

# WorkCentre 7855 Family Service Documentation



November 9, 2012 ECAT Version

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Service Documentation

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## CAUTION

*This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions documentation, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart B of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to correct the interference.*



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## About this Manual

This Service Manual is part of the multinational documentation system for this copier/printer. The Service Documentation is used in order to diagnose machine malfunctions, adjust components and has information which is used to maintain the product in superior operating condition. It is the controlling publication for a service call. Information on its use is found in the Introduction of the Service Documentation.

This manual contains information that applies to **USSG (XC) and ESG (XE)** configurations.

## Service Manual Revision

The Service Manual will be updated as the machine changes or as problem areas are identified.

## Organization

The titles of the sections and a description of the information contained in each section are contained in the following paragraphs:

### Section 1 Service Call Procedures

This section contains procedures that determine what actions are to be taken during a service call on the machine and in what sequence they are to be completed. This is the entry level for all service calls.

### Section 2 Status Indicator RAPs

This section contains the diagnostic aids for troubleshooting the Fault Code and non-Fault Code related faults (with the exception of image quality problems).

### Section 3 Image Quality

This section contains the diagnostic aids for troubleshooting any image quality problems, as well as image quality specifications and image defect samples.

### Section 4 Repairs/Adjustments

This section contains all the Adjustments and Repair procedures.

#### Repairs

Repairs include procedures for removal and replacement of parts which have the following special conditions:

**When there is a personnel or machine safety issue.**

**When removal or replacement cannot be determined from the exploded view of the Parts List.**

**When there is a cleaning or a lubricating activity associated with the procedure.**

**When the part requires an adjustment after replacement.**

**When a special tool is required for removal or replacement.**

Use the repair procedures for the correct order of removal and replacement, for warnings, cautions, and notes.

#### Adjustments

Adjustments include procedures for adjusting the parts that must be within specification for the correct operation of the system.

Use the adjustment procedures for the correct sequence of operation for specifications, warnings, cautions and notes.

### Section 5: Parts Lists

This section contains the Copier/Printer Parts List.

### Section 6: General Procedures/Information

This section contains General Procedures, Diagnostic Programs, and Copier/Printer Information.

## Section 7: Wiring Data

This section contains drawings, lists of plug/jack locations, and diagrams of the power distribution wire networks in the machine. Individual wire networks are shown in the Circuit Diagrams contained in Section 2. This section also contains the Block Schematic Diagrams.

## How to Use this Documentation

The Service Call Procedures in Section 1 describe the sequence of activities used during the service call. The call **must** be entered using these procedures.

### Use of the Block Schematic Diagrams

Block Schematic Diagrams (BSDs) are included in Section 7 (Wiring Data) of the Service Manual. The BSDs show the functional relationship of the electrical circuitry to any mechanical, or non-mechanical, inputs or outputs throughout the machine. Inputs and outputs such as motor drive, mechanical linkages, operator actions, and air flow are shown. The BSDs will provide an overall view of how the entire subsystem works.

It should be noted that the BSDs no longer contain an Input Power Block referring to Chain 1. It will be necessary to refer to the Wirenets in order to trace a wire back to its source.

## Symbology and Nomenclature

The following reference symbols are used throughout the documentation.

### Warnings, Cautions, and Notes

Warnings, Cautions, and Notes will be found throughout the Service Documentation. The words **WARNING** or **CAUTION** may be listed on an illustration when the specific component associated with the potential hazard is pointed out; however, the message of the **WARNING** or **CAUTION** is always located in the text. Their definitions are as follows:

#### **WARNING**

**A Warning is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in personal injury.**

#### **CAUTION**

*A Caution is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in damage to the equipment.*

**NOTE:** A Note is used whenever it is necessary to highlight an operating or maintenance procedure, practice, condition, or statement.

### Machine Safety Icons

The following safety icons are displayed on the machine:



Figure 1 Customer Access Label

This symbol indicates that a surface can be hot. Use caution when reaching in the machine to avoid touching the hot surfaces.



Figure 2 Heated Surface Label

Danger label indicates where electrical currents exist when the machine is closed and operating. Use caution when reaching in the machine.



Figure 3 Shock Hazard Label

These symbols indicate components that may be damaged by Electrostatic Discharge (ESD).



Figure 4 ESD warning Label

### Electrostatic Discharge (ESD) Field Service Kit

The purpose of the ESD Protection Program is to preserve the inherent reliability and quality of electronic components that are handled by the Field Service Personnel. This program is being implemented now as a direct result of advances in microcircuitry technology, as well as a new acknowledgment of the magnitude of the ESD problem in the electronics industry today.

This program will reduce Field Service costs that are charged to PWB failures. Ninety percent of all PWB failures that are ESD related do not occur immediately. Using the ESD Field Service Kit will eliminate these delayed failures and intermittent problems caused by ESD. This will improve product reliability and reduce callbacks.

The ESD Field Service Kit should be used whenever Printed Wiring Boards or ESD sensitive components are being handled. This includes activities like replacing or reseating of circuit boards or connectors. The kit should also be used in order to prevent additional damage when circuit boards are returned for repair.

The instructions for using the ESD Field Service Kit can be found in ESD Field Service Kit Usage in the General Procedures section of the Service Documentation.

### Illustration Symbols

Figure 5 shows symbols and conventions that are commonly used in illustrations.

## REFERENCE SYMBOLOGY

Test data, notes, adjustments, and parts lists are supportive to the BSD and RAP information. This supportive data is referenced, using the symbols shown in the following paragraphs:

<b>TEST DATA</b>	This symbol appears on the BSD whenever a test data reference is necessary in order to verify the presence of a signal.	<b>TEST POINTS</b>		This symbol is used to identify a test point/test hole available for measuring a signal.	[ X-XXX ]	This symbol placed above a signal name on a BSD indicates the input or output component control code for that signal.
<b>NOTES</b>	This symbol is used to refer to notes. The notes normally appear on the same page.	<b>BSD GRAPHICS</b>		This symbol indicates the continuation of a signal line in a vertical direction.	[ X-XXX ] [ X-XXX ]	This symbol placed above a signal name on a BSD indicates that two component control codes ( an output and an input ) are required to check that signal.
<b>ADJUSTMENTS</b>	This symbol refers to adjustments on the Service Data Section.		This symbol indicates the continuation of a signal line in a horizontal direction.	[ X-XXX/X-XXX ]	This symbol placed above a signal name on a BSD indicates component control codes for two components, in this example, two Paper Trays. The left hand code is for Paper Tray 1, and the right hand code is for Paper Tray 2.	
<b>PARTS LISTS</b>	PL2-XX		This symbol indicates the direction of signal flow.	[ X-XXX ]	Fault Codes Indicator shown on BSD.	
This symbol refers to a parts list on the Service Data Section. PL indicates that this is a parts list reference and, in this example, the exploded view drawing is on Parts List 2-XX. Parts list reference appear on the BSDs next to all replaceable parts shown on the diagram.		This symbol indicates a feedback signal.		This symbol is used to show a twisted pair of wires.		The Flag symbol indicates a reference point into a Circuit Diagram from a RAP. Instructions will be given to check for an open circuit, a short circuit, or an intermittent condition

Figure 5 Illustration Symbols

## Signal Nomenclature

Refer to [Figure 6](#) for an example of Signal Nomenclature used in Circuit Diagrams and BSDs.

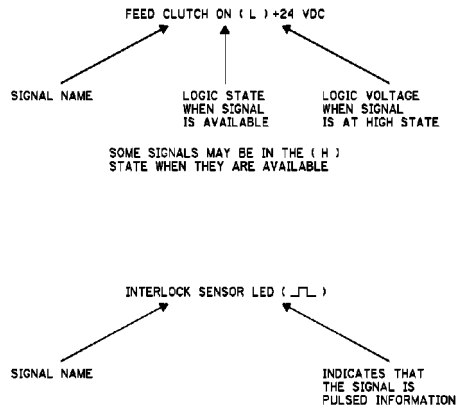


Figure 6 Signal Nomenclature

### Voltage Measurement and Specifications

Measurements of DC voltage must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure. All measurements of AC voltage should be made with respect to the adjacent return or ACN wire.

Table 1 Voltage Measurement and Specifications

VOLTAGE	SPECIFICATION
INPUT POWER 220 V	198 VAC TO 242 VAC
INPUT POWER 100 V	90 VAC TO 135 VAC
INPUT POWER 120 V	90 VAC TO 135 VAC
+5 VDC	+4.75 VDC TO +5.25 VDC
+24 VDC	+23.37 VDC TO +27.06 VDC

### Logic Voltage Levels

Measurements of logic levels must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure.

Table 2 Logic Levels

VOLTAGE	H/L SPECIFICATIONS
+5 VDC	H= +3.00 TO +5.25 VDC L= 0.0 TO 0.8 VDC
+24 VDC	H= +23.37 TO +27.06 VDC L= 0.0 TO 0.8 VDC

### DC Voltage Measurements in RAPs

The RAPs have been designed so that when it is required to use the DMM to measure a DC voltage, the first test point listed is the location for the red (+) meter lead and the second test point is the location for the black meter lead. For example, the following statement may be found in a RAP:

**There is +5 VDC from TP7 to TP68.**

In this example, the red meter lead would be placed on TP7 and the black meter lead on TP68.

Other examples of a statement found in a RAP might be:

- **There is -15 VDC from TP21 to TP33.**
- **-15 VDC is measured between TP21 and TP33.**

In these examples, the red meter lead would be placed on TP21 and the black meter lead would be placed on TP33.

If a second test point is not given, it is assumed that the black meter lead may be attached to the copier frame.



## **Translated Warnings**

All translated warnings for this documentation are located at point-of-need.

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# 1 Service Call Procedures

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## Service Call Procedures

### Service Strategy

The service strategy for the WorkCentre Copier/Printers is to perform any High Frequency Service Item (HFSI) actions before attempting to repair any problems. Some problems will be corrected by this strategy without the need to diagnose them. The Repair Analysis Procedures (RAPs) will be used for any remaining problems.

Problems that occur in the Basic Printer mode will be repaired before problems that occur when using the accessories.

Image Quality problems should be repaired after all other problems are repaired.

### Service Call Procedures

The **Service Call Procedures** are a guide for performing any service on this machine. The procedures are designed to be used with the Service Manual. Perform each step in order.

#### Initial Actions

The Initial Actions gather information about the condition of the machine and the problem that caused the service call.

#### Call Flow

Call Flow summarizes the sequence of the Service Call Procedures.

#### Detailed Maintenance Activities

This section provides the information needed to perform the dC135 High Frequency Service Item (HFSI) actions.

#### Cleaning Procedures

The cleaning procedures list what needs to be cleaned at each service call.

#### Final Actions

The Final Actions will test the copier/printer and return it to the customer. Administrative activities are also performed in the Final Actions.

## Initial Actions

### Purpose

The purpose of the Initial Action section of the Service Call Procedures is to determine the reason for the service call and to identify and organize the actions which must be performed.

### Procedure

1. Gather the information about the service call and the condition of the copier/printer.
  - a. Question the operator(s). Ask the customer if the problems are related to Xerox Secure Access. Ask about the location of most recent paper jams. Ask about the image quality and the copier/printer performance in general, including any unusual sounds or other indications.
  - b. After informing the customer, disconnect the machine from the customer's network.
  - c. Check that the power cords are in good condition, correctly plugged in the power source, and free from any defects that would be a safety hazard. Repair or replace the power cords as required. Check that the circuit breakers are not tripped.
  - d. If the machine appears to be inoperative, go to [Call Flow](#) and repair the problem. Then continue below.
  - e. Inspect any rejected copies. Inquire as to, or otherwise determine, the paper quality and weight. The specified papers for optimum image quality with this machine are 24 lb. Xerox Color Xpressions Plus (XC) or 90 gsm Colortech + (XE). Look for any damage to the copies, oil marks, image quality defects, or other indications of a problem.
  - f. Record the billing meter readings.
  - g. Enter CE Mode (see [UI Diagnostic \(CSE\) Mode](#)).
  - h. View HFSI Activity (see [dC135](#))

**NOTE:** If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to Diagnostics and continue with the dC procedure that you were performing.
  - i. Determine what HFSI action is required based on the customer output volume. Refer to the [Detailed Maintenance Activities \(HFSI\)](#) section for the detailed HFSI information. Record any items that require action.
  - j. Access UI Diagnostics ([UI Diagnostic \(CSE\) Mode](#)). Select the Service Info tab and use [dC120](#) Fault Counters and [dC122](#) Fault History to display fault information. Classify this information into categories and record the appropriate fault codes:
    - Information that is related to the problem that caused the service call.
    - Information that is related to secondary problems.
    - Information that does not require action, such as a single occurrence of a problem.
  - k. Check the Service Log for any recent activities that are related to the problem that caused the service call or any secondary problem.
2. Perform any required HFSI activities identified above. Refer to [Detailed Maintenance Activities \(HFSI\)](#).
3. Exit diagnostics. Try to duplicate the problem by running the same jobs that the customer was running.
4. Go to [Call Flow](#).

## Call Flow

This procedure should be performed at every service call.

### Initial Actions

Ask the operator about the problem. If the problem appears to be related to operator error, or an attempt to perform a job outside of the machine specifications, assist the customer in learning the correct procedure.

### Procedure

**NOTE:** If The product name displayed on the UI is shown as XXXXX-XXXXX go to **No-Run RAP**

**NOTE:** If customers cannot access machine functions because Xerox Secure Access is not functioning properly go to the **OF 18-1 RAP** to repair the problem, then return here and continue.

Switch on the Main Power. **The machine comes to a Ready condition.**

**Y N**  
Go to the **Machine Not Ready RAP**.

**A xerographics-related message (Drum Cartridge Error, Replace Toner), which cannot be cleared, is displayed on the UI.**

**Y N**  
**The reported problem occurs in Print Mode ONLY.**

**Y N**  
Place the Color Test Pattern on the Document Glass. Make a copy from each paper tray. **The Copier/Printer can copy from all trays.**

**Y N**  
Access UI Diagnostics (**UI Diagnostic (CSE) Mode**). Select the Service Info tab and use **dC120** Fault Counters and **dC122** Fault History to display fault information. **A fault code related to the problem is displayed.**

**Y N**  
**The problem is related to a specific paper tray (for example, erroneous “Tray X out of Paper” message).**

**Y N**  
For intermittent problems, Go to **GP 23**.

Enter **UI Diagnostic (CSE) Mode**. Select the Diagnostics tab. Use **dC612** Test Patterns and print Test Pattern 1 from the suspect tray. When a fault is declared, go to the RAP for that fault code.

Go to the RAP for the displayed fault.

Place two originals into the DADF and program a duplex job. **The Copier/Printer can copy from the DADF.**

**Y N**  
**A fault code is displayed.**

A B C

**Y N**  
Check the DADF Document Sensors for debris or damage. Check the mechanical drives and Feed Rolls for contamination, wear, damage, or binding.

Go to the RAP for the displayed fault code.

Check the image quality in the Basic Copier Mode:

- Select a tray that is loaded with 11 X 17 or A3 paper.
- Select the following parameters (**Table 1**):

**Table 1 Basic Copier Mode Settings**

Tab	Item Name	Sub-Item Name	Setting
Copy	Output Color	-	<b>Auto Detect</b>
Copy	Reduce/Enlarge	-	<b>Auto</b>
Image Quality	Original Type	Content Type	<b>Photo and Text</b>
Image Quality	Original Type	How Original was Produced	<b>Printed</b>
Image Quality	Color Presets	-	<b>Off</b>
Image Quality	Image Options	Lighten/Darken	<b>Normal</b>
Image Quality	Image Options	Sharpness	<b>Normal</b>
Image Quality	Image Options	Saturation	<b>Normal</b>
Image Quality	Color Balance	-	<b>Normal</b>
Image Quality	Image Enhancement	Background Suppression	<b>Off</b>
Image Quality	Image Enhancement	Contrast: Manual Contrast	<b>Normal</b>
Layout Adjustment	Image Shift	-	<b>Off</b>

- Run four copies of the Color Test Pattern.

**The Image Quality of the copies produced is acceptable.**

**Y N**  
Go to the **IQ1** Image Quality Entry RAP.

Go to **Final Actions**.

**The problem is with wireless printing.**

**Y N**  
**The problem occurs in all print jobs.**

**Y N**  
If the problem is specific to a single application or group of applications, ensure that current drivers are loaded. If the problem persists, escalate the call to the Customer Support Center.

Go to **GP 7** (Network Printing Simulation) and send a print job. **An acceptable print is produced.**

**Y N**  
• verify machine settings

A B C

A D E

A D E

- reload system software
- replace the Hard Drive (PL 35.2).
- replace the SBC PWB (PL 35.2).

The problem is in the customer network or the setup. Check the following:

- Ensure that the Static IP/DHCP setting matches the customer's network
- Verify that the IOT IP address is correct.

When resolved, go to Final Actions.

Go to OF 19 Wireless Connectivity RAP.

Go to the Xerographic Messages RAP.

## Detailed Maintenance Activities (HFSI) - TBD see note

### Procedure

1. Clean the ADC Sensor and LPH lenses on every call.
2. Refer to the HFSI activity viewed during Initial Actions.

**NOTE:** The HFSI report lists several counters that do not require maintenance. Disregard any counters not listed in Table 1.

3. Perform the Service Actions in Table 1 for any High Frequency Service Item (HFSI) counters that are over threshold or approaching the threshold. Using the customer's output volume numbers (high, medium, or low volume), evaluate which HFSI actions should be performed now to avoid an additional service call in the near future.
4. Refer to Cleaning Procedures for detailed cleaning instructions.
5. After servicing an HFSI, enter Diagnostics (UI Diagnostic (CSE) Mode).
  - Under Service Info, select dC135 CRU/HFSI.
  - Select the HFSI item from the list and select **Reset Counter**.
  - To change the threshold, perform the following:
    - Select the HFSI item from the list and select **Edit Life**.
    - Touch New Value and type in the new value.
    - Select **Save** to save the new threshold value.

Table 1 High Frequency Service Items - TBD see notes in table

Name	Service Action to be performed	Threshold
2nd BTR Roll	Replace the 2nd BTR Roll (PL 14.2) CRU - customer resets counter with button on UI (09-663)  <b>NOTE:</b> Customer can reset counter to clear "replace now" message without replacing component	200,000 Total length converted to A4 equivalent; A4 = 100
Fuser	Replace the Fuser (PL 7.1) Counter automatically clears when new Fuser is installed	360,000 Area conversion, with A4L = 100 counts/sheet, 8.5x11 = 96 counts/sheet, 11x17 = 193 counts/sheet, A3 = 200 counts/sheet, etc.
Transfer Belt Cleaner Assembly	Replace the Transfer Belt Cleaner (PL 6.1) CRU - customer resets counter with button on UI (09-662)  <b>NOTE:</b> Customer can reset counter to clear "replace now" message without replacing component	18,300,000 Total length converted to A4 equivalent; A4 = 100
Tray 1 Feed counter	Replace the Feed, Nudger, and Retard Rolls (PL 9.5).	300K sheets fed
Tray 2 Feed counter	Replace the Feed, Nudger, and Retard Rolls (PL 11.8 for TTM or PL 10.4 for 3TM).	300K sheets fed
Tray 3 Feed counter	Replace the Feed, Nudger, and Retard Rolls (PL 11.10 for TTM or PL 10.4 for 3TM).	300K sheets fed
Tray 4 Feed counter	Replace the Feed, Nudger, and Retard Rolls (PL 11.12 for TTM or PL 10.4 for 3TM).	300K sheets fed
Tray 6 (HCF) Feed counter	Replace the Feed and Nudger Rolls (PL 28.5) and the Retard Roll (PL 28.6).	300K sheets fed
Tray 5 (MSI) Feed counter	Replace the Feed and Nudger Rolls (PL 13.3) and the Retard Roll and Bottom Pad (PL 13.4).	50K sheets fed
Cyan Developer Housing	Replace Cyan Developer Housing PL 5.2	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size

**Table 1 High Frequency Service Items - TBD see notes in table**

Name	Service Action to be performed	Threshold
Black Developer Housing	Replace Black Developer Housing <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Magenta Developer Housing	Replace Magenta Developer Housing <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Yellow Developer Housing	Replace Yellow Developer Housing <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Cyan Developer	Replace Cyan Developer <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Black Developer	Replace Black Developer <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Magenta Developer	Replace Magenta Developer <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Yellow Developer	Replace Yellow Developer <a href="#">PL 5.2</a>	480,000 increments by 1 for A4/letter size or smaller; by 2 for longer than letter size
Intermediate Transfer Belt Unit	Replace the Transfer Belt Unit ( <a href="#">PL 6.1</a> )	480,000 Total length converted to A4 equivalent; A4 = 100
	<b>TBD - the DADF HFSI items are not included in either this table or in the tables in the machine. Should they be? Need SME input.</b>	



# Cleaning Procedures

## Purpose

The purpose is to provide cleaning procedures to be performed at every call.

## Procedure

### CAUTION

*Do not use any solvents unless directed to do so by the Service Manual.*

### General Cleaning

Use a dry lint free cloth or a lint free cloth moistened with water for all cleaning unless directed otherwise by the Service Manual. Wipe with a dry lint free cloth if a moistened cloth is used.

#### 1. Feed Components (Rolls and Pads)

Use a dry lint free cloth or a lint free cloth moistened with water. Wipe with a dry lint free cloth

#### 2. LPH

Use the cleaning plates to clean the LPH windows (follow the procedure in the User Guide).

#### 3. Toner Dispense Units

Vacuum the Toner Dispense units.

#### 4. Jam Sensors

Clean the sensors with a dry cotton swab.

#### 5. Transfer Belt Cleaning

Check the Transfer Belt surface and wipe with a dry lint free cloth. If the surface is excessively dirty, replace the Transfer Belt (PL 6.3).

Do not rub the Transfer Belt Cleaning Blade. If it is necessary to clean the blade, use a soft brush or dry swab to brush away contamination. Rubbing will remove the protective coating on the blade.

#### 6. Fuser Components (best cleaned when hot)

Switch off the power. Allow the Fuser to cool enough so that it does not present a burn hazard.

Wipe with a lint free cloth.

#### 7. Scanner

- a. Switch off the power.
- b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
- c. Clean the Exposure Lamp with a clean cloth and Film Remover.
- d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.

#### 8. DADF

Check the paper path for debris or damage. Clean the rolls with a clean cloth and Film Remover as required.

#### 9. Finisher

Check the paper path for debris or damage. Clean the Finisher with a dry lint free cloth.

# Final Actions

## Purpose

The intent of this procedure is to be used as a guide to follow at the end of every service call.

## Procedure

1. Ensure that the exterior of the copier/printer and the adjacent area are clean. Use a dry cloth or a cloth moistened with water to clean the copier/printer. Do not use solvents.
2. Check the supply of consumables. Ensure that an adequate supply of consumables is available according to local operating procedures.
3. Conduct any operator training that is needed. Ensure that the operator understands that the Automatic Gradation Adjustment procedure in the User Guide should be used to calibrate the colors.
4. Complete the Service Log (for blank copy, see Library).
5. Perform the following steps to make a copy of the Demonstration Original for the Customer:
  - a. Load Tray 1 with 8.5 x 11" (A4) or 11 x 17" (A3) paper.
  - b. Place the Color Test Pattern on the glass with the short edge of the test pattern registered to the left edge of the glass. Select Tray 1 and make a single copy.
  - c. Print out the Machine Settings (Configuration Report). Store this report with the service log in Tray 1.
  - d. Ask the customer to verify the Print and Scan functions.
  - e. Present the copies to the customer.
6. Reconnect the machine to the customer network. Verify function.
7. Issue copy credits as needed.
8. Discuss the service call with the customer to ensure that the customer understands what has been done and is satisfied with the results of the service call.

## 2 Status Indicator RAPs

### Chain 302 UI

302-302 Flash Rewrite Failure .....	2-9
302-306 Flash Erase Failure .....	2-9
302-308 Flash Download Failure .....	2-10
302-312 Application SW Checksum Failure.....	2-10
302-315 RAP.....	2-11
302-316 RAP.....	2-11
302-317 RAP.....	2-12
302-320 UI Data Time Out Error.....	2-12
302-321 RAP.....	2-13
302-380 UI Communication Fault RAP .....	2-13
302-381 UI Communication Fault RAP .....	2-14
302-390 RAP.....	2-14

### Chain 303 MRC

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303-317 IOT NVM Save Failure.....	2-16
303-318 IOT NVM Init Failure .....	2-17
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## 302-302 Flash Rewrite Failure

Flash Rewrite Failure

### Initial Actions

Power Off and On

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#)
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-306 Flash Erase Failure

Flash Erase Failure

### Initial Actions

Power Off and On

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#).
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-308 Flash Download Failure

Flash Download Failure

### Initial Actions

Power Off and On

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#).
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-312 Application SW Checksum Failure

Application SW Checksum Failure

### Initial Actions

Power Off and On

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#)
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-315 RAP

Service Registry Bad data / Corrupted

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#).
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-316 RAP

SRS returns to UI "invalid fields, invalid data, or missing data"

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#).
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))



## 302-317 RAP

UI gets no response from SRS

### Procedure

Perform the following in order:

1. Reload SW using [GP 9](#).
2. Replace the Hard Drive ([PL 35.2](#)).
3. Replace the SBC PWB ([PL 35.2](#))

## 302-320 UI Data Time Out Error

A software error has occurred. User intervention is required to Power Off/Power On the machine. Printing may be disabled.

### Procedure

Perform the following in order:

1. Power Off and On
2. Reload SW using [GP 9](#)
3. Go to the [303-347](#) UI Communication Fault

## 302-321 RAP

XEIP Browser Dead

**NOTE:** Set by the XUI when the XEIP browser does not respond or is known to be dead.

### Procedure

Perform the following in order:

1. Power Off and On
2. Reload software via AltBoot (GP 9).
3. Replace the Hard Drive (PL 35.2).
4. Replace the SBC PWB (PL 35.2)

## 302-380 UI Communication Fault RAP

Communication via H-H USB netpath connection between SBC and UI panel is not working

### Procedure

Perform the following in order:

1. Power Off and On
2. Reload SW using GP 9.
3. Use [BSD 3.4 PWB Communication \(4 of 9\)](#) to troubleshoot the problem.
4. Replace the USB Cable (PL 1.7).
5. Replace the Hard Drive (PL 35.2).
6. Replace the SBC PWB (PL 35.2). If replacing the SBC PWB does not resolve the problem, install the original SBC PWB.

## 302-381 UI Communication Fault RAP

Communication via USB connection between CC and UI panel is not working.

### Procedure

Go to [302-380](#) UI Communication Fault RAP

## 302-390 RAP

During power up all configurable services have not achieved a stable state after 5 minutes from power up.

### Procedure

Go to the [Machine Not Ready RAP](#).

## 303-306 Downgrade Not Permitted

Downgrade not permitted. A Customer upgrade was attempted, which would result in a downgrade, which is not allowed.

### Procedure

If a downgrade is required by the customer perform the downgrade using GP 9. If not, switch off and then switch on the machine.

## 303-307 Upgrade Synchronization Failure

SW Upgrade Synchronization Failure. Customer or CSE tried to perform upgrade resulting in a SW Upgrade Synchronization problem.

### Initial Actions

Power off and power on the machine.

### Procedure

Perform the following in order:

1. Check connections and cables and perform Software Upgrade again using Altboot in GP 9.
2. If the upgrade fails again, use Altboot to reload the SW version that existed on the machine prior to attempting the upgrade.
3. If the previous version loads correctly, download the upgrade SW again, verify that the files are correct for the machine, and attempt the upgrade using different media.
4. Replace the Hard Drive (PL 35.2).
5. Replace the SBC PWB (PL 35.2). If this fails to resolve the problem, reinstall the original SBC PWB and call service support.

## 303-316 CCM Cannot Communicate with IOT

Controller cannot communicate with IOT.

The scanner and copier are disabled but printing is operational.

### Initial Actions

Enter the diagnostic mode [dC131](#), and change the NVM setting in the following location (CCS: SWUP NVM Save Switch):

[616-116] = 2

### Procedure

Switch the power off then on. If the problem continues, perform [GP 9](#).

Inspect the MDM PWB and the MCU-PF PWB for loose connections or any obvious electrical/mechanical cause for malfunction. Clean, reseal or replace as required. If this does not resolve the problem:

- Replace the MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) - 7845/55)
- Replace the Hard Drive ([PL 35.2](#)).
- Replace the SBC PWB ([PL 35.2](#))

## 303-317 IOT NVM Save Failure

IOT NVM Save Failure

### Procedure

Switch the power off then on. **Fault Code 303-317 is still declared.**

**Y N**

If intermittent performance is suspected, inspect the MDM PWB, and SBC SD Card for loose connections or any obvious electrical/mechanical cause for malfunction.

This fault can be caused by IOT software corruption or a software version mismatch between the IOT module and the rest of the software:

- If the fault occurred after replacing the MDM PWB, it is probably a software mismatch; perform a Software Upgrade ([GP 9](#)).
- If the fault is unrelated to MDM replacement it may be corrupt software; perform a Forced Upgrade.

If this does not resolve the problem replace the following in order,

1. Replace the MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) - 7845/55).
2. Replace the SBC SD Card ([PL 35.2](#)).
3. Replace the Hard Drive ([PL 35.2](#)).
4. Replace the SBC PWB ([PL 35.2](#)).

## 303-318 IOT NVM Init Failure

IOT NVM Init Failure

### Initial Actions

- Disconnect any Foreign Interface devices.
- Obtain all of the following information:
  - Saved Machine Settings, if possible.
  - NVM value factory setting report (typically it is located in the Tray 1 pocket)
  - Any customer setting Auditron account from the system administrator
  - Any setting changes (specifically NVM settings) shown on the machine's service log.
  - Any customer settings in the Tools mode.
- If possible, save Critical NVM (dC361).

### Procedure

Perform dC301 NVM Initialization for the IOT.

After the initialization is complete, use the data accumulated in **Initial Actions** to restore the machine to its previous configuration.

## 303-319 IOT NVM Restore Failure

IOT NVM Restore Failure

### Procedure

Perform dC361 NVM Restore for the IOT Critical NVM.

If this does not resolve the problem replace the following in order,

1. Replace the MDM PWB (PL 18.2A -7830/35, PL 18.2B - 7845/55).
2. Replace the SBC SD Card (PL 35.2).
3. Replace the Hard Drive (PL 35.2).
4. Replace the SBC PWB (PL 35.2).

## 303-320 Incompatible Product Type

Incompatible Product Type. SW Upgrade Aborted due to incompatible product type - software set does not match hardware.

### Procedure

Perform [GP 9](#) Software Upgrade with the correct Software module or select the correct .dln file using the Web UI to upgrade the machine.

## 303-324 Software Upgrade File Transfer Failure

SW Upgrade File Transfer failure

### Initial Actions

Power off and power on the machine.

### Procedure

Perform the following in order:

1. Check connections and cables and perform SW Upgrade again using Altboot in [GP 9](#).
2. Download the upgrade SW again, verify that the files are correct for the machine, and attempt the upgrade using different media.
3. Replace the Hard Drive ([PL 35.2](#)).
4. Replace the SBC PWB ([PL 35.2](#)). If this fails to resolve the problem, reinstall the original SBC PWB and call service support.

### **303-325 Wall Clock Timeout During Power Up**

System detects that the Wall Clock has not incremented within 1.5 seconds during Power On.

#### **Procedure**

Power OFF and then ON.

If the problem continues, call service support for assistance.

### **303-326 Upgrade is not Required**

Upgrade not required, since the SW Upgrade version is the same as the SW version on the machine.

#### **Procedure**

If a software reinstallation is required, perform [GP 9](#) Forced Altboot.



## 303-327 Upgrade Failure

Upgrade Failed. this problem could be caused by an internal timing issue (Front side BUS speed set incorrectly), hardware error, user error and others.

### Initial Actions

Check connections and reseal SCB PWB, MDM PWB, MDS PWB, and MCU-PF PWB and attempt another upgrade using GP 9 forced upgrade for the system or platform that failed.

### Procedure

The problem is still present:

Y N  
| Return to Service Call Procedures.

Call service support for assistance.

## 303-329 Upgrade Request During Diagnostics

Upgrade request received during active diagnostics.

### Procedure

Exit Diagnostics and perform GP 9 Software Upgrade.

### **303-330 Upgrade Request During Active Security Feature**

Upgrade request received during active Security function.

#### **Procedure**

Wait until Security function (Image Overwrite) is completed and perform [GP 9](#) Software Upgrade.

### **303-331 Communication Fault With NC**

Main controller board cannot communicate with Network Controller and unable to reestablish communications for 12 minutes. This problem could be caused by loose connections or improperly seated PWBs.

#### **Procedure**

The printer is currently busy. Normal operations should resume momentarily. SCB will continue to try to re-establish communication for 12 minutes.

If the fault persists, go to [303-332](#).

### 303-332 NC Communications Timeout

CCS unable to reestablish communication with the Network Controller for 12 minutes. This problem could be caused by loose connections or improperly seated PWBs.

#### Procedure

Reseat PWBs on the SBC (Riser PWB, Fax PWB (if installed) and Memory PWBs). **The problem continues.**

Y N

Return to [Service Call Procedures](#).

Go to the [Machine Not Ready RAP](#).

### 303-338 Main Controller Has Been Reset

CCS has been reset; either the watch dog timer timed out or the application SW wrote to an illegal address.

#### Initial Actions

Check that the customer does not have another device configured with the same IP address.

#### Procedure

Switch the power off then on.

Perform [dC361](#) to restore NVM.

If the problem continues, perform [GP 9](#) SW upgrade.

## 303-346 Communication fault with UI RAP

The SBC is unable to reestablish communication with the UI after 30 seconds.

### Procedure

Go to the [303-347](#).

## 303-347 UI Communication Fault

**BSD-ON:** [BSD 3.4 PWB Communication \(4 of 7\)](#)

The SBC cannot communicate with UI PWB.

If communication is not reestablished within 30 seconds, fault code 03-346 will be declared.

**NOTE:** *The UI will not display this fault because of the communication problem with the SBC PWB. This fault can be viewed only with the PWS.*

### Procedure

**NOTE:** *This fault can occur if the UI software version is not compatible with the SBC software version.*

Perform [GP 9](#). If the problem persists, go to the [Machine Not Ready RAP](#).

## 303-355 CCM POST Failure During NVM Test/NVM Battery Dead

Power On Self-Test failure detected during the NVM Integrity Test; NVM battery dead

### Procedure

The SBC battery may be loose, failing, or has failed. Reseat the SBC PWB battery. If the problem continues, go to [REP 1.11](#) to replace the SBC PWB.

## 303-380 Distribution PWB Missing or Disconnected

BSD-ON: [BSD 3.5 PWB Communication \(5 of 7\)](#)

PWBA is missing or disconnected.

### Procedure

Check the connectors between the SBC and the IIT/IPS PWBs.

Power OFF and then ON.

If the problem continues, call service support for assistance.

## **303-390 Upgrade Automation Failed**

Upgrade Automation failed

### **Procedure**

Call service support for assistance.

## **303-397 System Configuration is lost**

This fault occurs when the System Configuration is lost and an attempted recovery made from SIM.

### **Procedure**

Call service support for assistance.

## 303-398 SOK 1 Not Detected

SIM Card serial number mismatch. The number recorded on the SIM Card does not match the machine serial number. The first time a SIM is used in a machine the Serial number of the machine is written to the SIM.

### Procedure

**NOTE:** *If the problem surfaced after a PWB replacement that required serialization, make sure the serialization was performed correctly (dC132). If the machine is not serialized correctly this could be the cause of the SIM problem.*

The SIM belongs to another machine and will not work in the machine it is being tried on. Try a new SIM, of the same type, to install the feature(s) on the machine. If the problem still exists after using the new SIM, call service support for assistance.

## 303-399 SOK 1 Not Detected

SIM Card data cannot be processed

### Procedure

Check the configuration page. If the option is listed as "installed/not enabled," use the **Tools** menu (see [GP 2](#)) to enable.

If the SIMs are not available, contact the Sales Rep. and ensure the feature was ordered by verifying the paperwork with the CBR. If the feature was ordered, a replacement part can be ordered from the Parts List. If it was not ordered, the Sales Rep. should order the SIM/feature using the correct Sales Order Number.

If the problem still occurs with new SIMs, replace the SBC PWB ([PL 35.2](#)).

## 303-401 Basic FAX Not Detected or Confirmed

Basic FAX not detected/confirmed

### Procedure

Reset the Main Controller or Switch the power off then on. If the problem continues, go to the [OF 17-1 FAX Entry RAP](#).

## 303-403 Extended FAX Not Detected or Confirmed

Extended FAX not detected/confirmed

### Procedure

Reset the Main Controller or Switch the power off then on. If the problem continues, go to the [OF 17-1 FAX Entry RAP](#).



### 303-405 Failed to Recover Machine Class

Machine Class not set (unknown). Failed to recover machine class

#### Procedure

Set machine class - (dC131 - [616-328]).

- Value of 1 = chassis speeds up to 38ppm
- Value of 2 = chassis speed 35 to 56ppm

### 303-406 SIM Speed Does not Match Machine Class

SIM speed does not match machine class

#### Procedure

Remove incompatible SIM (and Insert compatible SIM).

**NOTE:** The procedure for obtaining a SIM is determined by the OPCO.

## 303-417 Incompatible FAX SW Detected at Power Up

Incompatible FAX software detected at power on

### Procedure

Reset the Main Controller or Switch the power off then on. If the problem continues, reload FAX software (GP 9).

## 303-777 Power Loss Detected

Input Power loss detected or software corruption.

### Procedure

1. Verify customer power outlet voltage is correct.
2. Reload current IOT software or perform an upgrade, as necessary (GP 9).

## 303-788 Failed to Exit Power Save Mode

CCS Runtime could not enter power saver mode S3.

**NOTE:** *The CC USB could not re-enumerate the UI panel coming out of sleep, which keeps parts of the system in power saver mode S3 and parts awake. This prevents system entry into power saver mode S3 at the next attempt to do so.*

### Procedure

Switch the power off then on to allow system to enter power save.

## 303-790 Timezone File Cannot be Set

Timezone file cannot be set. At power up, the time zone setting is not valid due to NVM corruption, or OS file system problem. Time Zone overridden to GMT: DST Disabled.

### Procedure

Switch the power off then on.

Perform [dC361](#) to restore NVM.

If the problem continues, perform [GP 9](#) SW upgrade.

## 305-121 (7830/35) DADF Feed Out Sensor On Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

After feeding started (DADF Feed Motor On (CW)) in Duplex, the DADF Feed Out Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for wear.
- The DADF Feed Out Sensor ([dC330](#) [005-205]) for operation failure. ([PL 51.6](#))
- The DADF Feed Motor ([dC330](#) [005-001]) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [J776](#) pin-2 and [J776](#) pin-1/3
  - Between DADF Feed Motor [J776](#) pin-5 and [J776](#) pin-4/6
- The DADF Nudger Roll for Nip operation failure.
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-121 (7845/55) DADF Feed Out Sensor On Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

After feeding started (DADF Feed Motor On (CW)) in Duplex, the DADF Feed Out Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for wear.
- The DADF Feed Out Sensor ([dC330](#) [005-205]) for operation failure. ([PL 55.7](#))
- The DADF Feed Motor ([dC330](#) [005-001]) for operation failure. ([PL 55.7](#))  
The wire wound resistance of the DADF Feed Motor: approx. 2 Ohm (when the temperature is 25 degrees celsius)
  - Between DADF Feed Motor [P/J783](#) pin-2 and [P/J783](#) pin-1/3
  - Between DADF Feed Motor [P/J783](#) pin-5 and [P/J783](#) pin-4/6
- The DADF Nudger Roll for Nip operation failure.
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-122 (7830/35) DADF Simplex/Side 1 Pre Reg Sensor On Jam

**BSD-ON:** [5.3 DADF Document Feeding \(1 of 2\)](#)

- After Pre-Feed started for the first sheet (DADF Feed Motor On (CW)) in Simplex and Duplex, the DADF Pre Reg Sensor did not turn ON within the specified time.
- After Pre-Feed started for the second sheet onwards (DADF Feed Motor On (CW)) in Duplex, the DADF Pre Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Retard Roll for wear.
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
- The DADF Feed Motor (dC330 [005-001]) for operation failure. (PL 51.5)  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor J776 pin-2 and J776 pin-1/3
  - Between DADF Feed Motor J776 pin-5 and J776 pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 51.2)

## 305-122 (7845/55) DADF Simplex/Side 1 Pre Reg Sensor On Jam

**BSD-ON:** [5.10 DADF Document Feeding \(1 of 2\)](#)

**BSD-ON:** [5.12 DADF Pre Registration](#)

- After Pre-Feed started for the first sheet (DADF Feed Motor On (CW)) in Simplex and Duplex, the DADF Pre Reg Sensor did not turn ON within the specified time.
- After Pre-Feed started for the second sheet onwards (DADF Feed Motor On (CW)) in Duplex, the DADF Pre Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Takeaway Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, and DADF Takeaway Roll for wear.
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
- The DADF Feed Motor (dC330 [005-001]) for operation failure. (PL 55.7)  
The wire wound resistance of the DADF Feed Motor: approx. 2 Ohm (when the temperature is 25 degrees celsius)
  - Between DADF Feed Motor P/J783 pin-2 and P/J783 pin-1/3
  - Between DADF Feed Motor P/J783 pin-5 and P/J783 pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 55.2)

## 305-123 (7830/35) DADF Simplex/Side 1 Reg Sensor On Jam

**BSD-ON:** [5.3 DADF Document Feeding \(1 of 2\)](#)

**BSD-ON:** [5.5 DADF Document Scan and Invert](#)

After Pre Reg operation started (DADF Feed Motor On (CCW)), the DADF Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Feed Roll and Takeaway Roll for foreign substances.
- The surface of the Feed Roll and Takeaway Roll for wear.
- The DADF Regi Sensor ([dC330](#) [005-110]) for operation failure. ([PL 51.17](#))
- The DADF Feed Motor ([dC330](#) [005-001]) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [J776](#) pin-2 and [J776](#) pin-1/3
  - Between DADF Feed Motor [J776](#) pin-5 and [J776](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-123 (7845/55) DADF Simplex/Side 1 Reg Sensor On Jam

**BSD-ON:** [5.10 DADF Document Feeding \(1 of 2\)](#)

**BSD-ON:** [5.13 DADF Registration](#)

After Pre Reg operation started (DADF Feed Motor On (CCW)), the DADF Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Pre Regi Roll and DADF Regi Roll for foreign substances.
- The surface of the DADF Pre Regi Roll and DADF Regi Roll for wear.
- The DADF Regi Sensor ([dC330](#) [005-110]) for operation failure. ([PL 55.16](#))
- The DADF Pre Regi Motor ([dC330](#) [005-015]) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Pre Regi Motor: approx. 2.7 Ohm
  - Between DADF Pre Regi Motor [P/J784](#) pin-2 and [P/J784](#) pin-1/3
  - Between DADF Pre Regi Motor [P/J784](#) pin-5 and [P/J784](#) pin-4/6
- The DADF Regi Motor ([DC330](#) [005-038]) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-125 (7830/35) DADF Reg Sensor Off Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

After the DADF Pre Reg Sensor turned OFF, the DADF Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll and DADF Out Roll for foreign substances.
- The surface of the DADF Regi Roll and DADF Out Roll for wear.
- The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 51.7](#))
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [P/J776](#) pin-2 and [P/J776](#) pin-1/3
  - Between DADF Feed Motor [P/J776](#) pin-5 and [P/J776](#) pin-4/6
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-125 (7845/55) DADF Reg Sensor Off Jam

BSD-ON: [5.12 DADF Pre Registration](#)

BSD-ON: [5.13 DADF Registration](#)

After the DADF Pre Reg Sensor turned OFF, the DADF Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll, DADF Out Roll, DADF CIS Roll, and DADF Exit Roll for foreign substances.
- The surface of the DADF Regi Roll, DADF Out Roll, DADF CIS Roll, and DADF Exit Roll for wear.
- The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-126 (7845/55) DADF Out Sensor On Jam

BSD-ON: [5.12 DADF Pre Registration](#)

BSD-ON: [5.13 DADF Registration](#)

BSD-ON: [5.15 DADF Document Exit](#)

BSD-ON: [5.16 DADF Document Exit](#)

The DADF Out Sensor did not turn ON within the specified time after the Read operation has started (DADF Regi Motor On).

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll and DADF Pre Regi Roll for foreign substances.
- The surface of the DADF Regi Roll and DADF Pre Regi Roll for wear.
- The DADF Out Sensor ([dC330 \[005-208\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The DADF Pre Regi Motor ([DC330 \[005-015\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Pre Regi Motor: approx. 2.7 Ohm
  - Between DADF Pre Regi Motor [P/J784](#) pin-2 and [P/J784](#) pin-1/3
  - Between DADF Pre Regi Motor [P/J784](#) pin-5 and [P/J784](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-127 (7845/55) DADF Out Sensor Off Jam

BSD-ON: [5.13 DADF Registration](#)

BSD-ON: [5.15 DADF Document Exit](#)

BSD-ON: [5.16 DADF Document Exit](#)

The DADF Out Sensor did not turn OFF within the specified time after the DADF Regi Sensor has turned OFF.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF CIS Roll and DADF Exit Roll for foreign substances.
- The surface of the DADF CIS Roll and DADF Exit Roll for wear.
- The DADF Out Sensor ([dC330 \[005-208\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))



## 305-128 (7845/55) DADF Simplex Exit Sensor On Jam

BSD-ON: [5.13 DADF Registration](#)

BSD-ON: [5.15 DADF Document Exit](#)

BSD-ON: [5.16 DADF Document Exit](#)

The DADF Exit Sensor did not turn ON within the specified time after the DADF Out Sensor On in Simplex Mode.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Out Roll and DADF CIS Roll for foreign substances.
- The surface of the DADF Out Roll and DADF CIS Roll for wear.
- The DADF Exit Sensor for operation failure. ([PL 55.7](#))
- The DADF Out Sensor for operation failure. ([PL 55.16](#))
- The DADF Regi Motor (dC330 [005-026]) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-129 (7845/55) DADF Simplex Exit Sensor Off Jam

BSD-ON: [5.13 DADF Registration](#)

BSD-ON: [5.15 DADF Document Exit](#)

BSD-ON: [5.16 DADF Document Exit](#)

The DADF Exit Sensor did not turn OFF within the specified time after the DADF Out Sensor Off in Simplex mode.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF CIS Roll and DADF Out Roll for foreign substances.
- The surface of the DADF CIS Roll and DADF Out Roll for wear.
- The DADF Exit Sensor for operation failure. ([PL 55.7](#))
- The DADF Out Sensor for operation failure. ([PL 55.16](#))
- The DADF Regi Motor (dC330 [005-026]) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-130 (7830/35) DADF Invert Sensor On Jam

BSD-ON: [5.5 DADF Document Scan and Invert](#)

Invert Sensor is not turned on after the lapse of a specified time from Feed Out Sensor On in Duplex Mode.

### Procedure

When the trouble occurs frequently, verify the following:

- Inspect the transport for burrs or snags.
- Check the roll surfaces for foreign material.
- Check the roll surface for abnormal wear.
- The Simplex / Duplex Gate Solenoid ([dC330](#) [005-067]) operates correctly.
- The Platen Motor ([dC330](#) [005-067]) is properly rotating.
- If no problem is found, replace the following in order:
  - Feed Out Sensor ([PL 55.7](#))
  - Invert Sensor ([PL 51.9](#))
  - Connector cables (Out Sensor to DADF-PWBA/Invert Sensor to DADF PWB) ([PL 55.2](#))
  - DADF PWB ([PL 55.2](#))

## 305-131 (7830/35) DADF Invert Sensor On Jam (During Invert)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

After the DADF Reg Sensor turned ON at Invert, the DADF Invert Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for foreign substances.
- The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for wear.
- The DADF Invert Sensor ([dC330](#) [005-211]) for operation failure. ([PL 51.9](#))
- The DADF Regi Sensor ([dC330](#) [005-110]) for operation failure. ([PL 51.17](#))
- The DADF Regi Motor ([dC330](#) [005-026]) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid ([dC330](#) [005-072]) operation failure). ([PL 51.6](#))  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
  - Between DADF PWB [P/J754](#) pin-B8 and [P/J754](#) pin-B9
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-132 (7830/35) DADF Invert Sensor On Jam

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

After the Read Speed Control operation started (DADF Reg Motor On (CCW)), the DADF Invert Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
  - The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for foreign substances.
  - The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for wear.
  - The DADF Invert Sensor (dC330 [005-211]) for operation failure. (PL 51.9)
  - The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5)  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
    - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
    - Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
  - The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid (dC330 [005-072]) operation failure). (PL 51.6)  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
    - Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
  - The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. (PL 51.2)

## 305-134 (7830/35) DADF Inverter Sensor Off Jam (During Invert)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

- After the DADF Reg Sensor turned OFF at Invert of the last document, the DADF Inverter Sensor did not turn OFF within the specified time.
- During the Invert where there is a next document, after the Read Speed Control operation started (DADF Reg Motor On (CCW)), the DADF Inverter Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
  - The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for foreign substances.
  - The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for wear.
  - The DADF Invert Sensor (dC330 [005-211]) for operation failure. (PL 51.9)
  - The DADF Regi Sensor (dC330 [005-110]) for operation failure. (PL 51.17)
  - The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5)  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
    - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
    - Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
  - The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid (dC330 [005-072]) operation failure). (PL 51.6)  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
    - Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
  - The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. (PL 51.2)

## 305-135 (7830/35) DADF Side 2 Pre Reg Sensor On Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

After the Invert operation started (DADF Reg Motor On (CW)) at Invert, the DADF Pre Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
  - The surface of the DADF Exit Roll for foreign substances.
  - The surface of the DADF Exit Roll for wear.
  - The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
  - The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
    - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
    - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
  - The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid ([DC330 \[005-072\]](#)) operation failure). ([PL 51.6](#))  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
    - Between DADF PWB [P/J754](#) pin-B8 and [P/J754](#) pin-B9
  - The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-136 (7830/35) DADF Side 2 Reg Sensor On Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

After the DADF Pre Reg Sensor turned ON at Invert, the DADF Reg Sensor did not turn ON within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
  - The surface of the DADF Exit Roll and DADF Takeaway Roll for foreign substances.
  - The surface of the DADF Exit Roll and DADF Takeaway Roll for wear.
  - The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 51.17](#))
  - The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
  - The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
    - Between DADF Feed Motor [P/J776](#) pin-2 and [P/J776](#) pin-1/3
    - Between DADF Feed Motor [P/J776](#) pin-5 and [P/J776](#) pin-4/6
  - The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
    - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
    - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
  - The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid ([dC330 \[005-072\]](#)) operation failure). ([PL 51.6](#))  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
    - Between DADF PWB [P/J754](#) pin-B8 and [P/J754](#) pin-B9
  - The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-139 (7830/35) DADF Invert Sensor Off Jam

BSD-ON: [5.5 DADF Document Scan and Invert](#)

BSD-ON: [5.6 DADF Document Exit Transportation](#)

- After the DADF Reg Sensor turned OFF in the Scan operation, the DADF Invert Sensor did not turn OFF within the specified time.
- During the Simplex scan operation where there is a next document, after the Next Document Scan Read Speed Control started (DADF Reg Motor On (CCW)), the DADF Inverter Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for foreign substances.
- The surface of the DADF Regi Roll, DADF Out Roll, and DADF Exit Roll for wear.
- The Invert Gate for operation failure.
- The DADF Invert Sensor ([dC330 \[005-211\]](#)) for operation failure. ([PL 51.9](#))
- The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid ([DC330 \[005-072\]](#)) operation failure). ([PL 51.6](#))  
The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)
  - Between DADF PWB [P/J754](#) pin-B8 and [P/J754](#) pin-B9
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 005-141 (7845/55) DADF Feed Out Sensor Off Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

The DADF Pre Regi Sensor turned OFF before the DADF Feed Out Sensor has turned OFF.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, and DADF Takeaway Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, and DADF Takeaway Roll for wear.
- The Torque Limiter for failure.
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 55.7](#))
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 2 Ohm (when the temperature is 25 degrees celsius)
  - Between DADF Feed Motor [P/J783](#) pin-2 and [P/J783](#) pin-1/3
  - Between DADF Feed Motor [P/J783](#) pin-5 and [P/J783](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-145 (7830/35) DADF Reg Sensor Off Jam (Invert)

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

After the DADF Pre Reg Sensor turned OFF at Invert, the DADF Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [P/J776](#) pin-2 and [P/J776](#) pin-1/3
  - Between DADF Feed Motor [P/J776](#) pin-5 and [P/J776](#) pin-4/6
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-146 (7830/35) DADF Pre Reg Sensor Off Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

- After the DADF Feed Out Sensor turned OFF in Simplex, the DADF Pre Reg Sensor did not turn OFF within the specified time.
- After the DADF Reg Motor turned ON in Duplex, the DADF Pre Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 51.6](#))
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [P/J776](#) pin-2 and [P/J776](#) pin-1/3
  - Between DADF Feed Motor [P/J776](#) pin-5 and [P/J776](#) pin-4/6
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-146 (7845/55) DADF Pre Reg Sensor Off Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.12 DADF Pre Registration](#)

BSD-ON: [5.13 DADF Registration](#)

- After the DADF Feed Out Sensor turned OFF in Simplex, the DADF Pre Reg Sensor did not turn OFF within the specified time.
- After the DADF Reg Motor turned ON in Duplex, the DADF Pre Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Pre Regi Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Pre Regi Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 55.7](#))
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 2 Ohm
  - Between DADF Feed Motor [P/J783](#) pin-2 and [P/J783](#) pin-1/3
  - Between DADF Feed Motor [P/J783](#) pin-5 and [P/J783](#) pin-4/6
- The DADF Pre Regi Motor ([dC330 \[005-015\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Pre Regi Motor: approx. 2.7 Ohm
  - Between DADF Pre Regi Motor [P/J784](#) pin-2 and [P/J784](#) pin-1/3
  - Between DADF Pre Regi Motor [P/J784](#) pin-5 and [P/J784](#) pin-4/6
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 55.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J782](#) pin-2 and [P/J782](#) pin-1/3
  - Between DADF Regi Motor [P/J782](#) pin-5 and [P/J782](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-147 (7830/35) DADF Pre Reg Sensor Off Jam (Invert)

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

After the DADF Reg Motor turned ON at Invert, the DADF Pre Reg Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Exit Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Exit Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.](#))
- The DADF Regi Motor ([dC330 \[005-026\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor [P/J777](#) pin-2 and [P/J777](#) pin-1/3
  - Between DADF Regi Motor [P/J777](#) pin-5 and [P/J777](#) pin-4/6
- The DADF Feed Motor ([dC330 \[005-001\]](#)) for operation failure. ([PL 51.5](#))  
The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor [P/J776](#) pin-2 and [P/J776](#) pin-1/3
  - Between DADF Feed Motor [P/J776](#) pin-5 and [P/J776](#) pin-4/6
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-194 (7830/35) Mixed Size Mismatch Jam

BSD-ON: [5.2 DADF Document Size Sensing](#)

In Mixed Size Originals, it was detected that the size in the Fast Scan Direction was different from the width of the document guide.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Follow the instructions on the UI screen.
2. If the error is not cleared, check the following:
  - The Document Tray Set Guide for operation failure.
  - The Document Tray Set Guide Sensor 1-3 ([dC330](#) [005-215/216/217]) for operation failure. ([PL 51.10](#))
3. If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-194 (7845/55) Mixed Size Mismatch Jam

BSD-ON: [5.9 DADF Document Size Sensing](#)

In Mixed Size Originals, it was detected that the size in the Fast Scan Direction was different from the width of the document guide.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Follow the instructions on the UI screen.
2. If the error is not cleared, check the following:
  - The Document Tray Set Guide for operation failure.
  - The Document Tray Set Guide Sensor 1-3 ([dC330](#) [005-215/216/217]) for operation failure. ([PL 55.10](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))



## 305-196 (7830/35) Size Mismatch Jam On No Mix-Size

BSD-ON: [5.2 DADF Document Size Sensing](#)

BSD-ON: [5.4 DADF Document Feeding \(2 of 2\)](#)

A document in a different size from the first document was detected in the No Mix mode.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Follow the instructions on the UI screen.
2. If the error is not cleared, check the following:
  - The DADF APS Sensor 1 (dC330 [005-218]) for operation failure. (PL 51.17)
  - The Document Tray Set Guide Sensor 1-3 (dC330 [005-215/216/217]) for operation failure. (PL 51.10)
  - The Document Tray Size Sensor 1/2 (dC330 [005-221/222]) for operation failure. (PL 51.10)
3. If no problem is found, replace the DADF PWB. (PL 51.2)

## 305-196 (7845/55) Size Mismatch Jam On No Mix-Size

BSD-ON: [5.9 DADF Document Size Sensing](#)

BSD-ON: [5.11 DADF Document Feeding \(2 of 2\)](#)

A document in a different size from the first document was detected in the No Mix mode.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Follow the instructions on the UI screen.
2. If the error is not cleared, check the following:
  - The DADF APS Sensor 1 (dC330 [005-218]) for operation failure. (PL 55.16)
  - The Document Tray Set Guide Sensor 1-3 (dC330 [005-215/216/217]) for operation failure. (PL 55.10)
  - The Document Tray Size Sensor 1/2 (dC330 [005-221/222]) for operation failure. (PL 55.10)
3. If no problem is found, replace the DADF PWB. (PL 55.2)

## 305-197 (7830/35) Prohibit Combine Size Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

A prohibited size combination was detected.

### Cause/Action

Explain to the customer that the following combinations are prohibited.

- 5.5 x 8.5 SEF and all the other document sizes.
- A5 SEF and all the other document sizes.
- B5 SEF, plus 11 x 15 SEF, 11 x 17 SEF, A4 LEF, A3 LEF, 8.5 x 11 LEF.
- 16K SEF, plus 11 x 15 SEF, 11 x 17 SEF, A4 LEF, and A3 LEF.

## 305-197 (7845/55) Prohibit Combine Size Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

A prohibited size combination was detected.

### Cause/Action

Explain to the customer that the following combinations are prohibited.

- A5 SEF and all the other document sizes.
- B5 SEF, plus 11 x 15 SEF, 11 x 17 SEF, A4 LEF, A3 LEF, 8.5 x 11 LEF.

## 305-198 (7830/35) Too Short Size Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

It was detected that the document length in Slow Scan direction was out of the specifications.

- Simplex mode: shorter than 85mm
- Duplex mode: shorter than 110mm

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the size of the document that was fed by the user. If it is within the permitted length for DADF transport, check the following:

- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 51.6](#))

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-198 (7845/55) Too Short Size Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.12 DADF Pre Registration](#)

It was detected that the document length in Slow Scan direction was out of the specifications.

- Simplex mode: shorter than 85mm
- Duplex mode: shorter than 110mm

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the size of the document that was fed by the user. If it is within the permitted length for DADF transport, check the following:

- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 55.7](#))

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-199 (7830/35) Too Long Size Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

It was detected that the document length in Slow Scan direction was out of the specifications.

- Simplex and Duplex modes: 431.9mm or longer
- Fax mode: 1501.0mm or longer

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the size of the document that was fed by the user. If it is within the permitted length for DADF transport, check the following:

- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 51.17](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 51.6](#))

If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-199 (7845/55) Too Long Size Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.12 DADF Pre Registration](#)

It was detected that the document length in Slow Scan direction was out of the specifications.

- Simplex and Duplex modes: 431.9mm or longer
- Fax mode: 1501.0mm or longer

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the size of the document that was fed by the user. If it is within the permitted length for DADF transport, check the following:

- The DADF Pre Regi Sensor ([dC330 \[005-206\]](#)) for operation failure. ([PL 55.16](#))
- The DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 55.7](#))

If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-210 (7830/35) DADF Download Fail

BSD-ON: [3.2 PWB Communication \(7830/35\)](#)

When the IISS starts up (Power ON/Sleep recovery), it was detected that the DADF is in Download Mode.

### Cause/Action

Perform the DADF software download.

## 305-210 (7845/55) DADF Download Fail

BSD-ON: [3.3 PWB Communication \(7845/55\)](#)

When the IISS starts up (Power ON/Sleep recovery), it was detected that the DADF is in Download Mode.

### Cause/Action

Perform the DADF software download.

## 305-253 IIT- DADH Communication Error

BSD-ON: [3.3 PWB Communication \(7845/55\)](#)

A communication error occurred between the IIT and DADH.

### Cause/Action

Power off and Power On.

## 305-280 (7830/35) DADF EEPROM Fail

BSD-ON: [3.2 PWB Communication \(7830/35\)](#)

The DADF EEPROM Read/Write operation failed.

*NOTE: When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

If the problem persists after turning the power OFF then ON, replace the DADF PWB

- [7830/35 DADF PWB - \(PL 51.2\)](#)

## 305-280 (7845/55) DADF EEPROM Fail

BSD-ON: [3.3 PWB Communication \(7845/55\)](#)

The DADF EEPROM Read/Write operation failed.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

If the problem persists after turning the power OFF then ON, replace the DADF PWB

- 7845/55 DADF PWB - ([PL 55.2](#))

## 305-305 (7830/35) DADF Feeder Cover Interlock Open (when running)

BSD-ON: [5.1 DADF Document Setting](#)

The Feeder Cover Interlock was opened during DADF operation.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Feeder Cover for mismatch.
2. Check the DADF Interlock Switch (dC330 [005-212]) for operation failure. ([PL 51.5](#))
3. If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-305 (7845/55) DADF Feeder Cover Interlock Open (when running)

BSD-ON: [5.8 DADF Interlock & Document Setting](#)

The Feeder Cover Interlock was opened during DADF operation.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Feeder Cover for mismatch.
2. Check the DADF Interlock Switch ([dC330 \[005-212\]](#)) for operation failure. ([PL 55.5](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-905 (7845/55) DADF Feed Out Sensor Static Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

The DADF Feed Out Sensor turns ON at the following timings.

1. At Power ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Check the DADF Feed Out Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 55.7](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))



## 305-906 (7830/35) DADF Feed Out Sensor Static Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

The DADF Feed Out Sensor turns ON at the following timings.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Feed Out Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Feed Out Sensor ([dC330 \[005-205\]](#)) for operation failure. ([PL 51.6](#))
3. If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-906 (7845/55) DADF Feed Out Sensor Static Jam

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

The DADF Feed Out Sensor turns ON at the following timings.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Feed In Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Feed In Sensor for operation failure. ([PL 55.7](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-907 (7830/35) DADF Pre Reg Sensor Static Jam

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

The DADF Pre Reg Sensor turns ON at the following timings:

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Pre Regi Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
3. If no problem is found, replace the DADF PWB. (PL 51.2)

## 305-907 (7845/55) DADF Pre Reg Sensor Static Jam

BSD-ON: [5.12 DADF Pre Registration](#)

The DADF Pre Reg Sensor turns ON at the following timings:

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Pre Regi Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
3. If no problem is found, replace the DADF PWB. (PL 55.2)

## 305-908 (7830/35) DADF Reg Sensor Static Jam

BSD-ON: [5.5 DADF Document Scan and Invert](#)

The DADF Reg Sensor turns ON at the following timings:

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Regi Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 51.17](#))
3. If no problem is found, replace the DADF PWB. ([PL 51.2](#))

## 305-908 (7845/55) DADF Reg Sensor Static Jam

BSD-ON: [5.13 DADF Registration](#)

The DADF Reg Sensor turns ON at the following timings:

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Check the DADF Regi Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Regi Sensor ([dC330 \[005-110\]](#)) for operation failure. ([PL 55.16](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-910 (7845/55) DADF Out Sensor Static Jam

BSD-ON: [5.15 DADF Document Exit](#)

The DADF Out Sensor turns ON at the following timings:

1. At Power ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Check the DADF Out Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Out Sensor for operation failure. ([PL 55.16](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-911 (7845/55) DADF Exit Sensor Static Jam

BSD-ON: [5.15 DADF Document Exit](#)

The DADF Exit Sensor turns ON at the following timings:

1. At Power ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Check the DADF Exit Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
2. Check the DADF Exit Sensor for operation failure. ([PL 55.7](#))
3. If no problem is found, replace the DADF PWB. ([PL 55.2](#))

## 305-913 (7830/35) DADF Inverter Sensor Static Jam

BSD-ON: [5.5 DADF Document Scan and Invert](#)

The DADF Invert Sensor turns On at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF Inverter Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF Invert Sensor: [dC330 \[005-211\] \(PL 51.9\)](#)

If the problem persists, check the circuit between the DADF Invert Sensor and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-915 (7830/35) DADF APS Sensor 1 Static Jam

BSD-ON: [5.4 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 1 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 1 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 1: [dC330 \[005-218\] \(PL 51.17\)](#)

If the problem persists, check the circuit between the DADF APS Sensor 1 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-915 (7845/55) DADF APS Sensor 1 Static Jam

BSD-ON:[5.11 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 1 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 1 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 1: [dC330 \[005-218\]](#) ([PL 51.17](#))

If the problem persists, check the circuit between the DADF APS Sensor 1 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-916 (7830/35) DADF APS Sensor 2 Static Jam

BSD-ON:[5.4 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 2 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 2 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 2: [dC330 \[005-219\]](#) ([PL 51.17](#))

If the problem persists, check the circuit between the DADF APS Sensor 2 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-916 (7845/55) DADF APS Sensor 2 Static Jam

BSD-ON:[5.11 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 2 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 2 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 2: [dC330 \[005-219\]](#) ([PL 55.16](#))

If the problem persists, check the circuit between the DADF APS Sensor 2 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-917 (7830/35) DADF APS Sensor 3 Static Jam

BSD-ON:[5.4 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 3 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 3 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 3: [dC330 \[005-220\]](#) ([PL 51.17](#))

If the problem persists, check the circuit between the DADF APS Sensor 3 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-917 (7845/55) DADF APS Sensor 3 Static Jam

BSD-ON: [5.11 Document Feeding \(2 of 2\)](#)

The DADF APS Sensor 3 turns ON at the timings below.

1. When Power is ON
2. At Feeder Cover Interlock Close
3. At Platen Interlock Close

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check the DADF APS Sensor 3 for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- DADF APS Sensor 3: [dC330 \[005-220\]](#) ([PL 55.16](#))

If the problem persists, check the circuit between the DADF APS Sensor 3 and the DADF PWB. If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-940 (7830/35) DADF No Original

BSD-ON: [5.1 DADF Document Setting \(7830/35\)](#)

It was detected that the document was pulled out during document feed.

### Cause/Action

Reload the document.



### **305-940 (7845/55) DADF No Original**

**BSD-ON:** [5.8 DADF Interlock & Document Feeding \(7845/55\)](#)

It was detected that the document was pulled out during document feed.

#### **Cause/Action**

Reload the document.

### **305-941 (7830/35) Doc number of sheets is insufficient**

**BSD-ON:** [5.1 DADF Document Setting \(7830/35\)](#)

It was detected that some documents were missing at post-Jam recovery.

#### **Cause/Action**

Follow the instructions on the UI screen to reload the document that was jammed.

## 305-941 (7845/55) Doc number of sheets is insufficient

BSD-ON: [5.8 DADF Interlock & Document Feeding \(7845/55\)](#)

It was detected that some documents were missing at post-Jam recovery.

### Cause/Action

Follow the instructions on the UI screen to reload the document that was jammed.

## 305-945 (7830/35) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size (Cont)

BSD-ON: [5.2 DADF Document Size Sensing](#)

BSD-ON: [5.4 DADF Document Feeding](#)

In No Mix or Slow Scan (SS) Mixed mode, it was detected that a document with a different size in Fast Scan (FS) direction was transported from the DADF. (If paper was not fed, 305-945 is displayed. If paper was fed, [305-947 \(7830/35\)](#) is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the DADF Tray Set Guide operates normally.
- DADF Tray Set Guide Sensor 1-3: [dC330 \[005-215/216/217\] \(PL 51.10\)](#)
- Check the circuit between the DADF Tray Set Guide Sensor 1-3 and the DADF PWB
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 51.17\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-945 (7845/55) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size (Cont)

BSD-ON: [5.9 DADF Document Size Sensing](#)

BSD-ON: [5.11 DADF Document Feeding](#)

In No Mix or Slow Scan (SS) Mixed mode, it was detected that a document with a different size in Fast Scan (FS) direction was transported from the DADF. (If paper was not fed, 305-945 is displayed. If paper was fed, [305-947 \(7830/35\)](#) is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the DADF Tray Set Guide operates normally.
- DADF Tray Set Guide Sensor 1-3: [dC330 \[005-215/216/217\]](#) ([PL 55.10](#))
- Check the circuit between the DADF Tray Set Guide Sensor 1-3 and the DADF PWB
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\]](#) ([PL 55.16](#))
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-946 (7830/35) SS-Size Mismatch Jam On No Mix-Size (Cont)

BSD-ON: [5.2 DADF Document Size Sensing](#)

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

In No Mix mode, it was detected that a document with a different size in Slow Scan (SS) direction was transported from the DADF. (If paper was not fed, 005-946 is displayed. If paper was fed, [305-948 \(7830/35\)](#) is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Document Tray Size Sensor 1/2: [dC330 \[005-221/222\]](#) ([PL 51.10](#))
- Check the circuit between the Document Tray Size Sensor 1/2 and the DADF PWB.
- DADF Feed Out Sensor: [dC330 \[005-205\]](#) ([PL 51.6](#))
- DADF Reg Sensor: [dC330 \[005-110\]](#) ([PL 51.17](#))
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\]](#) ([PL 51.17](#))
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-946 (7845/55) SS-Size Mismatch Jam On No Mix-Size (Cont)

BSD-ON: [5.9 DADF Document Size Sensing](#)

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.13 DADF Registration](#)

In No Mix mode, it was detected that a document with a different size in Slow Scan (SS) direction was transported from the DADF. (If paper was not fed, 005-946 is displayed. If paper was fed, [305-948 \(7830/35\)](#) is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Document Tray Size Sensor 1/2: [dC330 \[005-221/222\] \(PL 55.10\)](#)
- Check the circuit between the Document Tray Size Sensor 1/2 and the DADF PWB.
- DADF Feed Out Sensor: [dC330 \[005-205\] \(PL 55.7\)](#)
- DADF Reg Sensor: [dC330 \[005-110\] \(PL 55.16\)](#)
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 55.16\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-947 (7830/35) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size

BSD-ON: [5.2 DADF Document Size Sensing](#)

BSD-ON: [5.4 DADF Document Feeding \(2 of 2\)](#)

In No Mix or Slow Scan (SS) Mixed mode, it was detected that a document with a different size in Fast Scan (FS) direction was transported from the DADF. (If paper was not fed, [305-945 \(7830/35\)](#) is displayed. If paper was fed, 305-947 is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the DADF Tray Set Guide operates normally.
- DADF Tray Set Guide Sensor 1-3: [dC330 \[005-215/216/217\] \(PL 51.10\)](#)
- Check the circuit between the DADF Tray Set Guide Sensor 1-3 and the DADF PWB
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 51.17\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-947 (7845/55) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size

BSD-ON: [5.9 DADF Document Size Sensing](#)

BSD-ON: [5.11 DADF Document Feeding](#)

In No Mix or Slow Scan (SS) Mixed mode, it was detected that a document with a different size in Fast Scan (FS) direction was transported from the DADF. (If paper was not fed, [305-945 \(7830/35\)](#) is displayed. If paper was fed, 305-947 is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the DADF Tray Set Guide operates normally.
- DADF Tray Set Guide Sensor 1-3: [dC330 \[005-215/216/217\] \(PL 55.10\)](#)
- Check the circuit between the DADF Tray Set Guide Sensor 1-3 and the DADF PWB
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 55.16\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 55.2](#)).

## 305-948 (7830/35) SS-Size Mismatch Jam On No Mix-Size

BSD-ON: [5.2 DADF Document Size Sensing](#)

BSD-ON: [5.3 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.5 DADF Document Scan and Invert](#)

In No Mix mode, it was detected that a document with a different size in Slow Scan (SS) direction was transported from the DADF. (If paper was not fed, [305-946 \(7830/35\)](#) is displayed. If paper was fed, 305-948 is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Document Tray Size Sensor 1/2: [dC330 \[005-221/222\] \(PL 51.10\)](#)
- Check the circuit between the Document Tray Size Sensor 1/2 and the DADF PWB.
- DADF Feed Out Sensor: [dC330 \[005-205\] \(PL 51.6\)](#)
- DADF Reg Sensor: [dC330 \[005-110\] \(PL 51.17\)](#)
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 51.17\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 51.2](#)).

## 305-948 (7845/55) SS-Size Mismatch Jam On No Mix-Size

BSD-ON: [5.9 DADF Document Size Sensing](#)

BSD-ON: [5.10 DADF Document Feeding \(1 of 2\)](#)

BSD-ON: [5.13 DADF Registration](#)

In No Mix mode, it was detected that a document with a different size in Slow Scan (SS) direction was transported from the DADF. (If paper was not fed, [305-946 \(7830/35\)](#) is displayed. If paper was fed, 305-948 is displayed.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Document Tray Size Sensor 1/2: [dC330 \[005-221/222\] \(PL 55.10\)](#)
- Check the circuit between the Document Tray Size Sensor 1/2 and the DADF PWB.
- DADF Feed Out Sensor: [dC330 \[005-205\] \(PL 55.7\)](#)
- DADF Reg Sensor: [dC330 \[005-110\] \(PL 55.16\)](#)
- DADF APS Sensors 1-3: [dC330 \[005-218/219/220\] \(PL 55.16\)](#)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.

If no problems are found, replace the DADF PWB ([PL 55.2](#)).



## 310-329 Fuser Fuse Cut Fail

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

### Procedure

3.3 VDC is measured from [P/J431](#) to GND.

Y N  
Disconnect [P/J431](#). [P/J431](#) pin 2 measures shorted to ground.  
Y N  
Replace the MDM PWB:  
• MDM PWB (7830/35) ([PL 18.2A](#))  
• MDM PWB (7845/55) ([PL 18.2B](#))  
Replace / repair the wire connection.

Replace the MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-330 Fuser Motor Fault

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

BSD-ON: [9.22 First BTR Contact/Retract Control](#)

The Fuser Drive Motor revolution failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Turn the power OFF and check whether the Fuser Assembly is installed properly.
- With the Fuser in nipped state, rotate the Roller manually to check for loading.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [010-001] (Fuser Drive Motor).

**Does the Fuser Drive Motor rotate?**

Y N  
**Is the voltage between the Fuser Drive Motor [J242-1](#) (+) and the GND (-) +24VDC?**  
Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

**Is the voltage between the Fuser Drive Motor [J243-1](#) (+) and the GND (-) +5VDC?**  
Y N  
Go to [+5VDC Power](#) +5VDC Power RAP.

Turn the power OFF and check the connection between the MDM PWB [J525](#) and the Fuser Drive Motor [J243](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Drive Motor ([PL 3.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button. Check the operation of [dC330](#) [094-012] (1st BTR Contact) and [dC330](#) [094-013] (1st BTR Retract) **alternately. Does the Fuser Drive Motor rotate?**

Y N  
Turn the power OFF and check the 1st BTR Contact/Retract Gear for blockage or damage.

Turn the power OFF and check the connection between the Fuser Drive Motor [J243-8](#) and the MDM PWB [J525-A1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))



## 310-360 IH Driver Input High Voltage Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

BSD-ON: [1.1 Main Power On](#)

The input voltage of the IH Driver is high voltage (150VAC or higher). (Status code 0x1 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Remove the Right Cover and remove the Front LVPS Fan.

Turn the main power ON (turn ON the Main Power Switch). **Is the voltage between the Main LVPS J6-1 and J6-3 100VAC?**

**Y N**  
| Go to [AC Power](#) RAP.

Turn the main power OFF and replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-361 IH Driver Input Low Voltage Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

BSD-ON: [1.1 Main Power On](#)

The input voltage of the IH Driver is low voltage (80VAC or lower). (Status code 0x2 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Remove the Right Cover and remove the Front LVPS Fan.

Turn the main power ON (turn ON the Main Power Switch). **Is the voltage between the Main LVPS J6-1 and J6-3 100VAC?**

**Y N**  
| Go to [AC Power](#) RAP.

Turn the main power OFF and replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-362 IH Driver Surge Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

The IH Driver detected surge. (Status code 0x3 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the voltage and voltage noise at customer's outlet.

If the problem was not resolved by turning the power OFF then ON and no problems were found after checking the voltage and voltage noise at the outlet, replace the IH Driver ([PL 18.3](#)).

## 310-363 IGBT Temperature High Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

The IGBT Temperature Sensor detected high temperature. (Status code 0x4 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-016] (IH Intake Fan). **Is the IH Intake Fan rotating?**

**Y N**  
| Proceed to the [342-332](#) RAP.

Press the Stop button. Turn ON [dC330](#) [042-017] (IH Exhaust Fan). **Is the IH Exhaust Fan rotating?**

**Y N**  
| Proceed to the [342-330 \(7845/55\)](#) RAP.

Press the Stop button.

Turn the power OFF and check the connection between the IH Driver [J530](#) and the MDM PWB [J414](#) for open circuit, short circuit, and poor contact. (For 7845/55, perform the check after removing the Sub LVPS.)

If no problems are found, replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-364 IGBT Temperature Sensor Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

An open circuit, short circuit, or abnormal change in Sensor value was detected at the IGBT Temperature Sensor. (Status code 0x5 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the IH Driver [J530](#) and the MDM PWB [P/J414](#) for open circuit, short circuit, and poor contact. (For 7845/55, perform the check after removing the Sub LVPS.)

If no problems are found, replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-367 Input Low Current Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

The input current was below the lower limit continuously for the specified time. (Status code 0x8 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Turn the power OFF and remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.

### Procedure

Check the following: (For 7845/55, perform the check after removing the Sub LVPS.)

- The connection between the IH Driver T60 and the Fuser Assembly [DJ600-1](#) for short circuit and poor contact
- The connection between the IH Driver T61 and the Fuser Assembly [DJ600-3](#) for short circuit and poor contact

If no problems are found, replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- Fuser Assembly ([PL 7.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-368 Encoder Pulse Fault

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

The level change of the Belt Speed Sensor was in less than 1 second. (Status code 0x9 is received)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Turn the power OFF and remove the Fuser Assembly. The Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MDM PWB connector [J431](#) is connected properly.

### Procedure

Check the following connections for short circuits and poor contacts.

- Between MDM PWB [J431-12](#) and Fuser Assembly [DJ600-B7](#)
- Between MDM PWB [J431-13](#) and Fuser Assembly [DJ600-B6](#)
- Between MDM PWB [J431-14](#) and Fuser Assembly [DJ600-B5](#)

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([PL 7.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-369 IH Driver Communication Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

Communication error between the IH Driver and the MDM PWB has occurred. (Status code 0xC is received. Or, communication error between the DD and the IH was detected)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the MDM PWB [P/J414](#) and the IH Driver PWB [J530](#) for open circuit, short circuit, and poor contact. (For 7845/55, perform the check after removing the Sub LVPS.)

If no problems are found, replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-370 IH Driver Freeze Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

The IH Driver Freeze port became Active (Low). (The CPU of the IH Driver has hanged.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the MDM PWB [P/J414](#) and the IH Driver PWB [P/J530](#) for open circuit, short circuit, and poor contact. (For 7845/55, perform the check after removing the Sub LVPS.)

If no problems are found, replace the following parts in sequence:

- IH Driver ([PL 18.3](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-371 Heat Belt STS Center Disconnection Fault

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The open circuit AD value of the Center Thermistor was detected 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Turn the power OFF and remove the Fuser Assembly. The Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MDM PWB connector [J431](#) is connected properly.

### Procedure

Measure the resistance between Fuser Assembly [P/J530-A7](#) and [P/J530-A8](#). The resistance is infinite.

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Between [DJ600-A5](#) and MDM PWB [J431-7](#)
- Between [DJ600-A4](#) and MDM PWB [J431-8](#)

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Replace the Fuser Assembly ([PL 7.1](#)).

## 310-372 Heat Roll STS Center Over Temperature Fault

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The AD value of the Center Thermistor was detected to be higher than the defined value 4 times in a row.

**NOTE:** To clear this Fault, clear the history in NVM (744-001) and then turn the power OFF and ON. When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

The relationship between the displayed value and the parts that detected the error are as follows:

- 0: Normal
- 1: High temperature error (Center STS - Run in progress)
- 2: High temperature error (Rear STS - Run in progress)
- 3: High temperature error (Center STS - other than Run in progress)
- 4: High temperature error (Rear STS - other than Run in progress)
- 5: Coil loading error
- 6: Center STS is heating up abnormally
- 7: Rear STS is heating up abnormally

### Initial Actions

- Turn the power OFF and remove the Fuser Assembly. Check whether foreign substances or paper is wound around the Heat Roll.
- The Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MDM PWB connector [J431](#) is connected properly.

### Procedure

Check the following connections for short circuits and poor contacts.

- Between [DJ600-A5](#) and MDM PWB [J431-7](#)
- Between [DJ600-A4](#) and MDM PWB [J431-8](#)

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([PL 7.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-373 Heat Belt STS Rear Disconnection Fail

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The open circuit AD value of the Rear STS was detected 3 times in a row.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Rear STS for open circuit.
3. Check the following connections for short circuits and poor contacts.
  - Between [DJ600-A3](#) and MDM PWB [J431-9](#)
  - Between [DJ600-A2](#) and MDM PWB [J431-10](#)
4. If no problem is found, replace the following parts in sequence:
  - Fusing Assembly ([PL 7.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 310-374 Heat Belt STS Rear Over Temperature Fail

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The AD value of the Rear STS was detected to be higher than the defined value 4 times in a row.

**NOTE:** To clear this Fail, first remove the cause, next clear the value of NVM [744-001] (Error Detection History) to '0', and then turn the power OFF and ON. The relationship between the displayed value and the parts that detected the error is as follows:

- 0: Normal
- 1: High temperature error (Center STS - Run in progress)
- 2: High temperature error (Rear STS - Run in progress)
- 3: High temperature error (Center STS - other than Run in progress)
- 4: High temperature error (Rear STS - other than Run in progress)
- 5: Coil loading error
- 6: Center STS is heating up abnormally
- 7: Rear STS is heating up abnormally

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for foreign substances and pinched harnesses.

### Cause/Action

- Check the following:
  - The Rear STS for dropped parts, and the sensor for contamination and clogging due to foreign substances.
  - The Heat Belt for wound up, stuck paper.
  - The Rear STS ([dC140](#) [010-201]) for operation failure.

**NOTE:** Monitor AD Value: 118 or lower (Temperature Monitor Value: 237 degrees celsius or higher) is a Fail

- Check the following connections for short circuits and poor contacts.
  - Between [DJ600-A3](#) and MDMPWB [J431-9](#)
  - Between [DJ600-A2](#) and MDM PWB [J431-10](#)
- If no problem is found, replace the following parts in sequence:
  - Fusing Unit Assembly ([PL 7.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 310-375 Heat Belt STS Center Warm Up Time Fault

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

When transitioning from the Wait state, the specified Temperature is not reached within the specified time.

**NOTE:** This Fault may occur when the temperature in the installation environment is low (10 degree or lower)

When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter [dC122](#) Fault History. Check whether IH Driver Input Low Voltage Fault has occurred.

#### Has Fault 310-361 occurred?

- | Y | N   |
|---|---|
|   | Turn the power OFF and check the following: <ul style="list-style-type: none"><li>• Remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( <a href="#">P/DJ600</a>) for broken/bent pins, foreign substances, burns, and etc.</li><li>• Check the connection between the <a href="#">DJ600-A4/A5</a> and the MDM PWB <a href="#">J431-8/7</a> for open circuit, short circuit, and poor contact</li></ul> |
|   | If no problems are found, replace the following parts in sequence: <ul style="list-style-type: none"><li>• Fuser Assembly (<a href="#">PL 7.1</a>)</li><li>• MDM PWB (7830/35) (<a href="#">PL 18.2A</a>)</li><li>• MDM PWB (7845/55) (<a href="#">PL 18.2B</a>)</li></ul>  |

Proceed to the [310-361](#) RAP.

## 310-376 Heat Belt STS Rear Warm Up Time Fault

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

When transitioning from the Wait state, the specified Temperature is not reached within the specified time.

**NOTE:** •This Fault may occur when the temperature in the installation environment is low (10 degree or lower)

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Enter [dC122](#) Fault History. Check whether 310-361, IH Driver Input Low Voltage Fault has occurred. If the fault is present, go to [310-361](#).
2. Turn the power OFF and check the following:
  - Remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
  - Check the connection between the [DJ600-A2/A3](#) and the MDM PWB [J431-10/9](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Fuser Assembly ([PL 7.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-377 Fusing Unit On Time Fail

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

When in Ready or Standby states, the temperature monitor value of the Rear STS did not reach the specified temperature within the specified time after the IH power has turned ON.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Drawer Connector ( [P/DJ600](#)) between the Main Unit and the Fusing Unit Assembly for broken/bent pins, burn damage, and foreign substances.
3. Check the connection between the Motor Driver Main PWB [J431](#) and the Drawer Connector DJ600 for open circuit, short circuit, and poor contact.
4. If no problem is found, replace the following parts in sequence:
  - Fusing Unit Assembly ([PL 7.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))



## 310-378 Heat Belt Rotation Fault

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

The Belt Speed Sensor output has not changed for 500ms or longer after the Fuser Motor On.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF.
2. Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [010-006] to check the operation of the Fuser Drive Motor.
3. If the Fuser Drive Motor operates, turn the power OFF and check the following:
  - Remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
  - The connection between the [DJ600-B7/B6/B5](#) and the MDM PWB [J431-12/13/14](#) for open circuit, short circuit, and poor contact.
4. If the Fuser Drive Motor does not operate, turn the power OFF and check the following:
  - Remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, and etc.
  - The connections between the [P/J243](#) and the MDU PWB [P/J525](#) for open circuit, short circuit, and poor contact.
5. If no problems are found, replace the following parts in sequence:
  - Fuser Assembly ([PL 7.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 310-379 Fusing Unit Hot Not Ready Return Time Fail

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The time taken to recover from High Temperature Not Ready state has exceeded the specified time.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Drawer Connector [P/DJ600](#)) between the Main Unit and the Fusing Unit Assembly for broken/bent pins, burn damage, and foreign substances.
3. Check the connection between the Motor Driver Main PWB [J431](#) and the Drawer Connector [P/DJ600](#) for open circuit, short circuit, and poor contact.
4. If no problem is found, replace the following parts in sequence:
  - Fusing Unit Assembly ([PL 7.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 310-380 P/Roll Latch Motor Fault

BSD-ON: [10.2 Fuser Drive Control \(2 of 2\)](#)

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

When in the P/Roll Contact/Retract operation, the Latch Position Sensor detected a Latch position error of the P/Roll.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Turn the power OFF and check whether the Fuser Assembly is installed properly.
- Remove the Fuser Assembly and check the Drawer Connector between the Fuser Assembly and the Main Unit ( P/DJ600) for broken/bent pins, foreign substances, burns, and etc.
- Check whether the MDM PWB connector J431 is connected properly.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MDS PWB and open the Chassis Assembly.

Turn the power ON and enter the Diag mode. Turn ON dC330 [010-009] (P/Roll Latch On) and dC330 [010-010] (P/Roll Latch Off) alternately. **Does the Latch Motor rotate?**

Y N  
**Is the voltage between the MDM PWB J520-8 (+) and the GND +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Measure from each side of Fuse 1 to GND on the MDS PWB.

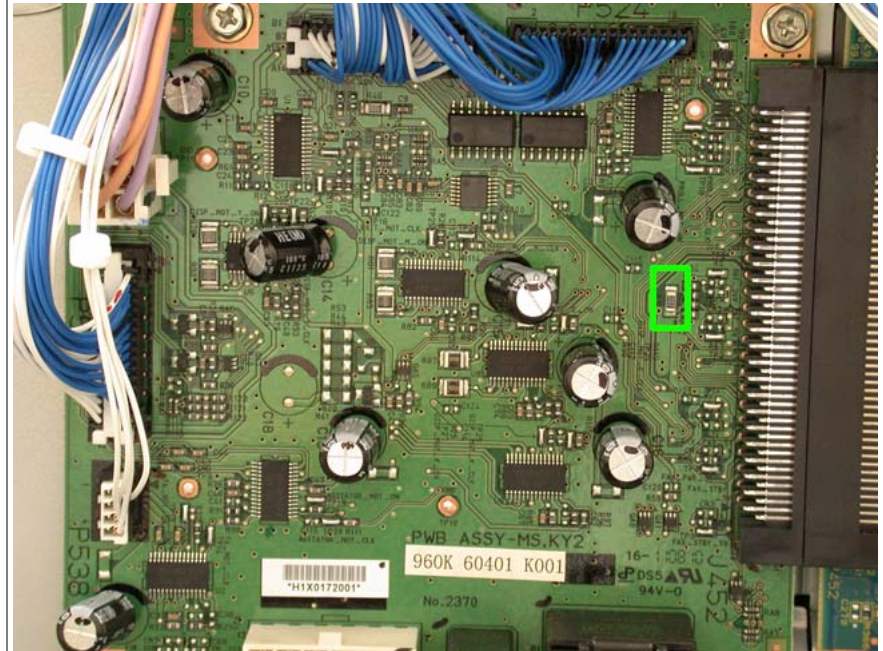


Figure 1 Fuse 1

**+24VDC is measured from both sides of the chip Fuse 1 on the MDS PWB.**

Y N  
Replace the following parts:

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF, then measure the Latch Motor wire wound resistance. Disconnect the Latch Motor P/J254, then measure the following resistances.

- Between Latch Motor P/J254 pin-2 and P/J254 pin-6
- Between Latch Motor P/J254 pin-1 and P/J254 pin-5

**Is the resistance approx. 5.7 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N  
Replace the P/R Latch Motor ([PL 7.1](#)).

Measure the resistance between the disconnected connector P/J254-1/2/5/6 and the Frame. **Is the resistance infinite for all?**

Y N  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

If no problems are found, replace the following parts:

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

A

Press the Stop button. Turn ON dC330 [010-009] (P/Roll Latch On) and dC330 [010-202] (P/Roll Latch Sensor), as well as dC330 [010-010] (P/Roll Latch Off) and dC330 [010-202] (P/Roll Latch Sensor) alternately. **Does the display change between Low/High?**

Y

N

**Is the voltage between the MDM PWB J431-4 (+) and the GND +1.2VDC?**

Y

N

Press the Stop button and turn the power OFF.

Remove the Fuser Assembly and check the connection between the DJ600-A8/A7 and the MDM PWB J431-4/5 for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (PL 7.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF.

Remove the Fuser Assembly and check the connection between the DJ600-A6 and the MDM PWB J431-6 for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Fuser Assembly (PL 7.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Turn the power OFF and check the Latch Motor Gear for wear or damage. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 310-381 Fuser Assy Illegal Fault

**BSD-ON: 10.3 Fusing Heat Control (1 of 3)**

An incorrect type of Fuser Assembly was installed. 7830/35 uses a different Fuser than 7845/55. Fuser can be identified by the barcode label on the bottom of the Fuser.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and replace with the correct Fuser Assembly; check the part number on the barcode label located on the bottom of the Fuser for parts compatibility (PL 7.1).

In the lower left corner of the barcode is a letter followed by a number, which translates to the following:

- B = Low Speed Machine (7830/35)
- C = High Speed Machine (7845/55)
- 100 = 110 VAC
- 200 = 220 VAC

## 310-382 Fuser Thermostat Fault

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

The Fuser Assembly Thermostat is broken or software fix is required.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Turn the power OFF and remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( [P/DJ600](#)) for broken/bent pins, foreign substances, burns, etc.
- Check whether the MDM PWB connector [J431](#) is connected properly.

### Procedure

Measure the resistance between [DP600](#) pin-A11 and [DP600](#) pin-B9. **Is the resistance infinite?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Between [DJ600-A1](#) and MDM PWB [J431-11](#)
- Between [DJ600-B1](#) and MDM PWB [J431-18](#)

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Replace the Fuser Assembly ([PL 7.1](#)).

## 310-398 Fuser Fan Fault

BSD-ON: [10.6 Fusing](#)

The Fuser Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Rotate the Fuser Fan manually to check for loading.

### Procedure

Enter DC122 Fault History. **Has 041-393 faults (MDS PWB F1 Open) occurred?**

Y N

Enter the Diag Mode, turn ON [dC330](#) [042-011] (Fuser Fan). **Is the Fuser Fan rotating?**

Y N

Turn the power OFF and check the connection between the Fuser Fan [J230-4/3/1](#) and the MDS PWB [P/J524-10/11/13](#) for open circuit, short circuit, and poor contact. Check the Fusing Unit Fan for foreign substances.

If no problems are found, replace the following parts in sequence:

- Fuser Fan ([PL 4.1](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF.

Check the connection between the Fuser Fan [J230-2](#) and the MDS PWB [P/J524-12](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts:

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Go to the [341-393](#) RAP.

## 310-420 Fuser Assembly Near Life Warning

BSD-ON: [10.6 Fusing](#)

The Fuser Assembly is near the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Fuser Assembly ([PL 7.1](#)) with a new one and clear [dC135](#) [954-850].

If the problem persists, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 310-421 Fuser Assembly Life Over Warning

BSD-ON: [10.6 Fusing](#)

The Fuser Assembly has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Fuser Assembly ([PL 7.1](#)) with a new one and clear [dC135](#) [954-850].

If the problem persists, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 312-111 (LX) H-Transport Entrance Sensor Off Jam A

BSD-ON: [BSD 12.14 Office Finisher LX Horizontal Transportation](#)

The H-Transport Entrance Sensor did not turn off within the specified time after it turned on.

### Procedure

Check the H-Transport Drive Rolls ([PL 23.4](#)) and Pinch Rolls ([PL 23.3](#)) for wear or contamination. Check for obstructions or damage in the paper path. **The Paper Path is OK.**

Y N  
Clean or replace as required.

Execute [dC330](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4](#)). **The display changes.**

Y N  
Check the wire between [J8861](#) pin 2 and [J8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 4 and 5 on the Finisher PWB ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8987](#), pin 6 on the Finisher PWB and GND ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). Actuate the H-Transport Entrance Sensor.

**The voltage changes.**

Y N  
Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Power OFF. Open the H-Transport Top Cover. Cheat the H-Transport Interlock Sensor. Power ON. **The H-Transport Belt rotates.**

Y N  
Check the wires between [P/J8862](#) on the H-Transport Motor and [J8987](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
Repair/reconnect as required.

Measure the resistance of the H-Transport Motor between each pin [J8862-1/2/5/6](#) ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N  
Replace the H-Transport Motor ([PL 23.4](#)).

Replace the Finisher PWB ([PL 23.16](#)). If the problem persists, replace the H-Transport Motor ([PL 23.4](#)).

Check the H-Transport Entrance Sensor and H-Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-132 (LX) Finisher Entrance Sensor On Jam

BSD-ON: [BSD 12.16 Office Finisher LX Transportation](#)

After the Fuser Exit Sensor turned On, the Finisher Entrance Sensor did not turn On within the specified time.

### Procedure

Execute [dC330](#) [012-100], Finisher Entrance Sensor. Actuate the Finisher Entrance Sensor ([PL 23.14](#)). **The display changes.**

Y N  
Check the wire between [J8868](#) pin 2 and [P/J8988](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 3 and 1 on the Finisher PWB ([BSD 12.16 Office Finisher LX Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 2 on the Finisher PWB and GND ([BSD 12.16 Office Finisher LX Transportation](#)). Actuate the Finisher Entrance Sensor. **The voltage changes.**

Y N  
Replace the Finisher Entrance Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N  
Check the wires between [P/J8879](#) on the Transport Motor and [P/J8983](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [J8879-1/2/5/6](#) ([BSD 12.16 Office Finisher LX Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N  
Replace the Transport Motor ([PL 23.13](#)).

Replace the Finisher PWB ([PL 23.16](#)). If the problem persists, replace the Transport Motor ([PL 23.13](#)).

Check the Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)).

Check the return Spring ([PL 23.11](#)) item 38 and replace if damaged or missing.

Check the Finisher Entrance Sensor and Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-151 (LX) Compiler Exit Sensor Off Jam

BSD-ON: [BSD 12.16 Office Finisher LX Transportation](#)

After the Compiler Exit Sensor turned On, the Compiler Exit Sensor did not turn Off within the specified time.

### Procedure

Execute [dC330](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL 23.14). **The display changes.**

Y N  
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 6 and 4 on the Finisher PWB ([BSD 12.16 Office Finisher LX Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB (PL 23.16).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 12.16 Office Finisher LX Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N  
Replace the Compiler Exit Sensor (PL 23.4).

Replace the Finisher PWB (PL 23.16).

Execute [dC330](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N  
Check the wires between [P/J8879](#) on the Transport Motor and [P/J8983](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [J8879-1/2/5/6](#) ([BSD 12.16 Office Finisher LX Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N  
Replace the Transport Motor (PL 23.13).

Replace the Finisher PWB (PL 23.16). If the problem persists, replace the Transport Motor (PL 23.13).

Check the Exit Roller, Paddle Shaft and Eject Belt for wear, damage or contamination (PL 23.13).

Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.

Check the Compiler Exit Sensor and Transport Motor circuits for an intermittent condition.

If the problem continues, replace the Finisher PWB (PL 23.16).

## 312-152 (LX) Compiler Exit Sensor On Jam

BSD-ON: [BSD 12.16 Office Finisher LX Transportation](#)

After the H-Transport Exit Sensor turned On, the Compiler Exit Sensor did not turn On within the specified time.

### Initial Actions

- Power OFF/ON

### Procedure

Execute [dC330](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL 23.14). **The display changes.**

Y N  
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 6 and 4 on the Finisher PWB ([BSD 12.16 Office Finisher LX Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB (PL 23.16).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 12.16 Office Finisher LX Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N  
Replace the Compiler Exit Sensor (PL 23.14).

Replace the Finisher PWB (PL 23.16).

Execute [dC330](#) [012-038], Transport Motor. **The Transport Motor rotates.**

Y N  
Check the wires between [P/J8879](#) on the Transport Motor and [P/J8983](#) on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin [J8879-1/2/5/6](#) ([BSD 12.16 Office Finisher LX Transportation](#)). **The resistance is approx. 20 Ohm.**

Y N  
Replace the Transport Motor (PL 23.13).

Replace the Finisher PWB (PL 23.16). If the problem persists, replace the Transport Motor (PL 23.13).

Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination (PL 23.13).

Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.

Check the Compiler Exit Sensor and Transport Motor circuits for an intermittent condition.



If the problem continues, replace the Finisher PWB (PL 23.16).

## 312-161 (LX) Finisher Set Eject Jam

**BSD-ON:**[BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

**BSD-ON:**[BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)

After the Eject Motor turned On, the Compiler Tray No Paper Sensor did not turn Off within the specified time.

### Procedure

Enter [dC330](#) [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

Y N

Check the wire between [J8880](#) pin 2 and [J8984](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#) pins 3 and 1 on the Finisher PWB ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8984](#) pin 2 on the Finisher PWB and GND ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). Actuate the Compiler Tray No Paper Sensor. **The voltage changes.**

Y N

Replace the Compiler Tray No Paper Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-054 Eject Motor FORWARD LO] and [dC330](#) [012-055 Eject Motor FORWARD HI]. **The Eject Motor starts up.**

Y N

Check the wires between [P/J8878](#) on the Eject Motor and [P/J8983](#) on the Finisher PWB ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair/reconnect as required.

Measure the resistance of the Eject Motor between each point of [J8878-1/3/4/6](#) ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)). **The resistance is approx. 20 Ohm.**

Y N

Replace the Eject Motor ([PL 23.11](#)).

Replace the Eject Motor ([PL 23.11](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination ([PL 23.13](#)).

Check the return Spring ([PL 23.11](#)) item 38 and replace if damaged or missing.



Check the Compiler Tray No Paper Sensor and Eject Motor circuits for an intermittent condition.

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## **312-210 (LX) NVM Fail RAP**

**BSD-ON:** [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

NVM Fail

### **Procedure**

Power OFF and then ON.

If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

## 312-211 (LX) Stacker Tray Fault

**BSD-ON:** [BSD 12.24 Office Finisher LX Stacker Tray Control](#)

Stack Height Sensor 1 is not ON within the specified time after stacker tray starts elevating. While Stacker Tray is elevating or lowering, the state of the Encoder Sensor does not change within the specified time.

### Initial Actions

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor 1 actuator.
- Check the tray raise/lower mechanism for damage or contamination.

### Procedure

Execute [dC330](#) [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1.

**The display changes.**

Y N

Check the wire between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 16 and 18 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 17 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**

Y N

Replace the Stacker Height Sensor 1 ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-263], Stacker Encoder Sensor. Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the sensor. **The display changes.**

Y N

Check the wire between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 22 and 24 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 23 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**

A

Y N

Replace the Stacker Encoder Sensor ([PL 23.7](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-060], Stacker Motor Up, and [012-061], Stacker Motor Down.

**The Stacker Motor ([PL 23.7](#)) Moves.**

Y N

**There is +24 VDC from [P/J8986](#) pin 12 to GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#))**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Check the wires between [P/J8986](#) pins 11 and 12, and the Stacker Motor for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair/reconnect as required.

Replace the Stacker Elevator Motor ([PL 23.7](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

# 312-212 (LX) Stacker Tray Upper Limit Fault

**BSD-ON:** [BSD 12.24 Office Finisher LX Stacker Tray Control](#)

The stacker has continued to elevate after the defined period of time has passed since Stacker No Paper Sensor is ON during stacker elevation.

## Initial Actions

- Check for obstructions under the tray.  
**NOTE:** *If the carriage is uneven due to contact with an obstruction, go to [REP 23.29](#) and follow to make tray sit evenly.*
- Check the operation of the Stacker Height Sensor actuators.
- Check the tray raise/lower mechanism for damage or contamination.

## Procedure

Execute [dC330](#) [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. **The display changes.**

**Y N**  
Check the wire between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**  
**Y N**  
Repair/reconnect as required.  
Measure the voltage between [P/J8988](#), pins 16 and 18 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**  
**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).  
Measure the voltage between [P/J8988](#), pin 17 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**  
**Y N**  
Replace the Stacker Height Sensor 1 ([PL 23.11](#)).  
Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. **The display changes.**

**Y N**  
Check the wire between [J8874](#) pin 2 and [P/J8988](#) pin 20 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**  
**Y N**  
Repair/reconnect as required.  
Measure the voltage between [P/J8988](#), pins 19 and 21 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**  
**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

**A B**  
Measure the voltage between [P/J8988](#), pin 20 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**  
**Y N**  
Replace the Stacker Height Sensor 2 ([PL 23.11](#)).  
Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-263], Stacker Encoder Sensor. Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the sensor. **The display changes.**

**Y N**  
Check the wire between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**  
**Y N**  
Repair/reconnect as required.  
Measure the voltage between [P/J8988](#), pins 22 and 24 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**  
**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).  
Measure the voltage between [P/J8988](#), pin 23 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**  
**Y N**  
Replace the Stacker Encoder Sensor ([PL 23.7](#)).  
Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-262], Stacker No Paper Sensor. Block and unblock the Sensor ([PL 23.7](#)). **The display changes.**

**Y N**  
Check the wire between [J8872](#) pin 2 and [P/J8988](#) pin 14 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**  
**Y N**  
Repair/reconnect as required.  
Measure the voltage between [P/J8988](#), pins 13 and 15 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**  
**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).  
Measure the voltage between [P/J8988](#), pin 14 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker No Paper Sensor. **The voltage changes.**  
**Y N**  
Replace the Stacker No Paper Sensor ([PL 23.7](#)).  
Replace the Finisher PWB ([PL 23.16](#)).  
Replace the Finisher PWB ([PL 23.16](#)).

# 312-213 (LX) Stacker Tray Lower Limit Fault

**BSD-ON:** [BSD 12.24 Office Finisher LX Stacker Tray Control](#)

Stacker descended lower than normal levels, below low limit height.

## Initial Actions

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor actuators.
- Check the tray raise/lower mechanism for damage or contamination.

## Procedure

Execute [dC330](#) [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. **The display changes.**

**Y N**  
Check the wire between [J8873](#) pin 2 and [P/J8988](#) pin 17 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 16 and 18 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 17 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**

**Y N**  
Replace the Stacker Height Sensor 1 ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. **The display changes.**

**Y N**  
Check the wire between [J8874](#) pin 2 and [P/J8988](#) pin 20 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 19 and 21 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 20 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker Height Sensor 1. **The voltage changes.**

**Y N**  
Replace the Stacker Height Sensor 2 ([PL 23.11](#)).

**A B**  
Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-263], Stacker Encoder Sensor. Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the sensor. **The display changes.**

**Y N**  
Check the wire between [J8875](#) pin 2 and [P/J8988](#) pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 22 and 24 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 23 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Manually rotate the Encoder ([PL 23.7](#)) to block and unblock the Stacker Encoder Sensor. **The voltage changes.**

**Y N**  
Replace the Stacker Encoder Sensor ([PL 23.7](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Execute [dC330](#) [012-262], Stacker No Paper Sensor. Block and unblock the Sensor ([PL 23.7](#)). **The display changes.**

**Y N**  
Check the wire between [J8872](#) pin 2 and [P/J8988](#) pin 14 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 13 and 15 on the Finisher PWB ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 14 on the Finisher PWB and GND ([BSD 12.24 Office Finisher LX Stacker Tray Control](#)). Actuate the Stacker No Paper Sensor. **The voltage changes.**

**Y N**  
Replace the Stacker No Paper Sensor ([PL 23.7](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-221 (LX) Front Tamper Home Sensor On Fault

**BSD-ON:**[BSD 12.18 Office Finisher LX Tamping and offset \(1 of 2\)](#)

**BSD-ON:**[BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

After the Front Tamper started moving to the home position, the Front Tamper Home Sensor did not turn On within 800ms.

### Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N

Replace the parts that are interfering with operation.

Execute [dC330](#) [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N

Check the wire between [J8881](#) pin 2 and [J8984](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 6 and 4 on the Finisher PWB ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8984](#), pin 5 on the Finisher PWB and GND ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y N

Replace the Front Tamper Home Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.**

Y N

**There is +24 VDC from [J8984](#) pin 19 to GND on the Finisher PWB to GND**

Y N

**There is +24 VDC from [J8982](#) pin 4 to GND on the Finisher PWB to GND**

Y N

Go to [BSD 12.12 Office Finisher LX Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([PL 23.16](#)).

Check the wires between [J8984](#), pins 18 ~ 22 on the Finisher PWB, and the Front Tamper Motor [J8984](#) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair/reconnect as required.

A B

Replace the front Tamper Motor ([PL 23.12](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-223 (LX) Front Tamper Home Sensor Off Fault

**BSD-ON:** [BSD 12.18 Office Finisher LX Tamping and offset \(1 of 2\)](#)

**BSD-ON:** [BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

After the Front Tamper started moving away from the home position, the Front Tamper Home Sensor did not turn Off within the specified time.

### Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N  
| Replace the parts that are interfering with operation.

Execute [dC330](#) [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N  
| Check the wire between [J8881](#) pin 2 and [J8984](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
| Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 6 and 4 on the Finisher PWB ([BSD 12.18 Office Finisher LX Tamping and offset \(1 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N  
| Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8984](#), pin 5 on the Finisher PWB and GND ([BSD 12.18 Office Finisher LX Tamping and Offset \(1 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y N  
| Replace the Front Tamper Home Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.**

Y N  
| **There is +24 VDC from [J8984](#) pin 19 on the Finisher PWB to GND**

Y N  
| **There is +24 VDC from [J8982](#) pin 4 on the Finisher PWB to GND**

Y N  
| Go to [BSD 12.12 Office Finisher LX Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([PL 23.16](#)).

Check the wires between [J8984](#), pins 18 ~ 22 on the Finisher PWB, and the Front Tamper Motor [J8984](#) for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
| Repair/reconnect as required.

A B  
| Replace the Front Tamper Motor ([PL 23.12](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-224 (LX) Rear Tamper Home Sensor Off Fault

BSD-ON: [BSD 12.18 Office Finisher LX Tamping and offset \(1 of 2\)](#)

BSD-ON: [BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn Off within the specified time.

### Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N  
| Replace the parts that are interfering with operation.

Execute [dC330 \[012-221\]](#), Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N  
| Check the wire between [J8882](#) pin 2 and [J8984](#) pin 8 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
| Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 9 and 7 on the Finisher PWB ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N  
| Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8984](#), pin 8 on the Finisher PWB and GND ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N  
| Replace the Rear Tamper Home Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330 \[012-026\]](#), Rear Tamper Motor Front and [\[012-029\]](#), Rear Tamper Motor Rear. **The Rear Tamper Motor moves.**

Y N  
| **There is +24 VDC from [J8984](#) pin 14 on the Finisher PWB to GND**

Y N  
| **There is +24 VDC from [J8982](#) pin 4 on the Finisher PWB to GND**

Y N  
| Go to [BSD 12.12 Office Finisher LX Interlock Switching](#) and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([PL 23.16](#)).

Check the wires between [J8984](#), pins 13 ~ 17 on the Finisher PWB, and the Rear Tamper Motor [P/J8883](#) for an open or short circuit, or a loose or damaged connector.

**The wires are OK.**

Y N  
| Repair/reconnect as required.

A B  
| Replace the Rear Tamper Motor ([PL 23.12](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-243 (LX) Booklet Folder Home Sensor On Fault

BSD-ON:[BSD 12.17 Office Finisher LX Folding](#)

Folder Home Sensor is not turned on after the lapse of 500ms from Motor ON while Folder Knife is returning to Home.

### Initial Actions

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Folder Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

### Procedure

Enter [dC330](#) [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select Start. **The Fold Knife Motor energizes.**

Y N  
Select Stop. Refer to ([BSD 12.17 Office Finisher LX Folding](#)). Check continuity between the Booklet Folder Knife Motor ( [P/J8905](#)) and the Finisher PWB ( [P/J8990](#)), and between the Booklet PWB ( [P/J8994](#)) and the Finisher PWB ( [P8985](#)). **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Booklet Folder Knife Motor ([PL 23.15](#)). If the problem continues, replace the Booklet PWB ([PL 23.21](#)).

Select Stop. Enter [dC330](#) [13-101], Folder Home Sensor. Select Start. Block/unblock the Folder Home Sensor. **The display changes.**

Y N  
Check the wire between [J8904](#) pin 2 and [P/J8990](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
Repair/reconnect as required.

Measure the voltage between [P/J8990](#), pins 3 and 1 on the Finisher PWB ([BSD 12.17 Office Finisher LX Folding](#)). **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8990](#), pin 2 on the Finisher PWB and GND ([BSD 12.17 Office Finisher LX Folding](#)) Block/unblock the Folder Home Sensor. **The voltage changes.**

Y N  
Replace the Folder Home Sensor ([PL 23.15](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-249 (LX) Booklet Front Stapler Fault

BSD-ON:[BSD 12.26 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)

BSD-ON:[BSD 12.13 Office Finisher LX Booklet Interlock Switching](#)

The Booklet Front Staple Home Switch is not ON (does not return to home position) within the specified time after the Booklet Front Staple Motor starts to reverse.

### Initial Actions

Check the Booklet Front Stapler for jammed staples or an incorrectly installed staple cartridge.

### Procedure

Enter [dC330](#) [12-046], Staple Motor FWD. and then [12-047], Staple Motor REV. **The Front Booklet Stapler cycles normally.**

Y N  
**There is +24 VDC from [P/J8993](#) pin 5 on the Booklet PWB to GND.**

Y N  
Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch ([BSD 12.13 Office Finisher LX Booklet Interlock Switching](#)). Repair/replace as required ([PL 23.21](#)).

Switch off the power. Check the wires between [P/J8994](#) on the Booklet PWB and [J8894](#) on the Front Booklet Stapler ([BSD 12.26 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly ([PL 23.19](#)). If the problem remains, replace the Booklet PWB ([PL 23.21](#)).

Switch off the power. Check the wire between [P/J8995](#), pin 5 on the Booklet PWB and [P/J8994](#) pin 3 on the Front Booklet Stapler ([BSD 12.26 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly ([PL 23.19](#)). If the problem remains, replace the Booklet PWB ([PL 23.21](#)).



## 312-260 (LX) Eject Clamp Home Sensor On Fault

BSD-ON: [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)

After the Eject Clamp started ascending, the Eject Clamp Home Sensor did not turn On within 500ms.

### Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Eject Clamp Home Sensor b for damage

### Procedure

Execute [dC330](#) [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor **The display changes.**

Y N  
Check the wire between [J8870](#) pin 2 on the Eject Clamp Home Sensor and [P/J8988](#) pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

Y N  
Repair/replace as required.

Measure the voltage between [P/J8988](#), pins 9 and 7 on the Finisher PWB. **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#) pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.**

Y N  
Replace the Eject Clamp Home Sensor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor ([PL 22.9](#)) starts up.**

Y N  
Check the wires between [P/J8878](#) pins 1~6 on the Eject Motor and [P/J8983](#) pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)). **The wires are OK.**

Y N  
Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of [P/J8878](#)-1/3/4/6. **The resistance is approx. 20hm.**

Y N  
Replace the Eject Motor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)). If the problem remains, replace the Eject Motor ([PL 23.11](#))

A

Go to [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#). Check for an intermittent circuit or intermittent mechanical problem. If the check is OK, replace the Finisher PWB ([PL 23.16](#)).

## 312-263 (LX) Rear Tamper Fault

**BSD-ON:** [BSD 12.18 Office Finisher LX Tamping and offset \(1 of 2\)](#)

**BSD-ON:** [BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

After the Rear Tamper started moving to the home position, the Rear Tamper Home Sensor did not turn On within 800ms.

### Procedure

Manually operate the Tamper mechanism. **The Tamper mechanism moves smoothly.**

Y N

Replace the parts that are interfering with operation.

Execute [dC330](#) [012-221], Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.**

Y N

Check the wire between [J8882](#) pin 2 and [J8984](#) pin 8 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between [J8984](#), pins 9 and 7 on the Finisher PWB ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8984](#), pin 8 on the Finisher PWB and GND ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N

Replace the Rear Tamper Home Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-026], Rear Tamper Motor Front and [012-029], Rear Tamper Motor Rear. **The Rear Tamper Motor moves.**

Y N

**There is +24 VDC from [J8984](#) pin 14 on the Finisher PWB to GND**

Y N

**There is +24 VDC from [J8982](#) pin 4 on the Finisher PWB to GND**

Y N

Go to [BSD 12.12 Office Finisher LX Interlock Switching](#): and check the +24V circuit feeding pin 4. Repair/reconnect as required.

Replace the Finisher PWB ([PL 23.16](#)).

Check the wires between [J8984](#), pins 13 ~ 17 on the Finisher PWB, and the Rear Tamper Motor [P/J8883](#) for an open or short circuit, or a loose or damaged connector.

**The wires are OK.**

Y N

Repair/reconnect as required.

A B

Replace the Rear Tamper Motor ([PL 23.12](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-265 (LX) Booklet Folder Home Sensor OFF Fault

BSD-ON: [BSD 12.17 Office Finisher LX Folding](#)

When the Booklet Home moves from Home position, the Folder Home Sensor did not turn OFF within the specified time.

### Initial Actions

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Booklet Fold Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

### Procedure

Enter **dC330** [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select Start. **The Fold Knife Motor energizes.**

**Y N**  
Select Stop. Refer to [BSD 12.17 Office Finisher LX Folding](#). Check continuity between the Folder Knife Motor ( [P/J8905](#)) and the Finisher PWB ( [P/J8990](#)), and between the Booklet PWB ( [P/J8994](#)) and the Finisher PWB ( [P8985](#)). **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Folder Knife Motor ([PL 23.15](#)). If the problem continues, replace the Booklet PWB ([PL 23.21](#)).

Select Stop. Enter **dC330** [13-101], Folder Home Sensor. Select Start. Block/unblock the Folder Home Sensor. **The display changed.**

**Y N**  
Check the wire between [J8904](#) pin 2 and [P/J8990](#) pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8990](#), pins 3 and 1 on the Finisher PWB [BSD 12.17 Office Finisher LX Folding](#). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8990](#), pin 2 on the Finisher PWB and GND ([BSD 12.17 Office Finisher LX Folding](#)). Block/unblock the Folder Home Sensor. **The voltage changes.**

**Y N**  
Replace the Folder Home Sensor ([PL 23.15](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-268 (LX) Booklet Rear Stapler Fault

BSD-ON: [BSD 12.27 Office Finisher LX Booklet Staple Control \(2 of 2 -Rear\)](#)

BSD-ON: [BSD 12.13 Office Finisher LX Booklet Interlock Switching](#)

The Booklet Rear Staple Home Switch is not ON (does not return to home position) within the specified time after the Booklet Rear Staple Motor starts to reverse.

### Initial Actions

Check the Booklet Rear Stapler for jammed staples or an incorrectly installed staple cartridge.

### Procedure

Enter **dC330** [12-026], Staple Motor FWD. and then [12-027], Staple Motor REV. **The Rear Booklet Stapler cycles normally.**

**Y N**  
**There is +24 VDC from [P/J8993](#) pin 5 on the Booklet PWB to GND.**

**Y N**  
Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch [BSD 12.13 Office Finisher LX Booklet Interlock Switching](#). Repair/replace as required ([PL 23.21](#)).

Switch off the power. Check the wires between [P/J8995](#) on the Booklet PWB and [J8895](#) on the Rear Booklet Stapler ([BSD 12.27 Office Finisher LX Booklet Staple Control \(2 of 2 -Rear\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly ([PL 23.20](#)). If the problem remains, replace the Booklet PWB ([PL 23.21](#)).

Switch off the power. Check the wire between [P/J8995](#), pin 12 on the Booklet PWB and [J8895](#) pin 3 on the Rear Booklet Stapler ([BSD 12.27 Office Finisher LX Booklet Staple Control \(2 of 2 -Rear\)](#)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly ([PL 23.20](#)). If the problem remains, replace the Booklet PWB ([PL 23.21](#)).

## 312-282 (LX) Eject Clamp Home Sensor Off Fault

**BSD-ON:** [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)

After the Eject Clamp started descending, the Eject Clamp Home Sensor did not turn Off within 200ms.

### Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Eject Clamp Home Sensor for damage
- Check the return Spring ([PL 23.11](#)) item 38 and replace if damaged or missing.

### Procedure

Execute [dC330](#) [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor **The display changes.**

**Y N**  
Check the wire between [J8870](#) pin 2 on the Eject Clamp Home Sensor and [P/J8988](#) pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

**Y N**  
Repair/replace as required.

Measure the voltage between [P/J8988](#), pins 9 and 7 on the Finisher PWB. **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#) pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.**

**Y N**  
Replace the Eject Clamp Home Sensor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

**Y N**  
Check the wires between [P/J8878](#) pins 1~6 on the Eject Motor and [P/J8983](#) pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#). **The wires are OK.**

**Y N**  
Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of [P/J8878](#)-1/3/4/6. **The resistance is approx. 20hm.**

**Y N**  
Replace the Eject Motor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)). If the problem remains, replace the Eject Motor ([PL 23.11](#))

A

Go to [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#). Check for an intermittent circuit or intermittent mechanical problem. If the check is OK, replace the Finisher PWB ([PL 23.16](#)).

## 312-283 (LX) Set Clamp Home Sensor On Fault

BSD-ON: [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)

BSD-ON: [BSD 12.23 Office Finisher LX Eject Control \(2 of 2\)](#)

After the Set Clamp started, the Set Clamp Home Sensor did not turn On within 200ms.

### Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Set Clamp Home Sensor for damage
- Check the return Spring ([PL 23.11](#)) item 38 and replace if damaged or missing.
- Make sure there is good meshing between Gear ([PL 23.11](#)) item 10 and the Set Clamp Clutch, item 12.
- Remove the Gear Select Actuator ([PL 23.11](#)) item 21 and check the drive dogs for damage.

### Procedure

Execute [dC330](#) [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. **The display changes.**

Y N  
Check the wire between [J8871](#) pin 2 on the Set Clamp Home Sensor and [P/J8988](#) pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

Y N  
Repair/replace as required.

Measure the voltage between [P/J8988](#), pins 12 and 10 on the Finisher PWB. **The voltage is approx. +5VDC.**

Y N  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between the [P/J8988](#) pin 11 on the Finisher PWB and GND). Actuate the Eject Clamp Home Sensor. **The voltage changes.**

Y N  
Replace the Eject Clamp Home Sensor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

Y N  
Check the wires between [P/J8878](#) pins 1~6 on the Eject Motor and [P/J8983](#) pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)). **The wires are OK.**

Y N  
Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of [P/J8878](#)-1/3/4/6. **The resistance is approx. 2 Ohm.**

A

Y N  
Replace the Eject Motor ([PL 23.11](#)).

Replace the Finisher PWB ([PL 23.16](#)). If the problem remains, replace the Eject Motor ([PL 23.11](#))

Execute [dC330](#) [012-050 Set Clamp Clutch ON]. **The Set Clamp Clutch energizes.**

Y N  
Select Stop. Check the wires between [P/J8877](#) pins 1 and 2 on the Set Clamp Clutch and [P/J8983](#) pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 12.23 Office Finisher LX Eject Control \(2 of 2\)](#)). **The wires are OK.**

Y N  
Repair/replace as required.

Measure the voltage between the Finisher PWB [P8983-4](#) (+) and GND (-). **The voltage is approx. +24VDC.**

Y N  
Replace the Set Clamp Clutch ([PL 23.11](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

## 312-284 (LX) Set Clamp Home Sensor Off Fault

BSD-ON: [BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)

BSD-ON: [BSD 12.23 Office Finisher LX Eject Control \(2 of 2\)](#)

After the Set Clamp completed operation, the Set Clamp Home Sensor did not turn Off within the specified time.

### Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Set Clamp Home Sensor for damage
- Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.
- Make sure there is good meshing between Gear (PL 23.11) item 10 and the Set Clamp Clutch item 12.
- Remove the Gear Select Actuator (PL 23.11) item 21 and check the drive dogs for damage.

### Procedure

Execute [dC330](#) [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. **The display changes.**

**Y N**  
Check the wire between [J8871](#) pin 2 on the Set Clamp Home Sensor and [P/J8988](#) pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

**Y N**  
Repair/replace as required.

Measure the voltage between [P/J8988](#), pins 12 and 10 on the Finisher PWB. **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB (PL 23.16).

Measure the voltage between the pin 11 and GND on the Finisher PWB and GND). Actuate the Eject Clamp Home Sensor. **The voltage changes.**

**Y N**  
Replace the Eject Clamp Home Sensor (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Alternately execute [dC330](#) [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. **The Eject Motor starts.**

**Y N**  
Check the wires between [P/J8878](#) pins 1~6 on the Eject Motor and [P/J8983](#) pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 12.22 Office Finisher LX Eject Control \(1 of 2\)](#)). **The wires are OK.**

**Y N**  
Repair/replace as required.

**A B**  
Measure the resistance of the Eject Motor between each pin of [P/J8878-1/3/4/6](#). **The resistance is approx. 20hm.**  
**Y N**  
Replace the Eject Motor (PL 23.11).  
Replace the Finisher PWB (PL 23.16). If the problem remains, replace the Eject Motor (PL 23.11)

Execute [dC330](#) [012-050 Set Clamp Clutch ON]. **The Set Clamp Clutch energizes.**

**Y N**  
Select Stop. Check the wires between [P/J8877](#) pins 1 and 2 on the Set Clamp Clutch and [P/J8983](#) pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors ([BSD 12.23 Office Finisher LX Eject Control \(2 of 2\)](#)). **The wires are OK.**

**Y N**  
Repair/replace as required.

Measure the voltage between the Finisher PWB [P/J8983-4 \(+\)](#) and GND (-). **The voltage is approx. +24VDC.**

**Y N**  
Replace the Set Clamp Clutch (PL 23.11). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

## 312-291 (LX) Stapler Fault

BSD-ON:[BSD 12.21 Office Finisher LX Staple Control](#)

- After the Stapler Motor turned On (Forward rotation), the Staple Head Home Sensor did not switch from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.

### Initial Actions

Check the Stapler for jammed staples or an incorrectly installed staple cartridge.

### Procedure

Execute [dC330](#) [012-046], Staple Motor FWD, and [012-047], then Staple Motor REV. **The Stapler cycles.**

**Y N**  
Check the wires between [J8887](#), pins 1~4 on the Stapler Assembly and [P/J8981](#) pins 9~11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. If the wires are OK, the Stapler Assembly ([PL 23.8](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

Select Stop. Execute [dC330](#) [012-244], Staple Home Switch. **The display is “Low.”**

**Y N**  
**There is +5 VDC from pin 5 to pin 1 of [J8886](#) on the Stapler Assembly.**

**Y N**  
Check the wires from [P/J8981](#), pins 4 and 8, to [J8886](#) pins 5 and 1 for an open circuit. If the wires are OK, replace the Finisher PWB ([PL 23.16](#)).

Check the wire from [J8886](#) pin 4 to [P/J8981](#) pin 5 for an open circuit. If the wire is OK, replace the Stapler Assembly ([PL 23.8](#)).

Go to [BSD 12.21 Office Finisher LX Staple Control](#). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([PL 23.8](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-295 (LX) Stapler Move Position Sensor On Fault

BSD-ON:[BSD 12.20 Office Finisher LX Staple Positioning](#)

- After the Stapler started moving to the staple position, the Stapler Move Position Sensor did not turn On within 2sec.
- After the Stapler completed moving to the Staple Position, the Stapler Move Position Sensor did not turn On.

### Initial Actions

Check the Stapler, Base Frame, and Rail ([PL 23.8](#)) for freedom of movement.

### Procedure

Execute [dC330](#) [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.**

**Y N**  
Check the wire between [J8885](#) pin 2 on the Stapler Move Position Sensor and [P/J8981](#) pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

**Y N**  
Repair/replace as required.

Measure the voltage between [P/J8981](#), pins 3 and 1 on the Finisher PWB ([BSD 12.20 Office Finisher LX Staple Positioning](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8981](#) pin 2 on the Finisher PWB and GND ([BSD 12.20 Office Finisher LX Staple Positioning](#)). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.**

**Y N**  
Replace the Stapler Move Position Sensor ([PL 23.8](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-043], Staple Move Motor Rear and [012-040], Staple Move Motor Front. **The Stapler Move Motor moves.**

**Y N**  
Check the wires between [P/J8981](#) pins 13~16 on the Finisher PWB and [P/J8888](#) on the Stapler Move Motor ([BSD 12.20 Office Finisher LX Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

**Y N**  
Repair/replace as required.

Replace the Staple Move Motor ([PL 23.8](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Go to ([BSD 12.20 Office Finisher LX Staple Positioning](#)). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([PL 23.8](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-296 (LX) Staple Move Sensor Off Fault

**BSD-ON:** [BSD 12.20 Office Finisher LX Staple Positioning](#)

- After the Stapler started moving to the Staple Position and the Staple Move Sensor turned Off, the Staple Move Sensor did not turn Off within 500ms.
- After the Staple Position had been fixed, the Staple Move Sensor turned Off.
- After the Staple Move Sensor turned On when paper passed through the Dual Staple 1 Position while moving to the Rear Staple Position, the Staple Move Sensor did not turn Off within 500ms.

### Initial Actions

Check the Stapler, Base Frame, and Rail ([PL 23.8](#)) for freedom of movement.

Check to see if the shipping screw was removed from the stapler.

### Procedure

Execute [dC330](#) [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.**

**Y N**  
Check the wire between [J8885](#) pin 2 on the Stapler Move Position Sensor and [P/J8981](#) pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.**

**Y N**  
Repair/replace as required.

Measure the voltage between [P/J8981](#), pins 3 and 1 on the Finisher PWB ([BSD 12.20 Office Finisher LX Staple Positioning](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8981](#) pin 2 on the Finisher PWB and GND ([BSD 12.20 Office Finisher LX Staple Positioning](#)). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.**

**Y N**  
Replace the Stapler Move Position Sensor ([PL 23.8](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [012-043], Staple Move Motor Rear and [012-040], Staple Move Motor Front. **The Stapler Move Motor moves.**

**Y N**  
Check the wires between [P/J8981](#) pins 13~16 on the Finisher PWB and [P/J8888](#) on the Stapler Move Motor ([BSD 12.20 Office Finisher LX Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

**Y N**  
Repair/replace as required.

Replace the Staple Move Motor ([PL 23.8](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

A

Go to [BSD 12.20 Office Finisher LX Staple Positioning](#). Check for an intermittent connection. If the check is good, replace the Stapler Assembly ([PL 23.8](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).



## 312-300 (LX) Eject Cover Open

BSD-ON:[BSD 12.12 Office Finisher LX Interlock Switching](#)

Eject Cover Switch open was detected.

### Initial Actions

- Ensure that the Eject Cover is down
- Check Eject Cover Switch for improper installation
- Check Eject Cover Switch connectors for connection failure
- Check Actuator part for deformation

### Procedure

Enter [dC330](#) [012-300], Eject Cover Switch ([PL 23.11](#)). Select Start. Actuate the Eject Cover Switch. **The display changes**

Y N  
Select Stop. Check continuity of the Eject Cover Switch ( [J8889](#), pin 1 to pin 2). **The continuity check is OK.**

Y N  
Replace the Eject Cover Switch ([PL 23.11](#)).

Check continuity between the Eject Cover Switch and the Finisher PWB ( [J8982](#) pin 1 to [J8889](#) pin 1, and [J8889](#) pin2 to [J8982](#) pin 7). If the check is OK, replace the Finisher PWB ([PL 23.16](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-302 (LX) Finisher Front Cover Open

BSD-ON:[BSD 12.12 Office Finisher LX Interlock Switching](#)

The Finisher Front Cover is open.

### Initial Actions

- Check the installation of the H-Transport Open Sensor
- Opening/closing of the Finisher H-Transport Cover.

### Procedure

Execute [dC330](#) [012-302], Front Door Interlock Switch. Open/close the Finisher Front Cover.

**The display changes.**

Y N  
Open the Front Door and cheat the Front Door Interlock Switch **The display changes.**

Y N  
Check the wires between [J8982](#) pin 3 and [J8891](#) pin 2B, and from [J8891](#) pin 2A to [J8982](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wires are OK.**

Y N  
Repair/reconnect as required.

Remove the cheater. Measure the voltage between [J8891](#) pin 2A on the Front Door Interlock Switch and GND ([BSD 12.12 Office Finisher LX Interlock Switching](#)). **The voltage is approx. +5VDC.**

Y N  
Check the wire from [J8891](#) pin 2A to [J8982](#) pin 2 for an open or short circuit, or a loose or damaged connector. If the wires are OK, replace the Finisher PWB ([PL 23.16](#)).

Cheat the Interlock Switch. **The voltage drops to 0 VDC.**

Y N  
Replace the Front Door Interlock Switch ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Check the actuator for damage or misalignment

Check the Interlock circuit for an intermittent condition ([BSD 12.12 Office Finisher LX Interlock Switching](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-303 (LX) Finisher H-Transport Cover Open

BSD-ON: [BSD 12.14 Office Finisher LX Horizontal Transportation](#)

The Finisher H-Transport Cover is open.

### Initial Actions

- Check the installation of the H-Transport Open Sensor
- Opening/closing of the Finisher H-Transport Cover.

### Procedure

Execute [dC330](#) [012-303], H-Transport Open Sensor. Actuate the H-Transport Open Sensor ([PL 23.4](#)). **The display changes.**

**Y N**  
Check the wire between [J8860](#) pin 2 and [J8987](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 3 and 1 on the Finisher PWB ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)) **The voltage is approx. +5VDC.**

**Y N**  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8987](#), pin 2 on the Finisher PWB and GND ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). Actuate the H-Transport Open Sensor. **The voltage changes.**

**Y N**  
Replace the H-Transport Open Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-320 (LX) Punch Home Sensor On Fault

BSD-ON: [BSD 12.15 Office Finisher LX Punch](#)

The Punch Home Sensor did not turn ON within the specified time after the Punch Motor started running.

### Initial Actions

Check the following:

- Punch Home Actuator for deformation
- Punch Home Sensor for proper installation
- Punch Home Sensor connectors
- Punch Motor for proper operation
- Punch Motor connectors

### Procedure

Enter [dC330](#) [12-074] and [12-078], Punch Motor ([PL 23.5](#)), alternately.

Select Start. **The Punch Motor runs.**

**Y N**  
Select Stop. Check circuit of the Punch Motor. Refer to [BSD 12.15 Office Finisher LX Punch](#) to troubleshoot the circuit.

Select Stop. Select [12-271], Punch Home Sensor ([PL 23.5](#)). Select Start. Actuate the sensor with a piece of paper. **The display changes.**

**Y N**  
Go to [BSD 12.15 Office Finisher LX Punch](#). Check circuit of the Punch Home Sensor.

Select Stop. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-334 (LX) Download Mode Fault

BSD-ON: [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

Failure in previous download (abnormal termination during download); can only start in Download Mode upon turning power on.

### Procedure

Download defective; check the following:

- Cable connection between Finisher and IOT is not connected or defective
- Finisher power cable is plugged in properly

## 312-700 (LX) Punch Box Nearly Full

BSD-ON: [BSD 12.15 Office Finisher LX Punch](#)

Punch Box nearly full.

### Procedure

Empty the Punch Box and re-insert. If the fault remains, check the circuit of the Punch Box Set Sensor ([BSD 12.15 Office Finisher LX Punch](#)).

## 312-901 (LX) H-Transport Entrance Sensor On Jam

BSD-ON:[BSD 12.14 Office Finisher LX Horizontal Transportation](#)

Paper remains on the H-Transport Entrance Sensor.

### Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

### Procedure

Execute [dC330](#) [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor ([PL 23.4](#)). **The display changes.**

Y N  
|  
Check the wire between [J8861](#) pin 2 and [J8987](#) pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
|  
Repair/reconnect as required.

Measure the voltage between [J8987](#), pins 4 and 5 on the Finisher PWB ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
|  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [J8987](#), pin 6 on the Finisher PWB and GND ([BSD 12.14 Office Finisher LX Horizontal Transportation](#)). Actuate the H-Transport Entrance Sensor. **The voltage changes.**

Y N  
|  
Replace the H-Transport Entrance Sensor ([PL 23.4](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-903 (LX) Paper Remains at Compiler Exit Sensor

BSD-ON:[BSD 12.16 Office Finisher LX Transportation](#)

Paper remains on the Compiler Exit Sensor.

### Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

### Procedure

Execute [dC330](#) [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor ([PL 23.14](#)). **The display changes.**

Y N  
|  
Check the wire between [J8869](#) pin 2 and [P/J8988](#) pin 5 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N  
|  
Repair/reconnect as required.

Measure the voltage between [P/J8988](#), pins 4 and 6 on the Finisher PWB ([BSD 12.16 Office Finisher LX Transportation](#)). **The voltage is approx. +5VDC.**

Y N  
|  
Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between [P/J8988](#), pin 5 on the Finisher PWB and GND ([BSD 12.16 Office Finisher LX Transportation](#)). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N  
|  
Replace the Compiler Exit Sensor ([PL 23.14](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-905 (LX) Compiler Tray No Paper Sensor On JAM

BSD-ON: [BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)

Paper remains on the Compiler Tray No Paper Sensor.

### Initial Actions

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

### Procedure

Enter **dC330** [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

Y N

Check the wire between **J8880** pin 2 and **J8984** pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

Y N

Repair/reconnect as required.

Measure the voltage between **J8984** pins 3 and 1 on the Finisher PWB ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). **The voltage is approx. +5VDC.**

Y N

Replace the Finisher PWB ([PL 23.16](#)).

Measure the voltage between **J8984** pin 2 on the Finisher PWB and GND ([BSD 12.19 Office Finisher LX Tamping and Offset \(2 of 2\)](#)). Actuate the Compiler Tray No Paper Sensor. **The voltage changes.**

Y N

Replace the Compiler Tray No Paper Sensor ([PL 23.12](#)).

Replace the Finisher PWB ([PL 23.16](#)).

If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-916 (LX) Stacker Mix Stack Detection RAP

BSD-ON: [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

A stack of mixed sizes detected.

### Initial Actions

- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

### Procedure

Enter **dC330** [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 23.7](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

Y N

Select Stop. Go to [BSD 12.24 LX Finisher Stacker Drive](#). **Check continuity between the Elevator Motor and Finisher PWB. The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 23.7](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-917 (LX) Stacker Tray Stapled Set Over Count

BSD-ON: [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

The Staple Set Count of the Stacker Tray has exceeded 50 sets during the Staple Set Eject operation.

### Procedure

Remove all paper from the Stacker. If the problem continues, go to the [312-161 \(LX\)](#) RAP.

## 312-930 (LX) Stacker Tray Full RAP

BSD-ON: [BSD 12.24 LX Finisher Stacker Drive.](#)

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size).

### Initial Actions

- Remove the paper from the Stacker Tray
- Power Off/On

If the fault remains, perform the Procedure

### Procedure

Go to the [312-211 \(LX\)](#) RAP.

## 312-949 (LX) Punch Box Missing

BSD-ON: [BSD 12.15 Office Finisher LX Punch](#)

Punch Box Set Sensor detected Punch Box to be missing.

### Initial Actions

- Ensure that the Punch Box is present and installed properly

### Procedure

Enter [dC330](#) [012-275], Punch Box Set Sensor ([PL 23.5](#)). Select **Start**. Remove and insert the Punch Box manually. **The display changes**

**Y N**  
Select Stop. Check continuity between the Punch Box Set Sensor ( [J8866](#)); [P8863](#); and the Finisher PWB ( [J8987](#)). **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Punch Box Set Sensor ([PL 23.5](#)). If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

Check the Punch Box Set Sensor Actuator and Punch Box Guide for deformation. **The Punch Box can be removed and inserted properly.**

**Y N**  
Repair or replace the Punch Box ([PL 23.2](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 23.16](#)).

## 312-976 (LX) Staple Fail

BSD-ON: [12.21 Office Finisher LX Staple Control](#)

Staple Head Home Sensor is not turned on within 450msec after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

### Procedure

Go to the [312-291 \(LX\)](#) RAP.

## 312-977 (LX) Staple Ready Fail

BSD-ON: [12.21 Office Finisher LX Staple Control](#)

Staple Head void stapling reached a specified number of times during the Staple Head initialization.

### Procedure

Check that staples are present and correctly installed. If the problem continues, go to the [312-291 \(LX\) RAP](#).

## 312-978 (LX) Staple Fail

BSD-ON: [12.26 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)

BSD-ON: [12.27 Office Finisher LX Booklet Staple Control \(2 of 2 -Rear\)](#)

Booklet Stapler started operating, but Ready signal did not turn to Ready state in a specified period of time.

### Procedure

Go to the [312-291 \(LX\) RAP](#).



## 312-979 (LX) Stapler near empty

BSD-ON: [12.21 Office Finisher LX Staple Control](#)

- Low Staple Sensor ON is detected during power ON and Interlock Close
- Low Staple Sensor ON is detected right before the Staple Head Close operation

### Procedure

Check the Staple Cartridge. If the Staples are NOT low, go to the [312-291 \(LX\)](#) RAP.

## 312-982 (LX) Stacker Lower Safety Warning

BSD-ON: [12.24 Office Finisher LX Stacker Tray Control](#)

The Height Alignment was not successful within 250msec when the Height Adjustment was performed for output paper to the Stacker Tray (Tray lowering down) in the middle of a job.

### Procedure

Remove all paper from the Stacker. If the problem continues, go to the [312-213 \(LX\)](#) RAP.

## 312-984 (LX) Booklet Low Staple F RAP

BSD-ON: [12.26 Office Finisher LX Booklet Staple Control \(1 of 2 - Front\)](#)

One of the following was detected

- Booklet Stapler Low Staple F signal was found to be on when staple started working.
- Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.

### Procedure

Refill the Front Stapler.

## 312-989 (LX) Booklet Low Staple R RAP

BSD-ON: [12.27 Office Finisher LX Booklet Staple Control \(2 of 2 -Rear\)](#)

One of the following was detected

- Booklet Stapler Low Staple R signal was found to be on when staple started working.
- Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.

### Procedure

Refill the Rear Stapler.



## 312-112 (Pro) H-Transport Entrance Sensor On Jam

BSD-ON: [BSD 12.32 H-Transport Drives](#)

BSD-ON: [BSD 12.33 Horizontal Transportation \(1 of 2\)](#)

H-Transport Entrance Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check the H-Transport Motor Belt for wear or damage
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation

### Procedure

Enter [dC330](#) [012-190], H-Transport Entrance Sensor ([PL 21.25](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes.**

Y N

Go to [BSD 12.33 Horizontal Transportation \(1 of 2\)](#) Check the circuit of the H-Transport Entrance Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-090], H-Transport Motor ([PL 21.28](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.32 H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Close the H-Transport Cover. Select [012-086] or [012-087], Gate Solenoid ([PL 21.25](#)). Select **Start**. **The Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Entrance Sensor ([PL 21.28](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-113 (Pro) Booklet In Sensor On Jam

BSD-ON: [BSD 12.36 Professional Finisher Drives](#)

BSD-ON: [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

BSD-ON: [BSD 12.41 Booklet Transportation](#)

The Booklet In Sensor did not turn on within the specified time after Punch Out Sensor On.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet In Sensor for obstructions ([PL 21.21](#))
- Check for transportation failure of non-standard paper
- Check the Booklet In Roll for wear or damage

### Procedure

Enter [dC330](#) [013-135], Booklet In Sensor ([PL 21.21](#)). Select **Start**. Actuate the Booklet In Sensor. **The display changes.**

Y N

Go to [BSD 12.41 Booklet Transportation](#). Check the circuit of the Booklet In Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid ([PL 21.10](#)). Select **Start**. **The Booklet Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#) Check the circuit of the Booklet Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor ([PL 21.10](#)). Select **Start**. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#) Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet In Sensor ([PL 21.12](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-114 (Pro) Booklet In Sensor Off Jam

BSD-ON: [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

BSD-ON: [BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.41 Booklet Transportation](#)

The Booklet In Sensor did not turn off within the specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet In Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet In Roll for wear or damage

### Procedure

Enter **dC330** [013-135], Booklet In Sensor (PL 21.21). Select Start. Actuate the Booklet In Sensor. **The display changes.**

**Y N**  
Go to [BSD 12.41 Booklet Transportation](#). Check the circuit of the Booklet In Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid (PL 21.10). Select Start. **The Booklet Gate Solenoid actuates.**

**Y N**  
Select **Stop**. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#). Check the circuit of the Booklet Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. **The motor energizes.**

**Y N**  
Select **Stop**. Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet In Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-115 (Pro) Booklet Folder Roll Exit Sensor On Jam

BSD-ON: [BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.41 Booklet Transportation](#)

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet Folder Roll Exit Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet Folding Roll for wear or damage
- Check the Booklet Eject Roll Drive rolls for wear or damage

### Procedure

Enter **dC330** [013-103], Booklet Folder Roll Exit Sensor (PL 21.21). Select Start. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.**

**Y N**  
Go to [BSD 12.41 Booklet Transportation](#). Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. **The motor energizes.**

**Y N**  
Select **Stop**. Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [013-008], Booklet Folder Roll Motor (PL 21.22). Select Start. **The motor energizes.**

**Y N**  
Select **Stop**. Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Folder Roll Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-125 (Pro) Gate Sensor On Jam

BSD-ON:[BSD 12.33 Horizontal Transportation \(1 of 2\)](#)

BSD-ON: [BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

Gate Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

### Procedure

Enter [dC330](#) [012-191], H-Transport Exit Sensor ([PL 21.28](#)). Select Start. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

Y N

Go to [BSD 12.33 Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Enter [012-102], Gate Sensor ([PL 21.11](#)). Select Start. Actuate the Gate Sensor. **The display changes.**

Y N

Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1Speed ([PL 21.10](#)). Select Start. **The motor energizes.**

Y N

Select Stop. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Gate Sensor ([PL 21.11](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-132 (Pro) Transport Entrance Sensor On Jam

BSD-ON:[BSD 12.36 Professional Finisher Drives](#)

BSD-ON:[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

Transport Entrance Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation

### Procedure

Enter [dC330](#) [012-100], Transport Entrance Sensor ([PL 21.10](#)). Select Start. Actuate the Transport Entrance Sensor. **The display changes.**

Y N

Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Entrance Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor Speed ([PL 21.10](#)). Select Start. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Transport Entrance Sensor ([PL 21.10](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-142 (Pro) Buffer Path Sensor On Jam

BSD-ON: [BSD 12.36 Professional Finisher Drives](#)

BSD-ON: [BSD 12.39 Professional Finisher Buffer Transport](#)

Buffer Path Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Transport Motor Belt, Gears and Drive Rolls for wear or damage

### Procedure

Enter [dC330](#) [012-101], Buffer Path Sensor ([PL 21.10](#)). Select Start. Actuate the Buffer Path Sensor. **The display changes.**

Y N

Go to [BSD 12.39 Professional Finisher Buffer Transport](#). Check the circuit of the Buffer Path Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1Speed ([PL 21.10](#)). Select Start. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] and/or [012-016], Buffer Gate Solenoid ([PL 21.10](#)). Select Start. **The Gate Solenoid actuates.**

Y N

Select Stop. Go to [BSD 12.39 Professional Finisher Buffer Transport](#). Check the circuit of the Buffer Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Buffer Rolls for obstructions
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Buffer Path Sensor ([PL 21.10](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-151(Pro) Compiler Exit Sensor Off Jam

BSD-ON: [BSD 12.36 Professional Finisher Drives](#)

BSD-ON: [BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

BSD-ON: [BSD 12.39 Professional Finisher Buffer Transport](#)

BSD-ON: [BSD 12.51 Professional Finisher Compiling](#)

The Compiler Exit Sensor did not turn Off within the specified time after Compiler Exit Sensor On.

### Initial Actions

- Check the Buffer Reverse Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter [dC330](#) [012-150], Compiler Exit Sensor ([PL 21.9](#)). Select Start. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Go to [BSD 12.51 Professional Finisher Compiling](#) Check the circuit of the Compiler Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 21.10](#)), and Select Start. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid ([PL 21.10](#)), and Select Start. **The Buffer Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.39 Professional Finisher Buffer Transport](#) Check the circuit of the Buffer Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 21.8](#)). Select Start. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-152 (Pro) Compiler Exit Sensor On Jam

**BSD-ON:**[BSD 12.36 Professional Finisher Drives](#)

**BSD-ON:**[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

**BSD-ON:**[BSD 12.39 Professional Finisher Buffer Transport](#)

**BSD-ON:**[BSD 12.51 Professional Finisher Compiling](#)

Not in the Punch mode: The Compiler Exit Sensor did not turn On within the specified time after Punch Out Sensor On.

In Punch mode: The Compiler Exit Sensor did not turn On within the specified time after the punching operation had begun.

### Initial Actions

- Check the Buffer Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter [dC330](#) [012-150], Compiler Exit Sensor (PL 21.9). Select Start. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Go to [BSD 12.51 Professional Finisher Compiling](#) Check the circuit of the Compiler Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid (PL 21.10), and Select Start. **The Buffer Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.39 Professional Finisher Buffer Transport](#). Check the circuit of the Buffer Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates.**

Y N

Select **Stop**. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#) Check the circuit of the Transport Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor (PL 21.11). Select Start. **The motor energizes.**

Y N

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.



Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-161 (Pro) Set Eject Jam

**BSD-ON:**[BSD 12.36 Professional Finisher Drives](#)

**BSD-ON:**[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

**BSD-ON:**[BSD 12.51 Professional Finisher Compiling](#)

The Compiler Exit Sensor did not turn off within the specified time after the Eject operation has begun.

### Initial Actions

- Check the Buffer Reverse Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter **dC330** [012-150], Compiler Exit Sensor (PL 21.9). Select Start. Actuate the Compiler Exit Sensor. **The display changes.**

**Y N**

Go to [BSD 12.51 Professional Finisher Compiling](#) Check the circuit of the Compiler Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-007] Exit Motor (PL 21.11). Select Start. **The motor energizes.**

**Y N**

Select **Stop**. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates.**

**Y N**

Select **Stop**. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-162 (Pro) H-Transport Exit Sensor On Jam

BSD-ON:[BSD 12.32 H-Transport Drives](#)

BSD-ON:[BSD 12.33 Horizontal Transportation \(1 of 2\)](#)

H-Transport Exit Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the H-Transport Motor Belt for wear or damage
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation
- Check the Fuser Exit Switch actuator for damage, installed properly, or actuator spring damaged or missing

### Procedure

Enter [dC330](#) [012-191], H-Transport Exit Sensor ([PL 21.28](#)). Select Start. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.33 Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-091], H-Transport Motor ([PL 21.28](#)). Select Start. **The motor energizes.**

**Y N**  
Select **Stop**. Go to [BSD 12.32 H-Transport Drives](#). Check the circuit of the H-Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Exit Sensor ([PL 21.28](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-171 (Pro) Top Tray Exit Sensor On Jam

BSD-ON:[BSD 12.36 Professional Finisher Drives](#)

BSD-ON:[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

BSD-ON:[BSD 12.48 Professional Finisher Top Tray Stacking](#)

Not in the Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after Punch Out Sensor on.

In Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after the punching operation had begun.

### Initial Actions

- Check Top Tray Exit for operation failure
- Check paper transportation failure due to a foreign substance/burr on the paper path
- Check transportation failure of non-standard paper

### Procedure

Enter [dC330](#) [012-115], Top Tray Exit Sensor ([PL 21.11](#)). Select Start. Actuate the Top Tray Exit Sensor. **The display changes.**

**Y N**  
Go to [BSD 12.48 Professional Finisher Top Tray Stacking](#) Check the circuit of the Top Tray Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor ([PL 21.11](#)). Select Start. **The motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.36 Professional Finisher Drives](#) Check the circuit of the Exit Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid ([PL 21.10](#)). Select Start. **The Transport Gate Solenoid actuates.**

**Y N**  
Select Stop. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor ([PL 21.10](#)). Select Start. **The motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.36 Professional Finisher Drives](#) Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment
- Exit Drive Shaft for wear and a revolution failure

- The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the Top Tray Exit Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-172 (Pro) Top Tray Exit Sensor Off Jam

**BSD-ON:**[BSD 12.36 Professional Finisher Drives](#)

**BSD-ON:**[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

**BSD-ON:**[BSD 12.48 Professional Finisher Top Tray Stacking](#)

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after Punch Out Sensor detected at the leading edge of the same paper.

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after the punching operation had begun.

### Initial Actions

- Check Top Tray Exit for operation failure
- Check paper transportation failure due to a foreign substance/burr on the paper path
- Check transportation failure of non-standard paper

### Procedure

Enter [dC330](#) [012-115], Top Tray Exit Sensor (PL 21.11). Select Start. Actuate the Top Tray Exit Sensor. **The display changes.**

Y N

Go to [BSD 12.48 Professional Finisher Top Tray Stacking](#). Check the circuit of the Top Tray Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-007], Exit Motor (PL 21.11). Select Start. **The motor energizes.**

Y N

Select Stop. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Exit Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates.**

Y N

Select Stop. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor (PL 21.10). Select Start. **The motor energizes.**

Y N

Select Stop. Go to [BSD 12.36 Professional Finisher Drives](#). Check the circuit of the Finisher Transport Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment
- Exit Drive Shaft for wear and a revolution failure

- The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the top Tray Exit Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-180 (Pro) Booklet Folder Roll Exit Sensor Off Jam

**BSD-ON:**[BSD 12.40 Booklet Drive](#)

**BSD-ON:**[BSD 12.41 Booklet Transportation](#)

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

### Initial Actions

- Check for obstructions in the paper path
- Check the Booklet Folder Roll Exit Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet Folding Roll for wear or damage
- Check the Booklet Eject Roll Drive rolls for wear or damage

### Procedure

Enter **dC330** [013-103], Booklet Folder Roll Exit Sensor (PL 21.21). Select Start. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.**

**Y N**

Go to [BSD 12.41 Booklet Transportation](#). Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. **The motor energizes.**

**Y N**

Select **Stop**. Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Paper Path Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Select **Stop**. Select [013-008], Booklet Folder Roll Motor (PL 21.22). Select Start. **The motor energizes.**

**Y N**

Select **Stop**. Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Folder Roll Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

## 312-211(Pro) Stacker Tray Fault

BSD-ON:[BSD 12.58 Professional Finisher Stack Height Detection](#)

BSD-ON:[BSD 12.57 Professional Finisher Stacker Drive](#)

The Stack Height Sensor did not turn Off in 500msec after the Stacker Tray started to drive down.

The Tray Height Sensor Lower did not turn On in 5000msec after the Stacker Tray started lifting up.

### Initial Actions

- The Stack Height Sensor for improper installation
- The Stack Height Sensor connectors for connection failure
- The Tray Height Sensor Lower for improper installation
- The Tray Height Sensor Lower connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure
- The Elevator Gear for deformation

### Procedure

Enter [dC330](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 21.4](#)), alternately. Select **Start**. **The Elevator Motor runs.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-212 (Pro) Stacker Upper Limit Fault

BSD-ON:[BSD 12.57 Professional Finisher Stacker Drive](#)

When Stack Height Sensor 2 On was detected after the Stacker Tray had started lifting up.

### Initial Actions

Check Items

- The Upper Limit SW for improper installation
- The Upper Limit SW connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

### Procedure

Enter [dC330](#) [012-061] Elevator Motor Down and [012-060], Elevator Motor UP ([PL 21.4](#)), alternately. Select **Start**. **The Elevator Motor runs.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select **Stop**. Select [012-262], Stacker No Paper Sensor ([PL 21.4](#)). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#). Check continuity between the Stacker No Paper Sensor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Stacker No Paper Sensor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select [012-260], Upper Limit Sensor ([PL 21.4](#)). Block/unblock the Upper Limit Sensor. Select **Start**. **The display changes.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Upper Limit Sensor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Upper Limit Sensor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-213 (Pro) Stacker Lower Limit Fault

BSD-ON: [BSD 12.57 Professional Finisher Stacker Drive](#)

BSD-ON: [BSD 12.58 Professional Finisher Stack Height Detection](#)

When Lower Limit Sensor On was detected after the Stacker Tray had started driving down.

### Initial Actions

Check Items

- The Upper Limit SW for improper installation
- The Upper Limit SW connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

### Procedure

Enter [dC330](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 21.4](#)), alternately. Select **Start**. **The Elevator Motor runs.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-221 (Pro) Front Tamper Home Sensor On Fault

BSD-ON: [BSD 12.52 Professional Finisher Tamper Control](#)

The Front Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

### Initial Actions

Check the following:

- Front Tamper Actuator for deformation
- Front Tamper Home Sensor for proper installation
- Front Tamper Home Sensor connectors
- Front Tamper Motor for proper operation
- Front Tamper Motor connectors

### Procedure

Enter [dC330](#) [012-020] and [012-023], Front Tamper Motor ([PL 21.8](#)), alternately. Select **Start**. **The Front Tamper Motor runs.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#) Check circuit of the Front Tamper Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-220], Front Tamper Home Sensor ([PL 21.8](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#). Check circuit of the Front Tamper Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-223(Pro) Front Tamper Home Sensor Off Fault

BSD-ON:[BSD 12.52 Professional Finisher Tamper Control](#)

Front Tamper Home Sensor is not turned off within a specified time. Front Tamper Home Sensor is not turned off after the stop following Front Tamper Home Sensor Off.

### Initial Actions

Check the following:

- Front Tamper Actuator for deformation
- Front Tamper Home Sensor for proper installation
- Front Tamper Home Sensor connectors
- Front Tamper Motor for proper operation
- Front Tamper Motor connectors

### Procedure

Enter [dC330](#) [012-020] and [012-023], Front Tamper Motor ([PL 21.8](#)), alternately. **Select Start. The Front Tamper Motor runs.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#) Check circuit of the Front Tamper Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-220], Front Tamper Home Sensor ([PL 21.8](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#) Check circuit of the Front Tamper Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-224 (Pro) Rear Tamper Home Sensor Off Fault

BSD-ON:[BSD 12.52 Professional Finisher Tamper Control](#)

Rear Tamper Home Sensor is not turned off within a specified time. Rear Tamper Home Sensor is not turned off after the stop following Rear Tamper Home Sensor Off.

### Initial Actions

Check the following:

- Rear Tamper Actuator for deformation
- Rear Tamper Home Sensor for proper installation
- Rear Tamper Home Sensor connectors
- Rear Tamper Motor for proper operation
- Rear Tamper Motor connectors

### Procedure

Enter [dC330](#) [012-026] and [012-029], Rear Tamper Motor ([PL 21.8](#)), alternately. **Select Start. The Rear Tamper Motor runs.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#). Check circuit of the Rear Tamper Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-221], Rear Tamper Home Sensor ([PL 21.8](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#). Check circuit of the Rear Tamper Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-225 (Pro) Booklet Tamper F Home Sensor On Fault

BSD-ON:[BSD 12.42 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON: [BSD 12.43 Booklet Tamper Control \(2 of 2\)](#)

Tamper Home Sensor Front is not turned on within 1000msec from motor On while Booklet Tamper Front is returning to Home.

### Initial Actions

- The Booklet Tamper Home Sensor Front for improper installation
- The Booklet Tamper Home Sensor Front connectors for connection failure
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

### Procedure

Enter [dC330](#) [013-048] Booklet Tamper Motor F Rear 1 and [dC330](#) [013-052], Booklet Tamper Motor Front ([PL 21.19](#)), alternately. Select **Start. The Booklet Tamper Motor Front energizes.**

Y N

Select Stop. Go to [BSD 12.42 Booklet Tamper Control \(1 of 2\)](#) Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-134], Booklet Tamper Home Sensor Front ([PL 21.19](#)). Select **Start.** Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.**

Y N

Select Stop. Go to [BSD 12.43 Booklet Tamper Control \(2 of 2\)](#) Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-226 (Pro) Booklet Tamper F Home Sensor Off Fault

BSD-ON:[BSD 12.42 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON:[BSD 12.43 Booklet Tamper Control \(2 of 2\)](#)

Even when Booklet tamper Front motor outputs 75pulse, Tamper Front Home Sensor is not turned off.

### Initial Actions

- The Booklet Tamper Home Sensor Front for improper installation
- The Booklet Tamper Home Sensor Front connectors for connection failure
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

### Procedure

Enter [dC330](#) [013-048] Booklet Tamper Motor F Rear 1 and [dC330](#) [013-052], Booklet Tamper Motor Front ([PL 21.19](#)), alternately. Select **Start. The Booklet Tamper Motor Front energizes.**

Y N

Select Stop. Go to [BSD 12.42 Booklet Tamper Control \(1 of 2\)](#) Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-134], Booklet Tamper Home Sensor Front ([PL 21.19](#)). Select **Start.** Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.**

Y N

Select Stop. Go to [BSD 12.43 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).



## 312-227 (Pro) Booklet End Guide Home Sensor Off Fault

BSD-ON: [BSD 12.46 Booklet End Guide Control](#)

Even when Booklet End Guide motor outputs 200 pulse after the start, Booklet End Guide Home Sensor is not turned off.

### Initial Actions

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

### Procedure

Enter **dC330** [013-013] and [013-016], Booklet End Guide Motor ([PL 21.17](#)), alternately. Select **Start**. **The Booklet End Guide Motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.46 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor ([PL 21.17](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-137] Booklet End Guide Home Sensor. Block/unblock the Booklet End Guide Home Sensor to the light with paper strip. Select **Start**. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.46 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor ([PL 21.17](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-228 (Pro) Booklet End Guide Home Sensor On Fault

BSD-ON: [BSD 12.46 Booklet End Guide Control](#)

Booklet End Guide Home Sensor is not turned on within 2000ms from motor On while Booklet End Guide is returning to Home.

### Initial Actions

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

### Procedure

Enter **dC330** [013-013] and [013-016], Booklet End Guide Motor ([PL 21.17](#)), alternately. Select **Start**. **The Booklet End Guide Motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.46 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor ([PL 21.17](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Enter **dC330** [013-137] Booklet End Guide Home Sensor. Select **Start**. Block/unblock the Booklet End Guide Home Sensor. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.46 Booklet End Guide Control](#). Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor ([PL 21.17](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-229 (Pro) Booklet Tamper R Home Sensor On Fault

BSD-ON:[BSD 12.42 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON:[BSD 12.43 Booklet Tamper Control \(2 of 2\)](#)

Tamper Home Sensor Rear is not turned on within 1000msec from motor On while Booklet Tamper Rear is returning to Home.

### Initial Actions

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

### Procedure

Enter [dC330](#) [013-056] and [dC330](#) [013-060], Booklet Tamper Motor Rear ([PL 21.19](#)), alternately. Select **Start**. **The Booklet Tamper Motor Rear energizes.**

**Y N**  
Select Stop. Go to [BSD 12.42 Booklet Tamper Control \(1 of 2\)](#). Check continuity between the Booklet Tamper Motor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Rear ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-136], Booklet Tamper Home Sensor. Select **Start**. Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.43 Booklet Tamper Control \(2 of 2\)](#). Check continuity between the Booklet Tamper Home Sensor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Rear ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-230 (Pro) Booklet Tamper R Home Sensor Off Fault

BSD-ON:[BSD 12.42 Booklet Tamper Control \(1 of 2\)](#)

BSD-ON:[BSD 12.43 Booklet Tamper Control \(2 of 2\)](#)

Even when Booklet tamper Rear motor outputs 75pulse, Tamper Rear Home Sensor is not turned off.

### Initial Actions

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

### Procedure

Enter [dC330](#) [013-056] and [013-060], Booklet Tamper Motor Rear ([PL 21.19](#)), alternately. Select **Start**. **The Booklet Tamper Motor Rear energizes.**

**Y N**  
Select Stop. Go to [BSD 12.42 Booklet Tamper Control \(1 of 2\)](#) Check continuity between the Booklet Tamper Motor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Rear ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-136], Booklet Tamper Home Sensor ([PL 21.19](#)). Select **Start**. Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.43 Booklet Tamper Control \(2 of 2\)](#) Check continuity between the Booklet Tamper Home Sensor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Rear ([PL 21.19](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-243 (Pro) Booklet Knife Home Sensor On Fault

BSD-ON: [BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.44 Booklet Knife Control](#)

Knife Home Sensor is not turned on after the lapse of 500ms from Clutch On while Booklet Knife is returning to Home.

### Initial Actions

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Clutch connectors for connection failure
- The Knife Clutch for improper installation
- The Knife drive mechanism for a foreign substance

### Procedure

Manually move the Booklet Tamper to both ends. Enter [dC330](#) [013-008] and [013-009], Booklet Folder Roll Motor ([PL 21.22](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.40 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [013-010], Knife Solenoid, ([PL 21.22](#)). Select **Start**. **The Knife Solenoid actuates.**

**Y N**  
Select Stop. Go to [BSD 12.44 booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select **Stop**. Select [013-101], Booklet Knife Home Sensor ([PL 21.18](#)). Select **Start**. Block/unblock the Knife Home Sensor. **The display changed.**

**Y N**  
Select Stop. Go to [BSD 12.44 Booklet Knife Control](#). Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

A

**Y N**  
Repair the open circuit or short circuit.

Replace the Knife Home Sensor ([PL 21.18](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-246 (Pro) Booklet Stapler Fault

BSD-ON: [BSD 12.45 Booklet Staple Control](#)

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Booklet Stapling operation.

The Stapler Ready signal did not turn to 'Not Ready' within the specified time after Booklet Stapler Start signal On.

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Stapler Power On check was performed at Power On or when the interlock was closed.

Error signal On was detected just before the Booklet Stapling operation.

### Procedure

Check continuity between the Staple and Booklet PWB. **The continuity check is OK.**

Y N  
| Repair the open circuit or short circuit.

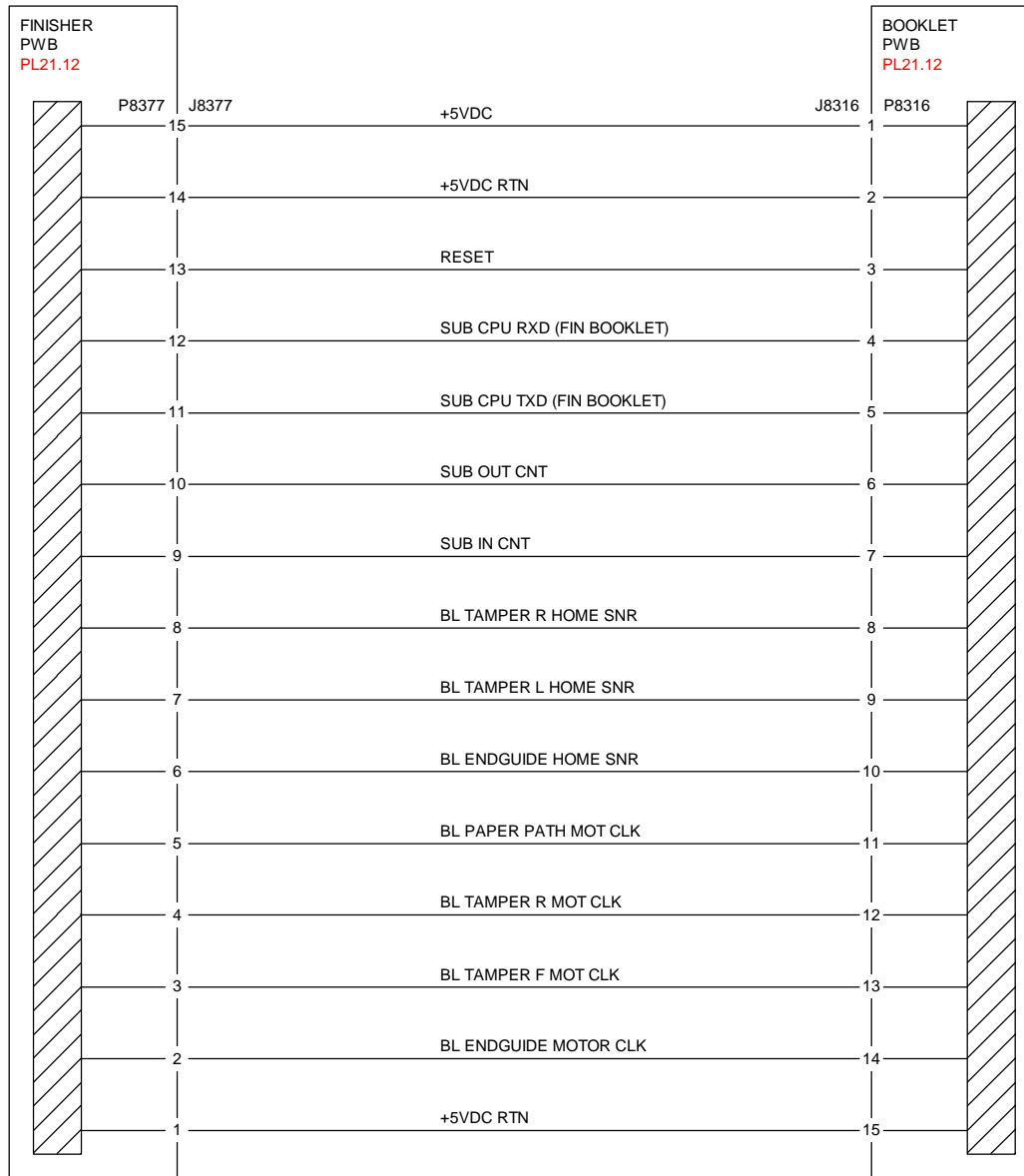
Go to [Figure 1](#). Check continuity between the Booklet PWB and Finisher PWB. **The continuity check is OK.**

Y N  
| Repair the open circuit or short circuit.

**Replace the Stapler ([PL 21.16](#)). The problem is resolved.**

Y N  
| Replace the Booklet PWB ([PL 21.13](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

If the problem continues, replace the Finisher PWB ([PL 21.12](#)).



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Figure 1 Finisher, Booklet PWBs

## 312-247 (Pro) Side Registration Sensor Off Fault

BSD-ON: [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

BSD-ON: [BSD 12.49 Professional Finisher Punch Drive](#)

Side Registration Sensor not turned off after the lapse of 500msec from operation start. Side Registration Sensor is not turned off after the stop following Side Registration Sensor Off. Target Side Registration Sensor1 or Side Registration Sensor2 is not turned off at operation start.

### Initial Actions

- The Actuator for deformation
- The Side Reg 1 and 2 Sensors for improper installation
- The Side Reg 1 and 2 Sensors connectors for connection failure
- The Puncher Move Motor connectors for connection failure

### Procedure

Enter [dC330](#) [012-071] and [012-073], Puncher Move Motor ([PL 21.5](#)), alternately. Select **Start. The Puncher Move Motor run.**

Y N  
Select Stop. Go to [BSD 12.49 Professional Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Puncher Move Motor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [012-200], Side Registration 1 Sensor ([PL 21.5](#)). Select **Start.** Block/unblock the Side Reg 1 Sensor. **The display changes.**

Y N  
Select Stop. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#). Check continuity between the Side Reg 1 Sensor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Side Reg 1 Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select [012-201], Side Reg 2 Sensor ([PL 21.5](#)). Select **Start.** Block/unblock the Side Reg 2 Sensor. **The display changes.**

Y N  
Select Stop. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#). Check continuity between the Side Reg 2 Sensor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Side Reg 2 Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

A

Select Stop. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-260 (Pro) Eject Clamp Home Sensor On Fault

BSD-ON: [BSD 12.55 Professional Finisher Eject Drive](#)

Eject Clamp Home Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the Clamp area

### Procedure

Enter [dC330](#) [012-250], Eject Clamp Home Sensor ([PL 21.7](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-052], Eject Clamp Motor ([PL 21.7](#)). Select **Start**. **The Eject Clamp moves up.**

Y N

**The Eject Motor energized.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Clamp Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Eject Clamp Motor and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.7](#)).

Select Stop.

Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor ([PL 21.7](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-261 (Pro) Booklet Knife Folding Sensor Fault

BSD-ON: [BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.44 booklet Knife Control](#)

When the Booklet Knife performs folding operation, the Knife Folding Sensor did not turn On within 400 msec after Knife Solenoid On.

### Initial Actions

- The Knife Folding Sensor for improper installation
- The Knife Folding Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance

### Procedure

Manually move the Booklet Tamper to both ends. Enter [dC330](#) [013-008] and [013-009], Booklet Folder Roll Motor ([PL 21.22](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

Y N

Select Stop. Go to [BSD 12.40 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select [dC330](#) [013-010], Knife Solenoid, ([PL 21.22](#)). Select **Start**. **The Knife Solenoid actuates.**

Y N

Select Stop. Go to [BSD 12.44 booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select **Stop**. Select [dC330](#) [013-101], Booklet Knife Home Sensor ([PL 21.18](#)). Select **Start**. Block/unblock the Knife Home Sensor. **The display changed.**

Y N

Select Stop. Go to [BSD 12.44 booklet Knife Control](#). Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

A

Y N

Repair the open circuit or short circuit.

Replace the Knife Home Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

## 312-263 (Pro) Rear Tamper Home Sensor On Fault

BSD-ON: [BSD 12.52 Professional Finisher Tamper Control](#)

The Rear Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

### Initial Actions

Check the following:

- Rear Tamper Actuator for deformation
- Rear Tamper Home Sensor for proper installation
- Rear Tamper Home Sensor connectors
- Rear Tamper Motor for proper operation
- Rear Tamper Motor connectors

### Procedure

Enter [dC330](#) [012-026] and [012-029], Rear Tamper Motor (PL 21.8), alternately. **Select Start. The Rear Tamper Motor runs.**

Y N

Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#) Check circuit of the Rear Tamper Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-221], Rear Tamper Home Sensor (PL 21.8). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Select Stop. Go to [BSD 12.52 Professional Finisher Tamper Control](#) Check circuit of the Rear Tamper Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).



## 312-264 (Pro) Booklet Drawer Broken Fault

BSD-ON:[BSD 12.40 Booklet Drive](#)

Booklet Drawer Set Sensor Open was detected when the Finisher Front Door Interlock was closed.

### Initial Actions

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Booklet Drawer Actuator part for a foreign substance and deformation
- The Drawer mechanism for a foreign substance and deformation

### Procedure

Enter **dC330** [013-104], Booklet Drawer Set Sensor ([PL 21.15](#)). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes.**

Y N

Go to [BSD 12.40 Booklet Drive](#). Check the circuit of the Booklet Drawer Set Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-265 (Pro) Booklet Knife Home Sensor Off Fault

BSD-ON:[BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.44 booklet Knife Control](#)

When the Booklet Knife moves from Home position, the Knife Home Sensor did not turn Off within the specified time after Knife Solenoid On.

### Initial Actions

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance

### Procedure

Manually move the Booklet Tamper to both ends. Enter **dC330** [013-008] and [013-009], Booklet Folder Roll Motor ([PL 21.22](#)), alternately. Select **Start**. **The Booklet Folder Roll Motor energizes.**

Y N

Select Stop. Go to [BSD 12.40 Booklet Drive](#). Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select **dC330** [013-010], Booklet Knife Solenoid, ([PL 21.22](#)). Select **Start**. **The Knife Solenoid actuates.**

Y N

Select Stop. Go to [BSD 12.44 booklet Knife Control](#). Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB.

**The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid ([PL 21.22](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)). If the problem persists, replace Finisher PWB ([PL 21.12](#)).

Select Stop. Select **dC330** [013-140], Booklet Knife Folding Sensor ([PL 21.18](#)). Select **Start**. **Block/unblock the Knife Folding Sensor. The display changed.**

Y N

Select Stop. Go to [BSD 12.44 booklet Knife Control](#). Check continuity between the Knife Folding Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

A

Y N

Repair the open circuit or short circuit.

Replace the Knife Folding Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

## 312-266 (Pro) Booklet Compiler No Paper Sensor Fault

BSD-ON: [BSD 12.40 Booklet Drive](#)

BSD-ON: [BSD 12.41 Booklet Transportation](#)

The Booklet Compile No Paper Sensor did not turn On within the specified time.

### Procedure

Enter [dC330](#) [013-102], Booklet Compile No Paper Sensor (PL 21.18). Select **Start**. Block/unblock the Booklet Compile No Paper Sensor. **The display changed.**

Y N

Select Stop. Go to [BSD 12.51 Professional Finisher Compiling](#). Check continuity between the Booklet Compile No Paper and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Compile No Paper Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select **Start**. **The Motor energizes.**

Y N

Select Stop. Go to [BSD 12.40 Booklet Drive](#). Check continuity between the Booklet Paper Path Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Booklet Paper Path Motor (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem persists, replace Finisher PWB (PL 21.12).

## 312-269 (Pro) Booklet Sub-CPU Communications Fault

BSD-ON: [BSD 12.31 Professional Finisher PWB Communication](#)

Communications between the Finisher PWB and the Booklet PWB Failed

### Initial Actions

- Check the connectors at the Finisher PWB and the Booklet PWB are connected or seated properly ([Figure 1](#))
- Check the wiring between the Finisher PWB and the Booklet PWB for damage ([Figure 1](#))

### Procedure

Power Off and Power On the Printer. **The problem is resolved.**

Y N

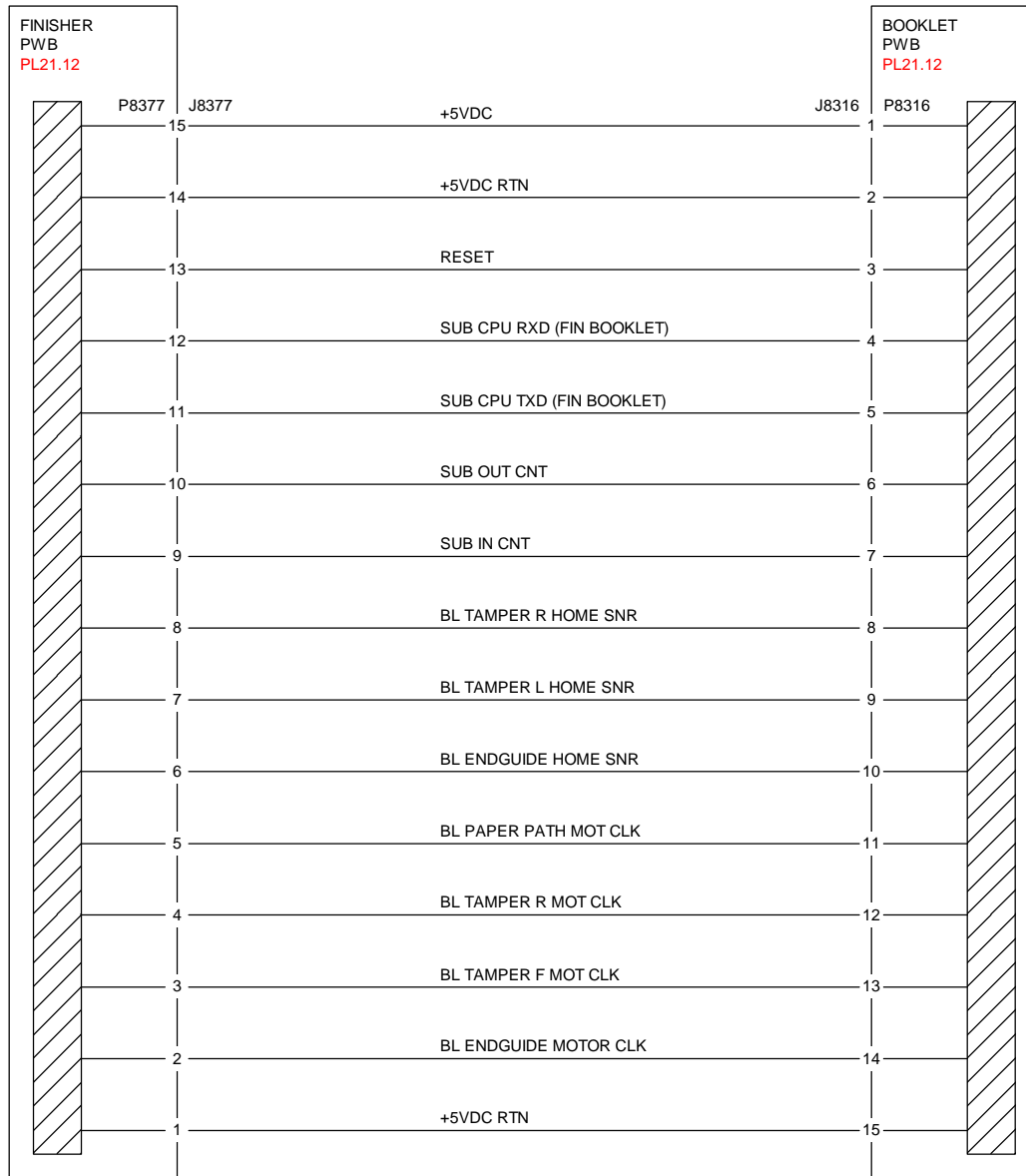
Reload the Software. **The problem is resolved.**

Y N

Replace the Finisher PWB ([PL 21.12](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)).

Rerun the job.

Rerun the job.



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Figure 1 Finisher, Booklet PWBs

## 312-282 (Pro) Eject Clamp Home Sensor Off Fault

BSD-ON: [BSD 12.55 Professional Finisher Eject Drive](#)

Eject Clamp Home Sensor is not turned off within a specified time.

### Initial Actions

- Check for obstructions in the Clamp area

### Procedure

Enter [dC330](#) [012-250], Eject Clamp Home Sensor ([PL 21.7](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-052], Eject Clamp Motor ([PL 21.7](#)). Select **Start**. **The Eject Clamp moves up.**

Y N

**The Eject Motor energized.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Clamp Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Eject Clamp Motor and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.7](#)).

Select Stop.

Check the

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor ([PL 21.7](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-283 (Pro) Set Clamp Home Sensor On Fault

BSD-ON: [BSD 12.55 Professional Finisher Eject Drive](#)

BSD-ON: [BSD 12.56 Professional Finisher Set Clamp Control](#)

Set Clamp Home Sensor is not turned on within a specified time.

### Initial Actions

- Check for obstructions in the Clamp area

### Procedure

Enter [dC330](#) [012-250], Eject Clamp Home Sensor ([PL 21.7](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.56 Professional Finisher Set Clamp Control](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-052], Eject Motor ([PL 21.8](#)). Select **Start**. **The Eject moves up.**

Y N

**The Eject Motor energized.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Eject Motor and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.8](#)).

Select Stop. The following codes will be stacked. Select [012-052], Eject Motor ([PL 21.8](#)). Select **Start**. Select [012-050], Set Clamp Clutch ([PL 21.8](#)). Select **Start**. **The Eject Roll Shaft rotates.**

Y N

**The Set Clamp Clutch energized.**

Y N

Select Stop. Go to [BSD 12.56 Professional Finisher Set Clamp Control](#). Check the circuit of the Set Clamp Clutch. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Set Clamp Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.8](#)).

Select Stop. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor ([PL 21.7](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-284 (Pro) Set Clamp Home Sensor Off Fault

BSD-ON: [BSD 12.55 Professional Finisher Eject Drive](#)

BSD-ON: [BSD 12.56 Professional Finisher Set Clamp Control](#)

Set Clamp Home Sensor is not turned off within a specified time.

### Initial Actions

- Check for obstructions in the Clamp area

### Procedure

Enter [dC330](#) [012-250], Eject Clamp Home Sensor ([PL 21.7](#)). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.56 Professional Finisher Set Clamp Control](#). Check the circuit of the Eject Clamp Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-052], Eject Motor ([PL 21.8](#)). Select **Start**. **The Eject moves up.**

Y N

**The Eject Motor energized.**

Y N

Select Stop. Go to [BSD 12.55 Professional Finisher Eject Drive](#). Check the circuit of the Eject Motor. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Eject Motor and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.8](#)).

Select Stop. Select [012-050], Set Clamp Clutch ([PL 21.8](#)). Select **Start**. **The Eject Roll Shaft rotates.**

Y N

**The Set Clamp Clutch energized.**

Y N

Select Stop. Go to [BSD 12.56 Professional Finisher Set Clamp Control](#). Check the circuit of the Set Clamp Clutch. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Set Clamp Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.8](#)).

Select Stop. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor ([PL 21.7](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-291 (Pro) Stapler Fault

BSD-ON: [BSD 12.53 Professional Finisher Stapler Control](#)

BSD-ON: [BSD 12.54 Professional Finisher Staple Positioning](#)

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor had started rotating forward.

The Staple Home Sensor did not turn On within the specified time after the Staple Motor had started rotating backward.

### Initial Actions

- Check the Stapler Head for obstructions

### Procedure

Enter [dC330](#) [012-042] and [012-045]. Staple Move Motor, ([PL 21.6](#)), alternately. Select **Start**. **The Staple Motor runs.**

Y N

Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Head ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [012-244], Staple Home Sensor. Select [012-042] and [012-045]. Staple Move Motor, ([PL 21.6](#)), alternately. Select **Start**. **The display changes.**

Y N

Select Stop. Go to [BSD 12.53 Professional Finisher Stapler Control](#). Check continuity between the Stapler Home Sensor and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Head ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Check the following:

- The wire between the Staple Head and the Finisher PWB for damage

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-295 (Pro) Stapler Move Position Sensor On Fault

BSD-ON: [BSD 12.54 Professional Finisher Staple Positioning](#)

Stapler Move Position Sensor is not turned on within a specified time.

Stapler Move Position Sensor not turned on when home operation is completed.

Stapler Move Position Sensor is not turned on after the stop following Stapler Move Position Sensor On.

### Initial Actions

- Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure
- Check Staple Guide for deformation

### Procedure

Enter [dC330](#) [012-042] and [012-045], Stapler Move Motor ([PL 21.6](#)), alternately. Select **Start**. **The Staple Move Motor energizes.**

Y N  
Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Move Motor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Staple Move Motor ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [dC330](#) [012-241], Stapler Move Position Sensor ([PL 21.6](#)). Select **Start**. Block/unblock the Stapler Move Position Sensor. **The display changed.**

Y N  
Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Move Position Sensor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Check the following:

- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK. replace the Finisher PWB ([PL 21.12](#)).

## 312-296 (Pro) Stapler Move Position Sensor Off Fault

BSD-ON: [BSD 12.54 Professional Finisher Staple Positioning](#)

Stapler Move Position Sensor is not turned off within a specified time

Stapler Move Position Sensor is not turned off when home operation is completed.

Stapler Move Position Sensor is not turned off after the stop following Stapler Move Position Sensor Off.

### Initial Actions

- Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure
- Check Staple Guide for deformation
- Check to see if the shipping screw was removed from the stapler

### Procedure

Enter [dC330](#) [012-042] and [012-045], Stapler Move Motor ([PL 21.6](#)), alternately. Select **Start**. **The Staple Move Motor energizes.**

Y N  
Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Move Motor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Staple Move Motor ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [dC330](#) [012-241], Stapler Move Position Sensor ([PL 21.6](#)). Select **Start**. Block/unblock the Stapler Move Position Sensor. **The display changed.**

Y N  
Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Move Position Sensor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Check the following:

- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK. replace the Finisher PWB ([PL 21.12](#)).

## 312-300 (Pro) Eject Cover Open

BSD-ON:[BSD 12.29 Professional Finisher Interlocks](#)

Eject Cover Switch open was detected.

### Initial Actions

- Ensure that the Eject Cover is down
- Check Eject Cover Switch for improper installation
- Check Eject Cover Switch connectors for connection failure
- Check Actuator part for deformation

### Procedure

Enter [dC330](#) [012-300], Eject Cover Switch ([PL 21.7](#)). Select **Start**. Actuate the Eject Cover Switch. **The display changes**

Y N  
Select Stop. Check continuity of the Eject Cover Switch. **The continuity check is OK.**

Y N  
Replace the Eject Cover Switch ([PL 21.7](#)).

Go to [BSD 12.29 Professional Finisher Interlocks](#) Check continuity between the Eject Cover Switch and the Finisher PWB. If the check is OK, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-302 (Pro) Finisher Front Door Interlock Open

BSD-ON:[BSD 12.29 Professional Finisher Interlocks](#)

Finisher Front Door Switch Open was detected.

### Initial Actions

Check the following:

- Finisher Front Door Switch for proper installation
- Finisher Front Door Switch connectors for connection failure
- Actuator part for deformation
- Ensure that the Eject Cover is in the closed/down position

### Procedure

Enter [dC330](#) [012-302], Front Door Interlock Switch ([PL 21.3](#)). Select **Start**. Open and close the Front Door. **The display changes.**

Y N  
Go to [BSD 12.29 Professional Finisher Interlocks](#) Disconnect P8314 on the Finisher PWB. **+5 VDC is measured between the Finisher PWB, P8314-2 and P8314-3.**

Y N  
Replace the Finisher PWB ([PL 21.12](#)).

**There is less than 5 ohms between P8314-3 and the finisher frame.**

Y N  
Replace the Finisher PWB ([PL 21.12](#)).

Go to [BSD 12.29 Professional Finisher Interlocks](#) Check the wires between the Finisher PWB, the Eject Cover Switch, and the Finisher Front Door Switch for an open circuit or poor contact.

If the wires are good, replace the Front Door Interlock Switch ([PL 21.3](#)).

Select Stop. Check the following:

- Alignment between the Front Door and the Front Door Interlock Switch
- Front Door and Front Cover for proper installation
- Actuator for damage or bent
- Magnet for proper mounting

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).



## 312-303 (Pro) H-Transport Cover Open

BSD-ON: [BSD 12.34 Horizontal Transportation \(2 of 2\)](#)

H-Transport Interlock Sensor-L Open was detected.

### Initial Actions

Check Items

- The H-Transport Interlock Sensor-L for improper installation
- Check for obstruction in between the H-Transport Cover and the H-Transport paper transport area
- The H-Transport Cover Interlock Sensor connectors for connection failure
- The Actuator for deformation

### Procedure

Enter **dC330** [012-303], H-Transport Interlock Sensor ([PL 21.26](#)). Select **Start**. Block and unblock the H-Transport Interlock Sensor-L. **The display changes.**

**Y N**  
+5 VDC is measured between the H-Transport Interlock Sensor [P/J8445--1](#) and [-3](#).  
**Y N**  
Go to [BSD 12.34 Horizontal Transportation \(2 of 2\)](#). Disconnect J8310 on Finisher PWB. +5 VDC is measured between H Transport Interlock Sensor [P/J8445-1](#) and [-3](#).  
**Y N**  
Replace the H Transport PWB ([PL 21.12](#)).  
Check for an open circuit between H-Transport PWB [P/J8396-3](#) and [-1](#) and H-Transport Interlock Sensor [P/J8445-1](#) and [-3](#).  
**+5 VDC is measured between Finisher PWB [P/J8310-20](#) and ground.**  
**Y N**  
Replace the Finisher PWB ([PL 21.12](#))  
**+5 VDC is measured at the H-Transport Interlock Sensor [P/J8445-2](#) and ground.**  
**Y N**  
Check for an open circuit between Finisher PWB [P/J8310-20](#) and H-Transport Interlock Sensor [P/J8445-2](#).  
Replace the H-Transport Interlock Sensor ([PL 21.26](#)).

Select Stop. Check the following:

- Alignment between the H-Transport Cover and the H-Transport Interlock Sensor.
- The H-Transport Cover for proper installation
- The Actuator for bending or alignment
- The Magnets for proper mounting

## 312-307 (Pro) Booklet Drawer Set Fault

BSD-ON: [BSD 12.40 Booklet Drive](#)

Booklet Drawer Set Sensor Open was detected.

### Initial Actions

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Actuator part for deformation

### Procedure

Enter **dC330** [013-104], Booklet Drawer Set Sensor ([PL 21.15](#)). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.40 Booklet Drive](#). Check continuity between the Booklet Drawer Set Sensor and Finisher PWB. **The continuity check is OK.**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Booklet Drawer Set Sensor ([PL 21.15](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).  
Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-320 (Pro) Puncher Home Sensor On Fault

BSD-ON: [BSD 12.49 Professional Finisher Punch Drive](#)

BSD-ON: [BSD 12.50 Professional Finisher Punch Hole Control](#)

The Puncher Home Sensor did not turn On within the specified time after the Puncher Motor started running.

### Initial Actions

Check the following:

- Puncher Home Actuator for deformation
- Puncher Home Sensor for proper installation
- Puncher Home Sensor connectors
- Puncher Motor for proper operation
- Puncher Motor connectors

### Procedure

Enter [dC330](#) [012-078] and [012-075], Puncher Motor ([PL 21.5](#)), alternately. **Select Start. The Puncher Motor runs.**

Y N

Select Stop. Go to [BSD 12.49 Professional Finisher Punch Drive](#). Check circuit of the Punch Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-271], Puncher Home Sensor ([PL 21.5](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Go to [BSD 12.50 Professional Finisher Punch Hole Control](#). Check circuit of the Puncher Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-321 (Pro) Puncher Home Sensor On Fault

BSD-ON: [BSD 12.49 Professional Finisher Punch Drive](#)

BSD-ON: [BSD 12.50 Professional Finisher Punch Hole Control](#)

The Puncher Home Sensor did not turn On within the specified time after the Puncher Motor started running.

### Initial Actions

Check the following:

- Puncher Home Actuator for deformation
- Puncher Home Sensor for proper installation
- Puncher Home Sensor connectors
- Puncher Motor for proper operation
- Puncher Motor connectors

### Procedure

Enter [dC330](#) [012-078] and [012-075], Puncher Motor ([PL 21.5](#)), alternately. **Select Start. The Puncher Motor runs.**

Y N

Select Stop. Go to [BSD 12.49 Professional Finisher Punch Drive](#). Check circuit of the Punch Motor. Refer to [OF 99-9](#) RAP for troubleshooting procedure.

Select Stop. Select [012-271], Puncher Home Sensor ([PL 21.5](#)). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.**

Y N

Go to [BSD 12.50 Professional Finisher Punch Hole Control](#). Check circuit of the Puncher Home Sensor. Refer to [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-322 (Pro) Puncher Move Home Sensor Off Fault

BSD-ON: [BSD 12.49 Professional Finisher Punch Drive](#)

BSD-ON: [BSD 12.50 Professional Finisher Punch Hole Control](#)

Puncher Move Home Sensor not turned off after the lapse of 1000 (100\*) msec from operation start. Puncher Move Home Sensor is not turned off after the Stop following Puncher Move Home Sensor Off.

### Initial Actions

- The Actuator for deformation
- The Puncher Move Home Sensor for improper installation
- The Puncher Move Home Sensor connectors for connection failure
- The Puncher Move Motor connectors for connection failure

### Procedure

Enter **dC330** [012-071] and [012-073], Puncher Move Motor ([PL 21.5](#)), alternately. Select **Start. The Puncher Move Motor run.**

**Y N**  
Select Stop. Go to [BSD 12.49 Professional Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Puncher Move Motor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [012-270], Puncher Move Home Sensor ([PL 21.5](#)). Select **Start.** Block/unblock the Puncher Move Home Sensor. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.50 Professional Finisher Punch Hole Control](#). Check continuity between the Puncher Move Home Sensor and Finisher PWB. **The continuity check is OK.**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Puncher Move Home Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-323 (Pro) Puncher Move Home Sensor On Fault

BSD-ON: [BSD 12.49 Professional Finisher Punch Drive](#)

BSD-ON: [BSD 12.50 Professional Finisher Punch Hole Control](#)

Puncher Move Home Sensor is not turned on after the lapse of 400 (300\*500\*\*)msec from operation start. Puncher Move Home Sensor is not turned on after the stop following Puncher Move Home Sensor On.

### Initial Actions

Check the following:

- Actuator for deformation
- Puncher Move Home Sensor for improper installation
- Puncher Move Home Sensor connectors for connection failure
- Puncher Move Motor connectors for connection failure

### Procedure

Enter **dC330** [012-071] and [012-073], Puncher Move Motor ([PL 21.5](#)), alternately. Select **Start. The Puncher Move Motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.49 Professional Finisher Punch Drive](#). Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Puncher Move Motor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [012-270], Puncher Move Home Sensor ([PL 21.5](#)). Select **Start.** Block/unblock the Puncher Move Home Sensor. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.50 Professional Finisher Punch Hole Control](#). Check continuity between the Puncher Move Home Sensor and Finisher PWB. **The continuity check is OK.**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Puncher Move Home Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Check the following:

- Puncher Move Motor rack and gear for binding, wear, or damage

If the above check is OK, replace the Finisher PWB ([PL 21.12](#)).

## 312-330 (Pro) Decurler Cam Home Sensor Off Fault

BSD-ON: [BSD 12.35 Professional Finisher Decurling](#)

Decurler Move Home Sensor is not turned off after the lapse of 1000msec from the detection of Decurler Cam Home Sensor On.

### Initial Actions

- Check for obstructions in the Decurler area

### Procedure

Enter **dC330** [012-282], Decurler Cam Home Sensor ([PL 21.27](#)). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.35 Professional Finisher Decurling](#). Check the circuit of the Decurler Cam Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Select [012-099], Decurler Cam Clutch ([PL 21.27](#)). Select **Start**. **The Decurler Roll Shaft rotates.**

Y N

**The Decurler Cam Clutch energized.**

Y N

Select Stop. Go to [BSD 12.35 Professional Finisher Decurling](#). Check the circuit of the Decurler Cam Clutch. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Decurler Cam Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.26](#), [PL 21.27](#)).

Select Stop. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged

If the above checks are OK, replace the Decurler Cam Home Sensor ([PL 21.27](#)). If the problem continues, replace the H-Transport PWB ([PL 21.12](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-332 (Pro) Decurler Cam Home Sensor On Fault

BSD-ON: [BSD 12.35 Professional Finisher Decurling](#)

Decurler Cam Home Sensor is not turned on after the lapse of 1000msec from the detection of Decurler Cam Home Sensor Off.

### Initial Actions

- Check for obstructions in the Decurler area

### Procedure

Enter **dC330** [012-282], Decurler Cam Home Sensor ([PL 21.27](#)). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.35 Professional Finisher Decurling](#). Check the circuit of the Decurler Cam Home Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-099], Decurler Cam Clutch ([PL 21.27](#)). Select **Start**. **The Decurler Roll Shaft rotates.**

Y N

**The Decurler Cam Clutch energized.**

Y N

Select Stop. Go to [BSD 12.35 Professional Finisher Decurling](#). Check the circuit of the Decurler Cam Clutch. Refer to the [OF 99-9](#) RAP for troubleshooting procedure.

Check the Decurler Cam Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment ([PL 21.26](#))([PL 21.27](#)).

Select Stop. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged

If the above checks are OK, replace the Decurler Cam Home Sensor ([PL 21.27](#)). If the problem continues, replace the H-Transport PWB ([PL 21.12](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-334 (Pro) Finisher Download Fail RAP

Abnormal end during Download. After that, at Power On, can start only in Download Mode

### Procedure

Check the following:

- Finisher-IOT cable connection failure
- Finisher power cable insertion failure

## 312-700 (Pro) Punch Dust Nearly Full RAP

**BSD-ON:** [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

Cumulative punching count reached the specified times (2-hole punching: 5000 times, 4-hole punching: 2500 times).

### Procedure

Remove the Puncher Waste Bin and discard the waste. Reinstall the Puncher Waste Bin. **The problem is resolved.**

**Y N**  
Enter **dC330** [012-275], Puncher Box Set Sensor ([PL 21.5](#)). Select **Start**. Remove and reinsert the Puncher Waste Bin. **The display changes.**

**Y N**  
Select **Stop**. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#) Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.**

**Y N**  
Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select **Stop**. Replace the Finisher PWB ([PL 21.12](#)).

Ensure the Puncher Waste Bin is installed properly.

## 312-900 (Pro) Paper at Buffer Path Sensor

BSD-ON: [BSD 12.39 Professional Finisher Buffer Transport](#)

Control logic reports paper at the Buffer Path Sensor.

### Initial Actions

Check the following:

- Paper on the Buffer Path Sensor
- Obstructions in the paper path

### Procedure

Enter **dC330** [012-101], Buffer Path Sensor ([PL 21.10](#)). Select **Start**. Actuate the Buffer Path Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.39 Professional Finisher Buffer Transport](#). Check the circuit of the Buffer Path Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Finisher for a docking failure

If the above checks are OK, then replace the Buffer Path Sensor ([PL 21.10](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-901 (Pro) Paper at H-Transport Entrance Sensor

BSD-ON: [BSD 12.33 Horizontal Transportation \(1 of 2\)](#)

Control logic reports paper at the H-Transport Entrance Sensor.

### Initial Actions

Check the following:

- Paper on the H-Transport Entrance Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

### Procedure

Enter **dC330** [012-190], H-Transport Entrance Sensor ([PL 21.26](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.33 Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Entrance Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Entrance Sensor ([PL 21.26](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-902 (Pro) Paper at H-Transport Exit Sensor

BSD-ON:[BSD 12.33 Horizontal Transportation \(1 of 2\)](#)

Control logic reports paper at the H-Transport Exit Sensor.

### Initial Actions

Check the following:

- Paper on the H-Transport Exit Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

### Procedure

Enter [dC330](#) [012-191], H-Transport Exit Sensor ([PL 21.28](#)). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.33 Horizontal Transportation \(1 of 2\)](#). Check the circuit of the H-Transport Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Exit Sensor ([PL 21.28](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-903 (Pro) Paper at Compiler Exit Sensor

BSD-ON:[BSD 12.51 Professional Finisher Compiling](#)

Control logic reports paper at the Compiler Exit Sensor.

### Initial Actions

- Paper on the Compiler Exit Sensor
- Obstructions in the paper path

### Procedure

Enter [dC330](#) [012-150], Compiler Exit Sensor ([PL 21.9](#)). Select **Start**. Open the H-Transport Cover and actuate the Compiler Exit Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.51 Professional Finisher Compiling](#). Check the circuit of the Compiler Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Exit Sensor ([PL 21.9](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-905 (Pro) Paper at Compiler Tray No Paper Sensor

BSD-ON:[BSD 12.51 Professional Finisher Compiling](#)

Control logic reports paper at the Compiler Tray No Paper Sensor.

### Initial Actions

- Paper on the Compiler Tray Paper Sensor
- Obstructions in the paper path

### Procedure

Enter [dC330](#) [012-151], Compiler Tray No Paper Sensor ([PL 21.8](#)). Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.51 Professional Finisher Compiling](#) Check the circuit of the Compiler Tray No Paper Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Tray No Paper Sensor ([PL 21.8](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-907 (Pro) Paper at Top Tray Exit Sensor

BSD-ON:[BSD 12.48 Professional Finisher Top Tray Stacking](#)

Control logic reports paper at the Top Tray Exit Sensor.

### Initial Actions

- Paper on the Top Tray Exit Sensor
- Obstructions in the paper path

### Procedure

Enter [dC330](#) [012-115], Top Tray Exit Sensor ([PL 21.11](#)). Select **Start**. Actuate the Top Tray Exit Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.48 Professional Finisher Top Tray Stacking](#). Check the circuit of the Top Tray Exit Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Drive Shaft Rolls for wear or damage
- Exit Pinch Rollers for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Top Tray Exit Sensor ([PL 21.11](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).



## 312-916 (Pro) Stapler NG

BSD-ON: [BSD 12.53 Professional Finisher Stapler Control](#)

BSD-ON: [BSD 12.54 Professional Finisher Staple Positioning](#)

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor started rotating forward.

The Staple Head Home Sensor turned On within xxx msec. after the Staple Motor reversed.

### Initial Actions

- The Actuator for deformation
- The Staple Home Sensor for improper installation
- The Staple Home Sensor connectors for connection failure
- The Staple Guide for a foreign substance and deformation
- The Staple Motor for operation failure
- The Staple Motor connectors for connection failure

### Procedure

Enter [dC330](#) [012-042] and [012-045], Staple Motor ([PL 21.6](#)), alternately. Select **Start**. **The Staple Motor energizes.**

Y N

Select Stop. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. Select [012-244], Staple Home Sensor, (part of Stapler Assembly) ([PL 21.6](#)). Select [012-042] and [012-045], Staple Motor ([PL 21.6](#)), alternately. Select **Start**. **The display changes.**

Y N

Select Stop. Go to [BSD 12.53 Professional Finisher Stapler Control](#). Check continuity between the Stapler and Finisher PWB. **The continuity check is OK.**

Y N

Repair the open circuit or short circuit.

Replace the Stapler Head ([PL 21.6](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-920 (Pro) Paper at Gate Sensor (Top Tray Job)

BSD-ON: [BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

Control logic reports paper at the Gate Sensor.

### Initial Actions

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

### Procedure

Enter [dC330](#) [012-102], Gate Sensor ([PL 21.11](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

Y N

Select Stop. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Gate Sensor ([PL 21.11](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-930 (Pro) Full Stack Detected

BSD-ON:[BSD 12.57 Professional Finisher Stacker Drive](#)

Stacker No Paper Sensor On was detected during the Stacker Tray height adjusting operation.

### Initial Actions

- The Stacker No Paper Sensor for improper installation
- The Stacker No Paper Sensor connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

### Procedure

Enter **dC330** [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 21.4](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK,**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Elevator Motor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. Select [012-262], Stacker No Paper Sensor ([PL 21.4](#)). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Stacker No Paper Sensor and Finisher PWB. **The continuity check is OK,**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Stacker No Paper Sensor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor ([PL 21.4](#)). Select **Start**. Block/unblock the Stacker Encoder Sensor. **The display changes.**

**Y N**  
Select **Stop**. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Stacker Encoder Sensor and Finisher PWB. **The continuity check is OK,**  
**Y N**  
Repair the open circuit or short circuit.  
Replace the Stacker Encoder Sensor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB

Select **Stop**. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-932 (Pro) Paper Remain at Gate SNR

BSD-ON:[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

Gate SNR (Compile Path Job) has detected paper

### Procedure

Enter [012-102], Gate Sensor ([PL 21.11](#)). Select **Start**. Actuate the Gate Sensor. **The display changes.**

**Y N**  
Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Gate Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select [012-086] or [012-087], Gate Solenoid ([PL 21.25](#)). Select **Start**. **The Gate Solenoid actuates.**

**Y N**  
Select **Stop**. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Gate Solenoid. Refer to the [OF 99-8](#) RAP for troubleshooting procedure.

Select **Stop**.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- If the above checks are OK, then replace the Gate Sensor ([PL 21.11](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-935 (Pro) Paper at Transport Entrance Sensor

BSD-ON:[BSD 12.38 Professional Finisher Transport Top Tray Gating](#)

Control logic reports paper at the Transport Entrance Sensor.

### Initial Actions

- Check for obstructions in the paper path
- Check that the Finisher is docked correctly to ensure proper Transport Gate operation

### Procedure

Enter [dC330](#) [012-100], Transport Entrance Sensor ([PL 21.10](#)). Select **Start**. Actuate the Transport Entrance Sensor. **The display changes.**

**Y N**

Select Stop. Go to [BSD 12.38 Professional Finisher Transport Top Tray Gating](#). Check the circuit of the Transport Entrance Sensor. Refer to the [OF 99-2](#) RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Transport Entrance Sensor ([PL 21.10](#)). If the problem persists, replace the Finisher PWB ([PL 21.12](#)).

## 312-936 (Pro) Paper Remains at Booklet In Sensor

BSD-ON:[BSD 12.41 Booklet Transportation](#)

Booklet Input SNR has detected paper

### Procedure

Go to [312-113 \(Pro\)](#) .

## 312-946 (Pro) Top Tray Full

BSD-ON: [BSD 12.48 Professional Finisher Top Tray Stacking](#)

The Top Tray Full Sensor was turned On for 10sec continuously.

### Initial Actions

- The Top Tray Full Sensor for improper installation
- The Top Tray Full Sensor connectors for connection failure
- The Top Tray Full Sensor Actuator for deformation and operation failure

### Procedure

Enter [dC330](#) [012-215], Top Tray Full Sensor, ([PL 21.11](#)). Select **Start**. Actuate the Top Tray Full Sensor. **The display changes.**

Y N  
Select Stop. Go to [BSD 12.48 Professional Finisher Top Tray Stacking](#) Check continuity between the Top Tray Full Sensor and Finisher PWB. **The continuity check is OK.**  
Y N  
Repair the open circuit or short circuit.  
Replace the Top Tray Full Sensor ([PL 21.11](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-949 (Pro) Puncher Waste Bin Open

BSD-ON: [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

The Puncher Waste Bin Set Sensor detected Off (No Puncher Waste Bin).

### Initial Actions

- The Puncher Waste Bin Set Sensor for improper installation
- The Puncher Waste Bin Set Sensor connectors for connection failure
- The Puncher Waste Bin Actuator part for deformation and damage
- The Guide for deformation
- The Guide for a foreign substance

### Procedure

Enter [dC330](#) [012-275], Puncher Box Set Sensor ([PL 21.5](#)). Select **Start**. Remove and insert the Puncher Waste Bin manually. **The display changes**

Y N  
Select Stop. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#) Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.**  
Y N  
Repair the open circuit or short circuit.  
Replace the Puncher Box Set Sensor ([PL 21.5](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

Check the Puncher Waste Box Actuator and Guide for deformation. **The Puncher Waste Bin can be removed and inserted properly.**

Y N  
Repair or replace the Puncher Waste Bin ([PL 21.5](#)).

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-963 (Pro) Puncher Waste Bin Full

BSD-ON: [BSD 12.37 Professional Finisher Booklet/Punch Transport](#)

Cumulative punching count reached the specified times (2-hole punching: 5000 times, 4-hole punching: 2500 times).

### Procedure

Remove the Puncher Waste Bin and discard the waste. Reinstall the Puncher Waste Bin. **The problem is resolved.**

Y N  
Enter [dC330](#) [012-275], Puncher Box Set Sensor (PL 21.5). Select **Start**. Remove and reinsert the Puncher Waste Bin. **The display changes.**

Y N  
Select **Stop**. Go to [BSD 12.37 Professional Finisher Booklet/Punch Transport](#) Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select **Stop**. Replace the Finisher PWB (PL 21.12).

Ensure the Puncher Waste Bin is installed properly.

## 312-976 (Pro) Staple Fault RAP

BSD-ON: [BSD 12.53 Professional Finisher Stapler Control](#)

BSD-ON: [BSD 12.54 Professional Finisher Staple Positioning](#)

Staple Head Home Sensor is not turned on within 450ms after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

### Initial Actions

- The Actuator for deformation
- The Staple Home Sensor for improper installation
- The Staple Home Sensor connectors for connection failure
- The Staple Guide for a foreign substance and deformation
- The Staple Motor for operation failure
- The Staple Motor connectors for connection failure

### Procedure

Enter [dC330](#) [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select **Start**. **The Staple Motor energizes.**

Y N  
Select **Stop**. Go to [BSD 12.54 Professional Finisher Staple Positioning](#). Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Stapler (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select **Stop**. Select [012-244], Staple Home Sensor, (part of Stapler Assembly) (PL 21.6). Select [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select **Start**. **The display changes.**

Y N  
Select **Stop**. Go to [BSD 12.53 Professional Finisher Stapler Control](#). Check continuity between the Stapler and Finisher PWB. **The continuity check is OK.**

Y N  
Repair the open circuit or short circuit.

Replace the Stapler Head (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select **Stop**. If the problem continues, replace the Finisher PWB (PL 21.12).

## 312-982 (Pro) Stacker Lower Safety Warning RAP

BSD-ON:[BSD 12.57 Professional Finisher Stacker Drive](#)

The Stacker Lower Safety Warning occurs when the following happens four time successively:

Stacker tray height adjustment was not completed successfully within a specified time period when running a job.

### Procedure

Enter [dC330](#) [012-061] Elevator Motor Down and [012-060] Elevator Motor UP ([PL 21.4](#)), alternately. Select **Start**. **The Elevator Motor energizes.**

**Y N**  
Select Stop. Go to [BSD 12.57 Professional Finisher Stacker Drive](#). Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK,**

**Y N**  
Repair the open circuit or short circuit.

Replace the Elevator Motor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor ([PL 21.4](#)). Select **Start**. Block/unblock the Stacker Encoder Sensor. **The display changes.**

**Y N**  
Select Stop. Go to [BSD 12.57 Professional Finisher Stacker Drive](#) Check continuity between the Stacker Encoder Sensor and Finisher PWB. **The continuity check is OK,**

**Y N**  
Repair the open circuit or short circuit.

Replace the Stacker Encoder Sensor ([PL 21.4](#)). If the problem continues, replace the Finisher PWB

Select Stop. If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-983 (Pro) Booklet Tray Full was detected

BSD-ON:[BSD 12.47 Booklet Tray Control](#)

Booklet Tray Full was detected.

### Procedure

Remove all sets. Perform the job again. **The problem is resolved.**

**Y N**  
Replace the Finisher PWB ([PL 21.12](#)).

If the problem continues, replace the Finisher PWB ([PL 21.12](#)).

## 312-984 (Pro) Booklet Low Staple F

BSD-ON:[BSD 12.45 Booklet Staple Control](#)

Booklet Stapler Low Staple Front signal was detected just before Stapling operation.

Booklet Stapler Low Staple Front signal was detected at Power On, at initialization, or when the interlock was closed.

### Procedure

Supply the staples. **The problem is resolved.**

Y N  
Enter [dC330](#) [013-107], Booklet Low Staple Front. Select **Start**. **'LOW' (staples available) is displayed**  
Y N  
Select **Stop**. Go to [BSD 12.45 Booklet Staple Control](#) Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. **The continuity check is OK.**  
Y N  
Repair the open circuit or short circuit.  
Replace the Booklet Stapler Low Staple Front ([PL 21.16](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).  
Select **Stop**. Replace the Finisher PWB ([PL 21.12](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)).

If the problem continues, replace the Finisher PWB ([PL 21.12](#)). If the problem persists, replace the Booklet PWB ([PL 21.13](#)).

## 312-989 (Pro) Booklet Low Staple R

BSD-ON:[BSD 12.45 Booklet Staple Control](#)

Booklet Stapler Low Staple Rear signal was detected just before Stapling operation.

Booklet Stapler Low Staple Rear signal was detected at Power On, at initialization, or when the interlock was closed.

### Procedure

Supply the staples. **The problem is resolved.**

Y N  
Enter [dC330](#) [013-108], Booklet Low Staple Rear. Select **Start**. **'LOW' (staples available) is displayed**  
Y N  
Select **Stop**. Go to [BSD 12.45 Booklet Staple Control](#) Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. **The continuity check is OK.**  
Y N  
Repair the open circuit or short circuit.  
Replace the Booklet Stapler Low Staple Rear ([PL 21.16](#)). If the problem continues, replace the Finisher PWB ([PL 21.12](#)).  
Select **Stop**. Replace the Finisher PWB ([PL 21.12](#)). If the problem continues, replace the Booklet PWB ([PL 21.13](#)).

If the problem continues, replace the Finisher PWB ([PL 21.12](#)). If the problem persists, replace the Booklet PWB ([PL 21.13](#)).

## 312-132 (Int) Entrance Sensor ON Jam

BSD-ON: [BSD 12.3 Integrated Finisher Transportation](#)

Finisher Entrance Sensor does not turn On within a specified time after receiving the Sheet Exit command (the sheet to be ejected has turned ON the IOT Exit Sensor 1).

### Initial Actions

- Check that the Finisher Entrance Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- Power Off/On.

### Procedure

Check the specifications of paper. **Paper is in spec.**

Y N  
Replace the paper with new paper that is in spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N  
Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. **The transport path is in normal condition.**

Y N  
Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check that the Finisher is installed properly. **The Finisher is properly installed and properly connected to the IOT.**

Y N  
Reinstall the Finisher properly.

Enter [dC330](#) [012-140]. Actuate the Finisher Entrance Sensor. **The display changes.**

Y N  
Check the connections of [P/J8709](#) and [P/J8729](#). **[P/J8709](#) and [P/J8729](#) are securely connected.**

Y N  
Connect [P/J8709](#) and [P/J8729](#) securely.

Check for an open or short circuit between J8709 and J8729. **The wires between J8709 and J8729 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-6 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8709-5 (+) and GND (-). Actuate the Finisher Entrance Sensor. **The voltage changes.**

A

Y N

Replace the Finisher Entrance Sensor ([PL 22.5](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).



## 312-151 (Int) Compiler Exit Sensor OFF Jam

BSD-ON: [BSD 12.3 Integrated Finisher Transportation](#)

The Compiler Exit Sensor does not turn Off within a specified time after it has turned On.

### Initial Actions

- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/On.

### Procedure

Check the specifications of paper. **Paper is in spec.**

Y N  
Replace the paper with new paper that is in spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N  
Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. **The transport path is in normal condition with no foreign object, deformed part and paper dust.**

Y N  
Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check the Transport Roll for wear, deterioration and paper dust. **The Transport Roll is in normal condition, not worn and deteriorated and with no paper dust.**

Y N  
Remove the paper dust and replace the worn or deteriorated Transport Roll.

Check the drive mechanism to the Transport Roll for a deformed, broken part, and/or belt damage. **The drive mechanism is free of defects.**

Y N  
Repair defects or damage to the drive mechanism.

Enter **dC330** [012-150]. Actuate the Compiler Exit Sensor. **The display changes.**

Y N  
Check the connections of **P/J8709** and **P/J8728**. **P/J8709** and **P/J8728** are securely connected.

Y N  
Connect **P/J8709** and **P/J8728** securely.

Check for an open or short circuit between **P/J8709** and **P/J8728**. **The wire J8709 and J8728 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB **P/J8709-3** (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +5VDC circuit.

Measure the voltage between Finisher PWB **P/J8709-2** (+) and GND (-). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N  
Replace the Compiler Exit Sensor (**PL 22.5**).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (**PL 22.7**).

Enter **dC330** [012-095]. **The Finisher Transport Motor rotates.**

Y N  
Check the connections of **P/J8706** and **P/J8739**. **P/J8706** and **P/J8739** are securely connected.

Y N  
Connect **P/J8706** and **P/J8739** securely.

Check for an open or short circuit between **P/J8706** and **P/J8739**. **The wire between J8706 and J8739 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB **J8706-5** (+) and GND (-), and between Finisher PWB **J8706-7** (+) and GND (-). **Each voltage is approx. +24VDC.**

Y N  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor (**PL 22.4**). If the problem persists, replace the Finisher PWB (**PL 22.7**).

Enter **dC330** [012-013]. **When the Sub Paddle Solenoid is turned On/Off, the Sub Paddle Shaft Assembly goes down/up.**

Y N  
Check the Sub Paddle mechanism for a deformed or broken part and not-seated gears. **The Sub Paddle mechanism is free from defects and gears are seating properly.**

Y N  
Repair defects to the Sub Paddle mechanism.

Check the connections of **P/J8705** and **P/J8734**. **P/J8705** and **P/J8734** are securely connected.

Y N  
Connect **P/J8705** and **P/J8734** securely.

Check for an open or short circuit between **J8705** and **J8734**. **The wires between J8705 and J8734 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB **J8705-1** (+) and GND (-). **The voltage is approx. +24VDC.**

Y N

Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the circuit is OK, replace the Finisher PWB ([PL 22.7](#)).

Enter [dC330](#) [012-013], measure the voltage between Finisher PWB J8705-2 (+) and GND (-). **The voltage changes.**

Y N

Replace the Finisher PWB ([PL 22.7](#)).

Replace the Sub Paddle Solenoid ([PL 22.3](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-152 (Int) Compiler Exit Sensor ON Jam

**BSD-ON:**[BSD 12.3 Integrated Finisher Transportation](#)

The Compiler Exit Sensor does not turn On within a specified time after receiving the Sheet Exit command (the paper to be ejected has turned On the IOT Exit Sensor 1).

### Initial Actions

- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- Power Off/On.

### Procedure

Check the specifications of paper. **Paper is in spec.**

Y N

Replace the paper with new paper that is ins spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

Y N

Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. **The transport path is in normal condition with no foreign object, deformed part and paper dust.**

Y N

Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check the Transport Roll for wear, deterioration and paper dust. **The Transport Roll is in normal condition.**

Y N

Remove the paper dust and replace the worn or deteriorated Transport Roll.

Check the drive mechanism to the Transport Roll for a deformed parts, broken parts, and/or belt damage. **The drive mechanism free from defects.**

Y N

Repair defects or damage to the drive mechanism.

Check that the Finisher is installed properly. **The Finisher is properly installed and properly connected to the IOT.**

Y N

Reinstall the Finisher properly.

Enter [dC330](#) [012-150]. Actuate the Compiler Exit Sensor. **The display changes.**

Y N

Check the connections of [P/J8709](#) and [P/J8728](#). **[P/J8709](#) and [P/J8728](#) are securely connected.**

Y N

Connect [P/J8709](#) and [P/J8728](#) securely.

Check for an open or short circuit between J8709 and J8728. **The wires between J8709 and J8728 are OK.**

A

**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). **The voltage is approx. +5VDC.**

**Y N**  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8709-2 (+) and GND (-). Actuate the Compiler Exit Sensor. **The voltage normally changes.**

**Y N**  
Replace the Compiler Exit Sensor ([PL 22.5](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Enter [dC330](#) [012-095]. **The Finisher Transport Motor rotates.**

**Y N**  
Check the connections of [P/J8706](#) and [P/J8739](#). **P/J8706 and P/J8739 are securely connected.**

**Y N**  
Connect [P/J8706](#) and [P/J8739](#) securely.

Check for an open or short circuit between J8706 and J8739. **The wire between J8706 and J8739 are OK.**

**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-5 (+) and GND (-), and J8706-7 (+) and GND (-). **Each voltage is approx. +24VDC.**

**Y N**  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor ([PL 22.4](#)). If the problem persists, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-161 (Int) Set Eject Jam

**BSD-ON:**[BSD 12.6 Integrated Finisher Set Eject \(1 of 2\)](#)

In the Eject Motor's ejecting operation, Eject Home Sensor ON was detected within a specified time after the start of the reverse operation of the Eject Motor.

(The Eject Motor should have ejected paper, but returned Home earlier than specified.)

### Initial Actions

- Check the Eject Home Sensor is properly installed, not broken, and has no foreign object.
- Power Off/On.

### Procedure

Check the specifications of paper. **Paper is in spec.**

**Y N**  
Replace the paper with new paper that is in spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent or caught.**

**Y N**  
Resolve any problem that causes the paper to be bent or caught.

Check the Eject mechanism for deformed parts, broken parts, and/or belt damage. **The Eject mechanism free from defects.**

**Y N**  
Repair the Eject mechanism.

Enter [dC330](#) [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. **The display changes.**

**Y N**  
Check the connections of [P/J8700](#) and [P/J8725](#). **P/J8700 and P/J8725 are securely connected.**

**Y N**  
Connect [P/J8700](#) and [P/J8725](#) securely.

Check for an open or short circuit between J8700 and J8725. **The wires between J8700 and J8725 are OK.**

**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). **The voltage is approx. +5VDC.**

**Y N**  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. **The voltage changes.**

**Y N**  
Replace the Eject Home Sensor ([PL 22.10](#)).

A B

A B  
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. **The Eject Motor rotates.**

Y N  
Check the connections of P/J8706 and P/J8741. **P/J8706 and P/J8741 are securely connected.**

Y N  
Connect P/J8706 and P/J8741 securely.

Check for an open or short circuit between J8706 and J8741. **The wires between J8706 and J8741 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +24VDC circuit.

Check the Eject Motor drive mechanism for deformed parts, broken parts, and/or belt damage **The drive mechanism free from defects.**

Y N  
Repair defects or damage to the drive mechanism.

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-211 (Int) Stacker Tray Fault

BSD-ON: [BSD 12.8 Integrated Finisher Stacker Tray Control](#)

- Within a specified time after the Stacker Tray started lifting up, the Stack Height Sensor did not detect the lifting up of the Stacker Tray.
- Within a specified time after the Stacker Tray started going down at initialization and during a job, the lower position of the tray (Full) could not be detected based on the changes in the Stacker Stack Sensor 1 and the Stacker Stack Sensor 2.

### Initial Actions

- Check the Stack Height Sensor is properly installed, not broken, and has no foreign object.
- Check the Stacker Stack Sensors 1 and 2 are properly installed and have no foreign objects and that their actuators are not broken.
- Power Off/On.

### Procedure

Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. **The mechanism is free from defects and the gears seat properly.**

Y N  
Repair the mechanism.

Enter **dC330** [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. **The display changes.**

Y N  
Check the connections of P/J8708 and P/J8727. **P/J8708 and P/J8727 are securely connected.**

Y N  
Connect P/J8708 and P/J8727 securely.

Check for an open or short circuit between J8708 and J8727. **The wire between J8708 and J8727 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8708-3 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to **Finisher (Int) +5VDC Wirenet** and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8708-2 (+) and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. **The voltage changes.**

Y N  
Replace the Stack Height Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-278]. Block and unblock the Stacker Stack Sensor 1 by rotating the actuator. **The display changes.**

**Y N**  
Check the connections of P/J8707 and P/J8722. **P/J8707 and P/J8722 are securely connected.**  
**Y N**  
Connect P/J8707 and P/J8722 securely.

Check for an open or short circuit between J8707 and J8722. **The wires between J8707 and J8722 are OK.**  
**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8707-6 (+) and GND (-). **The voltage is approx. +5VDC.**  
**Y N**  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8707-5 (+) and (-). Block and unblock the Stacker Stack Sensor 1 by rotating the actuator. **The voltage changes.**  
**Y N**  
Replace the Stacker Stack Sensor 1 (PL 22.8).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-279]. Block and unblock the Stacker Stack Sensor 2 by rotating the actuator. **The display changes.**

**Y N**  
Check the connections of P/J8707 and P/J8721. **P/J8707 and P/J8721 are securely connected.**  
**Y N**  
Connect P/J8707 and P/J8721 securely.

Check for an open or short circuit between J8707 and J8721. **The wires between J8707 and J8721 are OK.**  
**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8707-3 (+) and GND (-). **The voltage is approx. +5VDC.**  
**Y N**  
Go to **Finisher (Int) +5VDC Wirenet** and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8707-2 (+) and GND (-). Block and unblock the Stacker Stack Sensor 2 by rotating the actuator. **The voltage changes.**  
**Y N**  
Replace the Stacker Stack Sensor 2 (PL 22.8).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. **The Stacker Motor rotates.**

**Y N**  
Check the connections of P/J8711 and P/J8736. **P/J8711 and P/J8736 are securely connected.**  
**Y N**  
Connect P/J8711 and P/J8736 securely.

Check for an open or short circuit between J8711 and P8736. **The wires between J8711 and P8736 are OK.**  
**Y N**  
Repair the open or short circuit.

Enter [012-060], measure the voltage between Finisher PWB J8711-1 (+) and GND (-). **The voltage changes.**  
**Y N**  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between Finisher PWB J8711-2 (+) and GND (-). **The voltage changes.**  
**Y N**  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open and short circuit. If the problem continues, replace the Stacker Motor (PL 22.8).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-221 (Int) Front Tamper Home Sensor ON Fault

BSD-ON: [BSD 12.4 Integrated Finisher tamping and Offset](#)

During the moving of the Front Tamper, when the Front Tamper Home Sensor was Off, to the home position, the Front Tamper Home Sensor did not detected turning On within a specified time after the Front Tamper started moving.

### Initial Actions

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. **The Front Tamper is defects and binding.**

Y N  
Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. **The drive mechanism is free from defects and the gears seat properly.**

Y N  
Repair the Front Tamper mechanism.

Enter [dC330](#) [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The display changes.**

Y N  
Check the connections of [P/J8700](#) and [P/J8724](#). **P/J8700 and P/J8724 are securely connected.**

Y N  
Connect [P/J8700](#) and [P/J8724](#) securely.

Check for an open or short circuit between J8700 and J8724. **The wires between J8700 and J8724 are OK.**

Y N  
Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y N  
Replace the Front Tamper Home Sensor ([PL 22.10](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

A  
Enter [012-020] and [012-023] alternately. **The Front Tamper Motor rotates.**

Y N  
Check the connections of [P/J8710](#), [J8738A](#) and [J8738B](#). **P/J8710, J8738A, and P/J8738B are securely connected.**

Y N  
Connect [P/J8710](#), [J8738A](#) and [J8738B](#) securely.

Check for an open or short circuit between J8710, P/J8738A and J8738B. **The wires between are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Replace the Front Tamper Motor ([PL 22.10](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-223 (Int) Front Tamper Home Sensor OFF Fault

BSD-ON: [BSD 12.4 Integrated Finisher tamping and Offset](#)

- At the end of the operation to turn Off the Front Tamper Home Sensor that was On, the Front Tamper Home Sensor was not detected being Off.
- The Front Tamper Home Sensor should have turned Off and then the Front Tamper Motor stopped, but the Front Tamper Home Sensor was On.

### Initial Actions

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. **The Front Tamper free from defects and binding.**

Y N  
Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. **The drive mechanism is free from defects and the gears seat properly.**

Y N  
Repair the Front Tamper drive mechanism.

Enter [dC330](#) [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The display changes.**

Y N  
Check the connections of [P/J8700](#) and [P/J8724](#). **P/J8700 and P/J8724 are securely connected.**

Y N  
Connect [P/J8700](#) and [P/J8724](#) securely.

Check for an open or short circuit between J8700 and J8724. **The wires between J8700 and J8724 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The voltage changes.**

Y N  
Replace the Front Tamper Home Sensor ([PL 22.10](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

A  
Enter [012-020] and [012-023] alternately. **The Front Tamper Motor rotates.**

Y N  
Check the connections of [P/J8710](#), [J8738A](#) and [J8738B](#). **P/J8710, J8738A and P/J8738B are securely connected.**

Y N  
Connect [P/J8710](#), [P/J8738A](#) and [J8738B](#) securely.

Check for an open wire or short circuit between J8710, P/J8738A and J8738B. **The wire between J8710, P/J8738A and J8738B are OK.**

Y N  
Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). **Each voltage is approx. +24VDC.**

Y N  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Replace the Front Tamper Motor ([PL 22.10](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).



## 312-224 (Int) Rear Tamper Home Sensor OFF Fault

BSD-ON: [BSD 12.4 Integrated Finisher tamping and Offset](#)

- At the end of the operation of trying to turn Off the Rear Tamper Home Sensor that was On, the Rear Tamper Home Sensor was not detected being Off.
- The Rear Tamper Home Sensor should have turned Off and then the Rear Tamper Motor stopped, but the Rear Tamper Home Sensor was On.

### Initial Actions

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. **The Rear Tamper is free from defects and binding.**

Y N  
Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. **The drive mechanism is in normal condition, not deformed or broken and with no not-seated gears.**

Y N  
Repair the Rear Tamper drive mechanism.

Enter [dC330](#) [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The display of changes.**

Y N  
Check the connections of [P/J8700](#) and [P/J8726](#). **P/J8700 and P/J8726 are securely connected.**

Y N  
Connect [P/J8700](#) and [P/J8726](#) securely.

Check for an open or short circuit between J8700 and J8726. **The wires between J8700 and J8726 are OK.**

Y N  
Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-12 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-11 (+) and GND (-). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N  
Replace the Rear Tamper Home Sensor ([PL 22.9](#)).

A B  
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Enter [012-026] and [012-029] alternately. **The Rear Tamper Motor rotates.**

Y N  
Check the connections of [P/J8710](#), [J8738A](#) and [J8738B](#). **J8738A, J8738A and J8738B are securely connected.**

Y N  
Connect [P/J8710](#), [P/J8737A](#) and [J8738B](#) securely.

Check for an open wire or short circuit between J8710, [P/J8737A](#) and [J8737B](#). **The wire between J8710, P/J8737A and J8737B are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Repair the Rear Tamper Motor ([PL 22.10](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).



## 312-259 (Int) Eject Home Sensor ON Fault

**BSD-ON:** [BSD 12.6 Integrated Finisher Set Eject \(1 of 2\)](#)

In the Eject Motor's initializing operation and ejecting operation, one of the following is met.

- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. Within a specified time after that, the Eject Home Sensor was not detected turning On.
- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. The Eject Home Sensor should have been detected turning On and then the Eject Motor stopped, but then the Eject Home Sensor was not On.

### Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object.
- Power Off/ON.

### Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. **The mechanism is free from defects and belt damage.**

**Y N**  
Repair the mechanism.

Enter [dC330](#) [012-252]. Block and unblock the Eject Home Sensor. **The display changes.**

**Y N**  
Check the connections of [P/J8700](#) and [P/J8725](#). **[P/J8700](#) and [P/J8725](#) are securely connected.**

**Y N**  
Connect [P/J8700](#) and [P/J8725](#) securely.

Check for an open wire or short circuit between J8700 and J8725. **The wire between J8700 and J8725 is normally conductive with no open wire or short circuit.**

**Y N**  
Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). **The voltage is approx. +5VDC.**

**Y N**  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor. **The voltage changes**

**Y N**  
Replace the Eject Home Sensor ([PL 22.10](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Enter [012-054] and [012-056] alternately. **The Eject Motor rotates.**

**Y N**  
Check the connections of [P/J8706](#) and [P/J8741](#). **[P/J8706](#) and [P/J8741](#) are securely connected.**

A

**Y N**  
Connect [P/J8706](#) and [P/J8741](#) securely.

Check for an open or short circuit between J8706 and J8741. **The wires between J8706 and J8741 are OK.**

**Y N**  
Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). **Each voltage is approx. +24VDC.**

**Y N**  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Replace the Eject Motor ([PL 22.9](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-263 (Int) Rear Tamper Home Sensor ON Fault

BSD-ON: [BSD 12.4 Integrated Finisher Tamping and Offset](#)

During the moving of the Rear Tamper from when the Rear Tamper Home Sensor was Off to the home position, the Rear Tamper Home Sensor was not detected turning On within a specified time after the Rear Tamper started moving.

### Initial Actions

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. **The Rear Tamper is free from defects and binding.**

Y N  
Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. **The drive mechanism is free from defects and gears seat properly.**

Y N  
Repair the Rear Tamper drive mechanism.

Enter [dC330](#) [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The display changes.**

Y N  
Check the connections of [P/J8700](#) and [P/J8726](#). **P/J8700 and P/J8726 are securely connected.**

Y N  
Connect [P/J8700](#) and [P/J8726](#) securely.

Check for an open wire or short circuit between J8700 and J8726. **The wire between J8700 and J8726 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-12 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-11 (+) and GND (-). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The voltage changes.**

Y N  
Replace the Rear Tamper Home Sensor ([PL 22.9](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

A  
Enter [012-026] and [012-029] alternately. **The Rear Tamper Motor rotates.**

Y N  
Check the connections of [P/J8710](#), [P/J8737A](#) and [J8738B](#). **P/J8710, P/J8737A and J8738B are securely connected.**

Y N  
Connect [P/J8710](#), [P/J8737A](#) and [J8738B](#) securely.

Check for an open or short circuit between J8710, P/J8737A and J8737B. **The wires between J8710, P/J8737A and J8737B are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). **Each voltage is approx. +24VDC.**

Y N  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Replace the Rear Tamper Motor ([PL 22.10](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-280 (Int) Eject Home Sensor OFF Fault

BSD-ON:BSD 12.6 Integrated Finisher Set Eject (1 of 2)

In the Eject Motor's initializing operation and ejecting operation, the Eject Motor had rotated forward for a time corresponding to a specified number of pulses since the Eject Home Sensor was On, and then the motor stopped, but then the Eject Home Sensor was not detected turning Off.

### Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object.
- Power Off/ON.

### Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. **The mechanism is free from defects and belt damage.**

Y N  
Repair the mechanism.

Enter dC330 [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. **The display changes.**

Y N  
Check the connections of P/J8700 and P/J8725. **P/J8700 and P/J8725 are securely connected.**

Y N  
Connect P/J8700 and P/J8725 securely.

Check for an open or short circuit between J8700 and J8725. **The wires between J8700 and J8725 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to **Finisher (Int) +5VDC Wirenet** and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. **The voltage changes.**

Y N  
Replace the Eject Home Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. **The Eject Motor rotates.**

Y N  
Check the connections of P/J8706 and P/J8741. **P/J8706 and P/J8741 are securely connected.**

Y N  
Connect P/J8706 and P/J8741 securely.

A B  
Check for an open or short circuit between P/J8706 and P/J8741. **The wires between J8706 and J8741 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). **Each voltage is approx. +24VDC.**

Y N  
Go to **Finisher (Int) +24VDC/24VDC RTN** and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-283 (Int) Set Clamp Home Sensor ON Fault

BSD-ON:BSD 12.7 Integrated Finisher Set Eject (2 of 2)

In the initialize operations each at Power On, when Interlock closed and at the start of a job, and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning On within a specified time after the start of the Set Clamp Motor operation.

### Initial Actions

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. **The mechanism is free from defects and belt damage.**

Y N  
Repair the Set Clamp mechanism.

Enter dC330 [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The display changes.**

Y N  
Check the connections of P/J8707, J8742B, J8742A and P/J8723. **P/J8707, J8742B, J8742A and P/J8723 are securely connected.**

Y N  
Connect P/J8707, J8742B, J8742A and P/J8723 securely.

Check for an open or short circuit between J8707 and J8742B, and between J8742A and J8723. **The wires between J8707 and J8742B and between J8742A and J8723 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8707-9 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8707-8 (+) and GND (-). Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The voltage changes.**

Y N  
Replace the Set Clamp Home Sensor (PL 22.4).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-017]. **The Set Clamp Motor rotates.**

Y N  
Check the connections of P/J8706 and P/J8740. **P/J8706 and P/J8740 are securely connected.**

A

Y N  
Connect P/J8706 and P/J8740 securely.

Check for an open or short circuit between P/J8706 and P/J8740. **The wires between J8706 and J8740 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-9 (+) and GND (-), and between J8706-11 (+) and GND (-). **Each voltage is approx. +24VDC.**

Y N  
Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Set Clamp Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

A

## 312-284 (Int) Set Clamp Home Sensor OFF Fault

BSD-ON: [BSD 12.7 Integrated Finisher Set Eject \(2 of 2\)](#)

In the initialize operations each at Power On, when Interlock closed and at the start of a job, and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning Off within a specified time after the start of the Set Clamp Motor operation.

### Initial Actions

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. **The mechanism is free from defects and belt damage.**

**Y N**  
Repair the Set CLamp mechanism.

Enter [dC330](#) [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The display changes.**

**Y N**  
Check the connections of [P/J8707](#), [J8742B](#), [J8742A](#) and [P/J8723](#). **[P/J8707](#), [J8742B](#), [J8742A](#) and [P/J8723](#) are securely connected.**

**Y N**  
Connect [P/J8707](#), [J8742B](#), [J8742A](#) and [P/J8723](#) securely.

Check for an open or short circuit between [J8707](#) and [J8742B](#), and between [J8742A](#) and [J8723](#). **The wires between [J8707](#) and [J8742B](#) and between [J8742A](#) and [J8723](#) are OK.**

**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB [J8707-9](#) (+) and GND (-). **The voltage is approx. +5VDC.**

**Y N**  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB [J8707-8](#) (+) and GND (-). Rotate the Set Clamp Shaft by hand to block and unblock the acceptance surface of the Set Clamp Home Sensor. **The voltage changes normally.**

**Y N**  
Replace the Set Clamp Home Sensor ([PL 22.4](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Enter [012-017]. **The Set Clamp Motor rotates.**

**Y N**  
Check the connections of [P/J8706](#) and [P/J8740](#). **[P/J8706](#) and [P/J8740](#) are securely connected.**

A

**Y N**  
Connect [P/J8706](#) and [P/J8740](#) securely.

Check for an open or short circuit between [P/J8706](#) and [P/J8740](#). **The wires between [J8706](#) and [J8740](#) are OK.**

**Y N**  
Repair the open or short circuit.

Measure the voltage between Finisher PWB [J8706-9](#) (+) and GND (-), and between [J8706-11](#) (+) and GND (-). **Each voltage is approx. +24VDC.**

**Y N**  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Replace the Set Clamp Motor ([PL 22.9](#)). If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-291 (Int) Stapler Fault

BSD-ON: [BSD 12.5 Integrated Finisher Staple Control](#)

Within a specified time after the Staple Motor started rotating in reverse direction, the Staple Head Home Sensor was never detected turning On.

### Initial Actions

- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/ON.

### Procedure

Enter [dC330](#) [012-042] and [012-043] alternately. **The Staple Motor rotates.**

Y N  
Check the connections of [P/J8705](#) and [P/J8735](#). **P/J8705 and P/J8735 are securely connected.**

Y N  
Connect [P/J8705](#) and [P/J8735](#) securely.

Check for an open or short circuit between J8705 and J8735. **The wires between J8705 and J8735 are OK.**

Y N  
Repair the open wire or short circuit.

Enter [012-042] and [012-043] alternately. Measure the voltages between Finisher PWB J8705-3, 4, 5, 6 (+) and GND (-). **Each voltage changes.**

Y N  
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#))

Replace the Staple Assembly ([PL 22.4](#)).

Enter [012-042] and [012-043] alternately. **The display changes.**

Y N  
Check the connections of [P/J8701](#) and [P/J8731](#). **P/J8701 and P/J8731 are securely connected.**

Y N  
Connect [P/J8701](#) and [P/J8731](#) securely.

Check for an open or short circuit between J8701 and J8731. **The wires between J8701 and J8731 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8701-4 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

A B  
Measure the voltage between Finisher PWB [P/J8701-5](#) (+) and GND (-). Enter [012-042] and [012-043] alternately. **The voltage changes.**

Y N  
Replace the Staple Assembly ([PL 22.4](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-301 (Int) Top Cover Interlock OPEN

BSD-ON: [BSD 12.1 Integrated Finisher DC Power and Interlock Switching](#)

The Top Cover Interlock Open was detected.

### Initial Actions

- Check that the Top Cover can be opened and closed.
- Check the Finisher Top Cover Interlock Sensor and the Finisher Top Cover Interlock +24V Switch are properly installed, not broken, and have no foreign objects
- Power Off/ON.

### Procedure

Check the following;

- Top Cover installation
- Finisher Top Cover Interlock Sensor for damage
- Finisher Top Cover Interlock +24V Switch actuator for any damage

**These parts are in normal condition.**

Y N

Repair or replace any of the parts that has a defect.

Enter [dC330](#) [012-300]. Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. **The display changes.**

Y N

Check the connections of [P/J8701](#) and [P/J8730](#). **[P/J8701](#) and [P/J8730](#) are securely connected.**

Y N

Connect [P/J8701](#) and [P/J8730](#) securely.

Check for an open or short circuit between J8701 and J8730. **The wires between J8701 and J8730 are OK.**

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8701-3 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N

Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8701-2 (+) and GND (-). Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. **The voltage changes.**

Y N

Replace the Finisher Top Cover Interlock Sensor ([PL 22.3](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Measure the voltage between Finisher PWB J8702-1 (+) and GND (-). **The voltage is approx. +24VDC.**

Y N

Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-302 (Int) Front Cover Interlock OPEN

BSD-ON: [BSD 12.1 Integrated Finisher DC Power and Interlock Switching](#)

The Front Cover Interlock Open was detected.

### Initial Actions

- Check that the Top Cover can be opened and closed.
- Check that the Finisher Front Interlock Switch is properly installed, not broken, and has no foreign object.
- Power Off/ON.

### Procedure

Check the following;

- Front Cover installation
- hinges for any damage
- Finisher Top Cover Interlock Sensor for any damage

**These above parts are OK.**

Y N  
Repair or replace any of the parts that are defected.

Enter [dC330](#) [012-302]. Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. **The display changes.**

Y N  
Connect the connections of [P/J8702](#) and [P/J8733](#). **P/J8702 and P/J8733 are securely connected.**

Y N  
Connect [P/J8702](#) and [P/J8733](#) securely.

Check for an open or short circuit between J8702 and J8733. **The wires between J8702 and J8733 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8702-4 (+) and GND (-). Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. **The voltage changes.**

Y N  
Replace the Finisher Front Interlock Switch ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Measure the voltage between Finisher PWB J8702-1 (+) and (-). **The voltage is approx. +24VDC.**

Y N  
Go to [Finisher \(Int\) +24VDC/24VDC RTN](#) and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

## 312-903 (Int) Paper Remains at Compiler Exit Sensor

BSD-ON: [BSD 12.3 Integrated Finisher Transportation](#)

- At Power On, the Compiler Exit Sensor detected paper.
- While the Main Motor was operating at initialization at Power On, the Compiler Exit Sensor detected paper.
- When the Cycle down operation at the end of a job was complete, the Compiler Exit Sensor was On.

### Initial Actions

- Check the power supply voltage at the customer site for a drop.
- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/ON.

### Procedure

Check for paper remaining on the Compiler Exit Sensor and how it is installed. **The sensor is properly installed with no paper left there.**

Y N  
Remove the remaining paper and reinstall the sensor properly.

Run Component Control [012-150].

Enter [dC330](#) [012-150]. Actuate the Compiler Exit Sensor. **The display changes.**

Y N  
Check the connections of [P/J8709](#) and [P/J8728](#). **P/J8709 and P/J8728 are securely connected.**

Y N  
Connect [P/J8709](#) and [P/J8728](#).

Check for an open or short circuit between J8709 and J8728. **The wires between J8709 and J8728 are OK.**

Y N  
Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). **The voltage is approx. +5VDC.**

Y N  
Go to [Finisher \(Int\) +5VDC Wirenet](#) and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8702-2 (+) and GND (-). Actuate the Compiler Exit Sensor. **The voltage changes.**

Y N  
Replace the Compiler Exit Sensor ([PL 22.5](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB ([PL 22.7](#)).



## 312-917 (Int) Stacker Tray Staple Set Over Count RAP

BSD-ON: [12.2 PWBS Communication IOT - Integrated Finisher](#)

When stapled sets are ejected to the Stacker Tray:

- Stapled set count exceeded 30 sets.
- And Stacker Tray is not positioned at paper empty level.
- And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.

### Procedure

Remove all paper from the Stacker. If the problem continues, go to the [312-211 \(Int\) RAP](#).

## 312-928 (Int) Scratch Sheet Compile

Paper was detected that was either out of spec, in poor condition (wrinkled, curled) and was ejected to the compiler.

**NOTE:** *This Code is an operation message. If this fail code is frequently declared, perform the procedure below.*

### Initial Actions

- Check that the Top Cover can be opened and closed.
- Power Off/On.

### Procedure

Check the specifications of paper. **The paper is in spec.**

Y N

Replace the paper with new paper that is in spec.

Check the condition of the paper. **The paper is in normal condition without any problem that causes the paper to be bent (dog eared) or jam.**

Y N

Resolve any problem that causes the paper to be bent or caught.

Check for a Fault Code. **Another Fault Code is displayed.**

Y N

If the problem continues, replace the Finisher PWB ([PL 22.7](#)).

Go to the appropriate Fault Code.

## 312-930 (Int) Stacker Tray Full RAP

**BSD-ON:** [BSD 12.8 Integrated Finisher Stacker Tray Control](#)

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size).

### Initial Actions

- Remove the paper from the Stacker Tray
- Power Off/On

If the fault remains, perform the Procedure

### Procedure

Go to the [312-211 \(Int\)](#) RAP.

## 312-976 (Int) Staple Fail

Staple Head Home Sensor is not turned on within 450msec after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

### Procedure

Go to the [312-291 \(Int\)](#) RAP.

## 312-977 (Int) Staple Ready Fail

Staple Head void stapling reached a specified number of times (13) during the Staple Head initialization.

### Procedure

Check that staples are present and correctly installed. If the problem continues, go to the [312-291 \(Int\) RAP](#).

## 312-979 (Int) Stapler Near Empty RAP

**BSD-ON:** [BSD 12.1 Integrated Finisher DC Power and Interlock Switching](#)

**BSD-ON:** [BSD 12.5 Integrated Finisher Staple Control](#)

The Staple Cartridge is nearly empty.

### Initial Actions

If the staples are nearly empty, replace the Cartridge. If adequate staples are present, remove and reinstall the Cartridge several times. Check for dirt or debris blocking the Cartridge from correct seating. If the problem continues, perform the Procedure.

### Procedure

Execute [dC330](#) [012-242 Low Staple Sensor]. Install and remove the Staple Cartridge. **The display changes.**

Y N

Disconnect [P/J8731](#). **There is +5 VDC from [P/J8701](#) pin 9 to GND.**

Y N

Replace the Finisher PWB ([PL 22.7](#)).

Check the wires between [P/J8701](#) and [P/J8731](#) for an open circuit or a short circuit. If the wires are OK, replace the Staple Assembly ([PL 22.4](#)). If the problem persists, replace the Finisher PWB ([PL 22.7](#)).

If the fault remains, replace the Finisher PWB ([PL 22.7](#)).

## 312-982 (Int) Stacker Lower Safety Warning RAP

BSD-ON: [BSD 12.8 Integrated Finisher Stacker Tray Control](#)

The Stacker Lower Safety Warning occurs when the following happens four time successively:

Stacker tray height adjustment was not completed successfully within a specified time period when running a job.

### Procedure

Remove all paper from the Stacker. If the problem continues, go to the [312-211 \(Int\)](#) RAP.



## **313-902 Paper remains at Booklet Compiler No Paper Sensor**

Paper remains at the Booklet Compile No Paper Sensor.

### **Procedure**

Go to [312-266 \(Pro\)](#) to troubleshoot the Fault.

## **313-903 Paper remains at Booklet Folder Roll Exit Sensor**

Paper remains at the Booklet Folder Roll Exit Sensor.

### **Procedure**

Go to [312-115 \(Pro\)](#) and/or [312-180 \(Pro\)](#) to troubleshoot the Fault.



# 313-210 (LX) Booklet Staple Move Home Sensor ON RAP

BSD-ON: [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)

A

Go to [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#) and check for an intermittent circuit.

Booklet Staple Move Home Sensor does not turn on within designated time period.

## Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute [dC330](#) [013-143], Booklet Staple Move Home Sensor. Move the Booklet Stapler to block and unblock the sensor ([PL 23.18](#)). **The display changes.**

Y	N
	Check the wire between <a href="#">J8897</a> pin 2 and <a href="#">P/J8991</a> pin 2 for an open or short circuit, or a loose or damaged connector. <b>The wire is OK.</b>
Y	N
	Repair/reconnect as required.
	Measure the voltage between <a href="#">P/J8991</a> , pins 3 and 1 on the Booklet PWB ( <a href="#">BSD 12.25 Office Finisher LX Booklet Staple Positioning</a> ). <b>The voltage is approx. +5VDC.</b>
Y	N
	Replace the Booklet PWB ( <a href="#">PL 23.21</a> ).
	Measure the voltage between <a href="#">P/J8991</a> pin 2 on the Booklet PWB and GND ( <a href="#">BSD 12.25 Office Finisher LX Booklet Staple Positioning</a> ). Actuate the Booklet Staple Move Home Sensor. <b>The voltage changes.</b>
Y	N
	Replace the Booklet Staple Move Home Sensor ( <a href="#">PL 23.18</a> ).
	Replace the Booklet PWB ( <a href="#">PL 23.21</a> ).

Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

Y	N
	Check the wires between <a href="#">P/J8992</a> pins 1-6 on the Booklet PWB and <a href="#">P/J8906</a> on the Booklet Stapler Move Motor ( <a href="#">BSD 12.25 Office Finisher LX Booklet Staple Positioning</a> ) for an open or short circuit, or loose or damaged connectors. <b>The wires are OK.</b>
Y	N
	Repair/replace as required.
	Monitor the voltage at <a href="#">P/J8994</a> , pin 3 ( <a href="#">BSD 12.25 Office Finisher LX Booklet Staple Positioning</a> ). Alternately execute <a href="#">dC330</a> [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. <b>An AC clock pulse is detected.</b>
Y	N
	Check the wire between <a href="#">P/J8994</a> , pin 3 and <a href="#">P/J8995</a> pin 4. If the wire is OK, replace the Finisher PWB ( <a href="#">PL 23.16</a> ).
	Replace the Booklet Stapler Move Motor ( <a href="#">PL 23.18</a> ). If the problem persists, replace the Booklet PWB ( <a href="#">PL 23.21</a> ).



## 313-211 (LX) Booklet Staple Move Home Sensor OFF

**BSD-ON:** [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)

Booklet Staple Move Home Sensor does not turn off within designated time period

### Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

### Procedure

Execute [dC330](#) [013-143], Booklet Staple Move Home Sensor. Move the Booklet Staplers to block and unblock the sensor ([PL 23.18](#)). **The display changes.**

**Y N**  
Check the wire between [J8897](#) pin 2 and [P/J8991](#) pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.**

**Y N**  
Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 3 and 1 on the Booklet PWB ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

**Y N**  
Replace the Booklet PWB ([PL 23.21](#)).

Measure the voltage between [P/J8991](#) pin 2 on the Booklet PWB and GND ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Home Sensor. **The voltage changes.**

**Y N**  
Replace the Booklet Staple Move Home Sensor ([PL 23.18](#)).

Replace the Booklet PWB ([PL 23.21](#)).

Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

**Y N**  
Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

**Y N**  
Repair/replace as required.

Monitor the voltage at [P/J8994](#), pin 3 ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

**Y N**  
Check the wire between [P/J8994](#), pin 3 and [P/J8995](#) pin 4. If the wire is OK, replace the Finisher PWB ([PL 23.16](#)).

Replace the Booklet Stapler Move Motor ([PL 23.18](#)). If the problem persists, replace the Booklet PWB ([PL 23.21](#)).

A

Go to [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#) and check for an intermittent circuit.

# 313-212 (LX) Booklet Staple Move Position Sensor On Fault

**BSD-ON:** [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)

Booklet Staple Move Position Sensor does not turn on within designated time period

## Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute [dC330](#) [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the sensor ([PL 23.18](#)). **The display changes.**

**Y N**

Check the wire between [J8898](#) pin 2 and [P/J8991](#) pin 5; and the wire between [P/J8994](#), pin 5 and [P/J8995](#) pin 5 for an open or short circuit, or a loose or damaged connector.

**The wires are OK.**

**Y N**

Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 6 and 4 on the Booklet PWB ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

**Y N**

Replace the Booklet PWB ([PL 23.21](#)).

Measure the voltage between [P/J8991](#) pin 5 on the Booklet PWB and GND ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

**Y N**

Replace the Booklet Staple Move Position Sensor ([PL 23.18](#)).

Measure the voltage between [J8985](#) pin 5 on the Finisher PWB and GND ('). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

**Y N**

Replace the Booklet PWB ([PL 23.21](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

**Y N**

Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

**Y N**

Repair/replace as required.

**A**

**B**

Monitor the voltage at [P/J8994](#), pin 3 ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

**Y N**

Check the wire between [P/J8994](#), pin 3 and [P/J8995](#) pin 4. If the wire is OK, replace the Finisher PWB ([PL 23.16](#)).

Replace the Booklet Stapler Move Motor ([PL 23.18](#)). If the problem persists, replace the Booklet PWB ([PL 23.21](#)).

Go to [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#) and check for an intermittent circuit.

**A B**

Initial Issue

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November 9, 2012

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Status Indicator RAPs

**313-212 (LX)**

## 313-213 (LX) Booklet Staple Move Position Sensor Off Fault

**BSD-ON:** [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)

Booklet Staple Move Position Sensor does not turn off within designated time period.

### Initial Actions

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

### Procedure

Execute [dC330](#) [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the sensor ([PL 23.18](#)). **The display changes.**

**Y N**

Check the wire between [J8898](#) pin 2 and [P/J8991](#) pin 5; and the wire between [P/J8994](#), pin 5 and [P8985](#) pin 5 for an open or short circuit, or a loose or damaged connector.

**The wires are OK.**

**Y N**

Repair/reconnect as required.

Measure the voltage between [P/J8991](#), pins 6 and 4 on the Booklet PWB ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). **The voltage is approx. +5VDC.**

**Y N**

Replace the Booklet PWB ([PL 23.21](#)).

Measure the voltage between [P/J8991](#) pin 5 on the Booklet PWB and GND ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

**Y N**

Replace the Booklet Staple Move Position Sensor ([PL 23.18](#)).

Measure the voltage between [P8985](#) pin 5 on the Finisher PWB and GND ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.**

**Y N**

Replace the Booklet PWB ([PL 23.21](#)). If the problem persists, replace the Finisher PWB ([PL 23.16](#)).

Replace the Finisher PWB ([PL 23.16](#)).

Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.**

**Y N**

Check the wires between [P/J8992](#) pins 1~6 on the Booklet PWB and [P/J8906](#) on the Booklet Stapler Move Motor ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)) for an open or short circuit, or loose or damaged connectors. **The wires are OK.**

**Y N**

Repair/replace as required.

**A**

**B**

Monitor the voltage at [P/J8994](#), pin 3 ([BSD 12.25 Office Finisher LX Booklet Staple Positioning](#)). Alternately execute [dC330](#) [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected.**

**Y N**

Check the wire between [P/J8994](#), pin 3 and [P8985](#) pin 4. If the wire is OK, replace the Finisher PWB ([PL 23.16](#)).

Replace the Booklet Stapler Move Motor ([PL 23.18](#)). If the problem persists, replace the Booklet PWB ([PL 23.21](#)).

Go to [BSD 12.25 Office Finisher LX Booklet Staple Positioning](#) and check for an intermittent circuit.

## 313-220 (LX) Booklet Creaser Detect Fault

BSD-ON: [BSD 12.17 Office Finisher LX Folding](#)

Control logic cannot detect the Creaser Assembly.

### Procedure

**NOTE:** *If the Booklet Maker has been removed or is not installed, unplug the connector to the Crease assembly.*

Execute [dC330](#) [013-160], Creaser Detected. The display is 'Low.'

Y N  
|  
| **There is less than 1 VDC at [P/J8990](#) pin 4.**  
| Y N  
| | Check the wires between [P/J8990](#) pins 4 and 5. Make sure that [P8903](#) is securely fastened.  
|  
| Replace the Finisher PWB ([PL 23.16](#)).

Go to [BSD 12.17 Office Finisher LX Folding](#) and check for an intermittent circuit.

## 313-306 (LX) Booklet Safety Switches Open

BSD-ON: [BSD 12.13 Office Finisher LX Booklet Interlock Switching](#)

Control logic senses that one or more Booklet Safety Switch is open.

### Initial Actions

Check for 013-307 Faults.

### Procedure

There is +24 VDC between [P/J8993](#) pin 3 on the Booklet PWB and GND.

Y N  
|  
| **There is +24 VDC between [P/J8993](#) pin 6 on the Booklet PWB and GND.**  
| Y N  
| | Go to the [313-307 \(LX\) RAP](#)

Go to [BSD 12.13 Office Finisher LX Booklet Interlock Switching](#) and check the circuit through the Booklet Safety Switches ([PL 23.21](#)).

Replace the Booklet PWB ([PL 23.21](#)).

## 313-307 (LX) Booklet Cover Open

BSD-ON:[BSD 12.13 Office Finisher LX Booklet Interlock Switching](#)

Control logic senses that the Booklet Cover is open.

### Initial Actions

Ensure the Cover is closed.

### Procedure

There is +24 VDC between [P/J8993](#) pin 5 on the Booklet PWB and GND.

Y N

GO to [BSD 12.13 Office Finisher LX Booklet Interlock Switching](#) and check the circuit from [P/J8993](#) to and from [J8899](#) on the Booklet Stapler Cover Switch ([PL 23.21](#)).

Replace the Booklet PWB ([PL 23.21](#)).

## 316-XXX Faults Entry RAP

### Procedure

Find the Fault Code in [Table 1](#). Go to the RAP listed for that Fault Code. Fault Code extensions are defined in [Table 2](#).

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	000	09	Cannot create RPC connection with ENS	RPC corrupted or O/S service failure or ENS died	316-1 RAP
316	000	14	Cannot create RPC connection with ENS	RPC corrupted or O/S service failure or ENS died	316-1 RAP
316	000	19	Unable to Create RPC Connection with ENS	RPC corrupted or O/S service failure or ENS died	316-1 RAP
316	000	26	Cannot Create RPC Connection with ENS	RPC corrupted or O/S service failure or ENS died	316-1 RAP
316	001	09	Unable to do startup synchronization	IPC failure or SC not responding	316-1 RAP
316	001	14	Unable to do startup synchronization	IPC failure or SC not responding	316-1 RAP
316	001	19	Unable to do start up synchronization	IPC failure or SC not responding	316-1 RAP
316	001	26	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
316	001	90	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
316	001	47	Unable to do Start Up Synchronization	IPC failure or SC not responding	316-1 RAP
316	002	09	Unable to register as RPC server	Corrupt RPC or corrupt system configuration or O/S service failure	316-1 RAP
316	002	14	Unable to register as RPC server	Corrupt RPC or corrupt system configuration or O/S service failure	316-1 RAP
316	002	19	Unable to Register as an RPC Server	Corrupt RPC or corrupt system configuration or O/S service failure	316-1 RAP
316	002	26	Could not become an RPC Server	Corrupt O/S RPC Table	316-1 RAP
316	002	46	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
316	003	09	Too many IPC Handles	Too many existing IPC handlers in IPC handler table	316-1 RAP
316	003	14	Too many IPC Handles	Too many existing IPC handlers in IPC handler table	316-1 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	003	19	Too many IPC Handlers	Too many existing IPC handles in IPC handler table	316-1 RAP
316	003	90	Utility Insert Handler Failure	Too Many IPC Handlers in IPC Handler Table	316-1 RAP
316	004	14	RPC call failure to SBC registration service	Registration Service failed	316-1 RAP
316	004	19	RPC Connect Failure to SBC Registration Service	Registration Service Failed.	316-1 RAP
316	004	26	RPC Connect Failure to SBC Registration Service	RPC Communication Problem; Registration Service Failed	316-1 RAP
316	004	46	RPC connect failure to SBC Registration Service (to register with)	RPC Communication Problem (Flt Service)	316-1 RAP
316	005	14	RPC call failure to SBC registration service	Registration service failed to respond in time	316-1 RAP
316	005	19	RPC Call Failure to SBC Registration Service	Registration Service Failed to Respond in Time	316-1 RAP
316	005	26	RPC Call Failure to SBC Registration Service	Registration Service failed to respond in time.	316-1 RAP
316	005	46	RPC Call Failure to SBC Registration Service (to register with)	Registration Service Failed to Respond in Time (null returned)	316-1 RAP
316	005	90	RPC call to SBC Registration failed	Registration Service failed to respond. SW error.	316-1 RAP
316	005	92	RPC Call Failure to SBC Registration Service (to register with)	Registration Service Failed to Respond in Time (null returned)	316-1 RAP
316	006	09	Cannot register for events	Event Notification Service unable to process request; ENS died	316-1 RAP
316	006	19	Cannot register for events	Event Notification Service unable to process request; ENS died	316-1 RAP
316	007	92	Invalid RPC Data Received	Unable to register; Can't open IPC queue; SW Error; O/S Failure; Driver Failure	316-1 RAP
316	009	09	Invalid IPC Data Received	SW Error; Corrupt Disk; Bad Memory	316-1 RAP
316	010	14	Unable to send IPC	Service being communicated to is dead; Queue is full; No Queue; System Resource Corrupted	316-1 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	010	99	IPC open, create, signal queue failed	Service being communicated to is dead; Queue is full; No Queue; System Resource Corrupted	316-2 RAP
316	013	14	Digital Copier ENS synchronization error	System RPC info corrupt or DC ENS dead	316-1 RAP
316	014	14	Digital Copier ENS registration error	System RPC info corrupt or DC ENS dead	316-1 RAP
316	015	14	SESS data store environmental variable not set	Corrupt environment variable or configuration script error	316-1 RAP
316	015	19	SESS data store environmental variable not set	Corrupt environment variable or configuration script error	316-1 RAP
316	016	14	Data Store init. failed	SESS Faults 206, 207 or Data store not created or corrupt environment variable	316-1 RAP
316	016	19	Data Store init. failed	SESS Faults 206, 207 or Data store not created or corrupt environment variable	316-1 RAP
316	017	19	Send Event Failure Unable to send event to SBC ENS	Invalid event info or data, ENS failure, System RPC info corrupt	316-1 RAP
316	021	19	SBC PM Registration Connect Error	LynxOS failure of system call gethostname	316-1 RAP
316	021	26	Service could not get Host Name	Service could not get Host Name	316-1 RAP
316	021	46	Unable to Get Host Name	SW error.	316-1 RAP
316	023	09	RPC Call Failure to ENS	ENS Service Failed to Respond in Time	316-1 RAP
316	023	26	RPC Call Failure to ENS	ENS Service Failed to Respond in Time	316-1 RAP
316	026	09	Memory allocation failure	SW Error, system resource failure	316-1 RAP
316	026	14	MALLOC error	Memory Leak, SW Bug, Memory Corrupt, Virtual Memory Exhausted, process Size Exceeding System Limits	316-1 RAP
316	026	46	Memory Allocation Error	Memory Leak, SW Bug, Memory Corrupt, Virtual Memory Exhausted, process Size Exceeding System Limits	316-1 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	026	90	Malloc Error	Memory Leak; SW Error; Virtual Memory Exhausted; process Size Exceeding System Limits	316-1 RAP
316	026	92	Memory Allocation Fault	Memory Leak; SW Bug; Memory Corrupt; Virtual Memory Exhausted; process Size Exceeding System Limits	316-1 RAP
316	027	90	Unable to obtain well known Queue ID	Invalid Queue Requested; No Range Environment Variable; Invalid Range Environment Variable	316-1 RAP
316	028	09	Unable to complete RPC call	SW Error; system resource failure; RPC corrupt	316-1 RAP
316	028	90	Invalid Range String	Range Environment Variable not set; Range Environment Variable set to Invalid Numeric String	316-1 RAP
316	030	19	Unable to Obtain Client RPC handle to EJS	RPC corrupted; O/S Service Failure; ENS died.	316-1 RAP
316	031	09	Invalid Event Notification Received	SW Error in the ENS Service or in the Service generating the Fault	316-1 RAP
316	032	19	NVM Connection Failure	Invalid System Config; SW Error; NVM Corrupted; NVM Non existent	316-1 RAP
316	039	00	Pthread Create Error	UNIX problem creating a thread; O/S Failure	316-1 RAP
316	040	92	Semaphore Fault	O/S error	316-1 RAP
316	048	09	Unable to set binding	SW Error IPC failure system resource exhaustion. Unable to set binding	316-1 RAP
316	048	14	Can not set SBC client binding	IPC failure. OS failure. Semaphore allocation failure.	316-1 RAP
316	048	90	Can not set SBC client binding	IPC failure. OS failure. Semaphore allocation failure.	316-1 RAP
316	048	99	Unable to set client binding	IPC failure. OS failure. Semaphore allocation failure. Cannot set SBC client binding	316-1 RAP
316	150	09	Cannot send registration event	RPC corrupted or O/S service failure or ENS died. Cannot send registration event	316-1 RAP
316	150	14	Unable to obtain RPC transport	System RPC corrupt or invalid configuration	316-1 RAP



**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	150	19	Unable to sync peer (within SBC) infrastructure services	Infrastructure service(s) died/ gone or clogged or s/w error. Infrastructure service died/ gone or clogged or s/w error	316-1 RAP
316	150	26	Fault Service Failed to Write to Log	Disk Write Error SW Error.	316-1 RAP
316	150	90	Invalid IPC Request Destination	SW Error	316-1 RAP
316	150	92	Consumer Interface Fault	Data Store failure	316-1 RAP
316	151	09	Invalid IPC command	Message corrupt	316-1 RAP
316	151	14	SNMP event registration failed	SC IPC Queue full Excessive 16-750-14 faults.	316-1 RAP
316	151	19	Invalid IPC command	Message corrupt	316-1 RAP
316	151	26	Fault Service Failed to get a Log Handle	SW Error.	316-1 RAP
316	151	90	Put Environment Variable Failure	Malloc Failure; SW Error; Virtual Memory Exhausted; process Size Exceeding Configuration System Limit.	316-1 RAP
316	152	09	Internal IPC failure	Software error; System resource exhaustion	316-1 RAP
316	152	14	Empty internal event received by ENS	S/W error.	316-1 RAP
316	152	19	Unable to send request to SESS	SESS System Control broken or too many IPC messages.	316-1 RAP
316	152	26	Fault Service could not open Fault Log	SW Error; Bad Disk. Fault Service could not open Fault Log	316-1 RAP
316	153	09	Unable to obtain IPC queue	File system corrupt or full or disk problem	316-1 RAP
316	153	19	NVM Save Failure	SW Error; Mother Board Failure	316-1 RAP
316	154	19	NVM Read Failure	SW Error; Mother Board Failure	316-1 RAP
316	155	19	SBC Faulted to Boot from Alternate Disk Partition	Corrupted SW; H/W Faults. File System Corrupted. SBC	316-1 RAP
316	156	19	ServiceRun loop failed.	Poll select failed.	316-1 RAP
316	160	09	SBC Registration Service process death	Software error (technically not possible)	316-1 RAP
316	161	09	Cannot send registration event	Software error.	316-1 RAP
316	162	09	SBC Platform Manager Service process death	Software error. Check fault log for more specific reasons.	316-1 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	163	09	SBC DM Agent Service process death	Software error.Check fault log for more specific reasons.	316-1 RAP
316	674	00	XSA RPC Server Death	RPC Server Not Responding	316-2 RAP
316	674	09	XSA RPC Server Death	RPC Server Not Responding	316-2 RAP
316	675	00	XSA Database Server Death	Database Server Not Responding	316-2 RAP
316	701	00	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	701	99	Unable to communicate with XSA database	LOA Failure.SW error, XSA database crash.	316-2 RAP
316	702	00	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	702	95	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	740	19	Error - SBC Hard Disk I/O Failure	Immediate image overwrite failed on SBC hard disk.	316-4 RAP
316	751	00	Database Error known by Service Registry or registry not available.	S/W error.	316-2 RAP
316	752	07	Queue Service Library Initialization Failed	Data Store error; S/W error	316-1 RAP
316	752	14	Retry SESS Sys Control event registration	SC Not Responding; SC IPC Queue Full; SC IPC Queue does not exist	316-2 RAP
316	752	95	File transfer operation failure	File transfer failure	316-2 RAP
316	753	00	No IPC Response	Login gets no response from SRS	316-2 RAP
316	755	00	Service Registry cannot initialize database	Unable to remove advisory lock on network server.	316-2 RAP
316	760	09	Scan To File process death	Software error; Check fault log for more specific reasons	316-3 RAP
316	760	47	Incorrect Checksum partition 1	Found incorrect checksum partition 1 during Software Verify check; Bad disk; bad s/w	316-2 RAP
316	761	09	LPD process death	Software error	316-3 RAP
316	761	68	Login gets no response from SRS	No IPC Response	316-2 RAP
316	762	09	Netware process death	Netware process failed. Software error	316-3 RAP
316	762	47	Missing File	Missing file found during Software Verify check; Disk access problem; Configuration problem	316-2 RAP



**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	763	09	NetBios process death	Software error	316-3 RAP
316	763	14	Reached internal limit for events	Reached internal limit for events	316-2 RAP
316	763	47	Invalid Permission	Invalid Permission found during Software Verify check	316-2 RAP
316	764	09	AppleTalk process death	Software error	316-3 RAP
316	765	09	Banyan Vines process death	Software error	316-3 RAP
316	766	09	Adobe process failure	Software error	316-3 RAP
316	767	09	HP PCL process death	Software error	316-3 RAP
316	767	19	Request to cancel spooling job error	Job Map Library unable to cancel job	316-2 RAP
316	768	09	Parallel process death	Software error	316-3 RAP
316	769	09	HTTP process death	Software error	316-3 RAP
316	770	09	Unexpected process death	Software error	316-3 RAP
316	771	09	Print Service EJS process death	Software error	316-2 RAP
316	772	09	SBC Print SPI process death	Software error	316-2 RAP
316	772	19	Failure to set SBC Platform Manager service state	Software error	316-2 RAP
316	772	46	TCP/IP status file error.	TCP/IP address already being used.	316-3 RAP
316	773	09	SBC Print Service Surrogate process death	Software error	316-2 RAP
316	774	09	SBC Protocol Module process death	Software error	316-2 RAP
316	776	09	SBC Fault Service process death	Software error	316-2 RAP
316	777	09	SBC Completed Job Log Service/SPI process death	Software error	316-2 RAP
316	778	09	SBC Configuration Utility process death	Software error	316-2 RAP
316	779	09	SBC Diagnostic Service process death	Software error	316-2 RAP
316	780	09	SBC Authentication SPI process death	Software error	316-2 RAP
316	781	09	SBC Counters Utility process death	Software error	316-2 RAP
316	782	09	SBC Configuration Synchronization process failure	Software error; Check fault log for more specific reasons	316-2 RAP
316	785	09	SBC SNMP Agent process failure	Software error	316-3 RAP
316	786	09	Token Ring process death	Software error	316-3 RAP
316	787	09	Sub agent process death	Software error	316-3 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	788	09	Serial process death	Software error	316-3 RAP
316	789	09	Connectivity Configuration Server process death	Software error	316-3 RAP
316	789	46	Autonet status file error	Failed performing Autonet IP process	316-3 RAP
316	789	47	SESS Apple test unknown error	SESS Diagnostic failure.	316-3 RAP
316	790	09	Lan Fax process death	Software error	316-3 RAP
316	790	47	SESS Banyan test unknown error	SESS Diagnostic failure.	316-3 RAP
316	791	09	Accounting process death	Software error	316-2 RAP
316	792	09	Tiff process death	Software error	316-2 RAP
316	792	19	Lan Fax DLM is not defined.	Lan Fax DLM is not defined.	316-2 RAP
316	793	09	Port9100 process death	software error	316-2 RAP
316	793	19	Job Based Accounting DLM is not defined.	Job Based Accounting DLM is not defined.	316-2 RAP
316	795	09	Slpsa process death	software error	316-3 RAP
316	796	09	SSDP process death	Software error	316-3 RAP
316	797	09	USB process death	Software error	316-3 RAP
316	798	09	POP3 process death	Software error	316-3 RAP
316	799	09	SMTP process death	Software error	316-3 RAP
316	800	46	Ethernet Initialization failure	Unable to connect to device when setting up IP over Ethernet	316-3 RAP
316	801	46	Token Ring Initialization failure	Unable to connect to device when setting up IP over Token Ring	316-3 RAP
316	802	46	DHCP Initialization failure	Error occurred when attempting to get the IP data from the DHCP server.	316-3 RAP
316	803	46	RARP Initialization failure	Unable to get the IP address from the RARP server.	316-3 RAP
316	806	00	SESS NetBIOS test memory allocation error	CPI Death Error	316-2 RAP
316	807	00	SESS NetBIOS test memory allocation error	JobLog death Error	316-2 RAP
316	808	00	SESS NetBIOS test memory allocation error	Job Tracker death Error	316-2 RAP
316	809	00	SESS NetBIOS test memory allocation error	Kerberos Death Error	316-2 RAP
316	810	00	SESS NetBIOS test memory allocation error	Scan to Distribution Death Error	316-2 RAP
316	811	00	SESS NetBIOS test memory allocation error	SMB Death Error	316-2 RAP

**Table 1 Chain 16 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	812	00	SESS NetBIOS test memory allocation error	TCP/IP Death Error	316-2 RAP
316	813	00	SESS NetBIOS test memory allocation error	WS Scan Temp Death Error	316-2 RAP
316	814	00	SESS NetBIOS test memory allocation error	Scan Compressor Death Error	316-2 RAP
316	815	09	Service Registry Process Death	Service Registry process death	316-2 RAP

**Table 2 Fault Code Extensions**

Extension number	Definition
00 - 07	Queue Utility Faults
09	SBC Registration Service Faults.
14	Event Notification Service Faults.
19	Platform Manager Faults.
26	Fault Log Service Faults
38	Completed Job Log Service Faults
46	Config Utility Faults
47	Diagnostic Service Faults
68	Net Auth Service Faults
90	
92	Internal Print Service Faults
95	Transfer Service Faults
99	

## 316-1 RAP

### Initial Actions

Switch the power off, then on. If the problem is not resolved, continue with this procedure.

### Procedure

Refer to the error log and try to determine under what situations the problem is occurring. **The problem is related to a specific job, client, or Page Description Language (PDL).**

Y N

Reload the software (GP 9). **The problem remains.**

Y N

Switch the power off, then on. Return to Call Flow.

Replace the following, one at-a-time, until the problem is corrected:

- SBC Hard Disk & Hard Disk Cable.
- SBC DRAM SIMMS
- SBC PWB

**The problem occurs on one particular job from one particular client.**

Y N

**The problem occurs on all jobs sent from one client.**

Y N

**The problem occurs with one job from any client.**

Y N

Replace the following one at a time until the problem is corrected.

- SBC Hard Disk & Hard Disk Cable.
- SBC DRAM SIMMS.
- SBC PWB.

**Another WC 7855F printer is available.**

Y N

Escalate the service call.

**The problem is repeatable on both printers.**

Y N

Reload software on the problem machine. (GP 9). Ensure that the latest version is installed. If the problem continues, escalate the service call.

Inform Field Engineering that a Software Problem Action Report (SPAR) needs to be generated.

Ensure the following:

- Have the system administrator (SA) check the network configuration on the client (Compare to working client).
- Have the SA ensure that the client has the required resources.
- Have the system administrator reload the print driver on the client.
- If the problem continues, have the customer call the customer support center.

Reload the print driver on the affected workstation.

## 316-2 RAP

Non-Shutdown fault procedure

### Initial Actions

For non-shutdown specified Network Controller faults, there need be no action taken. If the fault seems related to a customer complaint, perform the Procedure.

### Procedure

Switch the power off, then on. If the problem continues, go to the [316-1 RAP](#).

## 316-3 RAP

This RAP addresses Network Controller faults related to network connectivity.

### Procedure

Verify that the server or network with which you are trying to connect is operating. Go to the [OF 16-1 Network Printing Problems Entry RAP](#), Network Printing Problems Entry RAP. If the problem is not resolved, go to the [316-1 RAP](#).

## 316-4 RAP

This RAP troubleshoots Network Controller fault codes related to the Image Overwrite options.

### Initial Actions

Print a Configuration Report (GP 6) and determine if Immediate Image Overwrite and/or On-Demand Overwrite options are enabled.

### Procedure

If the configuration report shows Image Overwrite as installed/disabled:

- Enter the **Administrator Mode** (GP 2)
- Select the **Tools Tab**.
- Select **Security Settings**.
- Enable the required Feature.

If the problem continues, go to the [316-1 RAP](#).



## 319-300 RAP

Unable to read or write data from the Image Disk

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-301 RAP

Unable to write data to the Image Disk

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-302 RAP

Bad Data received from the Disk (i.e. disk returns data other than a read or write operation in response to a read or write request from)

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-303 RAP

Unable to Format the Image Disk

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-310 RAP

System Disk does not return capacity information during Power Up.

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-401 RAP

Out of Memory caused by a Stress Document

### Procedure

No action is required. If 19-401 remains for more than 5 minutes, switch power off then on. If the problem continues, perform GP 9.



## 319-402 RAP

Out of Memory caused by a Stress Job

### Procedure

No action is required. If the fault remains for more than 5 minutes, switch power off then on. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

## 319-403 RAP

Out of Memory with greater than one job in EPC

### Procedure

Rescan job. If the Problem continues, rescan job according to EPC capabilities.

## 319-409 RAP

Video determines that it cannot guarantee the integrity of the job being processed.

### Procedure

Reconcile completed jobs with uncompleted jobs. Switch the power off then on. Rerun uncompleted jobs.

## 319-410-0 RAP

Mark Output Timeout. Incomplete image data transfer within the prescribed period. Machine will attempt to recover (may take more than 30 sec.).

### Procedure

If the job does not recover, switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-1 RAP

Mark Output Timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-2 RAP

Compress Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure. If the problem continues, replace the EPC memory ([PL 35.2](#)) in the SBC.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-3 RAP

Decompress Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-4 RAP

Merge Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-5 RAP

Rotate Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-6 RAP

Network Input Failure. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-7 RAP

E-Fax Send/Receive Failure. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-8 RAP

Scan Input Failure. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If there is a black background, but the prints are good, replace the IIT PWB ([PL 1.8](#)) item 3, and check the values of NVM 715-050 through 715-099 against the factory sheet.

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-9 RAP

Byte Count Error. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-10 RAP

Set Up Too Late. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-11 RAP

DMA Master Abort. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-410-12 RAP

Huffman Error. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.



## 319-410-13 RAP

EOR Error. Incomplete image data transfer. Job has been deleted.

### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseal or replace the EPC Memory on the SBC PWB ([PL 35.2](#)).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## 319-750 RAP

The System detects that the EPC Memory Size configuration has changed during the Power On Sequence

### Procedure

Rerun the job.

## **319-752 RAP**

The System detects that the Image Rotation Configuration has changed during Power On Sequence

### **Procedure**

Switch machine off then on.

## **319-754 RAP**

The System detects that the Image Disk Configuration (Present vs. Not Present) has changed during the Power On Sequence

### **Procedure**

Check the DC power connector on the HDD. Switch machine off then on.

## 319-760 RAP

Test Patterns are missing from EPC

### Procedure

Switch power off then on. **The problem continues.**

**Y N**

Return to service call procedures.

Go to [GP 9](#) and perform the Regular AltBoot procedure.

## 320-302 RAP

BSD-ON: [34.1 FAX](#)

Fax Card Hardware or Software error.

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

Y	N
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-303 RAP

BSD-ON: [34.1 FAX](#)

Fax Card Hardware or Software error.

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

Y	N
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-305 RAP

BSD-ON: [34.1 FAX](#)

Fax Card Hardware or Software error.

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-320 RAP

BSD-ON: [34.1 FAX](#)

5 instances of an unrecoverable fax fault and has not been cleared by a card reset.

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-322 RAP

BSD-ON: [34.1 FAX](#)

NV device not fitted to basic fax card

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

Y	N
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-323 RAP

BSD-ON: [34.1 FAX](#)

Fax system memory is low. (<6MB)

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

Y	N
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-324 RAP

BSD-ON: [34.1 FAX](#)

Not enough memory to use Fax Service

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-327 RAP

BSD-ON: [34.1 FAX](#)

Registers cannot be accessed on the Extended card

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-331 RAP

BSD-ON: [34.1 FAX](#)

No comms via PSTN1 port

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-332 RAP

BSD-ON: [34.1 FAX](#)

No comms via PSTN2 port

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).



## 320-338 RAP Fax Communication Fault

BSD-ON: [34.1 FAX](#)

Fax communication error at power up or re-boot; power on self test (POST) failure.

### Procedure

Power the machine off and on. If the problem continues, go to [OF 17-1 FAX Entry RAP](#)

## 320-339 RAP

BSD-ON: [34.1 FAX](#)

Internal FAX card fault

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

**Y N**  
|  
Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-340 RAP

BSD-ON: [34.1 FAX](#)

Fax Port 2 Modem Failure

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-341 RAP

BSD-ON: [34.1 FAX](#)

Miscellaneous Basic Card problems

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-342 RAP

BSD-ON: [34.1 FAX](#)

Error accessing file on a NV device

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-345 RAP

BSD-ON: [34.1 FAX](#)

Fax Port 1 Modem Failure

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

<b>Y</b>	<b>N</b>
	Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-701 RAP

BSD-ON: [34.1 FAX](#)

Phone book download failed

### Procedure

Print a Configuration Sheet. **The Config Sheet indicates the Fax PWB is installed.**

**Y N**  
|  
Install Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the [OF 17-1 FAX Entry RAP](#) and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB ([PL 35.2](#)).

## 320-710 RAP

BSD-ON: [34.1 FAX](#)

Fax Immediate Image Overwrite (IIO) Error. IIO Error has occurred on the fax card when overwriting the job

### Procedure

TBD

## **320-711 RAP**

**BSD-ON: [34.1 FAX](#)**

Fax On Demand Image Overwrite (ODIO) Error. ODIO Error has occurred on the fax card when overwriting the compact flash memory.

### **Procedure**

TBD

## **322-300-05 RAP**

Image Complete not Received from Video

### **Procedure**

Switch the power off then on.

## **322-300-10 RAP**

Failed to transfer image do to decoding error. (EORERROR, HUFFMANERROR, BYTECOUNTERERROR)

### **Procedure**

Switch the power off then on.

### **322-300-16 RAP**

When machine determines that it needs to do a reset in order to avoid an impending real time clock overflow

#### **Procedure**

Switch the power off then on.

### **322-301 RAP**

Scan resources not available

#### **Procedure**

Switch the power off then on.

## **322-309 RAP**

Consecutive no accepts received from a module exceeds threshold value (currently 20).

Five consecutive 22-309-04 will cause 22-319-04.

### **Procedure**

Switch the power off then on.

Allow five minutes for fault recovery.

## **322-310 RAP**

Pages received from Extended Job Service out of Sequence

### **Procedure**

Check that originals are not jammed in DADF. Verify DADF operation with media used by customer. Re-sort and reload ALL originals in the document feeder.



### **322-311 RAP**

Sequencer did not respond with proposal within the required time

#### **Procedure**

Switch the power off then on.

### **322-314 RAP**

Module Registration Error.

#### **Procedure**

Switch the power off then on.

## **322-315 RAP**

One or more modules did not respond with completion message

### **Procedure**

Switch the power off then on.

## **322-316 RAP**

One or more modules did not respond with completion message

### **Procedure**

Switch the power off then on.

## **322-317 RAP**

Job requires finishing capability that does not exist

### **Procedure**

Switch the power off then on.

## **322-318 RAP**

Job requires an IOT capability that does not exist

### **Procedure**

Switch the power off then on.

## 322-319 RAP

IOT Integrity problem while printing a job.

This fault can result in two ways:

1. IOT Cycles down and back up 10 times without printing a page within the same job causing a 322-319-04.
2. Five consecutive 322-309-04 will also cause a 322-319-04. Please refer to fault code [322-309 RAP](#) for more information

### Procedure

Switch the power off then on.

## 322-320 RAP

SM Failed to install scan to file

### Procedure

Switch the power off then on.

### **322-321-01 RAP**

SM Failed to remove Scan to file

#### **Procedure**

Switch the power off then on.

### **322-321-04 RAP**

Proposal Response Time Out Error

#### **Procedure**

Switch the power off then on.

## **322-322 RAP**

SM Failed to install Lan FAX

### **Procedure**

Switch the power off then on.

## **322-323 RAP**

SM Failed to remove LAN FAX

### **Procedure**

Switch the power off then on.

## **322-324 RAP**

SM Failed to install Scan to E-mail

### **Procedure**

Switch the power off then on.

## **322-325 RAP**

SM Failed to remove Scan to E-mail.

### **Procedure**

Switch the power off then on.

## **322-326 RAP**

SM Failed to install IFAX

### **Procedure**

Switch the power off then on.

## **322-327 RAP**

SM Failed to install IFAX

### **Procedure**

Switch the power off then on.



## **322-328 RAP**

Incomplete System Information. Accounting Service Data is corrupt

### **Procedure**

Switch the power off then on.

## **322-330-00 RAP**

PagePack PIN (Supplies Plan Activation Code) Entry locked due to repeated incorrect PIN entry attempts.

### **Procedure**

TBD

## **322-330-01 RAP**

List Jobs Request Timed out between UI and CCS

### **Procedure**

Switch the power off then on.

## **322-330-02 RAP**

List Jobs Request Timed out between CCS and SBC Print Service

### **Procedure**

Switch the power off then on.

### **322-330-03 RAP**

List Jobs Request Timed out between CCS and Scan to File Service

#### **Procedure**

Switch the power off then on.

### **322-330-04 RAP**

List Jobs Request Timed out between CCS and Scan To Fax Service

#### **Procedure**

Switch the power off then on.

## **322-330-05 RAP**

List Jobs Request Timed out between Queue Utility and DC Job Services

### **Procedure**

Switch the power off then on.

## **322-330-06 RAP**

SBC Scan to Distribution Service not responding to List Jobs RPC call

### **Procedure**

Switch the power off then on.

## **322-332 Invalid Plan Conversion**

Plan Conversion entry locked due to repeated incorrect entry attempts.

### **Procedure**

TBD

## **322-335 RAP**

SM Failed to install Job Based Accounting

### **Procedure**

Switch the power off then on.

## **322-336 RAP**

SM Failed to remove Job Based Accounting

### **Procedure**

Switch the power off then on.

## **322-337 RAP**

SM Failed to install disk overwrite

### **Procedure**

Switch the power off then on.

## **322-338 RAP**

SM Failed to remove Disk Overwrite

### **Procedure**

Switch the power off then on.

## **322-339 RAP**

SM Failed to install Job Overwrite

### **Procedure**

Switch the power off then on.

## **322-340 RAP**

SM Failed to remove Job Overwrite

### **Procedure**

Switch the power off then on.

## **322-350-1 RAP**

Software detects non-valid Xerox SIM

### **Procedure**

There is a serial number problem, a copyright problem, or a SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.



## **322-350-2 RAP**

Software detects non-valid Xerox SIM

### **Procedure**

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## **322-351-1 RAP**

SIM Write Failure

### **Procedure**

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## **322-351-2 RAP**

SIM Write Failure

### **Procedure**

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## **322-351-3 RAP**

SIM Write Failure

### **Procedure**

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-352-00 RAP

Serial Number Update Required.

### Initial Actions

Confirm that the machine serial number displayed on the UI (select **Machine Status, Machine Information Screen**) or the Configuration Sheet (if the UI is unavailable), and the serial number on the label on machine frame match. If they do not match please notify the FE/NTS.

Make sure PWBs and PJ connectors among IOT Drive, MCU, SBC, UI, and IIT are seated properly

Check **dC122** for Communications faults (Chain 303). These can prevent serial number synchronization and must be addressed before proceeding

Enter diagnostics and select **Clear Counters**, Exit and Reboot at Service exit and exit diagnostics.

Have new SBC SD Card, MDM PWB, and IIT PWB available before trouble shooting problem.

#### CAUTION

*Do not swap the SD Card or PWBs between Machines.*

#### CAUTION

*Do not remove the batteries from any PWBs while making voltage checks in this RAP.*

#### CAUTION

*If any of the billing data PWBs is to be replaced (SBC SD Card, MDM PWB, IIT PWB) replace them one at a time, as directed in this procedure. Replacing them all at the same time will cause unrecoverable NVM corruption.*

If failure persists, wait 12 minutes before powering off / powering on the machine.

### Procedure

Check the serial numbers on the UI (select **Machine Status, Machine Information Screen**) against the label on the machine frame and the Configuration Report. **The serial numbers match.**

**Y N**

Power off the machine and disconnect the power cord. Contact the field engineer (RSE)/NTS immediately.

**More than one of the following have been replaced at the same time: SBC SD Card, MDM PWB, IIT PWB.**

**Y N**

Install the original PWB back into the machine, and reboot the machine. **The 322-352 Fault Code is still present.**

**Y N**

If any other fault codes exist, go to the specific RAP for that fault code. Otherwise, go to **Call Flow**.

Perform the following steps in the order indicated:

- Reseat the wire harness between the IIT PWB and SBC PWB.

**A**

- Reseat each board and connectors on the MCU-PF PWB, MDM PWB, SBC PWB, SBC NVM PWB.

**The original boards are still available.**

**Y N**

Use **dC132** to restore serial number and billing data integrity.

**NOTE:** *It may take up to 24 hours to receive a password from ACAST*

Install the original PWBs back into the machine, and perform the following steps in the order indicated:

- Reseat the wire harness between the IIT PWB and SBC PWB.
- Reseat each board and connectors on the MCU-PF PWB, MDM PWB, SBC PWB.

**The fault code 322-352 is still present.**

**Y N**

If other fault codes are present, go to the specific fault code RAP. If no other fault codes exist, go to **Call Flow**.

**The red light on the MDM PWB is flashing.**

**Y N**

Perform each activity until the fault is cleared.

- Replace the SBC PWB (**PL 35.2**). Have the MC load the latest software, and power on the machine.
- Replace the MDM PWB (**PL 18.2A-7830/35, PL 18.2B-7845/55**). Have the MC load the latest software and power on the machine.
- Replace the IIT/IPS PWB (**PL 1.8**). Have the MC load the latest software, and power on the machine.
- Enter Diagnostics and refresh the screen at **dC120**, and **dC122**.

**Other fault codes are present.**

**Y N**

Go to **Call Flow**.

Go to the particular fault code RAP. If, after completing any remaining fault code RAPs, the 322-352 fault code is still present, repeat the 322-352 Rap one time. If the fault code still remains, contact the CTS, FE(RSE) or NTS for assistance.

Replace the MDM PWB (**PL 18.2A-7830/35, PL 18.2B-7845/55**) and have the MC load the latest software. If the fault code remains, contact the CTS, FE(RSE) or NTS for assistance.

## 322-352-01 RAP

Serial Update Required

**NOTE:** Password required to write serial number to the IOT and SBC

### Procedure

Contact service support to perform a [dC132](#).

## 322-360 RAP

Service Plan Mismatch. Three way sync of Service Plan could not be resolved.

### Procedure

Contact service support.

## 322-370 RAP

XSA communication lost

### Procedure

Switch machine power off then on. Check network connections to XSA server and have System Administrator check configuration for XSA refer to System Administrator Guide.

## 322-371 RAP

Fax Application Registration Error

### Procedure

Switch machine power off and then on.

If the Fax Card is installed, go to [OF 17-1 FAX Entry RAP](#).

## 322-372 RAP

Fax Service can not un-register.

### Procedure

If the Fax Card was removed from the machine, switch machine power off and then on.

If the Fax Card is installed, go to [OF 17-1 FAX Entry RAP](#).

## 322-407 RAP

SM Failed To Install Embedded Fax

### Procedure

Switch machine power off then on. If problem still exists reseal Fax PWB.

## 322-417 RAP

SM Failed To Removal Embedded Fax

### Procedure

Switch machine power off then on.

## 322-419 RAP

SM Failed To Enable Embedded Fax

### Procedure

1. Switch machine power off then on.
2. Check Configuration Report, under Installed Options ensure Embedded Fax is installed (machine recognizes Fax Card). If the Embedded Fax does not show as installed on Configuration Report, switch off machine power and reseal the Fax Card (PL 35.2).
3. Switch on machine power and check the Configuration Report to see if the machine recognizes the Fax Card is installed and enabled. If enabled, return to Service Call Procedures. If not, continue with this RAP.
4. Check that Network Server Fax is disabled. Server Fax and Embedded Fax cannot be enabled at the same time.
5. Enter Tools mode GP 2. Select **User Interface Settings** and **Service Enablements**.
6. Select **Server Fax** and ensure Server Fax is disabled. If not, select **Disable and Save**.
7. Select **Embedded Fax**, enable Embedded Fax.
8. If problem still exists replace Fax Card (PL 35.2).
9. If problem still exists contact Service Support for assistance.

## 322-421 RAP

SM Failed To Disable Embedded Fax.

### Procedure

1. Switch machine power off then on.
2. Check Configuration Report, under installed Options see if Embedded Fax is disabled.
3. If not, Enter Tools Mode **GP 2**. Select **User Interface Settings** and **Service Enablements**.
4. Select Embedded Fax and select the **Disabled** button and **Save**.
5. Print a Configuration Report. Check report, Embedded Fax should now be disabled.
6. If disabled, return to Service Call Procedures.
7. If still enabled remove Fax Card from machine if it is still present **PL 35.2**.
8. Check new Configuration Report to ensure Embedded Fax is disabled.
9. If still enabled contact Service Support for assistance.

## 322-701 RAP

Module completion message received after IOT returned to standby

### Procedure

Switch the power off then on.



## **322-720 RAP**

Service Registry Bad data / Corrupted.

### **Procedure**

TBD

## **322-721 RAP**

Triple A gets no response from SRS

### **Procedure**

TBD

## **322-750-04 RAP**

Output Device Configuration Mismatch

### **Procedure**

Check output device connections.

## **322-750-17 RAP**

Accessory Card Configuration Mismatch

### **Procedure**

Check output device connections.

## **322-751 RAP**

Paper Tray Configuration Mismatch

### **Procedure**

Switch the power off then on.

## **322-754 RAP**

When the System detects the UI Configuration has changed during the Power On Sequence

### **Procedure**

Switch the power off then on.

## **322-755 RAP**

RDT Configuration Mismatch

### **Procedure**

Check Output device connections.



## 324-923 Y Toner Cartridge Empty

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Y Toner Cartridge Empty

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform [dC991](#) Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive [PL 8.1](#) or toner supply path.

## 324-924 M Toner Cartridge Empty

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform [dC991](#) Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive [PL 8.1](#) or toner supply path.

## 324-925 C Toner Cartridge Empty

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform [dC991](#) Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive [PL 8.1](#) or toner supply path.

## 341-310 IM Logic Fail

BSD-ON: [3.5 PWB Communication \(5 of 9\)](#)

IM (IOT Manager) software control error detected.

### Procedure

1. Turn the power OFF and ON.
2. Install the correct version of the IOT firmware.
3. Perform [dC301](#), and initialize the IOT NVM (includes writing back the adjustment NVM).
4. If the problem persists, replace the MCU-PF PWB.
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 341-316 IH Driver Interface Fault

BSD-ON: [10.4 Fusing Heat Control \(2 of 3\)](#)

Interface error between the MDM PWB and the IH Driver has occurred (at the IH Driver).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Turn the power OFF and check the connection between the IH Driver [P/J530](#) and the MDM PWB [P/J414](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the IH Driver ([PL 18.3](#)).



## 341-317 MDM IH Interface Fault

BSD-ON: [BSD 10.3 Fusing Heat Control \(1 of 3\)](#)

Interface error between the MDM PWB and the IH Driver has occurred (at the MCU-IF).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connection between the IH Driver PWB [P/J530](#) and the Motor Driver Main PWB [P/J414](#) for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 341-340 MDM NVM EEPROM Data Fault

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

NVM data error (valid data is not stored in a valid address).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

1. Turn the power OFF and ON.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM).
4. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 341-341 MDM NVM EEPROM Access Fault

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

NVM access error (The read values are different from those that were written, or there is I2C communication error).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

1. Turn the power OFF and ON.
2. Turn OFF the power and check for poor contact between the EEPROM and the Motor Driver Main PWB.
3. If no problem is found, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 341-351 MDS Detect Fault

BSD-ON: [3.11 PWB Detection](#)

The MDS PWB is not installed.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connector ( [P452](#)) between the MDM PWB and the MDS PWB for poor connection.
3. If no problems are found, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 341-368 MCU-SW Firmware Mismatch

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

The MCU-PF software for 7845/55 model is installed in a 7830/35 model. Or, the MCU-PF software for 7830/35 model is installed in a 7845/55 model.

### Cause/Action

1. Turn the power OFF and ON.
2. Install the correct version of the IOT firmware.
3. Initialize the IOT NVM (includes writing back the adjustment NVM).
4. If the problem persists, replace the MCU-PF PWB.
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7830/35) ([PL 18.2B](#))

## 341-369 MDM Type Mismatch

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

The MDM PWD for the 7845/55 model is installed in the 7830/35 model. Or, the MDM PWD for the 7845/55 model is installed in the 7830/35 model.

**NOTE:** *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

1. Turn the power OFF and replace with the correct MDM PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7830/35) ([PL 18.2B](#))

## 341-371 Speed Update Required Fault

### Procedure

Go to [No-Run RAP](#)

## 341-388 MK Logic Fail

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

A fatal error was detected in Marking control.

### Cause/Action

1. Turn the power OFF and ON.
2. Install the correct version of the IOT firmware.
3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 341-391 Finisher Module Logic Fail

BSD-ON: [3.8 PWB Communication \(8 of 9\)](#)

A fatal error was detected in the Finisher Module.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Sub PWB [P590](#) and the Finisher PWB for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
  - The power supply at the Finisher.

**NOTE:** For more information on the IOT connection PWB and power supply at the Finisher, refer to the Finisher Supplementary Service Manual.

3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 341-393 Motor Driver Sub PWB F1 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [4.2 Drive Unit Cooling](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [9.27 Waste Toner Disposal \(1 of 2\)](#)

BSD-ON: [10.2 Fuser Drive Control \(2 of 2\)](#)

BSD-ON: [10.5 Fusing Heat Control \(3 of 3\)](#)

Fuse 1 on the Motor Driver Sub PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC supply line to the Motor Driver Sub PWB. **Is the voltage between the Motor Driver Main PWB [P/J520-8 \(+\)](#) and the GND (-) +24VDC?**

Y N

**Is the voltage between the Main LVPS [P/J510-3 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- [P/J529-A13](#) (LVPS Front Fan)
- [P/J529-B13](#) (C Exhaust Fan) (7845/55)
- [P/J538-1, 2, 3, 4](#) (Takeaway Motor) 7845/55)
- [P/J529-B5, B6, B7, B8](#) (Agitator Motor)
- [P/J524-14, 15, 16, 17](#) (P/R Latch Motor)
- [P/J529-B9](#) (IH Intake Fan)
- [P/J524-10](#) (Fusing Unit Fan)

**Is the resistance 5 Ohm or higher for each?**

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.

A

- The target components for internal short circuits.

Check the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for short circuit.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 341-394 Motor Driver Sub PWB F2 Fuse Fail

**BSD-ON:** [1.12 Interlocked Power](#)

**BSD-ON:** [1.14 PWB Fuse Status](#)

**BSD-ON:** [10.7 Fused Paper Exit 1](#)

**BSD-ON:** [10.9 Fused Paper Exit 2 \(1 of 2\)](#)

**BSD-ON:** [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

Fuse 2 on the Motor Driver Sub PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Sub PWB. **Is the voltage between the Motor Driver Sub PWB [P/J539-3 \(+\)](#) and the GND (-) +24VDC?**

Y N

**Is the voltage between the Motor Driver Main PWB [P/J540-3 \(+\)](#) and the GND (-) +24VDC?**

Y N

**Are the voltages between the Motor Driver Main PWB [P/J520-4/5 \(+\)](#) and the GND (-) +24VDC?**

Y N

**Are the voltages between the Main LVPS [P/J510-4/5 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn OFF the power and check the connection between the Motor Driver Main PWB [P/J540](#) and the Motor Driver Sub PWB [P/J539](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- [P/J524-3, 4](#) (Exit 1 OCT Motor)
- [P/J524-A7](#) (Exit Gate Solenoid)

- P/J522-A3, A4 (Exit 2 OCT Motor)
- P/J522-A9 (Face Up Gate Solenoid)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Sub PWB.

- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 341-397 (7845/55) Motor Driver Main PWB F4 Fuse Fail

BSD-ON: [1.7 DC Power Generation \(5 of 5\)](#)

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [1.14 PWB Fuse Status](#)

Fuse 4 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB P/J536-7 (+) and the GND (-) +24VDC?**

Y N

Is the voltage between the Sub LVPS P/J504-3 (+) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Sub LVPS P/J504 and the Motor Driver Main PWB P/J536 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J593 from the Motor Driver Main PWB and measure the resistance between P/J593-1 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the following:

- The connection between the Motor Driver Main PWB P/J593-1 and the HCF for short circuit (earth fault).
- The HCF for internal short circuit.

**NOTE:** For more information on the circuits at the HCF, refer to the HCF Supplementary Service Manual.

Disconnect connector P/J540 from the Motor Driver Main PWB and measure the resistance between P/J540-1 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Disconnect connector P592 from the Motor Driver Sub PWB and measure the resistance between P592-B2 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the connection between the Motor Driver Sub PWB P592-B2 and the Tray Module PWB P/J541-10 for short circuit (earth fault).  
If no problem is found, replace the Tray Module PWB. (PL 10.9, PL 11.17)

Check the connection between the Motor Driver Main PWB P/J540-1 and the Motor Driver Sub PWB P/J539-1 for short circuit (earth fault).

If no problem is found replace the Motor Driver Sub PWB.

- MDS PWB (7830/35) (PL 18.2A)

A

- MDS PWB (7845/55) (PL 18.2B)

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 341-398 Motor Driver Main PWB F5 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [9.12 Toner Suction and Marking Module](#)

BSD-ON: [9.22 First BTR Contact/Retract Control](#)

BSD-ON: [9.29 Rear Bottom Fan Control](#)

Fuse 5 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?**

Y N

**Is the voltage between the Main LVPS P/J510-3 (+) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J417 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- [P/J417-B14 \(Takeaway Clutch\) \(7830/35\)](#)
- [P/J417-A1 \(Suction Fan\) \(7845/55\)](#)
- [P/J417-A10 \(Marking Fan\) \(7845/55\)](#)
- [P/J417-A10 \(HV Fan\) \(7830/35\)](#)
- [P/J417-A8 \(1st BTR Contact/Retract Clutch\)](#)
- [P/J417-B11 \(Rear Bottom Fan\)](#)

**Is the resistance 5 Ohm or higher for each?**

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)



## 341-399 Motor Driver Main PWB F6 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

BSD-ON: [9.25 Drum Cleaning](#)

BSD-ON: [9.28 Waste Toner Disposal \(2 of 2\)](#)

BSD-ON: [10.3 Fusing Heat Control \(1 of 3\)](#)

BSD-ON: [10.5 Fusing Heat Control \(3 of 3\)](#)

Fuse 6 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB [P/J520-8 \(+\)](#) and the GND (-) +24VDC?**

Y N

**Is the voltage between the Main LVPS [P/J510-3 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- [P/J415-B6](#) (MOB ADC Sensor Assembly)
- [P/J411-A5, A7, B5, B7](#) (Erase Lamp (Y, M, C, K))
- [P/J416-6](#) (Process 2 Fan)
- [P/J431-11](#) (Fusing Unit Assembly)
- [P/J414-B1](#) (IH Exhaust Fan) (7845/55)

**Is the resistance 5 Ohm or higher for each?**

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

**NOTE:** If the MOB ADC Sensor Assembly was replaced, change the value of NVM [760-240] (TMA Gain Flag) to '1' after the replacement.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-319 (7830/35) Drum Y, M, C Motor Fail

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

The Drum/Deve Drive Motor (Y, M, C) revolution failure was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Drum Unit (Y, M, C) and the Developer (Y, M, C), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y, M, C)). **Does the Drum/Deve Drive Motor (Y, M, C) rotate?**

Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum/Deve Drive Motor (Y, M, C).
- The connection between the Motor Driver Main PWB [P/J527](#) and the Drum/Deve Drive Motor (Y, M, C) [P/J247](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Drum/Deve Drive Motor (Y, M, C) ([PL 3.3A](#))
- Motor Driver Main PWB ([PL 18.2A](#))

Turn OFF the power and remove the Drum Unit (Y, M, C) and the Developer (Y, M, C).

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y, M, C)). **Does the Drum/Deve Drive Motor (Y, M, C) rotate?**

Y N

Check the Drum Unit (Y, M, C) and the Developer (Y, M, C) for loading

Turn OFF the power and check the connection between the Drum/Deve Drive Motor (Y, M, C) [P/J247-8](#) and the Motor Driver Main PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. ([PL 18.2A](#))

## 342-319 (7845/55) Drum Y, M, C Motor Fail

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

The Drum Drive Motor (Y,M,C) revolution failure was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Drum Unit (Y, M, C) and cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y, M, C)). **Does the Drum Drive Motor (Y, M, C) rotate?**

Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum Drive Motor (Y, M, C).
- The connection between the Motor Driver Main PWB [P/J527](#) and the Drum Drive Motor (Y, M, C) [P/J247](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Drum Drive Motor (Y, M, C) ([PL 3.3B](#))
- Motor Driver Main PWB ([PL 18.2B](#))

Turn OFF the power and remove the Drum Unit (Y, M, C).

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y, M, C)). **Does the Drum Drive Motor (Y, M, C) rotate?**

Y N

Check the Drum Unit (Y, M, C) for loading.

Turn OFF the power and check the connection between the Drum Drive Motor (Y, M, C) [P/J247-8](#) and the Motor Driver Main PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. ([PL 18.2B](#))

## 342-320 (7830/35) Drum Y Motor Fail

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

The Drum/Deve Drive Motor (Y) revolution failure was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Drum Unit (Y) and the Developer (Y), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y)). **Does the Drum/Deve Drive Motor (Y) rotate?**

Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum/Deve Drive Motor (Y).
- The connection between the Motor Driver Main PWB [P/J527](#) and the Drum/Deve Drive Motor (Y) [P/J247](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Drum/Deve Drive Motor (Y) ([PL 3.3A](#))
- Motor Driver Main PWB ([PL 18.2A](#))

Turn OFF the power and remove the Drum Unit (Y) and the Developer (Y).

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y)). **Does the Drum/Deve Drive Motor (Y) rotate?**

Y N

Check the Drum Unit (Y) and the Developer (Y) for loading

Turn OFF the power and check the connection between the Drum/Deve Drive Motor (Y) [P/J247-8](#) and the Motor Driver Main PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. ([PL 18.2A](#))

## 342-320 (7845/55) Drum Y Motor Fail

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

The Drum Drive Motor (Y) revolution failure was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Drum Unit (Y) and cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y)). **Does the Drum Drive Motor (Y) rotate?**

Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum Drive Motor (Y).
- The connection between the Motor Driver Main PWB [P/J527](#) and the Drum Drive Motor (Y) [P/J247](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Drum Drive Motor (Y) ([PL 3.3B](#))
- Motor Driver Main PWB ([PL 18.2B](#))

Turn OFF the power and remove the Drum Unit (Y).

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y)). **Does the Drum Drive Motor (Y) rotate?**

Y N

Check the Drum Unit (Y) for loading.

Turn OFF the power and check the connection between the Drum Drive Motor (Y) [P/J247-8](#) and the Motor Driver Main PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. ([PL 18.2B](#))

## 342-323 Drum K Motor Fail

BSD-ON: [9.2 Drum/Developer Drive Control \(K\)](#)

The Drum/Developer Drive Motor revolution failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Front Cover. Remove the Drum (K) and the Developer (K) and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [091-036] (Drum/Developer Drive Motor K). **Does the Drum/Developer Drive Motor (K) rotate?**

Y N  
Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J526-1 \(+\)](#) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#)

**Is the voltage between the MDM PWB [P/J527-A8 \(+\)](#) and the GND (-) +5VDC?**

Y N  
Go to [+5VDC Power RAP](#).

Turn the power OFF and check the connections between the MDM PWB [P/J526](#) and the Drum/Developer Drive Motor (K) [P/J240](#), as well as between the MDM PWB [P/J527](#) and the Drum/Developer Drive Motor (K) [P/J241](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- Drum/Developer Drive Motor (K) (7830/35) ([PL 3.3A](#))
- Drum/Developer Drive Motor (K) (7845/55) ([PL 3.3B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Install the Drum (K), the Developer (K), and the Front Cover.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [091-036] (Drum/Developer Drive Motor K). **Does the Drum/Developer Drive Motor (K) rotate?**

Y N  
Check the Drum (K) and the Developer (K) for loading

Press the Stop button and turn the power OFF. Check the connection between the Drum/Developer Drive Motor (K) [P/J241-8](#) and the MDM PWB [P/J527-A1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-324 IBT Motor Fail

BSD-ON: [9.20 IBT Belt Drive Control](#)

The IBT Drive Motor revolution failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Remove the IBT Unit and cheat the L/H Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [094-010] (IBT Drive Motor).

**Does the IBT Drive Motor rotate?**

Y N  
Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J526-5 \(+\)](#) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#).

**Is the voltage between the MDM PWB [P/J527-B8 \(+\)](#) and the GND (-) +5VDC?**

Y N  
Go to [+5VDC Power RAP](#).

Turn the power OFF and check the connections between the MDM PWB [P/J526](#) and the IBT Drive Motor [P/J248](#), as well as between the MDM PWB [P/J527](#) and the IBT Drive Motor [P/J249](#) for open circuits, short circuits, and poor contacts.

If no problems are found, replace the following parts in sequence:

- IBT Drive Motor (7830/35) ([PL 3.3A](#))
- IBT Drive Motor (7845/55) ([PL 3.3B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Install the IBT Unit and close the L/H Cover.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [094-010] (IBT Drive Motor).

**Does the IBT Drive Motor rotate?**

Y N  
Check the IBT Drive for loading. Also, check the IBT for loading due to blockage in the IBT Waste Toner Collection Auger

Press the Stop button and turn the power OFF. Check the connection between the IBT Drive Motor [P/J249-8](#) and the MDM PWB [P/J527-B1](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-325 Main Motor Fail

BSD-ON: [4.1 Main Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [8.6 Registration](#)

The Main Drive Motor revolution failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Remove the IBT Unit and cheat the L/H Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON **dC330** [042-002] (Main Drive Motor).

**Does the Main Drive Motor rotate?**

Y N

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB **P/J535-1 (+)** and the GND (-) +24VDC?**

Y N

Go to **+24VDC Power RAP (7830/35)** or **+24VDC Power RAP (7845/55)**.

**Is the voltage between the MDM PWB **P/J525-A16 (+)** and the GND (-) +5VDC?**

Y N

Go to **+5VDC Power RAP**.

Turn the power OFF and check the connections between the MDM PWB and the Main Driver Motor PWB for open circuits, short circuits, and poor contacts.

- **7830/35**

- MDM PWB - **P/J535** and the Main Drive Motor - **P/J244**

- MDM PWB - **P/J525** and the Main Drive Motor - **P/J245**

- **7845/55**

- MDM PWB - **P/J535** and the Main Drive Motor - **P/J244**

- MDM PWB - **P/J525** and the Main Drive Motor - **P/J245**

If no problems are found, replace the following parts in sequence:

- Main Drive Motor (**PL 3.2**)
- MDM PWB (7830/35) (**PL 18.2A**)
- MDM PWB (7845/55) (**PL 18.2B**)

Press the Stop button and turn the power OFF. Install the IBT Unit and close the L/H Cover.

Turn the power ON and enter the Diag mode. Turn ON **dC330** [042-002] (Main Drive Motor).

**Does the Main Drive Motor rotate?**

Y N

Check the 2nd BTR for loading and the Drive Gear for revolution failure or damage

Press the Stop button.

- **7830/35**

- Turn ON **dC330** [042-002] (Main Drive Motor), then turn ON **dC330** [077-001] (Takeaway Clutch).

- **7845/55**

- Turn ON **dC330** [042-002] (Main Drive Motor), then turn ON **dC330** [077-050] (Takeaway Motor).

**Does the Main Drive Motor rotate?**

Y N

Check the MSI Takeaway Roll and the Tray 1 Takeaway Roll for loading and the Drive Gear for revolution failure or damage

Press the Stop button. Turn ON **dC330** [042-002] (Main Drive Motor), then turn ON **dC330** [077-002] (Registration Clutch). **Does the Main Drive Motor rotate?**

Y N

Check the Registration Roll for loading and the Drive Gear for revolution failure or damage

Press the Stop button and turn the power OFF. Check the connection between the Main Drive Motor and the MDM PWB for open circuit, short circuit, and poor contact.

- **7830/35**

- MDM PWB **P/J525-A9** and Main Drive Motor **P/J245-8**

- **7845/55**

- MDM PWB **P/J525-A9** and Main Drive Motor **P/J245-8**

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (**PL 18.2A**)
- MDM PWB (7845/55) (**PL 18.2B**)

## 342-330 (7845/55) IH Exhaust Fan Fail

BSD-ON: [10.5 Fusing Heat Control \(3 of 3\)](#)

The IH Exhaust Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly. Rotate the IH Exhaust Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-017] (IH Exhaust Fan). **Is the IH Exhaust Fan rotating?**

Y N

When the Diag is turned ON, is the voltage between the MDM PWB [P/J414-B1 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB ([PL 18.2B](#)).

Turn the power OFF and check the connection between the IH Exhaust Fan [P/J225](#) and the MDM PWB [P/J414](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- IH Exhaust Fan (7845/55) ([PL 4.3B](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the IH Exhaust Fan [P/J225-3](#) and the MDM PWB [P/J414-B3](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB ([PL 18.2B](#)).

## 342-332 IH Intake Fan Fail

BSD-ON: [10.5 Fusing Heat Control \(3 of 3\)](#)

The IH Intake Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly.

Rotate the IH Intake Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-016] (IH Intake Fan). **Is the IH Intake Fan rotating?**

Y N

When the Diag is turned ON, is the voltage between the MDS PWB [P/J529-B9 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDS PWB.

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the connection between the IH Intake Fan [P/J226](#) and the MDS PWB [P/J529](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- IH Intake Fan ([PL 4.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the IH Intake Fan [P/J226-2](#) and the MDS PWB [P/J529-B11](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 342-334 (7830/35) IBT Fan Fail

BSD-ON:

### Procedure

TBD

## 342-335 (7845/55) Process 1 Fan Fail

BSD-ON: [9.28 Waste Toner Disposal \(2 of 2\)](#)

The Process 1 Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-022] (Process 1 Fan). **Is the Process 1 Fan rotating?**

Y N

**When the Diag is turned ON, is the voltage between the MDM PWB [P/J537-4 \(+\)](#) and the GND (-) +24VDC?**

Y N

Turn the power OFF and replace the MDM PWB ([PL 18.2B](#)).

Turn the power OFF and check the connection between the Process 1 Fan [P/J228](#) and the MDM PWB [P/J537](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Process 1 Fan ([PL 4.2B](#))
- MDM PWB ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Process 1 Fan [P/J228-2](#) and the MDM PWB [P/J537-5](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB ([PL 18.2B](#)).

## 342-336 Process 2 Fan Fail

BSD-ON: [9.28 Waste Toner Disposal \(2 of 2\)](#)

The Process 2 Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-013] (Process 2 Fan). **Is the Process 2 Fan rotating?**

Y N  
When the Diag is turned ON, is the voltage between the MDM PWB [P/J416-6 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the connection between the Process 2 Fan [P/J238](#) and the MDM PWB [P/J416](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Process 2 Fan (7830/35) ([PL 4.2A](#))
- Process 2 Fan (7845/55) ([PL 4.2B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Process 2 Fan [P/J238-2](#) and the MDMPWB [P/J416-7](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-338 LVPS Front Fan Fail

BSD-ON: [1.11 LVPS Cooling](#)

An abnormality was detected in the LVPS Front Fan.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Right Cover and Rear Upper Cover. Disconnect and reconnect [P/J239](#). Rotate the Front LVPS Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-014] (Front LVPS Fan). **Is the Front LVPS Fan rotating?**

Y N  
When the Diag is turned ON, is the voltage between the MDS PWB [P/J529-A13 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDS PWB.

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the connection between the Front LVPS Fan [P/J239](#) and the MDS PWB [P/J529](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Front LVPS Fan ([PL 4.1](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Front LVPS Fan [P/J239-2](#) and the MDS PWB [P/J529-A14](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))



## 342-340 (7845/55) Cartridge Fan Fail

BSD-ON: [9.19 Toner Cartridge Cooling \(7845/55\)](#)

The Cartridge Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-021] (Cartridge Fan). **Is the Cartridge Fan rotating?**

Y N  
When the Diag is turned ON, is the voltage between the MDM PWB [P/J416-3 \(+\)](#) and the GND (-) +24VDC?

Y N  
Turn the power OFF and replace the MDM PWB ([PL 18.2B](#)).

Turn the power OFF and check the connection between the Cartridge Fan [P/J619](#) and the MDM PWB [P/J416](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Cartridge Fan ([PL 4.2B](#))
- MDM PWB ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Cartridge Fan [P/J619-2](#) and the MDM PWB [P/J416-4](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB ([PL 18.2B](#)).

## 342-341 Marking/HV Fan Fail

BSD-ON: [9.12 Toner Suction and Marking Module](#)

The HV Fan (7830/35) or Marking Fan (7845/55) error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-012] (HVPS/M Fan). **Is the HVPS Fan or the Marking Fan rotating?**

Y N  
When the Diag is turned ON, is the voltage between the MDM PWB [P/J417-A10 \(+\)](#) and the GND (-) +24VDC?

Y N  
Turn the power OFF and replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the connection between the Marking/HV Fan [P/J235](#) and the MDM PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- HV Fan (7830/35) ([PL 4.3A](#))
- Marking Fan (7845/55) ([PL 4.3B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF.

Check the connection between the Marking/HV Fan [P/J235-3](#) and the MDM PWB [P/J417-A12](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-342 (7845/55) Suction Fan Fail

BSD-ON: [9.12 Toner Suction and Marking Module](#)

The Suction Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly. Rotate the Suction Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-020] (Suction Fan). **Is the Suction Fan rotating?**

Y N

When the Diag is turned ON, is the voltage between the MDM PWB [P/J417-A1 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB ([PL 18.2B](#)).

Turn the power OFF and check the connection between the Suction Fan [P/J231](#) and the MDM PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Suction Fan ([PL 18.2B](#))
- MDM PWB ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Suction Fan [P/J231-2](#) and the MDM PWB [P/J417-A3](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB ([PL 18.2B](#)).

## 342-343 Rear Bottom Fan Fail

BSD-ON: [9.29 Rear Bottom Fan Control](#)

The Bottom Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly. Rotate the Bottom Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-015] (Bottom Fan). **Is the Bottom Fan rotating?**

Y N

When the Diag is turned ON, is the voltage between the MDM PWB [P/J417-B11 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the connection between the Bottom Fan [P/J234](#) and the MDM PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Bottom Fan (7830/35) ([PL 4.3A](#))
- Bottom Fan (7845/55) ([PL 4.3B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF. Check the connection between the Bottom Fan [P/J234-2](#) and the MDM PWB [P/J417-B12](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-344 (7845/55) C Exhaust Fan Fail

BSD-ON: [4.2 Drive Unit Cooling](#)

The C Exhaust Fan error was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The C Exhaust Fan ([dC330](#) [042-024]) for operation failure. ([PL 4.3B](#))
- The C Exhaust Fan for foreign substances.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 342-400 Deodorant Filter Life End

The Deodorant Filter must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Deodorant Filter and clear the [dC135](#) HFSI Counter [954-860].

## 342-604 NOHAD Temperature Sensor Fail

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The NOHAD Thermistor error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Turn the power OFF and check the connection between the NOHAD Thermistor [P/J130](#) and the MDM PWB [P/J414](#) for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the NOHAD Thermistor.

If no problems are found, replace the following parts in sequence:

- NOHAD Thermistor (7830/35) ([PL 4.4A](#))
- NOHAD Thermistor (7845/55) ([PL 4.4B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 342-605 (7830/35) Suction Drive Fan Fail

BSD-ON: [9.12 Toner Suction and Marking Module](#)

The Drive Fan error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MDS PWB and open the Chassis Assembly. Rotate the Drive Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [042-020] (Drive Fan). Is the Drive Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB [P/J417-A1 \(+\)](#) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB ([PL 18.2A](#)).

Turn the power OFF and check the connection between the Drive Fan [P/J231](#) and the MDM PWB [P/J417](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Drive Fan ([PL 18.2A](#))
- MDM PWB ([PL 18.2A](#))

Press the Stop button and turn the power OFF. Check the connection between the Drive Fan [P/J231-2](#) and the MDM PWB [P/J417-A3](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB ([PL 18.2A](#)).

## 342-609 LH Fan Fail

### BSD-ON: 9.30 LH Fan Control (Option)

The LH Fan 1-3 error was detected.

**NOTE:** •The LH Fan is an option Fan to prevent paper blocking. If the LH Fan is installed, set NVM (741-140) to "1".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Open the L/H Cover and cheat the L/H Cover Interlock Switch.

Disconnect and reconnect the LH Fan PWB P/J453, P/J454, LH Fan 2 P/J217, and LH Fan 3 P/J218. Rotate the LH Fan 1-3 manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-026] (LH Fan). **Are the LH Fan 1-3 rotating?**

Y N

Press the Stop button. **Is the voltage between the LH Fan PWB P/J450-5 (+) and the GND (-) +24VDC?**

Y N

Remove the Rear Upper Cover. **Is the voltage between the MDM PWB P/J523-B13 (+) and the GND (-) +24VDC?**

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).PL18.2b

Turn the power OFF and check the connection between the MDM PWB P/J523 and the LH Fan PWB P/J450 for open circuit, short circuit, and poor contact.

Turn ON dC330 [042-026] (LH Fan) and measure the following voltages:

- Between the LH Fan PWB P/J453-1 (+) and the GND (-) (LH Fan 1)
- Between the LH Fan PWB P/J453-1 (+) and the GND (-) (LH Fan 2)
- Between the LH Fan PWB P/J453-5 (+) and the GND (-) (LH Fan 3)

**Is the voltage +24VDC?**

Y N

Turn the power OFF and check the connection between the MDM PWB P/J523 and the LH Fan PWB P/J450 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- LH Fan PWB
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the following connectors for open circuits, short circuits, and poor contacts.

- Between the LH Fan PWB P/J454 and the LH Fan 2 P/J217
- Between the LH Fan PWB P/J454 and the LH Fan 3 J218

If no problems are found, replace the LH Fan (1-3).

Press the Stop button. Turn the power OFF and check the following:

- Check the connection between the LH Fan 2 P/J217-3 and the LH Fan PWB P/J454-3 for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan 3 P/J218-3 and the LH Fan PWB P/J454-7 for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan PWB P/J450-2 and the MDM PWB P/J523-B16 for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- LH Fan PWB
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Go to the 345-349 RAP.

## 345-310 Image Ready NG

BSD-ON: [3.5 PWB Communication \(5 of 9\)](#)

The Controller image preparation failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connectors ( [J335](#), [J451](#), and [J1](#)) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - SBC PWB (7830/35) ([PL 18.2A](#))
  - SBC PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - BP PWB (7830/35) ([PL 18.2A](#))
  - BP PWB (7845/55) ([PL 18.2B](#))

## 345-311 Controller Communication Fault

BSD-ON: [3.5 PWB Communication \(5 of 9\)](#)

Communication error between SBC PWB and MCU-PF PWB was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connectors ( [J335](#), [J451](#), and [J1](#)) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - SBC PWB (7830/35) ([PL 18.2A](#))
  - SBC PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - BP PWB (7830/35) ([PL 18.2A](#))
  - BP PWB (7845/55) ([PL 18.2B](#))

## 345-320 Motor Driver Main PWB F8 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [7.8 Tray 1 Paper Stacking](#)

BSD-ON: [9.28 Waste Toner Disposal \(2 of 2\)](#)

Fuse 8 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB [P/J520-8 \(+\)](#) and the GND (-) +24VDC?**

Y N  
|  
Is the voltage between the Main LVPS [P/J510-3 \(+\)](#) and the GND (-) +24VDC?  
Y N  
|  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- [P/J528-B1, B2, B3, B4](#) (Tray 1 Feed/Lift Up Motor)
- [P/J537-4](#) (Process 1 Fan) (7845/55)

**Is the resistance 5 Ohm or higher for each?**

Y N  
|  
Check the following:  
• The connections that are in earth fault (at 5 Ohm or lower) for short circuits.  
• The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-343 Motor Driver Main PWB F9 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [8.6 Registration](#)

Fuse 9 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB [P/J520-8 \(+\)](#) and the GND (-) +24VDC?**

Y N  
|  
**Is the voltage between the Main LVPS [P/J510-3 \(+\)](#) and the GND (-) +24VDC?**  
Y N  
|  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector [P/J523](#) from the Motor Driver Main PWB and measure the resistance between [P/J523-A7](#) and the GND. **Is the resistance 5 Ohm or higher?**

Y N  
|  
Check the following:  
• The connection between the Motor Driver Main PWB [P/J523-A7](#) and the Regi Clutch [P/J260-2](#) for short circuit (earth fault).  
• The Regi Clutch for internal short circuit ([PL 15.2](#))

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-345 Motor Driver Sub PWB F3 Fuse Fail

BSD-ON: [1.10 DC Power Distribution - HCF Option](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [9.17 Toner Dispense Control \(Y,M\)](#)

BSD-ON: [9.18 Toner Dispense Control \(C,K\)](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

Fuse 3 on the Motor Driver Sub PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Sub PWB. **Is the voltage between the Motor Driver Sub PWB [P/J539-3 \(+\)](#) and the GND (-) +24VDC?**

Y N  
Is the voltage between the Motor Driver Main PWB [P/J540-3 \(+\)](#) and the GND (-) +24VDC?  
Y N  
Are the voltages between the Motor Driver Main PWB [P/J520-4/5 \(+\)](#) and the GND (-) +24VDC?  
Y N  
Are the voltages between the Main LVPS [P/J510-4/5 \(+\)](#) and the GND (-) +24VDC?  
Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .  
Turn OFF the power and check the connection between the Main LVPS [P/J510](#) and the Motor Driver Main PWB [P/J520](#) for open circuit, short circuit, and poor contact.  
Replace the Motor Driver Main PWB.  
• [MDM PWB \(7830/35\) \(PL 18.2A\)](#)  
• [MDM PWB \(7845/55\) \(PL 18.2B\)](#)  
Turn OFF the power and check the connection between the Motor Driver Main PWB [P/J540](#) and the Motor Driver Sub PWB [P/J539](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- [P/J529-A1, A2, A3, A4](#) (Toner Dispense Motor (Y))
- [P/J529-A5, A6, A7, A8](#) (Toner Dispense Motor (M))

- [P/J529-A9, A10, A11, A12](#) (Toner Dispense Motor (C))
- [P/J529-B1, B2, B3, B4](#) (Toner Dispense Motor (K))
- [P/J529-B4, B5, B6, B7](#) (Exit 2 Drive Motor)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Sub PWB.

- [MDS PWB \(7830/35\) \(PL 18.2A\)](#)
- [MDS PWB \(7845/55\) \(PL 18.2B\)](#)



## 345-346 (7830/35) Motor Driver Main PWB F3 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.8 IIT DC Power Distribution](#)

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [1.14 PWB Fuse Status](#)

Fuse 3 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?**

Y N

Is the voltage between the Main LVPS P/J510-3 (+) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J593 from the Motor Driver Main PWB and measure the resistance between P/J593-1 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the following:

- The connection between the Motor Driver Main PWB P/J593-1 and the HCF for short circuit (earth fault).
- The HCF for internal short circuit.

**NOTE:** For more information on the circuits at the HCF, refer to the HCF Supplementary Service Manual.

Disconnect connector P/J540 from the Motor Driver Main PWB and measure the resistance between P/J540-1 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Disconnect connector P592 from the Motor Driver Sub PWB and measure the resistance between P592-B2 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the connection between the Motor Driver Sub PWB P592-B2 and the Tray Module PWB P/J541-10 (3T) or P/J541-10 (TT) for short circuit (earth fault).

If no problem is found, replace the Tray Module PWB. (PL 10.9, PL 11.17, [PL 12.5], [PL 20.7])

Check the connection between the Motor Driver Main PWB P/J540-1 and the Motor Driver Sub PWB P/J539-1 for short circuit (earth fault).

A

If no problem is found, replace the Motor Driver Sub PWB.

- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

A

## 345-347 Motor Driver Main PWB F10 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [9.19 Toner Cartridge Cooling \(7845/55\)](#)

Fuse 10 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. **Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?**

Y N  
**Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

This is a 7830/35 machine.

Y N  
This is a 7845/55 machine.  
Turn OFF the power. Disconnect connector P/J416 from the Motor Driver Main PWB and measure the resistance between P/J416-3 and the GND. **Is the resistance 5 Ohm or higher?**

Y N  
Check the following:

- The connection between the Motor Driver Main PWB P/J416-3 and the Cartridge Fan P/J619 for short circuit (earth fault).
- The Cartridge Fan for internal short circuit.

Replace the Motor Driver Main PWB. (PL 18.2B)

Replace the Motor Driver Main PWB. (PL 18.2A)

## 345-348 Motor Driver Main PWB F11 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [9.7 Charging and Exposure \(7845/55\) \(1 of 2\)](#)

BSD-ON: [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

BSD-ON: [9.13 Development \(Y\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [10.8 Fused Paper Exit 2 \(1 of 4\)](#)

Fuse 11 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. **Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?**

Y N  
**Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- P/J412-A13 (HVPS (BCR)) (7845/55)
- P/J412-A13 (HVPS (Deve/BCR)) (7830/35)
- P/J412-A12 (HVPS (Deve)) (7845/55)
- P/J412-A12 (HVPS (Deve/BCR)) (7830/35)
- P/J414-A15 (HVPS (1st/2nd BTR))
- P/J523-B7, B8, B9, B10 (Duplex Motor)

**Is the resistance 5 Ohm or higher for each?**

Y N  
Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)

- MDM PWB (7845/55) (PL 18.2B)

## 345-349 Motor Driver Main PWB F13 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [10.8 Fused Paper Exit 2 \(1 of 4\)](#)

Fuse 13 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. **Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?**

Y N

**Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J523 from the Motor Driver Main PWB and measure the resistance between P/J523-B11 and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the following:

- The connection between the Motor Driver Main PWB P/J523-B11 and the DC Heater P/J170-1 for short circuit (earth fault).
- The DC Heater for internal short circuit.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 345-353 Motor Driver Main PWB F14 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [4.1 Main Drive Control](#)

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

Fuse 14 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. **Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?**

Y N

**Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J535 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J535-1 (Main Drive Motor)
- P/J535-3 (Fusing Unit Drive Motor)

**Is the resistance 5 Ohm or higher for each?**

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-354 Motor Driver Main PWB F15 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.2 Drum/Developer Drive Control \(K\)](#)

BSD-ON: [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

BSD-ON: [9.20 IBT Belt Drive Control](#)

Fuse 15 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. **Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?**

Y N

**Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J526 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J526-3 (Drum Drive Motor (Y, M, C)) (7845/55)
- P/J526-3 (Drum/Deve Drive Motor (Y, M, C)) (7830/35)
- P/J526-1 (Drum/Deve Drive Motor (K))
- P/J526-7 (Deve Drive Motor (Y, M, C)) (7845/55)
- P/J526-5 (IBT Drive Motor)

**Is the resistance 5 Ohm or higher for each?**

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-355 Motor Driver Main PWB F16 Fuse Fail

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

Fuse 16 on the Motor Driver Main PWB has blown.

### Cause/Action

The Intlk\_+24VDC\_F16 power line is not being used (no load). If this failure has occurred, replace the Motor Driver Main PWB. (MDM PWB (7830/35) ([PL 18.2A](#)) or MDM PWB (7845/55) ([PL 18.2B](#)))

## 345-356 Motor Driver Main PWB F17 Fuse Fail

BSD-ON: [1.3 DC Power Generation \(1 of 5\)](#)

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [1.14 PWB Fuse Status](#)

Fuse 17 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +5VDC\_Stby supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB [P/J521-3 \(+\)](#) and the GND (-) +5VDC?**

Y N

**Is the voltage between the Main LVPS [P/J502-1 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

Turn OFF the power and check the connection between the Main LVPS [P/J502](#) and the Motor Driver Main PWB [P/J521](#) for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector [P592](#) from the Motor Driver Sub PWB and measure the resistance between [P592-B8](#) and the GND. **Is the resistance 5 Ohm or higher?**

Y N

Check the following:

- The connection between the Motor Driver Sub PWB [P592-B8](#) and the Fax (G4 or Mini) for short circuit (earth fault).
- The Fax (G4 or Mini) for internal short circuit.

Check the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for short circuit.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 345-357 Motor Driver Main PWB F22 Fuse Fail

BSD-ON: [1.4 DC Power Generation \(2 of 5\)](#)

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

Fuse 22 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +5VDC supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB P/J520-2 (+) and the GND (-) +5VDC?**

Y N  
**Is the voltage between the Main LVPS P/J510-2 (+) and the GND (-) +5VDC?**

Y N  
Go to [+5VDC Power](#) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J532 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J532-2, 4 (LPH (Y))
- P/J532-6, 8 (LPH (M))
- P/J532-10, 12 (LPH (C))
- P/J532-14, 16 (LPH (K))

**Is the resistance 5 Ohm or higher for each?**

Y N  
Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-358 Motor Driver Main PWB F23 Fuse Fail

BSD-ON: [1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [1.14 PWB Fuse Status](#)

Fuse 23 on the Motor Driver Main PWB has blown.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. **Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?**

Y N  
**Is the voltage between the Main LVPS P/J510-3 (+) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J540 from the Motor Driver Main PWB and measure the resistance between P/J540-5 and the GND. **Is the resistance 5 Ohm or higher?**

Y N  
Disconnect connector P591 from the Motor Driver Sub PWB and measure the resistance between P591-1 and the GND. **Is the resistance 5 Ohm or higher?**

Y N  
Check the following:

- The connection between the Motor Driver Sub PWB P591-1 and the Finisher for short circuit (earth fault).
- The Finisher for internal short circuit.

**NOTE:** For more information on the circuits at the Finisher, refer to the Finisher Supplementary Service Manual.

Check the connection between the Motor Driver Main PWB P/J540-5 and the Motor Driver Sub PWB P/J539-5 for short circuit (earth fault).

- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 345-359 EEPROM Config Mismatch

**BSD-ON:** [3.6 PWB Communication \(6 of 9\)](#)

The EEPROM for 7845/55 model is installed in a 7830/35 model. Or, the EEPROM for 7830/35 model is installed in a 7845/55 model.

### Cause/Action

1. Turn the power OFF and ON.
2. Replace with the correct EEPROM.
3. Initialize the IOT NVM (includes writing back the adjustment NVM).
4. If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 345-368 SBM Initialize Fail

**BSD-ON:** [3.6 PWB Communication \(6 of 9\)](#)

Communication cannot be established via the serial bus between the MSOC and the HASIC.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connector ( **J1**) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 345-369 SBM Master Communication Fail

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

A communication error has occurred at the MSOC side via the serial bus between the MSOC and the HASIC.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connector ( **J1**) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 345-370 LPH Power On Fault Multi

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

Power source error during LPH batch download complete verification or MDM error. (Fail has occurred in multiple LPHs.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

**Is the voltage between the MDM PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?**

Y N

Turn the power OFF and disconnect the MDM PWB connector [P/J532](#).

Measure the resistance between the MDM PWB [P/J532-2/6/10/14](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MDM PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MDM PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MDM PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))



If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-350 RAP
- M color: 361-351 RAP
- C color: 361-352 RAP
- K color: 361-353 RAP

## 345-371 LPH Download Data Fault Multi

**BSD-ON: 1.5 DC Power Generation (3 of 5)**

**BSD-ON: 6.6 LPH Control (Y)**

**BSD-ON: 6.7 LPH Control (M)**

**BSD-ON: 6.8 LPH Control (C)**

**BSD-ON: 6.9 LPH Control (K)**

DELSOL register error during the LPH batch download complete verification or connector error. (Fail has occurred in multiple LPHs.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?**

**Y N**  
Go to +5VDC Power .

**Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?**

**Y N**  
Turn the power OFF and disconnect the MDM PWB connector P/J532.  
Measure the resistance between the MDM PWB P/J532-2/6/10/14 and the Frame. **Is the resistance infinite for all?**

**Y N**  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to dC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-354 RAP
- M color: 361-355 RAP
- C color: 361-356 RAP
- K color: 361-357 RAP

## 345-372 LPH Mismatch Fault Multi

**BSD-ON: 1.5 DC Power Generation (3 of 5)**

**BSD-ON: 6.6 LPH Control (Y)**

**BSD-ON: 6.7 LPH Control (M)**

**BSD-ON: 6.8 LPH Control (C)**

**BSD-ON: 6.9 LPH Control (K)**

The model numbers of multiple LPH Units do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?**

**Y N**  
Go to +5VDC Power .

**Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?**

**Y N**  
Turn the power OFF and disconnect the MDM PWB connector P/J532.  
Measure the resistance between the MDM PWB P/J532-2/6/10/14 and the Frame. **Is the resistance infinite for all?**

**Y N**  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Check that the values in dC131 [749-152 to 160] (LPH Specific Code) do not contain corruption, etc. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)
- LPH Unit (Y, M, C, K) (PL 2.1)

## 345-373 LPH Read Fault Multi

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

Communication error between MCU-PF and LPH Units (data read error from multiple LPHs)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

**Is the voltage between the MDM PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?**

Y N

Turn the power OFF and disconnect the MDM PWB connector [P/J532](#).

Measure the resistance between the MDM PWB [P/J532-2/6/10/14](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MDM PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MDM PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MDM PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP.

(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: [361-362 RAP](#)
- M color: [361-363 RAP](#)
- C color: [361-364 RAP](#)
- K color: [361-365 RAP](#)

## 345-374 LPH Write Fault Multi

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

- Y color: [361-366 RAP](#)
- M color: [361-367 RAP](#)
- C color: [361-368 RAP](#)
- K color: [361-369 RAP](#)

Communication error between MCU-PF and LPH Units (data write error to multiple LPHs).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

**Is the voltage between the MDM PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?**

Y N

Turn the power OFF and disconnect the MDM PWB connector [P/J532](#).

Measure the resistance between the MDM PWB [P/J532-2/6/10/14](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MDM PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MDM PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MDM PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP.  
(1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

## 345-375 LPH Act Fault Multi

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

Communication error between MCU-PF and multiple LPH Units (error in the communication IC or cable).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON.

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

Y N

If the failure occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation

**Is the voltage between the MDM PWB [P/J532-4/8/12/16 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

**Is the voltage between the MDM PWB [P/J532-2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?**

Y N

Turn the power OFF and disconnect the MDM PWB connector [P/J532](#). Measure the resistance between the MDM PWB [P/J532-2/6/10/14](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MDM PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MDM PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MDM PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))

- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

If the problem persists, refer to [dC131 \[749-001\]](#) (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: [361-370](#) RAP
- M color: [361-371](#) RAP
- C color: [361-372](#) RAP
- K color: [361-373](#) RAP

## 345-376 LPH PLL Lock Fault Multi

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [6.6 LPH Control \(Y\)](#)

BSD-ON: [6.7 LPH Control \(M\)](#)

BSD-ON: [6.8 LPH Control \(C\)](#)

BSD-ON: [6.9 LPH Control \(K\)](#)

LPH PLL lock mechanism failure (clock failures in multiple LPHs).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. **Is the voltage between the MDM PWB [P/J532 -4/8/12/16 \(+\)](#) and the GND (-) +5VDC?**

Y N

Go to [+5VDC Power](#) .

**Is the voltage between the MDM PWB [P/J532 -2/6/10/14 \(+\)](#) and the GND (-) +1.8VDC?**

Y N

Turn the power OFF and disconnect the MDM PWB connector [P/J532](#). Measure the resistance between the MDM PWB [P/J532 -2/6/10/14](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB [P/J557](#) and LPH Rear PWB [P/J561](#)
- Between MDM PWB [P/J556](#) and LPH Rear PWB [P/J560](#)
- Between MDM PWB [P/J555](#) and LPH Rear PWB [P/J559](#)
- Between MDM PWB [P/J554](#) and LPH Rear PWB [P/J558](#)

If no problems are found, replace the following in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

If the problem persists, refer to [dC131 \[749-001\]](#) (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: [361-386](#) RAP
- M color: [361-387](#) RAP
- C color: [361-388](#) RAP
- K color: [361-389](#) RAP

## 345-377 SBM Slave Communication Fail

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

A communication error has occurred at the HASIC side via the serial bus between the MSOC and the HASIC.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connector ( **J1**) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 345-378 MCU-PF Config Mismatch

BSD-ON: [3.6 PWB Communication \(6 of 9\)](#)

The MCU-PF settings differ from the expected values.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connector ( **J1**) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 345-379 Motor Driver Main/Sub PWB Type Mismatch

BSD-ON: [3.11 PWB Detection](#)

The Motor Driver Main PWB or Motor Driver Sub PWB for 7830/35 model is installed in a 7845/55 model. Or, the Motor Driver Main PWB or Motor Driver Sub PWB for 7830/35 model is installed in a 7845/55 model.

### Cause/Action

1. Turn the power OFF and ON.
2. Replace with the correct Motor Driver Main PWB or Motor Driver Sub PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))





## 347-211 Exit 1 OCT Home Fault

BSD-ON: [10.7 Fused Paper Exit 1](#)

After the Exit 1 OCT Motor has run for the specified operation time, the Exit 1 OCT Home Position Sensor does not turn ON.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Check the Exit 1 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 1 OCT Home Position Sensor, for damage and check the OCT Chute for improper installation.

### Procedure

Turn the power ON and enter the Diag mode.

Turn ON [dC330](#) [077-109]. Move the OCT Chute manually to block/clear the light path to the Exit 1 OCT Home Position Sensor. **Does the display change between High/Low?**

Y N  
Use [OF 99-1](#) RAP to check the Exit 1 OCT Home Position Sensor.

Press the Stop button. Turn ON [dC330](#) [077-040] and [dC330](#) [077-041] alternately. **Does the OCT 1 Chute move forward and backward?**

Y N  
**Is the voltage between the MDS PWB [P/J524-3/4 \(+\)](#) and the GND (-) +24VDC?**  
Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn the power OFF and check the Exit 1 OCT Motor Gear for blockage and the OCT Chute for damage. Also, check the connection between the MDS PWB [P/J524](#) and the Exit 1 OCT Motor [J271](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Exit 1 OCT Motor ([PL 17.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF.

Replace the MD PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 347-212 Exit 2 OCT Home Fault

BSD-ON:[BSD 10.9 Fused Paper Exit 2 \(2 of 4\)](#)

After the Exit 2 OCT Motor has run for the specified operation time, the Exit 2 OCT Home Position Sensor does not turn ON.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

- Check the Exit 2 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 2 OCT Home Position Sensor, for damage and check the OCT 2 Chute for improper installation.

### Procedure

Turn the power ON and enter the Diag mode.

Turn ON [dC330](#) [077-110]. Move the OCT 2 Chute manually to block/clear the light path to the Exit 2 OCT Home Position Sensor. **Does the display change between High/Low?**

Y N  
Use Transmissive Sensor RAP [OF 99-2](#) to check the Exit 2 OCT Home Position Sensor.

Press the Stop button. Turn ON [dC330](#) [077-045] and [dC330](#) [077-046] alternately. **Does the OCT 2 Chute move forward and backward?**

Y N  
**Is the voltage between the MDM PWB [P/J522-A3/A4 \(+\)](#) and the GND (-) +24VDC?**  
Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#) .

Turn the power OFF and check the Exit 2 OCT Motor Gear for blockage and the OCT 2 Chute for damage. Also, check the connection between the MDS PWB [P/J522](#) and the Exit 2 OCT Motor [P/J266](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts in sequence:

- Exit 2 OCT Motor ([PL 17.5](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF.

Replace the MD PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 347-213 Finisher Type Mismatch

BSD-ON: [3.8 PWB Communication \(8 of 9\)](#)

BSD-ON: [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

System detect incorrect finisher type.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Power down the machine.

**NOTE:** The Integrated Finisher is only applicable to the 7830/35 machines. If an Integrated Finisher is installed on a 7845/55 machine, perform the following:

- a. Disconnect the Finisher
  - b. Power up the machine
  - c. Go to [dC131](#) and set NVM location 742-869 to 0.
  - d. Exit diagnostics
2. Turn the power OFF and connect a Finisher that is supported by this machine.
    - a. Power up the machine
    - b. Verify the fault has cleared

## 347-310 Finisher Communication Fault

BSD-ON: [3.8 PWB Communication \(8 of 9\)](#)

BSD-ON: [12.9 Office Finisher LX Communication \(IOT-Finisher\)](#)

Communication failure between the Finisher and the IOT was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Sub PWB [P590](#) and the Finisher PWB for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
  - The power supply at the Finisher.

#### NOTE:

For more information on the PWB and power supply at the Finisher, refer to the Finisher Supplementary Service Manual.

3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 347-320 ALL Destination Tray Broken

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

All Trays connected to the IOT have become unusable.

### Cause/Action

Enter [dC122](#) Fault History. Go to the RAP of the affected Output Tray.



## 361-350 LPH Power On Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The connection between the Motor Driver Main PWB [P/J532](#) and the LPH Rear PWB (Y) [P/J553](#) for open circuit and poor contact.
- The connection between the LPH Header PWB (Y) [P/J565](#) and the Driver PWB (Y) [P/J573](#) for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB [P/J557-28/27](#) and the LPH Rear PWB (Y) [P/J561-1/2](#))
- The Flat Cable between the LPH Header PWB (Y) [P/J569](#) and the Driver PWB (Y) [P/J577](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J581](#)) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-351 LPH Power On Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The connection between the Motor Driver Main PWB [P/J532](#) and the LPH Rear PWB (M) [P/J552](#) for open circuit and poor contact.
- The connection between the LPH Header PWB (M) [P/J564](#) and the Driver PWB (M) [P/J572](#) for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB [P/J556-28/27](#) and the LPH Rear PWB (M) [P/J560-1/2](#))
- The Flat Cable between the LPH Header PWB (M) [P/J568](#) and the Driver PWB (M) [P/J576](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J580](#)) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-352 LPH Power On Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The connection between the Motor Driver Main PWB [P/J532](#) and the LPH Rear PWB (C) [P/J551](#) for open circuit and poor contact.
- The connection between the LPH Header PWB (C) [P/J563](#) and the Driver PWB (C) [P/J571](#) for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB [P/J555-28/27](#) and the LPH Rear PWB (C) [P/J559-1/2](#))
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-353 LPH Power On Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The connection between the Motor Driver Main PWB [P/J532](#) and the LPH Rear PWB (K) [P/J550](#) for open circuit and poor contact.
- The connection between the LPH Header PWB (K) [P/J562](#) and the Driver PWB (K) [P/J570](#) for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB [P/J554-28/27](#) and the LPH Rear PWB (K) [P/J558-1/2](#))
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-354 LPH Download Data Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) [P/J569](#) and the Driver PWB (Y) [P/J577](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J581](#)) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The EEPROM data of the LPH Unit (Y) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-355 LPH Download Data Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) [P/J568](#) and the Driver PWB (M) [P/J576](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J580](#)) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The EEPROM data of the LPH Unit (M) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))



## 361-356 LPH Download Data Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The EEPROM data of the LPH Unit (C) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).
- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-357 LPH Download Data Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The EEPROM data of the LPH Unit (K) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).
- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-358 LPH Mismatch Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

The model number of the LPH Unit (Y) does not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the values in [dC131](#) [749-157] (LPH Specific Code 4Y) do not contain corruption, etc.
- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).

If no problems are found, replace the LPH Unit (Y) ([PL 2.1](#)).

## 361-359 LPH Mismatch Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

The model number of the LPH Unit (M) does not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the values in [dC131](#) [749-158] (LPH Specific Code 4M) do not contain corruption, etc.
- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).

If no problems are found, replace the LPH Unit (M) ([PL 2.1](#)).

## 361-360 LPH Mismatch Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

The model number of the LPH Unit (C) does not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the values in [dC131](#) [749-159] (LPH Specific Code 4C) do not contain corruption, etc.
- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).

If no problems are found, replace the LPH Unit (C) ([PL 2.1](#)).

## 361-361 LPH Mismatch Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

The model number of the LPH Unit (K) does not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Check that the values in [dC131](#) [749-160] (LPH Specific Code 4K) do not contain corruption, etc.
- Use Software Versions ([dC108](#)) to verify the most current software is installed.
  - If a software upgrade is necessary go to [GP 9](#).

If no problems are found, replace the LPH Unit (K) ([PL 2.1](#)).

## 361-362 LPH Read Fault Y

### BSD-ON: 6.6 LPH Control (Y)

Communication error between MCU-PF and LPH Unit (Y) (data read error from LPH)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

## 361-363 LPH Read Fault M

### BSD-ON: 6.7 LPH Control (M)

Communication error between MCU-PF and LPH Unit (M) (data read error from LPH)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

## 361-364 LPH Read Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

Communication error between MCU-PF and LPH Unit (C) (data read error from LPH)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-365 LPH Read Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

Communication error between MCU-PF and LPH Unit (K) (data read error from LPH)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problems are found, replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-366 LPH Write Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

Communication error between MCU-PF and LPH Unit (Y) (data write error to LPH).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Refer to NVM [749-046] (Write Retry Data Y). **Is the value of NVM [749-046] = '0'?**

Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) [P/J569](#) and the Driver PWB (Y) [P/J577](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J581](#)) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB [P/J532](#).

## 361-367 LPH Write Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

Communication error between MCU-PF and LPH Unit (M) (data write error to LPH).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Refer to NVM [749-047] (Write Retry Data M). **Is the value of NVM [749-047] = '0'?**

Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) [P/J568](#) and the Driver PWB (M) [P/J576](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J580](#)) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB [P/J532](#).

## 361-368 LPH Write Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

Communication error between MCU-PF and LPH Unit (C) (data write error to LPH).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Refer to NVM [749-048] (Write Retry Data C). **Is the value of NVM [749-048] = '0'?**

Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB [P/J532](#).

## 361-369 LPH Write Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

Communication error between MCU-PF and LPH Unit (K) (data write error to LPH).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Refer to NVM [749-049] (Write Retry Data K). **Is the value of NVM [749-049] = '0'?**

Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB [P/J532](#).

## 361-370 LPH Act Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

Communication error between MCU-PF and LPH Unit (Y) (error in the communication IC or cable).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

<b>Y</b>	<b>N</b>
	If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) [P/J569](#) and the Driver PWB (Y) [P/J577](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J581](#)) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-371 LPH Act Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

Communication error between MCU-PF and LPH Unit (M) (error in the communication IC or cable).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

<b>Y</b>	<b>N</b>
	If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) [P/J568](#) and the Driver PWB (M) [P/J576](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J580](#)) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))



## 361-372 LPH Act Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

Communication error between MCU-PF and LPH Unit (C) (error in the communication IC or cable).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

<b>Y</b>	<b>N</b>
	If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-373 LPH Act Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

Communication error between MCU-PF and LPH Unit (K) (error in the communication IC or cable).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?**

<b>Y</b>	<b>N</b>
	If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

If no problem is found, replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

## 361-374 LPH Chip Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

Open circuit detected in LPH Unit (Y) (open circuit between DELSOL and SLED).

**NOTE:** •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) has occurred. **Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?**

**Y** **N**  
|  
Replace the LPH Unit (Y). ([PL 2.1](#))

Go to the appropriate FIP

## 361-375 LPH Chip Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

Open circuit detected in LPH Unit (M) (open circuit between DELSOL and SLED).

**NOTE:** •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) has occurred. **Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?**

**Y** **N**  
|  
Replace the LPH Unit (M). ([PL 2.1](#))

Go to the appropriate FIP

## 361-376 LPH Chip Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

Open circuit detected in LPH Unit (C) (open circuit between DELSOL and SLED).

**NOTE:** •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) has occurred. **Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?**

**Y N**  
|     Replace the LPH Unit (C). ([PL 2.1](#))

Go to the appropriate FIP

## 361-377 LPH Chip Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

Open circuit detected in LPH Unit (K) (open circuit between DELSOL and SLED).

**NOTE:** •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) has occurred. **Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?**

**Y N**  
|     Replace the LPH Unit (K). ([PL 2.1](#))

Go to the appropriate FIP

## 361-378 LPH Ltrg Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

The Ltrg signal (image synchronization signal) failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J557](#) and the LPH Rear PWB (Y) [P/J561](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) [P/J569](#) and the Driver PWB (Y) [P/J577](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J581](#)) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation

If no problem is found, replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 361-379 LPH Ltrg Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

The Ltrg signal (image synchronization signal) failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J556](#) and the LPH Rear PWB (M) [P/J560](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) [P/J568](#) and the Driver PWB (M) [P/J576](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J580](#)) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation

If no problem is found, replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 361-384 LPH Ltrg Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

The Ltrg signal (image synchronization signal) failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J555](#) and the LPH Rear PWB (C) [P/J559](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) [P/J567](#) and the Driver PWB (C) [P/J575](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J579](#)) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation

If no problem is found, replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 361-385 LPH Ltrg Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

The Ltrg signal (image synchronization signal) failure was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB [P/J554](#) and the LPH Rear PWB (K) [P/J558](#) for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) [P/J566](#) and the Driver PWB (K) [P/J574](#) for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( [P/J578](#)) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation

If no problem is found, replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 361-386 LPH PLL Lock Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

LPH PLL lock mechanism failure (LPH clock failure).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-354](#) LPH Download Fail Y has occurred. **Has Fail [361-354](#) occurred?**

Y N

Replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-354](#) RAP.

## 361-387 LPH PLL Lock Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

LPH PLL lock mechanism failure (LPH clock failure).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-355](#) LPH Download Fail M has occurred. **Has Fail [361-355](#) occurred?**

Y N

Replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-355](#) RAP.

## 361-388 LPH PLL Lock Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

LPH PLL lock mechanism failure (LPH clock failure).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-356](#) LPH Download Fail C has occurred. **Has Fail [361-356](#) occurred?**

Y N

Replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-356](#) RAP.

## 361-389 LPH PLL Lock Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

LPH PLL lock mechanism failure (LPH clock failure).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-357](#) LPH Download Fail K has occurred. **Has Fail [361-357](#) occurred?**

Y N

Replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-357](#) RAP.

## 361-390 LPH FFC Connect Positive Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

The image data (Y) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-374](#) LPH Chip Fail Y has occurred. **Has** **Fail**  
[361-374](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-374](#) RAP.

## 361-391 LPH FFC Connect Positive Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

The image data (M) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-375](#) LPH Chip Fail M has occurred. **Has** **Fail**  
[361-375](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-375](#) RAP.



## 361-392 LPH FFC Connect Positive Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

The image data (C) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-376](#) LPH Chip Fail C has occurred. **Has** **Fail**  
[361-376](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-376](#) RAP.

## 361-393 LPH FFC Connect Positive Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

The image data (K) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-377](#) LPH Chip Fail K has occurred. **Has** **Fail**  
[361-377](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-377](#) RAP.

## 361-394 LPH FFC Connect Negative Fault Y

BSD-ON: [6.6 LPH Control \(Y\)](#)

The image data (Y) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-374](#) LPH Chip Fail Y has occurred. **Has** **Fail**  
[361-374](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (Y) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-374](#) RAP.

## 361-395 LPH FFC Connect Negative Fault M

BSD-ON: [6.7 LPH Control \(M\)](#)

The image data (M) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Reseat the Drum Modules. Power off, then on if the fault does not clear.

### Procedure

Enter DC122 Fail History. Check whether [361-375](#) LPH Chip Fail M has occurred. **Has** **Fail**  
[361-375](#) occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (M) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-375](#) RAP.

## 361-396 LPH FFC Connect Negative Fault C

BSD-ON: [6.8 LPH Control \(C\)](#)

The image data (C) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-376](#) LPH Chip Fail C has occurred. **Has** **Fail**  
**361-376** occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (C) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-376](#) RAP.

## 361-397 LPH FFC Connect Negative Fault K

BSD-ON: [6.9 LPH Control \(K\)](#)

The image data (K) cannot be received normally from the MCU.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether [361-377](#) LPH Chip Fail K has occurred. **Has** **Fail**  
**361-377** occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (K) ([PL 2.1](#))
- LPH Cable Assembly ([PL 2.2](#))
- LPH Rear PWB (K) ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Proceed to the [361-377](#) RAP.

## 361-398 ASIC 1 Initialize Fault

BSD-ON: [3.6 PWB Communication \(MCU-PF - Motor Driver Main PWB\)](#)

The ASIC 1 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC (image processing chip for Y and M) that is installed on the Motor Driver Main PWB.

### Procedure

Enter DC122 Fail History and check whether any other LPH related Fail has occurred. **Has any Chain No. 061 Fail occurred?**

Y N

Replace the following parts in sequence:

- LPH Cable Assembly ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Go to the appropriate FIP

## 361-399 ASIC 2 Initialize Fault

BSD-ON: [3.6 PWB Communication \(MCU-PF - Motor Driver Main PWB\)](#)

The ASIC 2 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC (image processing chip for C and K) that is installed on the Motor Driver Main PWB.

### Procedure

Enter DC122 Fail History and check whether any other LPH related Fail has occurred. **Has any Chain No. 061 Fail occurred?**

Y N

Replace the following parts in sequence:

- LPH Cable Assembly ([PL 2.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MCU-PF PWB (7830/35) ([PL 18.2A](#))
- MCU-PF PWB (7845/55) ([PL 18.2B](#))

Go to the appropriate FIP

## 361-610 Bitz1 CONTIF Fault

BSD-ON: [3.6 PWB Communication \(MCU-PF - Motor Driver Main PWB\)](#)

The Valid signal for Y color or M color was detected to be in error. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, did not turn ON at the given timing or turns ON at an unscheduled timing. (this Fail is a hidden failure and it is registered only in the History.)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connectors ( [J335](#), [P451](#), and [J1](#)) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
3. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - BP PWB (7830/35) ([PL 18.2A](#))
  - BP PWB (7845/55) ([PL 18.2B](#))

## 361-611 Bitz2 CONTIF Fault

BSD-ON: [3.6 PWB Communication \(MCU-PF - Motor Driver Main PWB\)](#)

The Valid signal for C color or K color was detected to be in error. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, did not turn ON at the given timing or turns ON at an unscheduled timing. (this Fail is a hidden failure and it is registered only in the History.)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connectors ( [J335](#), [P451](#), and [J1](#)) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
3. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - BP PWB (7830/35) ([PL 18.2A](#))
  - BP PWB (7845/55) ([PL 18.2B](#))

## 362-xxx Chain 62 Entrance Rap

The following table includes a list of chain 62 fault codes, fault description and links to associated RAPs. Use the table to locate the appropriate RAP for the fault code.

Table 1 362-xxx Fault Table

Fault Code	Description	RAP
362-396	CCD Cable Connection Fault	<a href="#">362-396</a>
362-397	IIT-Cont Video Cable Connection Fault	<a href="#">362-397</a>
362-398	IIT-Cont I/O Cable Connection Fault	<a href="#">362-398</a>
362-399	DADF Cable Fail	<a href="#">362-901 (7830/35)</a> <a href="#">362-901 (7845/55)</a>
362-450	Calibration Dark Range Not Clear	<a href="#">362-900</a>
362-451	Calibration Dark Range Not Done	<a href="#">362-900</a>
362-452	Calibration Pixel Offset Not Clear	<a href="#">362-900</a>
362-453	Calibration Pixel Offset Not Done	<a href="#">362-900</a>
362-454	Calibration Gain Range Not Clear	<a href="#">362-900</a>
362-455	Calibration Gain Range Not Done	<a href="#">362-900</a>
362-457	Calibration Pixel Gain Not Done	<a href="#">362-900</a>
362-458	Calibration Dark Range Errors	<a href="#">362-900</a>
362-459	Calibration Pixel Offset Hi Errors	<a href="#">362-900</a>
362-460	Calibration Pixel Offset Lo Errors	<a href="#">362-900</a>
362-461	Calibration Gain Range Errors	<a href="#">362-900</a>
362-462	Calibration Pixel Gain Hi Errors	<a href="#">362-900</a>
362-463	Calibration Pixel Gain Lo Errors	<a href="#">362-900</a>
362-466	Dark Range Rail Error	<a href="#">362-900</a>
362-467	Gain Range Rail Error	<a href="#">362-900</a>
362-468	Color State Errors	<a href="#">362-900</a>
362-476	Stepper Home Error	<a href="#">362-476</a>
362-481	DADH Client Time Out	<a href="#">362-481 (7830/35)</a> <a href="#">362-481 (7845/55)</a>
362-486	Supply 24 Volt Error	<a href="#">362-486</a>
362-490	Data Steerer Error	<a href="#">362-490</a>
362-491	Data Steerer Tx Error	<a href="#">362-490</a>
362-779	FPGA not loaded	<a href="#">362-779</a>
362-780	FPGA CRC Error	<a href="#">362-780</a>
362-781	IIT Remote NVM Out of Range	
362-782	IIT Remote NVM Read Timeout	
362-783	SPDH Side 1 Hotline Error	
362-784	IIT Platen Hotline Error	

## 362-396 CCD Cable Connection Fault

**BSD-ON:** [BSD 3.10 Poor Cable Connection](#)

A CCD Flat Cable connection error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

- Turn the power OFF and ON.
  - Turn the power OFF and check the following:
    - Check the Flat Cable between the CCD Lens Assy [P/J700](#) and the IIT PWB [P/J710](#) for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
    - The coaxial cable between the IIT PWB [P/J7191](#) and the BP PWB [P336](#) for an open circuit, short circuit, and poor contact
    - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances
- If no problems are found, replace the following parts in sequence:
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
  - SBC PWB ([PL 35.2](#))
  - BP PWB (7830/35) ([PL 18.2A](#))
  - BP PWB (7845/55) ([PL 18.2B](#))

## 362-397 IIT-Cont Video Cable Connection Fault

**BSD-ON:** [BSD 3.10 Poor Cable Connection](#)

An SBC Video Cable connection error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The coaxial cable between the IIT PWB [P/J7191](#) and the BP PWB [P336](#) for open circuit, short circuit, and poor contact
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances

If no problems are found, replace the following parts in sequence:

- SBC PWB ([PL 35.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7830/35) ([PL 18.2A](#))
- BP PWB (7845/55) ([PL 18.2B](#))

## 362-398 IIT-Cont I/O Cable Connection Fault

**BSD-ON:** [BSD 3.10 Poor Cable Connection](#)

An SBC I/O Cable connection error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connection between the IIT PWB [P/J7192](#) and the BP PWB [P/J390](#) for open circuit, short circuit, and poor contact
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances

If no problems are found, replace the following parts in sequence:

- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7830/35) ([PL 18.2A](#))
- BP PWB (7845/55) ([PL 18.2B](#))
- SBC PWB ([PL 35.2](#))

## 362-468 Color State Errors

Pixel clock error from the full width array

### Procedure

Switch the power off, then on.

## 362-476 Stepper Home Error

BSD-ON: [BSD 6.3 Carriage Control](#)

IIT Reg. Sensor not cleared/made in time

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Switch the power off, then on.

Enter [dC122](#) and check the Fault History for additional faults. **Fault codes 362-310 and 362-481 are BOTH also present.**

Y N

**Fault Code 362-481 is also present.**

Y N

Go to the following RAPs:

- [362-904](#) Lamp Illumination Fault
- [362-905](#) Platen AOC Fault

Go to the [362-901 \(7830/35\)](#) IPS-DADF Communication Fault RAP to troubleshoot.

Go to the following RAPs:

- [362-902 \(7830/35\)](#) IIT PWB Power Cable Connection Fault RAP
- [362-903 \(7845/55\)](#) IIT PWB Power Cable Connection Fault RAP
- [362-398](#) IIT-Cont I/O Cable Connection Fault RAP



## 362-481 (7830/35) DADF Communication Timeout

BSD-ON: [BSD 3.2 PWB Communication \(2 of 9\)](#)

Communication cannot be established between the SBC PWB and the DADF PWB.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and ON.

Enter [dC122](#) and check the Fault History for additional faults. **Fault Code 362-310 is also present.**

Y N

Turn the power OFF and check the following:

- The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances
- The connection between the BP PWB P/J 390 and the IIT PWB [P/J7192](#) for open circuit, short circuit, and poor contact
- The connection between the IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J751](#) (7830/35) or [P/J751](#) and [P/J752](#) (7845/55) for open circuit, short circuit, poor contact, damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB

If no problems are found, replace the following parts in sequence:

- DADF PWB ([PL 51.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7830/35) ([PL 18.2A](#))
- SBC PWB ([PL 35.2](#))

Go to the [362-901 \(7830/35\)](#) IPS-DADF Communication Fault RAP to troubleshoot.

## 362-481 (7845/55) DADF Communication Timeout

BSD-ON: [BSD 3.3 PWB Communication \(3 of 9\)](#)

Communication cannot be established between the SBC PWB and the DADF PWB.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and ON.

Enter [dC122](#) and check the Fault History for additional faults. **Fault Code 362-310 is also present.**

Y N

Turn the power OFF and check the following:

- The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances
- The connection between the BP PWB P/J 390 and the IIT PWB [P/J7192](#) for open circuit, short circuit, and poor contact
- The connection between the IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J751](#) (7830/35) or [P/J751](#) and [P/J752](#) (7845/55) for open circuit, short circuit, poor contact, damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB

If no problems are found, replace the following parts in sequence:

- DADF PWB ([PL 51.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7845/55) ([PL 18.2B](#))
- SBC PWB ([PL 35.2](#))

Go to the [362-901 \(7830/35\)](#) IPS-DADF Communication Fault RAP to troubleshoot.

## 362-486 Supply 24 Volt Error

24 volts not detected by the IIT

### Procedure

Go to [362-902 \(7830/35\)](#) or [362-903 \(7845/55\)](#).

## 362-490 Data Steerer Error

Failed to transfer video from

### Procedure

Switch the power off, then on.

## 362-779 FPGA not loaded

FPGA has corrupted image or hasn't been loaded

### Procedure

Reload the FPGA by reloading the IIT SW.

Refer to [GP 9](#) to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

## 362-780 FPGA CRC Error

FPGA has corrupted image or hasn't been loaded

### Procedure

Reload the FPGA by reloading the IIT SW.

Refer to [GP 9](#) to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

## 362-900 IIT Calibration RAP

BSD-ON: [BSD 1.7 DC Power Generation \(5 of 5\)](#)

BSD-ON: [BSD 1.8 IIT DC Power Distribution](#)

BSD-ON: [BSD 6.4 Image Input \(1 of 2\) \(SBC to CCD\)](#)

### Procedure

Switch the power off, then on.

### Procedure

Switch the power off, then on. **The fault is still present.**

Y N  
Perform [Final Actions](#).

Check [ADJ 6.2](#) IIT LEad Edge Registration. **The check is good.**

Y N  
Perform [ADJ 6.2](#) IIT LEad Edge Registration.

Check the following voltages on the IIT Trans PWB.

- TP10 to GND: +3.3 VDC
- TP20 to GND: +3.3VDC
- TP30 to GND: +10VDC

**The voltages are good.**

Y N  
**+24VDC is measured on [P/J720](#) on the IIT Trans PWB from pin 2 to pin 1.**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Replace the IIT Trans PWB ([PL 1.6](#))

Check that all optics mirrors are correctly aligned ([ADJ 6.6](#) Optical Axis Correction). **The check is good.**

Y N  
Perform [ADJ 6.6](#) Optical Axis Correction.

Check the CCD assembly for loose electrical connections or misalignment of the assembly.

**The CCD assembly is good.**

Y N  
Correct the electrical connection or misalignment.

Check the IIT Trans PWB for loose connections or damage. **The IIT Trans PWB is good.**

Y N  
Correct the electrical connections or replace the IIT Trans PWB ([PL 1.6](#)).

Check the wiring between the IIT Trans PWB [P/J710](#) and the CCD PWB ([P/J700](#)). **The wiring is good.**

Y N  
Repair the wiring.

Clean the optics:

- Switch off the power and allow the Exposer Lamp to cool off.
- Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
- Clean the Exposure Lamp with a clean cloth and Film Remover.
- Clean the Lens with Lens and Mirror Cleaner and a lint free cloth.
- Reassemble and switch on power.

**The fault is still present.**

Y N  
Perform [Final Actions](#).

Perform the following in order:

- Reload SW using the Forced Altboot process ([GP 9](#)).
- Replace the LED Lamp ([PL 1.5](#))
- Replace the IIT Control Cable ([PL 18.1](#))
- Replace the IIT Trans PWB ([PL 1.6](#))
- Replace the CCD Lens Assembly ([PL 1.3](#))
- Replace the Hard Drive ([PL 35.2](#)).
- Replace the SBC PWB ([PL 35.2](#))

## 362-901 (7830/35) IPS-DADF Communication Fault

BSD-ON: [3.2 PWB Communication \(SBC - 2 Pass DADF\)](#)

Communication cannot be established between the SBC PWB and the DADF PWB.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances
  - The connection between the BP PWB P/J 390 and the IIT PWB [P/J7192](#) for open circuit, short circuit, and poor contact
  - The connectors of the BP PWB [P/J390](#) and the IIT PWB [P/J7192](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
  - The connection between the IIT PWB and the DADF PWB for open circuit, short circuit, poor contact damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
    - **7830/35**  
IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J752](#)
    - **7845/55**  
IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J752](#)

If no problems are found, replace the following parts in sequence:

- DADF PWB ([PL 51.2](#))
- SBC PWB ([PL 35.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7830/35) ([PL 18.2A](#))

## 362-901 (7845/55) IPS-DADF Communication Fault

BSD-ON: [3.3 PWB Communication \(SBC - 1 Pass DADF\)](#)

Communication cannot be established between the SBC PWB and the DADF PWB.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances
  - The connection between the BP PWB P/J 390 and the IIT PWB [P/J7192](#) for open circuit, short circuit, and poor contact
  - The connectors of the BP PWB [P/J390](#) and the IIT PWB [P/J7192](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
  - The connection between the IIT PWB and the DADF PWB for open circuit, short circuit, poor contact damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
    - **7830/35**  
IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J752](#)
    - **7845/55**  
IIT PWB [J750](#) and the DADF PWB [P/J751](#) and [P/J752](#)

If no problems are found, replace the following parts in sequence:

- DADF PWB ([PL 51.2](#))
- SBC PWB ([PL 35.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7845/55) ([PL 18.2B](#))

## 362-902 (7830/35) IIT PWB Power Cable Connection Fault

BSD-ON: [BSD 1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON: [BSD 1.7 DC Power Generation \(5 of 5\)](#)

BSD-ON: [BSD 1.8 IIT DC Power Distribution](#)

The IIT PWB power source error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Right Cover.

Turn the power ON. Is the voltage between the Main LVPS [P/J502-2 \(+\)](#) and [P/J502-4 \(-\)](#) +24VDC?

Y N  
| Go to [+24VDC Power RAP \(7830/35\)](#) .

Turn the power OFF and check the connection between the Main LVPS PWB [P/J502](#) and the IIT PWB [P/J720](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the IIT PWB (Switch the EEPROM) ([PL 1.8](#)).

## 362-903 (7845/55) IIT PWB Power Cable Connection Fault

BSD-ON: [BSD 1.7 DC Power Generation \(5 of 5\)](#)

BSD-ON: [BSD 1.8 IIT DC Power Distribution](#)

The IIT PWB power source error was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector [P592](#) of the MD Sub PWB and open the Chassis Assembly.

Turn the power ON. Is the voltage between the Sub LVPS [P/J505-1 \(+\)](#) and [P/J505-3 \(-\)](#) +24VDC?

Y N  
| Go to [+24VDC Power RAP \(7845/55\)](#) .

Turn the power OFF and check the connection between the Sub LVPS PWB [P/J505](#) and the IIT PWB [P/J720](#) for open circuit, short circuit, and poor contact.

If no problems are found, replace the IIT PWB (Switch the EEPROM) ([PL 1.8](#)).

## 362-904 Lamp Illumination Fault

BSD-ON: [BSD 6.2 Document Illumination](#)

BSD-ON: [BSD 6.5 Image Input \(2 of 2\) \(CCD to SBC\)](#)

Insufficient light from Lamp detected in CCD (during white gradation correction/AGC before Scan starts)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### CAUTION

*When checking at the vicinity of the CCD and the IIT Trans PWB with the power remaining ON and the CCD Lens Cover removed, do not allow the Carriage to move all the way to the right. If the Carriage is moved all the way to the right, the LED Lamp PWB will contact the Earth Plate, which then shorts the LED Lamp PWB and damages it.*

### Initial Actions

Check whether there is something blocking the light and check the Lamp, Lens, Mirror, and White Color Correction Plate for deterioration or contamination.

### Procedure

- Turn the power ON and perform the following voltage checks on the IIT PWB:
  - Check for ANA 10V between TP 30 and GND.
  - Check for ANA 3.3V between TP 20 and GND.
  - Check for +3.3VDC between TP 10 and DC COM.

If one or more voltages is incorrect, replace the IIT/PS PWB (PL 1.8); otherwise, continue with Step 2.

- Check the following:
  - LED Lamp broken: [dC330 \[062-002\] \(PL 1.7\)](#)  
Switch the power off.
  - Check the Flat Cable between the LED Lamp PWB [P/J1](#) and the IIT PWB [P/J723](#) for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - Check the Flat Cable between the CCD Lens Assy [P/J700](#) and the IIT PWB [P/J710](#) for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - The coaxial cable between the IIT PWB [P/J7191](#) and the BP PWB [P336](#) for open circuit, short circuit, and poor contact
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances

## 362-905 Platen AOC Fault

BSD-ON: [BSD 6.5 Image Input \(2 of 2\) \(CCD to SBC\)](#)

A CCD output error was detected when performing AOC.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### CAUTION

*When checking at the vicinity of the CCD and the IIT Trans PWB with the power remaining ON and the CCD Lens Cover removed, do not allow the Carriage to move all the way to the right. If the Carriage is moved all the way to the right, the LED Lamp PWB will contact the Earth Plate, which then shorts the LED Lamp PWB and damages it.*

### Initial Actions

Check whether there is something blocking the light and check the Lamp, Lens, Mirror, and White Color Correction Plate for deterioration or contamination.

### Procedure

- Switch the power off, then on.
- If the problem persists, switch power off and check the following:
  - Check the Flat Cable between the CCD Lens Assy [P/J700](#) and the IIT PWB [P/J710](#) for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - The coaxial cable between the IIT PWB [P/J7191](#) and the BP PWB [P336](#) for an open circuit, short circuit, and poor contact
  - The connector ( [J309](#)) between the SBC PWB and the BP PWB for damage and foreign substances

If no problems are found, replace the following parts in sequence:

- CCD Lens Assy ([PL 1.5](#))
- SBC PWB ([PL 35.2](#))
- IIT PWB (Switch the EEPROM) ([PL 1.8](#))
- BP PWB (7830/35) ([PL 18.2A](#))
- BP PWB (7845/55) ([PL 18.2B](#))

## 366-xxx Chain 66 Entry Rap

The following table includes a list of chain 62 fault codes, fault description and links to associated RAPs. Use the table to locate the appropriate RAP for the fault code.

Table 1

Fault Code	Description	RAP
366-450	Calibration Dark Range Not Clear	<a href="#">366-900</a>
366-451	Calibration Dark Range Not Done	<a href="#">366-900</a>
366-452	Calibration Pixel Offset Not Clear	<a href="#">366-900</a>
366-453	Calibration Pixel Offset Not Done	<a href="#">366-900</a>
366-454	Calibration Gain Range Not Clear	<a href="#">366-900</a>
366-455	Calibration Gain Range Not Done	<a href="#">366-900</a>
366-457	Calibration Pixel Gain Not Done	<a href="#">366-900</a>
366-458	Calibration Dark Range Errors	<a href="#">366-900</a>
366-459	Calibration Pixel Offset Hi Errors	<a href="#">366-900</a>
366-460	Calibration Pixel Offset Lo Errors	<a href="#">366-900</a>
366-461	Calibration Gain Range Errors	<a href="#">366-900</a>
366-462	Calibration Pixel Gain Hi Errors	<a href="#">366-900</a>
366-463	Calibration Pixel Gain Lo Errors	<a href="#">366-900</a>
366-466	Dark Range Rail Error	<a href="#">366-900</a>
362-467	Gain Range Rail Error	<a href="#">366-900</a>
362-468	Color State Errors	
366-490	Data Steerer Error	<a href="#">366-490</a>
366-491	Data Steerer Tx Error	<a href="#">366-490</a>
366-779	FPGA not loaded	<a href="#">366-779</a>
366-780	FPGA CRC Error	<a href="#">366-780</a>
366-783	SPDH Side 2 Hotline Error	

## 366-490 Data Steerer Error - Taurus 2 (DADF-130 / 1 Pass)

BSD-ON: [BSD 5.14 DADF Document Scan \(DADF-130 / 1 Pass\)](#)

Data steerer error to/from Taurus 2 - Second side error.

### Procedure

Switch the power off, then on.



## 366-779 FPGA Not Loaded (Side 2) (DADF-130 / 1 Pass)

BSD-ON: [BSD 5.14 DADF Document Scan \(DADF-130 /1 Pass\)](#)

FPGA has corrupted image or has not been loaded - Second side error.

### Cause/Action

Reload the FPGA by reloading the IIT SW.

Refer to [GP 9](#) to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

## 366-780 FPGA CRC Error (Side 2) (DADF-130 / 1 Pass)

BSD-ON: [BSD 5.14 DADF Document Scan \(DADF-130 /1 Pass\)](#)

FPGA has corrupted image or has not been loaded - Second side error.

### Cause/Action

Reload the FPGA by reloading the IIT SW.

Refer to [GP 9](#) to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

## 366-900 IIT Side 2 Calibration RAP (DADF-130 / 1 Pass)

BSD-ON: [BSD 5.14 DADF Document Scan \(DADF-130 /1 Pass\)](#)

Dark Range Status bit is not clear prior to calibration - Second side error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

1. Switch the power off, then on; if the problem remains, check the following:
2. Turn OFF the power and check the following:
  - The flat cable ([PL 55.8](#)) between the CIS [P/J1](#) and the DCDC PWB [P/J746](#) for open circuits, short circuits, and poor contacts.
  - The coaxial cable ([PL 55.2](#)) between the DCDC PWB [P/J745](#) and the CIS PWB [P/J740](#) for open circuits, short circuits, and poor contacts.
  - The connector ([P/J17](#)) between the SBC PWB and the CIS PWB for poor contact.
3. Turn the power ON.
4. If the problem still exists, perform the following in sequence:
  - Reload SW using a Forced Altboot ([GP 9](#)).
  - Replace the DCDC PWB ([PL 55.2](#))
  - Replace the CIS PWB ([PL 35.2](#))
  - Replace the Hard Drive ([PL 35.2](#)).
  - Replace the SBC PWB ([PL 35.2](#)).



## 371-105 (7830/35) Regi Sensor On Jam (Tray 1/2/3/4)

BSD-ON: [4.1 Main Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(1 of 2\)](#)

BSD-ON: [BSD 8.4 Tray Module Paper Transportation \(2 of 2\)](#)

BSD-ON: [8.6 Registration](#)

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On during paper feed from the various Trays.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Main Drive Motor (dC330 [042-006]) for operation failure (when the Feed is from Tray 1). (PL 3.2)
- The Takeaway Clutch (dC330 [077-001]) for operation failure (when the Feed is from Tray 1). (PL 15.1)  
The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB P/J417 pin-B14 and P/J417 pin-B15

**NOTE:** It is possible to drive the T/A Roll 1 by combining this with the Main Drive Motor (dC330 [042-006]).
- The TM Takeaway Motor 1 (dC330 [077-031]) for operation failure (when the Feed is from Tray 2, 3, 4). (PL 10.9)  
The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm (3TM/TTM/2TM) or approx. 100 Ohm (1TM)
  - Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
  - Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
- The Tray 1 Feed Roll, Retard Roll, Nudger Roll, and Takeaway Roll 1 for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 1).
- The T/A Roll 2-4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 2, 3, 4).
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- Tray Module PWB (7830/35) (PL 10.9)

## 371-105 (7845/55) Regi Sensor On Jam (Tray 1/2/3/4)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [BSD 8.3 Tray Module Paper Transportation \(1 of 2\)](#)

BSD-ON: [8.6 Registration](#)

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On during paper feed from the various Trays.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Regi Sensor ([dC330 \[077-103\]](#)) for operation failure. ([PL 15.2](#))
- The Takeaway Motor ([dC330 \[077-050\]](#)) for operation failure (when the Feed is from Tray 1). ([PL 15.1](#))  
The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)
  - Between Takeaway Motor [P/J253](#) pin-1 and [P/J253](#) pin-3
  - Between Takeaway Motor [P/J253](#) pin-4 and [P/J253](#) pin-6
- The TM Takeaway Motor 1 ([dC330 \[077-035\]](#)) for operation failure (when the Feed is from Tray 2, 3, 4). ([PL 10.9](#))  
The wire wound resistance of the TM Takeaway Motor 1: approx. 100 Ohm
  - Between TM Takeaway Motor 1 [P/J224](#) pin-2 and [P/J224](#) pin-1/3
  - Between TM Takeaway Motor 1 [P/J224](#) pin-5 and [P/J224](#) pin-4/6
- The TM Takeaway Motor 2 ([DC330 \[077-037\]](#)) for operation failure (when the Feed is from Tray 3, 4). ([PL 11.16](#))  
The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm
  - Between TM Takeaway Motor 2 [P/J226](#) pin-2 and [P/J226](#) pin-1/3
  - Between TM Takeaway Motor 2 [P/J226](#) pin-5 and [P/J226](#) pin-4/6
- The Tray 1 Feed Roll, Retard Roll, Nudger Roll, and T/A Roll 1 for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 1).
- The T/A Roll 2-4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 2, 3, 4).
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. ([PL 15.1](#))

If no problem is found, replace the following parts in sequence:

- Motor Driver Main PWB ([PL 18.2B](#))
- Motor Driver Sub PWB ([PL 18.2B](#))

- Tray Module PWB ([PL 11.17](#))

## 371-210 Tray 1 Lift Up Fault

BSD-ON: [7.8 Tray 1 Paper Stacking](#)

Tray 1 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 1. Turn the power ON and enter the Diag mode. Turn ON **dC330** [071-001] (Tray 1 Feed/Lift Up Motor). **Does the Tray 1 Feed/Lift Up Motor rotate?**

Y N

**Is the voltage between the MDM PWB [P/J520-9 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 1 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances.

- Between the MDM PWB [P/J528-B1](#) and the [P/J528-B2](#)
- Between the MDM PWB [P/J528-B3](#) and the [P/J528-B4](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Check the connection between the MDM PWB [P/J528](#) and the Tray 1 Feed/Lift Up Motor [P/J268](#) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 1 Feed/Lift Up Motor ([PL 9.4](#)).

Measure the resistance between the MDM PWB [P/J528-B1/B2/B3/B4](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button. Turn ON **dC330** [071-102] (Tray 1 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 1 Nudger Level Sensor. **Does the display change between High/Low?**

Y N

Check for damaged wiring or a contaminated sensor. If the wiring is OK, replace the Tray 1 Nudger Level Sensor ([PL 9.4](#)) before replacing the MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 371-212 Tray 1 Paper Size Sensor Broken

BSD-ON: [7.1 Tray 1 Paper Size Sensing](#)

Abnormal Analog voltage to Digital value from Tray 1 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 1 Paper Size Sensor for failure: [dC140](#) [071-200], [dC330](#) [071-104] ([PL 9.1](#))
- The connection between the Tray 1 Paper Size Sensor [P/J174](#) and the MDM PWB [P/J417](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))



## 372-101 Tray 2 Misfeed

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.9 Tray 2 Paper Stacking](#)

BSD-ON: [8.3 Tray Module Paper Transportation \(1 of 2\)](#)

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

The Tray 2 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 2 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [072-001] (Tray 2 Feed/Lift Up Motor). **Does the Tray 2 Feed/Lift Up Motor rotate?**

Y N  
Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 2 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( [P/J550 - 3T](#), [P/J550 - TT](#)).

- Between the Tray Module PWB [P/J550-1](#) and [P/J550-2](#)
- Between the Tray Module PWB [P/J550-3](#) and [P/J550-4](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N  
Check the connection between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) and the Tray 2 Feed/Lift Up Motor ( [P/J221 - 3T](#), [P/J221 - TT](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 2 Feed/Lift Up Motor ([PL 10.3](#), [PL 11.7](#)).

Measure the resistance between the Tray Module PWB [P/J550-1/2/3/4](#) and the Frame. **Is the resistance infinite for all?**

Y N  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button. Turn ON the TM Takeaway Motor.

- [7830/35 - dC330](#) [077-031]
- [7845/55 - dC330](#) [077-035]

**Does the TM Takeaway Motor rotate?**

Y N  
Is the voltage between the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)) [P/J224-2/5 \(+\)](#) and the GND (-) +24VDC?

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)).

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-1](#)
- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-3](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-4](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-6](#)

The following resistance is measured:

- [7830/35](#) - 0.85 Ohms at 25 degrees C / 77 degrees F
- [7845/55](#) - 100 Ohms at 25 degrees C / 77 degrees F

**The correct resistance is measured.**

Y N  
Replace the TM Takeaway Motor.

- TM Takeaway Motor ([PL 10.9](#))

Measure the resistance between the disconnected TM Takeaway Motor connectors ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)), [P/J224 - TT \(7830/35\)](#)) [P/J224-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB ( [P/J551 - 3T](#), [P/J551 - TT](#)) and the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#))

Press the Stop button and open the L/H Cover. Turn ON [dC330](#) [072-103] (Tray 2 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 2 Feed Out Sensor. **Does the display change between High/Low?**

Y N  
Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 2 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure



- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
  - The TM Takeaway Roll Drive Gear for wear and damage
  - Use of paper out of spec (Refer to the spec in Chapter 6 General)
- If no problems are found, replace the following parts in sequence:
- Tray Module PWB (PL 10.9, PL 11.17)

## 372-102 Feed Out Sensor On Jam (Tray 2)

BSD-ON: [7.10 Tray 3 Paper Stacking](#)

BSD-ON: [8.3 Tray Module Paper Transportation \(1 of 2\)](#)

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

Feed Out Sensor 1 does not turn ON within the specified time during transport of the paper fed from Tray 2 to Take Away Path.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Feed Out Sensor 3 (dC330 [073-103] or dC330 [077-106]) for operation failure. (PL 10.12)
  - **7830/35**  
The TM Takeaway Motor 1 (dC330 [077-031]) for operation failure. (PL 10.9)  
The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm
    - ( P/J224 - 3T, P/J224 - TT (7830/35))
    - Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
    - Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
  - **7845/55**  
The TM Takeaway Motor 2 (dC330 [077-037]) for operation failure. (PL 11.7)  
The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm
    - ( P/J226 - 3T, P/J226 - TT (7845/55))
    - Between TM Takeaway Motor 2 P/J226 pin-2 and P/J226 pin-1/3
    - Between TM Takeaway Motor 2 P/J226 pin-5 and P/J226 pin-4/6
  - The T/A Roll 3, 4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
  - The Drive Gear for wear and damage.
  - The LH Cover for improper latching.
  - Transportation failure due to foreign substances in the paper path.
  - Usage of out of spec paper.
- If no problems are found, replace the following parts in sequence:
- Tray Module PWB (PL 10.9, PL 11.7)

## 372-210 Tray 2 Lift Up Fault

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.9 Tray 2 Paper Stacking](#)

Tray 2 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 2. Turn the power ON and enter the Diag mode. Turn ON [dC330 \[072-001\]](#) (Tray 2 Feed/Lift Up Motor). **Does the Tray 2 Feed/Lift Up Motor rotate?**

Y N

**Is the voltage between the Tray Module PWB [J541-10 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 2 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances ( [P/J550 - 3T](#), [P/J550 - TT](#)).

- Between the Tray Module PWB [P/J550-1](#) and [P/J550-2](#)
- Between the Tray Module PWB [P/J550-3](#) and [P/J550-4](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Check the connection between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) and the Tray 2 Feed/Lift Up Motor ( [P/J221 - 3T](#), [P/J221 - TT](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 2 Feed/Lift Up Motor ([PL 10.3](#), [PL 11.7](#)).

Measure the resistance between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) [P/J550-1/2/3/4](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button. Turn ON [dC330 \[072-102\]](#) (Tray 2 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 2 Nudger Level Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 2 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 372-212 Tray 2 Paper Size Sensor Broken

BSD-ON: [7.2 Tray 2 Paper Size Sensing](#)

Abnormal Analog voltage to Digital value from Tray 2 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 2 Paper Size Sensor for failure: [DC140\[072-200\]](#), [dC330 \[072-104\]](#) ([PL 10.1](#))
- Check the connection between the Tray 2 Paper Size Sensor ( [P/J101 - 3T](#), [P/J101 - TT](#)) and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 372-900 Tray 2 Feed Out Sensor Static Jam

BSD-ON: [8.5 Tray Module Paper Transportation \(3 of 3\)](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 2 Feed Out Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Tray 2 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 2 Feed Out Sensor for failure: [dC330 \[072-103\]](#) ([PL 10.12](#))
- The connection between the Tray 2 Feed Out Sensor [P/J180-1](#) and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) [P/J549-A9](#) for short circuit

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 373-101 (7830/35) Tray 3 Misfeed

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.10 Tray 3 Paper Stacking](#)

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [073-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( [P/J550 - 3T](#), [P/J550 - TT](#)).

- Between the Tray Module PWB [P/J550-5](#) and [P/J550-6](#)
- Between the Tray Module PWB [P/J550-7](#) and [P/J550-8](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)**

Y N

Check the connection between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) and the Tray 3 Feed/Lift Up Motor ( [P/J222 - 3T](#), [P/J222 - TT](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor ([PL 10.3](#), [PL 11.9](#)).

Measure the resistance between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) [P/J550-5/6/7/8](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button. Turn ON [dC330](#) [077-031] (TM Takeaway Motor). **Does the TM Takeaway Motor rotate?**

Y N

Is the voltage between the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)) [P/J224-2/5 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)).

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-1](#)
- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-3](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-4](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-6](#)

**Is the resistance approx. 0.85 Ohm for each? (At 25 degree C / 77 degree F)**

Y N

Replace the TM Takeaway Motor ([PL 10.9](#), [PL 11.17](#)).

Measure the resistance between the disconnected TM Takeaway Motor connectors ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)) [P/J224-1/3/4/6](#) and the Frame.

**Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB ( [P/J551 - 3T](#), [P/J551 - TT](#)) and the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT \(7845/55\)](#), [P/J224 - TT \(7830/35\)](#)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button and open the L/H Cover. Turn ON [dC330](#) [073-103] (Tray 3 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 3 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 373-101 (7845/55) Tray 3 Misfeed

**BSD-ON:** [1.9 DC Power Distribution - Options](#)

**BSD-ON:** [7.10 Tray 3 Paper Stacking](#)

**BSD-ON:** [8.3 Tray Module Paper Transportation \(1 of 2\)](#)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [073-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ([P/J550](#)).

- Between the Tray Module PWB [P/J550-5](#) and [P/J550-6](#)
- Between the Tray Module PWB [P/J550-7](#) and [P/J550-8](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)**

Y N

Check the connection between the Tray Module PWB ([P/J550](#)) and the Tray 3 Feed/Lift Up Motor ([P/J222](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor ([PL 11.9](#)).

Measure the resistance between the Tray Module PWB ([P/J550](#)) [P/J550-5/6/7/8](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 11.17](#))

Press the Stop button. Turn On [dC330](#) [077-037] (TM Takeaway Motor 2). **Does the TM Takeaway Motor 2 rotate?**

Y N

Is the voltage between the TM Takeaway Motor 2 ([P/J226](#)) [P/J226-2/5 \(+\)](#) and the GND (-) +24VDC?

A

Y N

Go to [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor 2 connector ([P/J226](#)). Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-1](#)
- Between the TM Takeaway Motor 2 [P/J226-2](#) and [P/J226-3](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-4](#)
- Between the TM Takeaway Motor 2 [P/J226-5](#) and [P/J226-6](#)

**Is the resistance approx. 0.85 Ohm for each? (At 25 degree C / 77 degree F)**

Y N

Replace the TM Takeaway Motor 2 ([PL 11.17](#)).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors ([P/J226](#)) [P/J226-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB ([P/J552](#)) and the TM Takeaway Motor 2 ([P/J226](#)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 11.17](#))

Press the Stop button and open the L/H Cover. Turn ON [dC330](#) [073-103] (Tray 3 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 3 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 11.17](#))

A

## 373-102 Feed Out Sensor 3 On Jam (Tray 3)

BSD-ON: [7.10 Tray 3 Paper Stacking](#)

BSD-ON: [8.3 Tray Module Paper Transportation \(1 of 2\)](#)

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Feed Out Sensor 3 [dC330 \[073-103\]](#) or [dC330 \[077-106\]](#) for operation failure. (PL [10.12](#))
- **7830/35**  
The TM Takeaway Motor 1 ([dC330 \[077-031\]](#)) for operation failure. (PL [10.9](#), PL [11.16](#))  
The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm( [P/J224 - 3T](#), [P/J224 - TT](#))
  - Between TM Takeaway Motor 1 [P/J224 pin-2](#) and [P/J224 pin-1/3](#)
  - Between TM Takeaway Motor 1 [P/J224 pin-5](#) and [P/J224 pin-4/6](#)
- **7845/55**  
The TM Takeaway Motor 2 ([dC330 \[077-037\]](#)) for operation failure. (PL [10.9](#), PL [11.16](#))  
The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm( [P/J226 - 3T](#), [P/J226 - TT](#))
  - Between TM Takeaway Motor 2 [P/J226 pin-2](#) and [P/J226 pin-1/3](#)
  - Between TM Takeaway Motor 2 [P/J226 pin-5](#) and [P/J226 pin-4/6](#)
- The T/A Roll 3, 4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- The LH Cover for improper latching.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB (PL [10.9](#), PL [11.17](#))

## 373-210 Tray 3 Lift Up Fault

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.10 Tray 3 Paper Stacking](#)

Tray 3 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 3. Turn the power ON and enter the Diag mode. Turn ON [dC330 \[073-001\]](#) (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?**

Y N  
**Is the voltage between the Tray Module PWB [J541-10 \(+\)](#) and the GND (-) +24VDC?**

Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances ( [P/J550 - 3T](#), [P/J550 - TT](#)).

- Between the Tray Module PWB [P/J550-5](#) and [P/J550-6](#)
- Between the Tray Module PWB [P/J550-7](#) and [P/J550-8](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)**

Y N  
Check the connection between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) and the Tray 3 Feed/Lift Up Motor ( [P/J222 - 3T](#), [P/J222 - TT](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor (PL [10.3](#), PL [11.9](#)).

Measure the resistance between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) [P/J550-5/6/7/8](#) and the Frame. **Is the resistance infinite for all?**

Y N  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB (PL [10.9](#), PL [11.17](#))

Press the Stop button. Turn ON [dC330 \[073-102\]](#) (Tray 3 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 3 Nudger Level Sensor. **Does the display change between High/Low?**

Y N  
Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 3 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- Tray Module PWB (PL [10.9](#), PL [11.17](#))

## 373-212 Tray 3 Paper Size Sensor Broken

BSD-ON: [7.3 Tray 3 Paper Size Sensing \(3TM\)](#)

BSD-ON: [7.4 Tray 3 Paper Size Sensing \(TTM\)](#)

Abnormal Analog voltage to Digital value from Tray 3 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 3 Paper Size Sensor for failure: dC330 [073-104] ([PL 10.1](#), [PL 11.1](#))
- The connection between the Tray 3 Paper Size Sensor ( [P/J102 - 3T](#), [P/J102 - TT](#)) and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 373-900 Tray 3 Feed Out Sensor Static Jam

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 3 Feed Out Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Tray 3 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 3 Feed Out Sensor for failure: dC330 [073-103] ([PL 10.12](#))
- The connection between the Tray 3 Feed Out Sensor ( [P/J112 - 3T](#), [P/J112 - TT](#)) P/J112-2 and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) P/J549 - A5 for short circuit

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))



## 374-101 (7830/35) Tray 4 Misfeed

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.11 Tray 4 Paper Stacking](#)

BSD-ON: [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

The Tray 4 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 4 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?**

Y N

Is the voltage between the Tray Module PWB [P/J541-10 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( [P/J550 - 3T](#), [P/J550 - TT](#)).

- Between the Tray Module PWB [P/J550-9](#) and [P/J550-10](#)
- Between the Tray Module PWB [P/J550-11](#) and [P/J550-12](#)

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Check the connection between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) and the Tray 4 Feed/Lift Up Motor ( [P/J223 - 3T](#), [P/J223 - TT](#)) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor ([PL 10.3](#), [PL 11.11](#)).

Measure the resistance between the Tray Module PWB ( [P/J550 - 3T](#), [P/J550 - TT](#)) [P/J550-9/10/11/12](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button. Turn ON [dC330](#) [077-031] (TM Takeaway Motor). **Does the TM Takeaway Motor rotate?**

Y N

Is the voltage between the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT](#)) [P/J224-2/5 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( [P/J224 - 3T](#), [P/J224 - TT](#)).

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-1](#)
- Between the TM Takeaway Motor [P/J224-2](#) and [P/J224-3](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-4](#)
- Between the TM Takeaway Motor [P/J224-5](#) and [P/J224-6](#)

**Is the resistance approx. 0.85 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Replace the TM Takeaway Motor ([PL 10.9](#), [PL 11.17](#)).

Measure the resistance between the disconnected TM Takeaway Motor connectors ( [P/J224 - 3T](#), [P/J224 - TT](#)) [P/J224-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB ( [P/J551 - 3T](#), [P/J551 - TT](#)) and the TM Takeaway Motor ( [P/J224 - 3T](#), [P/J224 - TT](#)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button and open the L/H Cover. Turn ON [dC330](#) [074-103] (Tray 4 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 4 Feed Out Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 4 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))



## 374-101 (7845/55) Tray 4 Misfeed

**BSD-ON:** [1.9 DC Power Distribution - Options](#)

**BSD-ON:** [7.11 Tray 4 Paper Stacking](#)

**BSD-ON:** [8.3 Tray Module Paper Transportation \(1 of 2\)](#)

The Tray 4 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 4 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB [P592](#) and the Tray Module PWB [P/J541](#) for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?**

Y N

**Is the voltage between the Tray Module PWB [J541-10 \(+\)](#) and the GND (-) +24VDC?**

Y N

Go to [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( [P/J550](#) ).

- Between the Tray Module PWB J550-9 and J550-10
- Between the Tray Module PWB J550-11 and J550-12

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Check the connection between the Tray Module PWB ( [P/J550](#) ) and the Tray 4 Feed/Lift Up Motor ( [P/J223](#) ) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor ( [PL 11.11](#) ).

Measure the resistance between the Tray Module PWB ( [P/J550](#) ) J550-9/10/11/12 and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ( [PL 11.17](#) )

Press the Stop button. Turn On [dC330](#) [077-037] (TM Takeaway Motor 2). **Does the TM Takeaway Motor 2 rotate?**

Y N

**Is the voltage between the TM Takeaway Motor 2 ( [P/J226](#) ) J226-2/5 (+) and the GND (-) +24VDC?**

A

Y N

Go to [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor 2 connector ( [P/J226](#) ). Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 J226-2 and J226-1
- Between the TM Takeaway Motor 2 J226-2 and J226-3
- Between the TM Takeaway Motor 2 J226-5 and J226-4
- Between the TM Takeaway Motor 2 J226-5 and J226-6

**Is the resistance approx. 0.85 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N

Replace the TM Takeaway Motor 2 ( [PL 11.17](#) ).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors [J226-1/3/4/6](#) and the Frame. **Is the resistance infinite for all?**

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB ( [P/J552](#) ) and the TM Takeaway Motor 2 ( [P/J226](#) ) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ( [PL 11.17](#) )

Press the Stop button and open the L/H Cover. Turn ON [dC330](#) [074-103] (Tray 4 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 4 Feed Out Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 4 Feed Out Sensor.

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

- Tray Module PWB ( [PL 11.17](#) )

A

## 374-210 Tray 4 Lift Up Fault

BSD-ON: [1.9 DC Power Distribution - Options](#)

BSD-ON: [7.11 Tray 4 Paper Stacking](#)

Tray 4 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 4. Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?**

Y N  
Is the voltage between the Tray Module PWB [J541-10 \(+\)](#) and the GND (-) +24VDC?  
Y N  
Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( [P/J550](#) - 3T, [P/J550](#) - TT).

- Between the Tray Module PWB J550-9 and J550-10
- Between the Tray Module PWB J550-11 and J550-12

**Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)**

Y N  
Check the connection between the Tray Module PWB ( [P/J550](#) - 3T, [P/J550](#) - TT). and the Tray 4 Feed/Lift Up Motor ( [P/J223](#) - 3T, [P/J223](#) - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor ([PL 10.3](#), [PL 11.11](#)).

Measure the resistance between the Tray Module PWB ( [P/J550](#) - 3T, [P/J550](#) - TT) J550-9/10/11/12 and the Frame. **Is the resistance infinite for all?**

Y N  
Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

Press the Stop button. Turn ON [dC330](#) [074-102] (Tray 4 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 4 Nudger Level Sensor. **Does the display change between High/Low?**

Y N  
Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 4 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 374-212 Tray 4 Paper Size Sensor Broken

BSD-ON: [7.5 Tray 4 Paper Size Sensing \(3TM\)](#)

Abnormal output AD value from Tray 4 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Broken link and damage at the bottom of the Tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 4 Paper Size Sensor for operation failure. ([PL 10.1](#), [PL 11.15](#))
  - 3TM: [dC140](#) [074-200], [dC330](#) [074-104]
  - TTM: [dC140](#) [074-200]
- The Tray for Paper misload
- The Tray for existence of objects other than Paper.

If no problem is found, replace the Tray Module PWB:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))

## 374-900 Tray 4 Feed Out Sensor Static Jam

**BSD-ON:** [8.4 Tray Module Paper Transportation \(2 of 2\)](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 4 Feed Out Sensor detected paper.

**NOTE:** *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

Check the following:

- The Tray 4 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 4 Feed Out Sensor for failure: [dC330 \[074-103\] \(PL 10.12\)](#)
- The connection between the Tray 4 Feed Out Sensor ( [P/J116 - 3T](#), [P/J116 - TT](#)) J116-2 and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) J549- A5 for short circuit.

If no problems are found, replace the following parts in sequence:

- Tray Module PWB (7845/55) ([PL 11.17](#))

## 375-100 Tray 5 (MSI) Misfeed

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [7.12 Paper Stacking](#)

The Tray 5 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 5 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [075-001] (Tray 5 Feed/Nudger Motor). **Does the Tray 5 Feed/Nudger Motor rotate?**

Y N

Is the voltage between the MDM PWB [P/J520-1 \(+\)](#) and the GND (-) +24VDC?

Y N

Go to [+24VDC Power RAP \(7830/35\)](#) +24VDC Power RAP or [+24VDC Power RAP \(7845/55\)](#) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 5 Feed/Nudger Motor wire wound resistance. Check the resistance of the following.

- Between the MDM PWB [P/J525-B10](#) and the [P/J525-B11](#)
- Between the MDM PWB [P/J525-B12](#) and the [P/J525-B13](#)

Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the MDM PWB [P/J525](#) and Tray 5 Feed/Nudger Motor [P/J269](#) for open circuit, short circuit, and poor contact. If no problems are found, replace the Tray 5 Feed/Nudger Motor ([PL 13.2](#)).

Measure the resistance between the MDM PWB [P/J525-B10/B11/B12/B13](#) and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Press the Stop button. Turn ON [dC330](#) [077-104] (Tray 5 Feed Out Sensor). Activate the Actuator by using a sheet of paper, etc. to block/clear the light path to the Tray 5 Feed Out Sensor.

**Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Tray 5 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Front Chute Floating Snap for disengagement
- The Tray 5 Nudger Roll and Retard Spring for deformation and snags

- The Tray 5 Feed Roll and Nudger Roll for contamination, wear, and revolution failure
  - The Tray 5 Feed Roll and Nudger Roll Drive Gears for wear and damage
  - Use of paper out of spec (Refer to the spec in Chapter 6 General)
- If no problems are found, replace the following parts in sequence:
- MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 375-103 (7830/35) Tray 5 Feed Out Sensor Off Jam

BSD-ON: [4.1 Motor Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [8.6 Registration](#)

The MSI Feed Out Sensor did not turn OFF within the specified time after the Regi Clutch On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The MSI Feed Out Sensor ([dC330 \[077-104\]](#)) for operation failure. ([PL 13.4](#))
  - The Main Drive Motor ([dC330 \[042-006\]](#)) for operation failure. ([PL 3.2](#))
  - The Takeaway Clutch ([dC330 \[077-001\]](#)) for operation failure. ([PL 15.1](#))  
The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Main PWB [P/J417](#) pin-B14 and [P/J417](#) pin-B15

**NOTE:** . It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).
  - The Regi Clutch ([dC330 \[077-002\]](#)) for operation failure. ([PL 15.2](#))  
The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Main PWB [P/J523](#) pin-A7 and [P/J523](#) pin-A8

**NOTE:** . It is possible to drive the Regi Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).
  - The MSI T/S Roll, Regi Roll, and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
  - The Drive Gear for wear and damage.
  - Transportation failure due to foreign substances in the paper path.
  - Usage of out of spec paper.
- If no problem is found, replace the Motor Driver Main PWB.
- MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 375-103 (7845/55) Tray 5 Feed Out Sensor Off Jam

BSD-ON: [4.1 Motor Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [8.6 Registration](#)

The MSI Feed Out Sensor did not turn OFF within the specified time after the Regi Clutch On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The MSI Feed Out Sensor ([dC330 \[077-104\]](#)) for operation failure. ([PL 13.4](#))
  - The Takeaway Motor ([dC330 \[077-050\]](#)) for operation failure. ([PL 15.1](#))  
The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)
    - Between Takeaway Motor [P/J253](#) pin-1 and [P/J253](#) pin-3
    - Between Takeaway Motor [P/J253](#) pin-4 and [P/J253](#) pin-6
  - The Main Drive Motor ([dC330 \[042-006\]](#)) for operation failure. ([PL 3.2](#))
  - The Regi Clutch ([dC330 \[077-002\]](#)) for operation failure. ([PL 15.2](#))  
The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Main PWB [P/J523](#) pin-A7 and [P/J523](#) pin-A8

**NOTE:** . It is possible to drive the Regi Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).
  - The MSI T/S Roll, Regi Roll, and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
  - The Drive Gear for wear and damage.
  - Transportation failure due to foreign substances in the paper path.
  - Usage of out of spec paper.
- If no problem is found, replace the following parts in sequence:
- MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 375-135 (7830/35) Reg Sensor On Jam (Tray 5)

BSD-ON: [4.1 Motor Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [8.6 Registration](#)

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On after the Paper Feed from the MSI has started.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Regi Sensor ([dC330 \[077-103\]](#)) for operation failure. ([PL 15.2](#))
- The Main Drive Motor ([dC330 \[042-006\]](#)) for operation failure. ([PL 3.2](#))
- The Takeaway Clutch ([dC330 \[077-001\]](#)) for operation failure. ([PL 15.1](#))  
The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB [P/J417](#) pin-B14 and [P/J417](#) pin-B15

**NOTE:** *It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).*

- The MSI T/A Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. ([PL 15.1](#))

If no problem is found, replace the following parts:

- Motor Driver Main PWB ([PL 18.2A](#))

## 375-135 (7845/55) Reg Sensor On Jam (Tray 5)

BSD-ON: [4.1 Motor Drive Control](#)

BSD-ON: [8.2 Tray 1 and MSI Paper Transportation](#)

BSD-ON: [8.6 Registration](#)

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On after the Paper Feed from the MSI has started.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Regi Sensor ([dC330 \[077-103\]](#)) for operation failure. ([PL 15.2](#))  
**NOTE:** *It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).*

- The Takeaway Motor ([dC330 \[077-050\]](#)) for operation failure. ([PL 15.1](#))  
The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)
  - Between Takeaway Motor [P/J253](#) pin-1 and [P/J253](#) pin-3
  - Between Takeaway Motor [P/J253](#) pin-4 and [P/J253](#) pin-6

- The MSI T/A Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. ([PL 15.1](#))

If no problem is found, replace the following parts:

- Motor Driver Main PWB ([PL 18.2B](#))
- Motor Driver Sub PWB ([PL 18.2B](#))

## 375-212 Tray 5 Nudger Up/Down Fault

BSD-ON: [7.12 Paper Stacking](#)

The MSI Nudger Position Sensor did not change within the specified time after the MSI Nudger Up or Down operation has started.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The MSI Nudger Position Sensor ([dC330 \[075-102\]](#)) for operation failure. ([PL 13.2](#))
- The MSI Feed/Nudger Motor ([dC330 \[075-004\]](#) (Up/Down)) for operation failure. ([PL 13.2](#))  
The wire wound resistance of the MSI Feed/Nudger Motor: approx. 4 Ohm (when the temperature is 25 degrees celsius)
  - Between MSI Feed/Nudger Motor [P/J269](#) pin-1 and [P/J269](#) pin-2
  - Between MSI Feed/Nudger Motor [P/J269](#) pin-3 and [P/J269](#) pin-4
- The MSI Nudger Roll Up/Down mechanism for mechanical loading, the springs for deformation and snags.

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-101 Regi Sensor Off Jam

BSD-ON: [4.1 Main Drive Control](#)

BSD-ON: [8.6 Registration](#)

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

The Regi Sensor did not turn OFF within the specified time after the Regi Clutch On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Regi Sensor ([dC330 \[077-103\]](#)) for operation failure. ([PL 15.2](#))
  - The Main Drive Motor ([dC330 \[042-006\]](#)) for operation failure. ([PL 3.2](#))
  - The Regi Clutch ([dC330 \[077-002\]](#)) for operation failure. ([PL 15.2](#))  
The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Main PWB [P/J523](#) pin-A7 and [P/J523](#) pin-A8
- NOTE:** It is possible to drive the Regi Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).
- The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
  - The Fusing Unit Drive Motor ([dC330 \[010-001\]](#)) for operation failure. ([PL 3.1](#))
  - The Regi Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
  - Each Drive Gear for wear and damage.
  - Transportation failure due to foreign substances in the paper path.
  - Usage of out of spec paper.
  - The Regi Transport Assembly for improper installation. ([PL 15.1](#))

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-103 Fuser Exit Sensor Off Jam

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

BSD-ON: [10.6 Fusing](#)

BSD-ON: [10.7 Fused Paper Exit 1](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

After the Fuser Exit Sensor turned ON, the Fuser Exit Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
  - The Fuser for wound up, stuck paper
  - Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
  - Each Exit Roll Drive Gear for wear and damage
  - The Exit 1 Gate for operation failure
  - The Exit 2 Gate for operation failure
  - Use of paper out of spec (Refer to the spec in [Product Codes](#) Chapter 6 General)
  - The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
  - The Fuser Exit Sensor for failure: [dC330 \[077-106\]](#) ([PL 7.1](#))
  - The connection between the Fuser Assembly [DJ600](#) and the MDM PWB [P/J431](#) for open circuit, short circuit, and poor contact
  - The Fuser Drive Motor for revolution failure: [dC330 \[010-006\]](#) ([PL 3.1](#))
  - The Exit 2 Drive Motor for revolution failure: [dC330 \[077-062\]](#) ([PL 17.4](#))  
The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
    - Between Motor Driver Sub PWB [P/J522](#) pin-B4 and [P/J522](#) pin-B6
    - Between Motor Driver Sub PWB [P/J522](#) pin-B5 and [P/J522](#) pin-B7
  - The Exit 2 Gate Solenoid for failure: [dC330 \[077-003\]](#) ([PL 17.5](#))  
The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Sub PWB [P/J522](#) pin-A7 and [P/J522](#) pin-A8
  - The Face Up Gate Solenoid for failure: [dC330 \[077-004\]](#) ([PL 17.5](#))  
The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Sub PWB [P/J522](#) pin-A9 and [P/J522](#) pin-A10
- If no problems are found, replace the following parts in sequence:
- MDM PWB (7830/35) ([PL 18.2A](#))



- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 377-104 Fuser Exit Sensor Off Jam (Too Short)

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

BSD-ON: [10.6 Fusing](#)

BSD-ON: [10.7 Fused Paper Exit 1\)](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

After the Fuser Exit Sensor turned ON, the Fuser Exit Sensor turned OFF before the specified time has passed.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
  - The Fuser for wound up, stuck paper
  - Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
  - Each Exit Roll Drive Gear for wear and damage
  - The Exit 1 Gate for operation failure
  - The Exit 2 Gate for operation failure
  - Use of paper out of spec (Refer to the spec in [Product Codes](#) Chapter 6 General)
  - The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
  - The Fuser Exit Sensor for failure: [dC330 \[077-101\] \(PL 7.1\)](#)
  - The connection between the Fuser Assembly [DJ600](#) and the MDM PWB [P/J431](#) for open circuit, short circuit, and poor contact
  - The Fuser Drive Motor for revolution failure: [dC330 \[010-001\] \(PL 3.1\)](#)
  - The Exit 2 Drive Motor for revolution failure: [dC330 \[077-062\] \(PL 17.4\)](#)  
The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
    - Between Motor Driver Sub PWB [P/J522](#) pin-B4 and [P/J522](#) pin-B6
    - Between Motor Driver Sub PWB [P/J522](#) pin-B5 and [P/J522](#) pin-B7
  - The Exit 2 Gate Solenoid for failure: [dC330 \[077-003\] \(PL 17.5\)](#)  
The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Sub PWB [P/J522](#) pin-A7 and [P/J522](#) pin-A8
  - The Face Up Gate Solenoid for failure: [dC330 \[077-004\] \(PL 17.5\)](#)  
The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Sub PWB [P/J522](#) pin-A9 and [P/J522](#) pin-A10.
- If no problems are found, replace the following parts in sequence:
- MDM PWB (7830/35) ([PL 18.2A](#))

- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 377-105 Exit Sensor 2 Off Jam

BSD-ON: [10.6 Fusing](#)

BSD-ON: [10.7 Fused Paper Exit 1](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

After the Exit 2 Sensor turned ON, the Exit 2 Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Exit 2 Roll and Pinch Roll for contamination, wear, and revolution failure
- The Face Up Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Exit 2 Roll Drive Gear for wear and damage
- The Exit 2 Gate for operation failure
- The Face Up Exit Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in [Product Codes](#) Chapter 6 General)
- The Exit 2 Sensor for contamination, improper installation, and Actuator operation failure
- The Exit 2 Sensor for failure: [dC330 \[077-100\]](#) (PL 17.4)
- The connection between the Exit 2 Sensor [P/J164](#) and the MDS PWB [P/J522](#) for open circuit, short circuit, and poor contact
- The Exit 2 Drive Motor for revolution failure: [dC330 \[077-062\]](#) (PL 17.4)  
The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB [P/J522](#) pin-B4 and [P/J522](#) pin-B6
  - Between Motor Driver Sub PWB [P/J522](#) pin-B5 and [P/J522](#) pin-B7
- The Face Up Gate Solenoid for failure: [dC330 \[077-004\]](#) (PL 17.5)  
The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Sub PWB [P/J522](#) pin-A9 and [P/J522](#) pin-A10.

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 377-106 Fuser Exit Sensor On Jam

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

BSD-ON: [10.6 Fusing](#)

The Fuser Exit Sensor does not turn ON within the specified time after the Reg Clutch On.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Fusing Unit Exit Sensor ([dC330 \[077-101\]](#)) for operation failure. ([PL 7.1](#))
- The Fusing Unit Drive Motor ([dC330 \[010-001\]](#)) for operation failure. ([PL 3.1](#))
- The Fusing Unit for wound up, stuck paper.
- The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
- The Fusing Unit P/Roll for Latch failure.
- The Fusing Unit Exit Chute for improper installation and deformation.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-109 Exit Sensor 2 On Jam

BSD-ON: [10.1 Fuser Drive Control \(1 of 2\)](#)

BSD-ON: [10.7 Fused Paper Exit 1\)](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

The Exit 2 Sensor did not turn ON within the specified time after the Fusing Unit Exit Sensor On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The Exit 2 Sensor ([dC330 \[077-100\]](#)) for operation failure. ([PL 17.4](#))
- The Exit 2 Drive Motor ([dC330 \[077-062\]](#) (output direction)) for operation failure. ([PL 17.4](#))  
The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB [P/J522](#) pin-B4 and [P/J522](#) pin-B6
  - Between Motor Driver Sub PWB [P/J522](#) pin-B5 and [P/J522](#) pin-B7
- The Fusing Unit Drive Motor ([dC330 \[010-001\]](#)) for operation failure. ([PL 3.1](#))
- The Exit 1 Gate for operation failure (including the Exit Gate Solenoid ([DC330 \[077-003\]](#)) operation failure). ([PL 17.5](#))  
The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Sub PWB [P/J522](#) pin-A7 and [P/J522](#) pin-A8
- The Invert Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Fusing Unit Exit Chute for improper installation and deformation.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 377-110 POB Sensor On Jam

BSD-ON: [4.1 Main Drive Control](#)

BSD-ON: [8.6 Registration](#)

BSD-ON: [9.24 Second Transfer](#)

The POB Sensor did not turn ON within the specified time after the Regi Clutch On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The POB Sensor ([dC330 \[077-102\]](#) or [dC330 \[094-202\]](#)) for operation failure. ([PL 14.4](#))
  - The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
  - The IBT Belt for wound up, stuck paper.
  - The Main Drive Motor ([dC3300 \[042-006\]](#)) for operation failure. ([PL 3.2](#))
  - The Regi Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
  - The Regi Clutch ([dC330 \[077-002\]](#)) for operation failure. ([PL 15.2](#))  
The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
    - Between Motor Driver Main PWB [P/J523](#) pin-A7 and [P/J523](#) pin-A8
- NOTE:** *It is possible to drive the Regi Roll by combining this with the Main Drive Motor ([dC330 \[042-006\]](#)).*
- The Drive Gear for wear and damage.
  - Transportation failure due to foreign substances in the paper path.
  - Usage of out of spec paper.
  - The Regi Transport Assembly for improper installation. ([PL 15.1](#))

If no problem is found, replace the MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-130 Reg Sensor On Jam (Duplex Direct)

BSD-ON: [8.6 Registration](#)

BSD-ON: [10.8 Fused Paper Exit 2 \(1 of 4\)](#)

The Reg Sensor does not turn ON within the specified time after the Reg Clutch On after the Feed has started in Duplex Direct mode.

**NOTE:** *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

Check the following:

- The Regi Sensor ([dC330 \[077-103\]](#)) for operation failure. ([PL 15.2](#))
- The Duplex Motor ([dC330 \[077-073\]](#)) for operation failure. ([PL 14.6](#))  
The wire wound resistance of the Duplex Motor: approx. 5.7 Ohm (7830/35) or approx. 1.5 Ohm (7845/55)
  - Between Motor Driver Main PWB [P/J523](#) pin-B7 and [P/J523](#) pin-B9
  - Between Motor Driver Main PWB [P/J523](#) pin-B8 and [P/J523](#) pin-B10
- The Duplex Trans Roll 1-3 for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-131 Duplex Wait Sensor On Jam

BSD-ON: [10.7 Fused Paper Exit 1](#)

BSD-ON: [10.8 Fused Paper Exit 2 \(1 of 4\)](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

The Duplex Wait Sensor does not turn ON within the specified time after the Exit 2 Drive Motor has started rotating in the Duplex intake direction.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Duplex Path Sensor (DC330 [077-108]) for operation failure. (PL 14.6)
- The Duplex Motor (DC330 [077-073]) for operation failure. (PL 14.6)  
The wire wound resistance of the Duplex Motor: approx. 5.7 Ohm (7830/35) or approx. 1.5 Ohm (7845/55)
  - Between Motor Driver Main PWB P/J523 pin-B7 and P/J523 pin-B9
  - Between Motor Driver Main PWB P/J523 pin-B8 and P/J523 pin-B10
- The Exit 2 Drive Motor (DC330 [077-063] (intake direction)) for operation failure. (PL 17.4)  
The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Exit 1 Gate for operation failure (including the Exit Gate Solenoid (DC330 [077-003]) operation failure). (PL 17.5)  
The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Sub PWB P/J522 pin-A7 and P/J522 pin-A8
- The Exit Roll 2, Invert Roll, and Duplex Trans Roll 1, 2 for transportation failure due to contamination, wear, and deterioration.
- Each Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 377-211 Tray Module Kind Mismatch

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

A different type of Tray Module is connected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF. Refer to [3.7 PWB Communication \(7 of 9\)](#) check the following:
  - The DIP Switch settings on the Tray Module PWB
  - The connection between the MDS PWB P592 and the Tray Module PWB P/J541 (P/J541 - 3T, P/J541 - TT) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- Tray Module PWB (7830/35) PL 10.9, (PL 11.17)
- Tray Module PWB (7845/55) (PL 11.17)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 377-212 Tray Module Reset Fault

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [1.8 IIT DC Power Distribution](#)

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

The Tray Module reset was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the voltage between the following terminals of the Tray Module PWB and the GND. ( [P/J541 - 3T](#), [P/J541 - TT](#) )
  - [P/J541-10 \(+24VDC\)](#)
  - [P/J541-12 \(+5VDC\)](#)
3. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( [P/J541 - 3T](#), [P/J541 - TT](#) ) and the Motor Driver Sub PWB [P592](#) for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#) ) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#) ) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
4. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) ([PL 10.9](#), [PL 11.17](#))
  - Tray Module PWB (7845/55) ([PL 11.17](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 377-214 Tray Module Logic Fault

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

I/F mismatch between the IOT and the Tray Module was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( [P/J541 - 3T](#), [P/J541 - TT](#) ) and the Motor Driver Sub PWB [P592](#) for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#) ) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#) ) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
3. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) ([PL 10.9](#), [PL 11.17](#))
  - Tray Module PWB (7845/55) ([PL 11.17](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 377-215 Tray Module Communication Fault

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

Communication error between Tray Module PWB and MCU PWB was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( [P/J541](#) - 3T, [P/J541](#) - TT) and the Motor Driver Sub PWB [P592](#) for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
3. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) ([PL 10.9](#), [PL 11.17](#))
  - Tray Module PWB (7845/55) ([PL 11.17](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 377-300 Front Cover Interlock Open

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

The Front Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Front Cover for damage or mismatch.
- The Front Cover Interlock Switch for failure: [dC330](#) [077-303] ([PL 18.5](#))
- The connection between the Front Cover Interlock Switch ( [P/J101](#) - 3T, [P/J101](#) - TT) and the MDM PWB [P/J521](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-301 L/H Cover Interlock Open

BSD-ON: [1.12 Interlocked Power](#)

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

The L/H Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The L/H Cover Unit for damage or mismatch
- The L/H Cover Interlock Switch for failure: [dC330 \[077-300\] \(PL 14.1\)](#)
- The connection between the L/H Cover Interlock Switch [P/J100](#) and the MDM PWB [P/J534](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-305 Tray Module L/H Cover Open

BSD-ON: [1.13 Interlocked Cover Switches](#)

The Tray Module L/H Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the following:
  - The Tray Module L/H Cover for damage or mismatch
  - The Tray Module L/H Cover Switch for failure: [dC330 \[077-306\] \(PL 10.12\)](#)
  - The connection between the Tray Module L/H Cover Switch ( [P/J104 - 3T](#), [P/J104 - TT](#)) and the Tray Module PWB ( [P/J549 - 3T](#), [P/J549 - TT](#)) for open circuit, short circuit, and poor contact

If no problems are found, replace the Tray Module PWB.

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))



## 377-307 Duplex Cover Open

BSD-ON: [1.13 Interlocked Cover Switches](#)

The Duplex Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Duplex Cover for damage or mismatch.
- The Duplex Cover Switch for failure: [dC330](#) [077-305] ([PL 14.5](#))
- The connection between the Duplex Cover Switch [P/J176](#) and the MDM PWB [P/J523](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-308 L/H High Cover Open

BSD-ON: [1.13 Interlocked Cover Switches](#)

The L/H High Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The L/H High Cover Assembly for damage or mismatch
- The L/H High Cover Switch for failure: [dC330](#) [077-302] ([PL 17.4](#))
- The connection between the L/H High Cover Switch [P/J168](#) and the MDM PWB [P/J522](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-312 Feeder Comm Fail

BSD-ON: [3.9 PWB Communication \(9 of 9\)](#)

Communication failure between the HCF and the IOT was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Main PWB [P/J594](#) and the HCF PWB for open circuit, short circuit, and poor contact.
  - The Drawer Connector ( [DP800](#)) for broken/bent pins, burn damage, and foreign substances.
  - The power supply at the HCF.
3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 377-314 P/H Module Logic Fail

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

A fatal error was detected in the Tray Module.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( [P/J541 - 3T](#), [P/J541 - TT](#)) and the Motor Driver Sub PWB [P592](#) for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( [J1](#)) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( [P452](#)) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
3. If no problem is found, replace the following parts in sequence:
  - Tray Module PWB ([PL 10.9](#), [PL 11.17](#))
  - MCU-PF PWB (7830/35) ([PL 18.2A](#))
  - MCU-PF PWB (7845/55) ([PL 18.2B](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))

## 377-320 All Feed Tray Broken

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

All the Feed Trays that are connected to the IOT were detected to have malfunctioned.

### Cause/Action

Enter DC122 Fail History. Go to the RAP of the affected Paper Tray.

## 377-900 Reg Sensor Static Jam

BSD-ON: [8.6 Registration](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Reg Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Reg Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Reg Sensor for failure: [dC330 \[077-103\] \(PL 15.2\)](#)
- The connection between the Reg Sensor [P/J160](#) and the MDM PWB [P/J523](#) for short circuit
- Check the return Spring ([PL 23.11](#)) and replace if damaged or missing
- Check to see the timing between the eject motor Gear ([PL 23.11](#)) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-901 Exit Sensor 1 Static Jam

BSD-ON: [10.6 Fusing](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Fuser Exit Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Lower Exit Pinch Rollers ([PL 17.2](#)) may be missing.
- The Fuser Exit Sensor for remaining paper, contamination, actuator return failure, or improper installation
- The Fuser Exit Sensor for failure: [dC330 \[077-101\]](#) ([PL 7.1](#))
- The connection between the Fuser Assembly [DJ600](#) and the MDM PWB [P/J431](#) for short circuit
- Check the return Spring ([PL 23.11](#)) and replace if damaged or missing.
- Check to see if the timing between the eject motor Gear ([PL 23.11](#)) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-902 Exit Sensor 2 Static Jam

BSD-ON: [10.10 Fused Paper Exit 2 \(2 of 2\)](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Exit 2 Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Exit 2 Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Exit 2 Sensor for failure: [dC330 \[077-100\]](#) ([PL 17.4](#))
- The connection between the Exit 2 Sensor [P/J164](#) and the MDS PWB [P/J522](#) for short circuit
- The L/H High Cover Assembly for damage or mismatch

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 377-903 POB Sensor Static Jam

BSD-ON: [9.24 Second Transfer](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the POB Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Lower Exit Pinch Rollers ([PL 17.2](#)) may be missing.
- The POB Sensor for remaining paper, contamination, or improper installation
- The POB Sensor for failure: [dC330 \[077-102\]](#) ([PL 14.4](#))
- The connection between the POB Sensor [P/J180](#) and the MDM PWB [P/J523](#) for short circuit
- Check the return Spring ([PL 23.11](#)) item 38 and replace if damaged or missing
- Check to see the timing between the eject motor Gear ([PL 23.11](#)) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

If no problems are found, replace the MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 377-907 Duplex Path Sensor Static Jam

BSD-ON: [10.8 Fused Paper Exit 2 \(1 of 4\)](#)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Duplex Path Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Duplex Path Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Duplex Path Sensor for failure: [dC330 \[077-108\]](#) ([PL 14.5](#))
- The connection between the Duplex Path Sensor [P/J175](#) and the MDM PWB [P/J523](#) for short circuit

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 378-151 HCF Feed Out Sensor Fault RAP

BSD-ON: [8.12 Standard HCF Option \(Tray 6\) Paper Transportation](#)

The paper transported from HCF did not turn on the Tray 6 Feed Out Sensor within the specified time.

### Initial Actions

- Clear any jam and switch the power off then on.
- Check for out-of-spec paper.
- Paper Path for a foreign object/burr/piece of paper

### Procedure

Execute [dC330](#) [078-101], Tray 6 Feed out Sensor. Block and unblock the Feed Out Sensor. **The display changes.**

Y N

Go to [8.12 Standard HCF Option \(Tray 6\) Paper Transportation](#) and check the following for an open wire, short or poor contact:

- Feed Out Sensor [PF/JF67-2](#) to HCF PWB [PF/JF01-2](#)
- Feed Out Sensor [PF/JF67-1](#) to HCF PWB [PF/JF01-3](#)
- Feed Out Sensor [PF/JF67-3](#) to HCF PWB [PF/JF01-1](#)

If OK, replace the Feed Out Sensor ([PL 28.8](#)) before replacing the HCF PWB ([PL 28.8](#)).

Execute [dC330](#) [078-096], Tray 6 Takeaway Motor. **There is operation noise from the Takeaway Motor.**

Y N

Check the circuit between [PF/JF57](#) on the Tray 6 Takeaway Motor and [PF/JF06](#) on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms (at 25 degrees C / 77 degrees F) at the measurement points below.

- [PF/JF57-3](#) to pins 1/2
- [PF/JF57-4](#) to pins 5/6

**The resistances are OK**

Y N

Replace the Tray 6 Takeaway Motor ([PL 28.8](#))

**There is +24VDC from [PF/JF06](#) pins 9 and 10, to GND.**

Y N

Go to [HCF +24VDC Wirenet](#) and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)). If the problem persists, replace the HCF PWB ([PL 28.8](#)).

Open and close Tray 6. **The Tray 6 Lift/Feed Motor operates**

Y N

Check the circuit between [PF/JF57](#) on the Tray 6 Lift/Feed Motor and [PF/JF06](#) on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms at the measurement points below.

- [PF/JF57-3](#) to pins 1/2
- [PF/JF57-4](#) to pins 5/6

**The resistances are OK+**

Y N

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)).

**There is +24VDC from [PF/JF06](#) pins 9 and 10, to GND.**

Y N

Go to [HCF +24VDC Wirenet](#) and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)). If the problem persists, replace the HCF PWB ([PL 28.8](#)).

Check the HCF paper lift components and repair as required ([PL 28.3](#)).

## 378-210 Tray 3 (TTM) Lift Failure RAP

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [7.10 Tray 3 Paper Stacking](#)

After the Tray 3 Lift/Feed Motor turned on, the Tray 3 Level Sensor did not turn on within the specified time.

### Initial Actions

- Reload paper in the tray correctly.
- Remove foreign substances in the tray.
- Power OFF/ON

### Procedure

Execute [dC330 \[073-004\]](#) Tray 3 Lift/Feed Motor On. **The Tray 3 Lift/Feed Motor can be heard.**

Y N

There is +24 VDC from [P/J541](#) pin 12 on the Tray Module PWB to GND

Y N

Refer to [1.5 DC Power Generation \(3 of 5\)](#) and the [+24VDC-4 Wirenet](#) to troubleshoot the 24 VDC circuit.

Turn OFF the power. Remove the Tray 3 Lift/Feed Motor, then measure the following resistances.

- Between [P/J222](#) pin-1 and [P/J222](#) pin-2
- Between [P/J222](#) pin-3 and [P/J222](#) pin-4

**All resistances are approx. 4 Ohms at 25 degrees C / 77 degrees F**

Y N

Replace the Tray 3 Lift/Feed Motor ([PL 10.3](#), [PL 11.9](#)).

Check the wires between [P/J222](#) on the Tray 3 Lift/Feed Motor and [P/J550](#) on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Replace the Tray 3 Feed/Lift Motor ([PL 10.3](#), [PL 11.9](#)). If the problem continues, replace the following in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)
- MDS PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

Check the installation of the Tray 3 Nudger Level Sensor ([PL 11.9](#)) and the operation of the actuator. **The Level Sensor is installed correctly and the actuator works.**

Y N

Reinstall the Tray 3 Level Sensor.

Execute [dC330 \[073-102\]](#), Tray 3 Nudger Level Sensor. Manually activate the Tray 3 Level Sensor ([PL 10.3](#), [PL 11.9](#)). **The display changes.**

Y N

Check the wires between [P/J111](#) on the Tray 3 Nudger Level Sensor and [P/J548](#) on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Disconnect [P/J548](#) on the Tray Module PWB. **There is approx. +5VDC from P 548 pin 13 to GND on the Tray Module PWB.**

Y N

Replace the Tray Module PWB ([PL 10.9](#), [PL 11.17](#)).

Reconnect [P/J548](#). Monitor the voltage between [P/J548-15 \(+\)](#) and GND (-) while you activate the actuator of the Tray 3 Level Sensor. **The voltage changes.**

Y N

Replace the Tray 3 Level Sensor ([PL 10.3](#), [PL 11.9](#)).

Replace the following in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)
- MDS PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

Check the mechanical components of the lift mechanism for dirty or damaged gears, broken or out-of-place cables.

If a problem is found replace the Tray 3 Assembly [PL 10.2](#), ([PL 11.1](#)).

If the check is good, replace the following in sequence:

- Tray Module PWB ([PL 10.9](#), [PL 11.17](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)
- MDS PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

## 378-216 Logic Failure RAP

BSD-ON: [3.7 PWB Communication \(7 of 9\)](#)

Cannot read from and/or write to the NVM in HCF Module.

### Initial Actions

Power OFF/ON

### Procedure

Check wires and connectors between the HCF and the IOT.

Reload Software. If the problem continues, replace the HCF PWB ([PL 28.8](#)).

## 378-219 HCF PF2 Soft Download Fail

### Procedure

TBD



## 378-250 HCF Lift Fault RAP

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [1.10 DC Power Distribution - HCF Option](#)

BSD-ON: [7.14 Standard HCF Option \(Tray 6\) Paper Stacking](#)

HCF Tray Lift failure. The Tray 6 Level Sensor does not turn ON within the specified time after the trays were inserted.

### Initial Actions

- Clear any jam and switch the power off then on.
- Check the size of the paper in the tray.
- Remove any debris or foreign substances in the tray.

### Procedure

Execute [dC330 \[078-004\]](#) Tray 6 Lift/Feed Motor On. **The Tray 6 Lift/Feed Motor can be heard.**

Y N

There is +24 VDC from [PF/JF06](#) pin 4 on the HCF PWB to GND

Y N

Refer to [1.10 DC Power Distribution - HCF Option](#) and the [HCF +24VDC Wirenet](#) to troubleshoot the 24 VDC circuit.

Turn OFF the power. Disconnect the Tray 6 Lift/Feed Motor, then measure the following resistances.

- Between [PF/JF58](#) pin-2 and [PF/JF58](#) pins 2, 3
- Between [PF/JF58](#) pin 5 and [PF/JF58](#) pins 4, 6

**All resistances are approx. 4 Ohms at 25 degrees C / 77 degrees F**

Y N

Replace the Tray 6 Lift/Feed Motor ([PL 28.4](#)).

Check the wires between [PF/JF58](#) on the Tray 6 Lift/Feed Motor and [PF/JF06](#) on the HCF PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Replace the Tray 6 Feed/Lift Motor ([PL 28.4](#)). If the problem continues, replace the following in sequence:

- HCF PWB ([PL 28.8](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

Check the installation of the Tray 6 Stack Height Sensor ([PL 28.5](#)) and the operation of the actuator. **The Level Sensor is installed correctly and the actuator works.**

Y N

Reinstall the Tray 6 Stack Height Sensor.

A

Execute [dC330 \[078-201\]](#), Tray 6 Stack Height Sensor. Manually activate the Tray 6 Stack Height Sensor. **The display changes.**

Y N

Check the wires between [PF/JF62](#) on the Tray 6 Stack Height Sensor and [PF/JF02](#) on the HCF PWB for an open or shorted circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Disconnect PF/JF02. **There is approx. +5VDC from [PF/JF02](#) pin 3 to GND.**

Y N

Replace the HCF PWB ([PL 28.8](#)).

Reconnect PF/JF02. Monitor the voltage between [PF/JF02-2 \(+\)](#) and GND (-) while you activate the actuator of the Tray 6 Stack Height Sensor. **The voltage changes.**

Y N

Replace the Tray 6 Stack Height Sensor ([PL 28.5](#)).

Replace the following in sequence:

- HCF PWB ([PL 28.8](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

Check the mechanical components ([PL 28.4](#)) of the lift mechanism for dirty or damaged gears, broken or out-of-place cables.

If the check is good, replace the following in sequence:

- HCF PWB ([PL 28.8](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

A

## 378-300 HCF Top Cover Interlock Open RAP

BSD-ON: [1.5 DC Power Generation \(3 of 5\)](#)

BSD-ON: [1.10 DC Power Distribution - HCF Option](#)

The HCF Top Cover Interlock is open.

### Procedure

Execute [dC330](#) [078-300 HCF Top Cover Interlock]. Open and close the Top Cover. **The display changes.**

Y	N
	+24VDC is measured between <a href="#">PF/JF05-2</a> on the HCF PWB and GND.
Y	N
	+24VDC is measured between <a href="#">PF/JF05-1</a> on the HCF PWB and GND.
Y	N
	+24VDC is measured from <a href="#">J593</a> pin 1 on the MDM PWB to GND.
Y	N
	Use <a href="#">1.10 DC Power Distribution - HCF Option</a> and the <a href="#">HCF +24VDC Wirenet</a> to troubleshoot the 24 VDC circuit.
	Replace the HCF PWB ( <a href="#">PL 28.8</a> ).
	Check the wires between <a href="#">PF/JF05-1</a> on the HCF PWB and <a href="#">FS001</a> on the HCF Top Cover Interlock Switch, and between <a href="#">FS002</a> on the HCF Top Cover Interlock Switch and <a href="#">PF/JF05-2</a> on the HCF PWB for an open wire or poor contact. If the wires are good, replace the HCF Top Cover Interlock Switch ( <a href="#">PL 28.7</a> ).
	Replace the HCF PWB ( <a href="#">PL 28.8</a> ).

The problem could be misalignment between the HCF Top Cover and the HCF Top Cover Interlock Switch. Check if the Switch/Cover is improperly installed and if the actuator is broken or bent.

If the check is good, replace the following in sequence:

- HCF PWB ([PL 28.8](#))
- MDM PWB ([PL 18.2A](#) -7830/35, [PL 18.2B](#) -7845/55)

## 378-301 HCF Docking interlock Open RAP

BSD-ON: [1.10 DC Power Distribution - HCF Option](#)

HCF Docking Interlock Open. The HCF and the IOT were undocked.

### Initial Actions

- Check that the HCF and the IOT are docked properly.
- Switch the power OFF then ON.

### Procedure

Execute [dC330](#) [078-301], HCF Docking Interlock. Dock and Undock the HCF. **The display changes.**

Y	N
	Undock the HCF. Press the HCF Docking Interlock several times. <b>The display changes.</b>
Y	N
	<b>The voltage between <a href="#">PF/JF08-2</a> on the HCF PWB and GND drops to less than 1 VDC when the Docking Interlock is pressed.</b>
Y	N
	Check the wires between <a href="#">PF/JF08-1</a> on the HCF PWB and <a href="#">FS003</a> on the HCF Docking Interlock, and between <a href="#">FS004</a> on the HCF Docking Interlock and <a href="#">PF/JF08-2</a> on the HCF PWB for an open wire or poor contact. If the wires are good, replace the HCF Docking Interlock Switch ( <a href="#">PL 28.8</a> ).
	Replace the HCF PWB ( <a href="#">PL 28.8</a> ).
	The problem could be misalignment between the HCF Docking Base and the IOT. Refer to <a href="#">REP 19.3</a> .

The problem may be intermittent. Check [1.10 DC Power Distribution - HCF Option](#) for loose or damaged wiring.

## 378-901 HCF Feed Out Sensor Static Jam RAP

BSD-ON: [8.12 Standard HCF Option \(Tray 6\) Paper Transportation](#)

The Tray 6 Feed Out Sensor static jam.

### Initial Actions

- Clear any jam and switch the power off then on.
- Check for out-of-spec paper.
- Paper Path for a foreign object/burr/piece of paper

### Procedure

Execute [dC330](#) [078-101], Tray 6 Feed out Sensor. Block and unblock the Feed Out Sensor.

**The display changes.**

Y N

Go to BSD and check the following for an open wire, short or poor contact:

- Feed Out Sensor [PF/JF67-2](#) to HCF PWB [PF/JF01-2](#)
- Feed Out Sensor [PF/JF67-1](#) to HCF PWB [PF/JF01-3](#)
- Feed Out Sensor [PF/JF67-3](#) to HCF PWB [PF/JF01-1](#)

If OK, replace the Feed Out Sensor ([PL 28.7](#)) before replacing the HCF PWB ([PL 28.8](#)).

Execute [dC330](#) [078-096], Tray 6 Takeaway Motor. **There is operation noise from the Takeaway Motor.**

Y N

Check the circuit between [PF/JF57](#) on the Tray 6 Takeaway Motor and [PF/JF06](#) on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.**

Y N

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms (25 degrees C / 77 degrees F) at the measurement points below.

- [PF/JF57-3](#) to pins 1/2
- [PF/JF57-4](#) to pins 5/6

**The resistances are OK**

Y N

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)).

**There is +24VDC from [PF/JF06](#) pins 9 and 10, to GND.**

Y N

Go to [HCF +24VDC Wirenet](#) and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)). If the problem persists, replace the HCF PWB ([PL 28.8](#)).

Open and close Tray 6. **The Tray 6 Lift/Feed Motor operates**

Y N

Check the circuit between [PF/JF57](#) on the Tray 6 Lift/Feed Motor and [PF/JF06](#) on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.**

A

Y N

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms at the measurement points below.

- [PF/JF57-3](#) to pins 1/2
- [PF/JF57-4](#) to pins 5/6

**The resistances are OK**

Y N

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)).

**There is +24VDC from [PF/JF06](#) pins 9 and 10, to GND.**

Y N

Go to [HCF +24VDC Wirenet](#) and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor ([PL 28.8](#)). If the problem persists, replace the HCF PWB ([PL 28.8](#)).

Check the HCF paper lift components and repair as required ([PL 28.3](#)).

A

## 389-600 RC Sample Lateral Fail-A1

BSD-ON: [6.10 Image Registration Control](#)

There is an error with the Cyan fast scan position that is used as a reference during A1 (fine adjustment pattern) and C patch detection. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1 Chain 389

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	38-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the installation status of the IBT Belt Unit. **Is the IBT Belt Unit installed properly?**

**Y N**

Install the IBT Belt Unit properly. After the installation, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the IBT Belt Unit ([PL 6.1](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

## 389-601 RC Sample Block Fail-A1-In

BSD-ON: [6.10 Image Registration Control](#)

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 003 in DC612 Test Pattern Print and check the print-out of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1 Chain 389

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	38-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Cause/Action

1. Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact. If no problems are found, replace the MOB ADC Assembly ([PL 18.5](#)).
2. Perform [dC675](#) Regi Control Setup Cycle.

## 389-603 RC Sample Block Fail-A1-Out

BSD-ON: [6.10 Image Registration Control](#)

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 003 in DC612 Test Pattern Print and check the print-out of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1 Chain 389

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Cause/Action

1. Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact.  
If no problems are found, replace the MOB ADC Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.
2. Perform [dC675](#) Regi Control Setup Cycle.

## 389-604 RC Sample Block Fail-B-#1-In

BSD-ON: [6.10 Image Registration Control](#)

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1 Chain 389

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of Y color. **Is the density of Y color normal?**

Y N

Adjust to correct the density of Y color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In [P/J150](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor In [P/J150](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (Y) for scratches and deformation. **Is the Drum Unit (Y) normal?**

**Y N**  
 Replace the Drum Unit (Y) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-606 RC Sample Block Fail-B-#1-Out

BSD-ON: [6.10 Image Registration Control](#)

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1 Chain 389

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of Y color. **Is the density of Y color normal?**

**Y N**  
 Adjust to correct the density of Y color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (Y) for scratches and deformation. **Is the Drum Unit (Y) normal?**

**Y N**  
 Replace the Drum Unit (Y) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-607 RC Sample Block Fail-B-#2-In

**BSD-ON:** [6.10 Image Registration Control](#)

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of M color. **Is the density of M color normal?**

**Y N**  
 Adjust to correct the density of M color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**



**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (M) for scratches and deformation. **Is the Drum Unit (M) normal?**

**Y N**  
 Replace the Drum Unit (M) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-609 RC Sample Block Fail-B-#2-Out

**BSD-ON:** 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of M color. **Is the density of M color normal?**

**Y N**  
 Adjust to correct the density of M color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**



**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (M) for scratches and deformation. **Is the Drum Unit (M) normal?**

**Y N**  
 Replace the Drum Unit (M) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-610 RC Sample Block Fail-B-#3-In

**BSD-ON:** 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

**Table 1**

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of C color. **Is the density of C color normal?**

**Y N**  
 Adjust to correct the density of C color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (C) for scratches and deformation. **Is the Drum Unit (C) normal?**

**Y N**  
 Replace the Drum Unit (C) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-612 RC Sample Block Fail-B-#3-Out

**BSD-ON:** 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of C color. **Is the density of C color normal?**

**Y N**  
 Adjust to correct the density of C color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (C) for scratches and deformation. **Is the Drum Unit (C) normal?**

**Y N**  
 Replace the Drum Unit (C) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-613 RC Sample Block Fail-B-#4-In

**BSD-ON:** 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of K color. **Is the density of K color normal?**

**Y N**  
 Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (K) for scratches and deformation. **Is the Drum Unit (K) normal?**

**Y N**  
 Replace the Drum Unit (K) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-615 RC Sample Block Fail-B-#4-Out

**BSD-ON:** 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the print-out of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of K color. **Is the density of K color normal?**

**Y N**  
 Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**  
 Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. **Is the Magnet Roll normal?**

**Y N**  
 Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**  
 Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (K) for scratches and deformation. **Is the Drum Unit (K) normal?**

**Y N**  
 Replace the Drum Unit (K) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-616 RC Data Over Flow Fail

**BSD-ON:** 6.10 Image Registration Control

The correction setting value of calculation result has exceeded the settable range. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

**Table 1**

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Display the adjustment amount in DC675 Registration Control Setup Cycle. Check which item has reached the maximum adjustment amount shown in the following table.

**Table 2**

Correction item	Adjustment Range	
	MIN	MAX
Fast Scan Margin	-90	+90
Slow Scan Margin	-4720	+4720
Skew	-800	+800

**Is the item that has reached the adjustment range (MIN or MAX), [Fast Scan Margin] or [Slow Scan Margin]?**

**Y N**  
 Check the following:

- Check that the value of NVM [760-024] is '0'.

A

A

- Check the position of the Drum Unit for each color.
- If no problem is found, replace the following parts in sequence:
- The Drum Unit (PL 8.1) of the appropriate color
  - The LPH Unit (PL 2.1) of the appropriate color
  - The Rear Holder Assembly (PL 2.1) of the appropriate color

**Is the item that has reached the adjustment range (MIN or MAX) [Slow Scan Margin]?**

Y N

Raise/lower the LPH (Y, M, C, K) 2 to 3 times to check the LPH lift up/down mechanism.  
 If no problem is found, replace the LPH Unit (PL 2.1) of the appropriate color. After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-617 RC Lead Regi Over Range Fail

**BSD-ON: 6.10 Image Registration Control**

The result from adding the offset value to the color registration correction value has exceeded the settable range. (This is a hidden failure. The Alignment Lead Regi or Skew might have exceeded the adjustable range and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Cause/Action

1. Check that the value of NVM [760-063] (Lead Regi Offset) is '0'. If the value is not '0', set it to '0'.
2. Check that the value of NVM [760-082] (Side 1 Skew Offset) is between the values of NVM [760-084] and NVM [760-085]. If the value is not in between, set it so that it does fall in between.
3. Check that the value of NVM [760-083] (Side 2 Skew Offset) is between the values of NVM [760-084] and NVM [760-085]. If the value is not in between, set it so that it does fall in between.

## 389-623 Vsout Stability Fail-In

### BSD-ON: 6.10 Image Registration Control

During the TMA Sensor LED Light Amount Correction at the In side, the reflected light amount is unstable. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor In [P/J150](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor In [P/J150](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**Is the detection section of the TMA Sensor In contaminated?**

Y N

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1').
- If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

A

# 389-625 RC Data Linearity Fail Y

## BSD-ON: 6.10 Image Registration Control

The result from adding the skew/bow correction value to the Y color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (Y) is correct. **Has any Fail involving the EEPROM of LPH (Y) occurred?**

Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. **Is the skew correction amount within the range of +500 to -500?**

Y N

Check the following:

- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (Y) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (Y) (PL 8.1)
- LPH Unit (Y) (PL 2.1)
- Rear Holder Assembly (Y) (PL 2.1)

Replace the LPH Unit (Y). (PL 2.1)

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

A

Go to the appropriate RAP.

A



# 389-626 RC Data Linearity Fail M

BSD-ON: [6.10 Image Registration Control](#)

The result from adding the skew/bow correction value to the M color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

## Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (M) is correct. **Has any Fail involving the EEPROM of LPH (M) occurred?**

Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. **Is the skew correction amount within the range of +500 to -500?**

Y N

Check the following:

- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (M) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (M) ([PL 8.1](#))
- LPH Unit (M) ([PL 2.1](#))
- Rear Holder Assembly (M) ([PL 2.1](#))

Replace the LPH Unit (M). ([PL 2.1](#))

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

A

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

Go to the appropriate RAP

A

# 389-627 RC Data Linearity Fail C

BSD-ON: [6.10 Image Registration Control](#)

The result from adding the skew/bow correction value to the C color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

## Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (C) is correct. **Has any Fail involving the EEPROM of LPH (C) occurred?**

Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. **Is the skew correction amount within the range of +500 to -500?**

Y N

Check the following:

- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (C) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (C) ([PL 8.1](#))
- LPH Unit (C) ([PL 2.1](#))
- Rear Holder Assembly (C) ([PL 2.1](#))

Replace the LPH Unit (C). ([PL 2.1](#))

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

A

A

Go to the appropriate RAP

## 389-628 RC Data Linearity Fail K

BSD-ON: [6.10 Image Registration Control](#)

The result from adding the skew/bow correction value to the K color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, [389-617](#) is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (K) is correct. **Has any Fail involving the EEPROM of LPH (K) occurred?**

Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. **Is the skew correction amount within the range of +500 to -500?**

Y N

Check the following:

- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (K) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (K) ([PL 8.1](#))
- LPH Unit (K) ([PL 2.1](#))
- Rear Holder Assembly (K) ([PL 2.1](#))

Replace the LPH Unit (K). ([PL 2.1](#))

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

A

Go to the appropriate RAP

## 389-629 Vsout Stability Fail-Out

### BSD-ON: 6.10 Image Registration Control

During the TMA Sensor LED Light Amount Correction at the Out side, the reflected light amount is unstable. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor Out [P/J151](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor Out [P/J151](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**Is the detection section of the TMA Sensor Out contaminated?**

Y N

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1'.)
- If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

After the replacement, perform [dC675](#) Regi Control Setup Cycle.

A

## 389-666 TMA LED Fail-In

### BSD-ON: 6.10 Image Registration Control

The TMA Sensor LED Light Amount Correction at the In side did not complete successfully. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor In [P/J150](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor In [P/J150](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**Is the detection section of the TMA Sensor In contaminated?**

Y N

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1').
- Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

A

## 389-667 TMA LED Fail-Out

**BSD-ON:** [6.10 Image Registration Control](#)

The TMA Sensor LED Light Amount Correction at the Out side did not complete successfully. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

**Table 1**

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor Out [P/J151](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

**Y N**

Connect the TMA Sensor Out [P/J151](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

**Y N**

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**Is the detection section of the TMA Sensor Out contaminated?**

**Y N**

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1').
- Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

A

## 389-668 TMA Thresh Hold Fail-In

### BSD-ON: 6.10 Image Registration Control

For the YMA Sensor Threshold level setting at the In side, the difference between the output voltage value of the Sensor that measures the IBT Belt surface and the output voltage value of the Sensor that measures the patch is lower than the permissible level. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of K color.

**NOTE:** Check whether any defect, such as white streaks, has occurred at the vicinity of the Sensor position.

#### Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In [P/J150](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor In [P/J150](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor In contaminated?

Y N

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 389-669 TMA Thresh Hold Fail-Out

### BSD-ON: 6.10 Image Registration Control

For the YMA Sensor Threshold level setting at the Out side, the difference between the output voltage value of the Sensor that measures the IBT Belt surface and the output voltage value of the Sensor that measures the patch is lower than the permissible level. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	08-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of K color.

**NOTE:** Check whether any defect, such as white streaks, has occurred at the vicinity of the Sensor position.

#### Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out [P/J151](#) and the Motor Driver Main PWB [P/J415](#) for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?**

Y N

Connect the TMA Sensor Out [P/J151](#) to the Motor Driver Main PWB [P/J415](#) properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt ([PL 6.3](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor Out contaminated?

Y N

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly ([PL 18.5](#)). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit ([PL 6.1](#)) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))





## 391-313 CRUM ASIC Communication Fault

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Communication error between CPU of the MDM PWB and CRUM ASIC was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and replace the MDM PWB.
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

## 391-400 Waste Toner Bottle Near Full

BSD-ON: [9.27 Waste Toner Disposal \(1 of 2\)](#)

The Waste Toner Bottle Full Sensor detected Near Full state.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

The Waste Toner Bottle needs to be replaced soon. Replace the Waste Toner Bottle ([PL 8.2](#)) as required. If the problem persists, check the Waste Toner Bottle Full Sensor.

Turn the power ON and enter the Diag mode. Turn ON [dC330](#) [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Waste Toner Bottle Full Sensor.

Press the Stop button and turn the power OFF.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-401 Drum Cartridge K Near Life

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

It was detected that the replacement timing for Drum (K) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

The Drum (K) needs to be replaced soon. Replace the Drum (K) ([PL 8.1](#)) as required.

## 391-402 Drum Cartridge K Life Over

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Drum (K) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Drum (K) ([PL 8.1](#)).

## 391-411 Drum Cartridge Y Near Life

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

It was detected that the replacement timing for Drum (Y) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

The Drum (Y) needs to be replaced soon. Replace the Drum (Y) ([PL 8.1](#)) as required.

## 391-421 Drum Cartridge M Near Life

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

It was detected that the replacement timing for Drum (M) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

The Drum (M) needs to be replaced soon. Replace the Drum (M) ([PL 8.1](#)) as required.

## 391-431 Drum Cartridge C Near Life

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

It was detected that the replacement timing for Drum (C) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

The Drum (C) needs to be replaced soon. Replace the Drum (C) ([PL 8.1](#)) as required.

## 391-480 Drum Cartridge Y Life Over

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Drum (Y) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace Drum (Y) ([PL 8.1](#)).

## 391-481 Drum Cartridge M Life Over

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Drum (M) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace Drum (M) ([PL 8.1](#)).

## 391-482 Drum Cartridge C Life Over

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Drum (C) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace Drum (C) ([PL 8.1](#)).

## 391-910 Waste Toner Bottle Not In Position

BSD-ON: [9.27 Waste Toner Disposal \(1 of 2\)](#)

The Waste Toner Bottle is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check that the Bottle Guide Assembly at the machine side and the Waste Toner Bottle does not have any deformation or foreign substances, and that they are installed properly. **Is the Waste Toner Bottle installed properly?**

Y N

Install the Waste Toner Bottle properly. If there is any deformation, replace the Waste Toner Bottle ([PL 8.2](#)) and Bottle Guide Assembly ([PL 8.2](#)).

Check the Waste Toner Bottle Position Sensor.

Turn the power ON and enter the Diag mode. Enter [dC330](#) [091-200]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Position Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Waste Toner Bottle Position Sensor.

Press the Stop button and turn the power OFF.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-911 Waste Toner Bottle Full

BSD-ON: [9.27 Waste Toner Disposal \(1 of 2\)](#)

After the Waste Toner Bottle Near Full has occurred, the PV exceeds the threshold value.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Replace the Waste Toner Bottle ([PL 8.2](#)). If the problem persists, check the Waste Toner Bottle Full Sensor. Enter [dC330](#) [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor. **Does the display change between High/Low?**

Y N

Use [OF 99-2 Transmissive Sensor RAP](#) to check the Waste Toner Bottle Full Sensor.

Press the Stop button and turn the power OFF.

Replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-913 Drum Cartridge K Life End

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Drum (K) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Drum (K) ([PL 8.1](#)).

## 391-914 Drum CRUM K Communication Fault

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Communication failure with Drum (K) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (K) [P/J115](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Drum (K) CRUM PWB for contamination or disengagement
  - The Drum (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (K) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (K) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))



## 391-915 Drum CRUM K Data Broken

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

The system detected that the data written to the Drum (K) CRUM and the data read from the Drum (K) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Remove and reinstall the Drum (K) and check for improper installation. If no problems are found, replace the Drum (K) ([PL 8.1](#)).

## 391-916 Drum CRUM K Data Mismatch

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Incorrect authentication area data was detected in Drum (K) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Remove and reinstall the Drum (K) and check for improper installation. If no problems are found, replace it with the correct Drum (K) ([PL 8.1](#)).

## 391-917 Drum CRUM Y Communication Fault

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Communication failure with Drum (Y) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (Y) [P/J112](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Drum (Y) CRUM PWB for contamination or disengagement
  - The Drum (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (Y) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (Y) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-918 Drum CRUM M Communication Fault

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Communication failure with Drum (M) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (M) [P/J113](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Drum (M) CRUM PWB for contamination or disengagement
  - The Drum (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (M) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (M) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-919 Drum CRUM C Communication Fault

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Communication failure with Drum (C) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (C) [P/J114](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Drum (C) CRUM PWB for contamination or disengagement
  - The Drum (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (C) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (C) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-920 Drum CRUM Y Data Broken

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

The system detected that the data written to the Drum (Y) CRUM and the data read from the Drum (Y) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (Y).
2. Check the Drum Unit (Y) for improper installation
3. If the problem persists, replace the Drum Unit (Y). ([PL 8.1](#))

## 391-921 Drum CRUM K Not In Position

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

The Drum (K) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum (K).
2. Polish the connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (K) [P/J115](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Drum (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (K) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (K) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-922 Drum CRUM M Data Broken

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

The system detected that the data written to the Drum (M) CRUM and the data read from the Drum (M) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (M).
2. Check the Drum Unit (M) for improper installation
3. If the problem persists, replace the Drum Unit (M). ([PL 8.1](#))

## 391-923 Drum CRUM C Data Broken

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

The system detected that the data written to the Drum (C) CRUM and the data read from the Drum (C) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (C).
2. Check the Drum Unit (C) for improper installation
3. If the problem persists, replace the Drum Unit (C). ([PL 8.1](#))

## 391-924 Drum CRUM Y Data Mismatch

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Incorrect authentication area data was detected in Drum (Y) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (Y).
2. Check the Drum Unit (Y) for improper installation
3. If the problem persists, replace the Drum Unit (Y). ([PL 8.1](#))

## 391-925 Drum CRUM M Data Mismatch

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Incorrect authentication area data was detected in Drum (M) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (M).
2. Check the Drum Unit (M) for improper installation
3. If the problem persists, replace the Drum Unit (M). ([PL 8.1](#))

## 391-926 Drum CRUM C Data Mismatch

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Incorrect authentication area data was detected in Drum (C) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum Unit (C).
2. Check the Drum Unit (C) for improper installation
3. If the problem persists, replace the Drum Unit (C). ([PL 8.1](#))

## 391-927 Drum CRUM Y Not In Position

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

The Drum (Y) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum (Y).
2. Polish the connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (Y) [P/J112](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Drum (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (Y) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (Y) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-928 Drum CRUM M Not In Position

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

The Drum (M) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum (M).
2. Polish the connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (M) [P/J113](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Drum (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (M) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (M) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-929 Drum CRUM C Not In Position

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

The Drum (C) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Remove and reinstall the Drum (C).
2. Polish the connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDM PWB [P/J528](#) and the Drum CRUM Coupler Assembly (C) [P/J114](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Drum (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (C) ([PL 8.1](#))
- Drum CRUM Coupler Assembly (C) ([PL 8.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 391-932 Drum Cartridge Y Life End

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Drum (Y) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Drum (Y) ([PL 8.1](#)).



## 391-933 Drum Cartridge M Life End

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

Drum (M) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Drum (M) ([PL 8.1](#)).

## 391-934 Drum Cartridge C Life End

BSD-ON: [9.4 Drum Life Control \(C,K\)](#)

Drum (C) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the Drum (C) ([PL 8.1](#)).

## 392-312 ATC Fault [Y]

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.13 Development \(Y\)](#)

The frequency at which the ATC Average Fail [Y] or the ATC Amplitude Fail [Y] has been occurring has exceeded the threshold value.

**NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-346] (ATC Fail [Y]) or DC131 [752-350] (ATC Fail Continuous Count [Y]) to “0”. If the machine is not repaired back to normal status, this failure will occur again during the operation.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: [dC330 \[093-005\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A1 and [P/J529](#) pin-A2
  - Between Motor Driver Sub PWB [P/J529](#) pin-A3 and [P/J529](#) pin-A4
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-026\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-313 ATC Fault [M]

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.14 Development \(M\)](#)

The frequency at which the ATC Average Fail [M] or the ATC Amplitude Fail [M] has been occurring has exceeded the threshold value.

**NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-347] (ATC Fail [M]) or DC131 [752-351] (ATC Fail Continuous Count [M]) to “0”. If the machine is not repaired back to normal status, this failure will occur again during the operation.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: [dC330 \[093-010\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A5 and [P/J529](#) pin-A6
  - Between Motor Driver Sub PWB [P/J529](#) pin-A7 and [P/J529](#) pin-A8
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-026\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-314 ATC Fault [C]

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.15 Development \(C\)](#)

The frequency at which the ATC Average Fail [C] or the ATC Amplitude Fail [C] has been occurring has exceeded the threshold value.

**NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-348] (ATC Fail [C]) or DC131 [752-352] (ATC Fail Continuous Count [C]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: [dC330 \[093-015\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A9 and [P/J529](#) pin-A10
  - Between Motor Driver Sub PWB [P/J529](#) pin-A11 and [P/J529](#) pin-A12
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-0226\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-315 ATC Fault [K]

BSD-ON: [9.2 Drum/Developer Drive Control \(K\)](#)

BSD-ON: [9.16 Development \(K\)](#)

The frequency at which the ATC Average Fail [K] or the ATC Amplitude Fail [K] has been occurring has exceeded the threshold value.

**NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-349] (ATC Fail [K]) or DC131 [752-353] (ATC Fail Continuous Count [K]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.

- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: [dC330 \[093-020\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-B1 and [P/J529](#) pin-B2
  - Between Motor Driver Sub PWB [P/J529](#) pin-B3 and [P/J529](#) pin-B4
- The Drum/Dev Drive Motor (K) for revolution failure (7830/35): [dC330 \[091-036\] \(PL 3.3A\)](#)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-649 ADC Shutter Open Fault

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC Sensor shutters is open (cannot be closed). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MDM PWB [P/J415](#) for open circuit, short circuit, and poor contact.

Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([PL 18.5](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-650 ADC Shutter Close Fault

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC Sensor shutters is closed (cannot be opened). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MDM PWB [P/J415](#) for open circuit, short circuit, and poor contact.

Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([PL 18.5](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-651 ADC Sensor Fault

**BSD-ON:** [9.23 ADC Patch and Environment Sensing](#)

The ADC Sensor read value of the density reference patch is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) [P/J153](#) and the MDM PWB [P/J415](#) for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([PL 18.5](#))
- IBT Assembly ([PL 6.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-657 ATC Amplitude Fault [Y]

**BSD-ON:** [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

**BSD-ON:** [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

**BSD-ON:** [9.13 Development \(Y\)](#)

**BSD-ON:** [9.19 Toner Cartridge Cooling \(7845/55\)](#)

The difference between the maximum and minimum values in the ATC Sensor (Y) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: [dC330 \[093-005\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A1 and [P/J529](#) pin-A2
  - Between Motor Driver Sub PWB [P/J529](#) pin-A3 and [P/J529](#) pin-A4
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-026\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-658 ATC Amplitude Fault [M]

**BSD-ON:** [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

**BSD-ON:** [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

**BSD-ON:** [9.14 Development \(M\)](#)

**BSD-ON:** [9.17 Toner Dispense Control \(Y, M\)](#)

The difference between the maximum and minimum values in the ATC Sensor (M) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: [dC330 \[093-016\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A5 and [P/J529](#) pin-A6
  - Between Motor Driver Sub PWB [P/J529](#) pin-A7 and [P/J529](#) pin-A8
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-026\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-659 ATC Amplitude Fault [C]

**BSD-ON:** [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

**BSD-ON:** [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

**BSD-ON:** [9.15 Development \(C\)](#)

**BSD-ON:** [9.18 Toner Dispense Control \(C,K\)](#)

The difference between the maximum and minimum values in the ATC Sensor (C) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: [dC330 \[093-015\] \(PL 5.1\)](#)  
Check the wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A9 and [P/J529](#) pin-A10
  - Between Motor Driver Sub PWB [P/J529](#) pin-A11 and [P/J529](#) pin-A12
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): [dC330 \[091-030\] \(PL 3.3A\)](#)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[091-030\] \(PL 3.3B\)](#)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): [dC330 \[093-026\] \(PL 3.3B\)](#)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-660 ATC Amplitude Fault [K]

BSD-ON: [9.3 Drum Life Control \(Y,M\)](#)

BSD-ON: [9.16 Development \(K\)](#)

BSD-ON: [9.18 Toner Dispense Control \(C,K\)](#)

The difference between the maximum and minimum values in the ATC Sensor (K) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the MDM PWB [P/J528](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: [dC330 \[093-020\] \(PL 5.1\)](#)

Check the wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm

- Between Motor Driver Sub PWB [P/J529](#) pin-B1 and [P/J529](#) pin-B2
- Between Motor Driver Sub PWB [P/J529](#) pin-B3 and [P/J529](#) pin-B4
- The Drum/Dev Drive Motor (K) for revolution failure (7830/35): [dC330 \[091-036\] \(PL 3.3A\)](#)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-661 Temperature Sensor Fault

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

Abnormal value was detected by the ENVIRONMENT SENSOR (Temperature). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly) [P/J154](#) and the MDM PWB [P/J415](#) for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([PL 18.5](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-662 Humidity Sensor Fault

**BSD-ON:** [9.23 ADC Patch and Environment Sensing](#)

Abnormal value was detected by the ENVIRONMENT SENSOR (Humidity). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly) [P/J154](#) and the MDM PWB [P/J415](#) for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly ([PL 18.5](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 392-665 ATC Average Fail Y

**BSD-ON:** [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

**BSD-ON:** [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

**BSD-ON:** [9.13 Development \(Y\)](#)

**BSD-ON:** [9.17 Toner Dispense Control \(Y, M\)](#)

The average output value of Y color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB [P/J124](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the Motor Driver Main PWB [P/J528](#) for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (Y) ([dC330 \[093-005\]](#)) for operation failure. ([PL 5.1](#))  
The wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A1 and [P/J529](#) pin-A2
  - Between Motor Driver Sub PWB [P/J529](#) pin-A3 and [P/J529](#) pin-A4
- **7830/35**
  - The Drum/Deve Drive Motor (Y, M, C) ([dC330 \[091-030\]](#)) for operation failure. ([PL 3.3A](#))
- **7845/55**
  - The Drum Drive Motor (Y, M, C) ([dC330 \[091-030\]](#)) for operation failure. ([PL 3.3B](#))
  - The Deve Drive Motor (Y, M, C) ([dC330 \[093-026\]](#)) for operation failure. ([PL 3.3B](#))
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (Y) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))



## 392-666 ATC Average Fail M

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

BSD-ON: [9.14 Development \(M\)](#)

BSD-ON: [9.17 Toner Dispense Control \(Y, M\)](#)

The average output value of M color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB [P/J125](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the Motor Driver Main PWB [P/J528](#) for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (M) ([dC330 \[093-010\]](#)) for operation failure. ([PL 5.1](#))  
The wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A5 and [P/J529](#) pin-A6
  - Between Motor Driver Sub PWB [P/J529](#) pin-A7 and [P/J529](#) pin-A8
- **7830/35**
  - The Drum/Deve Drive Motor (Y, M, C) ([DC330 \[091-030\]](#)) for operation failure. ([PL 3.3A](#))
- **7845/55**
  - The Drum Drive Motor (Y, M, C) ([dC330 \[091-030\]](#)) for operation failure. ([PL 3.3B](#))
  - The Deve Drive Motor (Y, M, C) ([dC330 \[093-026\]](#)) for operation failure. ([PL 3.3B](#))
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (M) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 392-667 ATC Average Fail C

BSD-ON: [9.1 Drum/Developer Drive Control \(Y,M,C\)](#)

BSD-ON: [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

BSD-ON: [9.15 Development \(C\)](#)

BSD-ON: [9.18 Toner Dispense Control \(C,K\)](#)

The average output value of C color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB [P/J126](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the Motor Driver Main PWB [P/J528](#) for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (C) ([dC330 \[093-015\]](#)) for operation failure. ([PL 5.1](#))  
The wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-A9 and [P/J529](#) pin-A10
  - Between Motor Driver Sub PWB [P/J529](#) pin-A11 and [P/J529](#) pin-A12
- **7830/35**
  - The Drum/Deve Drive Motor (Y, M, C) ([dC330 \[091-030\]](#)) for operation failure. ([PL 3.3A](#))
- **7845/55**
  - The Drum Drive Motor (Y, M, C) ([dC330 \[091-030\]](#)) for operation failure. ([PL 3.3B](#))
  - The Deve Drive Motor (Y, M, C) ([dC330 \[093-026\]](#)) for operation failure. ([PL 3.3B](#))
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (C) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 392-668 ATC Average Fail K

BSD-ON: [9.2 Drum/Developer Drive Control \(K\)](#)

BSD-ON: [9.16 Development \(K\)](#)

BSD-ON: [9.18 Toner Dispense Control \(C,K\)](#)

The average output value of K color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB [P/J127](#) for open circuit, short circuit, and poor contact
- The connection between the ATC PWB [P/J633](#) and the Motor Driver Main PWB [P/J528](#) for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (K) ([dC330](#) [093-020]) for operation failure. ([PL 5.1](#))  
The wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB [P/J529](#) pin-B1 and [P/J529](#) pin-B2
  - Between Motor Driver Sub PWB [P/J529](#) pin-B3 and [P/J529](#) pin-B4
- The Drum/Deve Drive Motor (K) ([dC330](#) [091-036]) for operation failure. ([PL 3.3A](#), [PL 3.3B](#))
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (K) ([PL 5.2](#))
- ATC PWB ([PL 5.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))

## 392-670 ADC Patch Fault [Y]

BSD-ON: [9.13 Development \(Y\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC patch of Y color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [Y] has occurred. **Has Fail [392-651](#) or [392-312](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (Y) for contamination
- The LPH (Y) for contamination
- The 1st BTR (Y) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (Y) ([PL 8.1](#))
- LPH Assembly (Y) ([PL 2.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to the [392-651](#) or [392-312](#).

## 392-671 ADC Patch Fault [M]

BSD-ON: [9.14 Development \(M\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC patch of M color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [M] has occurred. **Has Fail [392-651](#) or [392-313](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (M) for contamination
- The LPH (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (M) ([PL 8.1](#))
- LPH Assembly (M) ([PL 2.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-313](#).

## 392-672 ADC Patch Fault [C]

BSD-ON: [9.15 Development \(C\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC patch of C color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [C] has occurred. **Has Fail [392-651](#) or [392-314](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (C) for contamination
- The LPH (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (C) ([PL 8.1](#))
- LPH Assembly (C) ([PL 2.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/DTC) ([PL 6.2](#))
- MDMPWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-314](#).

## 392-673 ADC Patch Fault [K]

BSD-ON: [9.16 Development \(K\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The ADC patch of K color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [K] has occurred. **Has Fail [392-651](#) or [392-315](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (K) for contamination
- The LPH (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (K) ([PL 8.1](#))
- LPH Assembly (K) ([PL 2.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-315](#).

## 392-675 ADC Mini Setup Fault [Y]

BSD-ON: [9.7 Charging and Exposure \(7845/55\) \(1 of 2\)](#)

BSD-ON: [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

BSD-ON: [9.13 Development \(Y\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The difference in densities among the ADC patches of Y color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [Y] has occurred. **Has Fail [392-651](#) or [392-312](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (Y) for contamination
- The 1st BTR (Y) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (Y) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (BCR) and the BCR (Y) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (Y) ([PL 8.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (BCR) (7845/55) ([PL 18.6B](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-312](#).

## 392-676 ADC Mini Setup Fault [M]

BSD-ON: [9.7 Charging and Exposure \(7845/55\) \(1 of 2\)](#)

BSD-ON: [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

BSD-ON: [9.14 Development \(M\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The difference in densities among the ADC patches of M color is abnormal. (This is a hidden failure. (Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [M] has occurred. **Has Fail [392-651](#) or [392-313](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (M) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (BCR) and the BCR (M) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (M) ([PL 8.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (BCR) (7845/55) ([PL 18.6B](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDMPWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-313](#).

## 392-677 ADC Mini Setup Fault [C]

BSD-ON: [9.7 Charging and Exposure \(7845/55\) \(1 of 2\)](#)

BSD-ON: [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

BSD-ON: [9.15 Development \(C\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The difference in densities among the ADC patches of C color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [C] has occurred. **Has Fail [392-651](#) or [392-314](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (C) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (BCR) and the BCR (C) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (C) ([PL 8.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (BCR) (7845/55) ([PL 18.6B](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-314](#).

## 392-678 ADC Mini Setup Fault [K]

BSD-ON: [9.7 Charging and Exposure \(7845/55\) \(1 of 2\)](#)

BSD-ON: [9.9 Charging and Exposure \(7830/35\) \(1 of 2\)](#)

BSD-ON: [9.16 Development \(K\)](#)

BSD-ON: [9.21 First Transfer](#)

BSD-ON: [9.23 ADC Patch and Environment Sensing](#)

The difference in densities among the ADC patches of K color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [K] has occurred. **Has Fail [392-651](#) or [392-315](#) occurred?**

Y N

Turn the power OFF and check the following:

- The Drum (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- **7830/35**
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (K) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts
- **7845/55**
  - The connection and board springs between the HVPS (BCR) and the BCR (K) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (K) ([PL 8.1](#))
- HVPS (Dev/BCR) (7830/35) ([PL 18.6A](#))
- HVPS (BCR) (7845/55) ([PL 18.6B](#))
- HVPS (Dev) (7845/55) ([PL 5.3](#))
- HVPS (1st/2nd/BTR) ([PL 6.2](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Go to [392-651](#) or [392-315](#).



## 393-314 Y Dispense Motor Fault

**BSD-ON:** [9.5 Toner Cartridge Life Control \(Y,M\)](#)

Regardless of low usage of toner from Y Toner Cartridge, it was detected to be empty.

### NOTE:

- *If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.*
- *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

1. Turn the power OFF and ON.
2. Replace the Toner Cartridge (Y) ([PL 5.1](#)).

If the problem persists, check the following:

- The connectors of the MDM PWB [P/J411](#) and the Toner CRUM Coupler (Y) [P/J120](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler (Y) [P/J120](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y): [dC330 \[093-002\] \(PL 5.1\)](#)
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - [7830/35 \(PL 18.2A\)](#)
  - [7845/55 \(PL 18.2B\)](#)

## 393-315 M Dispense Motor Fault

**BSD-ON:** [9.5 Toner Cartridge Life Control \(Y,M\)](#)

Regardless of low usage of toner from M Toner Cartridge, it was detected to be empty.

### NOTE:

- *If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.*
- *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

1. Turn the power OFF and ON.
2. Replace the Toner Cartridge (M) ([PL 5.1](#)).

If the problem persists, check the following:

- The connectors of the MDM PWB [P/J411](#) and the Toner CRUM Coupler (M) [P/J121](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler (M) [P/J121](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M): [dC330 \[093-007\] \(PL 5.1\)](#)
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - [7830/35 \(PL 18.2A\)](#)
  - [7845/55 \(PL 18.2B\)](#)



## 393-316 C Dispense Motor Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

Regardless of low usage of toner from C Toner Cartridge, it was detected to be empty.

### NOTE:

- *If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.*
- *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

1. Turn the power OFF and ON.
2. Replace the Toner Cartridge (C) ([PL 5.1](#)).

If the problem persists, check the following:

- The connectors of the MDM PWB [P/J411](#) and the Toner CRUM Coupler (C) [P/J122](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler (C) [P/J122](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C): [dC330 \[093-012\]](#) ([PL 5.1](#))
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - [7830/35 \(PL 18.2A\)](#)
  - [7845/55 \(PL 18.2B\)](#)

## 393-317 K Dispense Motor Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

Regardless of low usage of toner from K Toner Cartridge, it was detected to be empty.

### NOTE:

- *If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.*
- *When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.*

### Cause/Action

1. Turn the power OFF and ON.
2. Replace the Toner Cartridge (K) ([PL 5.1](#)).

If the problem persists, check the following:

- The connectors of the MDM PWB [P/J411](#) and the Toner CRUM Coupler (K) [P/J123](#) for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler (K) [P/J123](#) for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K): [dC330 \[093-017\]](#) ([PL 5.1](#))
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - [7830/35 \(PL 18.2A\)](#)
  - [7845/55 \(PL 18.2B\)](#)

## 093-324 Deve Y, M, C Motor Fail (7845/55)

BSD-ON: [9.11 Developer Drive Control \(Y,M,C\) \(7845/55\)](#)

The Deve Drive Motor (Y, M, C) revolution failure was detected.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Procedure

Remove the Drum Unit (Y, M, C) and the Developer (Y, M, C), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [093-025] (Deve Drive Motor (Y, M, C)). **Does the Deve Drive Motor (Y, M, C) rotate?**

Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Deve Drive Motor (Y, M, C).
- The connection between the Motor Driver Main PWB [P/J527](#) and the Deve Drive Motor (Y, M, C) [P/J247](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Deve Drive Motor (Y, M, C) ([PL 3.3B](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

Turn OFF the power and reinstall the Drum Unit (Y, M, C) and the Developer (Y, M, C).

Turn ON the power and turn ON DC330 [093-025] (Deve Drive Motor (Y, M, C)). **Does the Deve Drive Motor (Y, M, C) rotate?**

Y N

Check the Developer (Y, M, C) for loading/binding.

Turn OFF the power and check the connection between the Deve Drive Motor (Y, M, C) [P/J247-8](#) and the Motor Driver Main PWB [P/J527-A9](#) for open circuit, short circuit, and poor contact.

If no problem is found, replace MDM PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))

## 393-400 Y Toner Cartridge Near Empty RAP

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

It was detected that the replacement timing for Toner Cartridge (Y) is closer than Pre Near.

### Procedure

The Toner Cartridge (Y) needs to be replaced soon. Replace the Toner Cartridge (Y) ([PL 5.1](#)) as required.

## 393-423 M Toner Cartridge Near Empty RAP

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

It was detected that the replacement timing for Toner Cartridge (M) is closer than Pre Near.

### Procedure

The Toner Cartridge (M) needs to be replaced soon. Replace the Toner Cartridge (M) ([PL 5.1](#)) as required.

## 393-424 C Toner Cartridge Near Empty RAP

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

It was detected that the replacement timing for Toner Cartridge (C) is closer than Pre Near.

### Procedure

The Toner Cartridge (C) needs to be replaced soon. Replace the Toner Cartridge (C) ([PL 5.1](#)) as required.

## 393-425 K Toner Cartridge Near Empty RAP

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

It was detected that the replacement timing for Toner Cartridge (K) is closer than Pre Near.

### Procedure

The Toner Cartridge (K) needs to be replaced soon. Replace the Toner Cartridge (K) ([PL 5.1](#)) as required.

## 393-912 K Toner Cartridge Empty

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

The K Toner Cartridge Empty state was detected.

### Cause/Action

Replace the Toner Cartridge (K) ([PL 5.1](#)). No special action necessary.

## 393-924 Toner K CRUM Communication Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

Communication failure with Toner CRUM (K) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.
2. Check the connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (K) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (K) ([PL 5.1](#))
- Toner CRUM Coupler Assembly (K) ([PL 5.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- Go to [393-926 Toner K CRUM Data Mismatch Fault](#)

## 393-925 Toner K CRUM Data Broken Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

The system detected that the data written to the Toner CRUM (K) and the data read from the Toner CRUM (K) do not match.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Initial Actions

Remove and reinstall the Toner Cartridge (K).

### Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Black Toner Cartridge and check for improper installation. **The problem continues**

Y N  
| End

Check the NVM locations in [Table 1](#).

Table 1 CRUM Data NVM

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

**The NVM values match the expected customer configuration.**

Y N

Determine correct Contract Type from customer. Contact Technical Support Center or your NTS for the CRUM conversion procedure.

1. Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Toner Cartridge (K) for improper installation
- If no problems are found, replace the following parts in sequence:
- Toner Cartridge (M) (PL 5.1)
  - Toner CRUM Coupler Assembly (M) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 393-926 Toner K CRUM Data Mismatch Fault

**BSD-ON: 9.6 Toner Cartridge Life Control (C,K)**

Incorrect authentication area data was detected in the Black Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Initial Actions

Remove and reinstall the Toner Cartridge (K).

### Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Black Toner Cartridge and check for improper installation. **The problem continues**

Y N  
| End

Check the NVM locations in Table 1.

**Table 1 CRUM Data NVM**

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

**The NVM values match the expected customer configuration.**

Y N  
| Go to GP 16

1. Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (K) P/J123 for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Toner Cartridge (K) for improper installation
- If no problems are found, replace the following parts in sequence:
- Toner Cartridge (M) (PL 5.1)
  - Toner CRUM Coupler Assembly (M) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 393-927 Toner Y CRUM Communication Fault

**BSD-ON:** [9.5 Toner Cartridge Life Control \(Y,M\)](#)

Communication failure with Toner CRUM (Y) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.

**NOTE:** If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

2. Check the connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact.
3. Remove and reinstall the Toner Cartridge (Y) and check for improper installation.
4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (Y) (PL 5.1)
  - Toner CRUM Coupler Assembly (Y) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - Go to [393-937 Toner Y CRUM Data Mismatch Fault](#)

## 393-928 Toner M CRUM Communication Fault

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

Communication failure with Toner CRUM (M) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.

**NOTE:** . If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

2. Check the connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact.
3. Remove and reinstall the Toner Cartridge (M) and check for improper installation.
4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (M) ([PL 5.1](#))
  - Toner CRUM Coupler Assembly (M) ([PL 5.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - Go to [393-938](#) Toner M CRUM Data Mismatch Fault

## 393-929 Toner C CRUM Communication Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

Communication failure with Toner CRUM (C) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

1. Turn the power OFF and ON.

**NOTE:** . If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

2. Check the connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact.
3. Remove and reinstall the Toner Cartridge (C) and check for improper installation.
4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (C) ([PL 5.1](#))
  - Toner CRUM Coupler Assembly (C) ([PL 5.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - Go to [393-939](#) Toner C CRUM Data Mismatch Fault



## 393-933 Toner Y CRUM Data Broken Fault

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

The system detected that the data written to the Toner CRUM (Y) and the data read from the Toner CRUM (Y) do not match.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge (Y).
3. Check the Toner Cartridge (Y) for improper installation
4. If the problem persists, replace the Toner Cartridge (Y). ([PL 5.1](#))

## 393-934 Toner M CRUM Data Broken Fault

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

The system detected that the data written to the Toner CRUM (M) and the data read from the Toner CRUM (M) do not match.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge (M).
3. Check the Toner Cartridge (M) for improper installation
4. If the problem persists, replace the Toner Cartridge (M). ([PL 5.1](#))

## 393-935 Toner C CRUM Data Broken Fault

BSD-ON: [9.6 Toner Cartridge Life Control \(C,K\)](#)

The system detected that the data written to the Toner CRUM (C) and the data read from the Toner CRUM (C) do not match.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge (C).
3. Check the Toner Cartridge (C) for improper installation
4. If the problem persists, replace the Toner Cartridge (C). ([PL 5.1](#))

## 393-937 Toner Y CRUM Data Mismatch Fault

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

Incorrect authentication area data was detected in the Yellow Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine).

### Initial Actions

Remove and reinstall the Toner Cartridge (Y).

### Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Yellow Toner Cartridge and check for improper installation. **The problem continues**

Y N  
| End

Check the NVM locations in [Table 1](#).

Table 1 NVM Values

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

**The NVM values match the expected customer configuration.**

Y N  
| Go to [GP 16](#)

1. Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
- The Toner Cartridge (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 393-938 Toner M CRUM Data Mismatch Fault - TBD verify this for Spyglass

**BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)**

Incorrect authentication area data was detected in the Magenta Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The 7830/35/45/55 machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine).

### Initial Actions

Remove and reinstall the Toner Cartridge (M).

### Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Magenta Toner Cartridge and check for improper installation. **The problem continues**

Y N  
| End

Check the NVM locations in [Table 1](#).

**Table 1 NVM Values**

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

**The NVM values match the expected customer configuration.**

Y N  
| Go to [GP 16](#)

1. Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Toner Cartridge (M) for improper installation
- If no problems are found, replace the following parts in sequence:
- Toner Cartridge (M) (PL 5.1)
  - Toner CRUM Coupler Assembly (M) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 393-939 Toner C CRUM Data Mismatch Fault

**BSD-ON:** [9.6 Toner Cartridge Life Control \(C,K\)](#)

Incorrect authentication area data was detected in the Cyan Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** *The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.*

*One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine.*

### Initial Actions

Remove and reinstall the Toner Cartridge (C).

### Procedure

An Error Message appears on the UI - **Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details.** Remove and reinstall the Cyan Toner Cartridge and check for improper installation. **The problem continues**

Y N  
| End

Check the NVM locations in [Table 1](#).

**Table 1 NVM Values**

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

**The NVM values match the expected customer configuration.**

Y N  
| Go to [GP 16](#)

1. Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
2. Check the following:
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
- The Toner Cartridge (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## **393-956 Deve install Mode Fail K**

### **Procedure**

TBD

## 393-959 Deve Install Times Over Fail K

### Procedure

TBD

## 393-970 Toner Y CRUM Not In Position

BSD-ON: [9.5 Toner Cartridge Life Control \(Y,M\)](#)

BSD-ON: [9.17 Toner Dispense Control \(Y, M\)](#)

The Toner CRUM (Y) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine).

### Cause/Action

1. Remove and reinstall the Toner Cartridge (Y).
2. Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDS PWB [P/J529](#) and the Toner Dispense Motor [P/J220](#) for damaged wiring or connectors
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (Y) [P/J120](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Toner Cartridge (Y) for improper installationIf no problems are found, replace the following parts in sequence:
  - Toner Cartridge (Y) ([PL 5.1](#))
  - Toner CRUM Coupler Assembly (Y) ([PL 5.1](#))
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))
  - MDS PWB (7830/35) ([PL 18.2A](#))
  - MDS PWB (7845/55) ([PL 18.2B](#))
  - Go to [393-937](#) Toner Y CRUM Data Mismatch Fault

## 393-971 Toner M CRUM Not In Position

**BSD-ON:** [9.5 Toner Cartridge Life Control \(Y,M\)](#)

**BSD-ON:** [9.17 Toner Dispense Control \(Y, M\)](#)

The Toner CRUM (M) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine.

### Cause/Action

1. Remove and reinstall the Toner Cartridge (M).
2. Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDS PWB [P/J529](#) and the Toner Dispense Motor [P/J221](#) for damaged wiring or connectors
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (M) [P/J121](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Toner Cartridge (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) ([PL 5.1](#))
- Toner CRUM Coupler Assembly (M) ([PL 5.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))
- Go to [393-938](#) Toner M CRUM Data Mismatch Fault

## 393-972 Toner C CRUM Not In Position

**BSD-ON:** [9.6 Toner Cartridge Life Control \(C,K\)](#)

**BSD-ON:** [9.18 Toner Dispense Control \(C, K\)](#)

The Toner CRUM (C) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a “Sold” cartridge installed in a “metered” configured machine.

### Cause/Action

1. Remove and reinstall the Toner Cartridge (C).
2. Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDS PWB [P/J529](#) and the Toner Dispense Motor [P/J222](#) for damaged wiring or connectors
  - The connection between the MDM PWB [P/J411](#) and the Toner CRUM Coupler Assembly (C) [P/J122](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Toner Cartridge (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (C) ([PL 5.1](#))
- Toner CRUM Coupler Assembly (C) ([PL 5.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))
- Go to [393-939](#) Toner C CRUM Data Mismatch Fault

## 393-973 Toner K CRUM Not In Position

**BSD-ON:** [9.6 Toner Cartridge Life Control \(C,K\)](#)

**BSD-ON:** [9.18 Toner Dispense Control \(C, K\)](#)

The Toner CRUM (K) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine).

### Cause/Action

1. Remove and reinstall the Toner Cartridge (K).
2. Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
3. Check the following:
  - The connection between the MDS PWB [P/J529](#) and the Toner Dispense Motor [P/J223](#) for damaged wiring or connectors
  - The connection between the MDM PWB [J411](#) and the Toner CRUM Coupler Assembly (K) [P/J123](#) for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Toner Cartridge (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (K) ([PL 5.1](#))
- Toner CRUM Coupler Assembly (K) ([PL 5.1](#))
- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#))
- MDS PWB (7830/35) ([PL 18.2A](#))
- MDS PWB (7845/55) ([PL 18.2B](#))
- Go to [393-926 Toner K CRUM Data Mismatch Fault](#).





## 394-300 IBT Front Cover Open

BSD-ON: [1.13 Interlocked Cover Switches](#)

The Front Cover Open was detected by the IBT Front Cover Switch.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Front Cover for damage or mismatch.
- The IBT Front Cover Switch for failure: [dC330 \[077-307\]](#) ([PL 18.5](#))
- The connection between the IBT Front Cover Switch [P/J272](#) and the MDM PWB [P/J416](#) for open circuit, short circuit, and poor contact

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#)).

## 394-320 1st BTR Contact/Retract Fail

BSD-ON: [9.22 First BTR Contact/Retract Control](#)

After the 1st BTR Contact/Retract operation has started, it does not complete within the specified time.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### Cause/Action

Check the following:

- The 1st BTR Contact/Retract Sensor for improper installation
- The 1st BTR Contact/Retract Sensor (DC330 [094-200]) for operation failure. ([PL 3.2](#))
- The 1st BTR Contact/Retract Clutch (DC330 [094-012/013]) for operation failure. ([PL 3.2](#))  
The coil resistance of the 1st BTR Contact/Retract Clutch: approx. 240 Ohm (when coil temperature is 20 degrees celsius)

– Between Motor Driver Main PWB [P/J417](#) pin-A8 and [P/J417](#) pin-A9

**NOTE:** During the 1st BTR Contact/Retract operation, also check for the rotation of the Fusing Unit Drive Motor. If it is not rotating, check the 1st BTR Contact/Retract Gear for blockage and damage.

- The IBT Belt Unit for mechanical loading or damage

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) ([PL 18.2A](#))
- MDM PWB (7845/55) ([PL 18.2B](#)).

## 394-417 IBT Unit Near End Warning

BSD-ON: [10.6 Fusing](#)

The IBT Assembly needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the IBT Assembly and clear [dC135](#) [954-820] (IBT Belt Assembly).

## 394-418 IBT CLN Unit Near End Warning

BSD-ON: [10.6 Fusing](#)

The IBT Cleaner needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the IBT Cleaner and clear [dC135](#) [954-822] (Transfer Belt Cleaner).

## 394-419 2nd BTR Unit Near End Warning

BSD-ON: [10.6 Fusing](#)

The 2nd BTR needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the 2nd BTR and clear [dC135](#) [954-821] (Second Bias Transfer Roll).

## 394-420 IBT Unit End Warning

BSD-ON: [10.6 Fusing](#)

The IBT Assembly must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the IBT Assembly and clear [dC135](#) [954-820] (IBT Belt Assembly).

## 394-421 IBT CLN Unit End Warning

BSD-ON: [10.6 Fusing](#)

The IBT Cleaner must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the IBT Cleaner and clear [dC135](#) [954-822] (Transfer Belt Cleaner).

## 394-422 2nd BTR Unit End Warning

BSD-ON: [10.6 Fusing](#)

The 2nd BTR must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Replace the 2nd BTR and clear [dC135](#) [954-821] (Second Bias Transfer Roll).

# 95-XXX Faults Entry RAP

## 95-XXX Fault Code Table

Find the Fault Code in [Table 1](#). Go to the Procedure listed for that Fault Code.

**Table 1 Chain 95 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	000	00	Software Upgrade Failure: DC BootCode	Failed to upgrade the DC Boot Code	<a href="#">SBC Procedure</a>
95	001	00	Software Upgrade Failure: DC SoftwareUpgradeCode	Failed to upgrade the DC Software Upgrade Code	<a href="#">SBC Procedure</a>
95	002	00	Software Upgrade Failure: DC Application	Failed to upgrade the DC Application	<a href="#">SBC Procedure</a>
95	008	00	Software Upgrade Failure: DC OS	Failed to upgrade the DC Operating System	<a href="#">SBC Procedure</a>
95	009	00	Software Upgrade Failure: DC CIPS	Failed to upgrade the DC CIPS	<a href="#">SBC Procedure</a>
95	016	00	Software Upgrade Failure: SUI Application	Failed to upgrade the SUI Application Code	<a href="#">SBC Procedure</a>
95	019	00	Software Upgrade Failure: SUI H8	Failed to upgrade the SUI H8	<a href="#">SBC Procedure</a>
95	020	00	Failed to upgrade the SUI H8	Failed to upgrade the DADH Application	<a href="#">DADF Procedure</a>
95	021	00	Software Upgrade Failure: Ext Memory	External Memory Error	<a href="#">SBC Procedure</a>
95	022	00	Software Upgrade Failure: DADH Kernel	Failed to upgrade the DADH Kernel	<a href="#">DADF Procedure</a>
95	030	00	Software Upgrade Failure: FAX Application	Failed to upgrade the FAX Application	<a href="#">FAX Procedure</a>
95	031	00	Software Upgrade Failure: FAX FPGA	Failed to upgrade the Fax FPGA	<a href="#">FAX Procedure</a>
95	035	00	Software Upgrade Failure: FAX Bootcode	Failed to upgrade the Fax Bootcode	<a href="#">FAX Procedure</a>
95	038	00	Software Upgrade Failure: Embedded Fax LCF Application	Failed to upgrade the embedded fax LCF Application	<a href="#">FAX Procedure</a>
95	040	00	Software Upgrade Failure: IOT Bootstrap	Failed to upgrade the IOT bootstrap code	
95	041	00	Software Upgrade Failure: IOT Bootloader	Failed to upgrade the IOT Bootloader code	
95	042	00	Software Upgrade Failure: IOT Application	Failed to upgrade the IOT Application	
95	048	00	Software Upgrade Failure: IOT Duplex Module	Failed to upgrade the IOT Duplex Module	
95	049	00	Software Upgrade Failure: IOT Loosely Coupled Module	Failed to upgrade the IOT Loosely Coupled Module	

**Table 1 Chain 95 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	050	00	Software Upgrade Failure: LCSS 1K Application	Failed to upgrade the LCSS 1K Application	
95	060	00	Software Upgrade Failure: LCSS 2K Application	Failed to upgrade the LCSS 2K application	
95	065	00	Software Upgrade Failure: LCSS 2K Bootcode	Failed to upgrade the LCSS 2K Application	
95	070	00	Software Upgrade Failure: LCSS 3K Application	Failed to upgrade the LCSS 3K Application	
95	100	00	Software Upgrade Failure: HCSS BO HCSS Application	Failed to upgrade the HCSS BO HCSS Application	N/A
95	110	00	Software Upgrade Failure: HCSS BO Application	Failed to upgrade the HCSS BO Application	N/A
95	140	00	Software Upgrade Failure: DC NC Applications	Failed to upgrade the DC NC Applications	
95	141	00	Software Upgrade Failure: DC NC OS	Failed to upgrade the DC NC Operating System	
95	150	00	software Upgrade Failure: IIT Application	Failed to upgrade the IIT Application	<a href="#">IIT Procedure</a>
95	151	00	Software Upgrade Failure: Embedded Fax FPGA	Failed to upgrade the Embedded Fax FPGA	<a href="#">FAX Procedure</a>
95	153	00	Software Upgrade Failure: IIT Kernel	Failed to upgrade the IIT Kernel	<a href="#">IIT Procedure</a>
95	154	00	Software Upgrade Failure: IIT A4 Scanner Module	Failed to upgrade the IIT A4 Scanner Module	<a href="#">IIT Procedure</a>
95	155	00	Software Upgrade Failure: IIT CCD Module	Failed to upgrade the IIT CCD Module	<a href="#">IIT Procedure</a>
95	156	00	Software Upgrade Failure: IIT FWA TES Module	Failed to upgrade the IIT FWA TES Module	<a href="#">IIT Procedure</a>
95	157	00	Software Upgrade Failure: DADH Quiet 100 Sheet Module	Failed to upgrade the DADH Quiet 100 Sheet Module	<a href="#">DADF Procedure</a>
95	158	00	Software Upgrade Failure: DADH 100 Sheet Module	Failed to upgrade the DADH 100 Sheet Module	<a href="#">DADF Procedure</a>
95	159	00	Software Upgrade Failure: DADH Quiet Module	Failed to upgrade the DADH Quiet Module	<a href="#">DADF Procedure</a>
95	170	00	Software Upgrade Failure: Scanner FWModule	Failed to upgrade the Scanner Firmware Module	<a href="#">IIT Procedure</a>
95	180	00	Software Upgrade Failure: HCF FWModule	Failed to upgrade the HCF Firmware Module	<a href="#">HDF Procedure</a>
95	190	00	Software Upgrade Failure: PFM FWModule	Failed to upgrade the PFM Firmware Module	N/A
95	191	00	Software Upgrade Failure: PFP FWModule	Failed to upgrade the PFP Firmware Module	

**Table 1 Chain 95 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	192	00	Software Upgrade Failure: HVF Application	Failed to upgrade the HVF Application	
95	193	00	Software Upgrade Failure: HVF BM Application	Failed to upgrade the HVF BM Application	
95	194	00	Software Upgrade Failure: HVF Bootcode	Failed to upgrade the HVF Bootcode	
95	195	00	Software Upgrade Failure: HVF BM Bootcode	Failed to upgrade the HVF BM Bootcode	
95	196	00	Software Upgrade Failure: PFP Bootloader	Failed to upgrade the PFP Bootloader	
95	200	00	Software Upgrade Failure: C Finisher Application	Failed to upgrade the C Finisher Application	Finishing Procedure
95	201	00	Software Upgrade Failure: D Finisher Application	Failed to upgrade the D Finisher Application	N/A
95	202	00	Software Upgrade Failure: KM Finisher Application	Failed to upgrade the KM Finisher Application	N/A
95	203	00	Software Upgrade Failure: A Finisher Application	Failed to upgrade the A Finisher Application	Finishing Procedure
95	204	00	Software Upgrade Failure: SB Finisher Application	Failed to upgrade the SB Finisher Application	N/A
95	206	00	Software Upgrade Failure: PFM Tray 3 Application	Failed to upgrade the PFM Tray 3 Application	N/A
95	207	00	Software Upgrade Failure: PFM Tray 4 Application	Failed to upgrade the PFM Tray 4 Application	N/A
95	208	00	Software Upgrade Failure: PFM Tray 5 Application	Failed to upgrade the PFM Tray 5 Application	N/A
95	212	00	Software Upgrade Failure: DC IOT Proxy	Failed to upgrade the DC IOT Proxy	
95	213	00	Software Upgrade Failure: DC IIT Proxy	Failed to upgrade the DC IIT Proxy	IIT Procedure
95	214	00	Software Upgrade Failure: DC ACD	Failed to upgrade the DC ACD	
95	216	00	Software Upgrade Failure: DC Glue	Failed to upgrade the DC Glue Application	
95	217	00	Software Upgrade Failure: DC PWS Proxy	Failed to upgrade the DC PWS Proxy	
95	218	00	Software Upgrade Failure: Staple Stacker 650 Bootcode	Failed to upgrade the Staple Stacker 650 Bootcode	
95	219	00	Software Upgrade Failure: Staple Stacker 650 Application	Failed to upgrade the Staple Stacker 650 Application	
95	221	00	Software Upgrade Failure: LVF Bootcode	Failed to upgrade the LVF Bootcode	
95	222	00	Software Upgrade Failure: LVF Application	Failed to upgrade the LVF Application	

**Table 1 Chain 95 Fault Codes**

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	223	00	Software Upgrade Failure: LVF BM Bootcode	Failed to upgrade the LVF BM Bootcode	
95	224	00	Software Upgrade Failure: LVF BM Application	Failed to upgrade the LVF BM Application	
95	251	00	Software Upgrade Failure: DC Nomad Proxy	Failed to upgrade the DC Nomad Proxy	
95	254	00	Software Upgrade Failure: DC Upgrade report Descriptor	Failed to upgrade the DC Upgrade Report Descriptor	
95	255	00	Software Upgrade Failure: DC SCD	Failed to upgrade the DC SCD	
95	300	00	Software Upgrade Failure: Incompatible Product	SWUP Incompatible Product	
95	301	00	Software Upgrade Failure: Incompatible Hardware	SWUP Incompatible Hardware	
95	302	00	Software Upgrade Failure: Incompatible Firmware	SWUP Incompatible Firmware	
95	303	00	Software Upgrade Failure: DLM Downgrade	SWUP DLM Downgrade Error	
95	304	00	Software Upgrade Failure: DLM Sidegrade	SWUP DLM Sidegrade Error	
95	305	00	Software Upgrade Failure: Platform Synchronisation Error	SWUP Platform Synchronisation Error	

**SBC Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9 Regular / Forced AltBoot](#), and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - SCB PWB ([PL 35.2](#))

**IOT Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9 Regular / Forced AltBoot](#), and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - MDM PWB (7830/35) ([PL 18.2A](#))
  - MDM PWB (7845/55) ([PL 18.2B](#))

**FAX Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9 Regular / Forced AltBoot](#), and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - FAX Unit ([PL 35.1](#))

**IIT Procedure**

1. Check that system connections are correct.

2. Refer to [GP 9](#) Regular / Forced AltBoot, and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - IIT PWB ([PL 1.8](#))

#### **DADF Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9](#) Regular / Forced AltBoot, and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - DADF PWB ([PL 51.2](#))

#### **HDF Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9](#) Regular / Forced AltBoot, and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - HCF PWB ([PL 28.8](#))

#### **Finishing Procedure**

1. Check that system connections are correct.
2. Refer to [GP 9](#) Regular / Forced AltBoot, and perform a forced altboot software installation.
3. If the error persists, replace the faulty board
  - C / Professional Finisher (Finisher PWB - [PL 21.12](#))
  - A / Integrated Office Finisher (Finisher PWB - [PL 22.7](#))
  - LX Finisher (Finisher PWB - [PL 23.16](#))





## AC Power RAP

BSD-ON: [BSD 1.1 Main Power On](#)

**NOTE:** When turning power Off, turn Off the Power Switch then the Main Power Switch.

### Initial Actions

If the GFI Breaker is tripped, reset the Breaker. If the Breaker trips again, check the AC circuit for a short circuit.

### Procedure

Plug in the Power Cord. **AC line voltage is measured between the GFI Breaker J10 and J11.**

Y N

**Unplug the Power Cord from the outlet. AC line voltage is measured at the outlet.**

Y N

Check the customer's breaker. If necessary, use a different outlet.

Check the Power Cord for open circuit and poor contact. If no problems are found, replace the GFI ([PL 18.4](#)).

Turn the main power On (turn On the Main Power Switch). **AC line voltage is measured between the Main Power Switch J13 and J15.**

Y N

**Is the voltage between the Main Power Switch J13 and J15 equal to line voltage?**

Y N

Go to [OF 99-3](#) and test the switch. **The switch operates correctly.**

Y N

Replace the Main Power Switch ([PL 18.5](#)).

Replace the Breaker.

Unplug the Power Cord and disconnect J1 on the Main LVPS. Check for open circuits and poor contacts.

- Between Main Power Switch J13 and Main LVPS J1-3
- Between Main Power Switch J15 and Main LVPS J1-1

If no problem is found, replace the Main LVPS.

Check the AC circuit to each component by referring to Chapter 7 Wiring Data.

## STBY +5VDC Power RAP

BSD-ON: [BSD 1.3 DC Power Generation \(1 of 5\)](#)

**NOTE:** When turning power Off, turn Off the Power Switch then the Main Power Switch.

### Procedure

Turn the power On. **Are the voltages between the Main LVPS J501-1/2/3 (+) and the GND (-) +5V?**

Y N

**Is the voltage between the Main LVPS J1-1 and J1-3 equal to line voltage?**

Y N

Go to the [AC Power RAP](#).

Turn the power Off and disconnect the Main LVPS J501 and J502. Turn On the machine 15 seconds later. **Are the voltages between the Main LVPS J501-1/2/3 (+) and the GND (-) +5V?**

Y N

Replace the Main LVPS ([PL 18.5](#)).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

**Is the voltage between the Main LVPS J502-1 (+) and the GND (-) +5V?**

Y N

Replace the Main LVPS ([PL 18.5](#)).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

## +5VDC Power RAP

BSD-ON: [BSD 1.1 Main Power On](#)

BSD-ON: [BSD 1.4 DC Power Generation \(2 of 5\)](#)

**NOTE:** When turning power Off, turn Off the Power Switch then the Main Power Switch.

### Procedure

Turn the power On. Are the voltages between the Main LVPS **J501-4/5 (+)** and **GND (-)** +5VDC?

Y N  
Is the voltage between the Main LVPS **J1-1** and **J1-3** equal to line voltage?  
Y N  
Go to [AC Power RAP](#).

Turn the power Off and disconnect the Main LVPS **J501** and **J510**. Turn On the machine 15 seconds later. Are the voltages between the Main LVPS **J501-4/5 (+)** and **GND (-)** +5VDC?

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

Are the voltages between the Main LVPS **J510-1/2 (+)** and **GND (-)** +5VDC?

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

## +24VDC Power RAP (7830/35)

BSD-ON: [BSD 1.1 Main Power On](#)

BSD-ON: [BSD 1.6 DC Power Generation \(4 of 5\)](#)

**NOTE:** When turning power Off, turn Off the Power Switch then the Main Power Switch.

### Procedure

Turn the power On. Is the voltage between the Main LVPS **J501-6 (+)** and **GND (-)** +24VDC?

Y N  
Is the voltage between the Main LVPS **J1-1** and **J1-3** equal to line voltage?  
Y N  
Go to [AC Power RAP](#).

Turn the power Off and disconnect the Main LVPS **J501**, **J502**, and **J510**. Turn On the machine 15 seconds later. Is the voltage between the Main LVPS **J501-6 (+)** and **GND (-)** +24VDC?

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Check the +24VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

Is the voltage between the Main LVPS **J502-2 (+)** and the **GND (-)** +24VDC?

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Is the voltage between the Main LVPS **J510-3 (+)** and the **GND (-)** +24VDC?

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

## +24VDC Power RAP (7845/55)

BSD-ON:[BSD 1.1 Main Power On](#)

BSD-ON:[BSD 1.6 DC Power Generation \(4 of 5\)](#)

BSD-ON:[BSD 1.7 DC Power Generation \(5 of 5\)](#)

**NOTE:** When turning the power OFF, turn OFF the Power Switch, then the Main Power Switch.

### Procedure

Turn the power On. **Is the voltage between the Main LVPS J510-3 (+) (BSD 1.6) and GND(-), as well as between the Sub LVPS J504-3 (+) (BSD 1.7) and GND (-) +24VDC?**

Y N  
**Is the voltage between the Main LVPS J1-1 and J1-3 (BSD 1.1) equal to line voltage?**

Y N  
Go to [AC Power RAP](#).

**Is the voltage between the Main LVPS J6-2 and J6-4 (BSD 1.1) equal to line voltage?**

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Turn the power Off and disconnect the Main LVPS J501, J510, and the Sub LVPS J504. Turn On the machine 15 seconds later. **Is the voltage between the Main LVPS J510-3 (+) (BSD 1.6) and the GND (-) +24VDC?**

Y N  
Replace the Main LVPS ([PL 18.5](#)).

**Is the voltage between the Sub LVPS J504-3 (+) (BSD 1.7) and the GND (-) +24VDC?**

Y N  
Turn the power OFF and unplug the Power Cord from the outlet. Disconnect J6 on the Main LVPS to check the following connections for open circuits and poor contacts.

- Between the Main LVPS J5-4 and the Sub LVPS J8-2
- Between the Main LVPS J5-8 and the Sub LVPS J8-1

If no problems are found, replace the Sub LVPS ([PL 18.3](#)).

Check the +24VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

**Is the voltage between the Main LVPS J501-6 (+) (BSD 1.6) and the GND (-) +24VDC?**

Y N  
Replace the Main LVPS ([PL 18.5](#)).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

## OF 2 UI Touch Screen Failure RAP

BSD-ON:[BSD 2.4 LCD Control](#)

Use this RAP to solve user interface touch screen problems when the machine has power but either the display is Black, blank, too dark, responds incorrectly or does not refresh.

### Initial Actions

- If the UI is Black, check for +24V to the UI I/F PWB.
- Check and re-seat all PJ's on the UI I/F PWB.
- If the UI is blank (White), check that the SBC SD Card is seated correctly.
- Reseat the SBC into the Backplane PWB.
- Refer to [ADJ 4.1](#) to access touch screen tests.
- Press the Machine Status key. Select the Tools tab. Select Device Settings, then Display Brightness. Adjust the brightness level.
- If the UI fails to boot, observe POST progress on the SBC 7-segment display. refer to [OF 3.3](#).

### Procedure

Check the +24VDC from P/J1311, pin 27 on the Backplane PWB to J1, pin 27 on the UI I/F PWB. **+24VDC is measured.**

Y N  
Check the ribbon cable between the Backplane PWB and UI I/F PWB. Install a new cable if necessary. If the wiring is good, Go to [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#)

Check the +5VDC from P/J1311, pin 29 on the Backplane PWB to J1, pin 29 on the UI I/F PWB. **+5VDC is measured.**

Y N  
Check the ribbon cable between the SBC and the UI I/F PWB. Install a new cable if necessary. If the wiring is good, Go to [+5VDC Power](#)

Check the status of CR18 on the SBC. **The LED is Off.**

Y N  
Check the Main LVPS for +24V. If +24V is available, replace the SBC.

Reload the machine software, [GP 9](#). **The fault remains.**

Y N  
Complete [Final Actions](#).

Check that the ribbon cables between the user interface control PWB and the touch screen are in good condition and are securely connected. As necessary, install new components:

- Control Panel Assembly.
- SBC

## Machine Not Ready RAP

“Machine not ready” is defined as any condition where the machine is not capable of performing its basic tasks (Copy or Print). “Not ready” ranges from a machine that is totally inert, without any indication of power, to a machine that appears ready but does not respond to either Control Panel commands or network input.

Boot failures can be caused by hardware failures in the SBC, or communication failures between the SBC and the rest of the machine. The SBC has several debug LEDs mounted onboard to indicate board activity. See [Figure 1](#). Also mounted to the SBC is a 7-segment display that changes state as the boot-up progresses. See [OF 3.3](#) for details.

### Initial Actions

- Reseat the SBC to the Backplane.
- If the boot failure occurs after new components are installed, make sure the new components are compatible with the machine and all PJ's are seated. Check that no pins are damaged.
- Check that all the PJ's are seated correctly on the SBC.

### Procedure

The first step is to categorize the problem. Decide which of the following condition best describes the problem:

- [Dead Machine](#)
- [Does not complete Boot-up](#)
- [Boots up; does not respond to Control Panel](#)
- [Boots up; does not print \(or other Network problem\)](#)

#### Dead Machine

If the machine shows no sign of power (fans or motors running, backlight on UI display, LEDs on Control Panel), check for AC line voltage at the Finisher Outlet.

1. If AC is not present, go to the [AC Power RAP](#).
2. If AC is present check for:
  - [STBY +5VDC Power](#)
  - [+5VDC Power](#)
  - [+24VDC Power RAP \(7830/35\)](#) or [+24VDC Power RAP \(7845/55\)](#)

#### Does not complete Boot-up

Failure to complete the boot routine can be caused by corrupt or mismatched software versions. [GP 6](#) details how to check s/w versions; [GP 9](#) explains how to reload software. Boot failures can also be caused by hardware failures in the SBC, or communication failures between the SBC and the rest of the machine. The SBC has a group of diagnostic LEDs that change state as the boot-up progresses.

1. Check the state of the SBC debug LED's, [Figure 1](#). Refer to [Table 1](#) to determine the fault state. If the debug LEDs indicate a problem on the SBC, follow procedures listed in the table.
2. Refer to [OF 3.3](#) and monitor the SBC 7-segment display. Perform the relevant service actions.
3. If the software appears to load, but the IOT and Finisher are missing on the UI display, replace the MD PWB ([PL 18.2A: 7830/35](#)) or ([PL 18.2B: 7845/55](#)).

4. Switch Off power and disconnect the power cord. Disconnect all accessories (Finisher, H-Transport, Fax, HCF, Tray Module, Foreign Interface). Reconnect power and reboot the machine. If the problem is no longer present, then reconnect one accessory and reboot. Repeat this process to identify the faulty accessory.

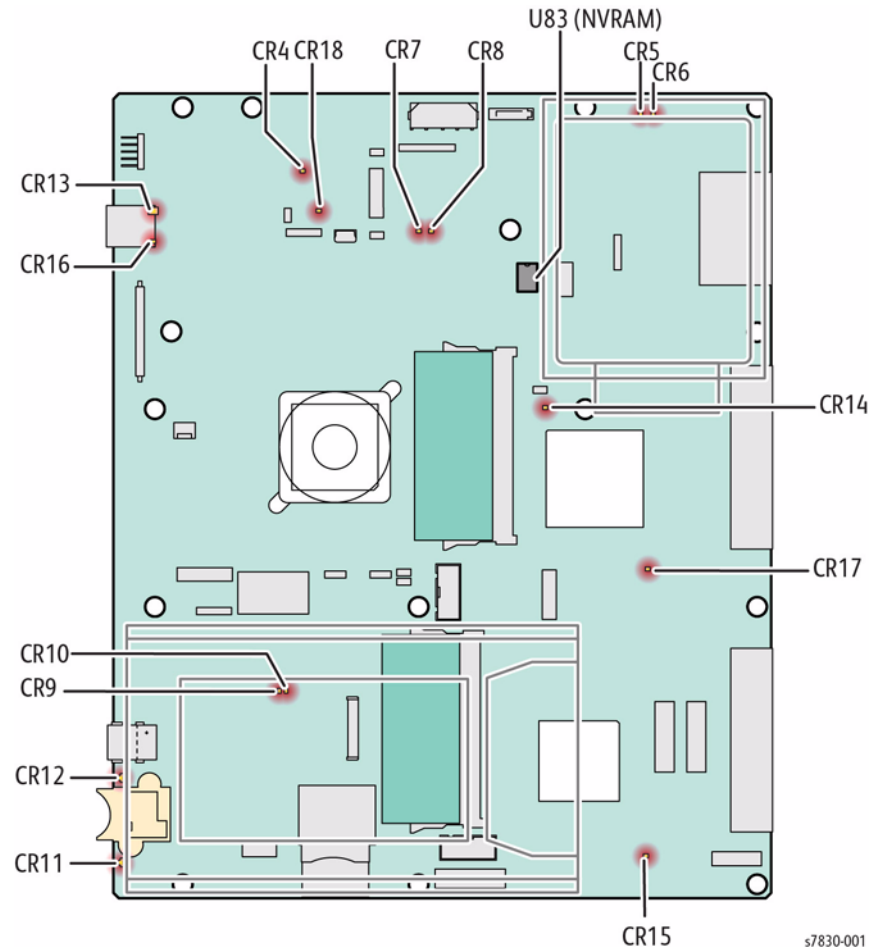


Figure 1 SBC Debug LED Locations

s7830-001

**Table 1 SBC Debug LEDs**

Designator	Color	Purpose	Service Action
CR4	Green	Supervisor heartbeat	With the main power switch On and the soft power switch Off, this LED blinks a very slow heart beat and is the only LED On in this mode. Once soft switch is turned On, the LED continues to blink a slow heart beat. Failure is no heart beat flash. Perform these steps: <ol style="list-style-type: none"> <li>1. Check the LVPS, or check for +5V at <b>J300</b> (power connector) on the SBC.</li> <li>2. If +5V present at <b>J300</b>, replace the SBC.</li> </ol>
CR5	Green	5V0_On signal present	This LED is always On when the main and soft power switches are On. Failure is Off if both power switches are On. Perform these steps: <ol style="list-style-type: none"> <li>1. Check status of CR4.</li> <li>2. If CR4 heart beat is visible, test the Soft Switch.</li> <li>3. If the Soft Switch passes, replace the SBC.</li> </ol>
CR6	Green	5V0_OFF signal present	On at power On of soft switch. Remains On during FPGA loading from SD card. Off during sleep mode. Off during boot could indicate corrupt or a failed SD card. <ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. Check LVPS for +5V at <b>J300</b> on SBC (power connector should have 5 wires with +5V on them).</li> <li>3. Reseat or replace the SD Card.</li> <li>4. Replace the SBC.</li> </ol>
CR7	Green	Image power available	On at power On of soft switch. Remains On during FPGA loading from SD card. Off during sleep mode. Off during boot could indicate corrupt or a failed SD card. <ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. Reseat or replace the SD Card.</li> <li>3. Replace the SBC.</li> </ol>
CR8	Green	Power available	This LED is always On when the main and soft power switches are On. Failure is Off if both power switches are On. Perform these steps: <ol style="list-style-type: none"> <li>1. Check status of CR4.</li> <li>2. If CR4 heart beat is visible, test the Soft Switch.</li> <li>3. If the Soft Switch passes, replace the SBC.</li> </ol>

**Table 1 SBC Debug LEDs**

Designator	Color	Purpose	Service Action
CR9	Green	CPU in sleep	Under software control. A very slow hear beat blink when CPU is in the deepest sleep mode. CPU sleep indicator only.
CR10	Green	Lynx configuration	Quick flash at power on of soft switch. LED On after 3 or 4 minutes indicates boot failure. Perform these steps: <ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. Reseat or replace SD Card.</li> <li>3. Replace the SBC.</li> </ol>
CR11	Red	SIM error	Blinking = Activity. On solid for ~1 minute at power On of soft switch. Off unless SIM card inserted.
CR12	Green	SIM active	Blinking = Activity. On solid for ~1 minute at power on of soft switch then goes out unless SIM card inserted.
CR13	Multi	Ethernet link	Green = 1Gb, Yellow = 100Mb, Off = 10Mb or no link
CR14	Green	Taurus heartbeat	LED On solid at power on of soft switch. Goes Off ~1 minute into boot process. LED On after 3 or 4 minutes indicates a boot failure. Perform these steps: <ol style="list-style-type: none"> <li>1. Check that U83 is seated in socket.</li> <li>2. Reload system software.</li> <li>3. Replace the SBC.</li> </ol>
CR15	Green	Lyra configuration	Quick flash at power on of soft switch. LED On after 3 or 4 minutes indicates boot failure. Perform these steps: <ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. Reseat or replace SD Card.</li> <li>3. Replace the SBC.</li> </ol>
CR16	Multi	Ethernet activity	Green On = Any link speed
CR17	Green	Elnath configuration	LED On solid at power on of soft switch. Goes Off after ~1 minute into boot process (timed with Taurus heartbeat CR14 above). LED On after 3 or 4 minutes indicates a boot failure. Perform these steps: <ol style="list-style-type: none"> <li>1. Check that U3011 is seated in socket.</li> <li>2. Reload system software.</li> <li>3. Replace the SBC.</li> </ol>
CR18	Red	SBC power failure	LED is Off when +5V is available. LED On = Failure. Perform these steps: <ol style="list-style-type: none"> <li>1. Check LVPS for +5V at <b>J300</b> on SBC.</li> <li>2. Replace the SBC.</li> </ol>

**Boots up; does not respond to Control Panel**

Check the following:

1. Refer to [OF 2](#).
2. Check the cable between the SBC and the UI PWB for damage or loose connections.
3. Check the connections of the wiring and PWBs within the Control Panel Assembly.
4. If the check is good, replace the following parts in sequence:
  - Control Panel Assembly ([PL 18.3](#))
  - SBC PWB ([PL 35.2](#))
  - MD PWB
    - [PL 18.2A](#) (7830/35)
    - [PL 18.2B](#) (7845/55)

**Boots up; does not print (or other Network problem)**

Go to the [OF 16-1 Network Printing Problems Entry RAP](#).

## Unresettable Machine Status Messages

In many cases when a problem causes a machine status message, no chain-link fault code is entered into either dC120 Fault Counters or dC122 Fault History. Typically these messages involve things like covers , interlock switch circuits and paper tray status.

This RAP can be used to find RAPs that can be used to troubleshoot and repair faults that cause unresettable machine status messages.

**NOTE:** When a machine status message occurs frequently or is unresettable and performing the action that would normally resolve the problem fails to resolve it, it is likely that the problem is caused by a repairable hardware fault such as a bent or broken cover, faulty wiring, a failed component, or by a SW fault.

The RAPs referenced in this procedure do not have their fault code appear in dC120 or dC122.

Do not use the Unresettable Machine Status Messages RAP if an appropriate fault code appears in either of the diagnostic listings.

## Procedure

Refer to **Table 1**. The table is grouped by subsystem. Within a particular subsystem, the faults are listed in Fault Code number order.

Perform the following steps in order;

1. Look within the listing for the subsystem that appears to be faulty. Find the displayed UI Message and/or Machine Reaction.
2. Check the items listed in the Clearing Action Column.
3. If performing the Clearing Actions fails to resolve the problem, go to the RAP indicated to troubleshoot the problem.

**NOTE:** If no action is listed go directly to the indicated RAP to troubleshoot the problem.

**Table 1 Machine Status to RAP Cross Reference**

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
UI	Rewrite Failure	Blink all LED indicators	302-302	Flash rewrite failure	
UI	Erase Failure	Blink all LED indicators	302-306	Flash erase failure	
UI	Download Invalid	Blink all UI LED indicators	302-308	Download invalid	
UI	Application Checksum Failure	Blink Job Stat & Features LED indicators	302-312	Application SW Checksum Failure	
UI	UI Data Time Out Error	A software error has occurred. User intervention is required to Power Off/Power On the machine. Printing may be disabled	302-320	UI does not receive requested data from the CCM within the specified time out window	One of the printer features requires service, however the printer can still function in a degraded mode.
UI	Config Services not Stable	Printing is disabled and the powering up process has stalled.	302-390	During power up all configurable services have not achieved a stable state after 5 minutes from power up	User Intervention, The printer needs to be rebooted in order to eliminate the current fault.
IIT/Scan	DADF No Original Fail		305-940 (7830/35) 305-940 (7845/55)	Machine detects that original has been removed	Follow UI Display
IIT/Scan	DADF Not Enough Document - TBD		305-941 (7830/35) 305-941 (7845/55)	Machine detects that original has been removed	Follow UI Display
Fuser	Fuser Assembly Near Life		310-420	"Need replacement" for Fuser Assy (consumables) detected.	No action required. However, recommend replacement to new Fuser Assy if Fuser Assy life is estimated to largely be over at the next call.
Fuser	Fuser Assembly Life Over		310-421	"Need replacement" for Fuser Assy (consumables) detected.	Replace Fuser Assy to new one.
Integrated Finisher	Finisher Front Door Open	Shut Down/Start Inhibited	312-302 (Int)	Machine detects that Finisher Front Door is open	Check that the Finisher Front Door closes properly



**Table 1 Machine Status to RAP Cross Reference**

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Integrated Finisher	Stacker Tray Staple Set Over Count	Finisher Job not allowed	312-917 (Int)	When stapled sets are ejected to the Stacker Tray: Stapled set count exceeded 30 sets, And Stacker Tray is not positioned at "paperempty" level, And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove Paper
Integrated Finisher	Scratch Sheet Compile	Finisher Job not allowed	312-928 (Int)	A sheet which was designated as a bad sheet (scratchesheet) by SheetIn-formation command from IOT was ejected to the compier.	Remove Paper
Integrated Finisher	Stacker Tray Full Stack	Finisher Job not allowed	312-930 (Int)	Stacker Height Sensor is detected full condition	Remove Paper
LX Finisher	Finisher Front Door Open	Shut Down/Start Inhibited	312-302 (LX)	Machine detects that FInisher Front Door is open	Check that the FInisher Front Door closes properly
LX Finisher	H-Xport Cover Open	Printing Inhibited	312-303 (LX)	Machine detects that Horizontal Transport Cover is open	Check that the Horizontal Transport Cover closes properly
LX Finisher	Punch Dust Nearly Full	No Action	312-700 (LX)	Machine detects that the Punch Waste Box is nearly full	Check that the Punch Waste Box is not nearly full
LX Finisher	Stacker Mix Stack Detection	Printing Inhibited	312-916 (LX)	A stack of mixed sizes is detected	Verify that the problem is not caused by a stack of mixed sizes
LX Finisher	Stacker Tray Staple Set Over Count	Finisher Job not allowed	312-917 (LX)	When stapled sets are ejected to the Stacker Tray: Stapled set count exceeded 30 sets, And Stacker Tray is not positioned at "paperempty" level, And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove Paper
LX Finisher	Stacker Tray Full Stack	Finisher Job not allowed	312-930 (LX)	Stacker Height Sensor is detected full condition	Remove Paper
LX Finisher	Booklet Low Staple F	Printing Inhibited	312-984 (LX)	Booklet Stapler Low Staple F signal was found to be on when staple started working. or Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.	Check the Front Booklet Stapler
LX Finisher	Booklet Low Staple R	Printing Inhibited	312-989 (LX)	Booklet Stapler Low Staple R signal was found to be on when staple started working. or Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.	Check the Rear Booklet Stapler

Table 1 Machine Status to RAP Cross Reference

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Eject Cover Open	Shut Down. Start inhibited.	312-300 (Pro)	Eject Cover Interlock Open	Check the following: - Eject Cover installation condition - Damage at Hinge area - Interlock Detect Lever damage (Bent) - Sensing Bracket damage (Bent)
Professional Finisher	Finisher Front Door Open	Shut Down. Start inhibited.	312-302 (Pro)	Finisher Front Door Interlock Open	Check the following: - Front Door installation condition - Damage at Door Hinge - Damage at interlock detect area - Check Magnet.
Professional Finisher	H-Transport Cover Open	Printing inhibited	312-303 (Pro)	Horizontal Transport Cover was detected to be opened.	Close interlock.
Professional Finisher	Booklet Drawer Opened	Shut Down. Start inhibited.	312-307 (Pro)	Booklet Drawer SNR OPEN is detected	Check the following: - Booklet Drawer Broken SNR mounting failure - Booklet Drawer Broken SNR Connector contact failure - Foreign material and deformation on Booklet Drawer Acuator area - Foreign material and deformation on Booklet Drawer Structure area
Professional Finisher	Punch Dust Nearly Full	No Action Jobs to Finisher may continue even with fault active.	312-700 (Pro)	PUNCH Dust Nearly Full	- Remove punch waste - Check that the Punch Dust Box Set SNR is OFF
Professional Finisher	Stacker Mix Stack Detection	Printing inhibited	312-916 (Pro)	A stack of mixed sizes detected.	When Stacker No Paper Sensor is turned off, the fault will be cleared. Or reset NVM 763-970 to clear stacker full state.

Table 1 Machine Status to RAP Cross Reference

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Stacker Tray Full	Finisher job not allowed	312-930 (Pro)	Fault occurs with any of the following conditions: -At power on, the Stacker Height Sensor detected full. -When Stacker Tray is holding a stack of small size paper, Stacker Tray is detected to be full while it is lowering to adjust its height. And Stacker Height Sensor is turned on, or information on the 30th sheet of the next job is received from IOT. - When Stacker Tray is holding a stack of large size paper (requiring limiting the stacking capacity to half), Stacker Tray is detected to be full while it is lowering to adjust its height. And Stacker Height Sensor is turned on, or information on the 30th sheet of the next job is received from IOT. -Stacker Tray is already detected to be full (full = half capacity because of large paper size), and large size paper is ejected. And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove paper when Finisher is in standby state. Then Stacker Tray is detected to be empty.
Professional Finisher	Top Tray Full Detection	Printing inhibited	312-946 (Pro)	Top Tray Sensor was turned on for 10 sec or more.	When top Tray Sensor is turned off, the fault will be cleared.
Professional Finisher	Punch Dust Box Full		312-963 (Pro)	Amount of punch waste is greater than or equal to the full amount of punch waste. If running paper is heavyweight paper, the number of holes is counted based on the sheet count that is defined in the NVM.	Check the following: 1) Punch Dust Box is installed. 2) Punch Box Set SNR in the Punch Unit fails. 3) The detection part of Punch Box Set SNR on the back side of Punch Dust Box is deformed or damaged. 4) Harness or PWB failure.
Professional Finisher	Booklet Tray Full Detection	Printing inhibited	312-983 (Pro)	Booklet Tray full state was detected.	When Booklet No Paper Sensor is turned off, the fault will be cleared.
Professional Finisher	Booklet Front Stapler Low	Printing inhibited	312-984 (Pro)	1) Booklet Stapler Low Staple F signal was found to be on when staple started working. 2) Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.	When Booklet Low Staple F Switch is turned off, the fault will be cleared.

**Table 1 Machine Status to RAP Cross Reference**

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Booklet Rear Stapler Low	Printing inhibited	312-989 (Pro)	1) Booklet Low Staple R signal was found to be on when staple started working. 2) Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.	When Booklet Low Staple R Switch is turned off, the fault will be cleared.
LX Finisher	Booklet Safety Switch Open		313-306 (LX)	Booklet Safety SW (located under Booklet) detects OPEN (with obstacles).	Check the Booklet Safety Switch
LX Finisher	Booklet Cover Open		313-307 (LX)	Booklet Cover SW detects OPEN.	Check the Booklet Cover Switch
Paper Handling	Tray 1 size switch NG	Display status message	371-212	Tray 1 size switch not working	Adjust tray
Paper Handling	Tray 2 size switch NG	Display status message	372-212	Tray 2 size switch not working	Adjust tray
Paper Handling	Tray 3 size switch NG	Display status message	373-212	Tray 3 size switch not working	Adjust tray
Paper Handling	Tray 4 size switch NG	Display status message	374-212	Tray 4 size switch not working	Adjust tray
Paper Handling	Front Cover Interlock Open	None	377-300	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Left Hand Cover Interlock Open	None	377-301	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Tray Module Left Hand Cover Open	Printing Inhibited	377-305	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Duplex Door Open		377-307	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Upper Left Door Open		377-308	Interlock Switch operation failure or Latch failure	Verify that closing the door does not resolve the problem
Paper Handling	HCF1 Transport Interlock	None	378-300	HCF1 Transport Cover has been opened.	Check and fix the following: - Transport Cover Open Switch operation failure - Top-Cover Latch failure
Paper Handling	IBT Front Cover	Printing inhibited	394-300	IBT (IOT)Left front door open	Close cover
Paper Handling	HCF1 Side Out Interlock	None	378-301	HCF1 has been disconnected from IOT.	Check and fix the following: HCF Side Out Switch operation failure
Drive	Deodorant Filter Life End	Printing operation inhibited	342-400	Deodorant Filter Life End	Replace odor filter if necessary.
Xerographics/ Cleaning	Waste Bottle Near Full		391-400	Waste Bottle Near Full has been detected by Toner Near Full Sensor	Check that the Toner Waste Bottle does not need replacing
Xerographics/ Cleaning	Drum Cartridge K Near Life		391-401	The number of K Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge K replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.

Table 1 Machine Status to RAP Cross Reference

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Xerographics/ Cleaning	Drum Cartridge K Life Over		391-402	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Near Life		391-411	The number of Y Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge Y replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge M Near Life		391-421	The number of M Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge M replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Near Life		391-431	The number of C Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge C replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Life Over		391-480	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge M Life Over		391-481	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Life Over		391-482	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Waste Bottle Not in Position	Print operation inhibited	391-910	Waste Bottle Not in Position has been detected by the Waste Bottle Sensor	Check that the Toner Waste Bottle is in position
Xerographics/ Cleaning	Waste Bottle Full	Print operation inhibited	391-911	"Waste Bottle Full" has been detected by elapse of the specified drive time (NVM) of YMCK Dispense Motor after Waste Bottle Near Full occurrence.	Check that the Toner Waste Bottle does not need replacing
Xerographics/ Cleaning	Drum Cartridge K Life End	Print operation inhibited	391-913	The number of K Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge K replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Life End	Print operation inhibited	391-932	The number of Y Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge Y replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.

Table 1 Machine Status to RAP Cross Reference

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Xerographics/ Cleaning	Drum Cartridge M Life End	Print operation inhibited	391-933	The number of M Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge M replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Life End	Print operation inhibited	391-934	The number of C Drum Cycles (CRUM) is compared with the threshold value (CRUM) and "Drum Cartridge C replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
ProCon	Y Toner Cartridge is Empty		324-923 Y Toner Cartridge Empty	The CRU Manager has generated the message Yellow toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is canceled or not.
ProCon	M Toner Cartridge is Empty		324-924 M Toner Cartridge Empty	The CRU Manager has generated the message Magenta toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is canceled or not.
ProCon	C Toner Cartridge is Empty		324-925 C Toner Cartridge Empty	The CRU Manager has generated the message Cyan toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is canceled or not.
ProCon	Yellow Toner Cartridge is near empty state (replace soon)		393-400	The CRU manager has generated the message "Yellow Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recovery is successfully completed at power off/on)
ProCon	Magenta Toner Cartridge is near empty state (replace soon)		393-423	The CRU manager has generated the message "Magenta Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recovery is successfully completed at power off/on)
ProCon	Cyan Toner Cartridge is near empty state (replace soon)		393-424	The CRU manager has generated the message "Cyan Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recovery is successfully completed at power off/on)

Table 1 Machine Status to RAP Cross Reference

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
ProCon	Black Toner Cartridge is near empty state (replace soon)		393-425	The CRU manager has generated the message "Black Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recovery is successfully completed at power off/on)
ProCon	Black Toner Cartridge is empty		393-912	The CRU Manager has generated the message Black toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is canceled or not.
Transfer	IBT Unit Near End Warning		394-417	This fault code is issued when the following condition is met. (IBT unit present count (NVM)) > (IBT unit life (NVM)) - (Page count before end of life warning (NVM))	Fault Code is cleared after replacing the IBT Unit.
Transfer	IBT CLN Unit Near End Warning		394-418	This fault code is issued when the following condition is met. (IBT cleaner unit present count (NVM)) > (IBT cleaner unit life (NVM)) - (Page count before end of life warning (NVM))	End of life of IBT cleaner unit is approaching. Replace IBT cleaner unit if necessary and clear HFSI Counter.
Transfer	2nd BTR Unit Near End Warning		394-419	This fault code is issued when the following condition is met. (2nd BTR unit present count (NVM)) > (2nd BTR unit life (NVM)) - (Page count before end of life warning (NVM))	Fault Code is cleared after replacing the 2nd BTR Unit.

## OF 3.3 Power On Self Test RAP

Power on Self Test (POST) runs each time the machine is powered On. POST tests the function of key subsystems on the SBC before starting the operating system. As POST executes, progress codes appear on the SBC 7-segment display.

This procedure uses POST to help diagnose SBC faults preventing the machine from powering up correctly. On power up, the 7-segment displays progress codes for short periods of time dependent on how long each test takes. Following POST testing, normal operation is indicated by a flashing decimal point. If any other code remains after testing, this may point to a problem component. Refer to the [Table 1](#) for POST codes and corresponding service procedure.

### CAUTION

*If you replace the SD Card, SBC, or System Hard Drive, perform an AltBoot (GP 9) at the first power-up.*

### Procedure

**NOTE:** If boot failure occurs after new components are installed, make sure the new components are compatible with the machine and all connectors are secure.

1. Locate the SBC 7-segment display, [Figure 1](#), then cycle system power.
2. Observe activity on the 7-segment display. If a failure occurs during POST, one of the codes listed in [Table 1](#) remains to indicate the error. Follow the indicated service action.

**Figure 1 7-Segment display location**

**Table 1 SBC 7-segment Display Codes**

Test	Code	Decimal Point	Description	Service Action	Comments
Display Test	8	On	Initial 7-Segment display test. All segments and decimal point illuminate to verify operation.	<ol style="list-style-type: none"> <li>1. Check power to the SBC.</li> <li>2. If power present, replace the SBC.</li> </ol>	All segments lit indicate a successful test, power is available to the SBC and the 7-segment display is operating correctly. If one or more segments are not lit and the external USB LED is On (FAIL) = Display is faulty. If one or more segments are not lit and external USB LED is Off (FAIL) = SBC or power distribution fault.
SBC power	P	Off	SBC onboard power supply failure.	<ol style="list-style-type: none"> <li>1. Cycle power.</li> <li>2. If the problem persists, replace the SBC.</li> </ol>	Displayed when an onboard power supply fault occurs.
SBC function	1	Off	SBC component failure.	<ol style="list-style-type: none"> <li>1. Cycle power.</li> <li>2. If the problem persists, replace the SBC.</li> </ol>	Displayed when an onboard component fault occur.
System Memory	2	Flashing	System Memory (DIMM) Failed	<ol style="list-style-type: none"> <li>1. Reseat System Memory.</li> <li>2. If problem persists, replace the System Memory Module.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	<b>2</b> appears at start then, if successful, changes to 0. On failure "2" remains displayed with no decimal point flashing indicating that U-boot cannot execute out of SDRAM. SDRAM not present or faulty.
EPC Memory	3	Flashing	EPC Memory (DIMM) Failed	<ol style="list-style-type: none"> <li>1. Reseat EPC Memory.</li> <li>2. If problem still persists, replace EPC Memory.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	Indicates EPC Memory Module (DIMM) is not present or faulty, 3 appears on failure, else the screen is left unchanged. Boot continues.  <b>NOTE:</b> Another indication of faulty EPC is a White screen on the UI panel.



Table 1 SBC 7-segment Display Codes

Test	Code	Decimal Point	Description	Service Action	Comments
NVM	4	Flashing	NVM Memory (SD Card) Failed	<ol style="list-style-type: none"> <li>1. Reseat SD Card.</li> <li>2. If problem persists, replace the SD Card.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	NVM read/write sample test. 4 appears on error, else display is left unchanged.
SD Card	5	Flashing	Flash Memory Failed	<ol style="list-style-type: none"> <li>1. Reseat SD Card. Cycle power to verify fix.</li> <li>2. If problem still persists, replace the SD Card.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	Kernel image corrupted - board does not boot. 5 is displayed just before the test start then set to 9 just before jump to kernel. Flash fault could be a h/w or s/w issue. Boot code resides in the SD card.
External Hard Drive	6	Flashing	External Hard Drive Failed	<ol style="list-style-type: none"> <li>1. Reseat SATA data/power cable on both ends.</li> <li>2. If problem persists, replace the SATA cable.</li> <li>3. If problem still persists, replace the Hard Drive.</li> <li>4. If problem still persists, replace the SBC.</li> </ol>	SATA cable and or Hard Drive fault. SATA initialization run, 6 displayed on error.
RTC Module	7	Flashing	Failed Real Time Clock	<ol style="list-style-type: none"> <li>1. Check RTC battery voltage (2.7 - 3.0V)</li> <li>2. Replace the RTC battery.</li> <li>3. If problem persists, replace the SBC.</li> </ol>	Check RTC before EPC is initialized, then read clock again. Display 7 on error.
Initial entry to kernel	0	Flashing	Waiting for Power Normal	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem persists, reseat SD Card.</li> <li>3. If problem still persists, replace the SD Card.</li> <li>4. If problem still persists, replace the SBC.</li> </ol>	After successful memory test the display is set to 0 and remains 0 if autoboot is interrupted by user. If there is no user interrupt 0 remains until the Power Normal signal is raised (after POST has completed (~25s). If Power Normal is not raised or u-boot does not hand over to kernel then 0 will also remain displayed.
Boot complete	9	Flashing	Boot process hand over to kernal	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	9 indicates kernel load has started. If 9 persists, the kernel s/w has failed to start. <b>NOTE:</b> If a previous error was detected, that error persists on the display following hand over to kernel.
Kernel starting	u	Flashing	Kernel starting user space	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	Kernel s/w has started. When u remains flashing, the CCS Application has not started.

**Table 1 SBC 7-segment Display Codes**

Test	Code	Decimal Point	Description	Service Action	Comments
UI platform available	A	Flashing	UI platform available	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	<p>On power up, the 7-segment display cycles through these codes until the relevant platform has fully synchronized with the system.</p> <p>Any code left displayed after power up indicates this event has not been detected in software and is likely a s/w issue.</p> <p>F is only displayed if a Fax card is installed and detected by the software. F is removed when the s/w gets a "platform available" response from the fax s/w</p>
IIT communication	b	Flashing	IIT communication established	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	
NC Platform available	C	Flashing	NC Platform available	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	
Dc platform available	d	Flashing	Dc platform available	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	
IOT communication	E	Flashing	IOT communication established	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	
FAX communication	F	Flashing	FAX communication established	<ol style="list-style-type: none"> <li>1. Reload system software.</li> <li>2. If problem still persists, replace the Hard Drive.</li> <li>3. If problem still persists, replace the SBC.</li> </ol>	
Attempting sleep entry	L	Flashing	OS suspending drivers, entering sleep	None, for diagnostic information only	
In Sleep state	r	Off	Resting in sleep	None, for diagnostic information only	Display an r when in deep sleep. Decimal point stops flashing in deep sleep.
In semi-conscious state	t	Flashing	Running in Low Power mode	None, for diagnostic information only	Display t in semi-conscious mode between Sleep and Wake.
Attempt sleep wake-up	H	Flashing	OS resuming drivers	None, for diagnostic information only	When leaving deep sleep, display changes from 'H' to 't'. From semi-conscious (t) the machine either fully wakes and blanks the display, or goes back to deep sleep (r).
Machine at Ready	Blank	Flashing	No Faults Detected	Normal operation	If blank, in Ready mode, no faults detected.

## Toner CRUM Mismatch RAP

**NOTE:** The machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration.

When the first Toner Cartridge (any color) is replaced, the geographic differentiation code and Toner Cartridge type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine).

### Procedure

1. Press the **Machine Status** button on the Control Panel.
2. Select **Supplies**.
3. The UI displays **Cartridge Error** for the mismatched cartridge.
4. Go to the Fault Code for the color that displays an error:
  - **393-937** Toner Y CRUM Data Mismatch Fail RAP
  - **393-938** Toner M CRUM Data Mismatch Fail RAP
  - **393-939** Toner C CRUM Data Mismatch Fail RAP
  - **393-926** Toner K CRUM Data Mismatch Fail RAP

## USB Port Disabled

USB Ports can be Enabled/Disabled in Centroware® Internet Services (CWIS) by the System Administrator

### Procedure

Log onto the machine or CWIS as System Administrator and verify the status of the USB Ports.

## No-Run RAP

Machine model (Speed) information corrupted or not set

### Procedure

Machine Speed information must be loaded using the appropriate SIM Card.

1. Insert the SIM containing machine speed information.

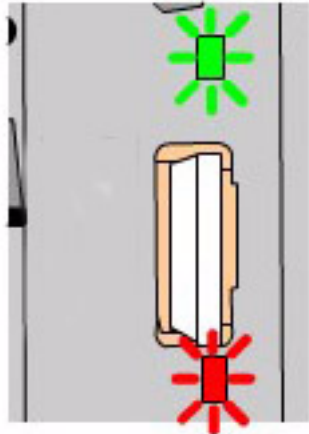


Figure 1 Inserting SIM Card

2. When the SIM is inserted, the status will be indicated by an LED display as shown in [Figure 1](#). The LEDs are located on the SBC and are visible through small square holes in the frame above CR12 (**Green**) and below CR11 (**Red**) the SIM socket. The following list describes the LED display status:
  - Solid Green LED indicates correct insertion. On solid for approximately one minute at power On of soft switch, then goes out unless SIM card inserted.
  - Solid RED indicates incorrect insertion. On solid for approximately one minute at power On of soft switch. Off unless SIM card inserted.
  - Flashing Green LED indicates activity, and should flash for 5 seconds at half-second intervals.
  - Flashing Red LED (at half-second intervals until card is removed) indicates **Incomplete error** or **Failed SIM**.
3. Cycle system power after the SIM is installed.

## Xerographic Messages RAP

Machine fails to detect Toner dispensing (Replace Toner message) or Drum Cartridge (Drum Cartridge Error message); message can't be cleared, no status codes displayed.

Turn the power off, then on.

### Drum Cartridge Error message is displayed on the UI:

Turn the power off.

Inspect the Drum cartridges for damage and ensure that cartridges are firmly inserted into position.

Remove the Drum Cartridge(s) and inspect the Drum CRUM Coupler Assembly at the rear of the machine for proper mounting and possible damage:

- Drum CRUM Coupler (Y) - [P/J112](#)
- Drum CRUM Coupler (M) - [P/J113](#)
- Drum CRUM Coupler (C) - [P/J114](#)
- Drum CRUM Coupler (K) - [P/J115](#)

If no problem is found, check the wiring from the MD PWB [J411](#) to the Drum CRUM Coupler Assemblies for an open or short circuit, or physical damage:

- [BSD 9.5 Toner Cartridge Life Control \(Y,M\)](#)
- [BSD 9.6 Toner Cartridge Life Control \(C,K\)](#)

If the wiring is OK, replace the following parts in sequence:

- MD PWB ([PL 18.2B](#))
- MCU PWB ([PL 18.2B](#))
- Drum CRUM Coupler ([PL 8.1](#))

### Replace Toner message is displayed on the UI:

Turn the power off.

Ensure that the Toner Cartridges contain toner, are not damaged or obstructed, and are firmly seated in place.

Check the wiring from the MD SUB PWB [P/J529](#) to the Toner Dispense Motor(s) for an open or short circuit, or physical damage:

- [J220, J221 - BSD 9.17 Toner Dispense Control \(Y,M\)](#)
- [J222, J223 - BSD 9.18 Toner Dispense Control \(C,K\)](#)

If the wiring is OK, replace the following parts in sequence:

- MD PWB ([PL 18.2B](#))
- MCU PWB ([PL 18.2B](#))
- Toner Dispense Motor ([PL 5.1](#))

## OF 16-1 Network Printing Problems Entry RAP

This Procedure is provided to help identify and diagnose network printing problems.

### Initial Actions

- Ensure the machine is online.
- Ensure that no IOT faults exist that prevent the IOT from functioning. That is, copies can be made, or prints can be printed from the UI.

Determine the following:

- Are any jobs printing on the printer?
- Is the problem related to one workstation?
- Is the problem related to one job?
- Have any changes been made to the network prior to a printing problem?
- Was a backup log of network configuration data created? If so, was it last created by a CSE or the customer/SA?

If there are multiple protocols enabled on the printer, and the problems are ONLY occurring with one network protocol, go to the procedure appropriate for that protocol:

- NOVELL: [OF 16-2](#), Novell Netware Checkout RAP
- TCP/IP: [OF 16-3](#), TCP/IP Checkout RAP
- APPLETALK: [OF 16-4](#), Appletalk Checkout RAP
- NETBIOS: [OF 16-5](#), Netbios Checkout RAP

### Procedure

#### No printing occurs (jobs won't print, can't see printer, or can't connect to printer)

Y N

If, instead of job printing normally, there is a literal printing of the PDL (many pages of code, or the job prints, but looks wrong (wrong fonts, missing fonts, other image quality problems), go to the [OF 16-9](#), Job Prints Incorrectly RAP.

#### The problem occurs in all print jobs from all clients.

Y N

##### The problem occurs in a specific job from all clients.

Y N

##### The problem occurs in all jobs from a specific client or group of clients,

Y N

If the problem is with a specific job from a specific client, the problem is likely with the client; either not connected to the network, wrong or old driver, bad application files or a hardware failure in the client.

If no printing can be done from a specific client or group, while other clients or group function normally, the likely cause is a problem in the customer's network.

If the problem is specific to a single application or group of applications, ensure that current drivers are loaded.

If the problem occurs in only one job, go to the [OF 16-8 Problem Printing Job RAP](#).

A

A

Check that the printer is physically connected to the network cable and that the cable/connections are OK. Disconnect and reseal the cable at both ends. Check to see if the problem is corrected. **The problem continues.**

Y N

Return to [Service Call Procedures](#).

Go to [GP 7](#) (Network Printing Simulation) and send a print job. **An acceptable print is produced.**

Y N

- verify machine settings
- reload system software
- If the problem continues, reseal the SBC System Memory and System Disk Cable.
- If the problem continues, replace the following ([PL 35.2](#)) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB
  - System Disk

Print out a Configuration Report ([GP 6](#)). Review the NetWare, TCP/IP, Apple Talk, and Microsoft Networking (NETBIOS) settings. **At least one networking protocol is enabled.**

Y N

The printer is not installed properly. Inform the customer/system administrator that the printer needs to be installed and setup for the appropriate networking protocol.

Go to [dC312](#) and check for a selectable protocol (not grayed out). **There is at least one selectable protocol.**

Y N

Cycle system power. When machine is ready, select [dC312](#) again. Check for a selectable protocol (not grayed out). **There is at least one selectable protocol.**

Y N

When machine is ready, select [dC312](#) again. Check for a selectable protocol (not grayed out).

Check for a selectable protocol. (Not grayed out) **There is at least one selectable protocol.**

Y N

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select **Start**. Observe the test results. **The test passed.**

Y N

Cycle system power. When machine is ready, select [dC312](#) again. Select the desired protocol and select **Start**. **The test passed.**

Y N

Perform the following:

B C

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, reseal the SBC System Memory and System Disk Cable.
- Go to [GP 9](#) and perform the Regular AltBoot procedure.
- If the problem continues, replace the following ([PL 35.2](#)) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB
  - System Disk
- If the problem continues, have the customer/System administrator replace the network drop cable.

Go to the appropriate RAP for the network protocol type that failed the Echo test.

- NOVELL: [OF 16-2](#), Novell Netware Checkout RAP
- TCP/IP: [OF 16-3](#), TCP/IP Checkout RAP
- APPLETalk: [OF 16-4](#), Appletalk Checkout RAP
- NETBIOS: [OF 16-5](#), Netbios Checkout RAP

Verify that the problem is corrected. If the problem continues, go to [GP 9](#) and perform the Regular AltBoot procedure.

### CAUTION

*The AltBoot procedure (GP 9) will delete all stored data on the System Disk Drive, including E-mail addresses, Xerox Standard Accounting data, and network configuration information. ALWAYS clone the machine (GP 13), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.*

Reload software via AltBoot ([GP 9](#)). **The problem continues.**

Y N

Return to [Service Call Procedures](#).

Select the most appropriate from the following:

- Jobs Won't Print, Can't See Printer, Can't Connect to Printer
  - NOVELL: [OF 16-2](#), Novell Netware Checkout RAP
  - TCP/IP: [OF 16-3](#), TCP/IP Checkout RAP
  - APPLETalk: [OF 16-4](#), Appletalk Checkout RAP
  - NETBIOS: [OF 16-5](#), Netbios Checkout RAP
- A particular Job Won't Print - go to the [OF 16-8 Problem Printing Job RAP](#), Problem Printing Job RAP
- Instead of job printing normally, there is a literal printing of the PDL (many pages of cryptic code) - Go to the [OF 16-9, Job Prints Incorrectly RAP](#)
- Job prints, but looks wrong. Wrong fonts, missing fonts, other image quality problems - Go to the [OF 16-9, Job Prints Incorrectly RAP](#)

## OF 16-2 Novell Netware Checkout RAP

Use this RAP if the printer is enabled for Novell Netware protocol, but there are problems printing to it.

It is assumed that before entering here that the IOT is known to be OK.

Perform [OF 16-1 Network Printing Problems Entry RAP](#), Network Entry RAP before using this RAP.

### Initial Actions

Question the system administrator and determine if any changes have been made to the machine Network Setup or the network.

### Procedure

Determine if the problem is occurring on multiple workstations. **Only one workstation is unable to print.**

Y N

Have the customer/system administrator run **pconsole**.

Check Print Queue, Attached Print Servers. **The print server is attached to the queue.**

Y N

Check Print Queue, Status.

Ensure the flag that indicates that new print servers can attach to queue is set to yes. **The flag is set to Yes.**

Y N

Have the customer/system administrator set the flag to Yes.

There may be a problem with the Network and Connectivity Setup on the printer. If a configuration report has not already been run, do so now ([GP 6](#)). Consult with the system administrator and ensure that the following Netware settings are correct on the printer:

- IPX Frame Type is correct (Ethernet Only)
- Primary Server name is correct (Bindery Only)
- NDS Tree and Context is correct (Netware 4.x, or later, NDS Only)
- Print Server name is correct
- A Print Server password is set and the same password is set for the print server object on the NDS tree

**All settings are OK.**

Y N

Go to Connectivity and Network Setup. Make Changes as appropriate.

Switch the machine power off/on to reboot the SBC. Check for a reoccurrence of the problem. **The problem continues.**

Y N

Done. Return to [Service Call Procedures](#).

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Check the following:

A

- In **pconsole**, check Print Queue, Print Queue Information, Status. Ensure that the following two flags are set to Yes.
  - Print servers can service jobs in the queue
  - Users can add jobs to the queue

**NOTE:** Administrator or Print Queue Operator rights are required to make these changes.

- Notify customer/system administrator. There may be a network problem or a problem with the client workstation.

#### The problem occurs only on one job.

**Y N**

Have the customer or system administrator check the workstation configuration. There may be a network problem or a problem with the client workstation.

Have the customer or system administrator reload the print driver on the affected workstation. Ensure that the problem is corrected. If the problem continues, escalate the call to the Customer Service Center (CSC).

Have the system administrator check the problem workstation.

## OF 16-3 TCP/IP Checkout RAP

Use this RAP if the printer is enabled for TCP/IP protocol, but there are problems printing to it.

### Initial Actions

- Perform **OF 16-1 Network Printing Problems Entry RAP**, Network Entry RAP before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.
- Ensure that the printer is properly configured for the TCP/IP Network. Verify with the system administrator that the following printer settings are correct:
  - Printer IP address
  - Subnet mask
  - Broadcast Address
  - Default Gateway
- For Solaris 2.5 and above, the key operator or system administrator must have root privilege to install the printer.
- For SunOs, have the system administrator ensure that the /etc/printcap file is properly configured.

### Procedure

Determine if problem is occurring on multiple workstations. **Only one workstation is unable to print (answer no if unsure)**

**Y N**

Print out a configuration report. (GP 6). Review the TCP/IP settings. **TCP/IP is enabled.**

**Y N**

The printer is not installed for TCP/IP. Inform the customer/system administrator that the printer needs to be installed and setup for TCP/IP.

Select **dC312**. Check if TCP/IP is selectable. **TCP/IP is selectable (not grayed out).**

**Y N**

Switch off/on the machine power to reboot the SBC. When machine is ready, select (**dC312**) again. Check if TCP/IP is selectable. **TCP/IP is selectable (not grayed out).**

**Y N**

Go to **GP 9** and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select **dC312**, select **TCP/IP** and select **Start**. Observe the test results. **The test passed.**

**Y N**

In Echo Test (**dC312**), select **Internal TCP/IP** and select **Start**. Observe the test results. **The test passed.**

**Y N**

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.

A B C

A B C

- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseal the SBC System Memory and System Disk Cable.
- Go to [GP 9](#) and perform the Regular AltBoot procedure.
- If the problem continues, replace the following (([PL 35.2](#)) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB
  - System Disk

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseal the SBC PWB Memory and System Disk Cable.
- If the problem continues, replace the following in order until the problem is resolved:
  - System Disk Cable
  - SBC PWB Memory
  - SBC PWB
  - System Disk

The printer needs to be reinstalled on the network. Have the system administrator reinstall the printer.

- Ensure that all configurations and IP addresses are valid.

**The problem occurs only on one job**

Y N

Have the customer/system administrator Ping from the affected workstation to the IP address of the printer.

Observe results. **The workstation can ping the printer successfully.**

Y N

Have the customer/system administrator ping to another known good IP address, other than the broadcast address, on the network. **The workstation can successfully ping another IP address on the network.**

Y N

Inform the customer/system administrator there is a problem with the workstation.

Ensure the Subnet Mask, IP address, broadcast address and Default Gateway are set properly at the printer.

Have the system administrator check the workstation configuration. Ensure that the workstation is set-up properly to print to the printer according to the System Administrator Guide.

D

D

**The same job prints ok from another workstation.**

Y N

Have the customer/system administrator reload the print driver on the affected workstation. If the problem continues, escalate the call to the Customer Service Center (CSC).

There is an application problem. Have the customer contact the Customer Service Center.



## OF 16-4 AppleTalk Checkout RAP

Use this RAP if the printer is enabled for AppleTalk protocol, but there are problems printing to it.

### Initial Actions

- Perform [OF 16-1 Network Printing Problems Entry RAP](#), Network Entry RAP before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.

### Procedure

Print out a configuration report ([GP 6](#)). **AppleTalk is enabled.**

Y N

The printer is not installed for AppleTalk. Inform the customer/system administrator that the printer needs to be installed and setup for AppleTalk.

Select [dC312](#) and select **Start**.

Check if AppleTalk is selectable. **AppleTalk is selectable (not greyed out).**

Y N

Switch off/on the machine power to reboot the SBC. When machine is ready select [dC312](#) and select **Start**. Check if AppleTalk is selectable. **AppleTalk is selectable (not greyed out).**

Y N

Have the system administrator reinstall the printer on the network. When complete, select [dC312](#). Check if AppleTalk is selectable. **AppleTalk is selectable (not greyed out).**

Y N

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select **AppleTalk** and select **Start**. Observe the test results. **The test passed.**

Y N

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseal the SBC System Memory and System Disk Cable.
- Go to [GP 9](#) and perform the Regular AltBoot procedure.
- If the problem continues, replace the following ([PL 35.2](#)) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB

A

A

– System Disk

Check the network drop cable for obvious damage. If OK, there may be a network problem. Notify the system administrator.

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- Recheck the AppleTalk configuration settings.
- Check the following AppleTalk configuration settings:
  - The Printer name is correct
  - Zone name is correct
  - The proper printer drivers are installed on the clients and that the printer is visible and selected in the chooser.

## OF 16-5 NETBIOS Checkout RAP

Use this RAP if the printer is enabled for NETBIOS protocol, but there are problems printing to it.

### Initial Actions

- Perform [OF 16-1 Network Printing Problems Entry RAP](#), before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.
- If running NETBIOS over an TCP/IP network, ensure the printer is properly configured for TCP/IP network. Verify with the system administrator that the following printer settings are correct:
  - Host Name
  - Printer Name
  - Workgroup (domain)

### Procedure

Print out a Configuration Report ([GP 6](#)). **NetBIOS is enabled.**

**Y N**

The printer is not installed for NetBios. Inform the customer/system administrator that the printer needs to be installed and setup for NetBIOS.

Select [dC312](#). Check if NetBIOS is selectable. **NetBIOS is selectable (not grayed out).**

**Y N**

Switch off/on the machine power to reboot the SBC. When machine is ready, select [dC312](#) again. Check if NetBIOS is selectable. **NetBIOS is selectable (not grayed out).**

**Y N**

Have the system administrator reinstall the printer on the network. When complete, select **Diagnostics** tab, **SBC/Network** tab, **Echo Test (dC312)**.

Check if NetBIOS is selectable. **NetBIOS is selectable (not grayed out).**

**Y N**

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select **NetBIOS** and select **Start**. Observe the test results. **The test passed.**

**Y N**

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseal the SBC System Memory and System Disk Cable.
- Go to [GP 9](#) and perform the Regular AltBoot procedure.
- If the problem continues, replace the following ([PL 35.2](#)) in order until the problem is resolved:

A

- System Disk Cable
- SBC System Memory
- SBC PWB
- System Disk

Check the network drop cable for obvious damage. If OK, there may be a network problem. Notify the system administrator.

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- Recheck the NetBIOS configuration settings.

Check fault History for 16.800.46, 16.802.46, or 16.803.46 fault codes. **The fault(s) occurred.**

**Y N**

Return to the top of this RAP and answer NO to statement that the interface is IP/Ethernet or IP/Token Ring.

Go to the [OF 16-3, TCP/IP RAP](#).

A

## OF 16-8 Problem Printing Job RAP

Use this RAP when a particular job won't print. Other jobs print OK.

### Procedure

Check the output to see if a PDL error sheet was printed. **An error sheet was printed.**

Y N  
On the machine UI, select Job Status, Other Queues, All Completed Jobs, Save.  
Check the queue for the job in question. **The job is in the log.**

Y N  
Select Other Queues, All Incomplete Jobs, Save. **The job is stuck in the queue.**

Y N  
Check for a fault listed against the job in question. **There is a fault(s) listed with the job.**

Y N  
Go to [GP 9](#) and perform the Regular AltBoot procedure.

Go to the appropriate RAP for the fault(s) listed with the job.

Switch the machine power off/on to reboot the SBC. **The job printed OK.**

Y N  
Inform the customer the job must be deleted. Delete the job. Instruct the customer to recreate and re-send the job. **The job printed OK.**

Y N  
Go to [GP 9](#) and perform the Regular AltBoot procedure.  
If the problem continues, there may be a problem with the job. See if other jobs print OK. If not, instruct the customer/System administrator to reload the print driver on the affected workstation.  
If the problem continues have the customer call the Customer Service Center.

Done. Return to [Service Call Procedures](#).

Done. Return to [Service Call Procedures](#).

The job must have been printed. Check for the possibility that the job was removed from the printer by another user.

Go to [GP 9](#) and perform the Regular AltBoot procedure.

If the problem continues, there may be a problem with the job. See if other jobs print OK. If not, instruct the customer/System administrator to reload the print driver on the affected workstation.

If the problem continues have the customer call the Customer Service Center.

## OF 16-9 Job Prints Incorrectly RAP

The job prints, but incorrectly.

### Procedure

Discuss the problem with the customer and/or inspect the incorrect output. **There is a font problem.**

Y N  
**The problem is occurring on all jobs from all clients.**

Y N  
**The problem is occurring on jobs from one particular client.**

Y N  
The problem is related to a particular job. Have the customer call the Customer Support Center.

There may be a problem with the client workstation. Check/perform the following:

- See if problem is related to a particular job. If so, go to the [OF 16-8 Problem Printing Job RAP](#).
- Ensure that the client meets minimum specifications for the Centware® software drivers.
- Ensure the latest printer drivers are loaded.
- Have the customer/System administrator reload the printer driver.

Have the customer/system administrator replace the print drivers. Ensure that the latest drivers available are loaded. **The problem still continues.**

Y N  
Return to [Service Call Procedures](#).

Go to [GP 9](#) and perform the Regular AltBoot procedure.

Have the customer view the job in Print Preview of the application. **The problem appears in Print Preview.**

Y N  
There may be a font substitution that is not acceptable to the customer. In the Printer Setup for the print driver, if Always Send to Printer is selected, the actual fonts will be sent to the printer from the workstation. This will slow down the printer performance, but will usually solve the font problem.

There may be a problem with the client workstation. Check/perform the following:

- See if problem is related to a particular job. If so, go to the [OF 16-8 Problem Printing Job RAP](#).
- Ensure the client meets minimum specifications for the Centware® software drivers.
- Ensure the latest printer drivers are loaded.
- Have the customer/System administrator reload the printer driver.

## OF 17-1 FAX Entry RAP

There is a problem with Embedded FAX. The primary causes of Fax problems, **in order of likelihood**, are:

- Phone line problems
- Customer operation problems
- PBX setup problems
- Machine configuration problems
- Fax hardware problems

### Initial Actions

- If the problem is FAX not printing the Date and Time stamp, enter dC131 and change the setting in NVM location 200-143 from a 0 to a 1.
- Verify the presence of the FAX PWB.
- Check the Configuration Sheet to confirm that the FAX PWB is detected.
- Perform [GP 1](#) Fax PWB Internal Selftest.
- Check the phone line connection ([GP 14](#)).
- If the FAX icon is not present, check cable ([PL 35.2](#)) item 8 on the SBC.

### Procedure

**NOTE:** *Embedded Fax is designed to work over analog lines only. PBX and DSL lines attempt to emulate a PSTN analog line, and must be configured appropriately. Incorrect PBX settings are a major cause of service calls.*

The following line types are supported on a best efforts only basis:

- xDSL lines with appropriate filtering.
- PBX extensions using digital signalling, with an analog speech path.
- ISDN lines are not supported.
- In a VoIP environment, Embedded Fax devices need separate analog lines or a T.38 Protocol Adapter

### The Fax cannot send or receive.

Y N

#### The Fax can send but not receive.

Y N

If the Fax receives but does not send, check the FAX set-up menus:

- Enter **Tools** ([GP 2](#)). Select **Service Settings**.
- Select **Fax Service Settings**.
- Select **Line \_\_ Setup**
  - Check that the Fax is set for **Send and Receive**.

If the Fax transmits but cannot receive,

- Check the phone number. To receive a FAX the sender must know the phone number assigned to the phone line connected to the FAX.
- Check the FAX set-up menus.
  - Enter **Tools** ([GP 2](#)). Select **Service Settings**.
  - Select **Fax Service Settings**.
  - Select **Line \_\_ Setup**.

Check that the Fax is set for **Send and Receive**.

Print a Configuration Report ([GP 6](#)). **The Fax is listed as installed.**

Y N

Switch Off the power.

Disconnect then reconnect the Fax PWB, Riser PWB, and SBC NVM PWB. Switch on the power. If the problem remains, perform the following:

- Replace the Fax PWB ([PL 35.1](#)).
- Reload SW ([GP 9](#)).
- Replace SBC NVM PWB ([PL 35.2](#)).
- Replace the SBC PWB ([PL 35.2](#)).

Check the FAX set-up menus.

- Enter **Tools** ([GP 2](#)). Select **Service Settings**.
- Select **Fax Service Settings**.
- Select **Fax Setup**.
  - Check that the Fax is enabled.
  - If the **Enable** and **Disable** buttons are not present, then the initial setup at install was not completed correctly. Press **Setup** and complete the setup.
- Line Configuration - be sure pulse or tone selection is correct.
- FAX Transmission Defaults (check closely for FAX transmission problems)
  - Automatic Redial Setups
  - Automatic Resend
  - Audio Line Monitor
  - Transmission Header Text
  - Batch Send
- Receive Defaults (check closely for FAX receive problems)
  - Receive Printing Mode
  - Default Output Options
  - Secure Receive
  - Auto Answer Delay
- FAX Country Setting
- File Management

**NOTE:** *Though typically the FAX feature is setup for analog transmission, if FoIP is being used, the following may be helpful if there is a problem.*

If the machine fails to receive or transmit fax jobs and the transmit speed drops immediately to 9600 bps or 7200 bps, then do the following:

The transmitting or receiving baud rate can be reduced from 33.6K bps to either 14.k bps, 9600 bps, or 7200 bps by changing the proper NVM locations.

The NVM values are:

3 = 33.6K 11= 14.4K 13 = 9600 14 = 7200

The NVMs are:

Sending NVM 200-087 "T30MaxSpeedL1Tx" (single line)

Sending NVM 200-088 "T30MaxSpeedL2Tx" (for 2 line fax)

A

Receive NVM 200-089 "T30MaxSpeedL1Rx" (single line)  
Receive NVM 200-090 "T30MaxSpeedL2Rx" (for 2 line fax)

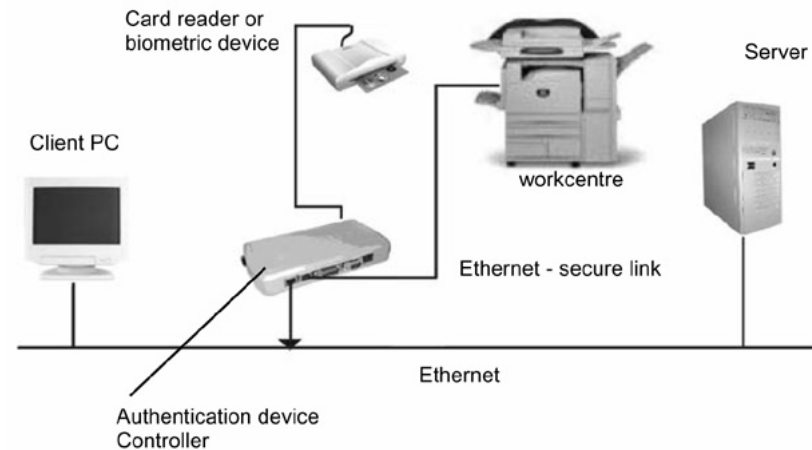
Otherwise, replace the FAX PWB (PL 35.1).

## OF 18-1 Secure Access RAP

### Overview

Xerox Secure Access uses an external device, such as a card reader or biometric device, to authorize access to the machine. This reader then passes the information to the controller, which handles the authentication process including, which GUI screens are displayed, accepting GUI responses, that defines their content and order. The controller can pass user identities and passwords directly to the machine after gathering the data from an external server. All communication is via a secure network link, Figure 1 Network Diagram.

Xerox Secure Access shall be controlled via the Centware® Internet Services GUI. The active status is displayed in tools within Access Control. If communication cannot be established with the Xerox Secure Access Server the service may be temporarily disabled by touching the now enabled Off button within the Xerox Secure Access tools window. Once communication is reestablished the stored Xerox Secure Access setting shall be restored.



Q-1-4271-A

Figure 1 Network Diagram

### Initial Action

Before working on the Xerox Secure Access, check out the machine in the service mode to insure no faults are displayed and that the machine is functioning properly. If it is not, repair any problems before proceeding with diagnosing the Secure Access Accessory. Diagnostics can be entered to test copier functionality when Secure Access is installed.

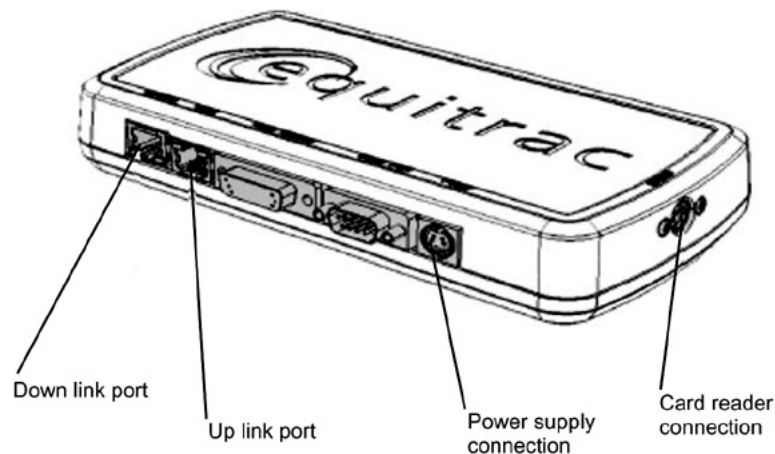
Perform the following steps

- Check the connection between the Card Reader and the Secure Access Authentication Device.
- Check for the LEDs are on or blinking on the Secure Access Authentication Device. If the LEDs on the Secure Access Authentication Device are not operating, go to Secure Access Authentication Device Failure.

- Check for the LEDs are on or blinking on the Card Reader. If the LEDs on the Card Reader are not operating, go to Card Reader Failure.
- If customers have problems of install / setting up, or any other problems related to their Secure Access Administrator, they should refer to the Secure Access System Administrator's Guide or contact Xerox Technical Support.

#### Secure Access Authentication Device Failure

The primary failure modes are power problems or failed hardware components. The symptom of these failures can be detected by observing the LEDs on the Secure Access Authentication Device, [Figure 2](#).



Q-1-4272-A

**Figure 2 Authentication Device**

Check the power to the Secure Access Authentication Device.

- Check the power supply at the wall socket. If there is no power at the wall socket, have the customer restore power and continue when confirmed.
- Disconnect the power cord from the wall socket and the power supply. Check the power cord for continuity and damage. If necessary install a new power cord. Disconnect the power cord from the power supply and plug the power cord into the wall outlet. Using a multi meter, check for line voltage at the end of the power cord disconnected from the power supply. If there is power at the wall but not at the end of the power cord. Install a new power cord.
- Disconnect the small power cord from the Secure Access Authentication Device. Check there is +5V at the connector that plugs into the Secure Access Authentication Device. If there is no +5V, install a new power supply.

- There is a 'Keyed' switch on the end of the Secure Access Authentication Device. Obtain the key from the customer. Insert the key into the 'keyed' switch and cycle the switch 1 quarter turn clockwise and then back to its start position. Observe the LEDs and listen for an audible tone.
- If the LEDs on the Secure Access Authentication Device "Uplink" and "Downlink" Ethernet ports do not cycle on and off as the controller goes through its boot-up process, or if the audible tone is not heard. Install a new Secure Access Authentication Device.

**NOTE:** A new device will require the Secure Access Administrator to reconfigure the server with the new MAC address for the new part. Be sure to inform the Secure Access Administrator of the MAC address of the device being removed and the MAC address of the new device.

#### Card Reader Failure

The primary failure modes are power problems or failed hardware components. The symptom of these failures can be detected by observing the LED on the Card Reader. Refer to [Figure 2](#).

- The Green LED on the Card Reader is On
- The Green LED on the Card Reader Flashes Rapidly
- The Red LED on the Card Reader is On
- The Red LED on Card Reader Flashes Slowly
- The Red LED on Card Reader Flashes Rapidly
- The Card Reader LEDs are not On or Blinking

**Table 1 Fault Indications**

When the LED on the card Reader is	Description
Red	The authentication device is in idle mode; there is no active session.
Green	The authentication device is in ready mode; a session is active.
Slow Flashing Red	The authentication device has no connection to the server.
Slow Flashing Green	The authentication device is communicating to the server.
Fast flashing red	Invalid card / password; access denied.

The Green LED on the Card Reader is On

- This indicates an active Secure Access Session and the Card Read correctly corresponds to a valid Secure Access Account.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.
- Ensure that the card corresponds to a valid Secure Access Account.

The Green LED on the Card Reader Flashes Rapidly

- This indicates a valid card swipe and in the process of authentication on the server.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.



- If the UI on the machine is locked and no secondary PIN is required. Check that the Xerox Secure Access is installed correctly, and ask customer to check the configuration at the server.

The Red LED on the Card Reader is On

- This indicates the Card Reader is in an idle state. If the red LED remains on, and the UI remains locked after a card is swiped, re-orient the card and re-swipe.
- Try a known good card in the reader. If the other card is working on the problem Card Reader. Ask customer to make sure the card corresponds to a valid Secure Access Account.
- Try the card in a known good reader. If the card is working on a known good Card Reader, it may be a problem with the Secure Access Authentication Device. Check to see if the LEDs on the Secure Access Authentication Device are on.

The Red LED on Card Reader Flashes Slowly

- This indicates the reader is connected to the controller but the controller is not connected to the server. Check the Ethernet green LED on the Authentication Device.
- If the Ethernet green LED on the Authentication Device is off, make sure the connectors of the LAN connections are working properly. If the connections are working, this indicates the network may not work properly. Ask customer to check with Network Administrator.
- If the Ethernet green LED on the Authentication Device is either on or flashing, contact the Secure Access Administrator

The Red LED on Card Reader Flashes Rapidly

- This indicates a valid card but does not correspond to a valid Secure Access Account at the server, test with a known valid user's card.
- If all cards react the same way, this indicates the Server Configuration may not be correct. Ask customer to check the Server Configuration.
- If all the card react this way, this indicates the cards are not valid. Ask customer to check the Server Configuration

The Card Reader LEDs are not On or Blinking

- Check to see if the Secure Access is correctly installed.
- If there is still no LED on the Card Reader, install a new the Card Reader.

**NOTE:** If there is another working card reader available, the readers can be switched to confirm failure. If the Card Reader is not functioning, the web page of the machine has a setting that will enable UI keypad access. If the users know their card access number, they can use the machine by manually entering their number. The process is as follows:

1. Go to the machine web page under properties and then security and check the box that says "Allow local user interface initiation".
2. Enable the keypad and test with valid credentials. This will validate the rest of the secure access function.
3. Leave it in this mode until the new card reader can be installed.

## OF 19 Wireless Connectivity RAP

Use this RAP when the customer reports wireless network failures when using the Xerox wireless print kit.

**NOTE:** The customer must use the Xerox wireless print kit. Other wireless network adapters are not supported.

### Initial Actions

Consult your manager before troubleshooting the customer's network, as the policy varies according to region.

### Procedure

Perform the following:

1. Check that the USB wireless network adapter is plugged into a USB port on the machine.
2. If the USB wireless network adapter is connected using the USB extension cable, check that the extension cable is also plugged into a USB port on the machine.
3. Print a configuration report.
  - a. Check with the customer that printing of configuration reports is enabled. If necessary, ask the customer to enable printing of the configuration report.
4. Ensure that the USB ports are enabled.
  - a. Check the configuration report under the heading Connectivity Physical Connections.
  - b. If Software Tools is not listed next to USB Connection Mode, ask the customer to enable USB.
    - i. Refer to the System Administrator Guide > USB Port Security Setting Check.
    - ii. Refer to the System Administrator Guide > Configuring USB Settings and set USB Connection Mode.
5. Confirm the USB port is functional.
  - a. Check that the LED on the wireless network adapter flashes when the machine is in standby.
  - b. Connect the wireless network adapter to a different USB port if available.
  - c. Perform dC361 NVM Save and Restore. If the NVM can be saved to a USB flash drive, the USB port is functional.
 

**NOTE:** It is not necessary to perform the NVM restore procedure.
6. Ensure that the machine is configured for wireless printing.
  - a. Check the configuration report under the heading Connectivity Physical Connections.
  - b. If wireless is disabled, ask the customer to enable wireless printing. Or enter Customer Administration Tools:
    - i. Select **Network Settings**.
    - ii. Select **Network Connectivity**.
    - iii. Select **Wireless**.
    - iv. Select OK.
  - c. Check the network name listed next to SSID on the configuration report.

- d. If the network name does not match the customer's wireless network, ask the customer to configure the wireless network setup before continuing.
  - e. Check the network name under the heading Connectivity Protocols.
  - f. If an IP address is not listed under TCP/IPv4 or TCP/IPv6, ask the customer to configure the wireless network setup before continuing.
7. Confirm that the customer's wireless network can be detected at the machine's location.
    - a. Ask the customer to confirm that the wireless network is switched on and can be received at the machine's location. Or use your PWS or a smartphone to detect the customer's wireless network.
    - b. To use a PWS with Windows 7 to confirm the customer's wireless network can be detected, perform relevant procedure below.

#### Windows 7

- i. Click on the Wireless Networking icon in the notification area of the taskbar. If necessary, click on the Show hidden icons button to show the wireless networking icon.
- ii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

#### Windows XP

- i. Right click on the Network Connection icon in the notification area of the taskbar.
- ii. Click on View Available Wireless Networks.
- iii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

**NOTE:** Do not attempt to connect the PWS or smartphone to the customer's wireless network.

8. If the wireless network signal strength is weak, ensure that the wireless network adapter is connected via the USB extension lead. If possible change the mounting position of the adapter to improve the reception. To view the signal strength, enter System Administration Tools and perform the following:
  - a. Select **Network Settings**.
  - b. Select **Network Connectivity**.
  - c. Select **Wireless**.
  - d. The signal strength is displayed in the text frame.
  - e. Move the wireless network adapter and extension lead until the strongest signal strength is found.
9. If necessary, install a new wireless network adapter.

## OF 99-1 Reflective Sensor RAP

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Reflective sensors operate by light from the LED being reflected off the paper to the photo transistor, causing the output of the sensor to go to the low (L) state.

### Initial Actions

Ensure that the sensor is not actuated.

### Procedure

Enter the component control code indicated in the Procedure and/or Circuit Diagram of the RAP that sent you here. Actuate the sensor using a sheet of paper. **The display changes with each actuation.**

Y N

Clean the sensor and then block and unblock it. **The display changes with each actuation.**

Y N

Access to some sensors in this machine is difficult. Follow the **Y** leg if you can access the sensor connector. Follow the **N** leg if access is not possible. **The sensor connector is accessible.**

Y N

Check the voltage at the output of the PWB or power supply (refer to the Circuit Diagram). In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC depending on the circuit (refer to the Circuit Diagram for the correct voltage). **The voltage corresponds with the voltage shown in the Circuit Diagram.**

Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB

**The display indicates a constant L.**

Y N

**Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.**

Y N

Use the circuit diagram and/or the wirenets in Section 7 to trace the problem.

Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. **The display changes from H to L.**

A B C



A B C

Y N

There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

Disconnect the sensor. **The display indicates H.**

Y N

When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB. **Figure 1** represents a typical sensor for this machine.

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.

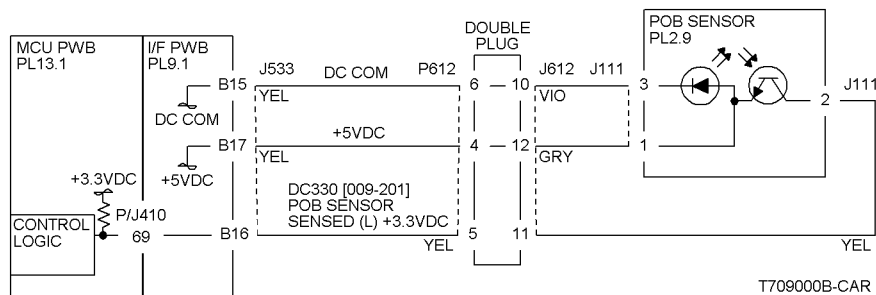


Figure 1 Typical Reflective Sensor Circuit Diagram

## OF 99-2 Transmissive Sensor

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Transmissive sensors have a flag or actuator that is pushed into the space between the LED and transistor, blocking the light beam and causing the output of the sensor to go to the high (H) state. This actuation may be caused by a sheet of paper striking a pivoting flag, or a rotating actuator on a shaft or roll.

Some sensors have built-in inverters and the outputs will go to the low (L) state when the sensors are blocked. In other situations, the processing of the signal in control logic may cause the logic level displayed on the UI or the PWS to be the opposite of the actual voltage output by the sensor. The specific RAP and/or Circuit Diagram will indicate if this is the case. **Figure 1** is an example of a typical sensor circuit for this machine

### Procedure

Enter the component control code indicated in the specific RAP and/or Circuit Diagram. Block and unblock the sensor. **The display changes with each actuation.**

Y N

Clean the sensor and then block and unblock it. **The display changes with each actuation.**

Y N

Access to some sensors in this machine is difficult. Follow the **Y** leg if you can access the sensor connector. Follow the **N** leg if access is not possible. **The sensor connector is accessible.**

Y N

Check for +5VDC at the output of the PWB or power supply. Refer to the Circuit Diagram. In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC, depending on the circuit. Refer to the circuit diagram for the correct voltage.

Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB

**The display indicates a constant L**

Y N

**Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.**

Y N

Use the circuit diagram and /or the wirenets in Section 7 to trace the problem.

A B C D

**A** | **B** | **C** | **D**

Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. **The display changes from H to L.**

**Y N**  
 There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

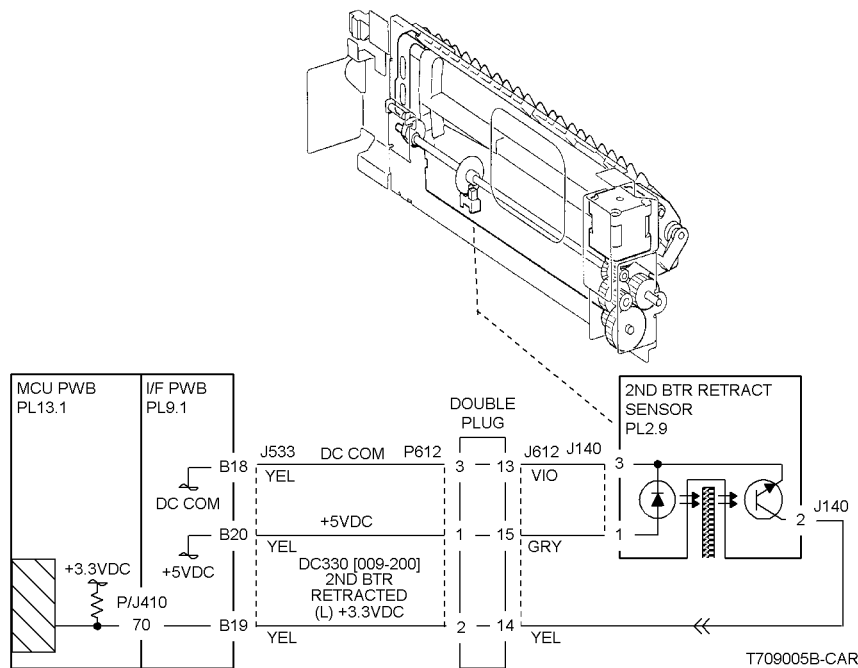
Disconnect the sensor. **The display indicates H.**

**Y N**  
 When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB. **Figure 1** represents a typical sensor for this machine

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check the sensor actuator/flag for proper operation. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.



**Figure 1 Typical Transmissive Sensor Circuit Diagram**

## OF 99-3 Switch

### Procedure

Enter **dC330** [XXX-XXX]. Actuate the switch. **The display changed.**

**Y N**  
 There is +3.5 / 5VDC measured between Pin 2(+) of the Switch and GND(-).  
**Y N**  
 Check the wire between the switch Pin 2 and the PWB Pin 3 for an open circuit and poor contact. If the check is OK, replace the PWB.

There is +3.5 / 5VDC measured between Pin 1(+) of the Switch and GND(-), **Figure 1**.  
**Y N**  
 Replace the switch.

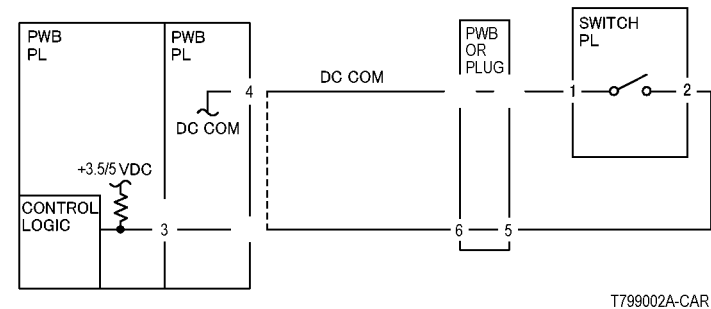
Check the wire between the PWB Pin 4 and the switch Pin 1 for an open circuit and poor contact. If the check is OK, replace the PWB.

De-actuate the switch. **The display changed.**

**Y N**  
 Disconnect the connector on the switch. **The display changed.**  
**Y N**  
 Check for a short between the switch Pin 2 and the PWB Pin 3. If the check is OK, replace the PWB.

Replace the switch.

Replace the switch.



**Figure 1 2003**

## OF 99-4 Generic Solenoid/Clutch RAP

Solenoids and electric clutches are essentially electromagnets. Typically, a positive voltage is applied to one end of a coil, and a current driver is connected to the other end. Control Logic switches this driver to GND potential, actuating the magnet. Bidirectional solenoids have a bipolar driver connected to each end. One leg is switched to 24 VDC and the other to GND.

Figure 1 is a circuit diagram of a typical solenoid.

### Initial Actions

Ensure that there is no damage or binding in the solenoid or in any mechanical linkage. If there is an Adjustment for the clutch or solenoid, make sure that the procedure was performed correctly

### Procedure

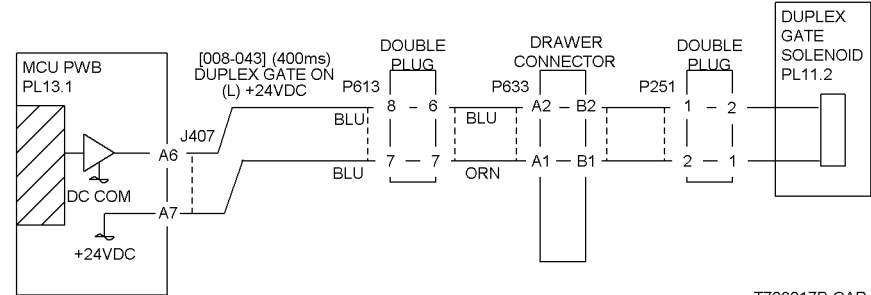
The clutch/solenoid is always energized.

- Y N**  
Enter the component control code (dC330) given in the RAP or the Circuit Diagram. Press the **Start** button **The Clutch or solenoid energizes.**
- Y N**  
Press the **Stop** button **There is +24 VDC between the switched leg (J407 pin A6 in the example, Figure 1) of the control PWB and GND.**
- Y N**  
**There is +24 VDC between the powered leg (J407 pin A7 in the example, Figure 1) of the control PWB and GND.**
- Y N**  
Disconnect the connector (J407 in the example, Figure 1). **There is +24 VDC between the powered leg of the control PWB and GND.**
- Y N**  
Refer to the 24 VDC wirenets. check the input power to the control PWB. **+24 VDC is present.**
- Y N**  
Use the 24 VDC wirenets to troubleshoot the problem.
- Replace the control PWB.
- Check the wire in the powered leg of the circuit, (J407 pin A7 in the example, Figure 1) for a short circuit to GND. If the wire is OK, replace the clutch or solenoid.
- Disconnect the connector (J407 in the example, Figure 1). Check continuity through the two wires and the clutch or solenoid. **There is less than 100 ohms between the two legs of the circuit.**
- Y N**  
Disconnect the clutch or solenoid. Check continuity through the two wires and the clutch or solenoid. **There is less than 100 ohms across the clutch or solenoid.**
- Y N**  
Replace the clutch or solenoid.

A B C D E

- A** One of the two wires between the control PWB and the clutch or solenoid is open. Repair or replace the wiring as required.
- B** Replace the control PWB.
- C** Press the **Start** button. **There is less than 1 VDC between the switched leg of the control PWB and GND.**
- Y N**  
Replace the PWB.
- D** Replace the clutch or solenoid.
- E** The clutch or solenoid appears to be functioning correctly. Refer to the Circuit Diagram for the RAP that sent you here. Check the wires for loose connections or damage that may cause intermittent operation. Perform any required adjustments.

There is a short circuit on the switched leg (J407 pin A6 in the example) from the solenoid or clutch. Check the wire for a short circuit to GND. If the wire is OK, replace the solenoid. If the problem persists, replace the controlling PWB.



T708017B-CAR

Figure 1 Typical Solenoid/Clutch Circuit Diagram

## OF 99-6 2 Wire Motor Open

### Procedure

**NOTE:** Before performing this RAP, ensure that the motor is free to rotate.

Enter the dC330 [XXX-XXX].

There is +24VDC measured between Pin 3(+) of the PWB and GND(-).

Y N

There is +24VDC measured between the Motor Pin 2(+) of the Motor and GND(-).

Y N

There is +24VDC measured between the Motor Pin 1(+) of the Motor and GND(-).

Y N

There is +24VDC measured between the PWB Pin 4(+) of the PWB and GND(-).

Y N

Replace the PWB.

Check the wire between the PWB Pin 4 and the Motor Pin 1 for an open circuit or poor contact.

Replace the motor.

Check the wire between the PWB Pin 3 and the Motor Pin 2 for an open circuit or poor contact.

Replace the PWB.

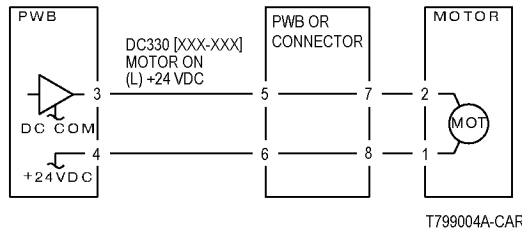


Figure 1 Motor CD

## OF 99-7 2 Wire Motor On

### Procedure

Turn off the power. Remove the PWB connector. **There is 10 Ohm's or less measured between the connector Pin 3 and the frame.**

Y N

Replace the PWB.

Check the wire between the connector Pin 3 and the motor Pin 2 for a short circuit.

If the check is OK, replace the motor.

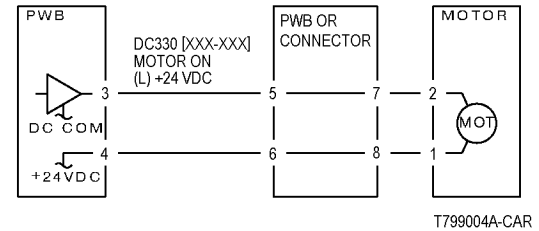


Figure 1 Motor CD

## OF 99-8 Set Gate Solenoid Open

### Procedure

There is +24VDC measured between the Nip/Release Solenoid Pin 1 (+) and GND (-).

Y N  
There is +24VDC measured between the PWB Pin 5 (+) and GND(-).

Y N  
Check +24VDC inputs on the PWB. If the check is OK, replace the PWB.

Check the wire between the PWB Pin 5 and the Nip/Release Solenoid Pin 1 for an open circuit or poor contact.

Enter dC330 [XXX-XXX]. There is +24VDC measured between the PWB Pin 4 (+) and GND(-).

Y N  
There is +24VDC measured between the Nip/Release Solenoid Pin 3 (+) and GND (-).

Y N  
Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 4 and the Nip/Release Solenoid Pin 3 for an open circuit and poor contact.

Follow the following when the release caused a problem.

Go to the dC330 [XXX-XXX]. There is +24VDC measured between the PWB Pin 6 (+) and GND(-).

Y N  
There is +24VDC measured between the Nip/Release Solenoid Pin 2 (+) and GND (-).

Y N  
Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 6 and the Nip/Release Solenoid Pin 2 for an open circuit or poor contact.

Replace the PWB.

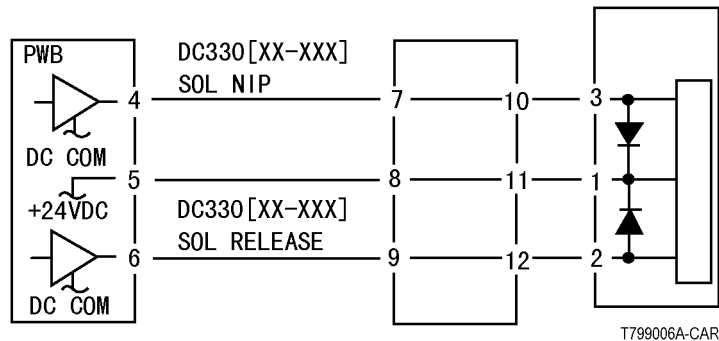


Figure 1 Nip Solenoid CD

## OF 99-9 Multiple Wire Motor

For use on DC motors that:

- have 1 or 2 DC power inputs
- are controlled by 2 or more drivers
- have no DC COM connections for return power
- have no specific feedback circuits

### Procedure

Connect black meter lead to ground. Measure voltage at each pin of J2 (example only, refer to the actual Circuit Diagram for the correct voltage and connector designation). **+24 VDC is measured at each pin.**

Y N  
Disconnect J2. Measure voltage at P2-1 and P2-6. **+24 VDC is measured.**

Y N  
Switch machine off then on. Measure voltage at P2-1 and P2-6. **+24 VDC is measured.**

Y N  
If an interlock circuit is present, check the interlock circuit. Repair as required. If the interlock circuit is good, replace the PWB.

Check the motor wires for a short circuit. If the wires are good, replace the Motor.

Check the motor wires for obvious damage. If the wires are good, replace the Motor.

Replace the PWB.



# 3 Image Quality

## Image Quality RAPs

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## IQ1 IOT Image Quality Entry RAP

The purpose of this RAP is to serve as the entrance vehicle into the Image Quality RAPs section. All Image Quality RAPs must be accessed through this RAP.

The RAP will have you evaluate the copies made during the Call Flow procedure for image quality defects. It will refer you to the Image Quality Analysis RAPs, the Image Quality Defect section in order to diagnose and repair any image quality problems.

### Initial Actions

1. Check for the presence of the defect in Copy mode and in Print mode. If the problem occurs in Copy mode only, go to the [IQ2 RAP](#).

**NOTE:** Color Calibration Adjustment (customer should refer to **Color Calibration in the SA Guide**) is a color calibration for the copier and printer. It compensates for differences between the actual and the expected (target) toner densities for each color. This procedure should be performed whenever there is a noticeable change in the appearance (quality) of the output, particularly changes in color tones or densities. Performing a Color Calibration Adjustment on a regular basis will help to maintain consistent color quality over time. Since this procedure can affect all jobs for all users, it is recommended that this procedure be performed only by the Machine Administrator.

Ask the customer SA to perform the Color Calibration Adjustment if any of the following problems are reported:

- Incorrect colors
- Poor gray balance
- Colors have shifted over time
- Color densities too high or low

Continue with the procedure if the problem remains.

### Procedure

Go to [Table 1](#). Examine the prints for any of the listed defects. Perform the corrective action that is listed.

**Table 1 Image Quality Defects**

Defect	Description	Corrective Action
1mm Lines	At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width approximately. 1mm.	Go to the RAP <a href="#">IQ3</a>
Image Shift in Process Direction	The image is shifted in the process direction.	Go to the RAP <a href="#">IQ4</a>
White Lines	White lines appear in the process direction for all densities.	Go to the RAP <a href="#">IQ5</a>
SLED Transfer Cycle Lines	Cyclical matte lines or black lines appear in the process direction. The cycle changes depending on the process speed. (175mm/s: 9.5mm, 121mm/s: 6.1mm, 79mm/s: 4.2mm)	Go to the RAP <a href="#">IQ6</a>
IN/OUT Density Difference	The densities between the IN and OUT sides are different.	Go to the RAP <a href="#">IQ7</a>
Video Data/Crosstalk	An image with different color overlaps another.	Go to the RAP <a href="#">IQ8</a>
Image Shift in Inboard-to Outboard Direction	The image lands on the blank area and gets dragged in the Inboard-to Outboard direction.	Go to the RAP <a href="#">IQ9</a>
Edge-less Image	An image is printed on the edges.	Go to the RAP <a href="#">IQ10</a>
Contamination Lines	There are blank areas. Their size is proportional to the size of contaminants.	Go to the RAP <a href="#">IQ11</a>
Chip/Half Chip Blanks	Blank areas in sizes of 2.7mm or 5.4mm.	Go to the RAP <a href="#">IQ12</a>
SLED Transfer Failure	Black lines and blank areas (lines) appear repeatedly in units of 2.7mm. They appear by half chip units.	Go to the RAP <a href="#">IQ13</a>
Tapes Not Peeled	The highlight portions are too obvious. The whole paper seems to be filled with lines.	Go to the RAP <a href="#">IQ14</a>
Charging Roll Pitch White Lines - 1	If the BCR is deformed at the BCR and Photoreceptor NIP sections, the trace may appear as thin white lines in the Inboard-to Outboard direction on the highlight portion at the Charging Roll Pitch.	Go to the RAP <a href="#">IQ15</a>
Charging Roll Pitch White Lines - 2	If the substances contained in the CLN-Roll get stuck to the BCR at the BCR and CLN-Roll NIP sections, the resistance on the BCR gets reduced and may cause the appearance of white lines in the Inboard-to Outboard direction.	Go to the RAP <a href="#">IQ16</a>
Photoreceptor Pitch Color Lines	Vibrations during the Drum CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the Inboard-to Outboard direction on the highlight portion at the Photoreceptor Pitch. Limit sample: SIR.84.00, < (incl.) G3 level	Go to the RAP <a href="#">IQ17</a>



**Table 1 Image Quality Defects**

<b>Defect</b>	<b>Description</b>	<b>Corrective Action</b>
Background on Gloss	Background level on Gloss paper is worse than the background level of Plain paper.	Go to the RAP <a href="#">IQ18</a>
Toner Empty Detection Color Lines	At Pre Near or Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.	Go to the RAP <a href="#">IQ19</a>
Toner Droplet Contamination	A contamination consisting of random spatters of toner in sizes of a few millimeters.	Go to the RAP <a href="#">IQ20</a>
Smear on Heavyweight	When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to change (decrease in speed). This change in speed changes the difference in relative speed between the Photoreceptor and the Transfer Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).	Go to the RAP <a href="#">IQ21</a>
Rough Black	On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.	Go to the RAP <a href="#">IQ22</a>
Moist Paper Transfer Failure	The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielectric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the difference in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.	Go to the RAP <a href="#">IQ23</a>
Toner Contamination at Lead/Trail Edge	Lead Edge: Paper lead edge contacts the Belt when it is transported from REGI to Transfer. Trail Edge: The trail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt.	Go to the RAP <a href="#">IQ24</a>
Trail Edge Transfer Failure	The paper trail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Transfer Belt.	Go to the RAP <a href="#">IQ25</a>
Color Lines	Presence of paper dust in between the Transfer Belt and the CLN Blade causes poor cleaning.	Go to the RAP <a href="#">IQ26</a>
Transfer Blank Areas (Partially Moist Paper)	Ripples in partially moist paper becomes wrinkles in the Transfer section, causing blank areas to appear.	Go to the RAP <a href="#">IQ27</a>
Nip Marks	When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch.	Go to the RAP <a href="#">IQ28</a>
Wetting	Distorted image may appear at one side or both sides of the paper trail edge when printing halftone fill.	Go to the RAP <a href="#">IQ29</a>
Background (IOT)	Undesirable toner deposits on the copy or print. The toner deposits can be localized or may cover the entire copy or print. Depending on the density of the background, it is referred to as low, medium, high, or very high background. It may occur in all colors, single colors, or any combination of single colors.	Go to the RAP <a href="#">IQ32</a>
Color Misregistration	Multi-colored images that should be superimposed are offset. This offset may be in the process direction or perpendicular to process direction.	Go to the RAP <a href="#">IQ33</a>
Fuser Offset	Areas of poorly-fused toner are lifted from one area of a print and deposited on a different area, or onto a subsequent print.	Go to the RAP <a href="#">IQ36</a>
High Frequency Bands	Repeating interval bands that are most noticeable in low density (20-30%) halftone areas of the copy. These bands run perpendicular to process direction.	Go to the RAP <a href="#">IQ37</a>
Irregular Process Direction Streak	Streaks: Usually medium-width streaks of (or shifts in) color most noticeable in low density 20-30%) halftone areas of the copy. A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy.	Go to the RAP <a href="#">IQ35</a>
Lead Edge Toner Smear (fused)	Smears of fused toner on the lead edge of prints	Go to the RAP <a href="#">IQ35</a>
Lead Edge Toner Smear (unfused)	Smears of unfused toner on the lead edge of prints	Go to the RAP <a href="#">IQ36</a>
Low Image Density	A condition that results when too little toner of a single color or combination of colors is developed on the copy or print. This results in lighter copies or prints for the single-color toner or the color that results from the combination of color toners.	Go to the RAP <a href="#">IQ30</a>
Misregistration/Skew	The position and/or alignment of the image relative to the top edge and side edge of the paper is not within specification.	Go to the RAP <a href="#">IQ34</a>
Missing Colors	One or more of the primary colors are missing from the image.	Go to the RAP <a href="#">IQ39</a>

**Table 1 Image Quality Defects**

<b>Defect</b>	<b>Description</b>	<b>Corrective Action</b>
Regular (Repeating) Bands, Streaks, Spots, or Smears	A defect that repeats at an interval from 14 to 264 mm, is most noticeable in low density (20-40%) halftone areas of the copy, and runs perpendicular to process direction. Lines and bands are generally uniform in shape from one end to the other. Streaks are generally shorter than lines and are of nonuniform width along their length. They may have a more ragged or fuzzy appearance than lines.	Go to the RAP <a href="#">IQ37</a>
Spots	Generally circular in shape, these defects can be caused by an absence of toner in a desired area, or a deposit of toner in an undesired area	Go to the RAP <a href="#">IQ38</a>
Unfused prints	Image can be rubbed off with little or no pressure	Go to the RAP <a href="#">IQ36</a>
Wrinkled Image	Areas of 11x17 in./A3 prints have distinctive worm track patterns, and/or wrinkles in the paper itself	Go to the RAP <a href="#">IQ31</a>
Background on Coated Paper	Compared to Plain Paper, background is a lot more visible on Coated Paper.	Go to the RAP <a href="#">IQ40</a>
Multi Color Transfer Failure	Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).	Go to the RAP <a href="#">IQ41</a>
Lines on Coated Paper	Lines are generated on Side 1 in 2 Sided mode.	Go to the RAP <a href="#">IQ42</a>
Caterpillar Mark	This is caused by low electric charge in toner.	Go to the RAP <a href="#">IQ43</a>
White Stripes due to Trimmer Jam	When foreign substances such as dirt, dust, toner aggregate (including the case of heated one) exist in the Toner Cartridge, on the Toner Supply Path, or in the Developer Housing Assy and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of developer layer.	Go to the RAP <a href="#">IQ44</a>
Heat Haze/Mock Heat Haze	The heat haze occurs at the place where paper is peeled off from the Transfer Belt. The mock heat haze occurs when the transported paper rubs against the Holder DTS (Chute at the Transfer EXIT) as shown in the figure, which charges it electrically and causes the toner to scatter at the Lead and Tail edges of the Solid section. This might form streaks in some parts.	Go to the RAP <a href="#">IQ45</a>
Poor Reproducibility of Fine Lines	The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600dpi/1200dpi thin lines.	Go to the RAP <a href="#">IQ46</a>
Deletions (outboard, all colors)	There is a light (faded or deleted) area along the outboard side of all prints, due to buildup on the outboard side of all the first BTRs, which is best viewed on halftone test patterns (all colors).	Go to the RAP <a href="#">IQ47</a>
MWS (Micro White Spots) - Side 2	When the resistance in the Secondary Transfer section is high, such as early mornings (low humidity environment), the transfer latitude between multicolor and monocolour is narrow and the voltage setting favors multicolor. That is, the voltage is a little high for monocolour, and this causes the Transfer nip discharge phenomenon that creates the white spots.	Go to the RAP <a href="#">IQ48</a>
Moist Paper Wrinkles	When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fusing Nip in this condition, the Fusing Nip cannot feed the paper properly, resulting in wrinkles.	Go to the RAP <a href="#">IQ49</a>
White Streaks in Process Direction / Dropping Density	IOT image quality defect	Go to the RAP <a href="#">IQ50</a>
Background (IPS)	A phenomenon like background (e.g. background color or document bleed) may occur depending on the document. The default background suppression function is unable to fully remove the background.	Go to the RAP <a href="#">IQ51</a>
Light Ink Support	This is used to copy an image to be lighter than the current BW Copy settings; e.g. when using light ink.	Go to the RAP <a href="#">IQ52</a>
Highlight Density Reproduction (NVM Darken +3)	This is used to reproduce the highlights (light colors) in darker shades.	Go to the RAP <a href="#">IQ53</a>
Highlight Density Reproduction (NVM Lighten +3)	This is used to reproduce the highlights (light colors) in lighter shades.	Go to the RAP <a href="#">IQ54</a>
Bleed on Tracing Paper	When copying or scanning Tracing Paper documents, bleed or background occurs around the text.	Go to the RAP <a href="#">IQ55</a>
CVT Streaks	Dirt such as paper dust is generated at the DADF scan position. The streaks in the process direction are created when that contamination is scanned.	Go to the RAP <a href="#">IQ56</a>
Copy Mode: Gradation Jump in Text & Photo	In the B/W and Text & Photo Copy mode, gradation jump occurs on 100-line photo documents.	Go to the RAP <a href="#">IQ57</a>

**Table 1 Image Quality Defects**

<b>Defect</b>	<b>Description</b>	<b>Corrective Action</b>
Scan mode: JPEG Mosquito Noise	Color texts are blurred and mosquito noise is generated around the text due to JPEG compression.	Go to the RAP <a href="#">IQ58</a>
Moire In Text Mode (Fine), BW Scan/Fax For 133-lpi Originals	When a document with tint on the whole paper, or a background image, is scanned using Fax Text mode in High Quality (Fine), the file size or the Fax transmission time may increase drastically.	Go to the RAP <a href="#">IQ59</a>
Copy: Bleed on 2-Sided Document	Bleed occurs in the Copy BW and Text mode.	Go to the RAP <a href="#">IQ60</a>
Copy: Platen Background	When 8.5x11/A4 stark white paper is scanned into 11x17/A3 when in Copy BW Text mode and AE is ON, the platen background density is reproduced outside of the copy range.	Go to the RAP <a href="#">IQ61</a>
Image Quality Difference between Side1 and Side2 (Sharpness)	During single-pass scanning, text and halftone reproduction (sharpness) is different, comparing Side 1 and Side 2 in copy or scan mode (DADF-130 only)	Go to the RAP <a href="#">IQ62</a>
Image Quality Difference between Side 1 and Side 2 (Color Balance)	Relative difference in color density, comparing Side 1 and Side 2	Go to the RAP <a href="#">IQ63</a>
Image Quality Difference between Side 1 and Side 2 (Bkgnd. Supp.)	Relative difference in background suppression, comparing Side 1 and Side 2	Go to the RAP <a href="#">IQ64</a>
Image Quality Difference between Side 1 and Side 2 (Color Adj.)	Relative difference in color, comparing Side 1 and Side 2	Go to the RAP <a href="#">IQ65</a>
Uneven Inboard/Outboard Density within the Image Area (ADJ 9.6)	Uneven density inboard to outboard arising from various causes in the vicinity of the Photoreceptor.	Go to the RAP <a href="#">IQ66</a>

## IQ2 IIT Image Quality Entry RAP

This RAP is for troubleshooting IIT (Scanner/ADF) problems only. Before proceeding, verify that the defect is present in Copy mode only. If the defect is present in Print mode, go to the [IQ1](#) RAP.

### Initial Actions

Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth.

### Procedure

Compare the defective copies with the descriptions listed in [Table 1](#). Perform the corrective action listed for that defect.

**Table 1 IIT Image Quality Problems**

Defect	Corrective Action
<b>Background</b>	<b>Clean the Platen Belt.</b> <b>Calibrate the IIT (dC945).</b>
Blurred or Streaked Copy	Ensure that the Platen Glass is installed correctly. Check/adjust the carriage alignment ( <a href="#">ADJ 6.1</a> ).
Deletions	Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth. If the problem persists, replace the CCD/Lens Assembly ( <a href="#">PL 1.5</a> ).
Misregistration/Skew	Go to the <a href="#">IQ34</a> RAP.
Moire Patterns in the image areas of the print that have the appearance of a screen or grid overlaying the image. The pattern may be uniform or nonuniform in area or shape.	<ul style="list-style-type: none"> <li>• Switch between photo modes and, if necessary, original types, to determine which mode minimizes the defect.</li> <li>• Decrease the <b>Sharpness</b> level.</li> <li>• Reduce or enlarge the copy slightly.</li> <li>• Rotate the original on the platen by 90 degrees.</li> </ul>
Newton Rings Repetitive, irregular-shaped marks that occur when making copies of glossy photographs. These marks are most noticeable in large low-density or highlight areas.	Clean the Document Glass. Place a transparency between the document and the glass.

## IQ3 1mm Lines RAP

This RAP troubleshoots parts failure or contamination on the LPH surface.

At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width is approximately 1mm.



Figure 1 1mm Lines Defect Sample

### Initial Actions

1. Check customer print to verify 1mm lines, or print Cin50% and Cin30% halftones using print test pattern -12'(dC612), and check for a 1mm line as in [Figure 1](#).
2. Check fault history for any LPH (chain 061) fault(s); resolve any faults.
3. Replace the paper in use with fresh, dry paper of the correct specification.
4. Use the LPH Cleaner to clean the LPH surface ([PL 2.1](#)).

### Procedure

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

Perform [IQ35](#) Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, replace the LPH Assembly for the affected color ([REP 9.10](#)).

## IQ4 Image Shift in Process Direction RAP

This RAP troubleshoots for corrupt LPH EEPROM data that results in an image shift in the process direction.

### Initial Actions

Check the EEPROM data.

1. Access UI Diagnostics ([UI Diagnostic \(CSE\) Mode](#)).
2. Select the **Diagnostics** tab.
3. Select **LPH EEPROM Self Test (dC304)**.

### Procedure

The EEPROM data is OK.

Y N

Replace the LPH Assembly for the affected color ([REP 9.10](#)).

Go to [IQ39](#), Missing Colors RAP.

## IQ5 White Lines RAP

This RAP is used to eliminate white lines that appear in the process direction for all densities.

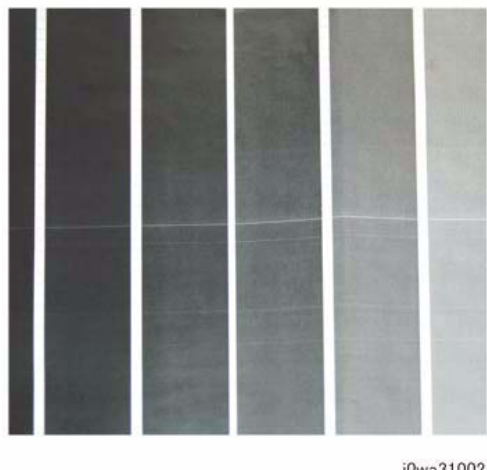


Figure 1 White Lines Defect Sample

### Initial Actions

1. Check customer print to verify white lines appear in the process direction for all densities as in [Figure 1](#).
2. Use the LED Print Head (LPH) Cleaner to clean the LPH surface ([PL 2.1](#)).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

3. Perform [IQ35](#) Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, continue with this RAP.

### Procedure

**White lines still appear after cleaning the LPH surface.**

**Y N**  
Go to [Final Actions](#).

Clean and inspect the LPH Cleaner ([PL 2.1](#)). **The LPH Cleaner is damaged or broken.**

**Y N**  
Replace the LPH Assembly ([REP 9.10](#)).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

Replace the LPH Cleaner ([PL 2.1](#)).

## IQ6 SLED Transfer Cycle Lines RAP

This RAP is used to eliminate cyclical matte lines or black lines that appear in the process direction.

The pitch changes depending on the process speed. Refer to [Table 1](#).

Table 1 Pitch

Process Speed	Pitch
175mm	9.5mm
121mm	6.1mm
79mm	4.2mm



Figure 1 Defect Sample

### Initial Actions

1. Check customer print to verify cyclical matte lines or black lines that appear in the process direction as in [Figure 1](#).
2. Use the LED Print Head (LPH) Cleaner to clean the LPH surface ([PL 2.1](#)).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

3. Perform [IQ35](#) Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, continue with this RAP.
4. Print test pattern -12 ([dC612](#)).

### Procedure

If the problem occurs in the [dC612-12](#) test pattern print, go to [IQ39](#), Missing Colors RAP.

## IQ7 IN-OUT Density Difference RAP

The densities vary from the inboard to outboard edges.

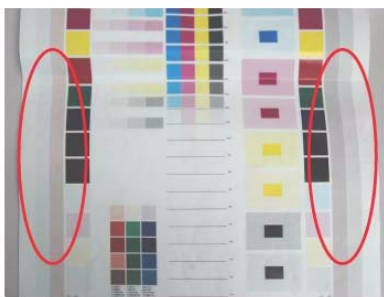


Figure 1 IN-OUT Density Difference Defect Sample

### Primary Causes

- The LPH Z direction positioning pin is not in contact with the Photoreceptor.
- Failure in the retract mechanism.
- The positioning plate cannot fit in.
- The LPH positioning pin is bent.
- The tip of the pin is contaminated.
- The LPH positioning pin is not in contact with the Drum bearing surface.
- The gap between the Photoreceptor and the Developer Housing is different at In and Out.

**NOTE:** The retract mechanism for the LPH also acts as the Retract Mechanism for the Developer; it may also cause Developer positioning failure.

### Initial Actions

1. Check customer print to verify the densities vary from the inboard to outboard edges as in [Figure 1](#).
2. Use the LPH Cleaner to clean the LPH surface ([PL 2.1](#)).
3. Check the EEPROM data ([dC304](#)).
4. Check whether the section that contacts the Drum bearing surface of the Developer Housing Assembly is abnormal.
5. Check for dirt or debris between the LPH and the Xero CRU.
6. Check for foreign substances on the tip of the LPH positioning pin (In/Out). ([REP 9.15](#))

### Procedure

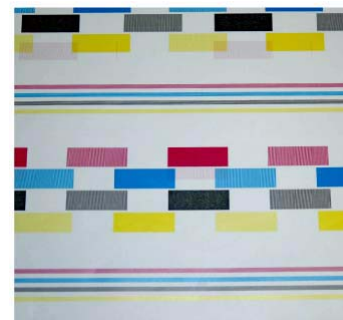
Perform the following based on the outcome of the above checks:

1. Perform LPH Exposure (Smile) Adjustment ([ADJ 9.6](#)).
2. Replace Developer Housing Assembly ([REP 9.14](#)).
3. Replace DRUM. (see [CRUs and Consumables](#))
4. Replace 1st BTR. ([REP 9.2](#))

## IQ8 Video Data/Crosstalk RAP

A different color image overlaps another.

Poor connection of Flat Cable between the MCU and the LPH



j0wa31005

Figure 1 Video Data/Crosstalk Defect Sample

### Initial Actions

1. Check customer print to verify a different color image overlaps another as in [Figure 1](#).
2. Use the LPH Cleaner to clean the LPH surface ([PL 2.1](#)).

### Procedure

Go to [IQ39](#), Missing Colors RAP.

## IQ9 Image Shift in Inboard-to Outboard Direction RAP

This RAP is used when an image defect appears as an image landing on the blank area and getting dragged in the Inboard-to Outboard direction as in [Figure 1](#).

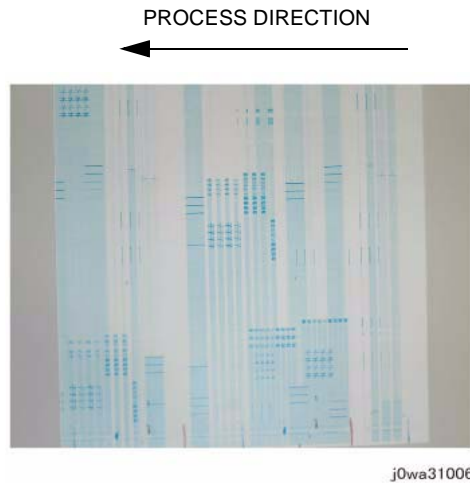


Figure 1 Image Shift in Inboard-to Outboard Direction Defect Sample

### Initial Actions

1. Print test pattern -13 ([dC612](#)).

### Procedure

If the defect is present in [dC612](#) (Test Pattern Print)-13, go to [IQ39](#), Missing Colors RAP.

## IQ10 Edge-less Image RAP

An image is printed on the margins as in [Figure 1](#).

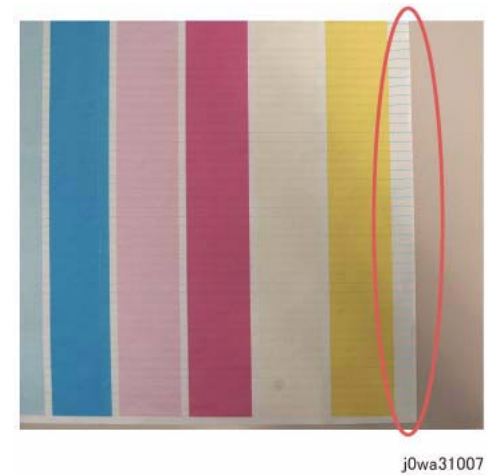


Figure 1 Edge-less Image Defect Sample

### Initial Actions

Check the IIT Side Registration ([ADJ 6.3](#)); adjust as required.

### Procedure

If the IIT Side Registration is in specification, go to [IQ39](#), Missing Colors RAP.



## IQ11 Contamination Lines RAP

There are blank areas. Their size is proportional to the size of the contaminants as in [Figure 1](#).

**NOTE:** Be careful, because this phenomenon is very similar to that of the process direction bands, streaks, and smears.

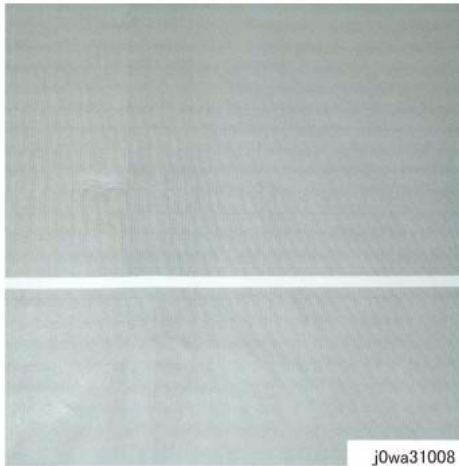


Figure 1 Contamination Lines Defect Sample

### Initial Actions

Use the LPH Cleaner to clean the LPH surface ([PL 2.1](#)).

### Procedure

Contamination Lines are still present after cleaning the LPH surface.

Y N  
Go to [Final Actions](#).

Check for process direction bands, streaks, and smears. Go to [IQ35](#). The defect is still visible.

Y N  
Go to [Final Actions](#).

Go to [IQ39](#), Missing Colors RAP.

## IQ12 Chip/Half Chip Blanks RAP

Blank areas with widths of 2.7mm (half-chip) or 5.4mm (chip).

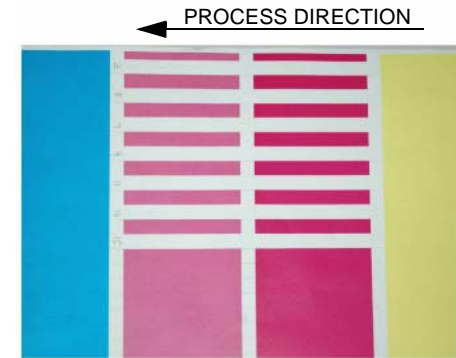


Figure 1 Chip/Half Chip Blanks Defect Sample

### Initial Actions

1. Check fault history for 061-374, 061-375, 061-376, 061-377 faults. If found, go to the appropriate RAP.
2. Check customer print or make prints using printer test patterns to compare and verify 2.7mm scale ([dC612-13](#)) or 5.4mm scale ([dC612-12](#)) of blank areas as in [Figure 1](#).

### Procedure

Go to [IQ39](#), Missing Colors RAP.

## IQ13 SLED Transfer Failure RAP

Black lines and blank areas (lines) appear repeatedly in half-chip units of 2.7mm in width.



j0wa31010

Figure 1 SLED Transfer Failure Defect Sample

### Procedure

Enter Service Rep. mode. Under the **Diagnostics** tab, select **dC304**(LPH EEPROM Selftest).  
The EEPROM data is OK.

**Y N**  
Replace the LPH Assembly for the affected color (**REP 9.10**).

Go to **IQ39**, Missing Colors RAP.

## IQ14 Tapes Not Peeled RAP

The highlight portions are too obvious. The whole paper seems to be filled with lines.



Figure 1 Tapes Not Peeled Defect Sample

### Initial Actions

1. Check customer print to compare problem to **Figure 1**.
2. Check if any protective tape remains on the LPH. Remove the LPH Assembly. (**REP 9.10**)

### Procedure

Ensure no protective tape remains on the LPH. Peel off the protective tape.

**NOTE:** Do not forget to check for and peel off any tape when replacing the LPH (spare part).

## IQ15 Charging Roll Pitch White Lines (type 1)

This image quality defect occurs in the BCR and Photoreceptor NIP sections. The defect may appear as thin white lines in the Inboard-to Outboard direction on the highlight portion at the Charging Roll Pitch as in [Figure 1](#).

This problem may occur with New Drum CRU that has been stored for a long time. It also occurs when the MC has rested in a high temperature environment for a long time. (Halftone image)



Figure 1 Charging Roll Pitch White Lines (type 1) Defect Sample

### Procedure

Print test pattern -11 ([dC612](#)). Lines with 38mm pitch appear in the Inboard-to-Outboard direction.

- |   |  |
|---|--|
| Y | N  |
|   | Have the customer re-evaluate affected jobs and re-send. |
1. Make approximately 10 to 30 printouts.
  2. Verify that no lines appear.

## IQ16 Charging Roll Pitch White Lines (type 2)

If contamination from the Cleaner roll gets stuck to the BCR, the resistance on the BCR gets reduced and may cause the appearance of white stripes in the FS direction. This may occur when the machine has been resting for a long time or in the early mornings as in [Figure 1](#).

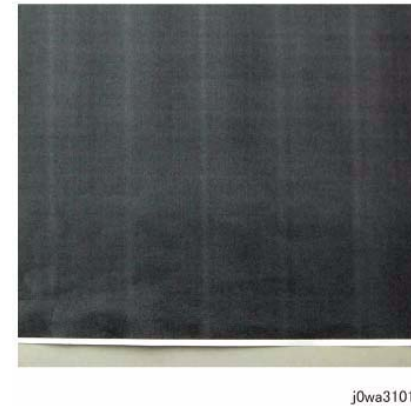


Figure 1 Charging Roll Pitch White Lines (type 2) Defect Sample

### Procedure

**NOTE:** If the machine has been resting (Wait state) or the machine is being utilized in the early morning, this image quality defect will occur because the BCR and Photoreceptor NIP sections are not properly warmed up to operating temperature. Printing 10 to 30 prints will be sufficient to allow the BCR and Photoreceptor to warm up to operating temperature.

1. Check customer print or Print test pattern -9 ([dC612](#)) Make approximately. 10 to 30 print-outs.
2. Verify that no lines appear. If the problem persists after you make approximately 10 to 30 printouts, this may be a case of IQ-15 White Stripes. Perform the solution in IQ-15. > This disappears over time
3. Check [dC120](#) and/or [dC122](#) for Chain 094-xxx Faults.
4. Perform 2nd Transfer Voltage Offset Adjustment (see [dC909](#)).
5. Replace:
  - HVPS (Dev/BCR) 7830/35 ([REP 1.9](#)).
  - HVPS (BCR) 7845/55 ([REP 1.9](#))
6. Replace the 2nd BTR ([CRUs and Consumables](#)).
7. Replace the BTR/Detack HVPS ([REP 1.1](#)) ([PL 6.2](#)).

## IQ17 Photoreceptor Pitch Color Lines

Vibrations during the Drum CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the Inboard-to Outboard direction on the highlight portion at the Photoreceptor Pitch. This problem may occur right after the replacement of Drum CRU (occurs at Halftone image quality).



j0wa31015

Figure 1 Photoreceptor Pitch Color Lines Defect Sample

### Initial Actions

Check customer print or Print test pattern -9 (dC612), check that lines with 94mm pitch appear in the Inboard-to Outboard direction as in Figure 1.

### Procedure

Make approximately 10 to 30 printouts:

- If the fault lies with the Y, M, or C Drum, print full-color images.
- If it is with the K Drum, print either full-color or B/W images.

## IQ18 Background on Gloss RAP

Use this RAP when the background level on Gloss paper is worse than the background level of Plain paper.

### Initial Actions

Verify that the background level is worse than that on Plain Paper.

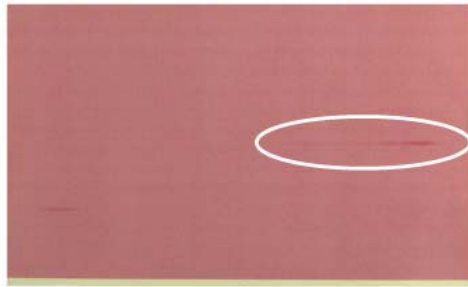
**NOTE:** Increasing the value of the NVM from the default will sacrifice the reproducibility of fine lines and highlight sections.

### Procedure

1. Changing these NVM values should be performed only for the color exhibiting the problem.
  - 753-054: Reference CF [Y]
  - 753-055: Reference CF [M]
  - 753-056: Reference CF [C]
  - 753-057: Reference CF [K]
2. Change the NVM for the target color from **110** (default value) to **120** if high background was observed when printing onto coated paper.
3. After changing NVM, power Off/On the machine. Enter the Diagnostics mode and execute ProCon On Print (ADJ 9.7).
4. Check the image quality on the test print (coated paper).
5. If the image quality is good, then the procedure is completed.
6. If the image quality is still not good, then change the NVM value to **130**. Power Off/On the machine. Enter the Diagnostics mode and execute ProCon On Print (ADJ 9.3).
7. Check the image quality on the test print (coated paper).
8. If the image quality is good, then the procedure is completed.
9. If high background becomes worse after changing the NVM, return the NVM back to its original (Default) value.

## IQ19 Toner Empty Detection Color Lines RAP

At Pre Near or Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.



j0wa31016

Figure 1 Toner Empty Detection Color Lines Defect Sample

### Initial Actions

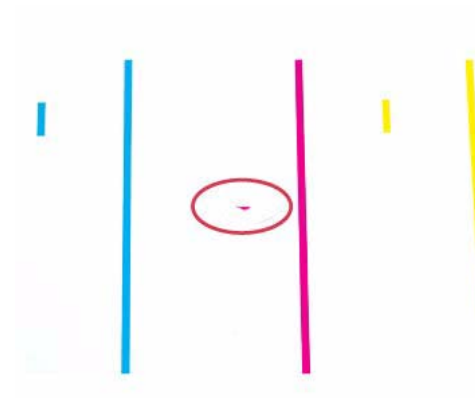
Check customer print to verify color stripe deterioration as in [Figure 1](#).

### Procedure

Use a new Cartridge.

## IQ20 Toner Droplet Contamination RAP

This RAP troubleshoots for contamination consisting of random spatters of toner in sizes of a few millimeters.



j0wa31017

Figure 1 Toner Droplet Contamination Defect Sample

### Initial Actions

Check customer print to verify contamination consisting of random spatters of toner in sizes of a few millimeters as in [Figure 1](#).

### Procedure

Clean the upper cover and trimmer cover of the Developer Housing Assembly ([REP 9.14](#)).

## IQ21 Smear on Heavyweight RAP

When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to decrease. This change in speed changes the difference in relative speed between the Photoreceptor and the Transfer Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).

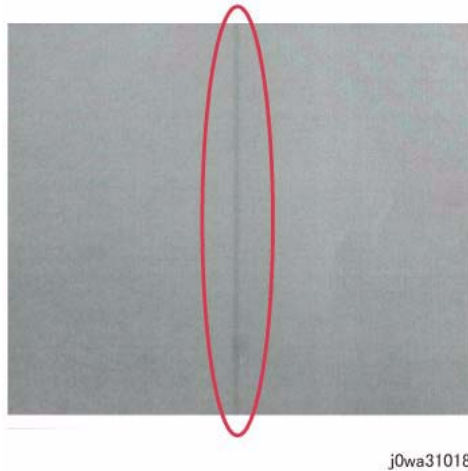


Figure 1 Smear on Heavyweight Defect Sample

### Initial Actions

Check customer print to verify smear or print test pattern -10 (dC612), and check for a 1mm-line (smear) as in Figure 1, 130 mm from the lead edge of the paper.

### Procedure

**NOTE:** Changing the following NVM Read/Write (dC131) locations (SmearSwitch) from 1 to 0 causes the IOT to operate in the FC mode, regardless of the color mode setting (Color Priority, B/W Priority, ACS) in the Controller, when performing monochrome printing for Cardstock and Glossy Cardstock in 35-sheet models and Cardstock, Glossy Cardstock, and Transparencies in 25-sheet models.

Change the following values in dC131 NVM Read/Write, only for the color exhibiting the problem:

- Change 740-134: SmearSwitch\_NORMAL\_D from 0 to 1.
- Change 740-135: SmearSwitch\_NORMAL\_G from 0 to 1.
- Change 740-136: SmearSwitch\_THICK1\_S from 0 to 1.
- Change 740-137: SmearSwitch\_THICK2\_S from 0 to 1.
- Change 740-140: ProductivityChangeSW\_forSmear from 0 to 1. (Heavyweight Smear Countermeasure) \* This is valid only for 25-sheet and 35-sheet models.

## IQ22 Rough Black RAP

On paper that is not flat, has a rough surface, or has poor hue, the toner is not transferred onto paper well.

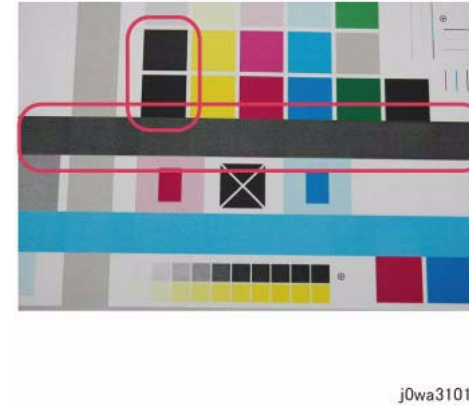


Figure 1 Rough Black Defect Sample

### Initial Actions

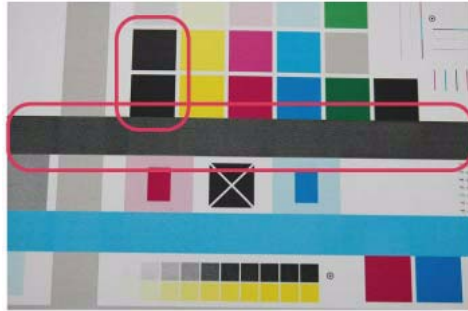
Check customer print to verify that the same problem does not occur for the same job printed on paper that is flatter, smoother, or has a better hue as in Figure 1.

### Procedure

Go to dC909, Calibrate for Paper, to adjust 2nd Transfer Voltage for desired result.

## IQ23 Moist Paper Transfer Failure RAP

The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielectric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the difference in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.



j0wa31019

Figure 1 Defect Sample

### Initial Actions

Print using freshly unpacked paper of the same type as the defective paper, then compare the roughness and blank areas for K color and single color as in [Figure 1](#).

### Procedure

Be sure to use freshly unpacked paper.

## IQ24 Toner Contamination at Lead/Trail Edge RAP

Toner contamination suddenly appears on the 2nd BTR or Belt (background) while in color mode.

Lead Edge: Paper lead edge contacts the Belt when it is transported from Registration to Transfer.

Trail Edge: The trail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt



j0wa31020

Figure 1 Toner Contamination at Lead/Trail Edge Defect Sample

### Initial Actions

Run 1-Sided print to check on which side (transfer side or side 2) the contamination exists as in [Figure 1](#).

### Procedure

**NOTE:** Since increasing the charge voltage for background area causes the repeatability of fine lines to deteriorate, take the balance into consideration.

1. Access UI Diagnostics. ([UI Diagnostic \(CSE\) Mode](#)).
2. Change the value of **dC131** NVM Read/Write location [753-054 to 753-057] from **110** (default value) to **120** for the target color.
  - 753-054: Reference CF [Y]
  - 753-055: Reference CF [M]
  - 753-056: Reference CF [C]
  - 753-057: Reference CF [K]

3. After changing NVM, power off/on the machine.
4. Execute ProCon On Print (ADJ 9.3) on coated paper. If the image quality is good, go to [Final Actions](#).
5. If the image quality is still not good, change the value of NVM locations 753-054 to 753-057 from **120** to **130** for the target color.

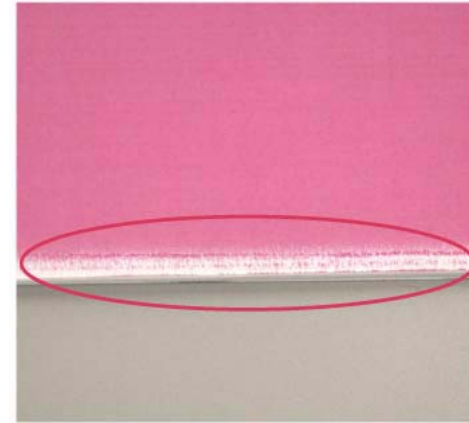
**NOTE:** By changing NVM, fine line reproduction and highlight reproduction may get worse. (worse when the value is changed to **130**)

- 753-054: Reference CF [Y]
  - 753-055: Reference CF [M]
  - 753-056: Reference CF [C]
  - 753-057: Reference CF [K]
6. If high background becomes worse after changing NVM, put NVM back to original.

## IQ25 Trail Edge Transfer Failure RAP

This RAP troubleshoots for an image defect that looks like a rough image or blank area (in Lead Edge-to Trail Edge direction) that occurs for images within 10mm (including margins) from the paper trail edge.

The paper trail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Transfer Belt.



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**Figure 1 Trail Edge Transfer Failure Defect Sample**

### Initial Actions

Check customer print to verify an image defect that looks like a rough image or blank area (in Lead Edge-to Trail Edge direction) that occurs for images within 10mm (including margins) from the paper trail edge as in [Figure 1](#).

### Procedure

There is no corrective action.



## IQ26 Color Lines RAP

If customer uses paper which causes a lot of paper debris and also run long run-length jobs, paper debris will adhere to the IBT cleaner, which may result in poor cleaning of residual toner on the Transfer Belt. Transfer Belt reverse rotation is needed to remove such residual toner from the Transfer Belt.

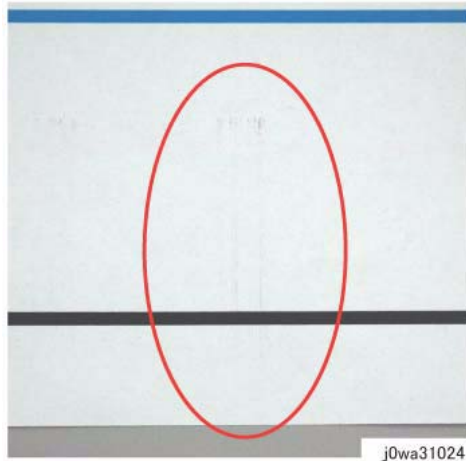


Figure 1 Color Lines Defect Sample

### Primary Causes

Presence of paper dust in between the Transfer Belt and the Transfer Belt Cleaner Assembly blade causes poor cleaning.

### Initial Actions

1. Check customer print to verify presence of paper dust in between the Intermediate Belt Transfer and the Transfer Belt Cleaner Assembly blade as in [Figure 1](#).
2. Remove the Transfer Belt Cleaner Assembly to check if foreign substances exist at the tip of the cleaner blade. ([REP 9.1](#))  
If check is true, clean the tip of the Transfer Belt Cleaner Assembly blade.
3. If the side that is opposite to the Intermediate Belt Transfer has toner scrapes or if the color lines disappear after the tip of the blade is cleaned, follow the procedure below.

### Procedure

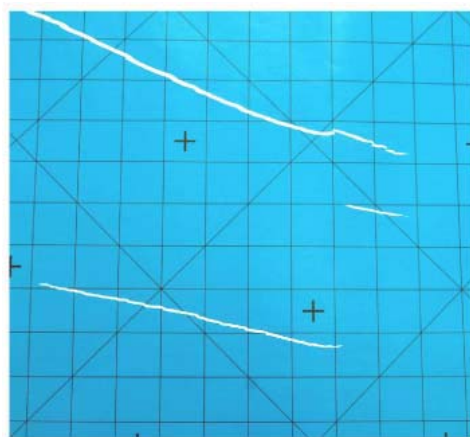
**NOTE:** By default, NVM 746-020 is 0 Transfer Belt reverse rotation is only performed at end of job (e.g. if a job is for 1000 pages, Transfer Belt reverse rotation is performed after printing 1000 pages).

When NVM 746-020 is 1, Transfer Belt reverse rotation is performed after a number of pages, determined by the value in location 746-125 (default is 7000 = 70 pages). NVM location 746-021 controls the length of time that the transfer belt is reversed. The machine always cycles down after printing 70 pages and performs Transfer Belt reverse rotation to remove residual toner on the Transfer Belt.

1. Change the [dC131](#) NVM Read/Write location [746-020] to 1 to change the Transfer Belt reverse rotation:
  - 0; Reverse at Job End
  - 1: Reverse during Job
  - 2: Do not Reverse
2. Change the [dC131](#) NVM Read/Write location [746-021] to change the Transfer Belt reverse rotation; increasing the value increases reverse rotation time.
3. If Transfer Belt reverse rotation needs to be performed more often, then the value in NVM 746-125 should be a smaller value.

## IQ27 Transfer Blank Areas (Partially Moist Paper) RAP

Ripples in partially moist paper become wrinkled in the Transfer section, causing blank areas to appear.



j0wa31025

Figure 1 Transfer Blank Areas (Partially Moist Paper) Defect Sample

### Initial Actions

Check customer print to verify defect in paper that has uneven moisture content as in Figure 1.

### Procedure

Replace the paper in use with fresh, dry paper of the correct specification. Ensure that the loaded media matches the UI or print driver settings.

Advise customer to try LEF paper feed or use horizontal-grained paper. In damp conditions, optional tray heater may be required.

## IQ28 Nip Marks RAP

When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch as in Figure 1.



j0wa31026

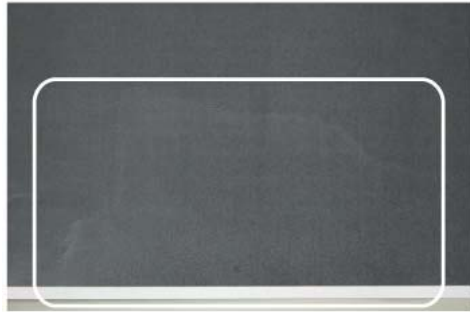
Figure 1 Nip Marks Defect Sample

### Procedure

No action required. This occurs when a transparency is the first thing printed after starting up a machine that has been left idle for a few days without heating up.

## IQ29 Moisture RAP

Distorted image may appear at one side or both sides of the paper trail edge when printing halftone fill as in [Figure 1](#).



j0wa31027

Figure 1 Moisture Defect Sample

### Procedure

1. No special actions required.
2. Try not to print in the early mornings.
3. Ask the customer to use fresh paper whenever possible.
4. In damp conditions, optional tray heater may be required.

## IQ30 Low Image Density RAP

This RAP troubleshoots the causes of output images showing image density lower than specification.

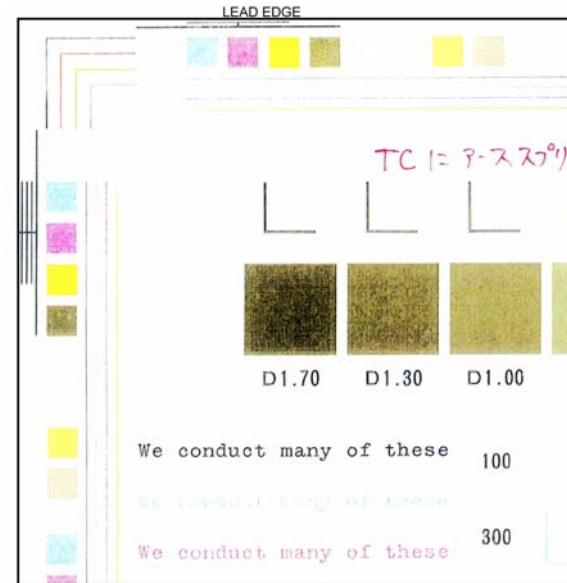


Figure 1 Low Density Defect Sample

### Initial Actions

1. Check customer print to verify images showing image density lower than specification as in [Figure 1](#).
2. Use the LPH Cleaner to clean the LPH ([PL 2.1](#)).
3. Replace the paper in use with fresh, dry paper of the correct specification.
4. Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-of-life. Replace if necessary.
5. Perform Max Setup ([ADJ 9.16](#)). If this does not resolve the problem, continue with this RAP.

### Procedure

Print Test pattern -7 ([dC612](#)). **The defect involves a single color.**

Y N

Print Test pattern -7 ([dC612](#)). Open the Front Door in the middle of the print job (approximately 7 seconds after selecting **Start**). Extend the IBT. **There is a good toner image on the Transfer Belt.**

Y N

Clean the LPH and check for misalignment.

A B

A B

Check the 2nd BTR for damage or incorrect installation. Check the Backup Roll bias. If the problem continues, replace 2nd BTR Assembly. If this does not resolve the problem, replace the Transfer Belt (PL 6.3).

Swap the affected Drum Cartridge with an adjacent unit. Print Test Pattern -7 (dC612). **The defect moved to the new color.**

Y N

Replace the Developer for the affected color (PL 5.2). If this does not resolve the problem, replace the ATC Sensor for the affected color (PL 5.2).

Replace the Drum Cartridge (see CRUs and Consumables in Section 6).

If the problem continues, replace the LPH Assembly for the affected color CMYK (REP 9.10).

## IQ31 Wrinkled Image RAP

Areas of 11x17 in./A3 prints have distinctive worm track patterns in the image, and/or wrinkles in the paper itself.

**NOTE:** The following factors will increase the likelihood of this problem:

- Lighter weight papers.
- Larger papers.
- Short-grain 11x17 in / A3 papers.
- Old (not freshly opened) paper.
- 2 sided printing
- Fuser with 1100 or more hours of operating life.

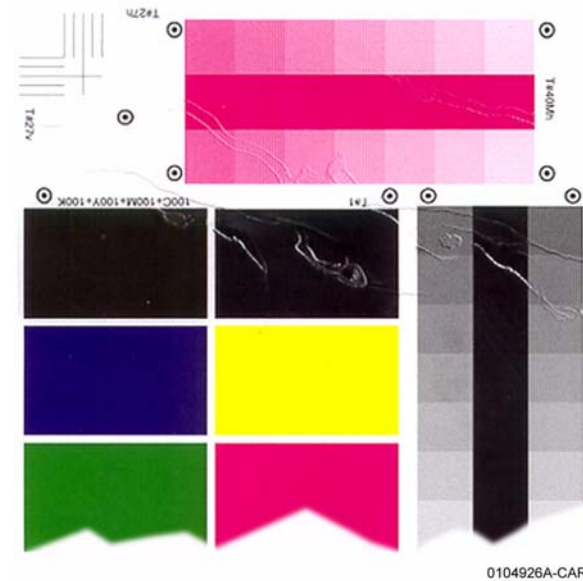


Figure 1 Wrinkled Image Defect Sample

### Initial Actions

1. Check customer print to verify distinctive worm track patterns in the images in Figure 1.
2. Make the following modifications to the copy/print jobs if possible:
  - Ensure that the paper is dry and fresh.
  - Use heavier weight paper
  - Use long-grain paper.

### Procedure

If the problem persists after performing the Initial Actions, replace the Fuser (PL 7.1).

# IQ32 IOT Background RAP

Defect may be due to incorrect Electrostatics, high TC, faulty ADC Sensor.

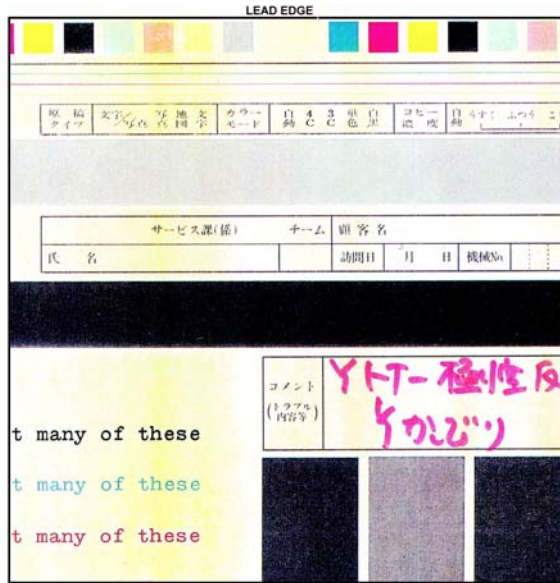


Figure 1 Background Defect Sample

## Initial Actions

1. Check customer print to verify image defect as in [Figure 1](#).

**NOTE:** Some background is unavoidable on certain media, such as cardstock and transparencies. Ensure that the customer selects the correct settings on the UI and print driver.

2. Perform Max Setup ([ADJ 9.16](#)). If this does not resolve the problem, continue with this RAP.

## Procedure

### WARNING

Use extreme care when working near electrically energized components and high voltage cables that are exposed during troubleshooting or repair. Contact with electrical components or high voltage cables represents a shock potential that could result in serious personal injury.

**DANGER:** Faire très attention en travaillant près des éléments sous tension et des câbles HT qui sont exposés pendant le dépannage. Tout contact avec les éléments électriques ou les câbles haute tension représente un risque de choc et de graves blessures.

**AVVERTENZA:** Fare estrema attenzione quando si lavora vicino a componenti sotto tensione e cavi elettrici esposti durante l'intervento. Il contatto con componenti sotto tensione o cavi elettrici comportano un serio pericolo di scossa elettrica e gravi ferite.

**VORSICHT:** Während dem Reparieren oder der Fehlerbehebung muss man beim Umgang mit elektronisch aufgeladenen Bauteilen und Hochspannungsgleitungen äußerste Vorsicht walten. Beim Umgang mit elektrischen Bauteilen und Hochspannungsgleitungen erhöht sich das Unfallrisiko. Äußerste Vorsicht ist geboten.

**AVISO:** Use extrema precaución al trabajar cerca de componentes cargados eléctricamente y cables de alto voltaje que estén expuestos mientras soluciona problemas o realiza reparaciones. Todo contacto con componentes eléctricos o cables de alto voltaje representa un peligro que puede ocasionar daños personales graves.

The problem occurs only when scanning or copying with the DADF.

Y	N	
		<b>The problem is Single Color Background.</b>
Y	N	Examine the face of the ADC Sensor. <b>The ADC Sensor is clean.</b>
	N	Go to the <a href="#">392-651</a> ADC Sensor Fail RAP to troubleshoot the ADC Sensor Solenoid.
		Examine the Transfer Belt for excessive dirt, damage, or uncleaned toner. <b>The Belt is clean.</b>
Y	N	Check the Transfer Belt Cleaner for damage or wear. Clean or replace as required.
		Check the Developer bias circuit for -600VDC (nominal Default). <b>Developer Bias is present.</b>
Y	N	Go to the following BSDs and check the wiring from the MD Main PWB to the Deve HVPS:
		<ul style="list-style-type: none"> <li>• <a href="#">BSD 9.15</a> Development (C)</li> <li>• <a href="#">BSD 9.16</a> Development (K)</li> <li>• <a href="#">BSD 9.17</a> Toner Dispense Control (Y,M)</li> <li>• <a href="#">BSD 9.18</a> Toner Dispense Control (C,K)</li> <li>• <a href="#">BSD 9.19</a> Toner Cartridge Cooling (7845/55)</li> <li>• <a href="#">BSD 9.20</a> IBT Belt Drive Control</li> <li>• <a href="#">BSD 9.21</a> First Transfer</li> </ul>
A	B	C

A B C

- [BSD 9.22 First BTR Contact/Retract Control](#)

If the wiring is OK, replace the Deve HVPS power supply ([PL 5.3](#)).  
If the problem still exists, replace the MD Main PWB ([PL 18.2B](#)).

If Developer Bias is OK, replace the Transfer Belt ([PL 6.3](#)). If this does not solve the problem, replace the 2nd BTR ([PL 14.2](#)).

Check the following:

- Check the end-of-life counter for the Toner Cartridge and Drum Cartridge for the affected color. Replace if at or near end-of-life (see [CRUs and Consumables](#) in Section 6).
- If the problem continues, examine the Developer Housing for the affected color. Check for toner bridging, uneven brush, or loose High Voltage terminals. Clean, repair, or replace as required ([PL 5.2](#)).

White reference settings for CVT mode may be incorrect. Enter Diagnostics [dC131](#) and check that the following NVM locations are set as indicated:

715-097 = 104  
715-098 = 105  
715-099 = 106

If NVM settings are correct, upgrade to the latest software. If problem still exists, the NVM may be corrupt; initialize the NVM:

1. Enter Diagnostics [dC301](#).
2. Select [Copier] (left), [Scanner] (center), [All] (right).
3. Select [Initialize] and exit Diagnostics.
4. Switch the power off, then on.

## IQ33 Color-to-Color Misregistration RAP

Failure of the IBT walking from rear to front or front to rear.

Defect may be due to mechanical problem in the IBT Assembly.

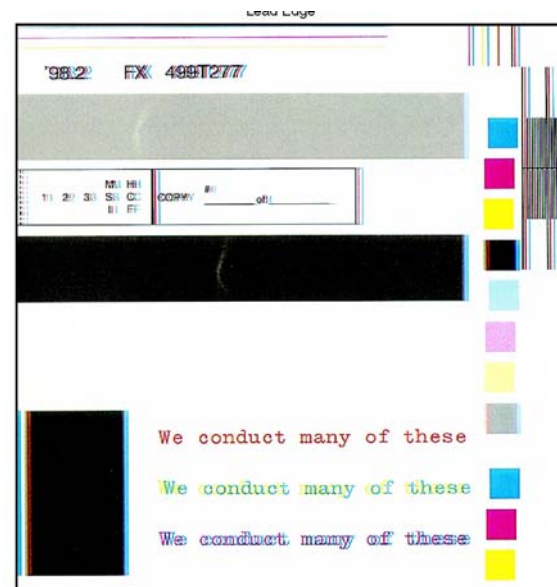


Figure 1 Color Misregistration Defect Sample

### Initial Actions

1. Check customer print to verify color to color misregistration as in [Figure 1](#).
2. Adjust the color registration ([ADJ 9.6](#)). If the problem remains, continue with this procedure.

### Procedure

If the problem involves a single color, go to Registration Control Setup Cycle ([ADJ 9.10](#)).

## IQ34 Skew/Misregistration RAP

This RAP is used when Skew, System Registration, or Magnification are out of specification. For Color-to-Color-Misregistration, go to the RAP [IQ33](#) RAP.

### Initial Actions

Load some new, dry 24 lb. 11X17/A3 Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) into each paper tray (use 8.5X11/A4 in Tray 1). Make 3 full color copies from each paper tray. Mark the appropriate paper tray on these copies.

### Procedure

**The problem is still present when using the proper paper.**

**Y N**  
Explain to the customer that new, dry, 24 lb. Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) paper is the specified paper to use.

**The problem occurs only in the printer mode.**

**Y N**  
**The defect occurs when the document is manually registered on the platen glass.**  
**Y N**  
Ensure that the Document Transport Belt is clean. Check the Document Handler Adjustments. If the problem continues, check the DADF drive rolls and pinch rolls for wear or glossing.

**The problem is Skew.**

**Y N**  
**The problem is Misregistration.**

**Y N**  
Adjust the IOT Lead Edge/Side Edge Registration ([ADJ 9.1](#)).

Enter [dC612](#) (Test Pattern Print), select Pattern 3. **Misregistration is present on the copy**

**Y N**  
Adjust the IOT Lead Edge/Side Edge Registration ([ADJ 9.1](#)), then the IIT Lead Edge and Side Edge Registration ([ADJ 6.2](#) and [ADJ 6.3](#)).

**<?FM: DEBUG [T:\fm\_books\spyglass\3iq\_nwd.fm] ELEMEND 0>The defect occurred on copies from all five paper trays.**

**Y N**  
Check the IOT Lead Edge/Side Edge Registration ([ADJ 9.1](#)) for that tray. Check the feeder for the affected tray for wear, slipping, damage, or contamination.  

- Tray 1 Feeder ([PL 9.3](#))
- Tray 2 Feeder ([PL 10.3](#))
- Tray 3 Feeder ([\[PL 10.5\]](#))
- Tray 4 Feeder ([\[PL 10.7\]](#))

**Registration varies from copy to copy.**

**Y N**  
Go to [ADJ 9.1](#), Lead/Side Edge Adjustment.

**A B C**  
Check the components in the Registration Transport Assembly ([PL 15.1](#)) for wear, slipping, damage, or contamination. Clean/replace as required

**The defect occurred on copies from all five paper trays.**

**Y N**  
Check the components in the Registration Transport Assembly ([PL 15.1](#)) for wear, slipping, damage, or contamination. Clean/replace as required

Check the IOT Lead Edge/Side Edge Registration ([ADJ 9.1](#)) for that tray.

Check the feeder for the affected tray for wear, slipping, damage, or contamination.

- Tray 1 Feeder ([PL 9.3](#))
- Tray 2 Feeder ([PL 10.3](#))
- Tray 3 Feeder ([\[PL 10.5\]](#))
- Tray 4 Feeder ([\[PL 10.7\]](#))
- Tray 5 Feed Assembly ([PL 13.3](#))

**The problem occurs on all jobs.**

**Y N**  
Have the customer re-evaluate affected jobs and re-send.

Refer to the DFE Service Guide.

**A B C**



## IQ35 Process Direction Bands, Streaks, and Smears RAP

Contamination of LPH, damage to or contact with Transfer Belt or Drum Cartridge.

Clog in Developer Housing, malfunction of Belt Cleaner, contaminated LPH.



Figure 1 Streak Deletion Defect Sample

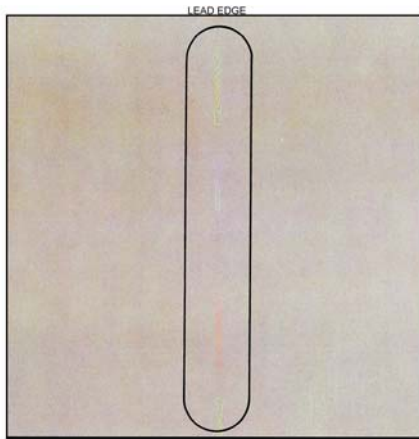


Figure 2 Streak Defect Sample

### Initial Actions

- Check customer print to verify Process Direction Bands, Streaks, and Smears as in the following:

– [Figure 1](#)

– [Figure 2](#)

- Clean the Transfer Belt Cleaner. Check for wear or damage
- Clean the Fuser. Check the metal stripper baffle in the Fuser for contamination.
- Check the 2nd BTR and the Detack Sawtooth (DTS) for Toner contamination.
- Use the LPH Cleaner to clean the LPH.

### Procedure

**NOTE:** The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every third sheet, or may only occur every 14 sheets.

**The defect occurs in approximately the same position on multiple prints.**

Y N

If the defect occurs intermittently, examine the Developer Housings for evidence of toner clumping. If clumping is found, replace the Developer ([REP 9.15](#)).

**The defect is full-width (LE - TE) [Figure 1](#).**

Y N

Remove the Fuser Assembly. Examine the Heat Roll for damage or contamination. Clean or replace as required ([PL 7.1](#)).

Check the Transfer Belt Cleaner ([PL 6.1](#)). Ensure that the blade and the Mylar backing are free from damage. Check that the auger turns freely. Clean, repair, or replace as required.

Check the Developer Housing ([PL 5.2](#)). Repair or replace as required ([REP 9.14](#)).

If the problem is related to a single color, replace the Drum Cartridge (see [CRUs and Consumables](#) in Section 6).

Enter [dC612](#) (Test Pattern Print). Select Test Pattern 9. Print a 40% coverage pattern for each single color. **The defect is present for all colors.**

Y N

- Check Drum Cartridge for affected color. Check for damage or contamination to the BCR.
- Replace the Developer ([REP 9.15](#)) for the affected color. Check the housing for damage or toner clumping.

Remove the Transfer Belt Cleaner ([PL 6.1](#)). Inspect the cleaning blade and Mylar seal for damage. Clean or replace as required.

If the Transfer Belt Cleaner is OK, check the Transfer Belt ([PL 6.3](#)) for damage or contamination. Ensure that there is no debris or loose wiring, etc. in contact with the belt. Clean or replace as required.



## IQ36 Unfused Copy/Toner Offset RAP

### Initial Actions

- Replace the paper in use with fresh, dry paper of the correct specification.
- Check the post-Fuser transport areas for dirt.
- Ensure that the media being used matches the settings on the UI screen or print driver. Using the next heavier setting may resolve the problem.
- If the Key Operator/Administrator has configured certain trays for a specific type of media, ensure that the specified media is actually loaded in those trays.

### Procedure

Check the following:

- Check the Sensor Assembly (PL 6.2) for contamination or incorrect mounting. Clean, repair, or replace as required.
- Check the Fuser (PL 7.1) for damage, toner offsetting, paper wrap, or incorrect installation. Clean or replace as required.

After resolving the problem, make 10 blank copies (letter size, Black mode) to clean residual toner from the Fuser Heat Roll and Fuser Belt. If the problem persists, or if Lead Edge contamination is present, remove the Fuser Exit Chute (PL 7.1) and clean any toner or paper residue from the Exit Chute and the metal stripper baffle.

## IQ37 Repeating Bands, Streaks, Spots, and Smears RAP

Damage, density variation, or deletions caused by rotating component. Spacing equal to effective circumference of part.

Faulty Photoreceptor/Developer Housing gear or bearing problem.



Figure 1 Repeating Defects Sample Image



Figure 2 High Frequency Bands Defect Sample

## Initial Actions

Check customer print to verify Repeating Bands, Streaks, Spots, and Smears as in the following:

- [Figure 1](#)
- [Figure 2](#)

## Procedure

Measure the distance between the repeating defects. Locate the distance on the table below. Perform the indicated repair actions.

Table 1 Repeating Defects

Repetition spacing	Component(s)	Repair Actions
<4 MM.	High Frequency Banding	
95 MM.	Photoreceptor	Single Color - Replace the Drum Cartridge (see <a href="#">CRUs and Consumables</a> in Section 6).
38 MM.	BCR	
56 MM.	Developer Mag Roll	Check Developer roll bias for floating or shorting out. Replace Developer Housing ( <a href="#">PL 5.2</a> ) if required.
84 MM.	Fuser Heat Roll	Ensure correct paper type is set for the actual paper in the paper tray. Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contamination. Clean or replace as required ( <a href="#">PL 7.1</a> ).
94 MM.	Fuser Pressure Belt	All Colors - Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contamination. Clean or replace as required ( <a href="#">PL 7.1</a> ).
25mm	BTR 1 Roll	
55 MM.	BTR 2 Backup Roll BTR 2 Roll	Check the 2nd BTR Assembly for damage or contamination. Clean, repair or replace as required. Replace the Transfer Belt ( <a href="#">PL 6.3</a> ).
81 MM.	IBT Drive Roller	

## IQ38 Spots RAP

### Initial Actions

Ensure that the paper in use is fresh, dry, and within specification for weight and quality.

Check print driver and copier control panel settings to ensure the media is being run in the proper mode.

### Procedure

The defect occurs in Copy mode only.

Y N

The spots occur at a fixed interval on each print.

Y N

The spots occur in the same location on every letter size print.

Y N

**NOTE:** The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every third sheet, or may only occur every 14 sheets.

The defect occurs in approximately the same position on multiple prints.

Y N

The problem is Fuser offset and/or lead edge smears or spots.

Y N

#### CAUTION

*Do not use a vacuum cleaner or any solvents in the following step. Damage to the Transfer Belt Cleaner will result.*

Remove the Transfer Belt Cleaner ([REP 9.1](#)). Carefully clean the cleaning blade and the Mylar shield with a soft brush or a lint free cloth. Brush away any accumulation of toner on the foam seal and the outside surfaces. Wipe the surface of the Transfer Belt with a lint free cloth.

If the problem continues, replace the Transfer Belt Cleaner ([PL 6.1](#)).

Go to the RAP [IQ28 RAP](#).

Check the Transfer Belt ([PL 6.3](#)) for dirt or damage. Clean or replace as required.

Check the Drum Cartridge for dirt or damage. Clean or replace as required (see [CRUs and Consumables](#) in Section 6).

Go to the [IQ37 RAP](#).

Ensure that the original is free from the defect.  
Clean the Platen Glass and Lens.

## IQ39 Missing Colors RAP

One or more of the primary (YMCK) colors is missing from the image.

### Initial Actions

Use the LPH Cleaner to clean the LPH.

### Procedure

Check wire harness between the LVPS and MD Main PWB for damage. Repair or replace as required:

- LPH Cable Assembly (7830/35) (REP 9.11)
- LPH Cable Assembly (7845/55) (REP 9.12)

Check for damaged wiring from MD Main PWB to the LPH for the affected color YMCK:

- BSD 6.6 LPH Control (Y)
- BSD 6.7 LPH Control (M)
- BSD 6.8 LPH Control (C)
- BSD 6.9 LPH Control (K)

If the wiring is OK, replace the LPH Assembly for the affected color YMCK (REP 9.10).

If the problem still exists, replace the MD Main PWB (REP 1.6).

## IQ40 Background on Coated Paper

Compared to Plain Paper, background is a lot more visible on Coated Paper.

Paper types with better surface flatness (better transfer ability) and better toner absorption ability have more stress.

### Initial Actions

Verify that the background level is worse than that on Plain Paper.

### Procedure

1. Increase the background voltage by 10 to 20V to reduce background on the Drum. However, this will sacrifice the reproducibility of fine lines and highlight sections.

Adjust the background voltage. The default voltage is 600V. The Adjustment NVM Read/Write (dC131) locations are:

- NVM 753-006 (Y) Dev Bias DC Output Value for Y (0~700:0~700V)
- NVM 753-007 (M) Dev Bias DC Output Value for M (0~700:0~700V)
- NVM 753-008 (C) Dev Bias DC Output Value for C (0~700:0~700V)
- NVM 753-009 (K) Dev Bias DC Output Value for K (0~700:0~700V)

2. Change the NVM locations listed below to increase the cleaning field voltage by approx. 10 to 20V to reduce the background on the Drum. Note that this will sacrifice the reproducibility of fine lines and highlight areas.

Color (YMC):

Add +10 to +20 to each of the following values:

- NVM location 753-237 CF Upper Limit Ref. Value - default = 110
- NVM location 753-239 CF Lower Limit Ref. Value - default = 100
- NVM location 753-241 CF Upper Limit: Lower Limit - default = 110
- NVM location 753-243 CF Upper Limit: Upper Limit - default = 110
- NVM location 753-245 CF Lower Limit: Lower Limit - default = 100
- NVM location 753-247 CF Lower Limit: Upper Limit - default = 100

Black and White (K) or Color (K):

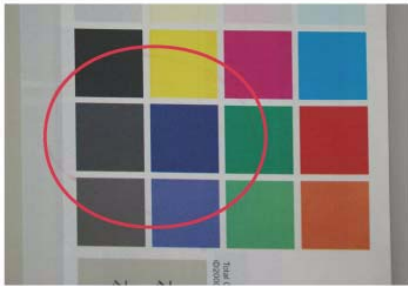
Add +10 to +20 to each of the following values:

- NVM location 753-238 CF Upper Limit Ref. Value - default = 110
- NVM location 753-240 CF Lower Limit Ref. Value - default = 100
- NVM location 753-242 CF Upper Limit: Lower Limit - default = 110
- NVM location 753-244 CF Upper Limit: Upper Limit - default = 110
- NVM location 753-246 CF Lower Limit: Lower Limit - default = 100
- NVM location 753-248 CF Lower Limit: Upper Limit - default = 100

## IQ41 Multi Color Transfer Failure

Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).

Due to the characteristics of the EA-ECO Toner, high R<sub>sys</sub> (in the early morning low temperature and low humidity environment) requires a transfer voltage for the areas where multiple transfers and MWS cannot be used at the same time. Because the machine is adjusted for Multiple Transfer Priority by default, MWS may be visible from Side 1.



j0wa31021

Figure 1 Multi Color Transfer Failure Defect Sample

### Initial Actions

1. Verify that the hue on Side 2 becomes lighter when printing a high density image in a low temperature and low humidity environment as in [Figure 1](#).
2. Change the Secondary Transfer voltage setting up or down, then compare the hue to the paper with defective image.

### Procedure

1. Increase the Secondary Transfer voltage by decreasing the single color density or by changing the permissible range for MWS.
2. Apply the Secondary Transfer voltage user offset specifications.

**Reference:** UI Operation Instructions for User Offset.

- a. Enter **UI Diagnostic (CSE) Mode**.

**Maintenance/Inspection > Max Setup > User Offset** feature

- b. Select the **Adjustments** tab.
- c. Select **NVM Read/Write dC131**.
- d. While the nominal value is **6**, perform variable output (between 1 and 16, low to high voltage) for secondary voltage, and register the optimal value.
- e. Nominal 200V/1 step and NVM Read/Write (**dC131**) location 747-019/020: Change the step width.

**NOTE:** Although the user offset is helpful, it deteriorates multiple transfers because they cannot be used at the same time. Also, because this problem recovers when the R<sub>sys</sub> gets lowered as the machine internal temperature rises, the user offset adjustment cannot be recommended. Recovery can be faster by using condensation (plus, Tray Heater).

## IQ42 Lines on Coated Paper (EXIT)

Lines are generated on Side 1 in 2 Sided mode.

When HW Gloss paper is output to Exit 1 using the 2 Sided mode in high temperature/high humidity environment, its Side 1 gets rubbed against the Exit Gate, resulting in lines as in [Figure 1](#).

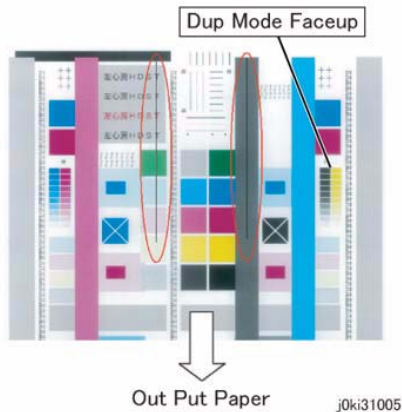


Figure 1 Lines on Coated Paper Defect Sample

### Initial Actions

1. Check whether both sides are output to Exit 1.
2. During Side 2 output, check whether the Side 1 output direction is at the Trail Edge.  
If the above two conditions are met, this defect is likely to occur.

### Procedure

Change the output tray to the Exit 2 Tray or the Side Tray.

- When paper is output to Exit 1 in 2 Sided mode, the convex part of the paper that bowed due to the corrugation of the Exit section makes contact with the Exit Gate, which generates brushed lines from the middle to the Trail Edge on the upper side (Side 1) of the exiting paper.  
This happens when the paper area that bowed due to corrugation makes contact with the Exit Gate.

## IQ43 Caterpillar Mark (Transfer)

This is caused by low electric charge in toner.

A bit of changed electricity remains at Side 1 Trail Edge of lightweight paper in the C-Zone.

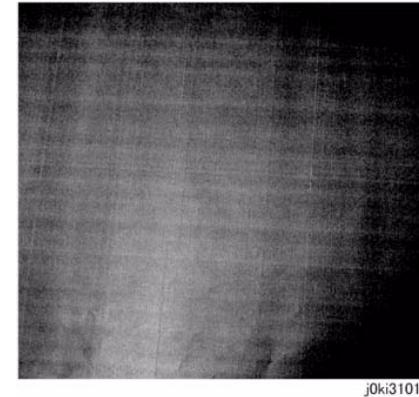


Figure 1 Caterpillar Mark Defect Sample

### Initial Actions

1. Compare with the image sample. ([Figure 1](#))

### Procedure

1. Lower the TC and increase the primary transfer current value (same as the heat haze/mock heat haze countermeasure) ([IQ46](#)).
2. Because this may get worse during condensation, go through a few dozens of full image 2 sided sheets to handle it.

## IQ44 White Stripes Due to Trimmer Jam (DEV)

When foreign substances such as dirt, dust, toner aggregate (including melted) exist in the Toner Cartridge, on the Toner Supply Path, or in the Developer Housing Assy and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of the developer layer.

### Initial Actions

1. Clean the LPH.
2. If the white stripes did not disappear, perform the following:

### Procedure

1. Scoop and remove the foreign substances by inserting a sheet of paper into the gap between the Developer Roll and the Trimmer.
2. In most cases, the above procedure will not be able to remove the foreign substances. The reliable method is to replace the Developer Housing Assy.

## IQ45 Heat Haze/Mock Heat Haze

### Procedure

The heat haze/mock heat haze is generated in various places and in different ways.

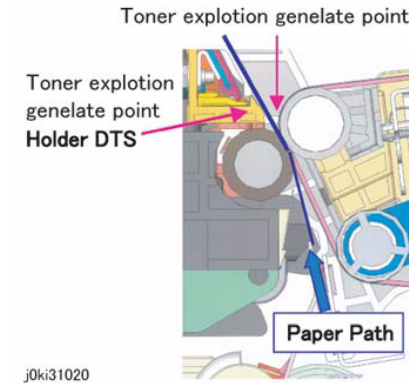


Figure 1 Heat Haze/Mock-Heat Haze

- Heat Haze:  
The heat haze occurs at the place where paper is peeled off from the IBT Belt as shown in Figure 1 and Figure 2. The toner scatters in small clouds around the Solid Patch.

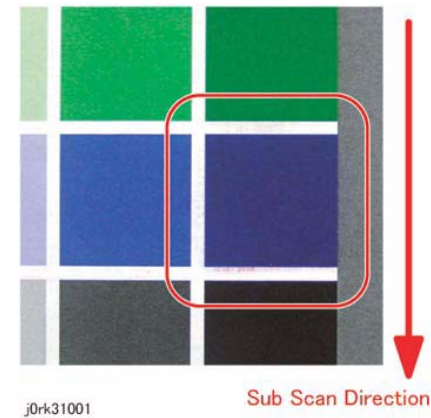
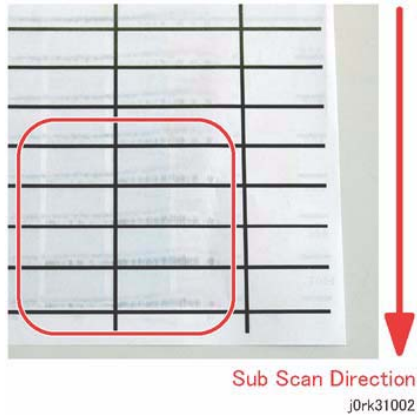


Figure 2 Heat Haze

- Mock Heat Haze:

The mock heat haze occurs when the transported paper rubs against the Holder DTS (Chute at the Transfer EXIT) as shown in the [Figure 1](#) and [Figure 3](#), which charges it electrically and causes the toner to scatter at the Lead and Trail edges of the Solid section. This might form streaks in some parts.



**Figure 3 Mock-Heat Haze**

### Initial Action

1. Perform [dC909](#) Calibrate for Paper, generate the test pattern and check whether the defect occurs for single K color or multiple colors, and whether the defect changes as a result of the procedure (secondary transfer voltage).
2. Perform [dC991](#), Toner Density Setup; if the TC reads higher than the target according to the Check, lower the TC to meet the target.

### Procedure

1. When heat haze or mock heat haze occurs, print 25 sheets of the [dC909](#) test pattern on A3/11x17.

**NOTE:** Step 2 is mainly effective for heat haze.

2. Adjust the secondary transfer voltage based on the results of step 1.
3. Adjust the primary transfer current value for toner scattering (mock heat haze) around K/ color texts:

**NOTE:** The value in NVM 746-015 indicates the machine internal environment (temperature and humidity) and it is stored as an integer value between 1 and 10. The higher the temperature and humidity are, the smaller the value becomes and vice versa.

- a. Enter [dC131](#), NVM 746-015 and make a note of the value.
- b. Change the primary transfer current value approximately to a value corresponding to the conditions in which the problem occurs ([Table 2](#)).
  - Refer to the following table for the NVM address to be changed ([Table 1](#)). (Model (ppm) & Output Color (FC/BW) & the value in NVM 746-015 noted above).

- Because the machine internal temperature and humidity changes slightly during the day, also change the values before and after the value that was noted in NVM 746-015 above (if the value is 5, change the NVMs for 4 and 6 too).

**Example:** If this problem occurs for 25ppm Full Color print and 746-015 is 9, change the value of 745-405, 406, and 407 from 103 to 150.

**Table 1 NVM Locations**

Model	Color	746-015 (Environment No. for Temperature and Humidity 1-10)									
		1	2	3	4	5	6	7	8	9	10
25ppm	FC	745-398	745-399	745-400	745-401	745-402	745-403	745-404	745-405	745-406	745-407
	BW	745-408	745-409	745-410	745-411	745-412	745-413	745-414	745-415	745-416	745-417
35ppm	FC	745-448	745-449	745-450	745-451	745-452	745-453	745-454	745-455	745-456	745-457
	BW	745-458	745-459	745-460	745-461	745-462	745-463	745-464	745-465	745-466	745-467
45ppm	FC	745-498	745-499	745-500	745-501	745-502	745-503	745-504	745-505	745-506	745-507
	BW	745-508	745-509	745-510	745-511	745-512	745-513	745-514	745-515	745-516	745-517
55ppm	FC	745-548	745-549	745-550	745-551	745-552	745-553	745-554	745-555	745-556	745-557
	BW	745-568	745-569	745-570	745-571	745-572	745-573	745-574	745-575	745-576	745-577

**Table 2 Adjusted Primary Transfer Voltage**

Model	25ppm FC/BW	35ppm FC/BW	45ppm FC/BW	55ppm FC	55ppm BW
Initial Value	103	148	169	193	216
After Change	150	200	220	250	255

**NOTE:** NVM 746-005 stores the current value that was output last. In the case of 25/25ppm, 103 (10.3 MicroAmp) is stored before the adjustment and 150 (15.0 MicroAmp) is stored after the adjustment.

c. After performing steps a and b, make a test print and refer to NVM 746-005 (1st BTR Transfer Bias Last Output Value K) to check that the primary transfer output has changed to the new value.

**NOTE:** This procedure may result in worse ghosting (residual image due to electrostatic charge on the photoreceptor).

Print and check a test pattern. If the level of ghosting is bad, manually decrease the ATC target value in the following step.

This is effective for heat haze/mock heat haze.

4. Decrease the TC by 1%.  $\Delta$  ATC Target Manual Correction Amount  
Decrease K color by 1%. 752-845: 0 to 35



Decrease Y color by 1%. 752-842: 0 to 35

Decrease M color by 1%. 752-843: 0 to 35

Decrease C color by 1%. 752-844: 0 to 35

When the value is changed, the target value for MAX Setup/Adjust Toner Density also shifts by 0 to 35.

**NOTE:** Occurrence of both heat haze and mock heat haze are easily influenced by the paper orientation. As final step, copy an image which has solid portions located at various positions to check for them. Especially for the secondary voltage offset chart (dC909), only one patch in the area is useful because the secondary transfer voltage changes between Lead and Trail edges.

## IQ46 Poor Reproducibility of Fine Lines (IOT Image Quality)

The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600dpi/1200dpi thin lines (Figure 1).

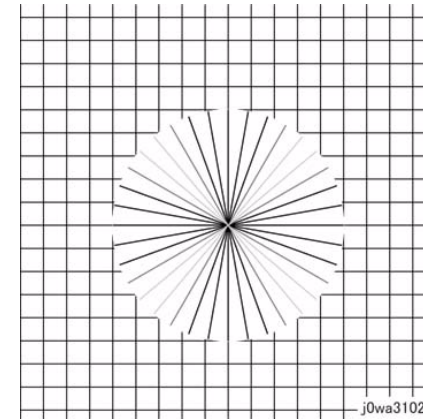


Figure 1 Poor Reproducibility of Fine Lines

### Procedure

Because of the dispersion due to the difference in the machines, thin lines, especially slanted ones, tend to break up.

When this happens, use the Thin Line Correction Mode to correct it.

**NOTE:** When in use, the Thin Line Correction Mode might cause defects to appear in the images.

The Thin Line Correction only emphasizes line images and it cannot be used to increase the text density, and may cause:

1. Interference in the form of banding in ladder images
2. LPH streaks appearing in high temperature environment

Because of these reasons, keep the adjustment amount as low as possible.

Perform the Thin Line Correction by adjusting the following NVM values:

1. NVM Read/Write (dC131) location 749-006: 1200 Only Fine Line Correction -  
0: OFF (also performs correction for 600dpi)  
15: ON (only performs correction for 1200dpi)

If the Thin Line Correction is also to be performed for 600dpi, use 0. The default value is 15.

2. NVM Read/Write (dC131) location 749-007: Thin Line Correction Switch -  
0: Thin Line Correction OFF  
1: Thin Line Correction ON



The default value is 0.

- Thin Line Correction Amount Adjustment (Table 1):

**Table 1 Thin Line Adjustment**

NVM Address	Contents	Initial Value	Adjustment Range
749-243	Thin Line Correction Amount Y Color	200	140-255
749-244	Thin Line Correction Amount M Color	200	140-255
749-245	Thin Line Correction Amount C Color	200	140-255
749-246	Thin Line Correction Amount K Color	200	140-255

The smaller the value, the more emphasis the thin line gets (amount of exposure is increased).

Amount of exposure is increased by: 30% for 140, 20% for 160, and 10% for 180. (Default value - Adjustment value)/2 = amount of increased exposure in%.

The recommended value is 160.

- NVM Read/Write (dC131) location 752-006 Thin Line Correction\_ADC\_Switch - 0: OFF, 1: ON.

Although this is normally set as 0 (OFF) during use, if the highlight reproduction is overdone, set this to 1 (ON).

Default value is 0.

## IQ47 Outboard Deletion in All Colors

These are light areas, faded or deleted, caused by toner buildup on the outboard side of the 1st BTRs.



**Figure 1 Outboard Deletion (All Colors)**

### Initial Actions

- Compare with the image sample (Figure 1).

### Procedure

- Remove the IBT Assembly (REP 9.2) and Transfer Belt Assembly (PL 6.4, item 5).
- Clean the 1st BTR rolls (PL 6.4, item 1) in order to correct the problem.
- Run test prints in order to verify that the problem is corrected.

## IQ48 MWS (Side 2) (Micro White Spots)

When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multicolor and monocolour is narrow and the setting voltage favors multicolor. In other words, the voltage is a little high for monocolour, and this causes the Transfer nip discharge phenomenon that creates the white spots on Side 2 in a low-humidity environment.

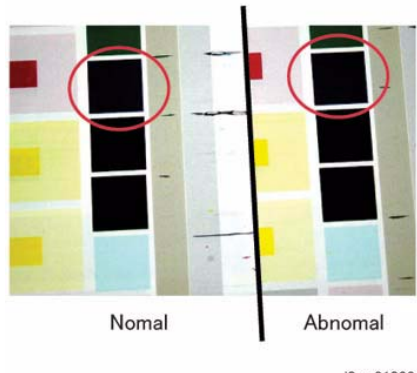


Figure 1 j0wa31023

### Initial Actions

Verify that the micro white spots (MWS) appear on Side 2 when printing in a low humidity environment.

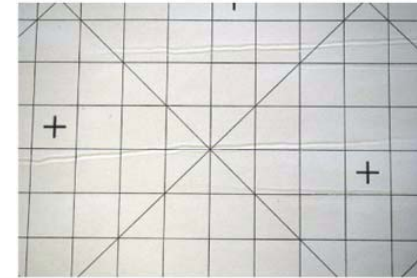
### Procedure

Reduce the 2nd-transfer voltage for the paper type in use by decreasing the single-color density or by changing the permissible range for MWS (Micro White Spots) (dC909).

**NOTE:** As much as user offset can serve as a solution, both multi-color transfer and MWS cannot be simultaneously satisfied. Whichever is given priority will lead to deterioration of the other. Adjust based on the customer's expectation and requirement.

## IQ49 Moist Paper Wrinkles (Fusing Unit)

When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fusing Nip in this condition, the Fusing Nip cannot feed the paper properly, resulting in wrinkles.



j0ki31017

Figure 1 Moist Paper Wrinkles

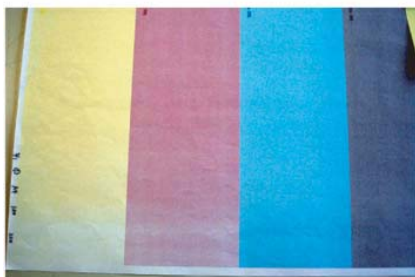
### Initial Actions

Check the paper in the Tray for moistness and waviness at the lead edge in the Paper Feed direction.

### Procedure

- Use fresh paper.
- Change the Paper Feed direction (LEF).
- Use horizontal grained paper.

## IQ50 White Streaks in Process Direction/Dropping Density (XERO/CLN)



j0ki31016

Figure 1 j0ki31016

### Initial Actions

TBS

### Procedure

1. TBS

## IQ51 Background (IPS)

A phenomenon like background (e.g. background color or document bleed) may occur depending on the document.

The default background suppression function is unable to fully remove the background.



j0ki31019

Figure 1 Background (IPS)

### Initial Actions

Set Background Suppression to **Enabled** and check whether background still occurs on the customer's document.

### Procedure

1. Refer to [Table 1](#) for a rough standard (approximation) of the effects that can be achieved with the various settings for Background Suppression Level, which varies by type of document.

Table 1 Background Suppression Level Settings (Approx.)

Suppression Level	Rough Standard for Suppression Levels (documents with white background, or level of effect on documents)	
Output Color	Color	BW
Normal	White paper such as Plain paper	Bleed is reduced slightly.
Higher (+1): Default	Recycled	White paper such as Plain paper, Recycled paper, Newspaper
Higher (+2)	Old recycled paper, Dark recycled paper	The suppression amount is more than Higher (+1).
Higher (+3)	Newspaper (with some bleed)	The suppression amount is more than Higher (+2).

**Table 1 Background Suppression Level Settings (Approx.)**

Suppression Level	Rough Standard for Suppression Levels (documents with white background, or level of effect on documents)	
Output Color	Color	BW
Higher (+4)	Newspaper	Reduces background to the level at which pencil text (light text) can be read.

2. The adjustment methods are different for Services and Output Colors in System Administrator mode and CE mode (NVM), dC131. Refer to Table 2.

**Table 2 Background Suppression Level Adjustment Method by Mode**

Service	Output Color	Adjustment Method
Copy	Full Color Mode	System Administrator Mode
	BW	CE Mode (NVM)
Fax	BW	CE Mode (NVM)
Scan	Full Color Mode	System Administrator Mode
	BW	CE Mode (NVM)

- a. To make the adjustment in System Administrator Mode:
- Copy (Full Color) Adjustment  
**[Tools] > System Settings tab > [Copy Service Settings] > [Copy Control] > [Background Suppression Level]**
  - Scan (Full Color) Adjustment  
**[Tools] > System Settings tab > [Scan Service Settings] > [Other Settings] > [Background Suppression Level]**
- b. To make the Adjustment in CE Mode (NVM):
- When adjusting the Text & Photo mode for Copy BW, Fax, and Scan BW, change the following NVM values in dC131; refer to Table 3.

**Table 3 NVM Settings (CE Mode) - Text & Photo**

Chain-Link	NVM Names	PSW Display	Settings Range	Initial Value	Description
715-631	Background Suppression Offset Level for BW Copy, Fax, Binary Scan - Text & Photo Mode (Print, Photograph, Copy)	TP_BW_Copy_Fax Offset Level of AE	0~4095	273 546 819 1092	Background Suppression Level: 0: Strength Level 0 (normal), 1: Strength Level 1 (+1), 2: Strength Level 2 (+2), 3: Strength Level 3 (+3), 4: Strength Level 4 (+4), 5~15 and above: Strength Level 0 (normal)

- When adjusting the Text mode for Copy BW, Fax, and Scan BW, change the following NVM values in dC131; refer to Table 4.

**NOTE:** Text mode requires different NVM values for (Normal, Pencil) and (Tracing Paper).

**NOTE:** The description of the settings is the same as that for the Text & Photo mode.

**Table 4 NVM Settings (CE Mode) - Text**

Chain-Link	NVM Names	PSW Display	Settings Range	Initial Value	Description
715-633	Background Suppression Offset Level for BW Copy, Fax, Binary Scan Text Mode (Normal, Pencil Text)	TP_BW_Copy_Fax Offset Level of AE	0~4095	273 546 819 1092	Background Suppression Level: 0: Strength Level 0 (normal), 1: Strength Level 1 (+1), 2: Strength Level 2 (+2), 3: Strength Level 3 (+3), 4: Strength Level 4 (+4), 5~15 and above: Strength Level 0 (normal)
715-637	Background Suppression Offset Level for BW Copy, Fax, Binary Scan Text Mode (Tracing Paper)	TP_BW_Copy_Fax Offset Level of AE	0~4096	273	Background Suppression Level: 0: Strength Level 0 (normal), 1: Strength Level 1 (+1), 2: Strength Level 2 (+2), 3: Strength Level 3 (+3), 4: Strength Level 4 (+4), 5~15 and above: Strength Level 0 (normal)

**NOTE:** Due to the mechanism of Background Suppression (Figure 2), backgrounds might not be suppressed up to the user's expectations on the following documents:

- (1) Photo documents having their high density sections placed in the background detection areas.
- (2) Document containing dark frames or fringes.
- (3) Document containing texts on dark background.
- (4) Negative document

For the document types (1) and (2), the suppression level may be improved by changing the background suppression method from High Speed to High Quality.

For the case of (3), density adjustment (ADJ 9.14) may be helpful.

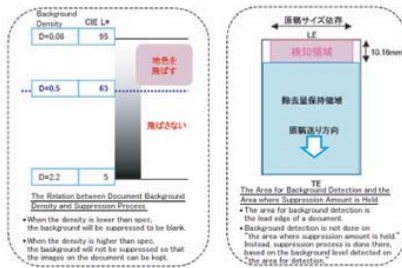


Figure 1 The Mechanism of the AE Function

j0ki31008

Figure 2 Suppression Mechanism

## IQ52 Light Ink Support (IPS)

This is used to copy an image to be lighter than the current BW Copy settings; e.g. when using light ink. Density adjustment cannot lighten images to the light ink level.

### Initial Actions

1. Consult with the customer to determine which (or all) level of Photo mode (Lighten +1 to +3) is to be set with light ink support adjustment.

### Procedure

1. Change the NVM values listed in the following table to adjust the **Lighten +1**, **Lighten +2**, and **Lighten +3** of Photo mode.

Table 1 Table of Light Ink Support

	Chain-Link and Recommended Setting Value
Photo Mode <b>Lighten +3</b>	[Chain-Link: 715-692]: 37 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set. Note 2) When 20 or lower is set, the result may be blank paper.
Photo Mode <b>Lighten +2</b>	[Chain-Link: 715-693]: 40 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set. Note 2) When 15 or lower is set, the result may be blank paper.
Photo Mode <b>Lighten +1</b>	[Chain-Link: 715-694]: 43 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set. Note 2) When 10 or lower is set, the result may be blank paper.

Density Adjustment: Darkening the Highlight

**NOTE:** This countermeasure is only valid for Copy BW images.

## IQ53 Highlight Density Reproduction (NVM Darken +3) (IPS)

This is used to reproduce the highlight (light colors) in darker shade. To prevent background, the highlight reproducibility is adjusted.

### Procedure

- Set the density adjustment to **Darken +1 ~ Darken +3**.  
\* When the highlight is not reproduced after performing the density adjustment in (1), it can be adjusted by the following method:
- Set the background suppression to **Disabled**.  
\* Although may cause background to appear, it improves the highlight reproducibility.
- In the case of Copy Service, adjust the density by using **DC919: Color Balance Adjustment**.  
In the case of Scan Service, increase the **Scan Resolution**.  
\* The highlight reproducibility is improved more with 600dpi than 200dpi.
- The following describes the adjustment method that is only valid for Output Color **BW** and Original Type **Text**.

Density Adjustment: Darkening the Highlight

Table 1 Density Adjustment: Darkening the Highlight

NVM Chain-Link	Service	Mode	How to Use
715-720 N/A	Copy	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 120.
715-721 N/A	Copy	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 120. The density of Darken +3 and Normal may be reversed depending on the setting value.
715-722	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 125.
715-723	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 125. The density of Darken +3 and Normal may be reversed depending on the setting value.

\* The NVM value adjustment is done by visually checking the copy or scan output while performing the adjustment.

## IQ54 Highlight Density Reproduction (NVM Lighten +3) (IPS)

This is used to reproduce the density in lighter shade.

### Procedure

- Set the density adjustment to **Lighten +1 ~ Lighten +3**.

\* When desired image quality cannot be obtained after performing the density adjustment in (1), the following adjustment method is also available:

Countermeasure (2): In the case of Copy Service, adjust the density by using **Color Balance Adjustment**.

The following describes the adjustment method that is only valid for Output Color **BW** and Original Type **Text**.

Density Adjustment: Lightening

Table 1 Density Adjustment: Lightening

NVM Chain-Link	Service	Mode	How to Use
715-720 N/A	Copy	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 136.
715-721 N/A	Copy	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 136. The density of <b>Darken +3</b> and <b>Normal</b> may be reversed depending on the setting value.
715-722 N/A	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 132.
715-723 N/A	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 132. The density of <b>Darken +3</b> and <b>Normal</b> may be reversed depending on the setting value.

\* The NVM value adjustment is done by visually checking the copy or scan output while performing the adjustment.

## IQ55 Bleed on Tracing Paper (IPS)

When copying or scanning Tracing Paper document, bleed or background occur around the texts. Because of the characteristics of Tracing Paper, shades are generated around the texts when scanning using CCD

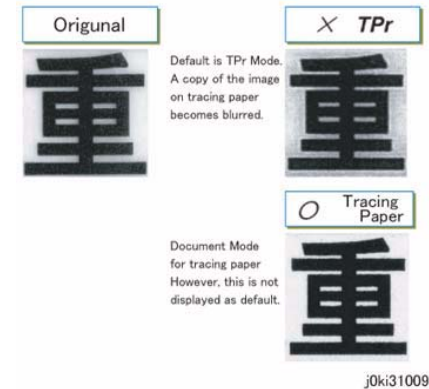


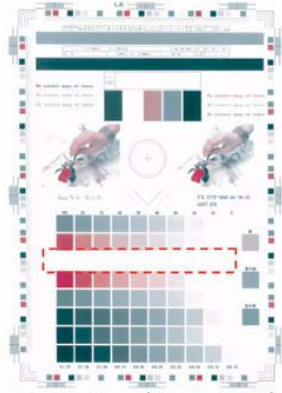
Figure 1 Bleed on Tracing Paper

### Procedure

- Use the Lightweight mode.
  - Copy Service Settings
    - Perform the following procedure to display the Lightweight mode on the UI.  
[Tools] > System Settings tab > [Copy Service Settings] > [Copy Control] > [Original Type - See-Through Paper] > [Enabled]
    - The Lightweight mode becomes selectable when **Output Color = BW** and **Original Type = Text** are specified.
  - Scan Service Settings
    - Change the following NVM values to enable the Lightweight mode.  
NVM715-669 0: Normal → 1: Tracing Paper mode
    - Select **Color Scanning = BW** and **Original Type = Photo** for the Lightweight mode.  
(The Lightweight mode button does not exist on the UI. It is attached as a background mode to the Photo mode.)

## IQ56 CVT Streaks (IPS)

Dirt such as paper dust is generated at the DADF scan position. The streaks in the SS direction are created when that contamination is scanned



2 Color Copy (1401 α Mode) j0ki31012

Figure 1 j0ki31012

### Initial Action

1. Check whether dirt such as paper dust exists at the DADF scan position.

### Procedure

1. Clean the DADF scan position.

## IQ57 Copy: Gradation Jump in Text & Photo (IPS)

In the BW and Text & Photo Copy mode, gradation jump occurs on 100-line photo documents.

As Text & Photo mode gives priority to 175 lpi halftone dots and text quality, Sharpen Edge is performed for lower lpi.

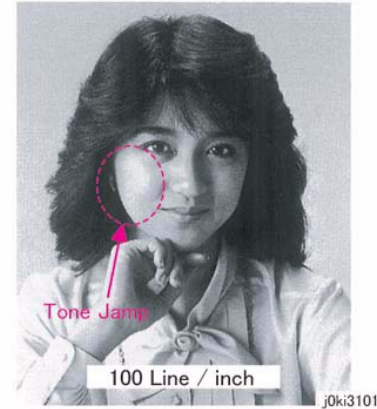


Figure 1 j0ki31013

### Procedure

Take the following countermeasures for 100-line documents:

Table 1 100-line Document: Countermeasures

Countermeasures	Secondary Defect
Set the Original Type to <b>Photo</b> .	The text becomes blurred.
Select <b>[Tools]</b> > <b>[Common Service Settings]</b> > <b>[Image Quality Adjustment]</b> > <b>[Image Quality]</b> and adjust <b>[Photo &amp; Text Recognition]</b>	Image quality of photographs deteriorate in <b>[More Text]</b> and <b>[Text]</b> settings. Text becomes blurred in <b>[More Photo]</b> and <b>[Photo]</b> settings.



## IQ58 Scan: Smearred Text, JPEG Mosquito Noise (IPS)

Color texts are blurred and mosquito noise is generated around the texts due to JPEG compression.

**NOTE:** As the JPEG compression technique is for images, not texts, noise is easy to crop up when it is used to compress texts.



Scan full Collor resolution 200dpi SPEG format  
Image enlargement

j0ki31014

Figure 1 j0ki31014

### Procedure

1. Set the compression mode from **Normal** to **Low Compression**. (Secondary defect: The file size becomes bigger.)

## IQ59 Moire In Text Mode (Fine) BW Scan/Fax For 133 Ipi Originals (IPS)

When a document with tint on the whole paper or a background image is scanned using Fax Text mode in High Quality (Fine), the file size or the Fax transmission time may increase drastically.

As the Text mode is designed to highlight texts, it generates halftone dot moire.



Fax fine 133 line half tone Screen Image

j0ki31015

Figure 1 j0ki31015

### Procedure

1. Scan the customer's document (photo image) in Binary Scan mode and check whether moire is generated and the file size became bigger.
2. Take the following countermeasures for 133-line documents:

Table 1 133-line document: Countermeasures

Countermeasures	Secondary Defect
Set the Original Type to <b>Photo</b> .	As the amount of data increases in Text & Photo mode, the machine takes a longer time for transmission.
Set the density adjustment to <b>Lighten</b> and the sharpness to <b>Soften</b> .	The text quality is degraded.

## IQ60 Copy: Bleed on 2 Sided Document (IPS)

Bleed occurs in the Copy BW and Text mode.

**NOTE:** Because the gradation feature is designed to improve the reproducibility of Low Contrast, when bleed density of the document is high, the background suppression function might not be able to remove it completely.

### Procedure

Take the following countermeasures for Bleed on document:

**Table 1 Bleed on Document Countermeasures**

Countermeasures	Secondary Defect
Switch the AE suppression level settings. (Switch the NVM)	Reproducibility of highlights is degraded.
Set the density adjustment to <b>Lighten +1</b> .	The density on the whole area becomes lighter and the reproducibility of highlights is degraded.

## IQ61 Copy: Platen Background (IPS)

When A4 stark white paper such as J Paper/Premier 80 is scanned into A3 when in Copy BW Text mode and AE is ON, the platen back density is reproduced outside of the copy range.

**NOTE:** Because some paper has a low background detection level, the density of the Platen background might not be fully removed, depending on the S/N level status of the IIT.

### Procedure

Take the following Platen background countermeasures:

**Table 1 Platen Background Countermeasures**

Countermeasures	Secondary Defect
Switch the AE suppression level settings. (Switch the NVM)	Reproducibility of highlights is degraded.
Set the density adjustment to <b>Lighten +1</b> .	The density on the whole area becomes lighter and the reproducibility of highlights is degraded.
Set the sharpness adjustment to <b>Soften +1</b> .	The text becomes blurred.

## IQ62 Image Quality Difference between Side 1 and Side 2 (Sharpness Adjustment of Side 1 and Side 2)

During 2 Sided Simultaneous Scan, the text and halftone dot reproduction qualities of copy or scan images are different between Side 1 and Side 2.

### Procedure

Adjust the sharpness of Side 2 scan in NVM 716-421. - N/A

The NVM has 5 levels, each of which indicates the Side 2 sharpness offset against Side 1.

Table 1

Content	Setting Range	Initial Value	Meaning
Sharpness adjustment for CIS (difference against Side 1)	0-4	2	Indicates the difference in sharpness adjustment against Side 1. 0: 2 levels softer than Side 1 1: 1 level softer than Side 1 2: Same as Side 1 3: 1 level sharper than Side 1 4: 2 levels sharper than Side 1

## IQ63 Image Quality Difference between Side 1 and Side 2 (Color Balance Adjustment of Side 1 and Side 2)

To narrow the difference in density between Side 1 and Side 2 during scan.

### Procedure

Perform color balance adjustment on Side 1 and Side 2, separately. The center of color balance adjustment\* in Customer Mode will be changed by this adjustment.

\* The color balance adjustment is performed for Side 1 and Side 2 at the same time in Customer Mode. Only this adjustment can adjust Side 1 and Side 2 separately.

This adjustment is only applicable to the copy function. Perform this adjustment only when requested by the customer.

Table 1 Overview of Color Balance Adjustment for Side 1 and Side 2 Scans

	Color Balance Adjustment for Side 1 Scan	Color Balance Adjustment for Side 2 Scan
Overview	Changes the center of color balance adjustment for Side 1 scan in Customer Mode.	Changes the center of color balance adjustment for Side 2 scan in Customer Mode.
Adjustment method	DC919	NVM 716-408 to 419 - N/A
Adjustment value	<b>0</b> is the default value. The image will become lighter from -1 to -4 (in 4 stages), and darker from 1 to 4 (in 4 stages).	<b>4</b> is the default value. The image will become lighter from 0 to 3 (in 4 stages), and darker from 5 to 8 (in 4 stages).

Table 2 Color Balance Adjustment for Side 2 Scan: Chain-Link List

Chain-Link	Mode
716-408 N/A	Side 2 Scan Adjustment Level K Color Low Density
716-409 N/A	Side 2 Scan Adjustment Level K Color Medium Density
716-410 N/A	Side 2 Scan Adjustment Level K Color High Density
716-411 N/A	Side 2 Scan Adjustment Level Y Color Low Density
716-412 N/A	Side 2 Scan Adjustment Level Y Color Medium Density
716-413 N/A	Side 2 Scan Adjustment Level Y Color High Density
716-414 N/A	Side 2 Scan Adjustment Level M Color Low Density
716-415 N/A	Side 2 Scan Adjustment Level M Color Medium Density

**Table 2 Color Balance Adjustment for Side 2 Scan: Chain-Link List**

Chain-Link	Mode
716-416 N/A	Side 2 Scan Adjustment Level M Color High Density
716-417 N/A	Side 2 Scan Adjustment Level C Color Low Density
716-418 N/A	Side 2 Scan Adjustment Level C Color Medium Density
716-419 N/A	Side 2 Scan Adjustment Level C Color High Density

**[Sample adjustment]**

Adjusting the Yellow low density area on Side 2 because it is lighter than Side 1.

1. Enter DC919 and check the value of **Side 1 Color Balance Adjustment Y Low Density**. In this example, it is assumed that the value of Side 1 is the default value of **0**.
2. To darken the Y low density on Side 2, increase the default value of **4** of Chain-Link 716-411 within the range of 5 to 8.

**NOTE:** Perform the NVM value adjustment by visually checking the copy output as you perform the adjustment.

**IQ64 Image Quality Difference between Side 1 and Side 2 (Background Suppression Adjustment of Side 1 and Side 2)**

How to Adjust the Suppression Level (Continuation)

**Procedure**

When adjusting the Text & Photo mode for BW Copy, Fax, and BW Scan, change the following NVM values:

**Table 1**

Chain-Link	NVM Name	PSW Display	Setting Range	Initial Value	Meaning
715-631 N/A	Background Suppression Offset Level for BW Copy, Fax, BW Scan: Text & Photo Mode (Print, Photograph, Copy)	TP_BW_Copy_Fax Offset Level of AE	0 to 4095	273	0: Strength Level 0 (Normal), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5 to 15 and above: Level 0 (Normal) * Refer to Table 3. bit0-bit3: Platen, bit4-bit7: CVT & DADF, bit8-bit11: CIS.

**Table 2**

	Meaning of Adjustment Value											
Scanning Method	CIS				CVT & DADF				Platen			
Bit allocation	11	10	9	8	7	6	5	4	3	2	1	0
Expressed in binary	0	0	0	1	0	0	0	1	0	0	0	1

\* When the binary value in Table 2 above is converted to decimal value, it becomes the initial value in Table 1 (that is, 273).

**Table 3 Relationship between Background Suppression Level and Strength Level**

Background Suppression Level	Strength Level
Normal	0, 5 to 15
Higher (+1)	1
Higher (+2)	2
Higher (+3)	3
Higher (+4)	4

### Description of NVM Settings

The NVM setting range is 12 bits, which are broken up into 4 bits for each scan method. The NVM setting value is determined in binary first, and then converted to a decimal number.

Example: The initial value 273 (decimal) indicates that the background suppression levels are 1 for all scan methods. When the background suppression levels are 2 for all scan methods: = 546 (decimal) = 001000100010 (binary). When the background suppression levels are 3 for all scan methods: = 819 (decimal) = 001100110011 (binary). When the background suppression levels are 4 for all scan methods: = 1092 (decimal) = 010001000100 (binary). When the background suppression level for the Platen or CVT & DADF scan method is 1 and the background suppression level for the CIS scan method is 3 (to suppress Side 2 background on Side 1) = 785 (decimal) = 001100010001 (binary). When the background suppression level for the CIS scan method is 1 and the background suppression level for the Platen or CVT & DADF scan method is 3 (to suppress Side 1 background on Side 2) = 307 (decimal) = 000100110011 (binary)

## IQ65 Image Quality Difference between Side 1 and Side 2 (Color Adjustment of Side 1 and Side 2)

To narrow the difference in color between Side 1 and Side 2 during scan.

### Initial Action

Executing **2 Sided Color Scanning Calibration** in System Administrator Mode automatically narrows the difference in color between Side 1 and Side 2. This adjustment is applicable to the copy and scan functions. Perform this adjustment only when requested by the customer.

### Procedure

Refer to **Performing the 2 Sided Color Scanning Calibration** in the Administrator Guide.

## IQ66 Unevenness Correction Within Image Area (IOT Image Quality)

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

### Correction Area

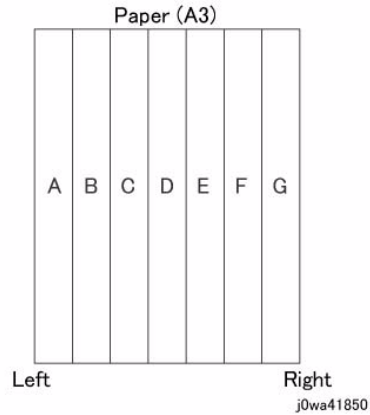


Figure 1 j0wa41850

Table 1

	A	B	C	D	E	F	G
Distance from the left of image (mm)	0	52	103	154	206	257	308.9

As shown in the figure, the LPH zone is divided into 7 areas by setting the 6 points - from A (left-most edge) to G (right-most edge).

Adjustment is performed at each area to lower the LPH exposure amount until the density is even.

\*There are cases where point A or G will lie beyond the image zone. Furthermore, the 154mm mark is the center of the image.

**NOTE:** As an overly large adjustment might cause jumps in gradation, make the adjustments as small as possible.

The adjustment amount (%) is not = amount of change in density.

The actual exposure level includes a process that converts the brightness of ADC Sensor Position to 100%.

### [Purpose]

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

### [Procedure]

- LPH Exposure Amount Fine Adjustment ON/OFF Switch Selector  
To enable the LPH Exposure Amount Fine Adjustment function, set the following NVM as ON.

Table 2

NVM Names	NVM Address	Contents	Initial Value	Adjustment Range
Smile Correction Switch	749-005	0: OFF 1: ON	0	0 or 1

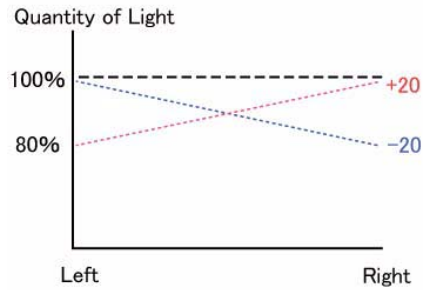
- Selection of Correction Method:

The LPH Exposure Amount Fine Adjustment can be done by:

- Correcting the density skew in the IN-OUT direction
- Selecting a pre-prepared pattern to perform the correction
- Using custom correction to manually correct the adjustment amount for each area  
A combination of the various correction methods can be used. However, the correction cannot go beyond the 0 to -20 (%) range.
  - IN/OUT Density Correction  
Corrects the IN-OUT density skew in the axis direction of the photoreceptor.  
When there is density skew from the left to the right of the image, the adjustment amount to correct that has to be set for each color.  
Setting Range is -20 to 20 (%)

Table 3

NVM Names	NVM Address		Initial Value	Adjustment Range
In Out Tendency (IN/OUT correction)	749-191	Y	0	-20~20
	749-192	M	0	-20~20
	749-193	C	0	-20~20
	749-194	K	0	-20~20



j0wa41851

Figure 2 j0wa41851

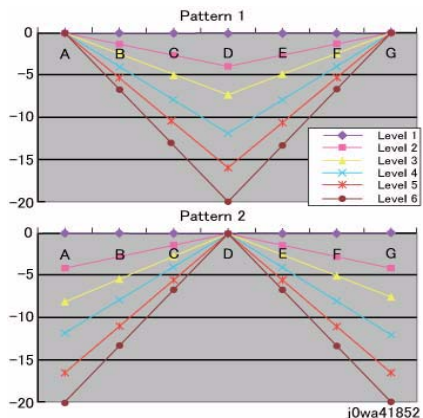
\*Although there is also an adjustment range at the positive side, it only involves reducing the brightness at the IN side or the OUT side and therefore will not have any correction that goes above 100%.

b. Pattern Selection Correction:

If you have elected to perform correction based on Pattern Selection, select the Pattern 1~6 and Level 1~6 that is most suitable for the density correction from the following figure.

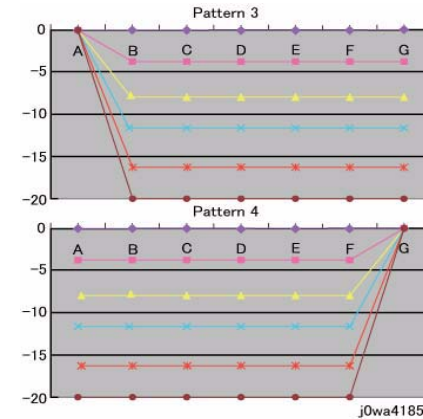
The selected Pattern and Level are reflected as LPH Brightness Correction by changing the following NVMs.

As there are separate NVMs for each color, they can each be corrected independently.



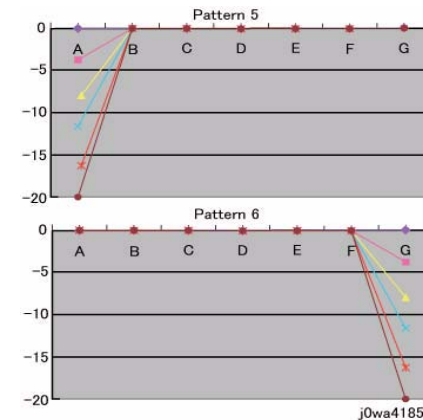
j0wa41852

Figure 3 j0wa41852



j0wa41853

Figure 4 j0wa41853



j0wa41854

Figure 5 j0wa41854

Table 4

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Pattern (Pattern Selection)	749-195	Y	1	1~6
	749-196	M	1	1~6
	749-197	C	1	1~6
	749-198	K	1	1~6

Table 5

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Level	749-199	Y	1	1~6
	749-200	M	1	1~6
	749-201	C	1	1~6
	749-202	K	1	1~6

**NOTE:** Take note that 0 and 5 for Pattern means **Disabled** and 1 for Level means **No correction**.

c. Custom Correction

If you have elected to perform density correction by custom correction, you must input the required adjustment amount for the correction of every area into the NVM for each YMCK color.

Be careful as only negative correction can be performed for density correction.

Table 6

NVM Names	NVM Address	Contents		Initial Value							Adjustment Range
				A	B	C	D	E	F	G	
Custom Correction Value	749-203~209	R/E (%) within	Y	0	0	0	0	0	0	0	-20~20
	749-210~216	Pulse Width	M	0	0	0	0	0	0	0	-20~20
	749-217~223	Variable Range	C	0	0	0	0	0	0	0	-20~20
	749-224~230		K	0	0	0	0	0	0	0	-20~20

\*The NVM Addresses correspond in ascending order to ABCDEFG.

\*Although there is also an adjustment range at the positive side, the brightness will saturate at 100%. The positive correction of up to the 100% range will only be applied when the exposure amount has been corrected towards the negative side at IN-OUT Density Correction or Pattern Selection Correction.

- The above 3 types of correction can be used in combination. However, the total amount of exposure adjustment for these Smile Corrections are restricted to be within 0 to -20%.
- [Sum of Correction 0~20%] = [IN-OUT Adjustment Amount%] + [Pattern Selection Adjustment Amount%] + [Custom Adjustment Amount%] If the total from the 3 corrections add up to less than -20%, it will be uniformly limited to -20%
- If it is larger than 0%, then it will be uniformly limited to 0%.
- The above are the restrictions that apply to the exposure amount correction and correction by Smile Correction function. However, within the actual machine, after the exposure amount correction by Smile Correction, it will enter another process to calibrate the exposure at the ADC Sensor Position to be 100%. As a correction is applied to the exposure amount after a Smile Correction, the exposure amount in the vicinity of 114 to 144mm from the left of the image becomes 100%, while it is relatively higher or lower for the rest of the positions.
- Reference sample

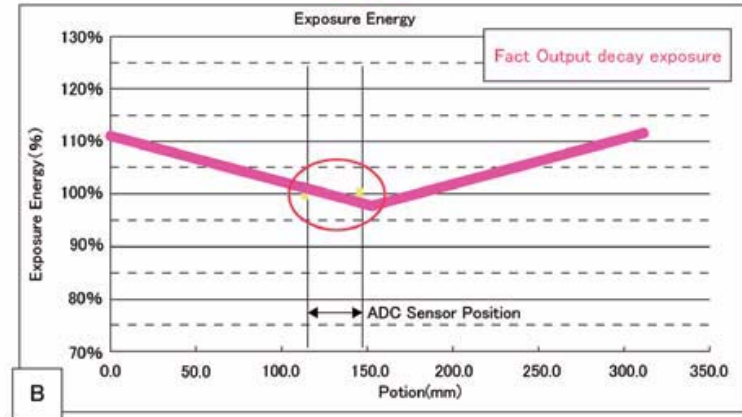
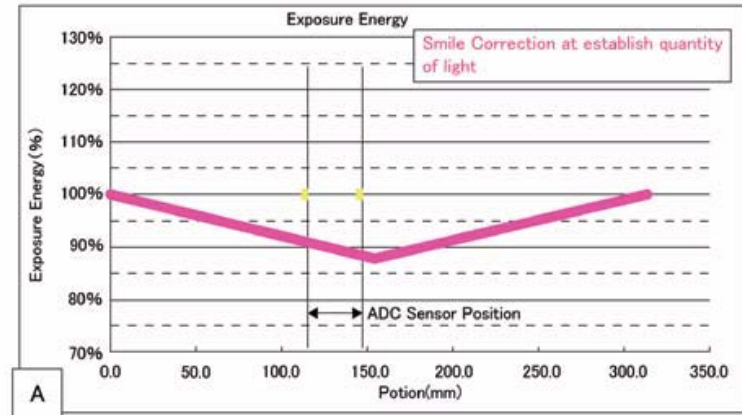


Figure 6 j0wa41855

As shown in figure B, the control is such that the final exposure at the ADC Sensor Position becomes 100%. By this, the exposure amount that was corrected by Smile Correction (figure A) is corrected again until it is at the actual output level (figure B). (The figures are the exposure models when Pattern 1, Level 4 correction have been performed)





## Test Pattern Usage (dC612)

The following table lists the types of test patterns and their usage:

**Table 1 IOT Built-in Test Patterns (dC612)**

No.	Pattern Name	Overview
1	90 Degree Grid	Alignment measurement
2	Diagonal Grid	For checking the reproducibility of diagonal lines
3	A1 Patch Pattern	For visual checking of Regi Control A1 Patch
4	B Patch Pattern	For visual checking of Regi Control B Patch
5	C Patch Pattern	For visual checking of Regi Control C Patch
6	C-TRACS Check PG	For calibration, gradation pattern for Print calibration
7	Procon PG	Gradation, Defect detection
8	16 Tone PG	Defect detection IOT
9	Full Halftone	Defect detection
10	Single K Full Halftone	Defect detection at single K mode
11	Drum Pitch Halftone	Defect detection/for shipment inspection
12	LPH streak adj chart (IOT mounted)	For LPH line detection
13	LPH streak adj chart (LPH mounted)	For LPH line detection and for identifying causes of Video data failure
14	X talk Test chart (Failure Analysis)	For detection of LPH power-related defects IOT
15	Grid (Fold Position Adjustment)	
16	Ladder	
17	Controller Test Pattern	N/A

## Image Quality Specifications

The following steps are used to set up the machine for the purpose of making test pattern copies to judge output image color density, balance, and registration.

- Set the following Customer Mode Settings to the positions listed:
  - Output Color - Full Color
  - Original Type - Photo & Text / Halftone
  - Lighter/Darker - Auto Contrast
  - Variable Color Balance - Normal
  - Color Saturation - Normal
  - Sharpness - Normal
- Place the Color Test Pattern on the platen. Load 11" X 17 or A3 paper into Tray 1. Make a copy of the test pattern.
- Compare the copy to the test pattern. Refer to [Figure 2](#) and [Table 1](#) for this evaluation.

**Table 1 Color Specifications Check Locations**

AREA (Fig. 2)	Check for the Following Results
A	Text Reproduction. Each of the seven sentences in this area are fully reproduced with no missing letters or portions of letters. The sentences are reproduced in Black, Cyan, Magenta, Yellow, Red, Green and Blue.
B	Color Registration. The patterns in location B should be properly registered to provide Black, Red, Green and Blue lines.
C	Front to Rear Density. The density of both the low density and high density bands should be uniform from front to rear. This can be tested by folding the copy in the center and comparing the front side of the copy to the rear side of the copy at location C. Both the high density and low density locations should exhibit even front to rear density.
D	Color Gradation. This area should exhibit a decreasing density of each of the colors from 100% density to 5% density. In a properly adjusted machine, the 10% patches should be visible and the 5% patches should be barely visible or not visible on the test pattern copy (except for the bottom row).
E	Routine Color. Location E represents three general tests for the machine to reproduce colors common to customer originals. Location A is a general skin tone test. Location B represents the color of grass or other common foliage. Location C represents the color of the sky.
F	Photo Gradation. Location F is not used for any copy quality evaluation on this product.
G	IIT Calibration Patches. These patches are scanned for IIT Calibration during the <a href="#">dC945</a> IIT Calibration portion of Max Setup.
H	100 Lines/Inch Image. A Moire defect will show on this image. Moire on a 100 Line/Inch image is within specification.
I	175 Lines/Inch Image. This image is used to test for Moire. Depending on the degree of the defect, moire seen on this image should be considered out of specification.

Registration and border deletions are checked using the Step Scales on the Geometric Test Pattern, an example of which is shown in [Figure 1](#). All of the scales are 20mm in height, and are made up of four 5mm steps. Step 1 will be described as at the top of the Step Scale, and Step 4 will be described as at the bottom.

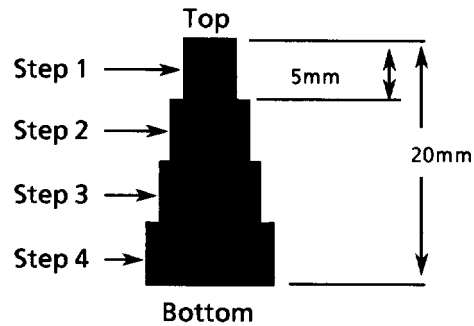


Figure 1 Step Scales

Each Step Scale is positioned for a particular paper size and orientation. [Table 2](#) indicates the appropriate Step Scales to use for the various paper sizes, orientations and measurement locations.

Table 2 Geometric Checkout - Step Scale Data.

Paper Size	Orientation	To check:	Step Scales to use (refer to <a href="#">Figure 1</a> )
11x17	SEF	Lead Edge Side Edge Trail Edge	LE1 through LE3 SE1 through SE4 (top); SE5 and SE8 (bottom) TE3
A3	SEF	Lead Edge Side Edge Trail Edge	LE 1 through LE3 SE1 through SE4 (top); SE6 and SE7 (bottom) TE4
8.5x11	SEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE9 (bottom) TE5
A4	LSEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE10 (bottom) TE6
8.5x11	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE1 and 2 (bottom) SE6 and SE7 (top) TE 2
A4	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE5 (top); SE1 and SE2 (bottom) TE1

- Set the following Customer Mode Settings to the positions listed:
  - Output Color - Full Color

- Original Type - Photo & Text / Halftone
  - Lighter/Darker - Auto Contrast
  - Color Saturation - Normal
  - Variable Color Balance - Normal
  - Sharpness - Normal
- Place Test Pattern 82E8220 on the platen and 24# Xerox Color Xpressions 11 X 17 (USCO), or 90 GSM Colortech A3 (XL) paper in Tray 1. Make a copy of the test pattern.
  - Follow the directions in [Table 3](#) to determine if the machine registration is within specification.

Table 3 Test Pattern Image Data Locations for Geometric Specifications

GEOMETRIC AREA	CHECK PERFORMED
Magnification	Locate the 300mm line running from near LE1 to the trail edge of the 1.8 lp ladder. Locate the 200mm line running from near LE1 to near LE3. Make a copy. The measurements should be: <ul style="list-style-type: none"> <li>Left to Right: 300mm <math>\pm</math>1.8mm</li> <li>Front to Rear: 200mm <math>\pm</math>1.2mm</li> </ul>
Resolution	Observing the targets on the test pattern copy at locations R1 through R8, the line pairs specified below are clearly visible for the magnification value indicated: <ul style="list-style-type: none"> <li>70%: 3.0 lp/mm</li> <li>100% through 400%: 4.3 lp/mm</li> </ul>
Lead Edge Registration	Measure from the lead edge of the paper to the top of Step 3 on the LE2 Step Scale. The measurement should be: <ul style="list-style-type: none"> <li>Trays 1 through 4: 10mm <math>\pm</math>1.5mm (<math>\pm</math>1.9mm for 2nd side of duplex job)</li> <li>Tray 5: 10mm <math>\pm</math>2.2mm</li> </ul>
Side Edge Registration	Measure from the side edge of the paper to the top of Step 3 on the SE2 and SE3 Step Scales. The distance should be within the following tolerance: <ul style="list-style-type: none"> <li>Trays 1 through 4: 10mm <math>\pm</math>2.0mm (<math>\pm</math>2.4mm for 2nd side of duplex job)</li> <li>Tray 5: 10mm <math>\pm</math>2.4mm</li> </ul>
Lead Edge Skew	For skew from front to rear, the distance from the lead edge of the paper to the targets at LE1 and LE3 are measured. The measurements must match each other to within the tolerance below. <ul style="list-style-type: none"> <li>Trays 1 through 4: within <math>\pm</math>1.5mm (<math>\pm</math>2.0mm for 2nd side of duplex job)</li> <li>Tray 5: within <math>\pm</math>2.0mm</li> </ul>
Side Edge Skew	For skew from left to right, the distance from the side edge of the paper to the targets at SE1 and SE4 are measured. They must match each other to within the tolerance below: <ul style="list-style-type: none"> <li>Trays 1 through 4: within <math>\pm</math>3.0mm (<math>\pm</math>4.0mm for 2nd side of duplex job)</li> <li>Tray 5: within <math>\pm</math>4.0mm</li> </ul>
Line Density	This parameter is measured on the two 0.7G Text Blocks on the test pattern copy. The machine should reproduce all of the characters shown in the block on the output copy.
Solid Reproduction	This specifies the desired standard for reproduction of solid gray images at 1.0 K. The 1.0 K blocks on the output copy should reproduce with minimal mottle or graininess.

**Table 3 Test Pattern Image Data Locations for Geometric Specifications**

<b>GEOMETRIC AREA</b>	<b>CHECK PERFORMED</b>
Low Contrast Reproduction	This specifies the desired standard for reproduction of low density images. The machine should reproduce all of the text in the 0.2 G Text Blocks on the output copy.

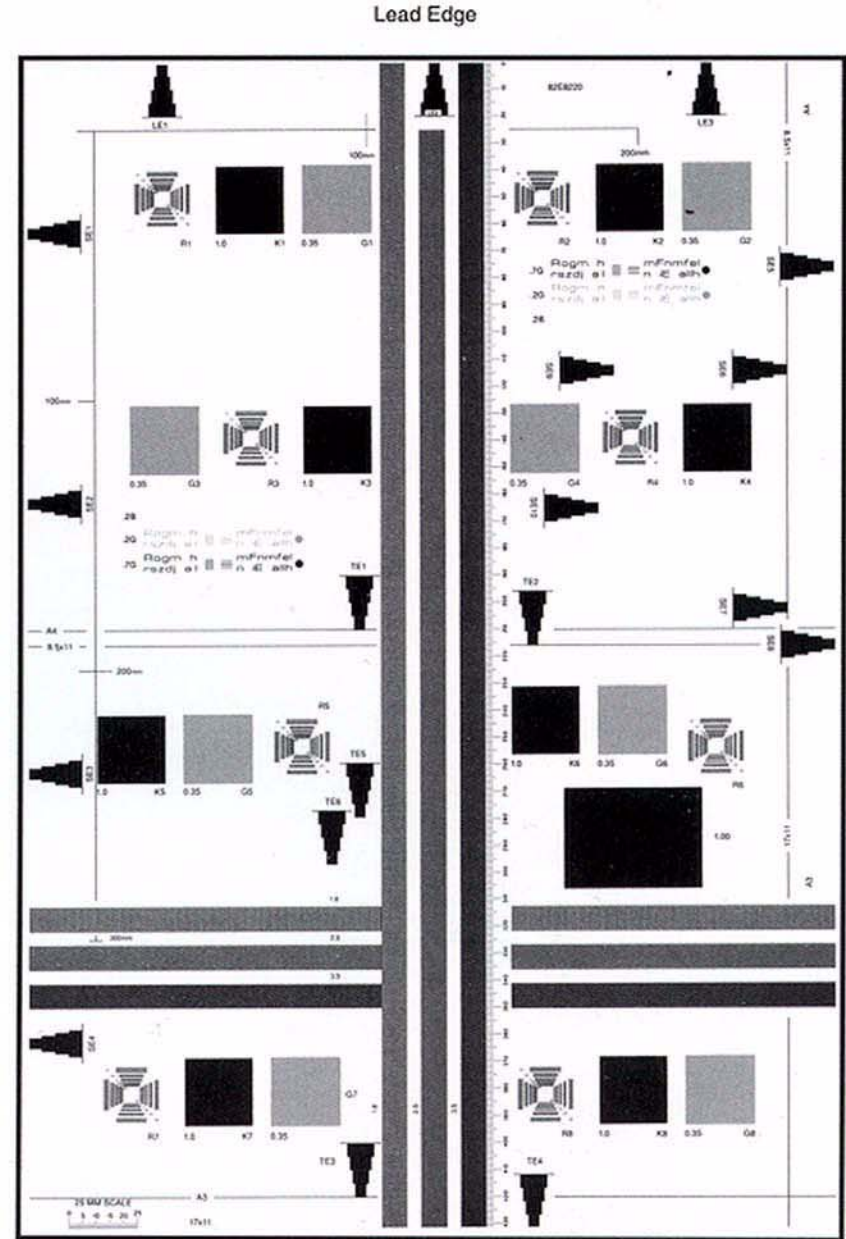


Figure 2 Color and Geometric Test Patterns

## Things to Note for Image Quality Restrictions

Table 1 IQ Restrictions

No.	Image Quality Restrictions	Details
1	Roll Marks	Depending on the paper, there may be rubber roll traces or toner wax component stuck in the paper feed direction when performing 2 Sided print or changing the output destination after continuous printing. This is more likely to occur with gloss paper and transparencies.
2	Transparency Blocking	When printing Transparencies continuously and then leaving them on the Exit Tray for a long time, they may adhere to each other and result in uneven gloss or image peel-off. Specifically, it is more likely to occur when printing 20 or more sheets continuously.
3	Condensation Copy	Sometimes patches of water droplets may be found on paper that is printed right after machine start up.
4	Side 2 Blank Areas (caused by water droplets)	These blank areas may appear on Side 2 of A3 paper of 157gsm or more. It is especially visible on gloss paper.
5	Scratched Transparency	When printing on Transparencies, minor scratches may appear in the fast scan direction.
6	Corrugation Lines	Depending on the paper, there may be Pinch Roll traces or minor scratches in the paper feed direction. This is more likely to occur with special paper such as Gloss.
7	Gloss Uneven Side 2	When performing 2 Sided print on Gloss, uneven image may appear on Side 2.
8	Background on Gloss	Background level on Gloss is higher than that on Plain.
9	Smear on Heavyweight	When using Heavyweight, smear may appear at the position 130mm away from the paper lead edge.
10	Rough Black	Depending on the paper type, rough images may occur to some extent.
11	Moist Paper Transfer Failure	This will occur when the paper moisture content increases.
12	Toner Contamination at Lead/Trail Edge	Slight contamination due to toner has occurred at Lead/Trail Edge.
13	Uneven Streaks in Paper Feed Direction	Uneven streaks may appear in the paper feed direction when performing high volume printing in a low humidity environment.
14	Side 2 Transfer Failure	The hue on Side 2 may become lighter when printing a high density image in a low temperature and low humidity environment.
15	Trail Edge Transfer Failure	Rough image or blank areas may occur for images within 10mm (including margins) from the paper trail edge.
16	MWS (Side2) (Micro White Spots)	Micro white spots may appear on Side 2 in a low humidity environment.
17	Moire	When copying, the Moire may appear due to interference with the halftone document. The appearance of Moire depends on the number of lines and angle of the document, as well as the magnification ratio.

**Table 1 IQ Restrictions**

<b>No.</b>	<b>Image Quality Restrictions</b>	<b>Details</b>
18	Density Fluctuation Right After Power ON/Change in Environment	In machines set to B/W Priority, the very first color print after power ON may, to some extent, have incorrect color density.
19	Fingerprints	When loading paper, handle it with care and try not to touch the print side. Contamination to the print side will affect the print result. If you wish to obtain the best print results, wear finger cots or gloves so as not to leave any marks on the print side.
20	Color Lines	Color Lines may appear on paper that has lots of paper dust.
21	Vapor	White vapor may leak nearby the top of the LH Cover when printing in a low temperature and low humidity environment using Heavyweight Paper.

# 4 Repairs and Adjustments

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## REP 1.1 HVPS (1st/2nd/DTC)

Parts List on [PL 6.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

*Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.*

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the PWB Chassis Unit. ([REP 1.14](#))
4. Remove the HVPS (1st/2nd/DTC). ([Figure 1](#))
  - a. Disconnect the connector.
  - b. Remove the screws (M3x8: x3).
  - c. Remove the screws (M3x6: x2).
  - d. Remove the HVPS (1st/2nd/DTC).

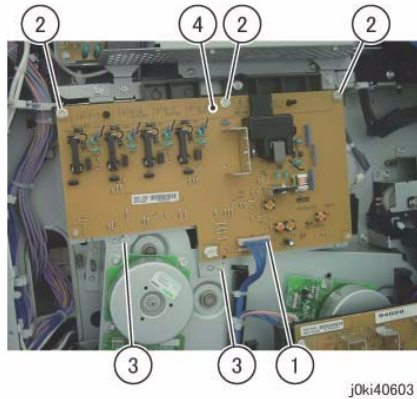


Figure 1 Remove the HVPS

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 1.2 HVPS (Dev) 7845/55

Parts List on [PL 5.3](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the PWB Chassis Unit. ([REP 1.14](#))
4. Disconnect the connector of the HVPS (Dev). ([Figure 1](#))
  - a. Release the wire harness from the Harness Guide.
  - b. Disconnect the connector.
  - c. Remove the Tapping Screw.

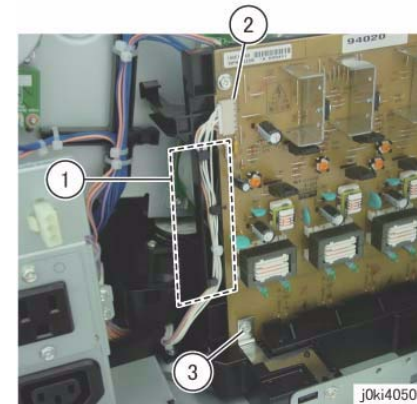


Figure 1 Disconnect the connector

5. Remove the HVPS (Dev). ([Figure 2](#))
  - a. Release the hooks (x2).
  - b. Remove the HVPS (Dev) in the direction of the arrow.

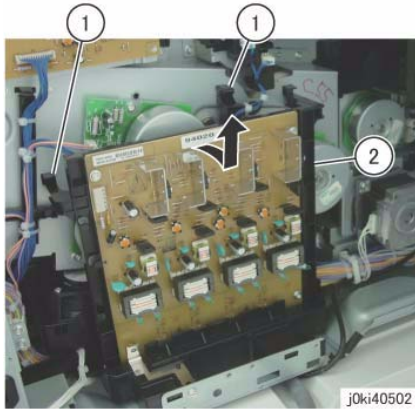


Figure 2 Remove the LVPS

## Replacement

- To install, carry out the removal steps in reverse order.

## REP 1.3 BP PWB

Parts List on [PL 18.2A/PL 18.2B](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

**NOTE:** Do not replace the BP PWB, MCU-PF PWB and CD Card at the same time because they contain information such as Billing.

- Remove the Control Unit Connector Cover. (PLX.X)
- Disconnect all cables connected to the Control Unit.
- Pull out the Control Unit. (Figure 1)
  - Remove the screw (x2).
  - Remove the screw.
  - Open the handle and pull out the Control Unit.

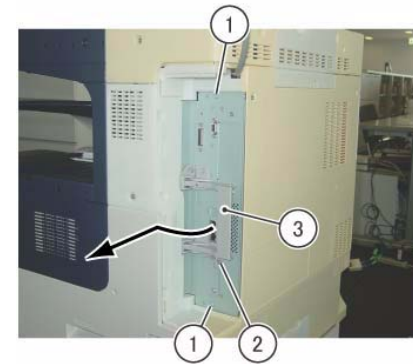
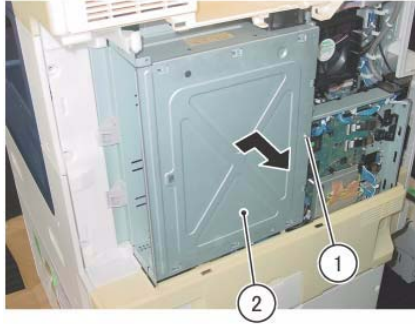


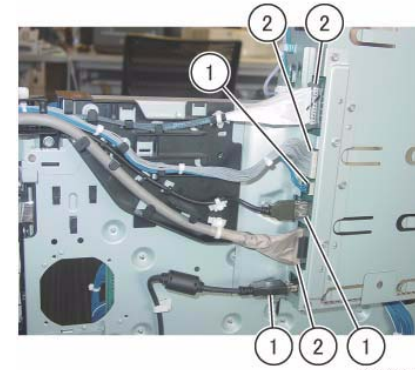
Figure 1 Pull out the Control Unit

- Remove the Rear Upper Cover. (PL 19.3)
- Remove the SBC Cover. (Figure 2)
  - Remove the screw (x2).
  - Remove the SBC Cover in the direction of the arrow.



j0kt41806

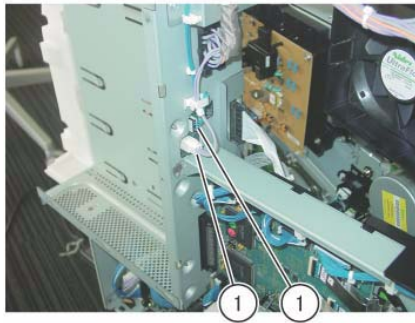
**Figure 2 Remove the SBC Cover**



j0kt41808

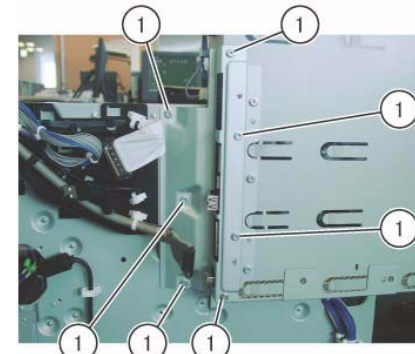
**Figure 4 Disconnect the connector of the BP PWB**

6. Open the PWB Chassis Unit.
7. Disconnect the connector of the BP PWB. (Figure 3)
  - a. Disconnect the connectors (x2).



j0kt41807

**Figure 3 Disconnect the connector of the BP PWB**



j0kt41809

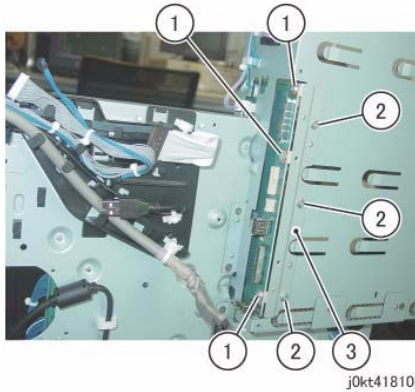
**Figure 5 Remove the Bracket**

9. Remove the Bracket. (Figure 5)
  - a. Remove the screws (x7).
  - b. Remove the Bracket.

8. Disconnect the connector of the BP PWB. (Figure 4)
  - a. Disconnect the connectors (x3).
  - b. Release the hook and disconnect the connectors (x3).

**NOTE:** Take care to not pull too forcefully as it may damage the hook.

10. Remove the Bracket. (Figure 6)
  - a. Remove the screw (x3) that secure the BP PWB.
  - b. Remove the screw (x3) that secure the bracket.
  - c. Remove the Bracket.

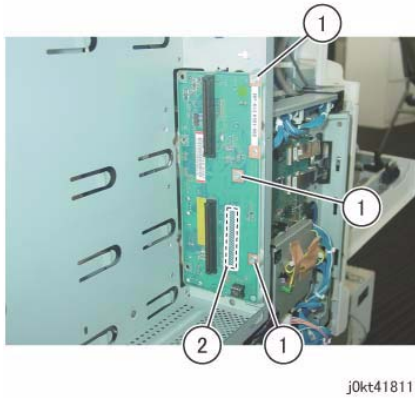


**Figure 6 Remove the Bracket**



**Figure 8 Remove the EEPROM from the old BP PWB**

11. Remove the BP PWB. (Figure 7)
  - a. Remove the screws (x3).
  - b. Disconnect the connector at the back of the BP PWB and remove the BP PWB.



**Figure 7 Remove the BP PWB**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the BP PWB, remove the EEPROM from the old BP PWB and install it onto the new one. (Figure 8)



## REP 1.4 (SCC) Motor Driver Sub PWB

Parts List on [PL 18.2A/PL 18.2B](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

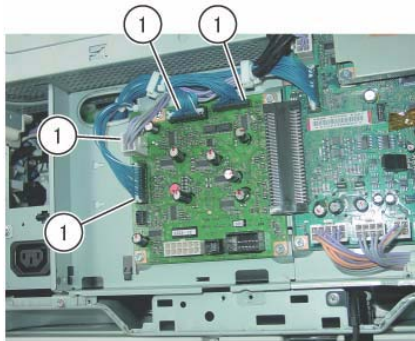
#### CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

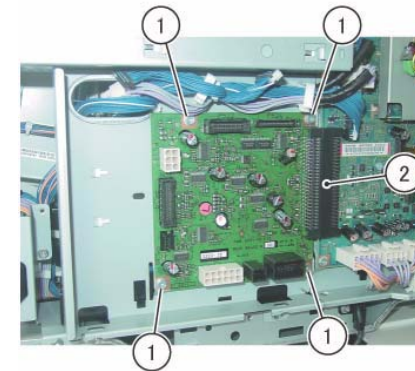
Do not get yourself hurt by a soldered part on the back of the PWB.

1. Remove the IIT Rear Cap Cover. (PL 1.1)
2. Remove the Control Unit Connector Cover. (PL X.X)
3. Remove the Filter Cover. (PL X.X)
4. Remove the Rear Upper Cover. (PL X.X)
5. Remove the MCU Cover. (PL X.X)
6. Remove the Rear Lower Cover. (PL X.X)
7. Disconnect the Motor Driver Sub PWB connectors (x4). (Figure 1)
  - a. Disconnect the connector (x4).



j0kt41813

Figure 1 Disconnect the Motor Driver Sub PWB connectors



j0kt41814

Figure 2 Remove the Motor Driver Sub PWB

### Replacement

1. To install, carry out the removal steps in reverse order.

8. Remove the Motor Driver Sub PWB. (Figure 2)
  - a. Remove the screw (x4).
  - b. Disconnect the connector and remove the Motor Driver Sub PWB.

## REP 1.5 (SCC) (ISC) MCU-PF PWB

Parts List on [PL 18.2A/PL 18.2B](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

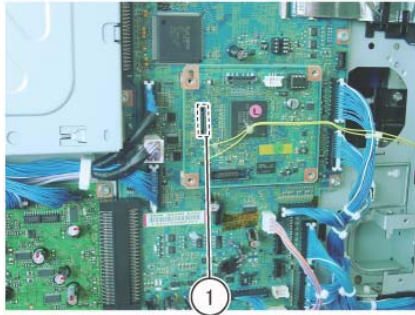
Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

**NOTE:** Do not replace the MCU-PF PWB, BP PWB and SD Card at the same time because they contain information such as Billing.

1. Remove the IIT Rear Cap Cover. (PL X.X)
2. Remove the Control Unit Connector Cover. (PL X.X)
3. Remove the Filter Cover and Rear Upper Cover. (PL X.X)
4. Remove the Rear Lower Cover. (PL X.X)
5. Remove the MCU-PF PWB. (Figure 1)
  - a. Disconnect the connector at the back of the MCU-PF PWB and remove the MCU-PF PWB.



j0kt41816

Figure 1 Remove the MCU-PF PWB

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 1.6 (SCC) (ISC) Motor Driver Main PWB

Parts List on [PL 18.2A/PL 18.2B](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

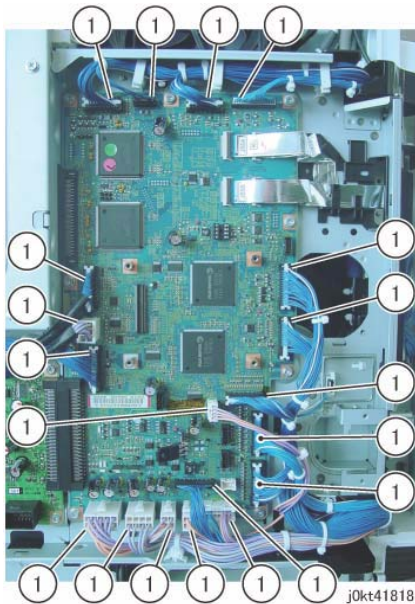
Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

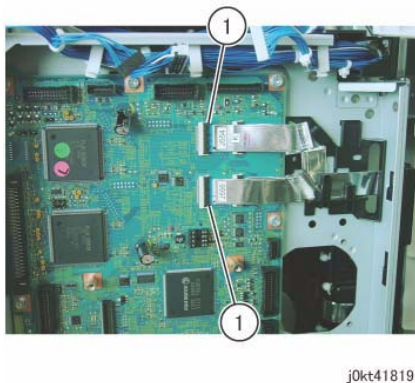
1. Remove the IIT Rear Cap Cover. (PL X.X)
2. Remove the Control Unit Connector Cover. (PL X.X)
3. Remove the Filter Cover. (PL X.X)
4. Remove the Rear Upper Cover. (PL X.X)
5. Remove the MCU Cover. (PL X.X)
6. Remove the Rear Lower Cover. (PL X.X)
7. Remove the MCU-PF PWB. (REP 1.5)
8. Disconnect the Motor Driver Main PWB connectors (x19). (Figure 1)
  - a. Disconnect the connector (x19).





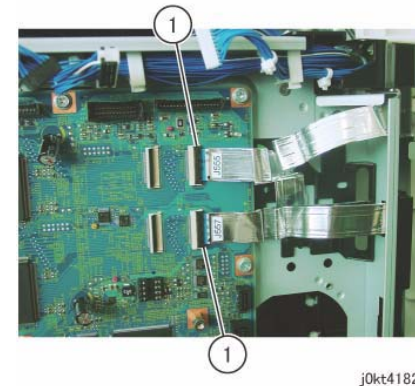
**Figure 1 Disconnect the Motor Driver Main PWB connectors**

9. Disconnect the Flexible Print Cables (x2). (Figure 2)
  - a. Disconnect the Flexible Print Cable (x2).



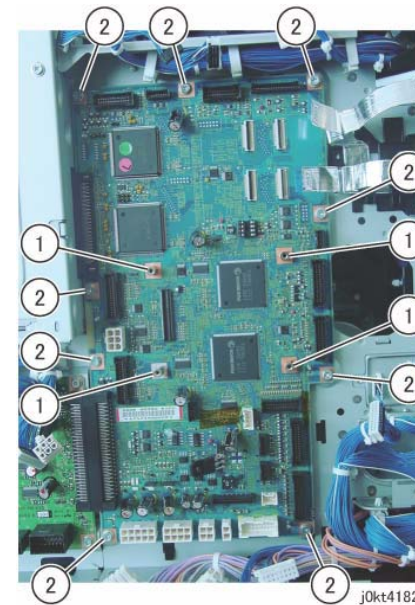
**Figure 2 Disconnect the Flexible Print Cables**

10. Disconnect the Flexible Print Cables (x2). (Figure 3)
  - a. Disconnect the Flexible Print Cable (x2).



**Figure 3 Disconnect the Flexible Print Cables**

11. Remove the screws (x13) that secure the Motor Driver Main PWB. (Figure 4)
  - a. Remove the Spacer Screw (x4).
  - b. Remove the screw (x4).



**Figure 4 Remove the screws**

12. Remove the Motor Driver Main PWB. (Figure 5)
  - a. Disconnect the connector (x2) and remove the Motor Driver Main PWB.

## REP 1.7 (SCC) IH Driver PWB (7830/7835)

Parts List on [PL 18.3](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

1. Open the PWB Chassis Unit. ([REP 1.14](#))
2. Remove the IIT Rear Cover. ([REP X.X](#))
3. Disconnect the connector of the IH Driver PWB. ([Figure 1](#))
  - a. Remove the cable band.
  - b. Disconnect the connector (x2).

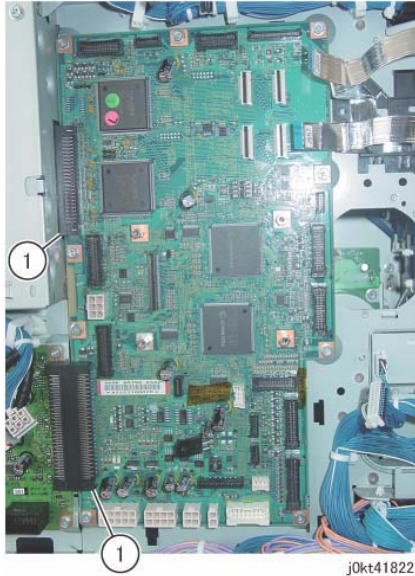


Figure 5 Remove the Motor Driver Main PWB

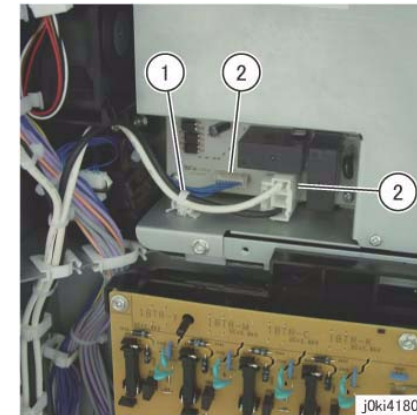


Figure 1 Disconnect the connector of the IH Driver PWB

### Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the Motor Drive Main PWB, remove the EEPROM from the old Motor Drive Main PWB and install it onto the new one. ([Figure 6](#))

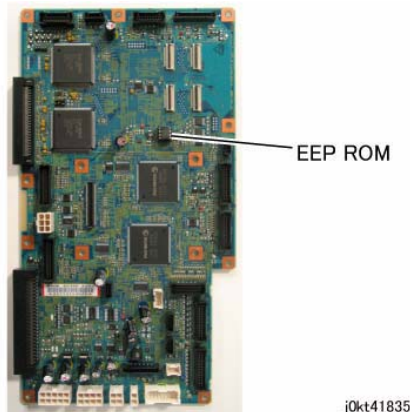
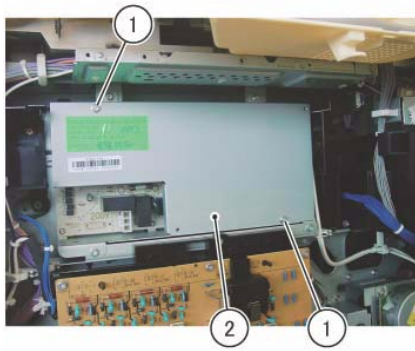


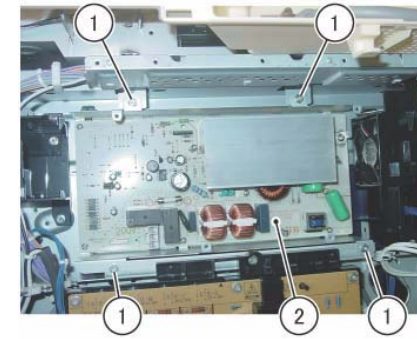
Figure 6 Remove the EEPROM

4. Remove the cover of the IH Driver PWB. ([Figure 2](#))
  - a. Remove the screw (x2).
  - b. Remove the cover of the IH Driver PWB.



j0kt41823

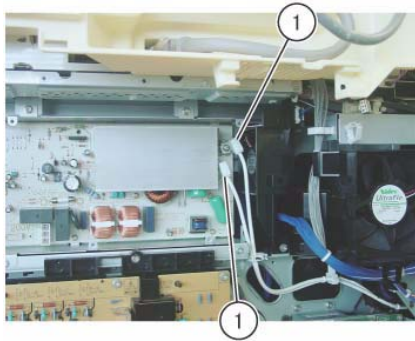
**Figure 2 Remove the cover of the IH Driver PWB**



j0kt41825

**Figure 4 Remove the IH Driver PWB**

5. Disconnect the connector (x2) of the IH Driver PWB. (Figure 3)
  - a. Disconnect the connector (x2).



j0kt41824

**Figure 3 Disconnect the connector (x2) of the IH Driver PWB**

6. Remove the IH Driver PWB. (Figure 4)
  - a. Remove the screw (x4).
  - b. Remove the IH Driver PWB.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 1.8 (SCC) IH Driver PWB (7845/7855)

Parts List on [PL 18.3](#)

### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

1. Open the PWB Chassis Unit. ([REP 1.14](#))
2. Disconnect the connector of the Sub LVPS. ([Figure 1](#))
  - a. Disconnect the connector.

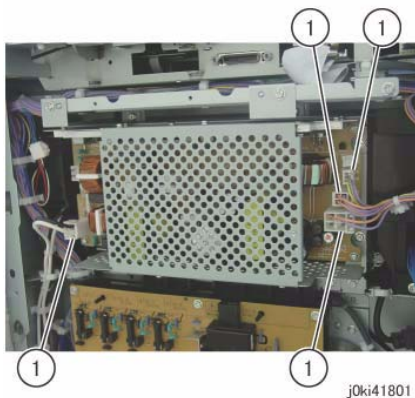


Figure 1 Disconnect the connector of the Sub LVPS

3. Remove the screws (x4) that secure the Sub LVPS. ([Figure 2](#))
  - a. Remove the screw (x4).

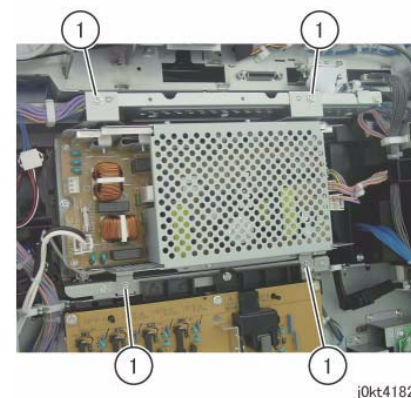


Figure 2 Remove the screws

4. Remove the Sub LVPS. ([Figure 3](#))
  - a. Raise the lower side of the Sub LVPS to remove the hook at the upper side of the Sub LVPS from the frame.

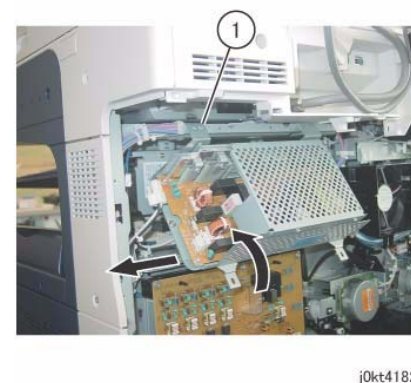
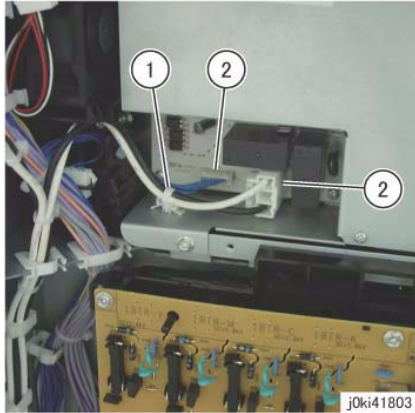


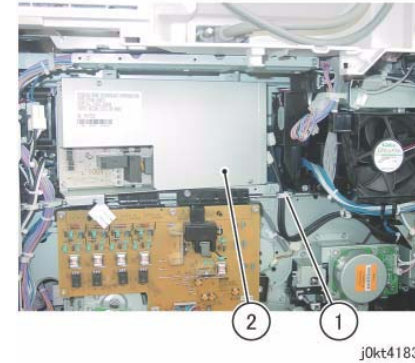
Figure 3 Remove the Sub LVPS

5. Disconnect the connector of the IH Driver PWB. ([Figure 4](#))
  - a. Remove the cable band.
  - b. Disconnect the connector (x2).



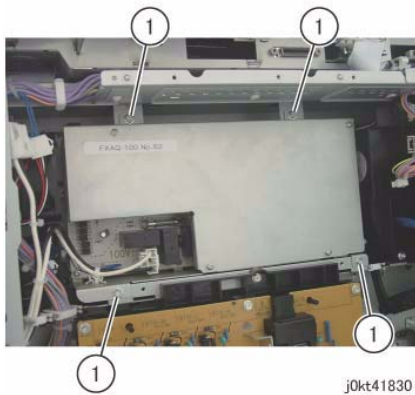


**Figure 4 Disconnect the connectors**



**Figure 6 Move the IH Driver PWB**

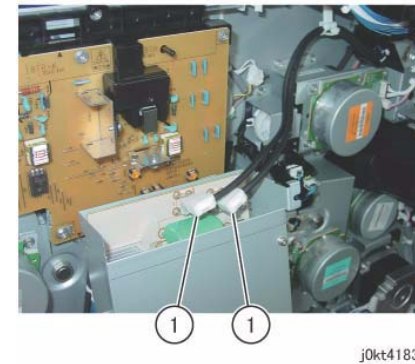
6. Remove the screws (x4) that secure the IH Driver PWB. (Figure 5)
  - a. Remove the screw (x4).



**Figure 5 Remove the screws**

7. Move the IH Driver PWB. (Figure 6)
  - a. Release the clamp to move the IH Driver PWB.

8. Disconnect the connector (x2) and remove the IH Driver PWB. (Figure 7)
  - a. Disconnect the connector (x2).



**Figure 7 Disconnect the connectors**

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 1.9 HVPS (Dev/BCR) 7830/35 HVPS (BCR)7845/55

Parts List on [PL 18.6A \(7830/35\)](#)

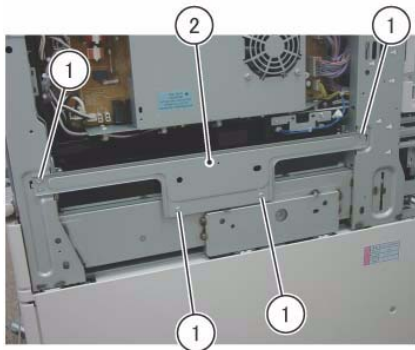
Parts List on [PL 18.6B \(7845/55\)](#)

### Removal

**NOTE:** 7845/55 HVPS (Dev) (REP 1.2)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

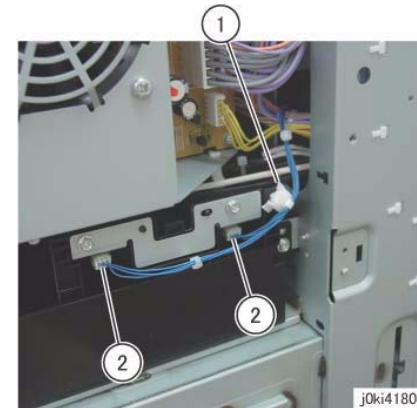
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Waste Toner Container ([PL 8.2](#))
  - Right Cover ([PL 19.3](#))
4. Remove the Tie Bar. ([Figure 1](#))
  - a. Remove the screws (x4).
  - b. Remove the Tie Bar.



j0ki41807

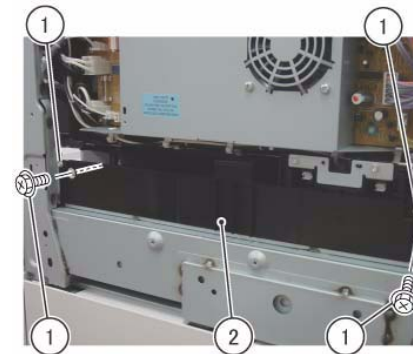
**Figure 1 Remove the Tie Bar**

5. Disconnect the connectors (x2). ([Figure 2](#))
  - a. Remove the cable band.
  - b. Disconnect the connectors (x2).



**Figure 2 Disconnect the connectors**

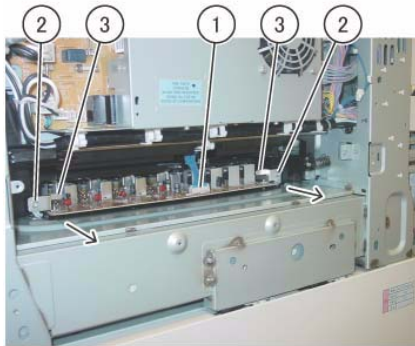
6. Remove the Bottle Guide Assembly. ([Figure 3](#))
  - a. Remove the screws (x4).
  - b. Remove the Bottle Guide Assembly.



j0ki41809

**Figure 3 Removing the Bottle Guide Assembly**

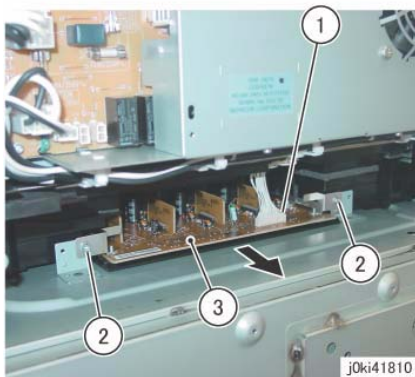
7. [7830/35]:  
Remove the HVPS (Dev/BCR). ([Figure 4](#))
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Hold onto the tabs (x2) of the Bracket and pull out the HVPS (Dev/BCR) in the direction of the arrow.



j0ki41830

**Figure 4 Remove the HVPS (Dev/BCR)**

8. [7845/55]:  
Remove the HVPS (BCR). (Figure 5)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Pull out and remove the HVPS (BCR).



j0ki41810

**Figure 5 Remove the HVPS (BCR)**

## Replacement

1. To install, carry out the removal steps in reverse order.

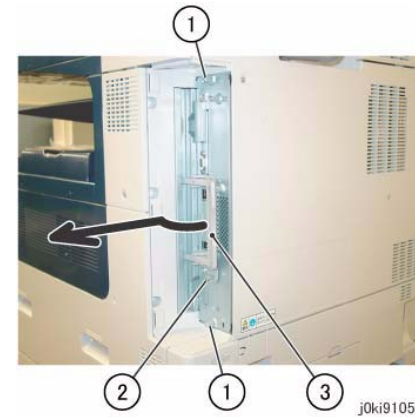
## REP 1.10 SBC Unit

Parts List on [PL 35.1](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Ethernet Cable and the SBC Unit Connector Cover. (PL 19.3)
4. Disconnect all cables connected to the Control Unit.
5. Pull out the SBC Unit. (Figure 1)
  - a. Loosen the Thumbscrews (x2).
  - b. Loosen the handle Thumbscrew.
  - c. Open the handle and pull out the SBC Unit.



j0ki91051

**Figure 1 Pull out the SBC Unit**

## REP 1.11 SBC SD Card

### Parts List on [PL 35.2](#)

#### Preparation

1. If possible, go to [dC361](#) and save NVM.
2. If possible, go to [GP 13](#) and Clone Network Configurations.
3. If possible, print a configuration page.
4. If possible, record the Billing Meter contents. Replacing the SBC SD Card will clear the Billing meters. You will need to report this ([GP 20](#)).

#### Removal

#### CAUTION

Serial number data is stored at three locations:

- MDM NVM PWB
- SBC SD Card
- IIT/IPS PWB.

If these boards are replaced one-at-a-time, the machine will automatically synchronize the data on the new PWB to match the other two. You must install the new PWB, switch on the power, wait for the numbers to synchronize, then switch off the power before replacing any other PWB.:

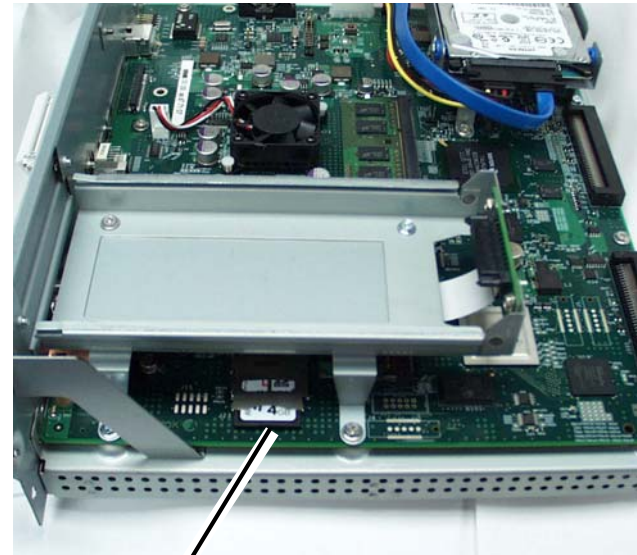
If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:

- 16-801.19
- 22-352

then you must perform [dC132](#) to restore serial numbers/billing data.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Control Unit. ([REP 1.10](#))
4. Remove the SD Card ([Figure 1](#)) by pushing in the card and releasing it to release the latch, then pulling it out after it ejects.



- 1 Remove the SD Card.

Figure 1 Removing the SD Card

#### Replacement

**NOTE:** When replacing the SD Card the machine will boot up in manufacturing mode. To change to a different mode please see below.

1. Install the SD Card ([Figure 1](#)) by pushing it in until it seats.
2. After reassembling the machine, switch on the power and run the install Wizard
  - a. Enter the **UI Diagnostic (CSE) Mode**.
  - b. Select the **Adjustments** tab, then select [dC131](#) NVM Read/Write.
  - c. Change 616-014 to a value of 2 and reboot the machine.
3. Perform [GP 9](#)
4. Restore NVM ([dC361](#)).
5. Report Billing Meter resets ([GP 20](#)).

**NOTE:** Enablement of optional features may be lost when the SD Card is replaced. Go to [GP 13](#) and restore Cloned Network Configurations.



## REP 1.12 Single Board Controller (SBC) PWB

Parts List on [PL 35.2](#)

### Preparation

#### CAUTION

The AltBoot procedure ([GP 9](#)) that is required when replacing this component will delete all stored data on the System Disk Drive, including E-mail addresses, Xerox Standard Accounting data, and network configuration information. **ALWAYS** clone the machine ([GP 13](#)), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.

1. If possible, go to [dC361](#) and save NVM to a USB drive.
2. If possible, print a configuration page.
3. If possible, go to [GP 13](#) and clone the network configuration.

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

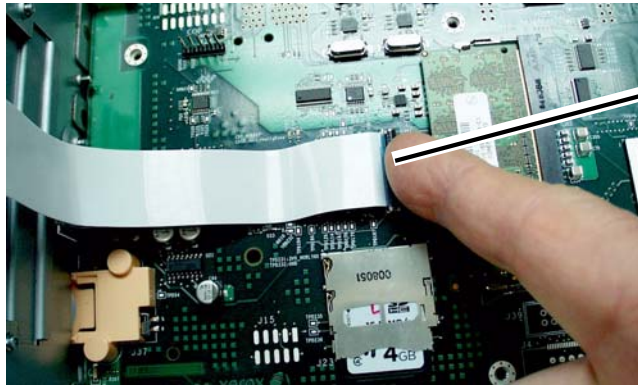
1. Press the **Job Status** button to check that there are no jobs in progress. If there are any jobs in progress, if possible wait until they complete, or inform the customer that the jobs will be lost.
2. Switch off the power and disconnect the power cord.
3. Remove the SBC Unit. ([REP 1.10](#))
4. Remove the FAX PWB if present.
5. Remove the Fax PWB chassis ([Figure 1](#)).

1  
Remove the screws securing the Fax PWB Chassis (4).



Figure 1 Remove the Fax PWB and PWB chassis

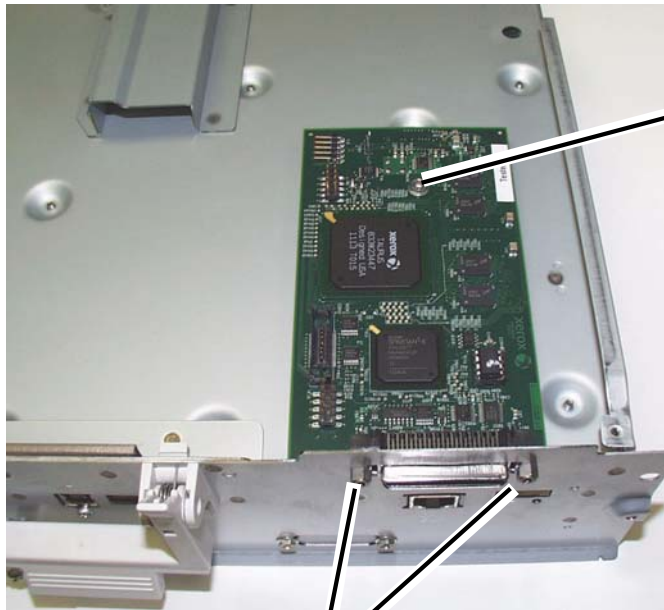
6. Disconnect the Fax chassis ribbon cable ([Figure 2](#)).



1  
Lift the tab  
and remove  
cable

Figure 2 Remove the Ribbon Cable

7. Remove the System Disk Drive (REP 1.13)
8. Remove the PXYIS PWB (7845/55) (Figure 3).



Remove the  
screw

Remove the  
screws (2)

Figure 3 Remove the PXYIS PWB (7845/55)

**NOTE:** RAM modules are not interchangeable; take note of the correct location for each.

9. Remove the System Memory and EPC Memory from the SBC PWB (Figure 4).

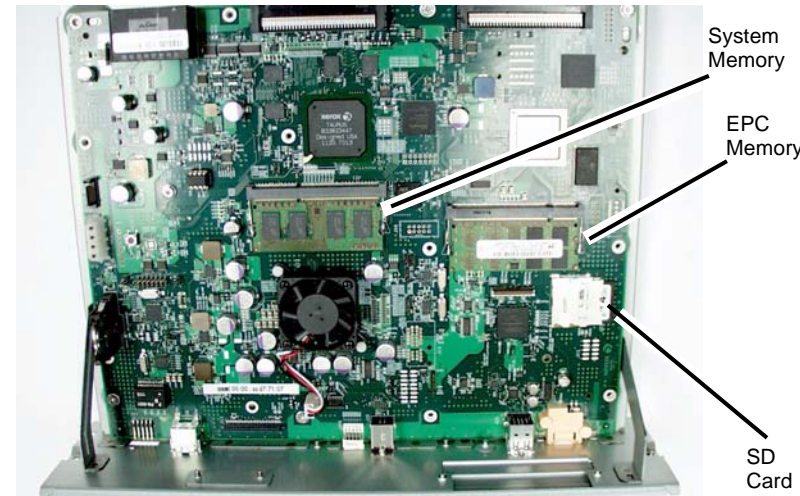


Figure 4 Removing the memory PWBs

10. Remove the SD Card from the SBC PWB (REP 1.11).
11. Remove the SIM Card from the SBC PWB (REP 1.15).

### Replacement

1. Install the SIM Card onto the new SBC PWB (REP 1.15).
2. Install the SD Card onto the new SBC PWB (REP 1.11).
3. Install the System Memory and EPC Memory onto the new SBC PWB (Figure 4).
4. Install the PXYIS PWB (7845/55) (Figure 3).
5. Install the System Disk Drive (REP 1.13)
6. Install the Fax PWB chassis (Figure 2 and Figure 1).
7. After reassembling the machine, perform **Regular AltBoot** (GP 9).
8. Print a configuration page. Verify that all options are enabled.
9. Reload saved clone (GP 13).

## REP 1.13 System Disk Drive

Parts List on [PL 35.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

The AltBoot procedure ([GP 9](#)) that is required when replacing this component will delete all stored data on the System Disk Drive, including E-mail addresses, Xerox Standard Accounting data, and network configuration information. **ALWAYS** clone the machine ([GP 13](#)), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.

1. If possible, go to [GP 13](#) and clone the network configuration.
2. Press the **Job Status** button to check that there are no jobs in progress.
3. Switch off the power and disconnect the power cord.
4. Remove the SBC Unit. ([REP 1.10](#))
5. Disconnect the connectors (3) at the Disk Drive and at the PWB.



Figure 1 Disconnecting the Disk Drive Connectors (3)

6. Remove the screws (4) ([Figure 2](#)).



1  
Remove the Screws (4)

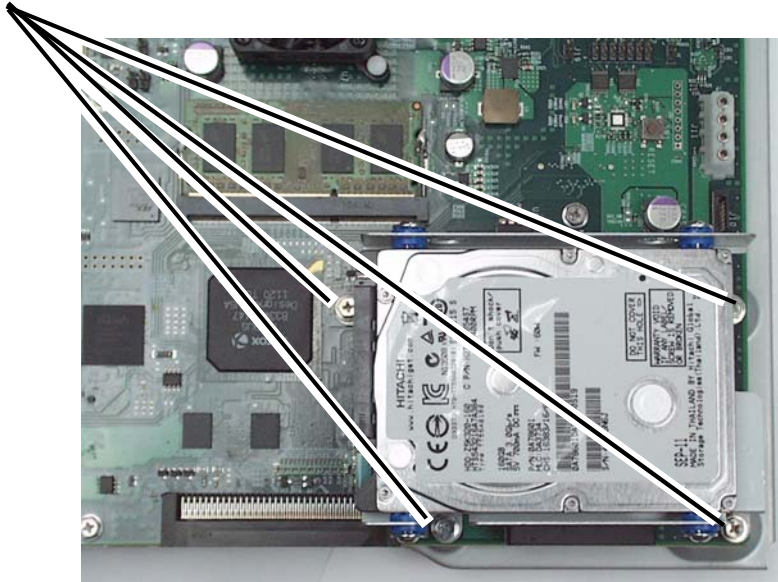


Figure 2 Removing Replacing the Disk Drive



1  
Screws (4)

Figure 3 Removing Replacing the Disk Drive from the HDD chassis

## Replacement

1. After positioning the Disk Drive inside the HDD chassis, install the 4 screws (Figure 3).

2. Connect the connector to the Disk Drive.
3. After reassembling the machine, perform **Regular AltBoot (GP 9)**.
4. Print a configuration page. Verify that all options are enabled.

## REP 1.14 Opening/Closing the PWB Chassis Unit

Parts List on [PL 18.1](#)

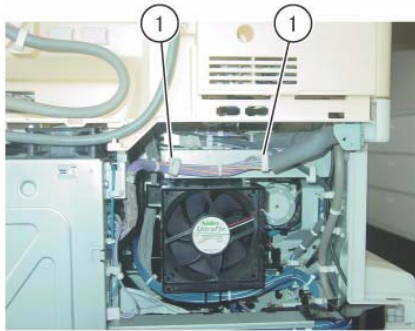
### Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

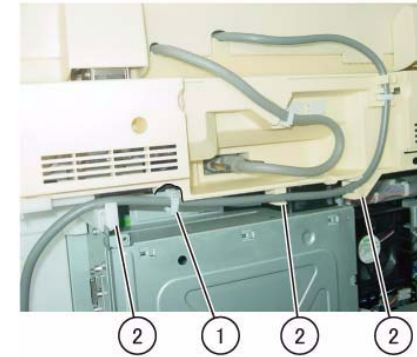
Turn OFF the main power switch and unplug the power plug.

1. Remove the Rear Upper Cover. ([PL 19.3](#))
2. Disconnect all cables connected to the SBC Unit.
3. Remove the Rear Lower Cover. ([PL 19.3](#))
4. Release the wire harness from the clamp. ([Figure 1](#))
  - a. Release the wire harness from the clamps (x2).



j0kt41801

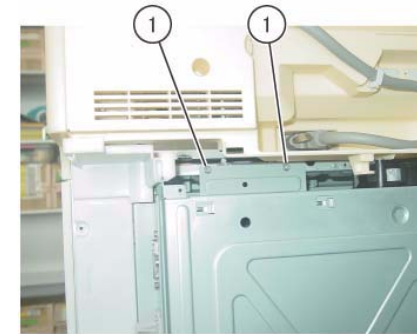
Figure 1 j0kt41801



j0kt41802

Figure 2 j0kt41802

6. Remove the screws that secure the PWB Chassis Unit. ([Figure 3](#))
  - a. Remove the screws (x2).

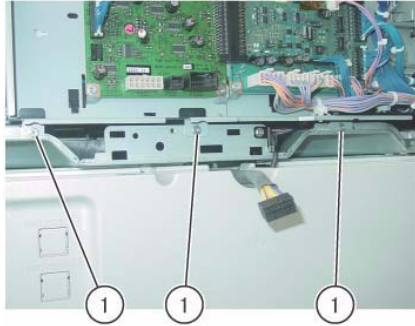


j0kt41803

Figure 3 j0kt41803

5. Remove the cable from the Cable Guide (x3). ([Figure 2](#))
  - a. Release the cable harness from the clamp.(x2).
  - b. Remove the cable from the Cable Guide (x3).

7. Remove the screws that secure the PWB Chassis Unit. ([Figure 4](#))
  - a. Remove the screws (x3).



j0kt41804

Figure 4 j0kt41804

8. Open the PWB Chassis Unit. (Figure 5)
  - a. Remove the screws (x3) and open the PWB Chassis Unit.



j0kt41805

Figure 5 j0kt41805

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 1.15 SBC SIM Card

Parts List on [PL 35.2](#)

### Preparation

If possible, print a configuration page.

### Removal

#### CAUTION

*If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:*

- *303-397 SIM Card S/N mismatch*
  - *303-398 SIM Card data cannot be processed*
  - *303-406 SIM Card Speed does not match machine class*
  - *322-350-1 SW Detects a non-valid Xerox SIM*
  - *322-350-2 SW Detects a non-valid Xerox SIM*
  - *322-351-1 SIM Write failure*
  - *322-351-2 SIM Write failure*
  - *322-351-3 SIM Write failure*
  - *No-Run RAP Machine speed information corrupted or not set*
- then you may need to obtain a replacement SIM Card (GP 26)..*

Remove the SIM Card (Figure 1) by pulling it out of the socket. There is no latch mechanism.



**1**  
Ensure that the arrows are aligned.

**Figure 1 Remove the SIM Card**

### **Replacement**

1. To replace the SIM Card, reinsert it into the slot ([Figure 1](#)). Ensure that the end of the SIM Card with the small tab is inserted into the machine first and that the arrow on the SIM Card and the arrow on the SBC PWB frame are aligned.
2. Reboot the machine.
3. If an error is encountered, it may be necessary to replace the SIM Card. [GP 26](#) provides a process for obtaining a replacement SIM Card.
4. Print a configuration page ([GP 6](#)) if one did not print when the machine restarted.
5. Verify that all customer options are correct. If they are not, it may be necessary to replace the SIM Card with one that will enable the correct options for that particular customer ([GP 26](#)).





## REP 4.1 Main Drive Assembly (7830/35)

### Parts List on PL 3.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Lower Cover. (REP 14.3)
4. Open the PWB Chassis Unit. (REP 14.4)
5. Remove the Takeaway Clutch. (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screws (x2).
  - d. Remove the Bracket and Takeaway Clutch.

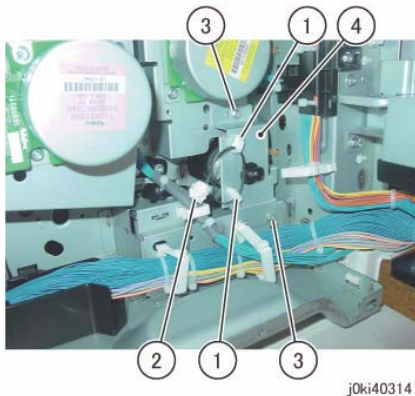


Figure 1 Remove the Takeaway Clutch

6. Remove the Main Drive Assembly. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.

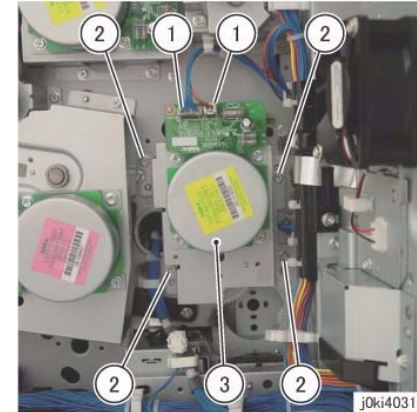


Figure 2 Remove the Main Drive Assy

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Takeaway Clutch, align the bosses (x4) of the bearing to the installation holes. (Figure 3)

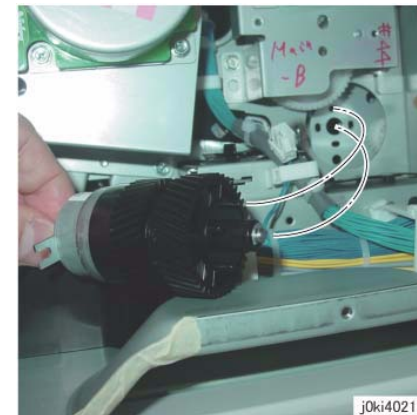


Figure 3 Install the Takeaway Clutch

3. When installing the Bracket, insert the Bracket into the tab of the Takeaway Clutch. (Figure 4)



Figure 4 Install the Bracket

## REP 4.2 Main Drive Assembly (7845/55)

### Parts List on PL 3.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Lower Cover. (REP 14.3)
4. Open the PWB Chassis Unit. (REP 14.4)
5. Remove the Takeaway Motor. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the screws (x3).
  - d. Release the clamp.
  - e. Move the wire harness in the direction of the arrow.
  - f. Remove the screw.
  - g. Remove the Takeaway Motor.

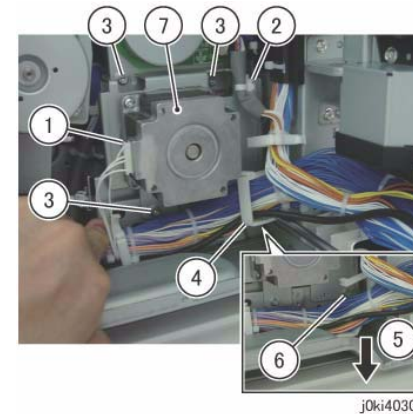
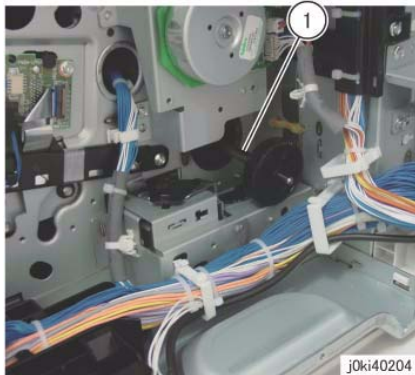


Figure 1 Remove the Takeaway Motor

6. Remove the gear and shaft. (Figure 2)
  - a. Remove the gear and shaft.



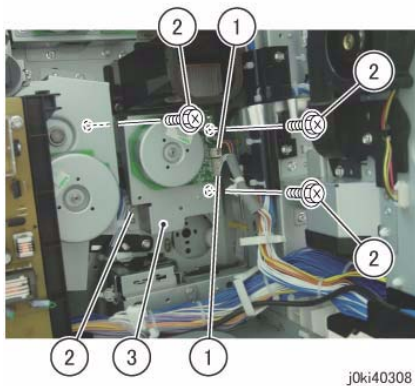
**Figure 2 Remove the gear and shaft**



**Figure 4 Install the gear and shaft**

7. Remove the Main Drive Assembly. (Figure 3)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.

3. When installing the Takeaway Motor, align the shaft to the hole of the bearing. (Figure 5)



**Figure 3 Remove the Main Drive Assy**



**Figure 5 Install the Takeaway Motor**

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the gear and shaft, align the bosses (x4) of the bearing to the installation holes. (Figure 4)

## REP 4.3 Drum/Developer Drive Assembly (7830/35)

### Parts List on PL 3.3A

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Drum (Y, M, C, K). (REP 9.5)
4. Remove the Rear Lower Cover. (REP 14.3)
5. Open the PWB Chassis Unit. (REP 14.4)
6. Remove the HVPS (06A2). (REP 1.1)
7. Move the Harness Holder. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Release the hook and move the Harness Holder.

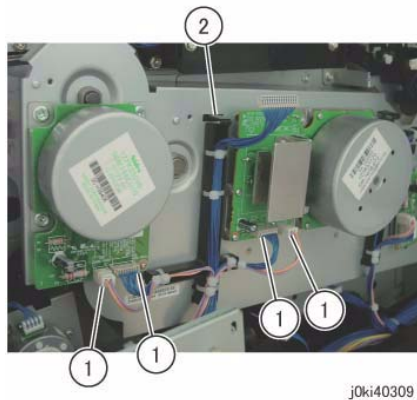


Figure 1 Move the Harness Holder

8. Move the Harness Holder. (Figure 2)
  - a. Release the wire harness from the Harness Holder.
  - b. Disconnect the connectors (x2).
  - c. Disconnect the connectors (x2).
  - d. Release the hook and move the Harness Holder.

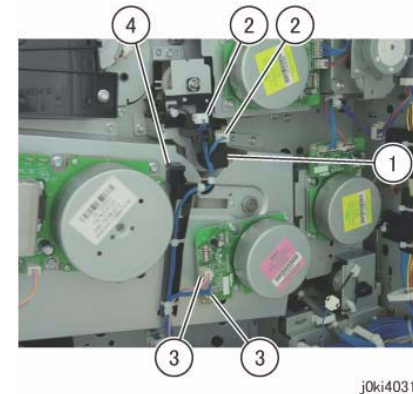


Figure 2 Move the Harness Holder

9. Remove the Rear Bottom Fan. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Rear Bottom Fan.

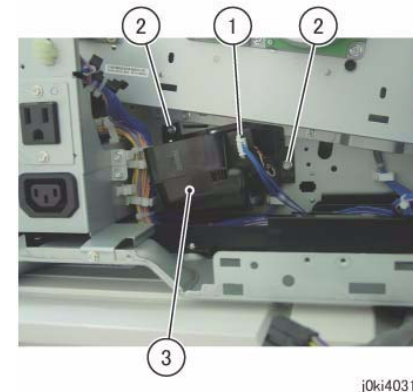
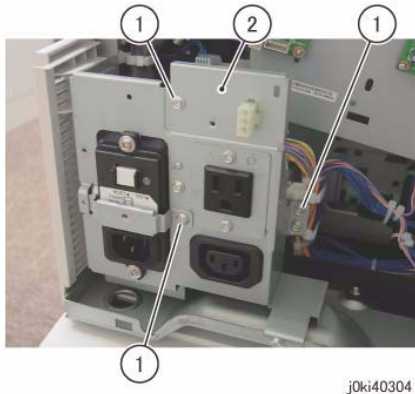


Figure 3 Remove the Rear Bottom Fan

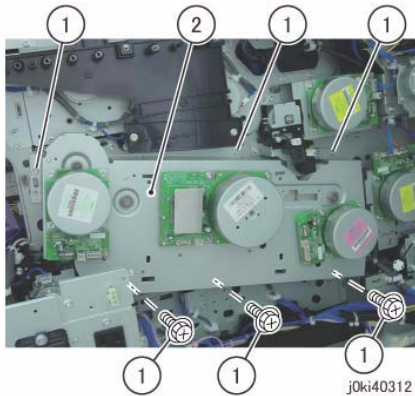
10. Slide the Bracket. (Figure 4)
  - a. Remove the screws (x3).
  - b. Slide the Bracket.



j0ki40304

**Figure 4 Slide the Bracket**

11. Remove the Drum/Dev Drive Assembly. (Figure 5)
  - a. Remove the screws (x6).
  - b. Remove the Drum/Dev Drive Assembly.



j0ki40312

**Figure 5 Remove the Drum/Dev Drive Assy**

**NOTE:** When placing the Drum/Dev Drive Assembly on the floor, place it with its Motor section facing downwards. (Figure 6)



j0ki40313

**Figure 6 Place the Motor section facing downwards**

### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 4.4 Drum/Developer Drive Assembly (7845/55)

### Parts List on PL 3.3B

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Drum (Y, M, C, K). (REP 9.5)
4. Remove the Rear Lower Cover. (REP 14.3)
5. Open the PWB Chassis. (REP 14.4)
6. Remove the LVPS (Dev). (REP 1.2)
7. Remove the HVPS (06A2). (REP 1.1)
8. Move the Harness Holder. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Release the hook and move the Harness Holder.

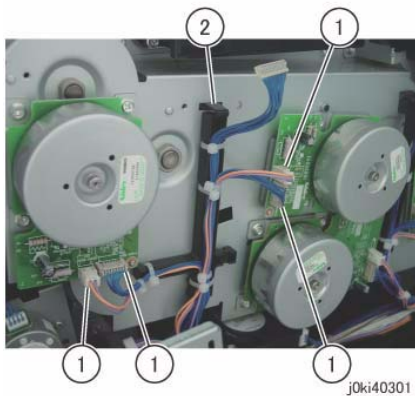


Figure 1 Move the Harness Holder

9. Move the Harness Holder. (Figure 2)
  - a. Release the wire harness from the Harness Holder.
  - b. Disconnect the connectors (x2).
  - c. Disconnect the connectors (x4).
  - d. Release the hook and move the Harness Holder.

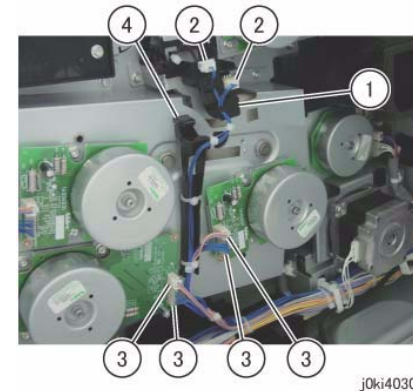


Figure 2 Move the Harness Holder

10. Remove the Rear Bottom Fan. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Rear Bottom Fan.

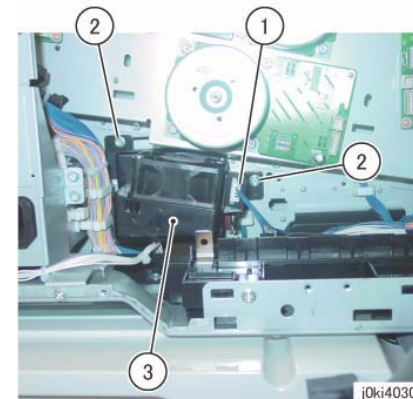
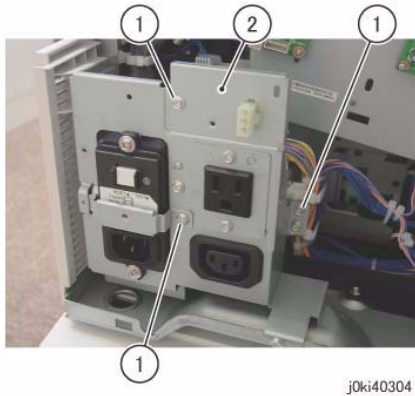


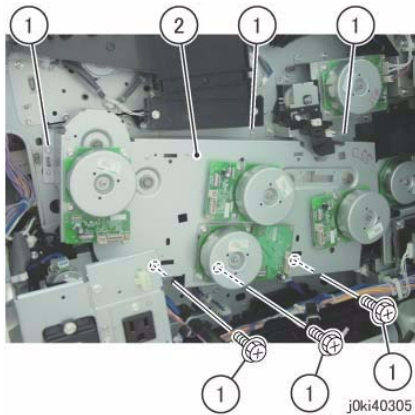
Figure 3 Remove the Rear Bottom Fan

11. Slide the Bracket. (Figure 4)
  - a. Remove the screws (x3).
  - b. Slide the Bracket.



**Figure 4 Slide the Bracket**

12. Remove the Drum/Dev Drive Assembly. (Figure 5)
  - a. Remove the screws (x6).
  - b. Remove the Drum/Dev Drive Assembly.



**Figure 5 Remove the Drum/Dev Drive Assy**

**NOTE:** When placing the Drum/Dev Drive Assembly on the floor, place it with its Motor section facing downwards. (Figure 6)



**Figure 6 Place the Motor section facing downwards**

### Replacement

1. To install, carry out the removal steps in reverse order.





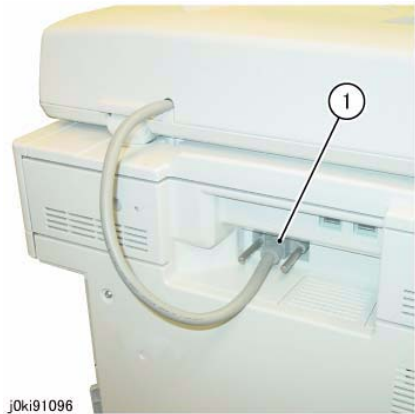
## REP 5.1 DADF (2 Pass)

### Parts List on [PL 51.1](#)

#### Removal

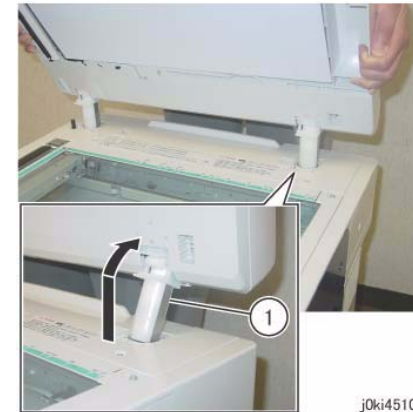
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Loosen the screws (x2) and disconnect the connector. (Figure 1)
  - a. Disconnect the connector.



**Figure 1 Disconnect the connector**

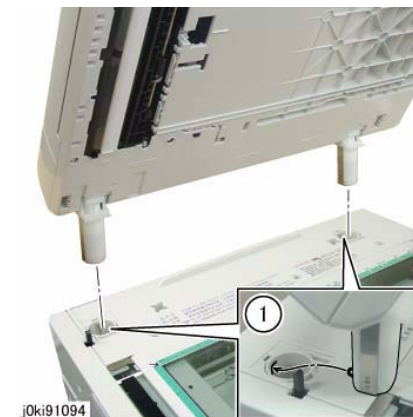
4. Remove the DADF. (Figure 2)
  - a. Tilt the Counter Balance in the direction of the arrow and remove it from the installation holes.



**Figure 2 Remove the DADF**

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the DADF. (Figure 3)
  - a. Insert the tabs of the Counter Balance into the grooves of the installation holes.



**Figure 3 Install the DADF**

3. Perform the DADF Original Detection Correction when replacing the DADF. (Refer to [ADJ 5.2 DADF Original Detection Correction](#).)

## REP 5.2 DADF Platen Cushion (2 Pass)

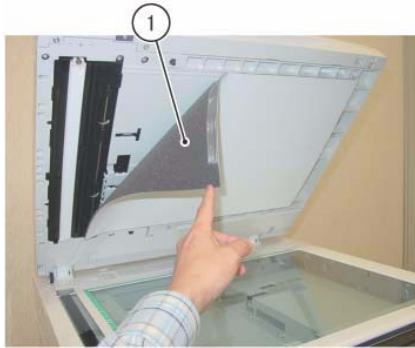
### Parts List on PL 51.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

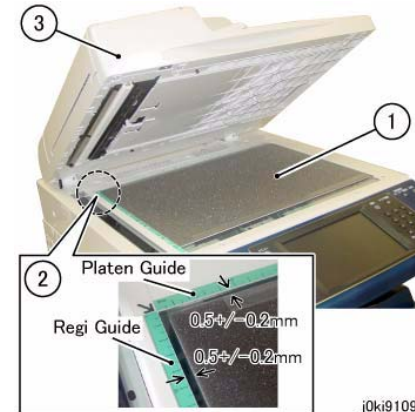
**NOTE:** The DADF Platen Cushion is pasted on with double sided adhesive tapes.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Remove the DADF Platen Cushion.



j0ki45107

Figure 1 Remove the DADF Platen Cushion



j0ki91095

Figure 2 Paste on the DADF Platen Cushion

#### Replacement

1. Paste on the DADF Platen Cushion. (Figure 2)
  - a. Place the DADF Platen Cushion on the Platen Glass.
  - b. Set the gap between the Reg Guide and Platen Guide.
  - c. Slowly lower the DADF and press it onto the DADF Platen Cushion.

## REP 5.3 DADF Front Cover (2 Pass)

Parts List on [PL 51.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Open the DADF.
5. Remove the DADF Front Cover. (Figure 1)
  - a. Remove the Tapping Screws (x4).
  - b. Remove the DADF Front Cover.

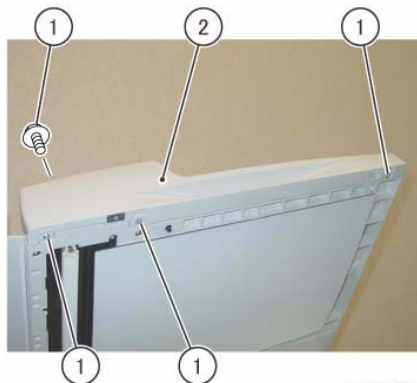


Figure 1 Remove the DADF Front Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

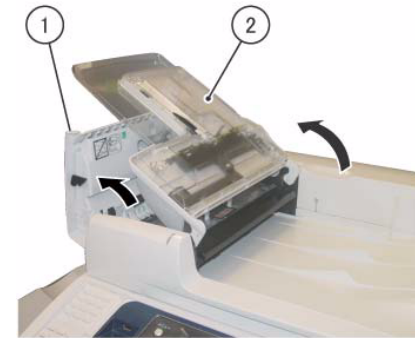
## REP 5.4 DADF Rear Cover (2 Pass)

Parts List on [PL 51.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

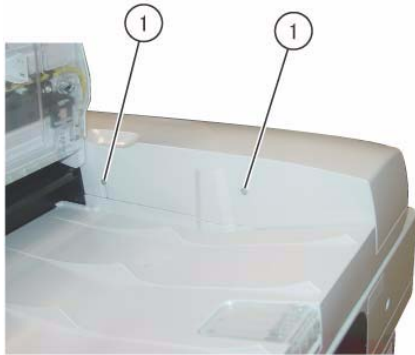
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Turn the DADF Document Tray upside down. (Figure 1)
  - a. Open the Top Cover.
  - b. Turn the DADF Document Tray upside down.



j0ki45101

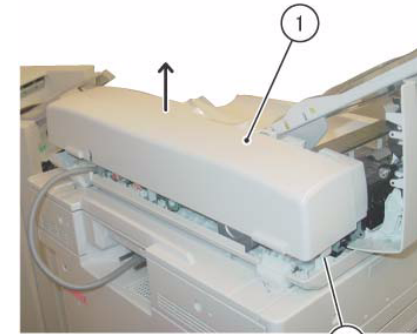
Figure 1 Turn the DADF Document Tray upside down

4. Remove the screws that secure the DADF Rear Cover. (Figure 2)
  - a. Remove the screws (x2).



j0ki45102

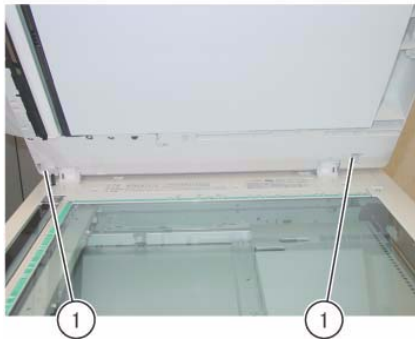
**Figure 2 Remove the screws**



j0ki45104

**Figure 4 Remove the DADF Rear Cover**

5. Open the DADF.
6. Release the hooks on the DADF Rear Cover. (Figure 3)
  - a. Release the hooks (x2).



j0ki45103

**Figure 3 Release the hooks**

7. Close the DADF gently.
8. Remove the DADF Rear Cover. (Figure 4)
  - a. Remove the DADF Rear Cover in the direction of the arrow.  
(A) Hook

### Replacement

1. To install, carry out the removal steps in reverse order.

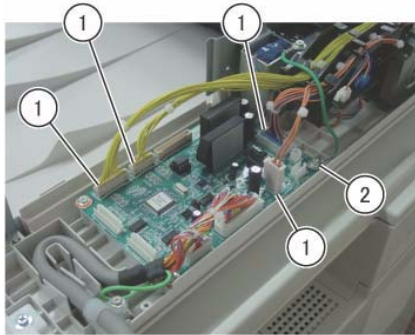
## REP 5.5 DADF Feeder Assembly (2 Pass)

### Parts List on PL 51.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

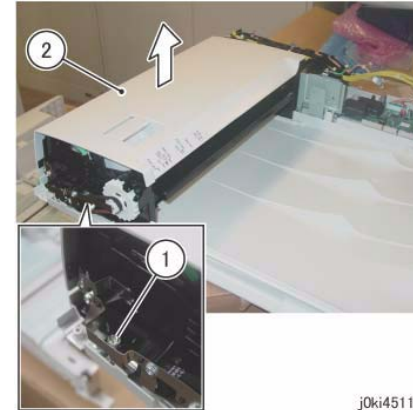
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. (REP 5.3)
4. Remove the DADF Rear Cover. (REP 5.4)
5. Remove the DADF. (REP 5.1)
6. Remove the DADF Document Tray. (REP 5.19)
7. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Remove the Tapping Screw and the Ground Wire.



j0ki45113

Figure 1 Disconnect the connectors

8. Remove the DADF Feeder Assembly. (Figure 2)
  - a. Remove the Tapping Screw.
  - b. Remove the DADF Feeder Assembly in the direction of the arrow.



j0ki45114

Figure 2 Remove the DADF Feeder Assy

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Align the positioning pin of the Base Frame and the hole of the FADF Feeder Assembly. (Figure 3)



j0ki45115

Figure 3 Align the positioning pin

3. When installing the DADF Feeder Assembly to the Base Frame, check the following A and B. (Figure 4)
  - (A) At the front: The Frame of the DADF Feeder Assembly is attached to the positioning pin of the Base Frame as shown in the figure.
  - (B) The Bracket of the DADF Feeder Assembly is attached to the support of the Base Frame as shown in the figure.

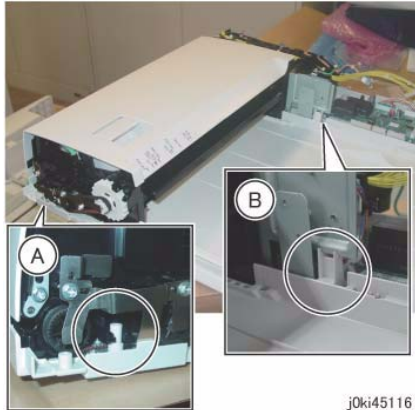


Figure 4 Check the following (A) and (B)

4. After a replacement, enter the Diagnostics Mode and use **dC135** to reset the HFSI counter.

## REP 5.6 DADF PWB (2 Pass)

Parts List on [PL 51.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

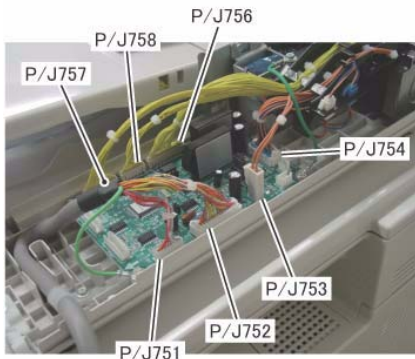
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. ([REP 5.4](#))
4. Remove the Bracket. ([PL 51.2](#))
5. Remove the DADF-IIT Cable from the guide of the Base Frame. ([Figure 1](#))



Figure 1 Remove the DADF-IIT Cable

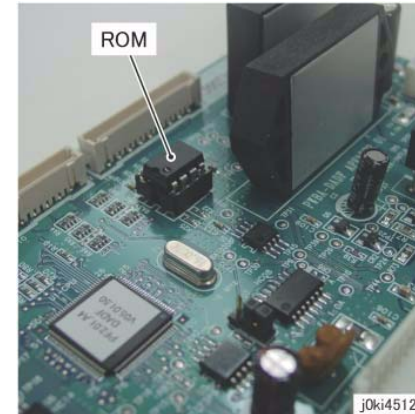
6. Disconnect the DADF PWB connectors. ([Figure 2](#))
  - a. Disconnect the connectors (x7).





j0ki45118

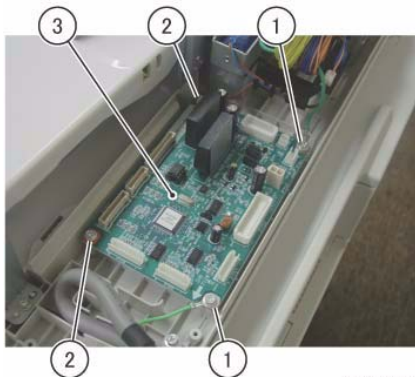
**Figure 2 Disconnect the connectors**



j0ki45120

**Figure 4 Switching the EEPROM**

7. Remove the DADF PWB. (Figure 3)
  - a. Remove the Tapping Screws (x2) and the Ground Wires (x2).
  - b. Remove the Tapping Screws (x2).
  - c. Remove the DADF PWB.
3. Check the software version. Update the version if an old software is installed in the new PWB.



j0ki45119

**Figure 3 Remove the DADF PWB**

## Replacement

1. To install, carry out the removal steps in reverse order.
2. Switch the ROM on the new PWB with the EEPROM from the old PWB. (Figure 4)  
This is because it stores the alignment value of the DADF.

## REP 5.7 Left Counter Balance (2 Pass)

### Parts List on PL 51.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

*Left/Right Counter Balance is identified by its spring pressure.*

- *Left Counter Balance: strong spring pressure*
  - *Right Counter Balance: weak spring pressure*
1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Remove the DADF Front Cover. (REP 5.3)
  4. Remove the DADF Rear Cover. (REP 5.4)
  5. Remove the DADF. (REP 5.1)
  6. Remove the DADF Document Tray. (REP 5.19)
  7. Remove the DADF Feeder Assembly. (REP 5.5)
  8. Remove the screws that secure the Tie Plate. (Figure 1)
    - a. Remove the Tapping Screw.
    - b. Remove the Ground Plate.
    - c. Remove the Tapping Screws (x2).

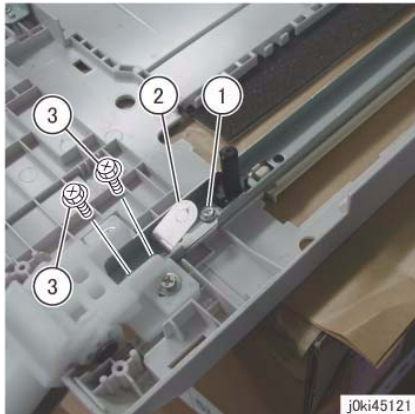


Figure 1 Remove the screws and Ground Plate

9. Remove the Left Counter Balance. (Figure 2)
  - a. Remove the Tapping Screws (Large: x2).
  - b. Remove the Left Counter Balance.

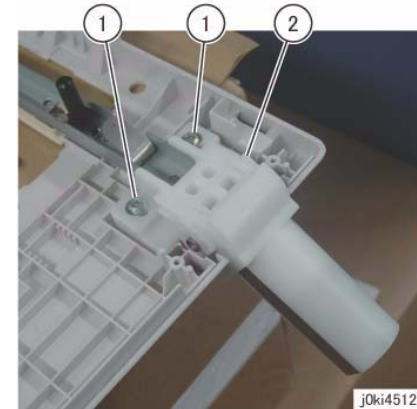


Figure 2 Remove the Left Counter Balance

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Left Counter Balance, align the hole of the Left Counter Balance to the positioning boss of the Frame. (Figure 3)

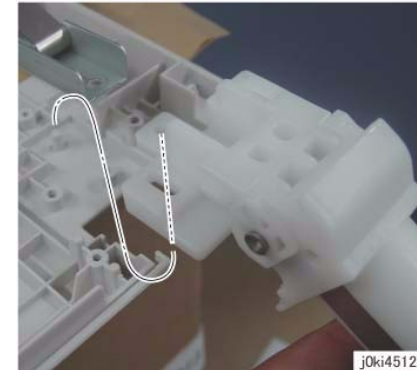


Figure 3 Installing the Left Counter Balance

3. Align the Ground Plate to the positioning boss. (Figure 4)



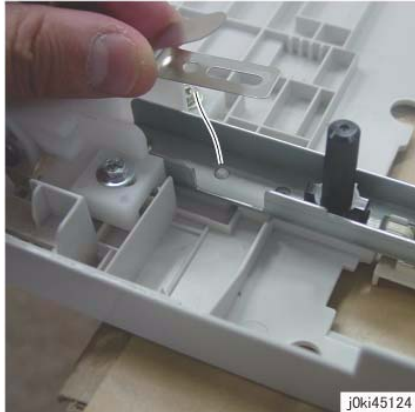


Figure 4 Align the Ground Plate

## REP 5.8 Right Counter Balance (2 Pass)

Parts List on [PL 51.3](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

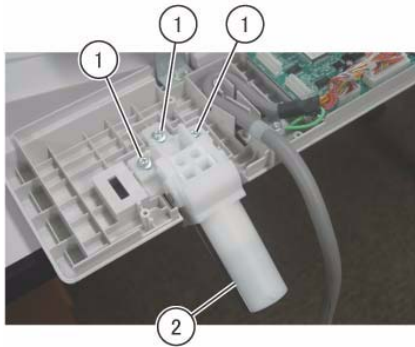
*Left/Right Counter Balance is identified by its spring pressure.*

- *Left Counter Balance: strong spring pressure*
  - *Right Counter Balance: weak spring pressure*
1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Remove the DADF Rear Cover. ([REP 5.4](#))
  4. Remove the DADF. ([REP 5.1](#))
  5. Take note of the graduation of the scale. ([Figure 1](#))



Figure 1 Note the graduation of the scale

6. Remove the Right Counter Balance. ([Figure 2](#))
  - a. Remove the Tapping Screws (Large: x3).
  - b. Remove the right Counter Balance.



j0ki45148

**Figure 2 Remove the Right Counter Balance**

### Replacement

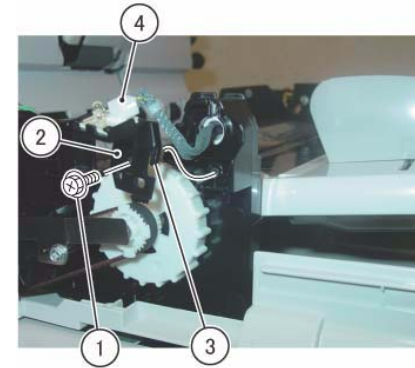
1. To install, carry out the removal steps in reverse order.
2. If it was replaced, perform checking for DADF Lead-Skew Adjustment. (ADJ 5.1)

## REP 5.9 DADF Document Tray (2 Pass)

Parts List on [PL 51.4](#)

### Removal

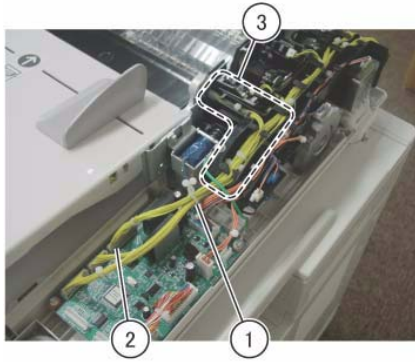
1. Remove the DADF Front Cover. (REP 5.3)
2. Remove the DADF Rear Cover. (REP 5.4)
3. Disconnect the connector of the DADF Document Set LED. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Remove the LED Bracket.
  - c. Remove the wire harness from the hook.
  - d. Disconnect the connector.



j0ki45109

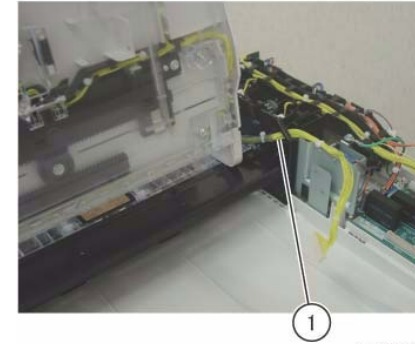
**Figure 1 Disconnect the connector**

4. Disconnect the connector. (Figure 2)
  - a. Remove the clamp.
  - b. Disconnect the connector of the P/J756.
  - c. Remove the P/J756 wire harness from the Harness Guide.



j0ki45110

**Figure 2 Disconnect the connectors**



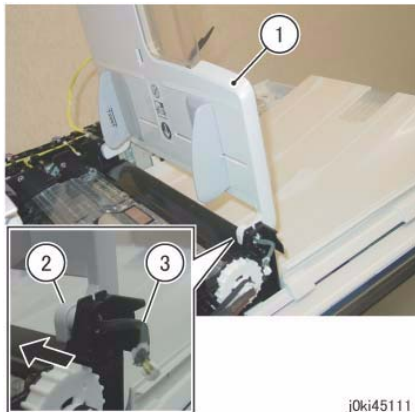
j0ki45112

**Figure 4 Remove the wire harness from the hole**

5. At the front side of the DADF Document Tray, remove the boss of the DADF Document Tray from the installation hole of the Frame. (Figure 3)
  - a. Position the DADF Document Tray vertically.
  - b. Press the boss of the DADF Document Tray in the direction of the arrow and remove it from the installation hole.
  - c. Remove the wire harness of the DADF Document Set LED from the groove of the Frame.

### Replacement

1. To install, carry out the removal steps in reverse order.



j0ki45111

**Figure 3 Remove the boss of the DADF Document Tray**

6. Pull out and remove the wire harness at the rear side of the DADF Document Tray from the hole of the Frame. (Figure 4)
  - a. Pull out and remove the wire harness through the hole on the Frame.

## REP 5.10 Top Cover (2 Pass)

Parts List on [PL 51.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Open the Top Cover.
10. Remove the Top Cover. ([Figure 1](#))
  - a. Remove the Tapping Screw.
  - b. Remove the Stud Bracket.
  - c. Remove the Top Cover.



Figure 1 Remove the Top Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 5.11 Harness Guide and Wire Harness (2 Pass)

Parts List on [PL 51.5](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Remove the Top Cover. ([REP 5.19](#))
10. Remove the wire harness from the Harness Guide. ([Figure 1](#))
  - a. Disconnect the connectors (x2).
  - b. Remove the wire harness from the Harness Guide.

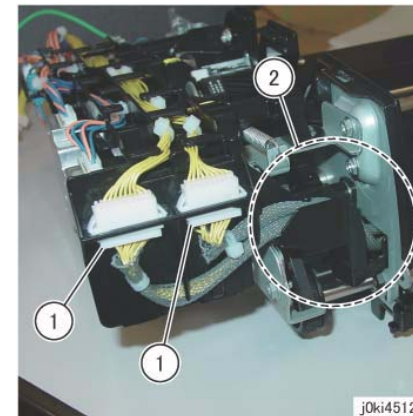
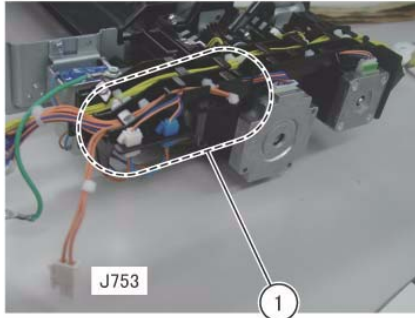


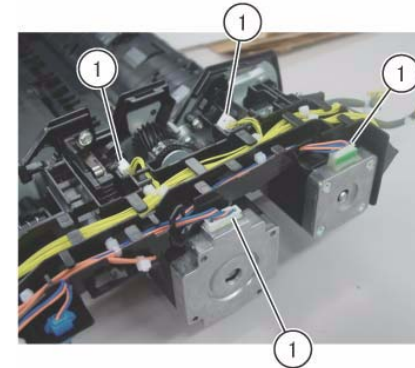
Figure 1 Remove the wire harness from the Harness Guide

11. Remove the wire harness from the Harness Guide. ([Figure 2](#))
  - a. Remove the J753 wire harness from the Harness Guide.



j0ki45128

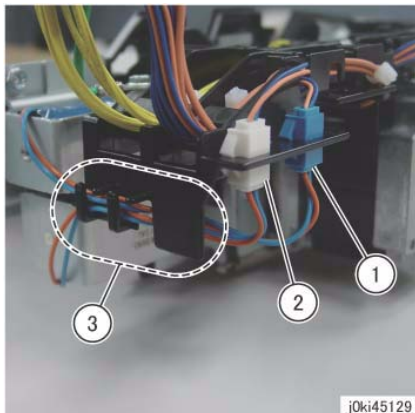
**Figure 2 Remove the wire harness from the Harness Guide**



j0ki45130

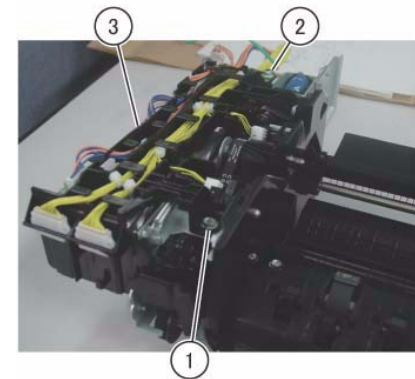
**Figure 4 Disconnect the connectors**

12. Remove the wire harness of the solenoid from the Harness Guide. (Figure 3)
  - a. Disconnect the connector (Blue).
  - b. Disconnect the connector (White).
  - c. Remove the wire harness from the Harness Guide.



j0ki45129

**Figure 3 Remove the wire harness from the Harness Guide**



j0ki45131

**Figure 5 Remove the wire harness from the Harness Guide**

13. Disconnect the connector. (Figure 4)
  - a. Disconnect the connectors (x4).

14. Remove the Harness Guide and the wire harness. (Figure 5)
  - a. Remove the screw.
  - b. Remove the screw and the Ground Wire.
  - c. Remove the Harness Guide and the wire harness.

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Hang the J753 wire harness to the hook (A). (Figure 6)  
(A)Hook

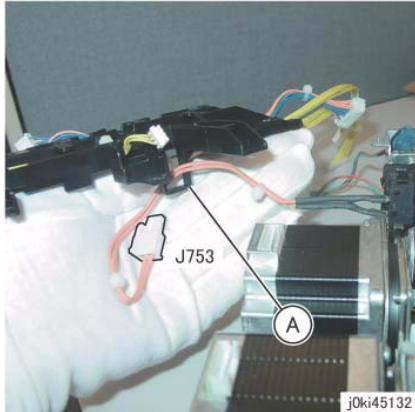


Figure 6 Hang the wire harness on the hook

## REP 5.12 DADF Registration Motor (2 Pass)

Parts List on [PL 51.5](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Remove the Top Cover. ([REP 5.19](#))
10. Remove the Harness Guide and the wire harness. ([REP 5.11](#))
11. Remove the DADF Reg Motor. ([Figure 1](#))
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Reg Motor.

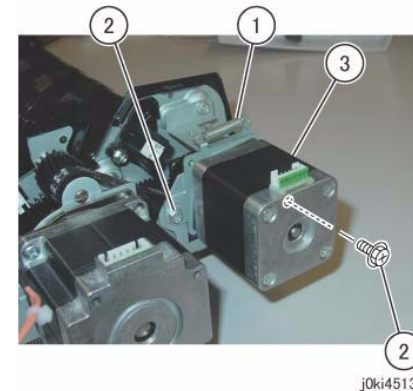
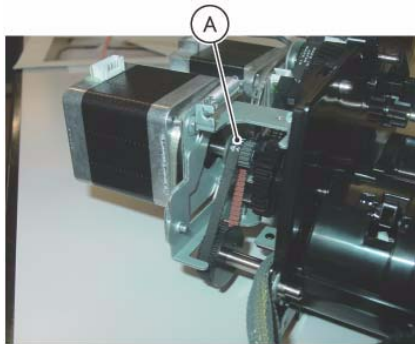


Figure 1 Remove the DADF Reg Motor

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Belt (A) to the Pulley of the DADF Reg Motor. ([Figure 2](#))  
(A)Belt





j0ki45135

**Figure 2 Install the Belt**

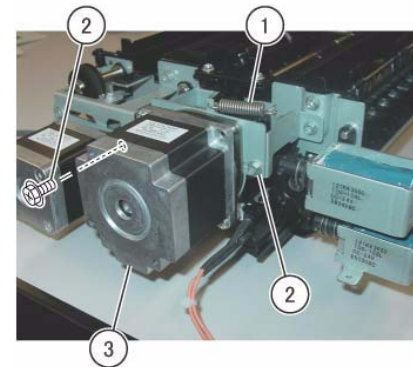
## REP 5.13 DADF Feed Motor (2 Pass)

Parts List on [PL 51.5](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Remove the Top Cover. ([REP 5.19](#))
10. Remove the Harness Guide and the wire harness. ([REP 5.11](#))
11. Turn the DADF Feeder Assembly upside down.
12. Remove the DADF Feed Motor. ([Figure 1](#))
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Feed Motor.



j0ki45136

**Figure 1 Remove the DADF Feed Motor**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Belt to the Pulley of the DADF Feed Motor. ([Figure 2](#))

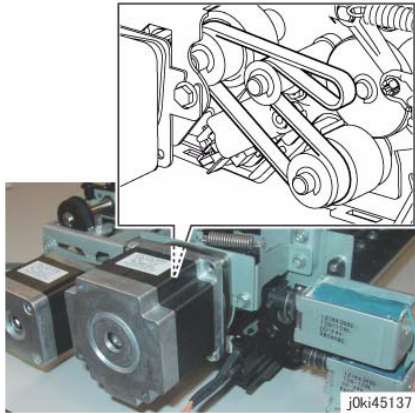


Figure 2 Install the Belt

## REP 5.14 Reg Chute (2 Pass)

Parts List on [PL 51.8](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Turn the DADF Feeder Assembly upside down.
9. Remove the Reg Chute. ([Figure 1](#))
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Reg Chute.

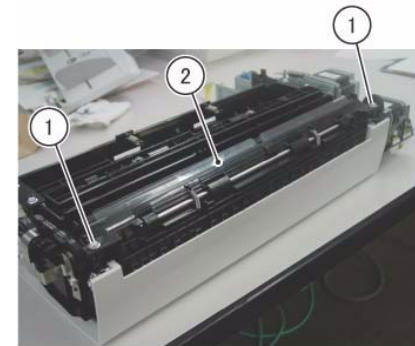


Figure 1 Remove the Reg Chute

### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 5.15 Retard Chute (2 Pass)

Parts List on [PL 51.8](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF Document Tray. ([REP 5.19](#))
6. Open the Retard Chute.
7. Remove the Retard Chute. ([Figure 1](#))
  - a. Remove the Retard Chute in the direction of the arrow.

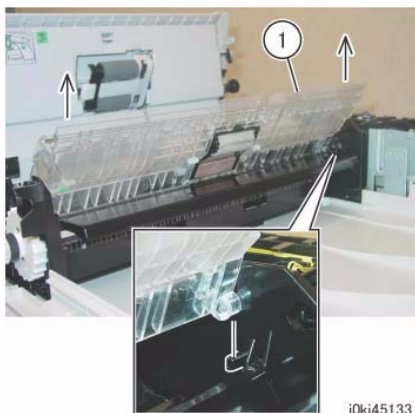


Figure 1 Remove the Retard Chute

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 5.16 Takeaway Roll (2 Pass)

Parts List on [PL 51.9](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Remove the Top Cover. ([REP 5.19](#))
10. Remove the Harness Guide and the wire harness. ([REP 5.11](#))
11. Loosen the Belt tension of the DADF Reg Motor. ([Figure 1](#))
  - a. Loosen the screws (x2).

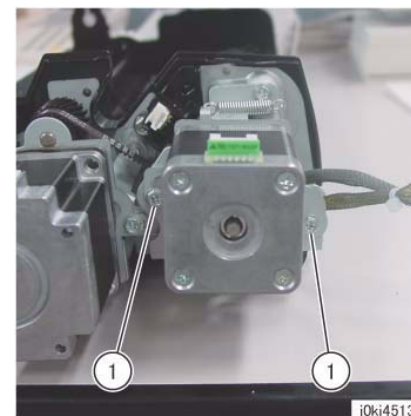
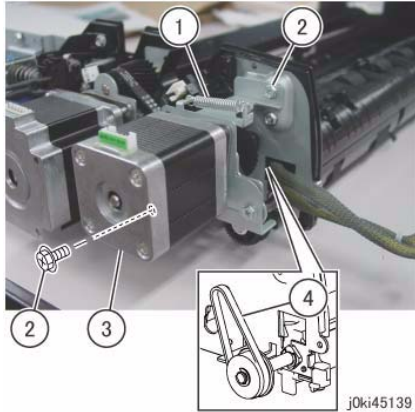
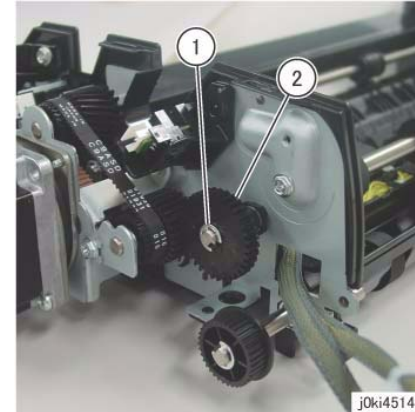


Figure 1 Loosen the Belt tension

12. Remove the DADF Reg Motor and the Bracket. ([Figure 2](#))
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Reg Motor and the Bracket.
  - d. Remove the Belt.

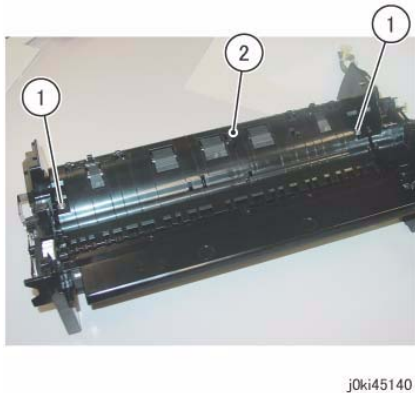


**Figure 2 Remove the DADF Reg Motor and Bracket**

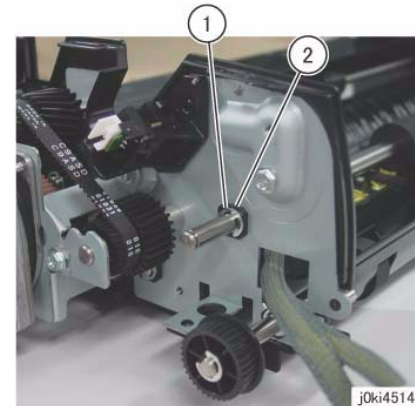


**Figure 4 Remove the gear**

13. Remove the Invert Chute. (Figure 3)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Invert Chute.



**Figure 3 Remove the Invert Chute**

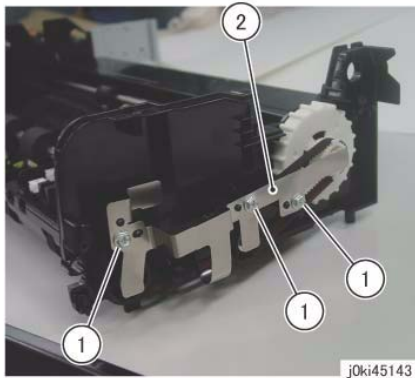


**Figure 5 Remove the bearing**

14. Remove the gear at the rear. (Figure 4)
  - a. Remove the E-Clip.
  - b. Remove the gear.

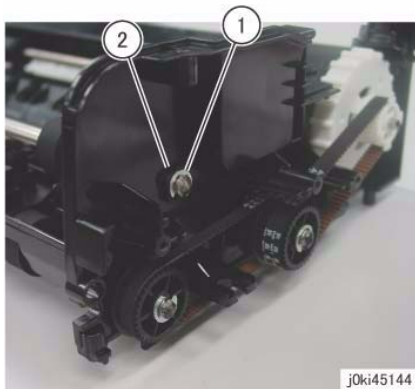
15. Remove the bearing at the rear. (Figure 5)
  - a. Remove the E-Clip.
  - b. Remove the bearing.

16. Remove the Ground Plate at the front. (Figure 6)
  - a. Remove the Tapping Screws (x3).
  - b. Remove the Ground Plate.



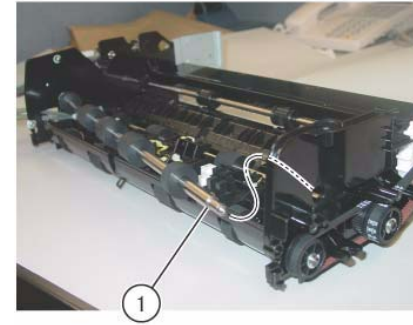
**Figure 6 Remove the Ground Plate**

17. Remove the bearing at the front. (Figure 7)
  - a. Remove the E-Clip.
  - b. Remove the bearing.



**Figure 7 Remove the bearing**

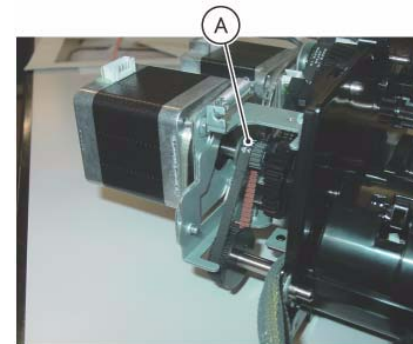
18. Remove the Takeaway Roll. (Figure 8)
  - a. Remove the Takeaway Roll.



**Figure 8 Remove the Takeaway Roll**

### Replacement

1. To install, carry out the removal steps in reverse order.
  2. Install the Belt (A) to the Pulley of the DADF Reg Motor. (Figure 9)
- (A) Belt



**Figure 9 Install the Belt**

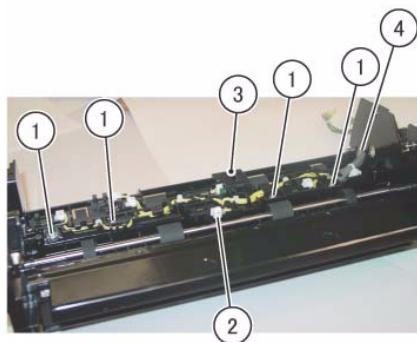
## REP 5.17 Sensor Bracket (2 Pass)

Parts List on [PL 51.9](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 5.3](#))
4. Remove the DADF Rear Cover. ([REP 5.4](#))
5. Remove the DADF. ([REP 5.1](#))
6. Remove the DADF Document Tray. ([REP 5.19](#))
7. Remove the DADF Feeder Assembly. ([REP 5.5](#))
8. Remove the Reg Chute. ([REP 5.14](#))
9. Remove the Top Cover. ([REP 5.19](#))
10. Remove the Harness Guide and the wire harness. ([REP 5.11](#))
11. Remove the Takeaway Roll. ([REP 5.16](#))
12. Remove the Sensor Bracket. ([Figure 1](#))
  - a. Remove the Tapping Screws (x4).
  - b. Disconnect the connector.
  - c. Remove the Sensor Bracket.
  - d. Pull out and remove the wire harnesses (x2) through the hole on the Frame.



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**Figure 1 Remove the Sensor Bracket**

### Replacement

1. To install, carry out the removal steps in reverse order.

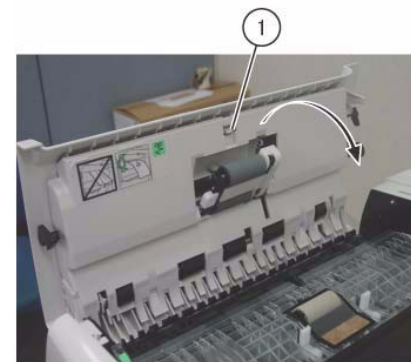
## REP 5.18 Nudger Roll, Feed Roll (2 Pass)

Parts List on [PL 51.12](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

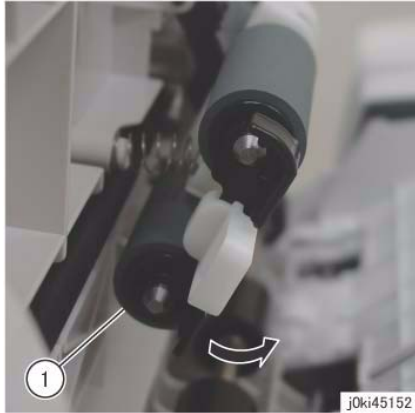
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Open the Feed Upper Chute. ([Figure 1](#))
  - a. Release the hook and open the Feed Upper Chute.



j0ki45151

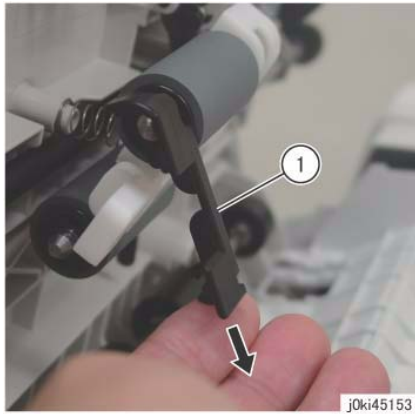
**Figure 1 Open the Feed Upper Chute**

5. Shift the housing. ([Figure 2](#))
  - a. Release the hook and shift the housing in the direction of the arrow.



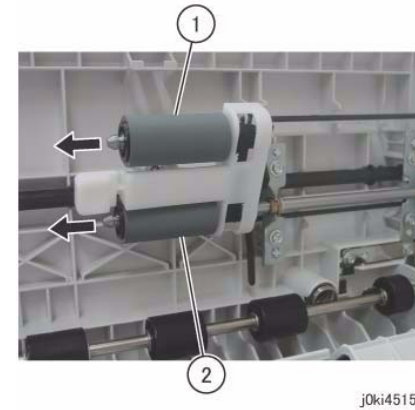
**Figure 2 Shift the housing**

6. Remove the housing. (Figure 3)
  - a. Remove the housing in the direction of the arrow.



**Figure 3 Remove the housing**

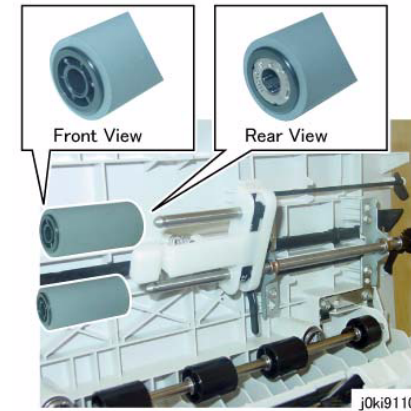
7. Remove the Nudger Roll and the Feed Roll. (Figure 4)
  - a. Remove the Nudger Roll.
  - b. Remove the Feed Roll.



**Figure 4 Remove the Nudger Roll and Feed Roll**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Nudger/Feed Roll while aligning them as shown (Figure 5)



**Figure 5 Align and Install the Nudger/Feed Roll**

3. After a replacement, enter the Diagnostics Mode and use **dC135** to reset the HFSI counter.

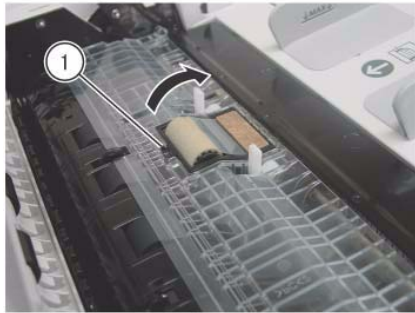
## REP 5.19 Retard Roll (2 Pass)

Parts List on [PL 51.14](#)

### Removal

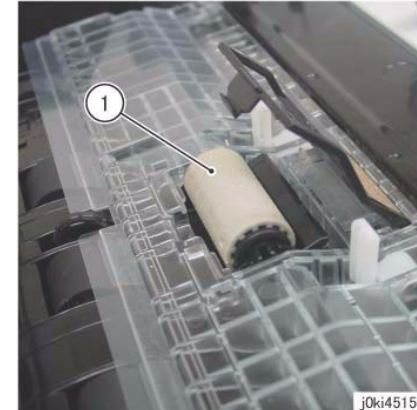
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Open the Retard Roll Cover. ([Figure 1](#))
  - a. Release the hook and open the Retard Roll Cover in the direction of the arrow.



j0ki45149

**Figure 1** Open the Retard Roll cover



j0ki45150

**Figure 2** Remove the Retard Roll

### Replacement

1. To install, carry out the removal steps in reverse order.
  2. After a replacement, enter the Diagnostics Mode and use [dC135](#) to reset the HFSI counter.
5. Remove the Retard Roll. ([Figure 2](#))
    - a. Remove the Retard Roll.



## REP 55.1 DADF (1 Pass)

### Parts List on PL 55.1

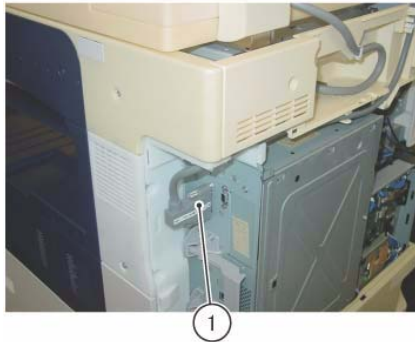
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

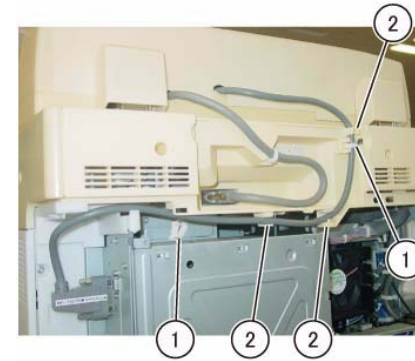
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the IIT Rear Cap Cover. (PL1.1)
4. Remove the Control Unit Connector Cover. (PL19.3)
5. Remove the Filter Cover. (PL19.3)
6. Remove the Rear Upper Cover. (PL19.3)
7. Disconnect the connector. (Figure 1)
  - a. Loosen the screw (x2) and disconnect the connector.



j0kt45501

Figure 1 Disconnect the connector

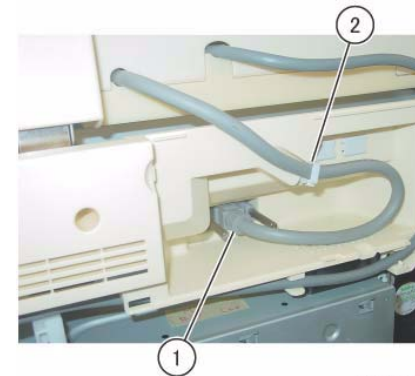
8. Remove the cable from the guide. (Figure 2)
  - a. Release the clamp to remove the cable (x2).
  - b. Remove the cable from the guide (x3).



j0kt45502

Figure 2 Remove the cable from the guide

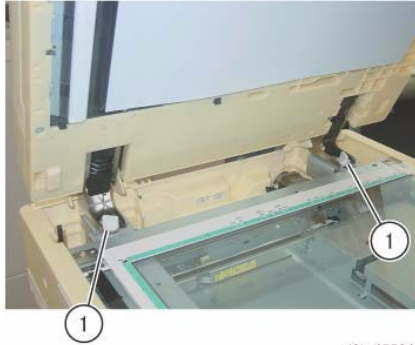
9. Disconnect the connector. (Figure 3)
  - a. Loosen the screw (x2) and disconnect the connector.
  - b. Release the clamp to remove the cable.



j0kt45503

Figure 3 Disconnect the connector

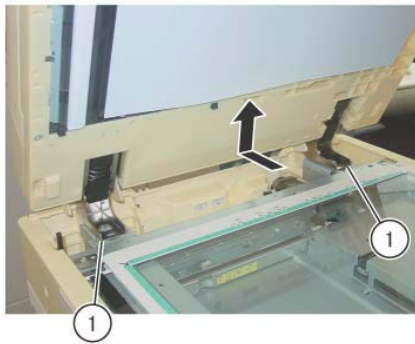
10. Open the DADF.
11. Remove the Knob Screw (x2) that secure the DADF. (Figure 4)
  - a. Remove the Knob Screw (x2).



j0kt45504

**Figure 4 Remove the Knob Screw (x2)**

12. Remove the DADF. (Figure 5)
  - a. Remove the bracket (x2) of the Counter Balance from the stud (x2) in the direction of the arrow.



j0kt45505

**Figure 5 Remove the DADF**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Perform the DADF Original Detection Correction when replacing the DADF. (Refer to [ADJ 5.3](#))

## REP 55.2 DADF Platen Cushion (1 Pass)

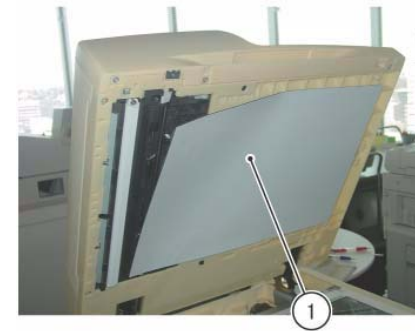
### Parts List on PL 55.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The DADF Platen Cushion is pasted on with double sided adhesive tapes.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Remove the DADF Platen Cushion.



j0kt45585

**Figure 1 Peel off the DADF Platen Cushion**

### Replacement

1. Paste on the DADF Platen Cushion. (Figure 2)
  - a. Place the DADF Platen Cushion on the Platen Glass.
  - b. Set the gap between the Regi Guide and Platen Guide.
  - c. Slowly lower the DADF and press it onto the DADF Platen Cushion.



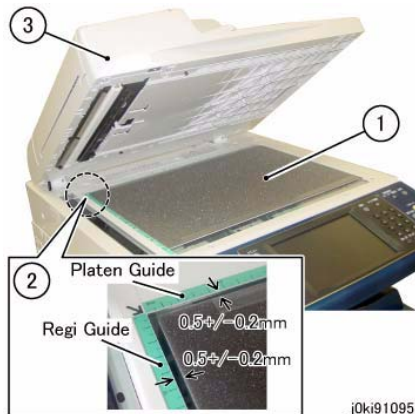


Figure 2 Paste on the DADF Platen Cushion

## REP 55.3 DADF Front Cover (1 Pass)

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the DADF.
4. Remove the screw (x3) that secure the DADF Front Cover. (Figure 1)
  - a. Remove the Tapping Screw (x3).

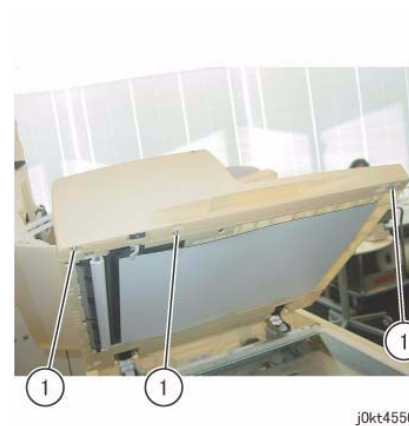
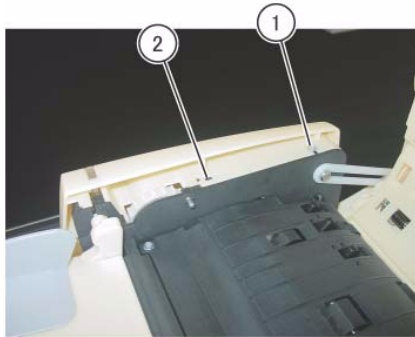


Figure 1 Remove the screws

5. Remove the DADF Front Cover. (Figure 2)
  - a. Remove the Tapping Screw.
  - b. Release the hook indicated by the arrow to remove the DADF Front Cover.



j0kt45507

Figure 2 Remove the DADF Front Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

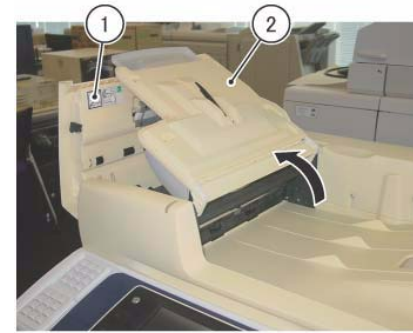
## REP 55.4 DADF Rear Cover (1 Pass)

### Parts List on PL 55.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

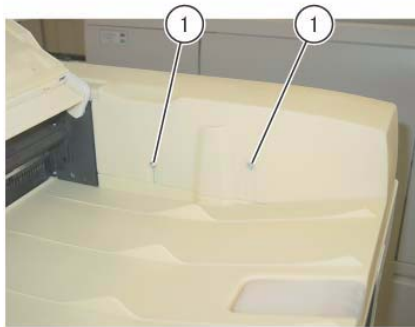
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Turn the DADF Document Tray upside down. (Figure 1)
  - a. Open the Top Cover.
  - b. Turn the DADF Document Tray upside down.



j0kt45508

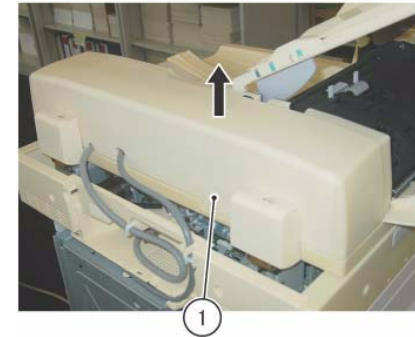
Figure 1 Turn the DADF Document Tray upside down

4. Remove the screws that secure the DADF Rear Cover. (Figure 2)
  - a. Remove the screws (x2).



j0kt45509

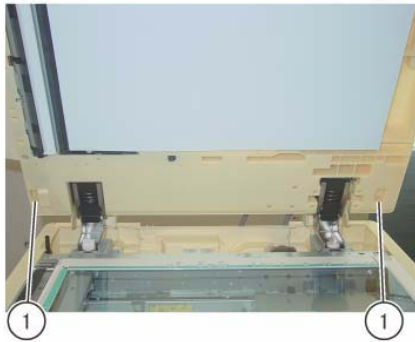
**Figure 2 Remove the screws**



j0kt45511

**Figure 4 Remove the DADF Rear Cover**

5. Open the DADF.
6. Release the hooks of the DADF Rear Cover. (Figure 3)
  - a. Release the hooks (x2).



j0kt45510

**Figure 3 Release the hooks**

7. Close the DADF gently.
8. Remove the DADF Rear Cover. (Figure 4)
  - a. Remove the DADF Rear Cover in the direction of the arrow.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 55.5 DADF Feeder Assembly (1 Pass)

### Parts List on PL 55.2

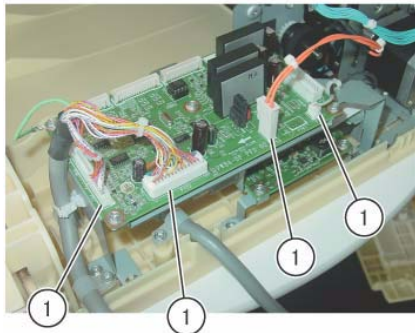
### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

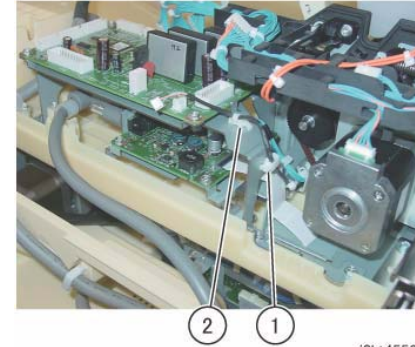
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the DADF. (REP 55.1)
5. Remove the Harness Guide and the wire harness. (REP 55.12)
6. Disconnect the DADF PWB connector (x4). (Figure 1)
  - a. Disconnect the connector (x4).



j0kt45515

**Figure 1 Disconnect the connectors**

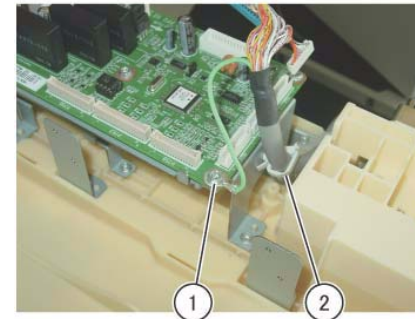
7. Remove the wire harness from the bracket of the DADF PWB. (Figure 2)
  - a. Release the clamp to remove the wire harness.
  - b. Remove the cable band.



j0kt45565

**Figure 2 Remove the wire harness**

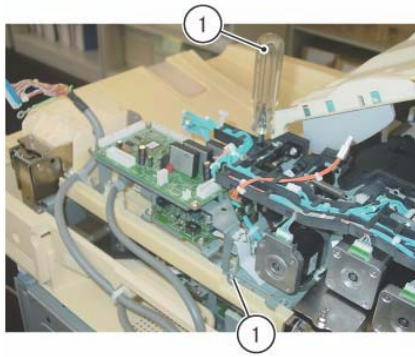
8. Remove the wire harness from the bracket of the DADF PWB. (Figure 3)
  - a. Remove the screw that secures the Ground Wire.
  - b. Release the clamp to remove the cable.



j0kt45566

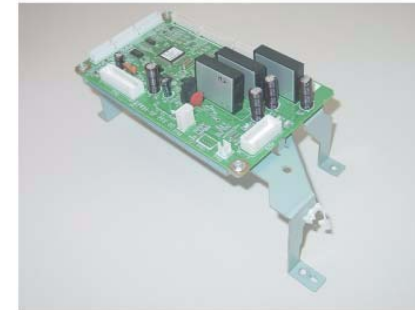
**Figure 3 Remove the wire harness**

9. Remove the screws that secure the DADF PWB and the bracket. (Figure 4)
  - a. Remove the Tapping Screw (x2).



j0kt45567

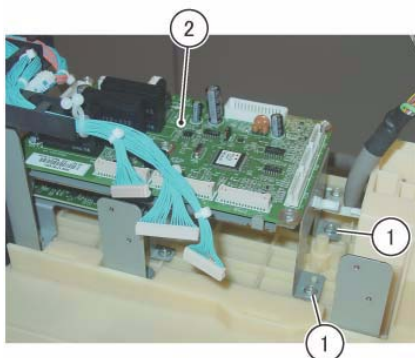
**Figure 4 Remove the screws**



j0kt45569

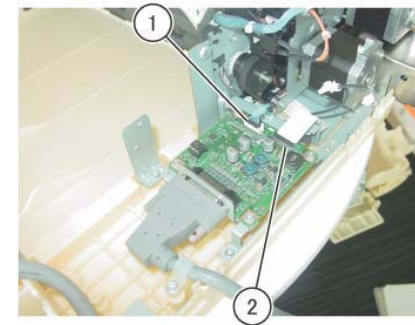
**Figure 6 Removed DADF PWB and the bracket**

10. Remove the DADF PWB and the bracket. (Figure 5)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the DADF PWB and the bracket.



j0kt45568

**Figure 5 Remove the DADF PWB and the bracket**



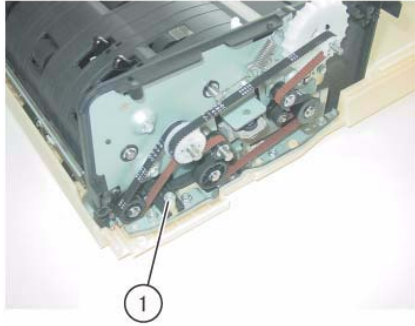
j0kt45516

**Figure 7 Disconnect the DC / DC PWB connectors**

11. The figure shows the removed DADF PWB and the bracket. (Figure 6)

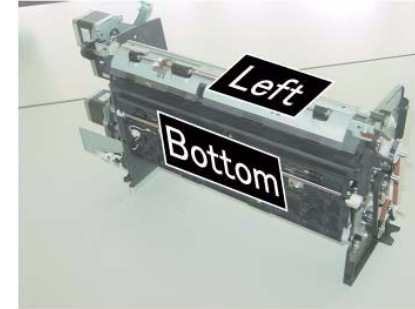
12. Disconnect the DC / DC PWB connector (x2). (Figure 7)
  - a. Disconnect the connector.
  - b. Release the block of the Connector Housing and disconnect the connector.

13. Remove the DADF Document Tray. (REP 55.10)
14. Remove the Top Cover. (REP 55.11)
15. Remove the screw at the front. (Figure 8)
  - a. Remove the Tapping Screw.



j0kt45517

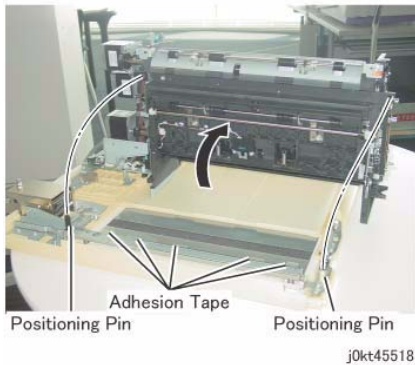
**Figure 8 Remove the screw**



j0kt45519

**Figure 10 Put down the DADF Feeder Assembly**

16. Remove the DADF Feeder Assembly. (Figure 9)
- Peel off the DADF Feeder Assembly from the Adhesion Tape and remove the DADF Feeder Assembly from the Positioning Pin.



j0kt45518

**Figure 9 Remove the DADF Feeder Assembly**

17. Put down the removed DADF Feeder Assembly with its Left side facing up. (Figure 10)

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.



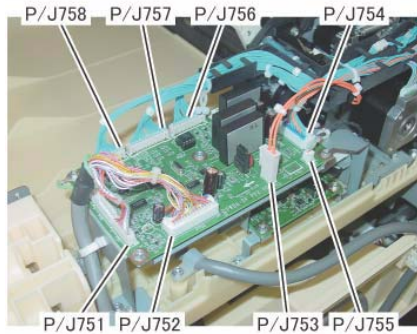
## REP 55.6 DADF PWB (1 Pass)

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

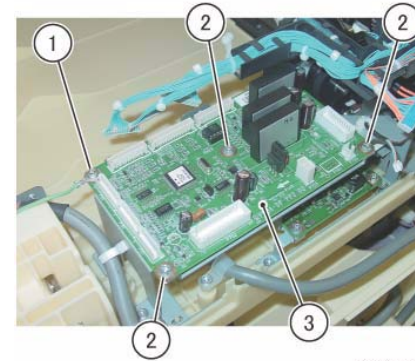
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connectors (x8).



j0kt45512

**Figure 1 Disconnect the connectors**

5. Remove the DADF PWB. (Figure 2)
  - a. Remove the screw and the Ground Wire.
  - b. Remove the screw (x3).
  - c. Remove the DADF PWB.

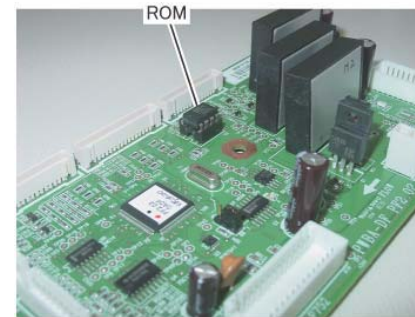


j0kt45513

**Figure 2 Remove the DADF PWB**

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Switch the ROM on the new PWB with the EEPROM from the old PWB. (Figure 3)  
This is because it stores the alignment value of the DADF.



j0kt45514

**Figure 3 Switch the ROM**

3. Check the software version. Update the version if an old software is installed in the new PWB.

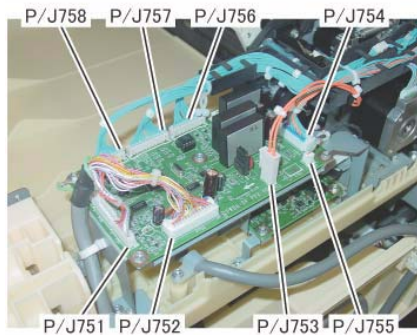
## REP 55.7 DD PWB (1 Pass)

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

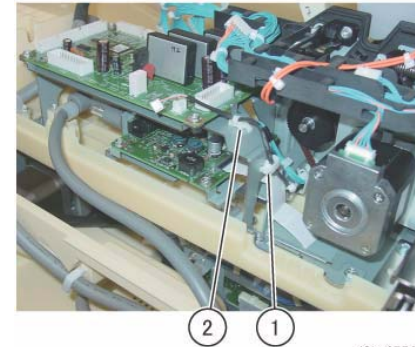
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connector (x8).



j0kt45512

**Figure 1 Disconnect the connectors**

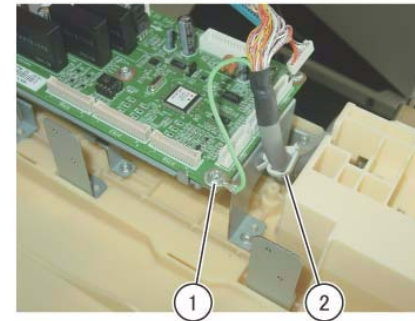
5. Remove the wire harness from the bracket of the DADF PWB. (Figure 2)
  - a. Release the clamp to remove the wire harness.
  - b. Remove the cable band.



j0kt45565

**Figure 2 Remove the wire harness**

6. Remove the cable from the bracket of the DADF PWB. (Figure 3)
  - a. Remove the screw that secures the Ground Wire.
  - b. Release the clamp to remove the cable.

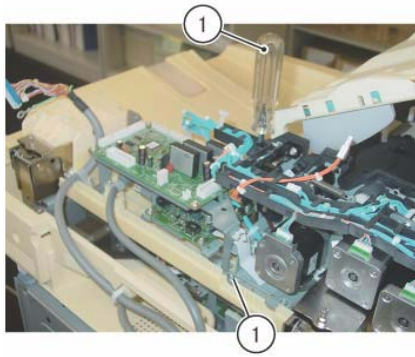


j0kt45566

**Figure 3 Remove the cable**

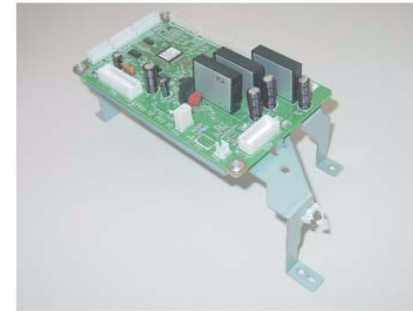
7. Remove the screws that secure the DADF PWB and the bracket. (Figure 4)
  - a. Remove the Tapping Screw (x2).





j0kt45567

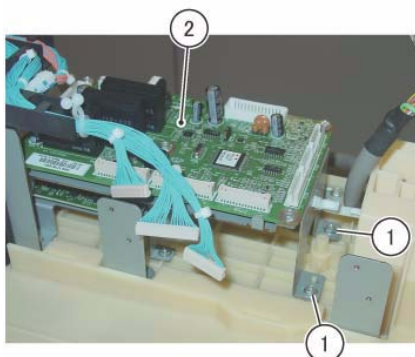
**Figure 4 Remove the screws**



j0kt45569

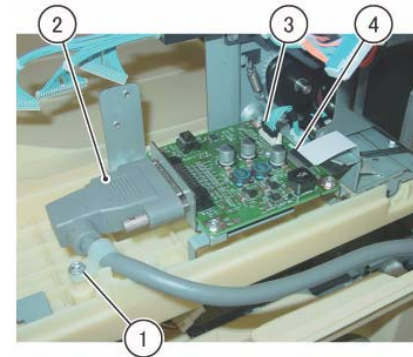
**Figure 6 Removed DADF PWB and the bracket**

8. Remove the DADF PWB and the bracket. (Figure 5)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the DADF PWB and the bracket.



j0kt45568

**Figure 5 Remove the DADF PWB and the bracket**



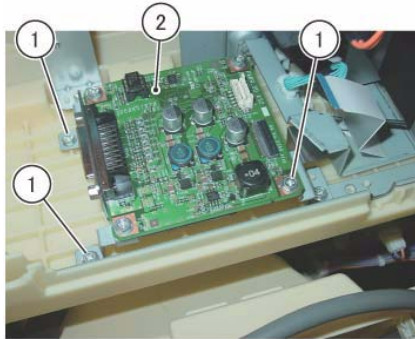
j0kt45570

**Figure 7 Disconnect the connectors**

9. The figure shows the removed DADF PWB and the bracket. (Figure 6)

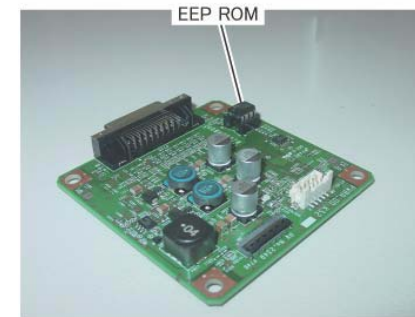
10. Disconnect the DC / DC PWB connector (x3). (Figure 7)
  - a. Remove the screws that secure the clamp.
  - b. Loosen the screw (x2) and disconnect the connector.
  - c. Disconnect the connector.
  - d. Release the block of the Connector Housing and disconnect the connector.

11. Remove the DC / DC PWB and the bracket. (Figure 8)
  - a. Remove the Tapping Screw (x3).
  - b. Remove the DC / DC PWB and the bracket.



j0kt45571

**Figure 8 Remove the DC / DC PWB and the bracket**

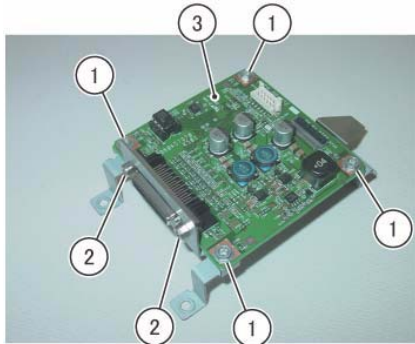


j0kt45573

**Figure 10 Remove the EEPROM**

12. Remove the DC / DC PWB. (Figure 9)

- a. Remove the screw (x4).
- b. Remove the DC / DC PWB.



j0kt45572

**Figure 9 Remove the DC / DC PWB**

**Replacement**

1. To install, carry out the removal steps in reverse order.
2. When replacing the DC / DC PWB, remove the EEPROM from the old DC / DC PWB and install it onto the new one. (Figure 10)

## REP 55.8 Left Counter Balance (1 Pass)

### Parts List on PL 55.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

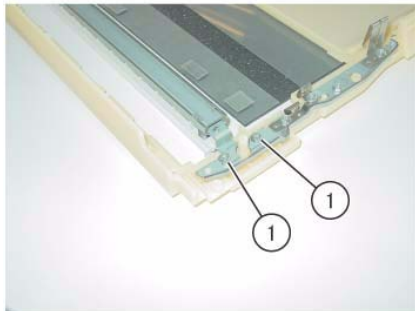
#### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

#### CAUTION

*Left/Right Counter Balance is identified by its spring pressure.*

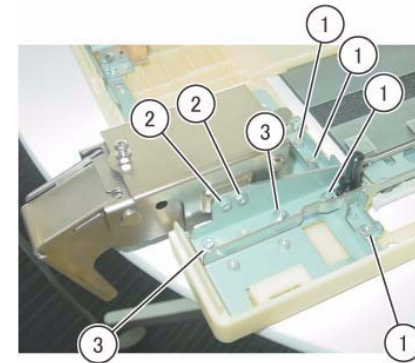
- *Left Counter Balance: strong spring pressure*
  - *Right Counter Balance: weak spring pressure*
1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Remove the DADF Rear Cover. (REP 55.4)
  4. Remove the DADF. (REP 55.1)
  5. Remove the Harness Guide and the wire harness. (REP 55.12)
  6. Remove the DADF Feeder Assembly. (REP 55.5)
  7. Remove the screw (x2) that secure the Tie Plate. (Figure 1)
    - a. Remove the Tapping Screw.



j0kt45520

**Figure 1 Remove the screws**

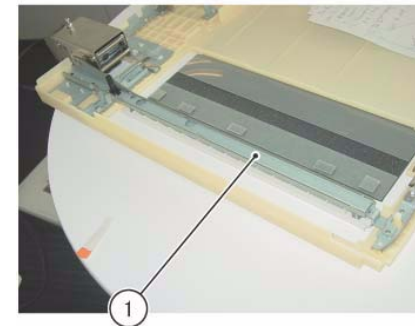
8. Remove the screw (x8) that secure the Tie Plate. (Figure 2)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the screw (M3: x2).
  - c. Remove the screw (M4: x2).



j0kt45521

**Figure 2 Remove the screws**

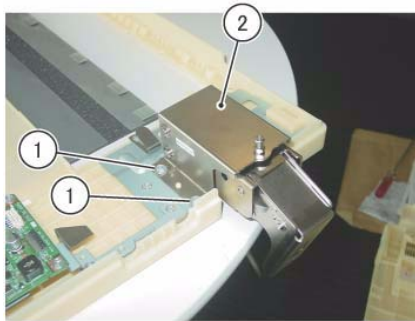
9. Remove the Tie Plate and the CVT Chute. (Figure 3)
  - a. Remove the Tie Plate and the CVT Chute.



j0kt45522

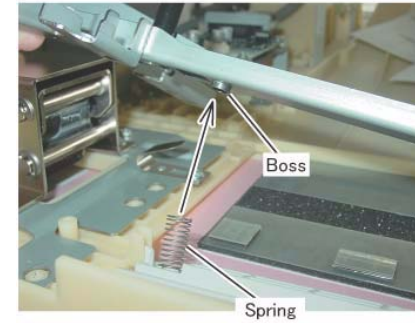
**Figure 3 Remove the Tie Plate and the CVT Chute**

10. Remove the Left Counter Balance. (Figure 4)
  - a. Remove the screw (x2).
  - b. Remove the Left Counter Balance.



j0kt45523

**Figure 4 Remove the Left Counter Balance**

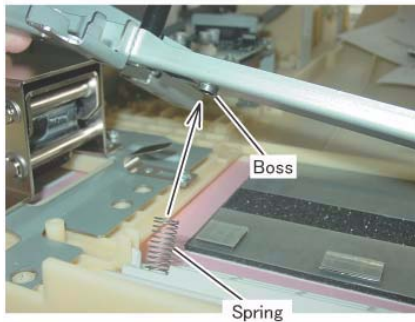


j0kt45525

**Figure 6 Attach the spring**

## Replacement

1. To install, carry out the removal steps in reverse order.
2. Attach the hook of the CVT Chute at the bottom of the Tie Plate to the Base Frame. (Figure 5)



j0kt45525

**Figure 5 Attach the hook**

3. Attach the spring of the CVT Chute to the boss of the Tie Plate. (Figure 6)

## REP 55.9 Right Counter Balance (1 Pass)

### Parts List on PL 55.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

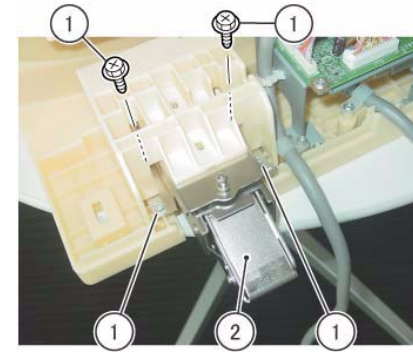
#### CAUTION

*Left/Right Counter Balance is identified by its spring pressure.*

- *Left Counter Balance: strong spring pressure*
  - *Right Counter Balance: weak spring pressure*
1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Remove the DADF Rear Cover. (REP 55.4)
  4. Remove the DADF. (REP 55.1)
  5. Take note of the graduation of the scale. (Figure 1)



Figure 1 Note the graduation of the scale



j0kt45527

Figure 2 Remove the Right Counter Balance

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. If it was replaced, perform checking for DADF Lead-Skew Adjustment. (ADJ 5.1)

6. Remove the Right Counter Balance. (Figure 2)
  - a. Remove the Tapping Screws (Large: x4).
  - b. Remove the right Counter Balance.

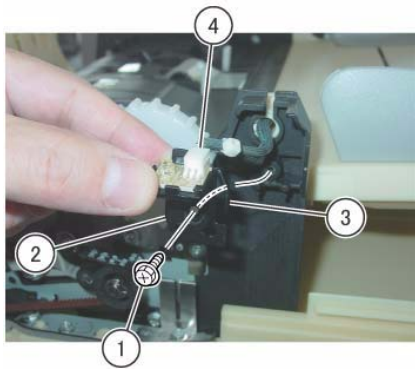


## REP 55.10 DADF Document Tray (1 Pass)

### Parts List on 55.4

#### Removal

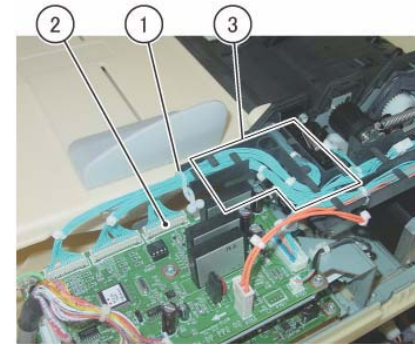
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. (REP 55.3)
4. Remove the DADF Rear Cover. (REP 55.4)
5. Disconnect the connector of the DADF Document Set LED. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Remove the LED Bracket.
  - c. Remove the wire harness from the hook.
  - d. Disconnect the connector.



j0kt45528

**Figure 1 Disconnect the connector**

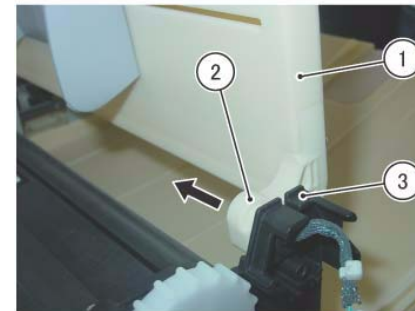
6. Disconnect the connector. (Figure 2)
  - a. Remove the clamp.
  - b. Disconnect the connector of the P/J756.
  - c. Remove the P/J756 wire harness from the Harness Guide.



j0kt45529

**Figure 2 Disconnect the connector**

7. At the front side of the DADF Document Tray, remove the boss of the DADF Document Tray from the installation hole of the Frame. (Figure 3)
  - a. Position the DADF Document Tray vertically.
  - b. Press the boss of the DADF Document Tray in the direction of the arrow and remove it from the installation hole.
  - c. Remove the wire harness of the DADF Document Set LED from the groove of the Frame.



j0kt45530

**Figure 3 Remove the boss**

8. Pull out and remove the wire harness at the rear side of the DADF Document Tray from the hole of the Frame. (Figure 4)
  - a. Pull out and remove the wire harness through the hole on the Frame.



j0kt45531

**Figure 4 Remove the wire harness**

### Replacement

1. To install, carry out the removal steps in reverse order.

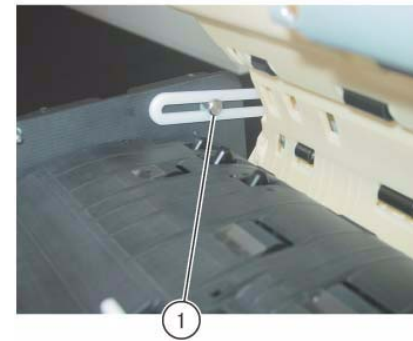
## REP 55.11 Top Cover (1 Pass)

Parts List on [PL 51.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. ([REP 55.3](#))
4. Remove the DADF Rear Cover. ([REP 55.4](#))
5. Remove the link of the Top Cover from the stud. ([Figure 1](#))
  - a. Remove the link from the cutout position of the link.



j0kt45540

**Figure 1 Remove the link**

6. Remove the Stud Bracket at the rear. ([Figure 2](#))
  - a. Remove the screw.
  - b. Remove the Stud Bracket.

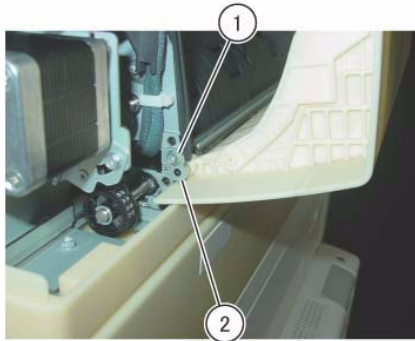
## REP 55.12 Harness Guide and Wire Harness (1 Pass)

### Parts List on PL 55.5

#### Removal

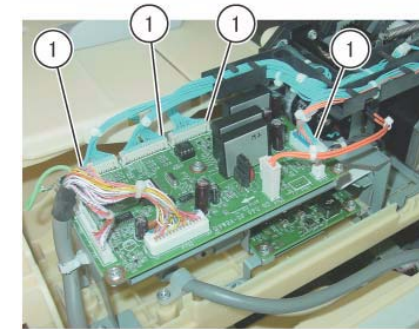
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Disconnect the DADF PWB connector (x4). (Figure 1)
  - a. Disconnect the connector (x4).



j0kt45541

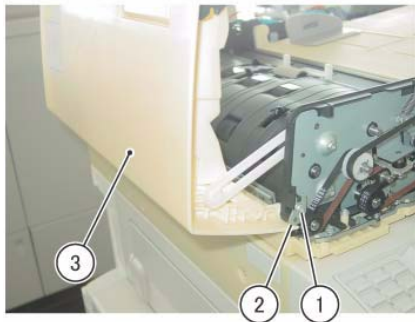
**Figure 2 Remove the Stud Bracket**



j0kt45532

**Figure 1 Disconnect the connectors**

7. Remove the Top Cover. (Figure 3)
  - a. Remove the Tapping Screw.
  - b. Remove the Stud Bracket.
  - c. Remove the Top Cover.



j0kt45542

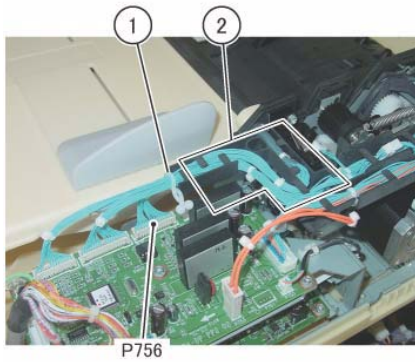
**Figure 3 Remove the Top Cover**

5. Remove the P756 wire harness from the Harness Guide. (Figure 2)
  - a. Remove the clamp.
  - b. Remove the P756 wire harness from the Harness Guide.

#### Replacement

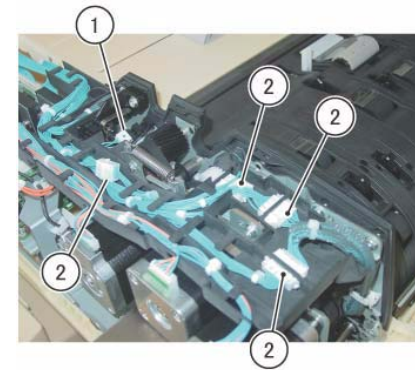
1. To install, carry out the removal steps in reverse order.





j0kt45533

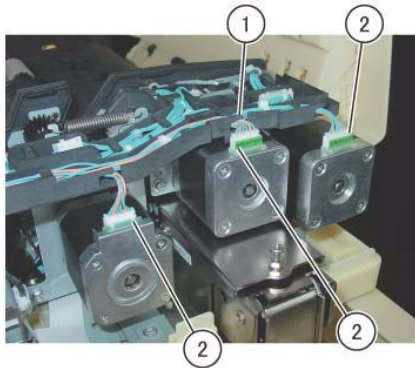
**Figure 2 Remove the P756 wire harness**



j0kt45535

**Figure 4 Disconnect the connectors**

6. Disconnect the Motor connector (x3). (Figure 3)
  - a. Release the wire harness of the Motor from the Harness Guide.
  - b. Disconnect the connector (x3).



j0kt45534

**Figure 3 Disconnect the Motor connectors**



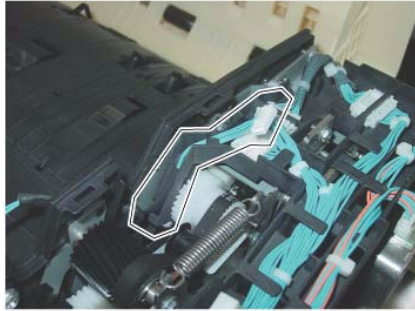
j0kt45536

**Figure 5 Remove the disconnected wire harness**

7. Disconnect the Harness Guide connector (x5). (Figure 4)
  - a. Disconnect the Sensor connectors.
  - b. Disconnect the Relay Connector (x4).

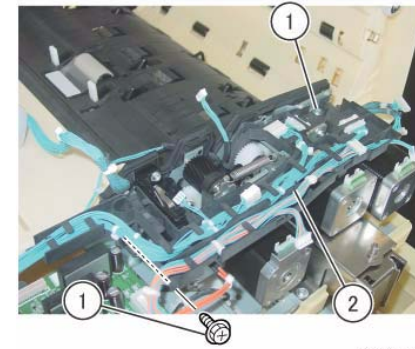
8. Remove the disconnected wire harness from the Harness Guide. (Figure 5)

9. Remove the disconnected wire harness from the Harness Guide. (Figure 6)



j0kt45537

**Figure 6 Remove the disconnected wire harness**



j0kt45539

**Figure 8 Remove the Harness Guide and the wire harness**

10. Remove the disconnected wire harness (x2) from the Harness Guide. (Figure 7)



j0kt45538

**Figure 7 Remove the disconnected wire harness**

11. Remove the Harness Guide and the wire harness. (Figure 8)
  - a. Remove the screw (x2).
  - b. Remove the Harness Guide and the wire harness.

### Replacement

1. To install, carry out the removal steps in reverse order.

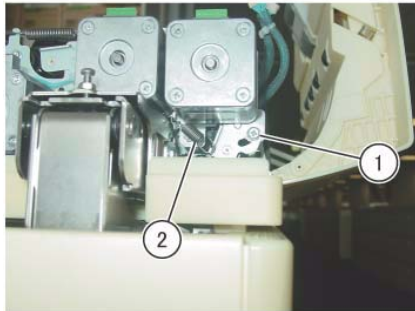
## REP 55.13 DADF Regi Motor (1 Pass)

### Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

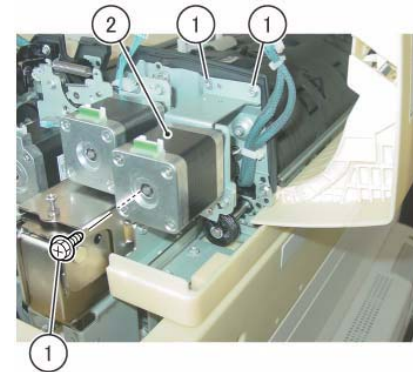
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the Harness Guide and the wire harness. (REP 55.12)
5. Remove the spring of the Belt Tension Bracket. (Figure 1)
  - a. Loosen the screw.
  - b. Remove the spring.



j0kt45543

**Figure 1 Remove the spring**

6. Remove the DADF Regi Motor. (Figure 2)
  - a. Remove the screw (x3).
  - b. Remove the DADF Regi Motor.

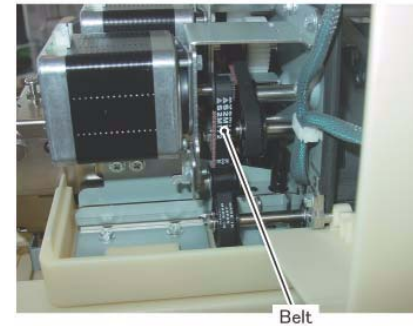


j0kt45544

**Figure 2 Remove the DADF Regi Motor**

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Belt to the Pulley of the DADF Regi Motor. (Figure 3)



j0kt45545

**Figure 3 Install the Belt**

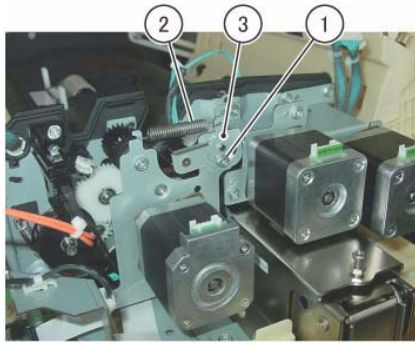
## REP 55.14 DADF Feed Motor (1 Pass)

### Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

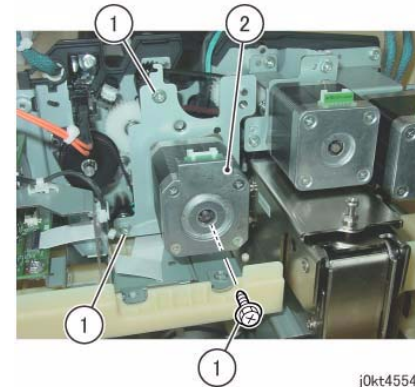
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the Harness Guide and the wire harness. (REP 55.12)
5. Remove the Belt Tension Bracket. (Figure 1)
  - a. Remove the screw.
  - b. Remove the screw.
  - c. Remove the Belt Tension Bracket.



j0kt45546

Figure 1 Remove the Belt Tension Bracket

6. Remove the DADF Feed Motor. (Figure 2)
  - a. Remove the screws (x3).
  - b. Remove the DADF Feed Motor.

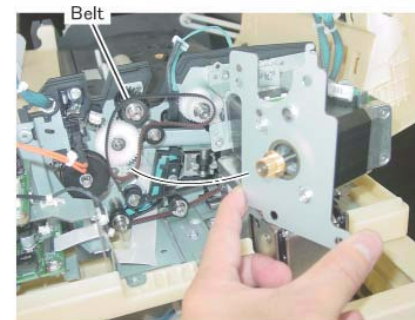


j0kt45547

Figure 2 Remove the DADF Feed Motor

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Belt to the Pulley of the DADF Feed Motor. (Figure 3)



j0kt45548

Figure 3 Install the Belt



## REP 55.15 DADF Pre Regi Motor (1 Pass)

### Parts List on PL 55.5

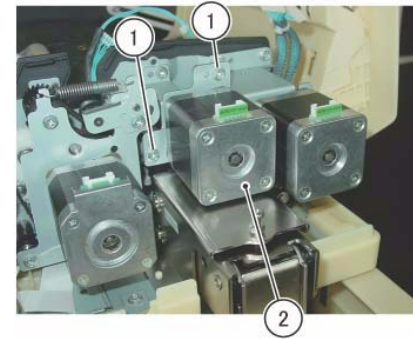
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the Harness Guide and the wire harness. (REP 55.12)
5. Loosen the screw of the Belt Tension Bracket. (Figure 1)
  - a. Loosen the screw.



Figure 1 Loosen the screw of the Belt Tension Bracket



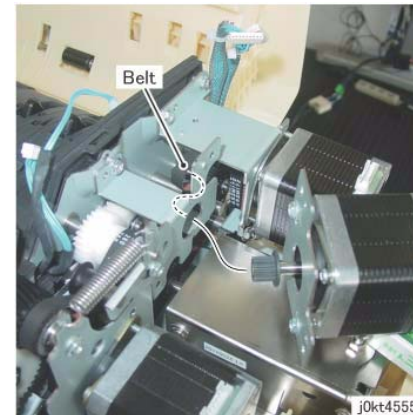
j0kt45550

Figure 2 Remove the DADF Pre Regi Motor

#### Replacement

6. Remove the DADF Pre Regi Motor. (Figure 2)
  - a. Remove the screw (x2).
  - b. Remove the DADF Pre Regi Motor.

1. To install, carry out the removal steps in reverse order.
2. Install the Belt to the Pulley of the DADF Pre Regi Motor. (Figure 3)



j0kt45551

Figure 3 Install the Belt

## REP 55.16 Regi Chute (1 Pass)

Parts List on PL 55.7

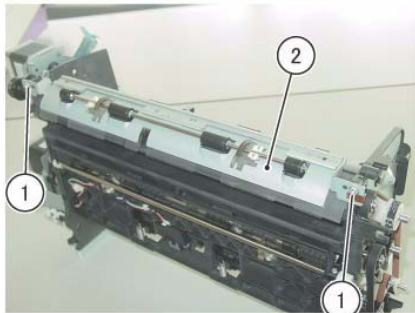
### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the DADF. (REP 55.1)
5. Remove the Harness Guide and the wire harness. (REP 55.12)
6. Remove the DADF Feeder Assembly. (REP 55.5)
7. Turn the DADF Feeder Assembly left-side up.
8. Remove the Regi Chute. (Figure 1)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Regi Chute.



j0kt45553

Figure 1 Remove the Regi Chute

### Replacement

1. To install, carry out the removal steps in reverse order.

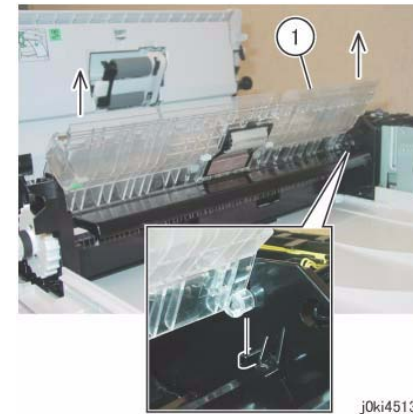
## REP 55.17 Retard Chute (1 Pass)

Parts List on PL 55.7

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Remove the Retard Chute. (Figure 1)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the Retard Chute.



j0ki45133

Figure 1 Remove the Retard Chute

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 55.18 Out Chute (1 Pass)

### Parts List on PL 55.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. (REP 55.3)

**NOTE:** The DADF Platen Cushion is pasted on with double sided adhesive tapes.

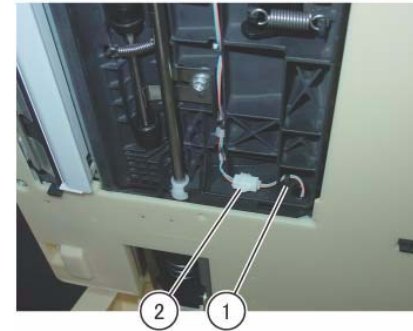
4. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Peel off the DADF Platen Cushion.



j0kt45580

Figure 1 Peel off the DADF Platen Cushion

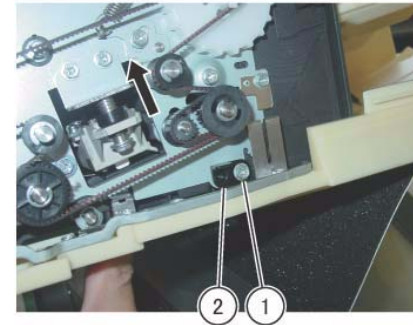
5. Disconnect the connector. (Figure 2)
  - a. Remove the wire harness from the hook.
  - b. Disconnect the connector.



j0kt45581

Figure 2 Disconnect the connector

6. Remove the hinge at the front. (Figure 3)
  - a. Raise the DADF Feeder Assembly in the direction of the arrow and remove the screw.
  - b. Remove the hinge.



j0kt45582

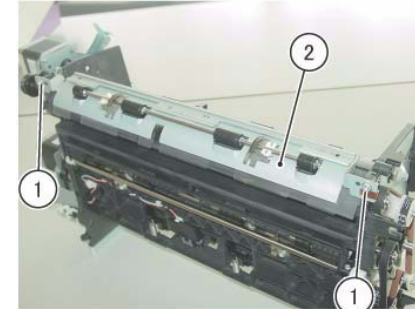
Figure 3 Remove the hinge at the front

7. Open the Out Chute downwards. (Figure 4)
  - a. Move the lever gently in the direction of the arrow.



j0kt45583

**Figure 4 Open the Out Chute downwards**



j0kt45553

**Figure 6 Remove the Regi Chute**

8. Remove the Out Chute from the hinge at the rear. (Figure 5)



j0kt45584

**Figure 5 Remove the Out Chute**

9. Remove the Harness Guide and the wire harness. (REP 55.12)
10. Remove the DADF Feeder Assembly. (REP 55.5)
11. Put down the DADF Feeder Assembly with its Left side facing up.
12. Remove the Regi Chute. (Figure 1)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the Regi Chute.

### Replacement

1. To install, carry out the removal steps in reverse order.



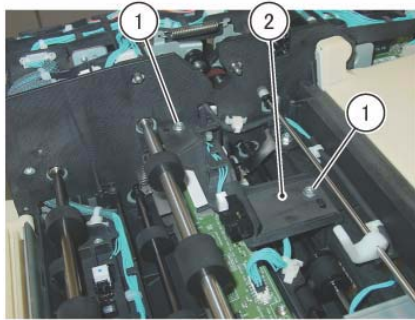
## REP 55.19 CIS (1 Pass)

### Parts List on PL 55.8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

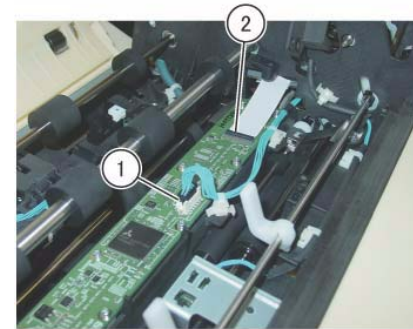
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Front Cover. (REP 55.3)
4. Remove the Retard Chute. (REP 55.17)
5. Move the Sensor Bracket. (Figure 1)
  - a. Remove the Tapping Screw (x2).
  - b. Move the Sensor Bracket.



j0kt45574

**Figure 1 Move the Sensor Bracket**

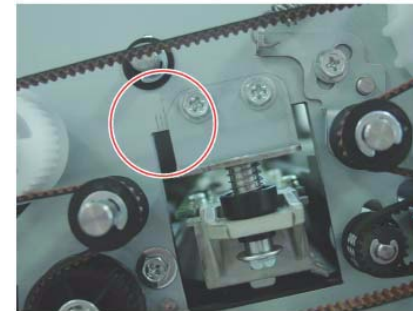
6. Disconnect the CIS connector (x2). (Figure 2)
  - a. Disconnect the connector.
  - b. Release the block of the Connector Housing and disconnect the connector.



j0kt45575

**Figure 2 Disconnect the CIS connectors**

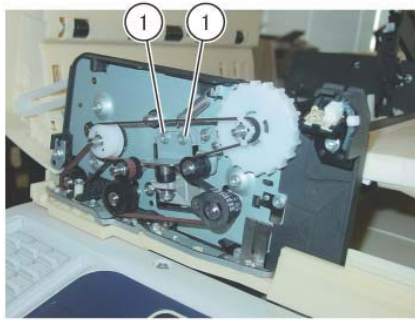
7. Take note of the graduation of the scale of the installation position of the CIS. (Figure 3)



j0kt45576

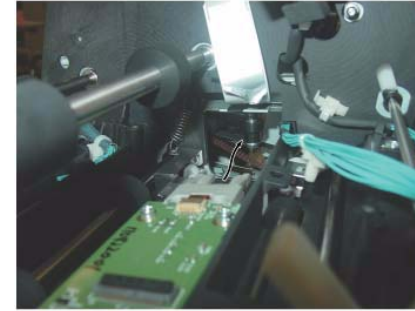
**Figure 3 Note of the graduation of the scale**

8. Remove the screw (x2) that secure the CIS. (Figure 4)
  - a. Remove the screw (x2).



j0kt45577

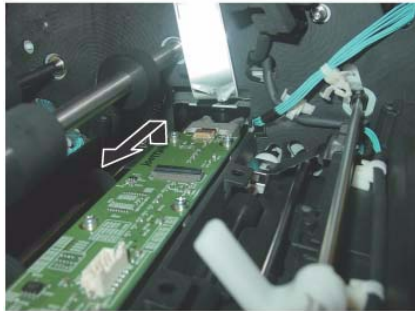
**Figure 4 Remove the screws**



j0kt45579

**Figure 6 Lower the rear side of the CIS to attach to the stud**

9. Remove the CIS. (Figure 5)
  - a. Raise the rear side of the CIS in the direction of the arrow and remove the CIS.



j0kt45578

**Figure 5 Remove the CIS**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Lower the rear side of the CIS to attach to the stud. (Figure 6)

## REP 55.20 Sensor Bracket (1 Pass)

### Parts List on PL 55.9

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the DADF Rear Cover. (REP 55.4)
4. Remove the Retard Chute. (REP 55.17)
5. Disconnect the Harness Guide connector (x2). (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Remove the wire harness (x2) from the harness guide.
  - c. Disconnect the connector (x2).

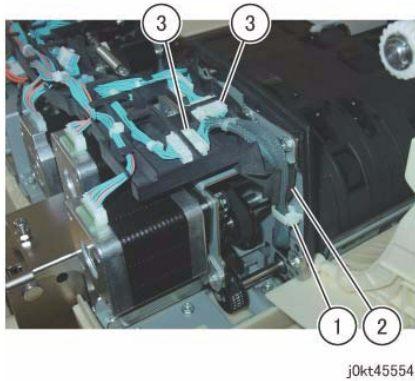


Figure 1 Disconnect the Harness Guide connectors

6. Remove the Sensor Bracket. (Figure 2)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the Sensor Bracket.
  - c. Pull out and remove the wire harness (x2) through the hole on the Frame.

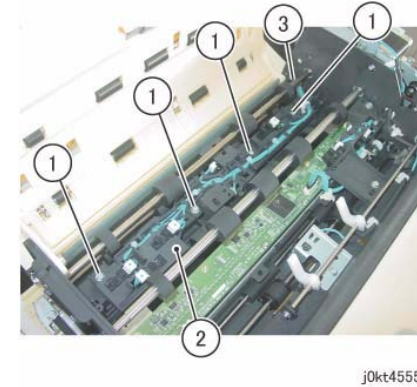


Figure 2 Remove the Sensor Bracket

7. The figure shows the locations of the removed Sensor Bracket and the actuator (x2). (Figure 3)

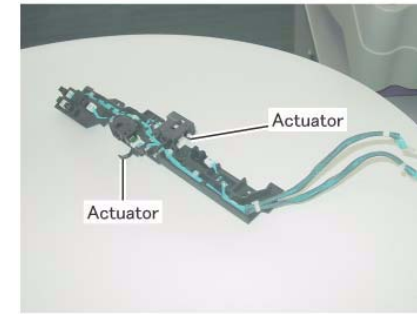


Figure 3 Locations of the removed Sensor Bracket and the actuators

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. Check that the actuator (x2) appear from the chute when installing the Sensor Bracket. (Figure 4)



j0kt45557

**Figure 4 Check the actuators**

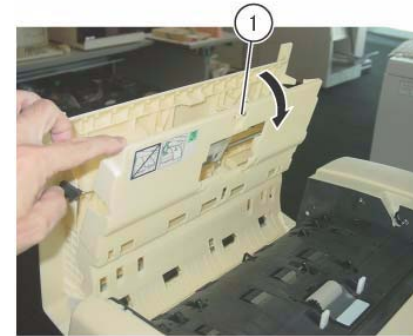
## REP 55.21 Nudger Roll, Feed Roll (1 Pass)

### Parts List on PL 55.12

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

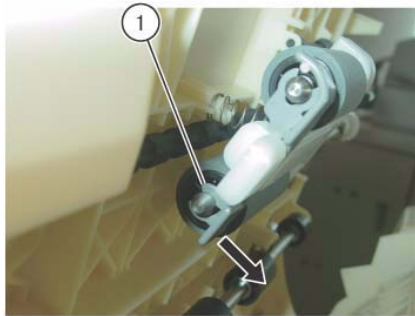
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Open the Feed Upper Chute. (Figure 1)
  - a. Release the hook and open the Feed Upper Chute.



j0kt45558

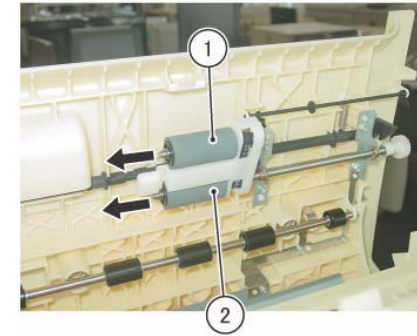
**Figure 1 Open the Feed Upper Chute**

5. Shift the housing. (Figure 2)
  - a. Release the hook and shift the housing in the direction of the arrow.



j0kt45559

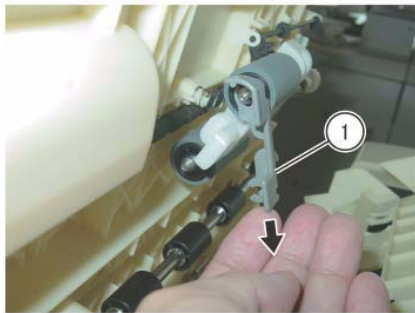
**Figure 2 Shift the housing**



j0kt45561

**Figure 4 Remove the Nudger Roll and the Feed Roll**

6. Remove the housing. (Figure 3)
  - a. Remove the housing in the direction of the arrow.



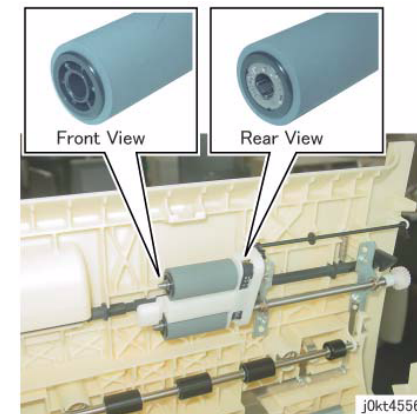
j0kt45560

**Figure 3 Remove the housing**

7. Remove the Nudger Roll and the Feed Roll. (Figure 4)
  - a. Remove the Nudger Roll.
  - b. Remove the Feed Roll.

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Nudger/Feed Roll while aligning them as shown in the figure. (Figure 5)



j0kt45562

**Figure 5 Install the Nudger/Feed Roll**

3. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

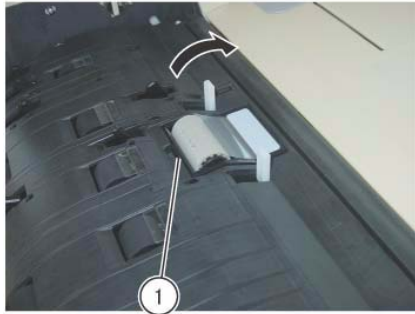
## REP 55.22 Retard Roll (1 Pass)

### Parts List on PL 55.14

#### Removal

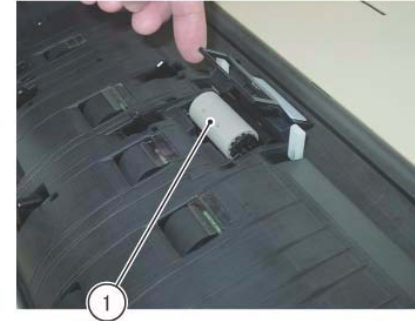
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Top Cover.
4. Open the Retard Roll Cover. (Figure 1)
  - a. Release the hook and open the Retard Roll Cover in the direction of the arrow.



j0kt45563

**Figure 1 Open the Retard Roll Cover**



j0kt45564

**Figure 2 Remove the Retard Roll**

#### Replacement

1. To install, carry out the removal steps in reverse order.
  2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.
5. Remove the Retard Roll. (Figure 2)
    - a. Remove the Retard Roll.



## REP 6.1 Platen Cushion

### Parts List on PL1.1

#### Replacement

**NOTE:** Remove all remaining tapes on the Platen Cover after the Platen Cushion has been peeled off.

1. Place the Platen Cushion on the Platen Glass, at the proper position. (Figure 1)
  - a. Peel off the seals (x2).
  - b. Leave a gap of 0.50.3mm between the Regi. Guide and the Platen Guide of the Platen Glass.
  - c. Close the Platen Cover gently and press it onto the Platen Cushion.

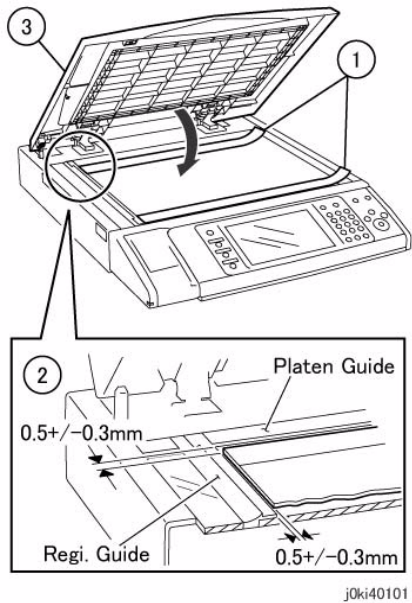


Figure 1 Place the Platen Cushion on the Platen Glass

## REP 6.2 Platen Glass

### Parts List on PL 1.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Platen Cover or DADF.
4. Remove the Platen Glass. (Figure 1)
  - a. Remove the screws (x2).
  - b. Remove the Right Side Plate.
  - c. Remove the Platen Glass.

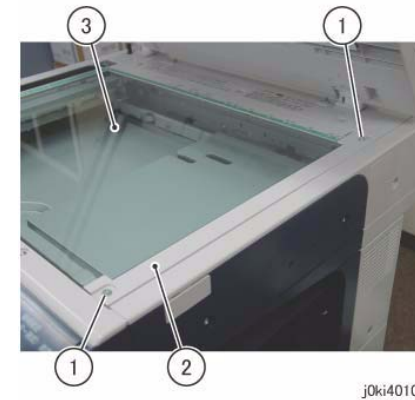


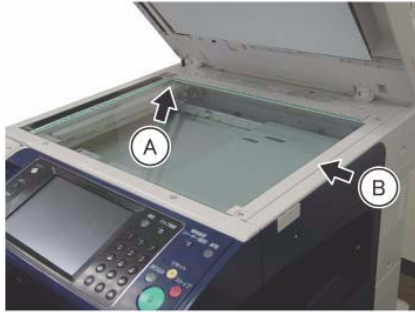
Figure 1 Remove the Platen Glass

#### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** Push the Platen Glass in the direction of arrow A and the Right Side Plate in the direction of arrow B.

(Figure 2)



j0ki40103

Figure 2 Push the Platen Glass (A) and (B)

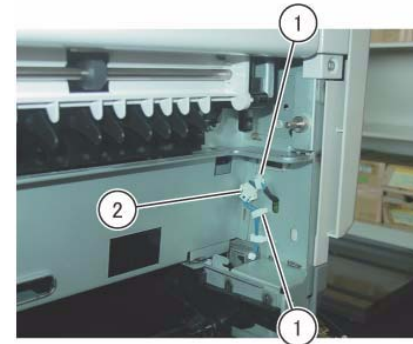
## REP 6.3 Control Panel

### Parts List on [PL 1.2](#)

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Cover.
4. Open the L/H Cover Unit.
5. Remove the Fusing Unit. ([REP 10.1](#))
6. Disconnect the Connector at rear-side of the Front Left Cover. ([Figure 1](#))
  - a. Release the Clamp (2) and remove the Wire Harness.
  - b. Disconnect the Connector.

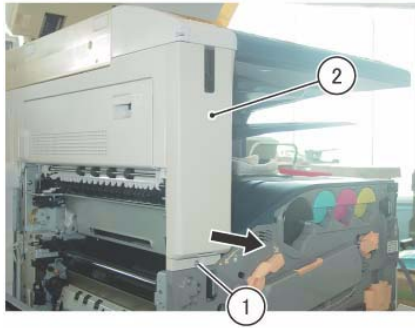


j0kt40103

Figure 1 Disconnect the connector

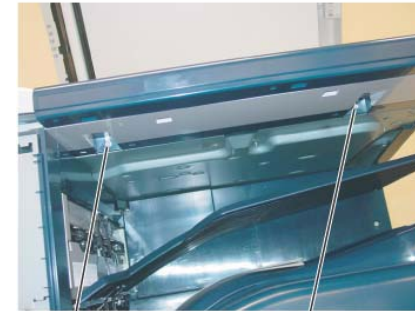
7. Remove the Front Left Cover. ([Figure 2](#))
  - a. Remove the screw.
  - b. Push the Front Left Cover to the arrow direction.





j0kt40104

**Figure 2 Remove the Left Front Cover**



j0ki91085

**Figure 4 Remove the screws**

8. Remove the screws that secure the Control Panel. (Figure 3)
  - a. Remove the Stylus Pen.
  - b. Remove the screws (x2).

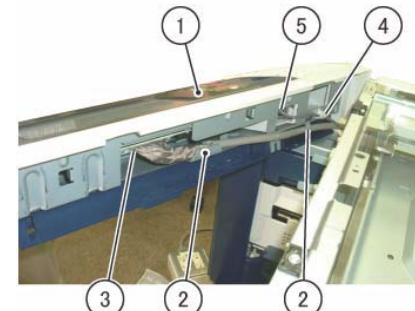


j0ki40104

**Figure 3 Remove the screws**

9. Remove the screws that secure the Control Panel. (Figure 4)
  - a. Remove the screws (x2).

10. Remove the Control Panel. (Figure 5)
  - a. Hold the Control Panel and slide it slowly to the front.
  - b. Release the UI Cable from the hooks (x2).
  - c. Release the hook at the bottom of the Connector Housing and disconnect the connector.
  - d. Release the USB Cable from the clamp.
  - e. Disconnect the connector of the USB Cable at the inner side.

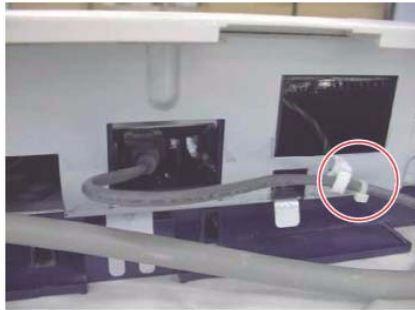


j0ki91086

**Figure 5 Remove the Control Panel**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Align the cable tie of the USB Cable to the right side of the clamp. (Figure 6)



j0ki40164

**Figure 6 Align the cable**



j0ki40166

**Figure 8 Position the coated end of the UI Cable at the hook**

3. Push in the excess length of the USB Cable into the opening. (Figure 7)



j0ki40165

**Figure 7 Push in the excess length of USB Cable**

4. When attaching the UI Cable to the hook, make it so that the coated end of the UI Cable is positioned at the hook. (Figure 8)

## REP 6.4 USB Cable

### Parts List on [PL 1.2](#)

#### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. When replacing the USB Cable, store the excess length in between the clamps (x2) as shown in the figure. ([Figure 1](#))

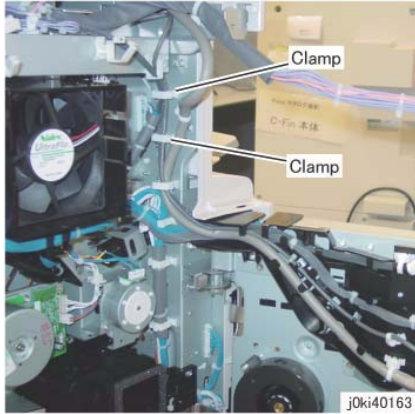


Figure 1 Store the excess USB Cable in between the clamps

## REP 6.5 Console Assembly

### Parts List on [PL 1.3](#)

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**Reference:** Cleaning the Touch Panel

- When cleaning the Touch Panel, use soft cloth with mild detergent or alcohol and wipe gently.
1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Open the Platen Cover or DADF.
  4. Open the Front Cover.
  5. Disconnect the Connector at rear-side of the Front Left Cover. ([Figure 1](#))
    - a. Release the Clamp (2) and remove the Wire Harness.
    - b. Disconnect the Connector.

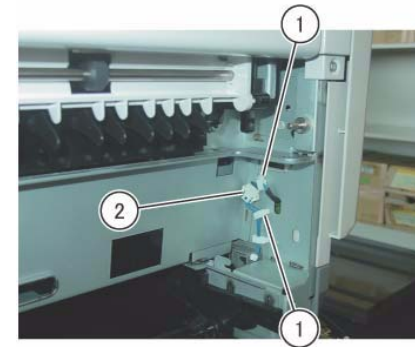
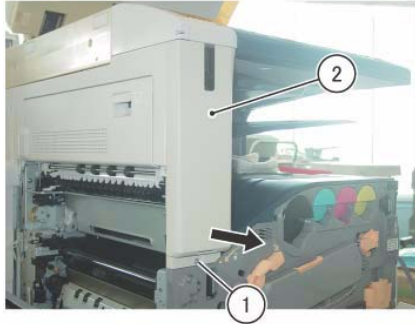


Figure 1 Disconnect the connector

6. Remove the Front Left Cover. ([Figure 2](#))
  - a. Remove the screw.
  - b. Push the Front Left Cover to the arrow direction.



j0kt40104

**Figure 2 Remove the Left Front Cover**

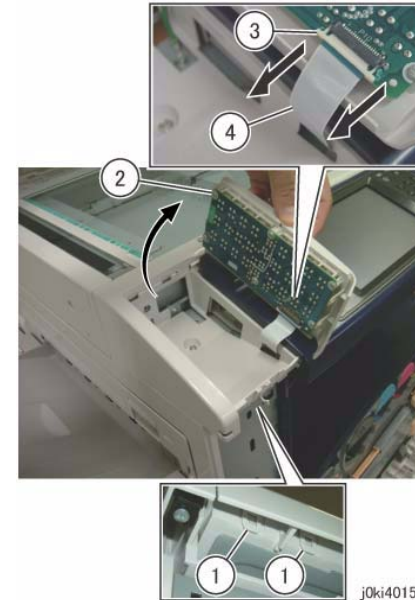
7. Remove the Stylus Pen. (Figure 3)
  - a. Remove the Stylus Pen.



j0ki40151

**Figure 3 Remove the Stylus Pen**

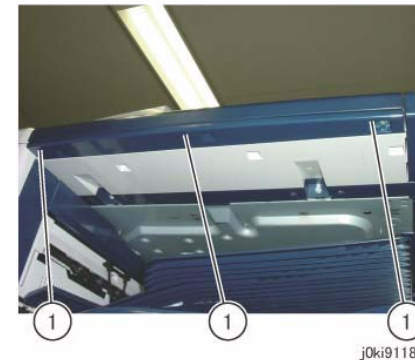
8. Remove the One Touch Panel. (Figure 4)
  - a. Release the hooks (x2).
  - b. Remove the One Touch Panel.
  - c. Move the Block of the Connector Housing in the direction of the arrow.
  - d. Remove the Flexible Flat Cable.



j0ki40152

**Figure 4 Remove the One Touch Panel**

9. Release the hooks of the Overlay Cover. (Figure 5)
  - a. Release the hooks (x3).



j0ki91180

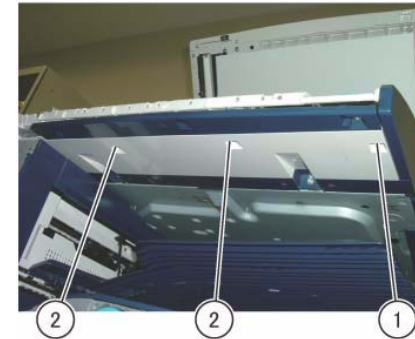
**Figure 5 Release the hooks**

10. Remove the Overlay Cover. (Figure 6)
  - a. Remove the Overlay Cover in the direction of the arrow.



j0ki91123

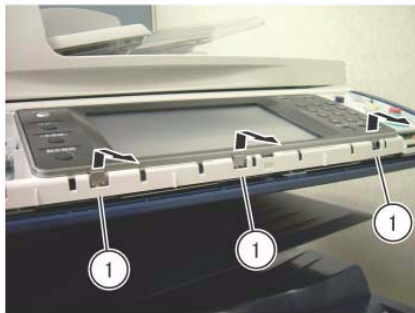
**Figure 6 Remove the Overlay Cover**



j0ki40153

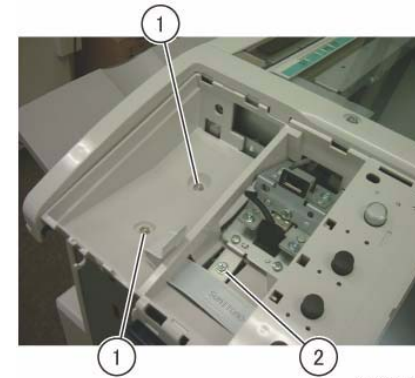
**Figure 8 Remove the screws**

11. Remove the Overlay Cover. (Figure 7)
  - a. Release the hooks (x3) and remove the Overlay Cover in the direction of the arrow.



j0ki91124

**Figure 7 Remove the Overlay Cover**

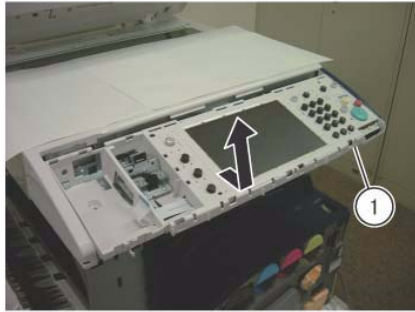


j0ki40154

**Figure 9 Remove the screws**

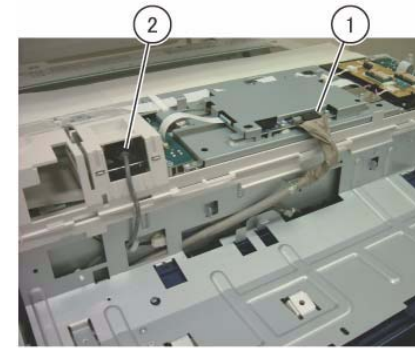
12. Remove the screws that secure the Console Assembly. (Figure 8)
  - a. Remove the Tapping Screw.
  - b. Remove the screws (x2).
13. Remove the screws that secure the Console Assembly. (Figure 9)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the screw.
14. Move the Console Assembly in the direction of the arrow. (Figure 10)
  - a. Move the Console Assembly in the direction of the arrow.





j0ki40155

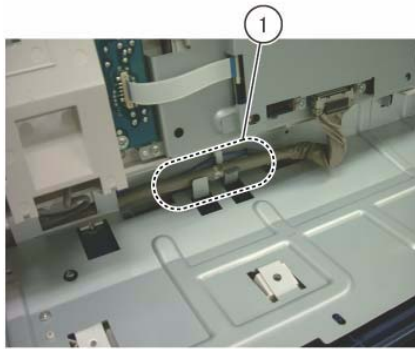
**Figure 10** Moving the Console Assembly in the direction of the arrow



j0ki40157

**Figure 12** Disconnect the connectors

15. Remove the UI Cable from the hook. (Figure 11)
  - a. Remove the UI Cable from the hook.



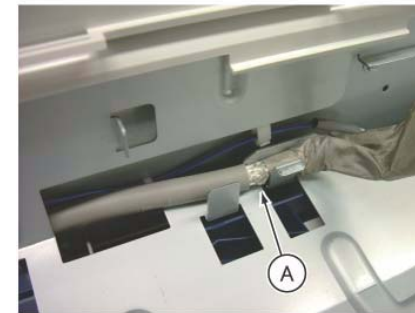
j0ki40156

**Figure 11** Remove the UI Cable from the hook

16. Turn the Console Assembly upside down and place it gently on the Platen Glass.
17. Disconnect the connector of the Console Assembly. (Figure 12)
  - a. Release the hook and disconnect the connector.
  - b. Disconnect the connector of the USB Cable.

### Replacement

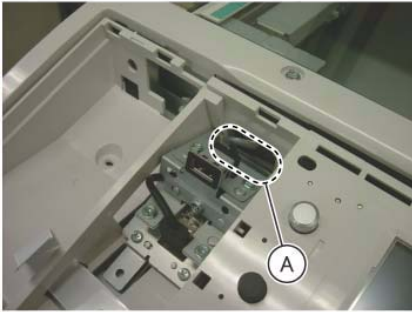
1. To install, carry out the removal steps in reverse order.
2. When attaching the UI Cable to the hook, make it so that the coated end of the UI Cable is positioned at the hook as shown in the figure. (Figure 13)
  - (A) Coated end of UI Cable



j0ki40158

**Figure 13** Position the coated end of the UI Cable (A)

3. Store the excess length of the USB Cable as shown in (A) in the figure. (Figure 14)



j0ki40159

**Figure 14** Store the excess length of USB Cable

## REP 6.6 CCD Lens Assembly

Parts List on [PL 1.5](#)

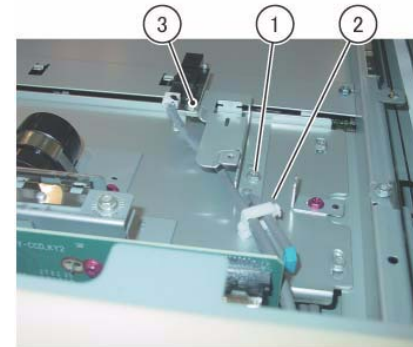
### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Light axis correction using UI Diagnostics is required after replacing the parts. After replacement, always check the light axis and perform the light axis correction adjustment where necessary. (The correction steps are described in this procedure.)

**NOTE:** Because the removal procedure for 7830/35 and 7845/55 are the same (they differ only by the shape of their CCD Lens Assembly), only the shape for 7845/55 will be described here.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Platen Glass ([REP 6.2](#))
  - Lens Cover ([PL 1.4](#))
4. Move the APS Sensor. ([Figure 1](#))
  - a. Remove the screw (round).
  - b. Release the harness from the clamp.
  - c. Move the APS Sensor.



j0kt40120

**Figure 1** Move the APS Sensor

5. Disconnect the CCD Flexible Print Cable. ([Figure 2](#))
  - a. Release the hook and disconnect the connector.



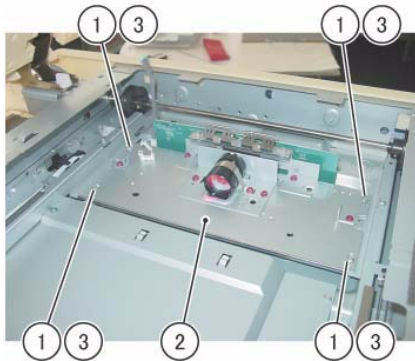
j0kt40121

**Figure 2 Disconnect the CCD Flexible Print Cable**

6. Replace the CCD Lens Assembly. (Figure 3)

**NOTE:** When removing the CCD Lens Assembly, never remove the screws (x2) of the jig pin.

- a. Remove the screws (x4).
- b. Replace the CCD Lens Assembly.
- c. Secure the CCD Lens Assembly by using the screws (x4).



j0kt40122

**Figure 3 Replace the CCD Lens Assembly**

7. Connect the CCD Flexible Print Cable.
8. Install the APS Sensor and Lens Cover.
9. Install the Platen Glass. (No need to install the guide for holding the glass.)
10. Make a copy onto A3 size paper using the Test Chart, and check both Lead and Tail sides.

11. Reinstall the removed parts if no problems are found.  
If any problems are found in images (especially alignment), go to Step 10.

**NOTE:** In the following steps, it is best to work in a condition in which outside light is minimized. If the servicing site is located directly below the fluorescent light, perform the servicing with the Platen (or DADF) somewhat closed to shut out the outside light.

12. Enter **UI Diagnostics**.
13. Enter **IIT Calibration** (White Reference Adjustment > CCD Calibration > Optical Axis Correction).
14. Select **[Optical Axis Correction]**.
15. Follow the instructions shown on the screen. Open the Platen and press the [Start] button. The Lamp Carriage moves and the lamp irradiates.
16. Check the following items on the UI screen.

**Table 1 Optical Axis Correction**

Optical Axis Correction	
Optical Axis Correction Judgment (Result)	NG
Front Nut Correction Angle -: Left rotation	-90
Rear Nut Correction Angle +: Right rotation	-555

Optical Axis Correction Judgment (Result): Displays OK/NG. If OK appears, the operation is complete. If NG appears, correction is needed. Front/Rear Nut Correction Angle: Shows a combination of with a numeral.

- Front Nut refers to the nuts at the front of the CCD Lens Assembly.
- Rear Nut refers to the nuts at the rear of the CCD Lens Assembly.
- +: Refers to right rotation.
- -: Refers to left rotation.
- Numeral: Refers to the angle. (Unit: degrees)

Using the content of the above table as an example:

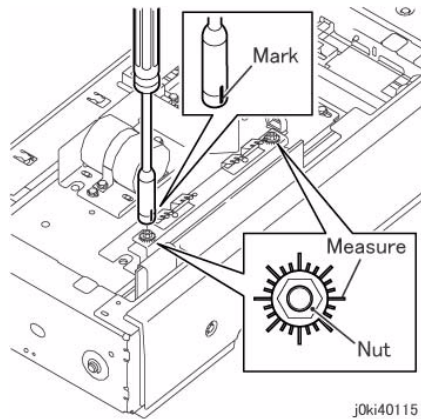
The Front Nut must be rotated 90 degrees. to the left.

The Rear Nut must be rotated 555 degrees. to the left.

- If the value is an abnormal number such as 990, clean the Platen Glass and the mirror, etc. and start again. This may be due to the light path being blocked.
17. Carry out the steps above using the information on the UI screen.
  18. Rotate the nut. (Figure 4)



**NOTE:** As it is difficult to control the rotation amount, it is recommended to draw a line on a strip of paper and tape it to the tip of the Box Driver to make a mark as shown in the figure below.(Figure 4)



**Figure 4 Rotate the nut**

19. After the adjustment, enter IIT Calibration (White Reference Adjustment, CCD Calibration, Optical Axis Correction) and perform the Optical Axis Correction again. (Refer to [ADJ 6.6](#))
20. Repeat Steps 10 to 17 until the judgment displays **OK**.

**NOTE:** If the result is OK, the operation can be completed even if the number of rotations is still displayed.

21. Reinstall all removed parts.

## REP 6.7 Front/Rear Carriage Cable

Parts List on [PL 1.6](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### WARNING

Use extreme care when working with the following components. Some of the components may have very sharp edges and could cause serious personal injury.

**DANGER:** Manipuler les éléments suivants avec précaution: ils peut comporter des rebords tranchants qui peuvent causer de graves blessures.

**AVVERTENZA:** Maneggiare i seguenti elementi con la massima precauzione: essi possono avere dei bordi molto affilati che possono causare serie ferite.

**VORSICHT:** Bei der Verwendung nachfolgender Komponenten ist äußerste Vorsicht geboten. Einige dieser Komponenten können u.U. scharfe Kanten vorweisen und somit zu schweren Schnittverletzungen führen.

**AVISO:** Manipule los componentes siguientes con mucha precaución. Éstos pueden tener bordes filosos y ocasionar daños personales graves.

**NOTE:** The front and rear coatings of the Carriage Cable are different.

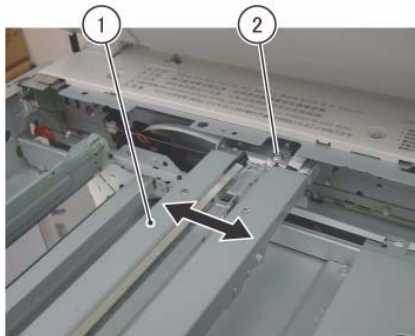
Front: Silver

Rear: Black

**NOTE:** Only the replacement procedures for the Rear Carriage Cable is described here. The replacement procedures for the Front Carriage Cable is the same as for the Rear Carriage Cable.

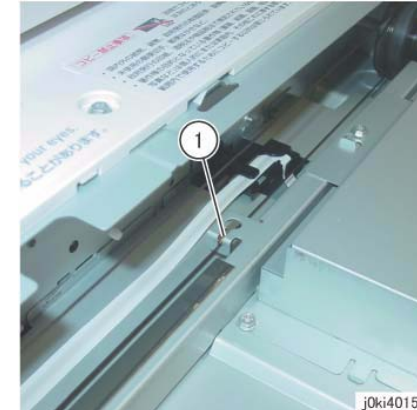
**NOTE:** The Carriage Cables must be replaced one by one. Never remove both front and rear cables at the same time.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the DADF or the Platen Cover.
4. Remove the following parts:
  - Platen Glass ([REP 6.2](#))
  - Control Panel ([REP 6.3](#))
  - IIT Left Cover ([PL 1.1](#))
5. Unfasten the Full Rate Carriage from the Carriage Cable. ([Figure 1](#))
  - a. Move the Full Rate Carriage to the notch on the Frame.
  - b. Remove the screw.



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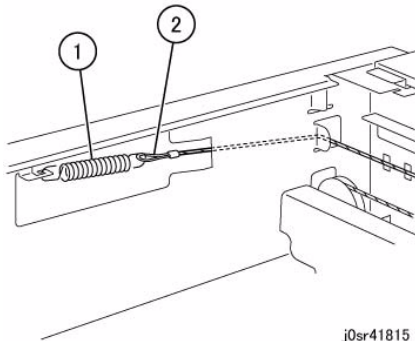
**Figure 1 Unfasten the Full Rate Carriage**



j0ki40150

**Figure 3 Remove the Carriage Cable**

6. Remove the Carriage Cable. (Figure 2)
  - a. Remove the spring from the Frame.
  - b. Detach the cable from the spring.



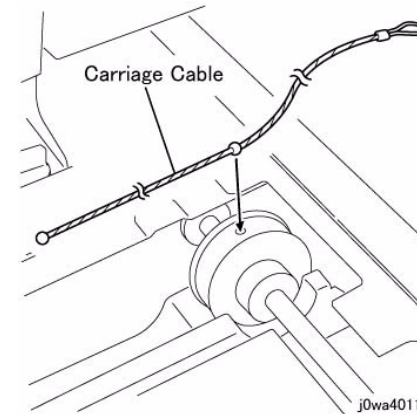
j0sr41815

**Figure 2 Remove the Carriage Cable**

7. Remove the Carriage Cable. (Figure 3)
  - a. Pull out the ball from the notch of the Frame and remove the Carriage Cable.

## Replacement

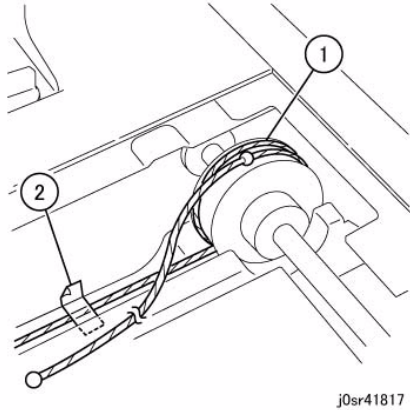
1. Insert the ball of the Carriage Cable into the groove of the Pulley. (Figure 4)



j0wa40112

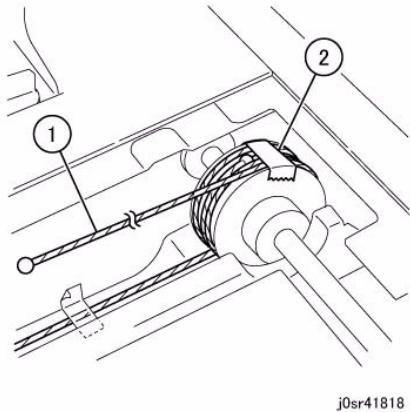
**Figure 4 Insert the ball of the Carriage Cable into the groove**

2. Wind the Carriage Cable at the spring end around the Pulley for 2 rounds. (Figure 5)
  - a. Wind the cable 2 rounds.
  - b. Fix the cable at the spring end on the Frame with tape.



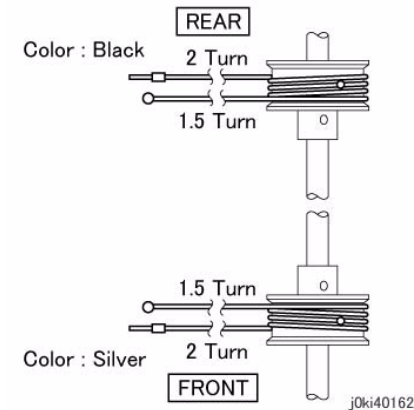
**Figure 5 Wind the Carriage Cable around the Pulley for 2 rounds**

3. Wind the Carriage Cable at the ball end around the Pulley for 1.5 rounds. (Figure 6)
  - a. Wind the cable 1.5 rounds.
  - b. Fix the cable wound on the Pulley with tape to prevent it from getting loose.



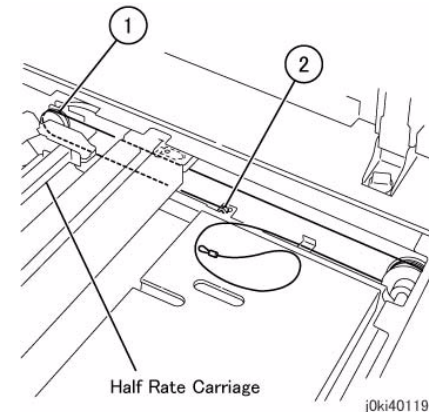
**Figure 6 Wind the Carriage Cable around the Pulley 1.5 rounds**

4. The figure below shows the number of rounds made by Carriage Cable at the front and rear. (Figure 7)



**Figure 7 Rounds made by the Carriage Cable**

5. Install the ball end of the Carriage Cable. (Figure 8)
  - a. Hang the cable on the larger Pulley of the Half Rate Carriage.
  - b. Hang the ball on the notch of the Frame.



**Figure 8 Install the ball end of the Carriage Cable**

6. Install the spring end of the Carriage Cable. (Figure 9)
  - a. Peel off the tape that secures the cable.
  - b. Hang the cable on the Pulley.
  - c. Hang it on the Pulley at the rear of Half Rate Carriage.
  - d. Hang the spring on the Cable and attach it to the Frame.

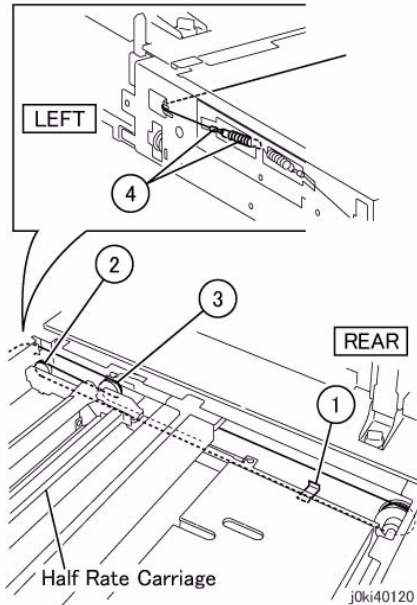


Figure 9 Install the spring end of the Carriage Cable

7. Affix the cable to the Full Rate Carriage. (Figure 10)
  - a. Peel off the tape.
  - b. Move the Full Rate Carriage to the notch on the Frame.
  - c. Affix the cable to the Full Rate Carriage.

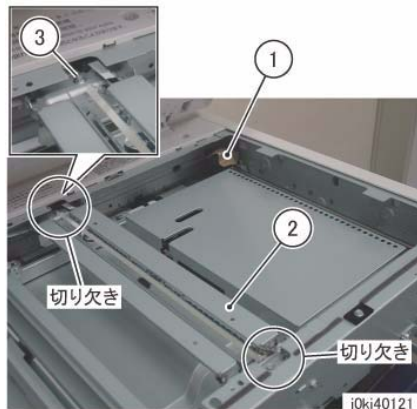


Figure 10 Affix the cable

8. Adjust the position of Full Rate/Half Rate Carriages. (ADJ 6.1)
9. Restore the machine to its original state.

## REP 6.8 Carriage Motor

Parts List on [PL 1.6](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Platen Cover or DADF Assembly ([REP 5.1](#))
  - Filter Cover ([PL 19.3](#))
  - Rear Upper Cover ([PL 19.3](#))
  - IIT Right Cover ([PL 1.1](#))
  - IIT Rear Cover ([PL 1.1](#))
  - IIT Top Cover ([PL 1.1](#))
4. Remove the Carriage Motor. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the spring.
  - d. Remove the screws (x3).
  - e. Remove the Carriage Motor.

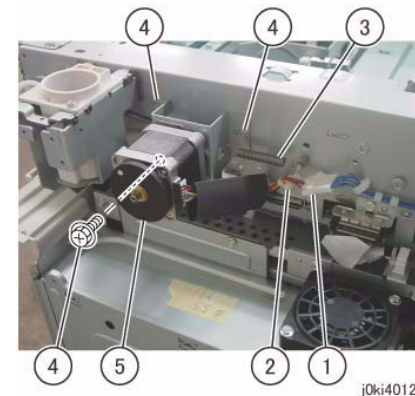
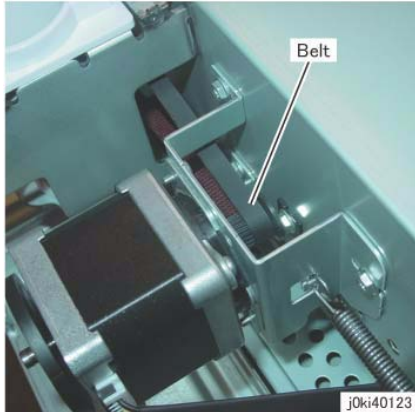


Figure 1 Remove the Carriage Motor

### Replacement

1. To install, carry out the removal steps in reverse order.
2. Install the Belt to the Pulley of the Carriage Motor. (Figure 2)



**Figure 2 Install the Belt**

3. Install the Carriage Motor:
  - a. Attach the idler spring.
  - b. Move the carriage to fit the Belt.
  - c. Secure the Carriage Motor to the Main Unit with the mounting screws.
4. After installing the Carriage Motor, move the Full Rate Carriage back and forth and check that it is moving smoothly.

## REP 6.9 LED Lamp PWB

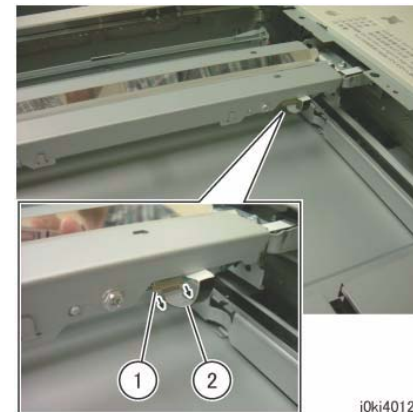
Parts List on [PL 1.7](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the chip on the LED Lamp PWB.

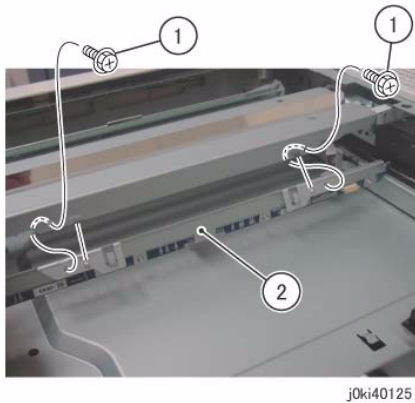
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Platen Cover or DADF.
4. Remove the Platen Glass. ([REP 6.2](#))
5. Move the Full Rate Carriage to the notch on the Frame.
6. Disconnect the connector. ([Figure 1](#))
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Remove the Flexible Flat Cable.



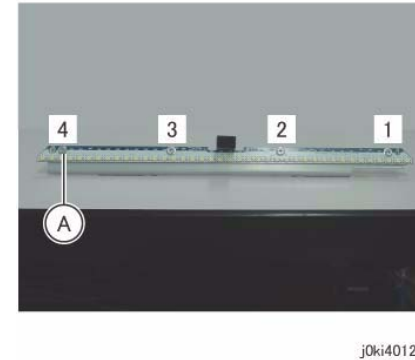
**Figure 1 Disconnect the connector**

7. Remove the LED Lamp. ([Figure 2](#))
  - a. Remove the screws (x2).
  - b. Remove the LED Lamp.





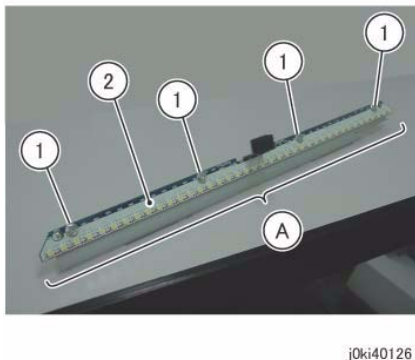
**Figure 2 Remove the LED Lamp**



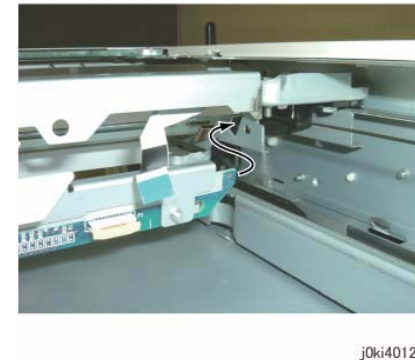
**Figure 4 Install the LED Lamp PWB**

8. Remove the LED Lamp PWB. (Figure 3)
  - a. Remove the screws (x4).
  - b. Remove the LED Lamp PWB.
 (A) Take note so as not to touch the LED chip.

3. When installing the LED Lamp, insert the rear side of the LED Lamp PWB into the square hole of the Full Rate Carriage. (Figure 5)



**Figure 3 Remove the LED Lamp PWB**

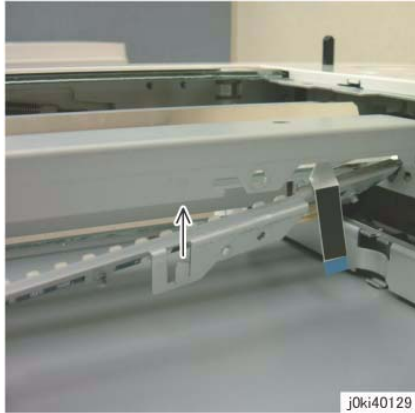


**Figure 5 Install the LED Lamp**

4. When installing the LED Lamp, affix the Full Rate Carriage by using the hook of the LED Lamp. (Figure 6)

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the LED Lamp PWB, loosely affix screw A and tighten the screws in order of 1 to 4. (Figure 4)



**Figure 6 Use the hook of the LED Lamp**

5. After a replacement, enter the Diagnostics Mode and use **dC135** reset the HFSI counter.

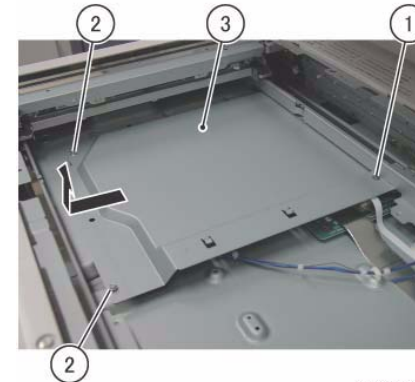
## REP 6.10 LED Lamp Wire Harness

Parts List on **PL 1.7**

### Removal

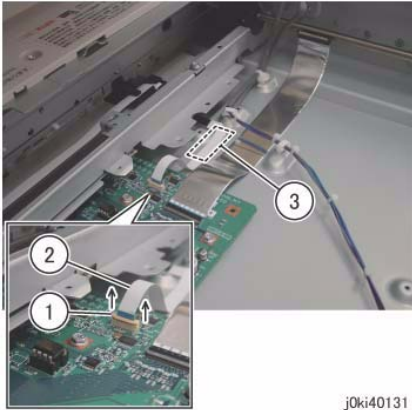
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Platen Cover or DADF.
4. Remove the following parts:
  - CCD Lens Assembly (REP 6.6)
  - LED Lamp (REP 6.9)
5. Remove the PWB Cover (Figure 1)
  - a. Remove the screw (Blue, x1).
  - b. Remove the screws (Round: x2).
  - c. Remove the PWB Cover in the direction of the arrow.



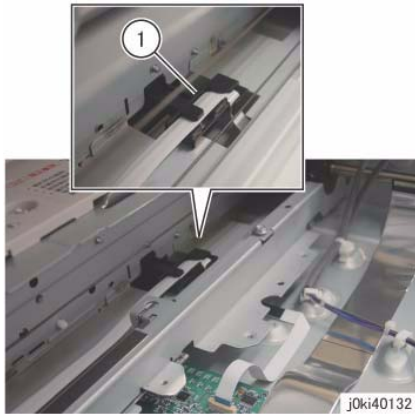
**Figure 1 Remove the PWB Cover**

6. Disconnect the LED Lamp Wire Harness (Figure 2)
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Disconnect the LED Lamp Wire Harness.
  - c. Peel off the LED Lamp Wire Harness from the adhesive tape section.



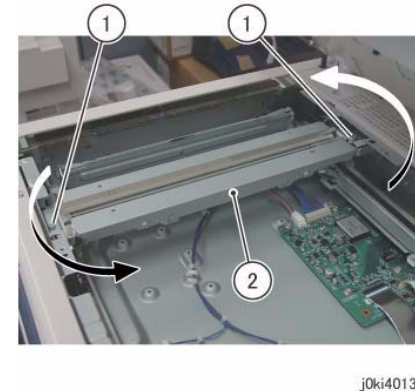
**Figure 2 Disconnect the LED Lamp Wire Harness**

7. Remove the LED Lamp Wire Harness from the Harness Holder. (Figure 3)
  - a. Remove the LED Lamp Wire Harness from the Harness Holder.



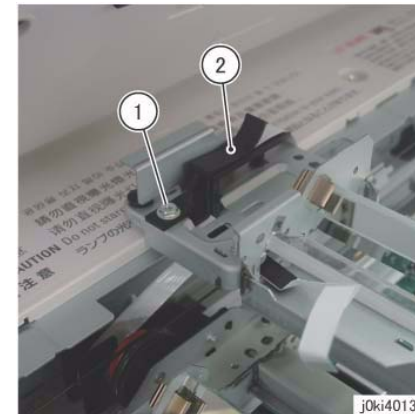
**Figure 3 Remove the LED Lamp Wire Harness**

8. Remove the Full Rate Carriage. (Figure 4)
  - a. Remove the screws (x2).
  - b. Move the Full Rate Carriage in the direction of the arrow and remove it.



**Figure 4 Remove the Full Rate Carriage**

9. Turn the Full Rate Carriage upside down.
10. Remove the guide. (Figure 5)
  - a. Remove the screw.
  - b. Remove the guide.



**Figure 5 Remove the Guide**

11. Remove the LED Lamp Wire Harness from the Full Rate Carriage. (Figure 6)
  - a. Remove the LED Lamp Wire Harness.



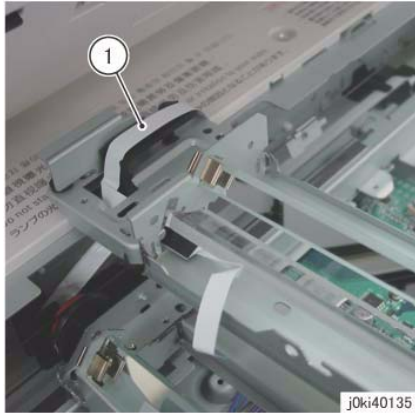


Figure 6 Remove the LED Lamp Wire Harness

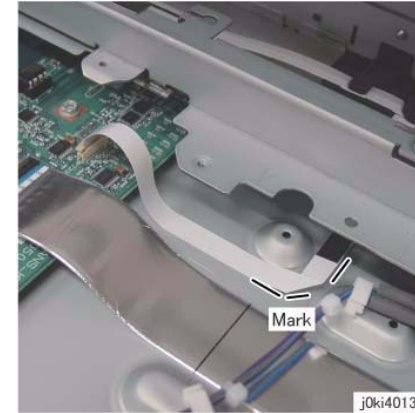


Figure 8 Secure the LED Lamp Wire Harness

## Replacement

1. To install, carry out the removal steps in reverse order.
2. The LED Lamp Wire Harness is to be installed to the Harness Guide of the Half Rate Carriage. (Figure 7)  
(A) Harness Guide

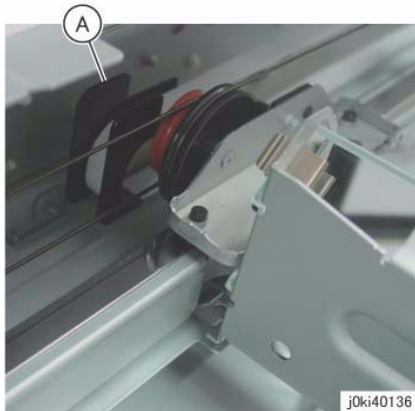


Figure 7 Install the LED Lamp Wire Harness



Figure 9 Install the PWB Cover

3. When securing the LED Lamp Wire Harness to the Base Frame using adhesive tape, align it to the mark as shown in the figure to paste it. (Figure 8)

4. When installing the PWB Cover, attach the hooks (x4). (Figure 9)

5. Adjust the position of Full Rate/Half Rate Carriages. (ADJ 6.1)

## REP 6.11 Light Guide

### Parts List on PL 1.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the Light Guide using bare hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
  2. Switch off the power and disconnect the power cord.
  3. Remove the DADF. (REP 5.1)
  4. Remove the Platen Glass. (REP 6.2)
  5. Move the Full Rate Carriage to the notch on the Frame.
  6. Remove the Light Guide. (Figure 1)
    - a. Remove the screw.
    - b. Remove the clip.
    - c. Remove the screw.
    - d. Remove the clip.
    - e. Remove the Light Guide.
- (A) Take note so as to not damage the Lamp Wire Harness.

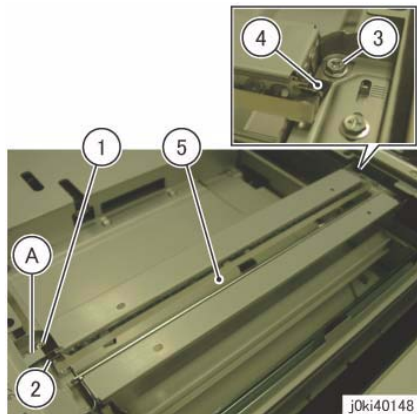


Figure 1 Remove the Light Guide

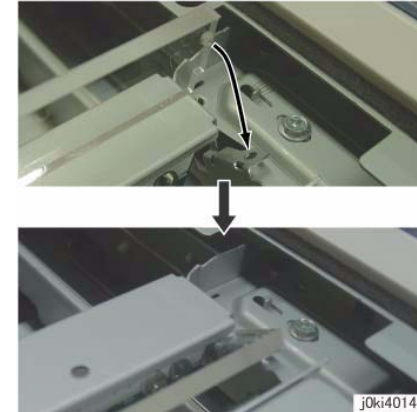


Figure 2 Install the Light Guide

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Light Guide, insert the boss of the Light guide into the positioning hole of the Full Rate Carriage. (Figure 2)

## REP 6.12 IIT PWB

### Parts List on PL 1.8

#### Removal

#### CAUTION

Serial number data is stored at three locations:

- MCU NVM PWB
- SBC NVM PWB
- IIT/IPS PWB.

If these boards are replaced one-at-a-time, the machine will automatically synchronize the data on the new PWB to match the other two. You must install the new PWB, switch on the power, wait for the numbers to synchronize, then switch off the power before replacing any other PWB.:

If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:

- 16-801.19
- 22-352

then you must perform dC132 to restore serial numbers/billing data.

#### CAUTION

Static electricity can damage electrical parts. Always use an Electrostatic Discharge Kit during servicing. If an ESD kit is not available, touch metallic parts on the machine frame prior to servicing to discharge the static electricity.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Filter Cover and Rear Upper Cover. (PL 19.3)
4. Remove the IIT Rear Cover. (REP 6.14)
5. Disconnect the connectors at the rear side that are connected to the IIT PWB. (Figure 1)
  - a. Release the hook and disconnect the connector.
  - b. Disconnect the connector.
  - c. Remove the Lock Screws (x2).
  - d. Remove the screw.

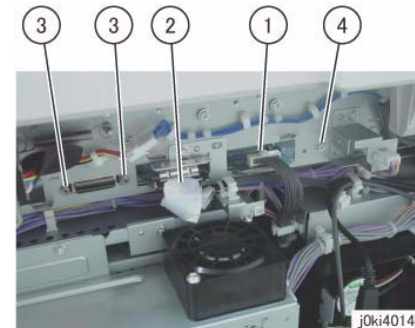


Figure 1 Disconnect the connectors

6. Open the Platen or the DADF.
7. Remove the Platen Glass. (REP 6.2)
8. Remove the Lens Cover. (PL 1.5)
9. Remove the PWB Cover. (Figure 2)
  - a. Remove the screw (Blue, x1).
  - b. Remove the screws (Round: x2).
  - c. Remove the PWB Cover in the direction of the arrow.

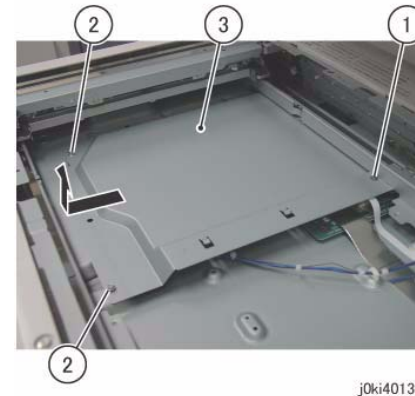
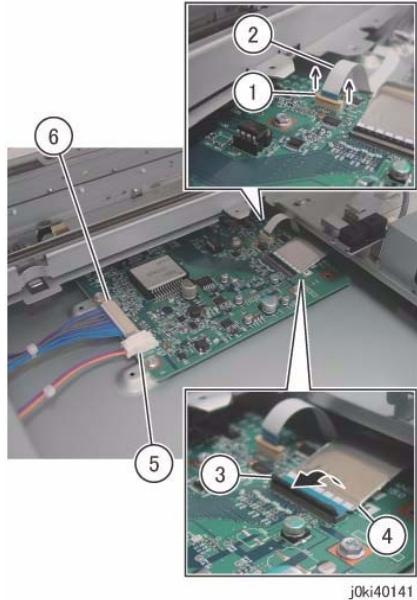


Figure 2 Remove the PWB Cover

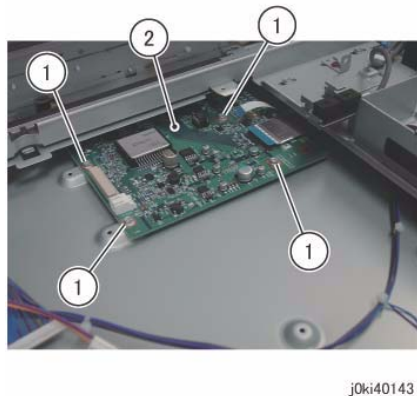
10. Disconnect the connectors that are connected to the IIT PWB. (Figure 3)
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Remove the Flexible Print Cable.
  - c. Open the Plate of the Connector Housing in the direction of the arrow.
  - d. Remove the Flexible Print Cable.

- e. Release the hook and disconnect the connector.
- f. Disconnect the connector.



**Figure 3 Disconnect the connectors**

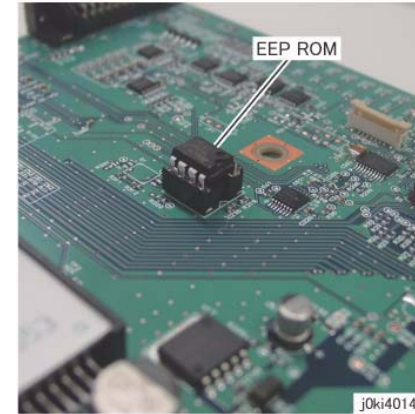
- 11. Remove the IIT PWB. (Figure 4)
  - a. Remove the screws (x4).
  - b. Remove the IIT PWB.



**Figure 4 Remove the IIT PWB**

## Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. When the PWB is replaced, remove the EEP ROM from the old PWB and install it onto the new one. (Figure 5)



**Figure 5 Remove and Replace the EEP ROM from the old PWB**

- 3. When installing the PWB Cover, attach the hooks (x4). (Figure 6)



**Figure 6 Install the PWB Cover**

## REP 6.13 USB Connector

### Parts List on PL 1.4

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Release the hooks of the Overlay Cover. (Figure 1)
  - a. Release the hooks (x3).

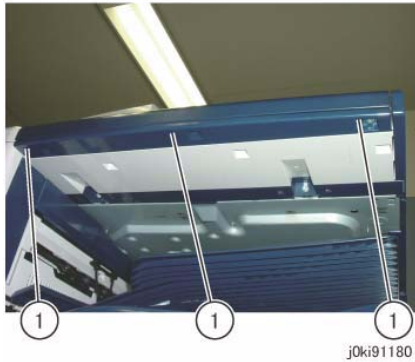


Figure 1 Release the hooks

4. Remove the Overlay Cover. (Figure 2)
  - a. Remove the Overlay Cover in the direction of the arrow.



Figure 2 Remove the Overlay Cover

5. Remove the screws that secure the USB Connector. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Tapping Screws (x2).

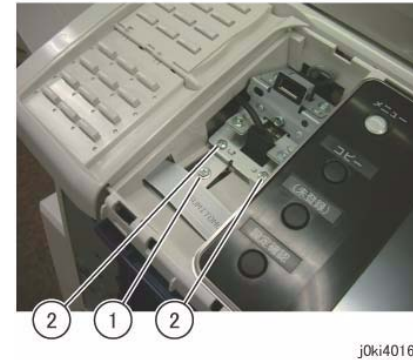


Figure 3 Remove the screws

6. Remove the USB Connector. (Figure 4)
  - a. Shift the USB Connector.
  - b. Disconnect the connector of the USB Cable.

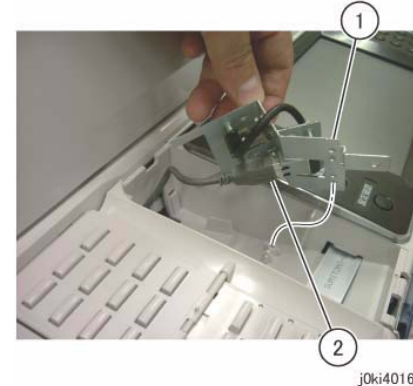


Figure 4 Remove the USB Connector

#### Replacement

1. To install, carry out the removal steps in reverse order.



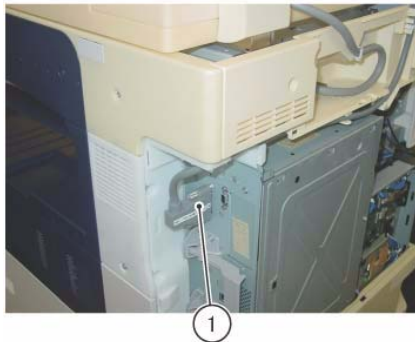
## REP 6.14 IIT Rear Cover

### Parts List on PL 1.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

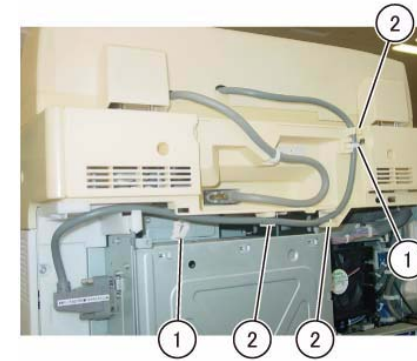
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the IIT Rear Cap Cover. (PL 1.1)
4. Remove the Control Unit Connector Cover. (PL 19.3)
5. Remove the Filter Cover. (PL 19.3)
6. Remove the Rear Upper Cover. (PL 19.3)
7. Disconnect the connector. (Figure 1)
  - a. Loosen the screw (x2) and disconnect the connector.



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Figure 1 j0kt45501

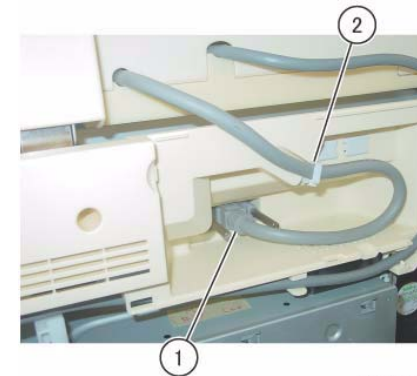
8. Remove the cable from the guide. (Figure 2)
  - a. Release the clamp (x2) to remove the cable.
  - b. Remove the cable from the guide (x3).



j0kt45502

Figure 2 j0kt45502

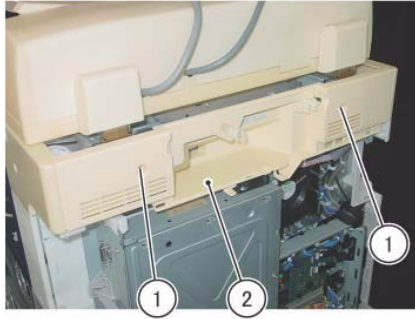
9. Disconnect the connector. (Figure 3)
  - a. Loosen the screw (x2) and disconnect the connector.
  - b. Release the clamp to remove the cable.



j0kt45503

Figure 3 j0kt45503

10. Remove the IIT Rear Cover. (Figure 4)
  - a. Remove the screw (x2).
  - b. Remove the IIT Rear Cover.



j0kt40102

**Figure 4 j0kt40102**

### **Replacement**

1. To install, carry out the removal steps in reverse order.





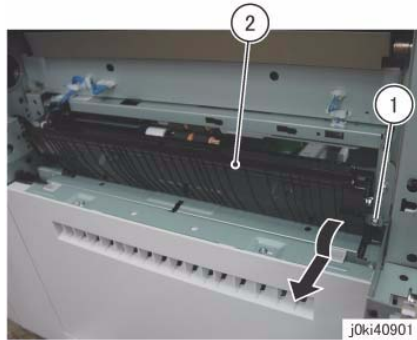
## REP 7.1 Tray 1 Feeder Assembly

Parts List on [PL 9.3](#)

### Removal

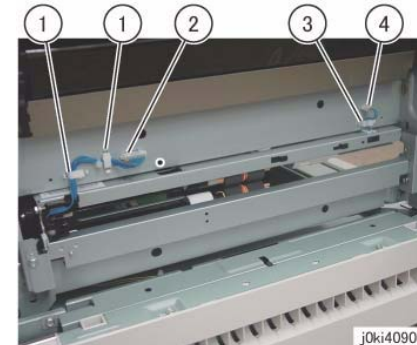
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Registration Transport Assembly. ([REP 7.24](#))
4. Pull out Tray 1 and remove the paper.
5. Remove Tray 1.
6. Remove the Chute Assembly from the Tray 1 Feeder Unit. ([Figure 1](#))
  - a. Remove the Stopper Screw.
  - b. Remove the Chute Assembly in the direction of the arrow.



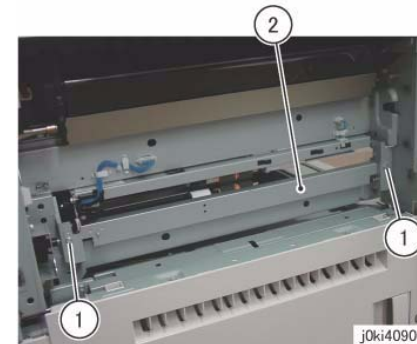
**Figure 1 Remove the Chute Assembly**

7. Disconnect the connector. ([Figure 2](#))
  - a. Release the Wire Harness from the clamps (x2).
  - b. Disconnect the connector.
  - c. Release the wire harness from the clamp.
  - d. Disconnect the connector.



**Figure 2 Disconnect the connector**

8. Remove the Tray 1 Feeder Unit. ([Figure 3](#))
  - a. Remove the screws (x2).
  - b. Remove the Tray 1 Feeder Unit.



**Figure 3 Remove Tray 1 Feeder**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag. Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.2 Tray 1 Feed/Retard/Nudger Roll

Parts List on [PL 9.5](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Pull out Tray 1 and remove the paper.
4. Remove Tray 1.
5. Remove the Tray 1 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 1 Feed/Retard/Nudger Roll.

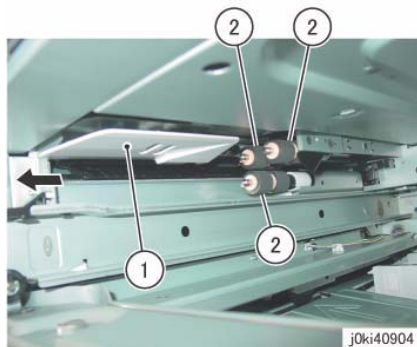


Figure 1 Remove the Tray 1 Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.3 Tray 2 Feeder Assembly (3TM)

Parts List on [PL 10.1](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2.
4. Open the L/H Cover Unit.
5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.

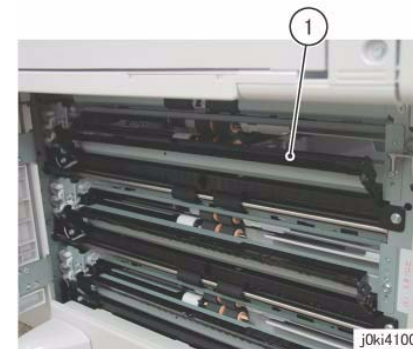
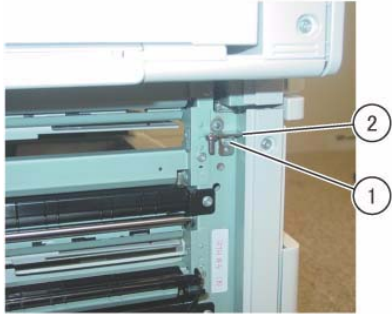


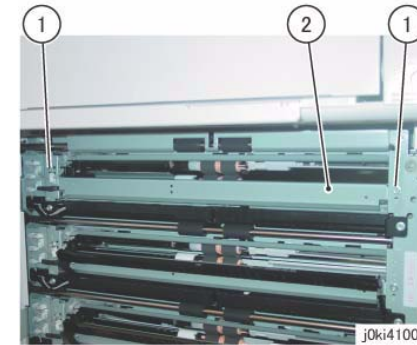
Figure 1 Remove the Feed Out Chute

6. Remove the Bracket Assembly. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket Assembly.



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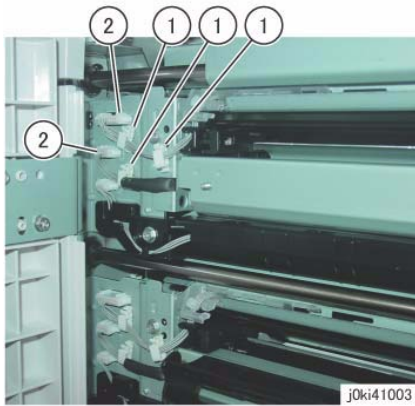
**Figure 2 Remove the Bracket Assembly**



j0ki41004

**Figure 4 Remove the Tray 2 Feeder Assembly**

7. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



j0ki41003

**Figure 3 Disconnect the connectors**

8. Remove the Tray 2 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 2 Feeder Assembly.

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

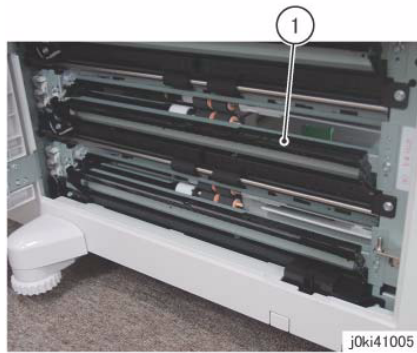
## REP 7.4 Tray 3 Feeder Assembly (3TM)

Parts List on [PL 10.1](#)

### Removal

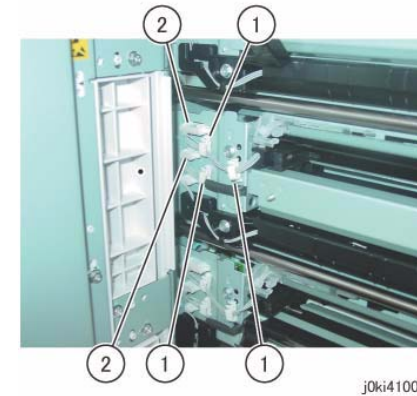
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 3.
4. Open the L/H Cover Unit.
5. Remove the Feed Out Chute. ([Figure 1](#))
  - a. Remove the Feed Out Chute.



**Figure 1 Remove the Feed Out Chute**

6. Disconnect the connector. ([Figure 2](#))
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



**Figure 2 Disconnect the connectors**

7. Remove the Tray 3 Feeder Assembly. ([Figure 3](#))
  - a. Remove the screws (x2).
  - b. Remove Tray 3 Feeder Assembly.



**Figure 3 Remove the Tray 3 Feeder Assembly**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

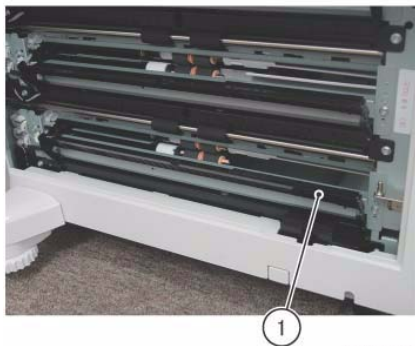
## REP 7.5 Tray 4 Feeder Assembly (3TM)

Parts List on [PL 10.1](#)

### Removal

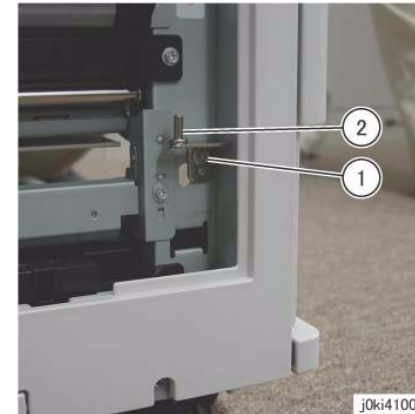
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 4.
4. Open the L/H Cover Unit.
5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



**Figure 1 Remove the Feed Out Chute**

6. Remove the Bracket Assembly. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket Assembly.



**Figure 2 Remove the Bracket Assembly**

7. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



**Figure 3 Disconnect the connectors**

8. Remove the Tray 4 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 4 Feeder Assembly.

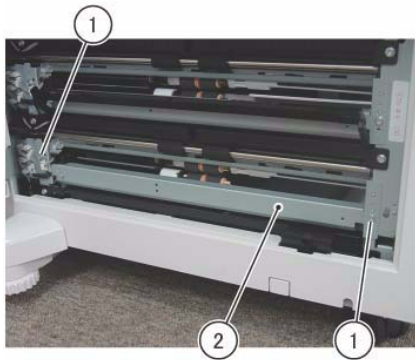


Figure 4 Remove the Tray 4 Feeder Assembly

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 7.6 Tray 2 Feed/Retard/Nudger Roll (3TM)

Parts List on **PL 10.4**

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2/3.
4. Remove the Tray 2 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 2 Feed/Retard/Nudger Roll.

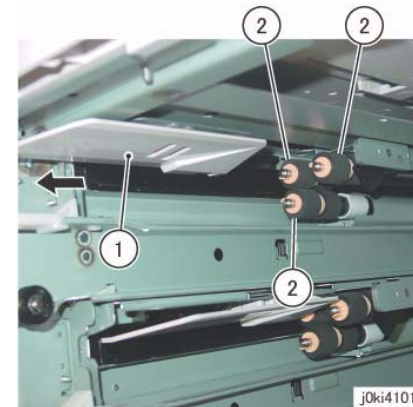


Figure 1 Remove the Tray 2 Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.



## REP 7.7 Tray 3 Feed/Retard/Nudger Roll (3TM)

Parts List on [PL 10.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 3/4.
4. Remove the Tray 3 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 3 Feed/Retard/Nudger Roll.

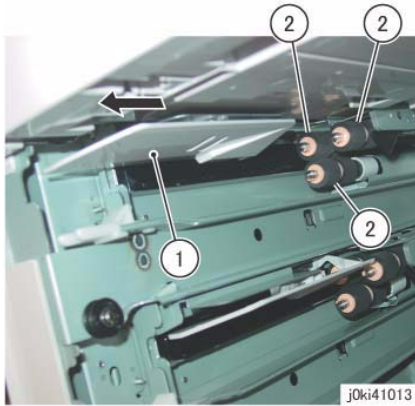


Figure 1 Remove the Tray 3 Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.8 Tray 4 Feed/Retard/Nudger Roll (3TM)

Parts List on [PL 10.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 3/4.
4. Remove the Tray 4 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 4 Feed/Retard/Nudger Roll.

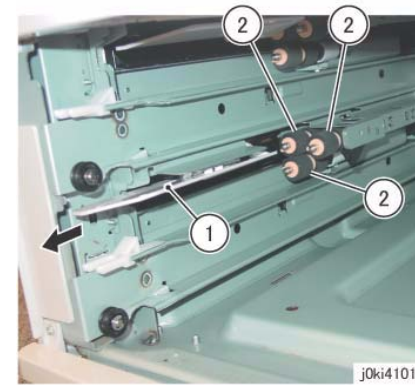


Figure 1 Remove the Tray 4 Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.9 Tray Module PWB (3TM)

Parts List on [PL 10.9](#)

### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. After replacement, set the switch of the Tray Module PWB as follows. (Figure 1)

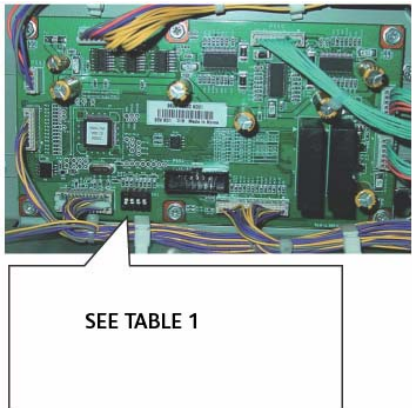


Figure 1 Tray Module PWB switch settings

Table 1 DIP Switch Settings

Tray Type	SW1	SW2	SW3	SW4
3TM	ON	ON	ON	ON

## REP 7.10 Tray 3 Assembly (TTM)

Parts List on [PL 11.1](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Pull out Tray 3.
4. Remove the paper from Tray 3.
5. Remove the Tray 3 Assembly. (Figure 1)
  - a. Remove the screw.
  - b. Remove the stopper.
  - c. Remove the Tray 3 Assembly.

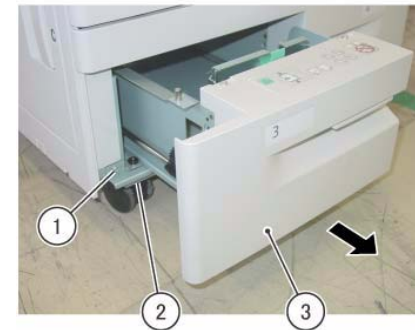


Figure 1 Remove the Tray 3 Assembly

### Replacement

1. To install, carry out the removed steps in reverse order.



## REP 7.11 Tray 4 Assembly (TTM)

Parts List on [PL 11.1](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Pull out Tray 4.
4. Remove the paper from Tray 4.
5. Remove the Tray 4 Assembly. (Figure 1)
  - a. Remove the screws (x2).
  - b. Store the Tray 4 Transport Assembly.
  - c. Remove the screw.
  - d. Remove the stopper.
  - e. Remove the Tray 4 Assembly.



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Figure 1 Remove the Tray 4 Assembly

### Replacement

1. To install, carry out the removed steps in reverse order.

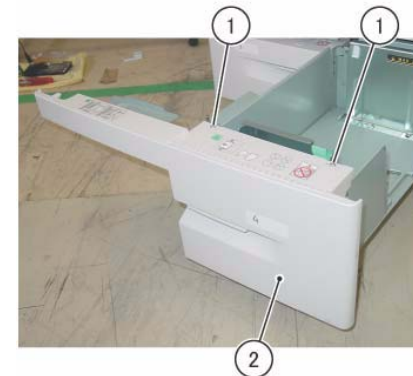
## REP 7.12 Tray Cable (TTM)

Parts List on [PL 11.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Tray 4 Assembly. ([REP 7.11](#))
4. Remove the Tray 4 Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Remove the Tray 4 Cover.



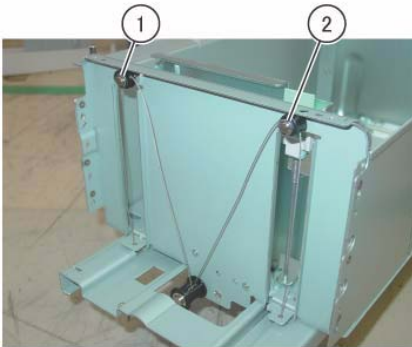
j0ki41103

Figure 1 Remove the Tray 4 Cover

5. Remove the Tray Cable. (Figure 2)

**NOTE:** Only the removal procedure for the Tray Cable at the front is described here. The Tray Cable at the rear is removed in the same way.

- a. Remove the E-Clip and Cable Guide.
- b. Remove the E-Clip and Cable Guide.



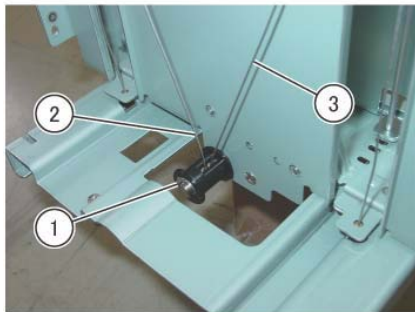
j0ki41104

**Figure 2 Remove the Tray Cable**

6. Remove the Tray Cable. (Figure 3)

**NOTE:** Only the removal procedure for the Tray Cable at the front is described here. The Tray Cable at the rear is removed in the same way.

- a. Remove the E-Clip and the Pulley.
- b. Remove the Tray Cable.
- c. Remove the Tray Cable.



j0ki41105

**Figure 3 Remove the Tray Cable**

## Replacement

1. To install, carry out the removed steps in reverse order.

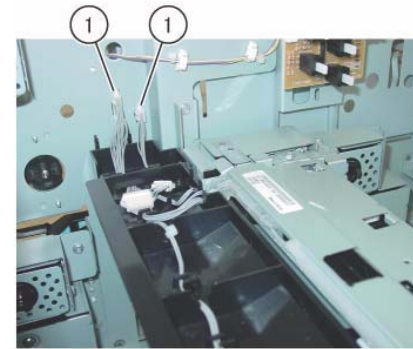
## REP 7.13 Tray 4 Feeder (TTM)

Parts List on [PL 11.5](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

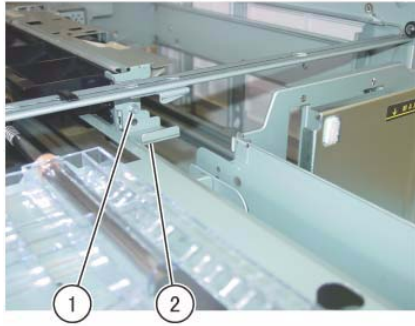
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 1 and Tray 2.
4. Disconnect the connector of the Tray 4 Feeder Assembly. (Figure 1)
  - a. Disconnect the connectors (x2).



j0ki41106

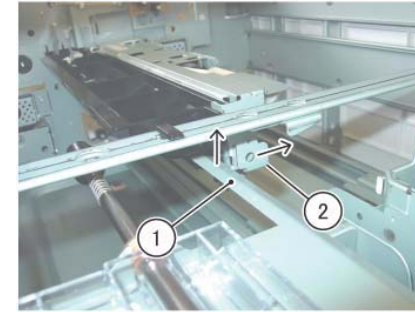
**Figure 1 Disconnect the connectors**

5. Pull out the Tray 3/4.
6. Remove the Stud Bracket. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Stud Bracket.



j0ki41107

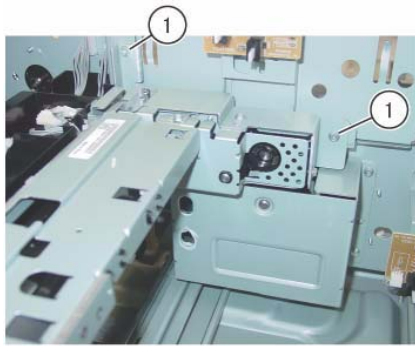
**Figure 2 Remove the Stud Bracket**



j0ki41109

**Figure 4 Remove the Tray 4 Feeder Assembly**

7. Remove the screws that secure the Tray 4 Feeder Assembly. (Figure 3)
  - a. Remove the screws (x2).

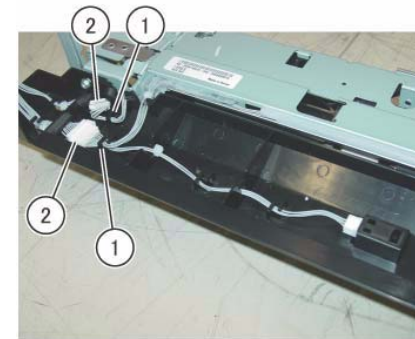


j0ki41108

**Figure 3 Remove the screws**

8. Remove the Tray 4 Feeder Assembly. (Figure 4)
  - a. Lift the Lower Chute in the direction of the arrow.
  - b. Move the Tray 4 Feeder Assembly in the direction of the arrow and remove it.

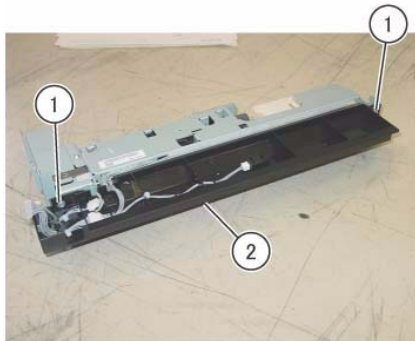
9. Disconnect the connector. (Figure 5)
  - a. Remove the wire harnesses (x2) from the hooks (x2).
  - b. Disconnect the connectors (x2).



j0ki41110

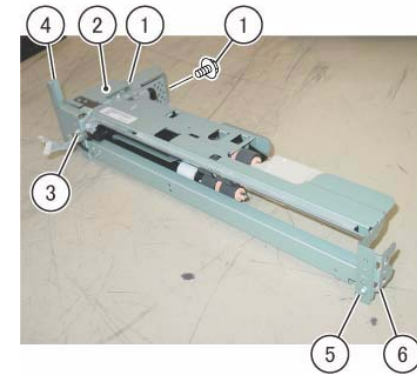
**Figure 5 Disconnect the connectors**

10. Remove the Upper Chute. (Figure 6)
  - a. Remove the screws (x2).
  - b. Remove the Upper Chute.



j0ki41111

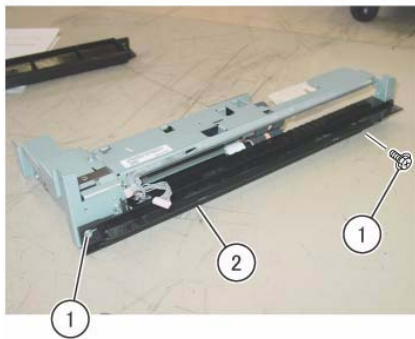
**Figure 6 Remove the Upper Chute**



j0ki41113

**Figure 8 Remove the various Tray 4 Feeder Assembly parts**

11. Remove the Lower Chute. (Figure 7)
  - a. Remove the screws (x2).
  - b. Remove the Lower Chute.



j0ki41112

**Figure 7 Remove the Lower Chute**

12. Remove the various parts from the Tray 4 Feeder Assembly. (Figure 8)
  - a. Remove the screws (x2).
  - b. Remove the Bracket.
  - c. Remove the screw.
  - d. Remove the Bracket.
  - e. Remove the screw.
  - f. Remove the Bracket.

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

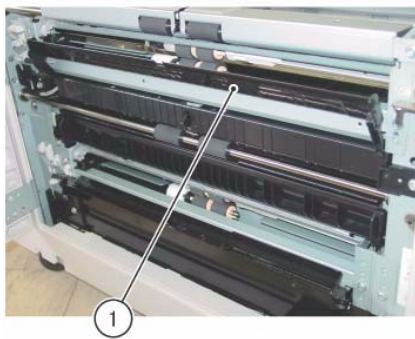
## REP 7.14 Tray 2 Feeder (TTM)

### Parts List on PL 11.6

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

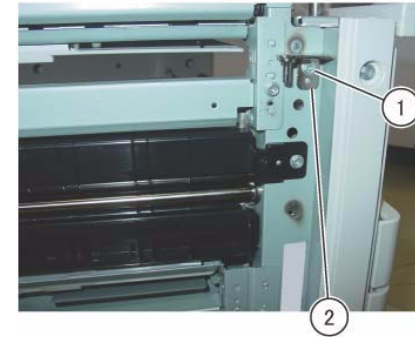
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Pull out Tray 2.
4. Open the Left Cover.
5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



j0ki41114

**Figure 1 Remove the Feed Out Chute**

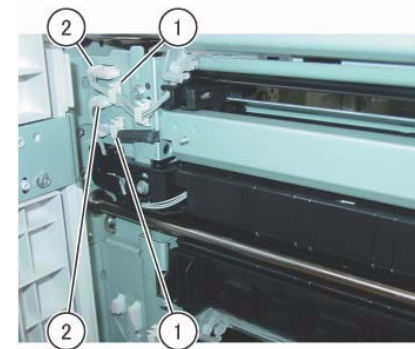
6. Remove the Bracket. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket.



j0ki41115

**Figure 2 Remove the Bracket**

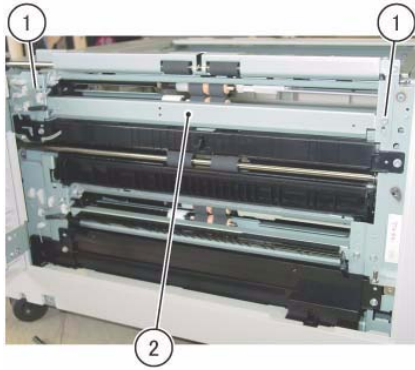
7. Disconnect the connector. (Figure 3)
  - a. Release the wire harnesses (x2) from the clamps (x2).
  - b. Disconnect the connectors (x2).



j0ki41116

**Figure 3 Disconnect the connectors**

8. Remove the Tray 2 Feeder. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove the Tray 2 Feeder.



j0ki41117

**Figure 4 Remove the Tray 2 Feeder**

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

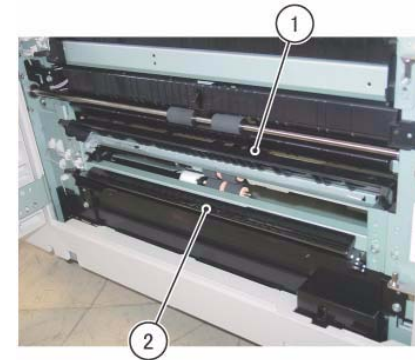
## REP 7.15 Tray 3 Feeder (TTM)

Parts List on **PL 11.6**

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2.
4. Pull out Tray 3 and Tray 4.
5. Open the Left Cover.
6. Remove the Lower Chute and the Feed Out Chute. (Figure 1)
  - a. Remove the Lower Chute.
  - b. Remove the Feed Out Chute.

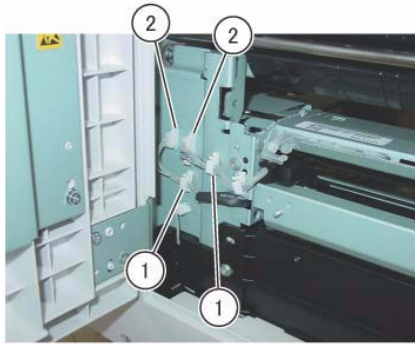


j0ki41118

**Figure 1 Remove the Lower and Feed Out Chutes**

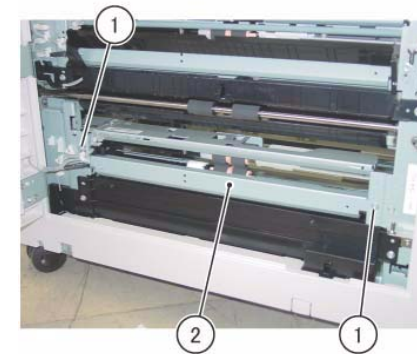
7. Disconnect the connector. (Figure 2)
  - a. Release the wire harnesses (x2) from the clamps (x2).
  - b. Disconnect the connectors (x2).





j0ki41119

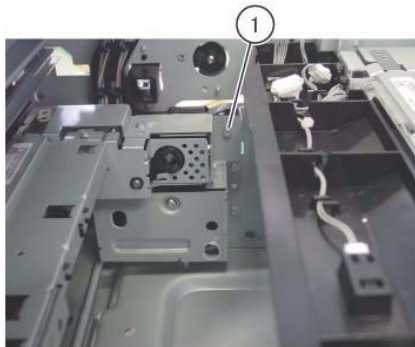
**Figure 2 Disconnect the connectors**



j0ki41121

**Figure 4 Remove the Tray 3 Feeder Assembly**

8. Remove the screws that secure the Tray 3 Feeder Assembly. (Figure 3)
  - a. Remove the screw.

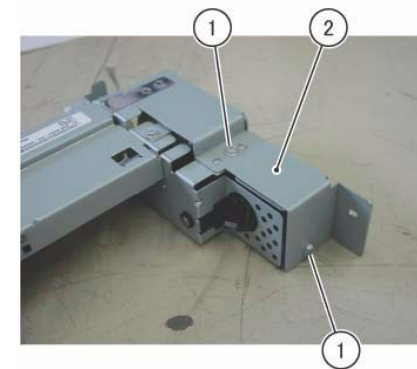


j0ki41120

**Figure 3 Remove the screws**

9. Remove the Tray 3 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 3 Feeder Assembly.

10. Remove the Tray 3 Feeder. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the Bracket.



j0ki41122

**Figure 5 Remove the Tray 3 Feeder**

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 7.16 Tray 2 Feed/Retard/Nudger Roll (TTM)

Parts List on [PL 11.8](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2.
4. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.

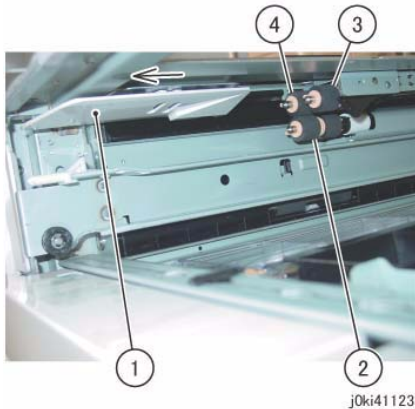


Figure 1 Remove the Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.18 Tray 3 Feed/Retard/Nudger Roll (TTM)

Parts List on [PL 11.10](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2.
4. Pull out Tray 3 and Tray 4.
5. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.

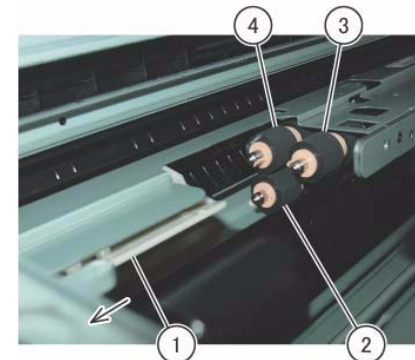


Figure 1 Remove the Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.



## REP 7.19 Tray 4 Feed/Retard/Nudger Roll (TTM)

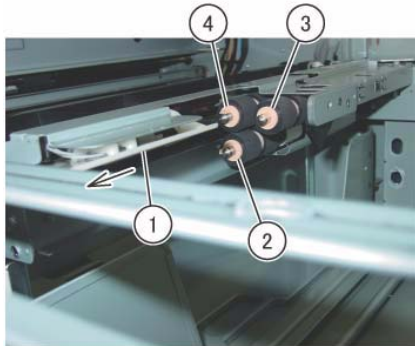
Parts List on [PL 11.12](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove Tray 2.
4. Pull out Tray 4.
5. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.



j0ki41125

Figure 1 Remove the Feed/Retard/Nudger Rolls

### Replacement

1. To install, carry out the removed steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 7.20 Tray Module PWB (TTM)

Parts List on [PL 11.17](#)

### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. After replacement, set the switch of the Tray Module PWB as follows. (Figure 1)

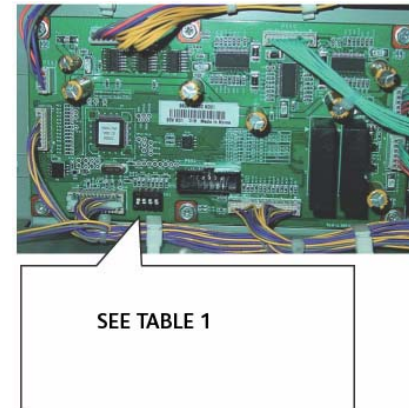


Figure 1 Tray Module PWB switch settings

Table 1 DIP Switch Settings

Tray Type	SW1	SW2	SW3	SW4
TTM	ON	ON	OFF	ON

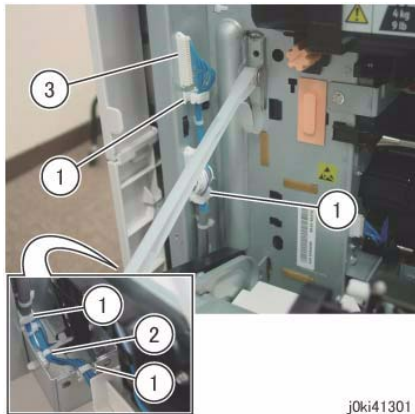
## REP 7.21 Tray 5

### Parts List on [PL 13.1](#)

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Left Rear Lower Cover. ([PL 19.2](#))
4. Open the L/H Cover Unit.
5. Disconnect the connector. ([Figure 1](#))
  - a. Release the wire harness from the clamps (x4).
  - b. Remove the cable band.
  - c. Disconnect the connector.



**Figure 1 Disconnect the connectors**



j0ki41302

**Figure 2 Remove Tray 5**

#### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** Be careful not to pinch the wire harness of the Tray 5 when installing the Left Rear Lower Cover.

6. Close the L/H Cover Unit.
7. Remove Tray 5. ([Figure 2](#))
  - a. Remove the screws (x2).
  - b. Remove Tray 5.

## REP 7.22 Tray 5 Feed/Retard/Nudger Roll

Parts List on [PL 13.3](#), [PL 13.4](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Top Cover. (Figure 1)
  - a. Release the hooks (x2) and remove the Top Cover.

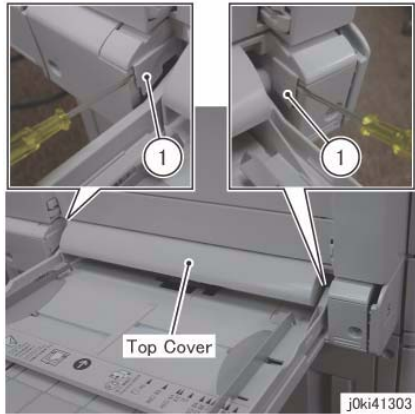


Figure 1 Remove the Top Cover

4. Remove the Nudger Roll. (Figure 2)
  - a. Remove the Nudger Roll.

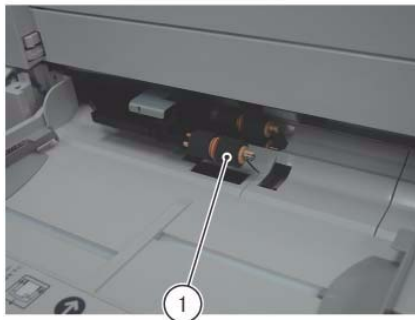


Figure 2 Remove the Nudger roll

5. Remove the Front Chute. (Figure 3)
  - a. Remove the Front Chute.

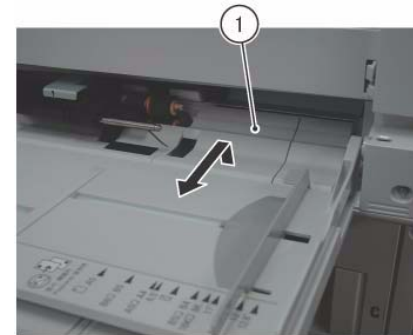


Figure 3 Remove the Front Chute

6. Remove the Feed/Retard Roll. (Figure 4)
  - a. Remove the Feed Roll.
  - b. Remove the Retard Roll.

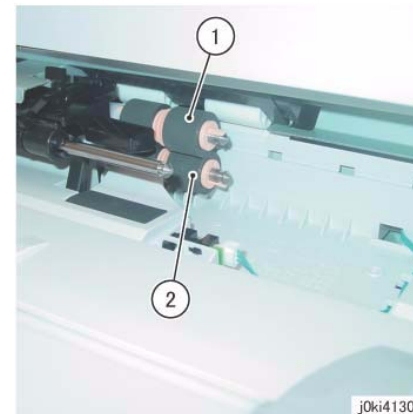


Figure 4 Remove the Feed/Retard Rolls

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

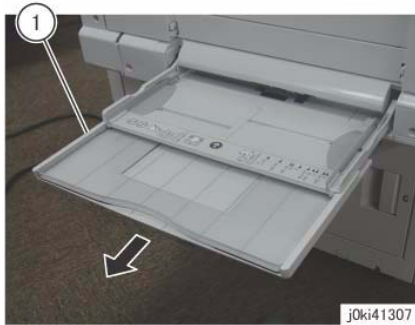
## REP 7.23 Tray 5 Paper Size Sensor

Parts List on [PL 13.5](#)

### Removal

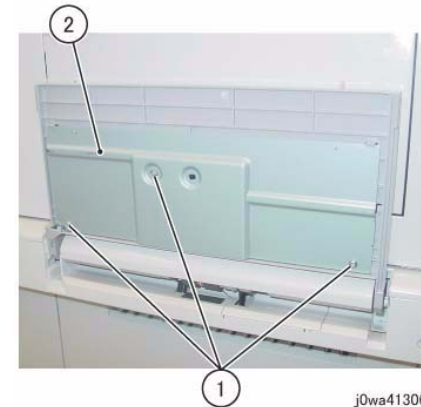
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Gently extend the Extension Tray and pull it out. ([Figure 1](#))
  - a. Remove the Extension Tray.



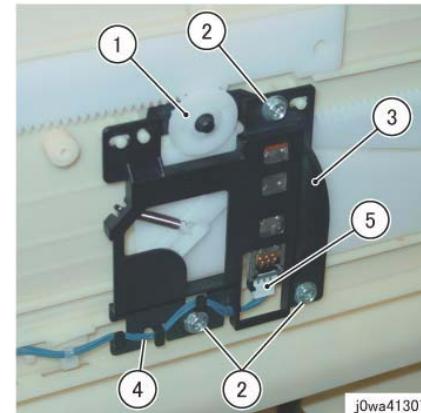
**Figure 1** Remove the Extension Tray

4. Remove the Plate. ([Figure 2](#))
  - a. Remove the Tapping Screws (x3).
  - b. Remove the Plate.



**Figure 2** Remove the Plate

5. Remove the Tray 5 Paper Size Sensor. ([Figure 3](#))
  - a. Remove the Pinion Gear.
  - b. Remove the Tapping Screws (x3).
  - c. Remove the Tray 5 Paper Size Sensor.
  - d. Release the wire harness from the Tray 5 Paper Size Sensor.
  - e. Disconnect the connector.



**Figure 3** Remove the Tray 5 Paper Size Sensor

### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** When installing the Tray 5 Paper Size Sensor, make sure that the pin is inserted properly into the long hole of the Link. (Figure 4)

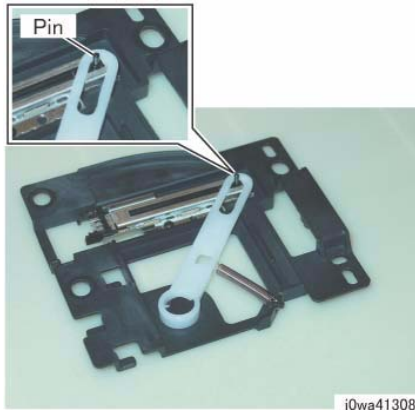


Figure 4 Insert the Pin

**NOTE:** When installing the Pinion Gear, align the marks on the Front/Rear Rack to the marks on Tray 5. (Figure 5)

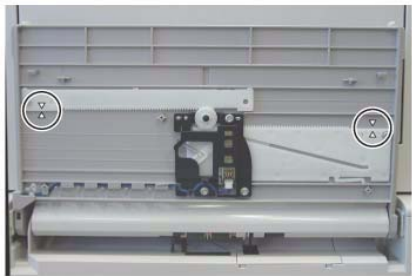


Figure 5 Installing the Pinion Gear

## REP 7.24 Registration Transport Assembly

### Parts List on PL 15.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the L/H Cover Unit. (REP 14.1)
4. Remove the Tray 5. (REP 7.21)
5. Remove the Registration Transport Assembly. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Registration Transport Assembly.

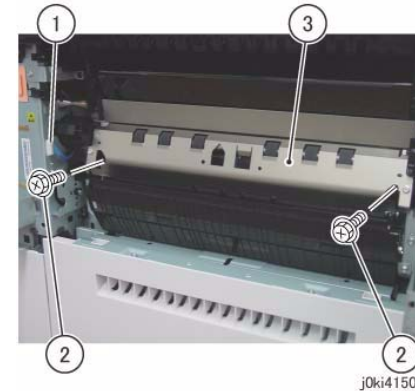


Figure 1 Remove the Registration Transport Assembly

#### Replacement

1. To install, carry out the removal steps in reverse order.

#### CAUTION

*Make sure you secure the screw (Figure 1) at the rear side of the Registration Transport Assembly. If it is not secured, it may cause the DUP MOT DRIVE of the MD PWB to be damaged.*



## REP 9.1 Transfer Belt Cleaner Assembly

### Parts List on PL 6.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Cover.
4. Rotate the shutter of the Transfer Belt Cleaner Assembly clockwise. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Rotate the shutter in clockwise direction.

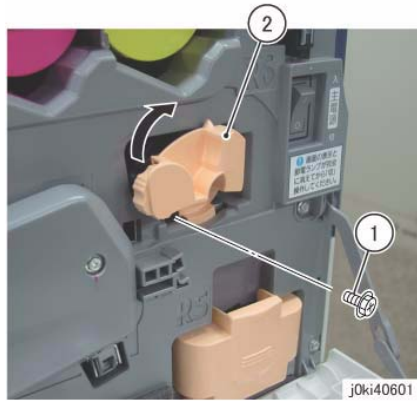


Figure 1 Rotate the shutter clockwise

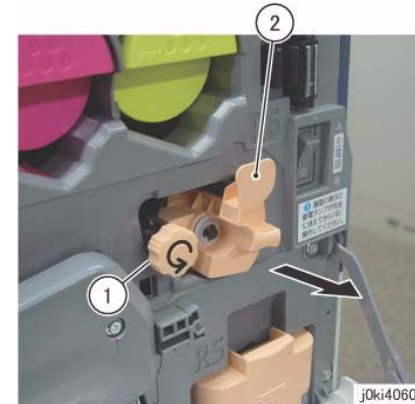


Figure 2 Remove the Transfer Belt Cleaner Assembly

#### Replacement

1. To install, carry out the removal steps in reverse order.
  2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.
5. Remove the Transfer Belt Cleaner Assembly. (Figure 2)
    - a. Rotate the Knob in the direction of the arrow until it is free.
    - b. Remove the Transfer Belt Cleaner Assembly.



## REP 9.2 IBT Assembly

### Parts List on PL 6.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Do not touch the Transfer Belt surface with your hands.

**NOTE:** When placing the IBT Assembly on the floor, spread paper or sheets, etc. on the floor beforehand to ensure that dirt or dust do not get stuck to the Transfer Belt.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Drum (Y, M, C, K). (REP 9.5)
4. Remove the Transfer Belt Cleaner Assembly. (REP 9.1)
5. Remove the Tension Lever of the Transfer Belt. (Figure 1)
  - a. Remove the screw.
  - b. Remove the Tension Lever.

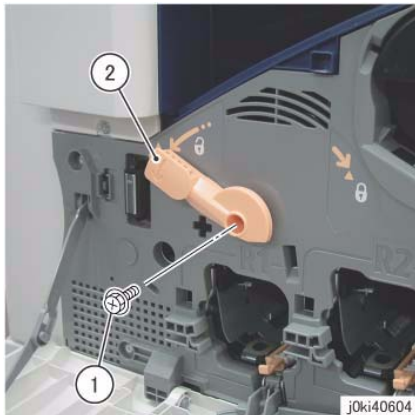


Figure 1 Remove the Tension Lever

6. Remove the Fuser. (REP 10.1)
7. Open the L/H Cover Unit.
8. Remove the Rear Support from the L/H Cover Unit. (Figure 2)
  - a. Remove the KL-Clip.
  - b. Remove the Rear Support.

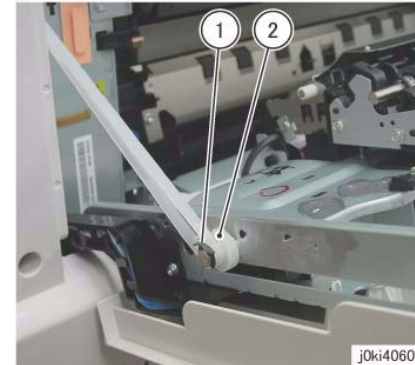


Figure 2 Remove the Rear Support

9. To open the L/H Cover Unit to the service position, rotate the Front Support 90 degree counterclockwise and pull it out one level. (Figure 3)

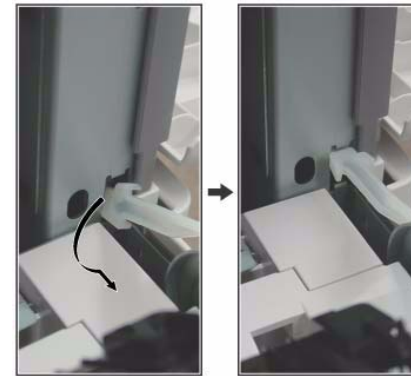
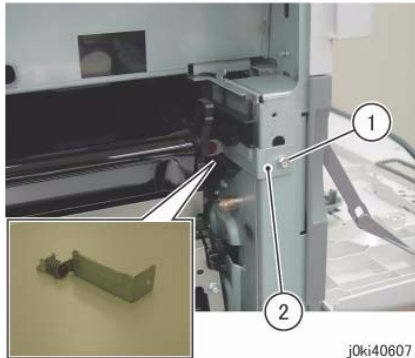


Figure 3 Open the L/H Cover

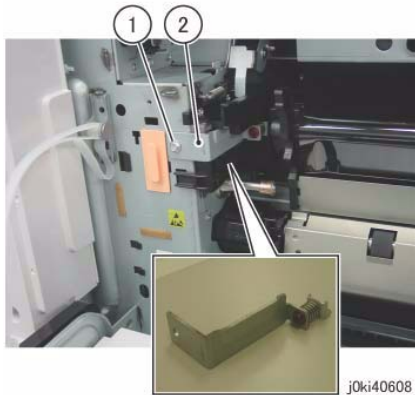
10. Remove the Front Lock Bracket. (Figure 4)
  - a. Remove the screw.
  - b. Remove the Front Lock Bracket.





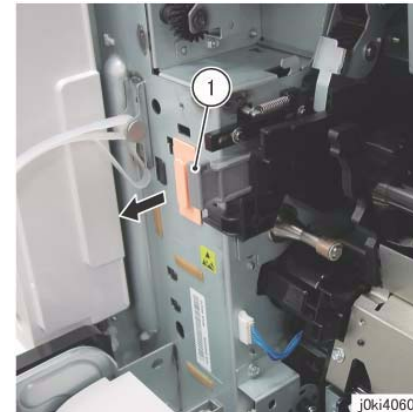
**Figure 4 Remove the Front Lock Bracket**

11. Remove the Rear Lock Bracket. (Figure 5)
  - a. Remove the screw.
  - b. Remove the Rear Lock Bracket.



**Figure 5 Remove the Rear Lock Bracket**

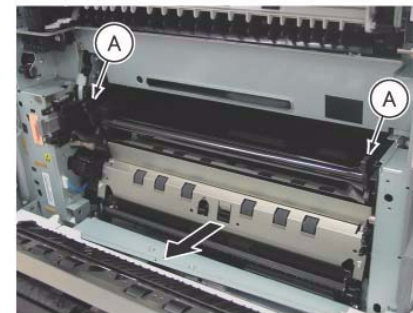
12. Pull the Stopper Lever. (Figure 6)
  - a. Pull the Stopper Lever.



**Figure 6 Pull the Stopper Lever**

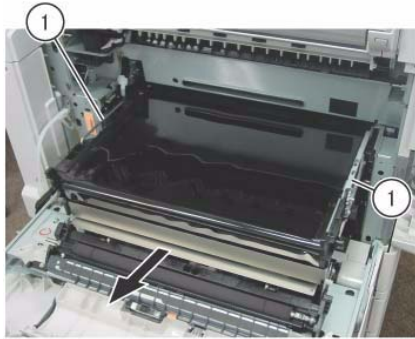
13. Pull out the IBT Assembly by holding onto the indicated sections (A) of the Front/Rear Frame until the Handle at the front/rear become accessible. (Figure 7)

**NOTE:** When pulling out the IBT Assembly, take care because it may drop from the front/rear rails if pulled too far out.



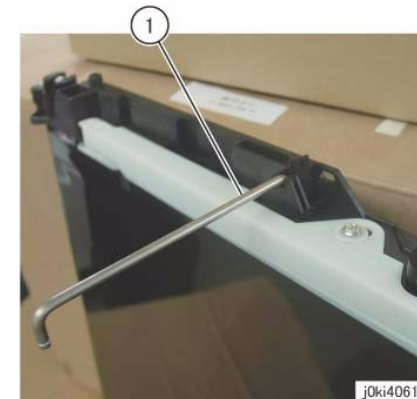
**Figure 7 Pull out the IBT Assembly**

14. Hold onto the Handle at the front/rear and remove the IBT Assembly. (Figure 8)
  - a. Hold onto the handles (x2) and pull it out.



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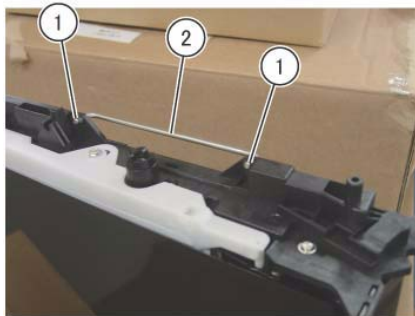
**Figure 8 Hold onto handle and remove the IBT Assembly**



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**Figure 10 Push the handle all the way in**

15. While holding the IBT Assembly steady with your hand, remove the handle at the rear. (Figure 9)
  - a. Remove the KL-Clips (x2).
  - b. Remove the handle.



j0ki40612

**Figure 9 Remove the handle**

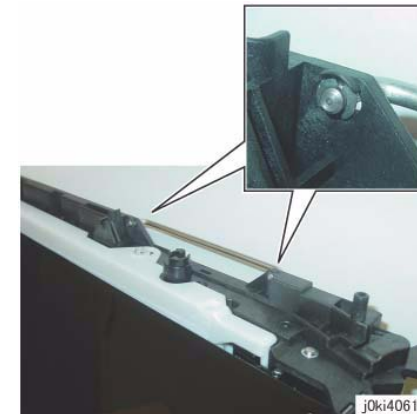
16. Push the handle all the way in at the position shown in (Figure 10).
  - a. Install the handle.

17. With the handle at the bottom, place the IBT Assembly into an upright position.

### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** When installing the handle at the rear, install the KL-Clip in the orientation shown in (Figure 11)



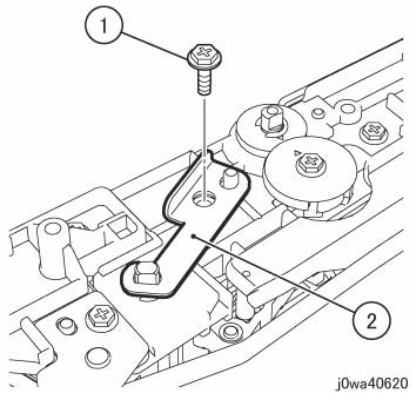
j0ki40614

**Figure 11 Install the KL-Clip**

**NOTE:** Insert the IBT Assembly completely into the Main Unit. After that, the positioning is done by the following procedure.

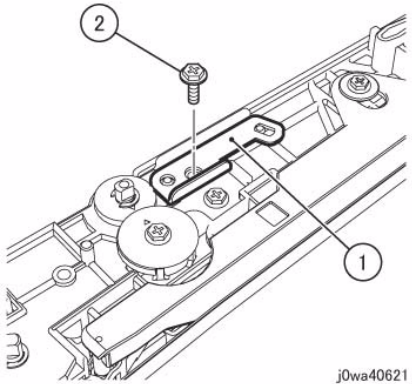
- a. Secure the Front Lock Bracket.
- b. Insert the Stopper Lever while pressing the indicated sections (A in Figure 7) of the Rear Frame against the Main Unit.
- c. Secure the Rear Lock Bracket.

2. When replacing the IBT Assembly, switch the Tension Plate of the new IBT Assembly.
  - Remove the Tension Plate. (Figure 12)
    - a. Remove the screw.
    - b. Remove the Tension Plate.



**Figure 12 Switch the Tension Plate**

- Install the Tension Plate. (Figure 13)
  - a. Install the Tension Plate.
  - b. Tighten the screw.



**Figure 13 Install the Tension Plate**

3. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 9.3 Transfer Belt

### Parts List on PL 6.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

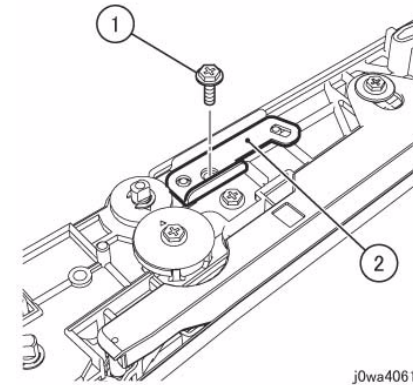
**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Do not touch the Transfer Belt surface with your hands.

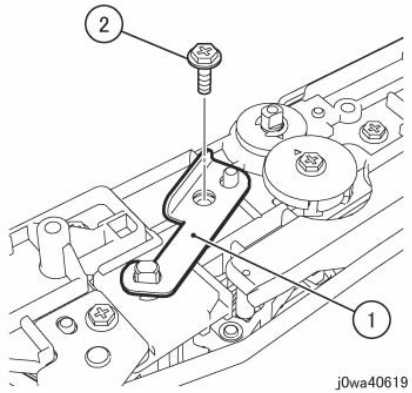
**NOTE:** Do not touch the Transfer Drive Roll surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Drum (Y, M, C, K). (REP 9.5)
4. Remove the Transfer Belt Cleaner Assembly. (REP 9.1)
5. Remove the IBT Assembly. (REP 9.2)
6. Remove the Tension Plate. (Figure 1)
  - a. Remove the screw.
  - b. Remove the Tension Plate.



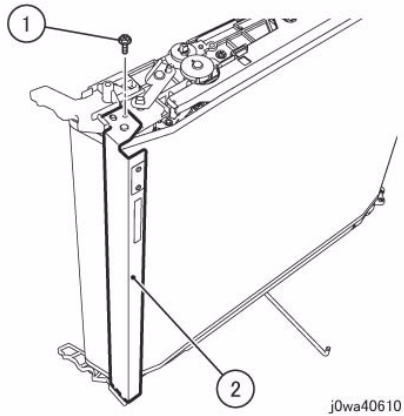
**Figure 1 Remove the Tension Plate**

7. Switch the Tension Plate that was removed in Step 4. (Figure 2)
  - a. Install the Tension Plate.
  - b. Tighten the screw.



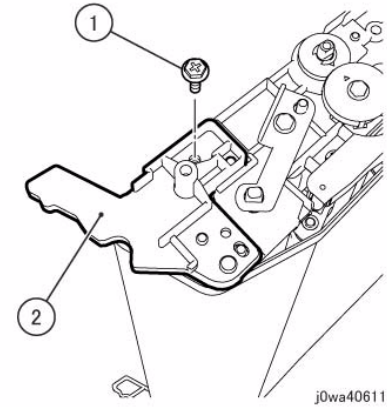
**Figure 2 Switch the Tension Plate**

8. Remove the Inlet Chute. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Inlet Chute.



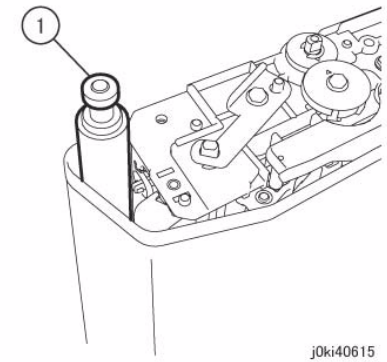
**Figure 3 Remove the Inlet Chute**

9. Remove the BUR Front Frame. (Figure 4)
  - a. Remove the screw.
  - b. Remove the BUR Front Frame.



**Figure 4 Remove the BUR Front Frame**

10. Remove the Backup Roll. (Figure 5)
  - a. Remove the Backup Roll.



**Figure 5 Remove the Backup Roll**

11. Remove the Transfer Belt. (Figure 6)

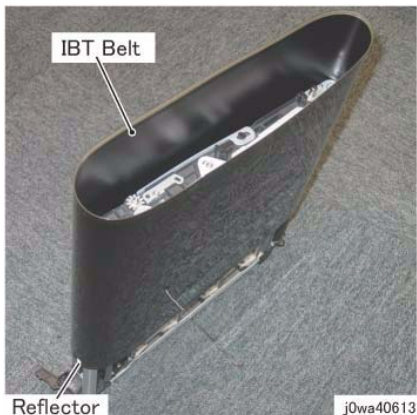


Figure 6 remove the Transfer Belt (IBT)

### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:  
**NOTE:** When installing the Transfer Belt, install it with the TR0 Seal at the rear.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 9.4 TR0 Seal

### Parts List on **PL 6.3**

### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

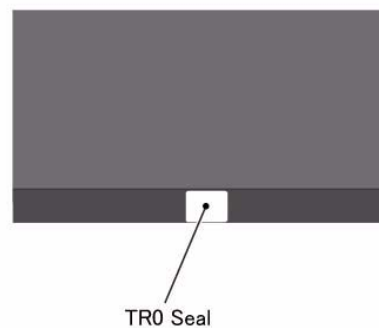
**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Do not touch the Transfer Belt surface with your hands.

**NOTE:** Do not touch the IBT Drive Roll surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Drum (Y, M, C, K) (**REP 9.5**).
4. Remove the Transfer Belt Cleaner Assembly. (**REP 9.1**)
5. Remove the IBT Assembly. (**REP 9.2**)
6. Remove the Transfer Belt. (**REP 9.3**)
7. Open the DADF or Platen Cover and place a piece of cloth, etc. on the Platen Glass to create a working space.
8. Using drum cleaner, clean the surface beside the old TR0 Seal (left or right, either one is ok; this will be the position to paste the new TR0 Seal). (**Figure 1**)



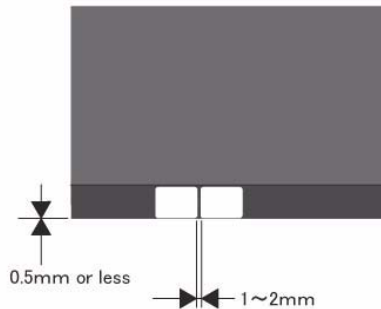
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Figure 1 Clean the surface beside the old TR0 Seal

9. Paste the new TR0 Seal at approx. 1mm to 2mm beside the old TR0 Seal and less than 0.5mm away from the edge of the Transfer Belt. (**Figure 2**)

**NOTE:** When peeling off the new TR0 Seal from its backing paper, make sure to do so by first bending the backing paper away to expose the edge. If you attempt to peel off the TR0 Seal directly, it may result in its edges getting bunched up and rendering it unusable.

**NOTE:** If the new TR0 Seal is skewed, or has dirt/air trapped in it, redo the pasting.



**Figure 2 Paste the new TR0 Seal**

10. From the top, gently press on the whole surface of the pasted TR0 Seal.

**NOTE:** Do not wipe it with a dry cloth, etc.

11. Peel off the old TR0 Seal and use drum cleaner to clean off any adhesive that may have remained on the Transfer Belt.
12. Clean the IBT Home Position Sensor by using a piece of dry cloth.

### Removal

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** When installing the Transfer Belt, install it with the TR0 Seal at the rear.

## REP 9.5 Drum

### Parts List on PL 8.1

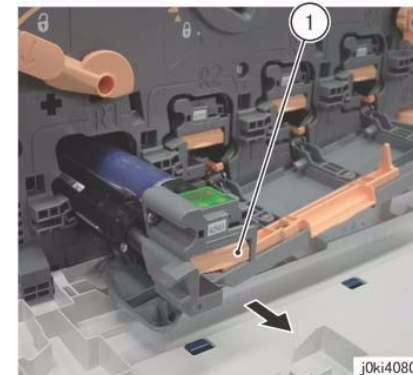
### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Cover.
4. Rotate the Tension Lever of the Transfer Belt counterclockwise.
5. Open the Drum Cover.
6. Remove the drum. (Figure 1)
  - a. Pull the handle of the Drum in the direction of the arrow and remove the Drum.



**Figure 1 Remove the drum**

### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 9.6 Erase Lamp Unit (K)

### Parts List on PL 8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - IBT Assembly (REP 9.2)
4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in Figure 1.
  - c. Remove the Drum Cover.

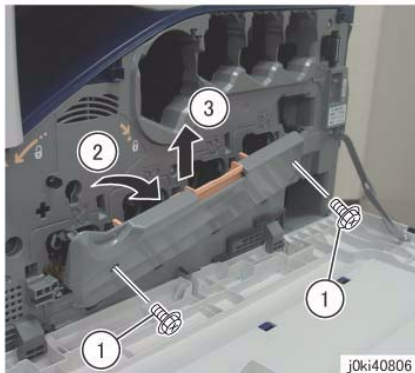


Figure 1 Remove the Drum Cover

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.

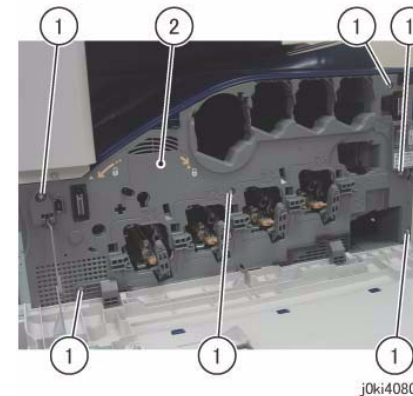


Figure 2 Remove the Front and Inner Cover together

7. [7845/55]:  
Remove the Process 1 Fan and Duct. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screw.
  - c. Remove the Process 1 Fan and Duct.
  - d. Remove the cable band.

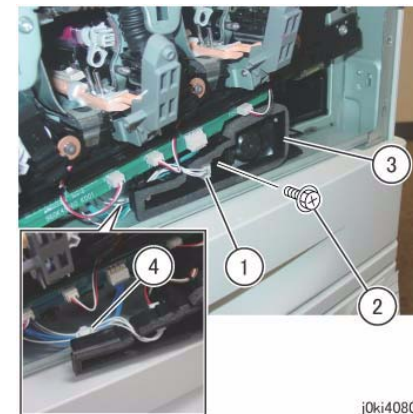
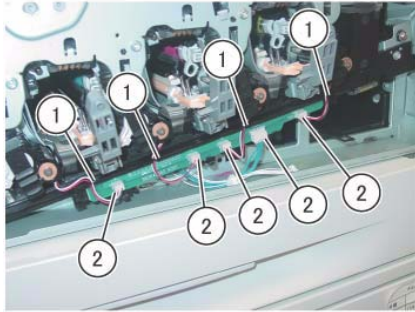


Figure 3 Remove the Process 1 Fan and Duct

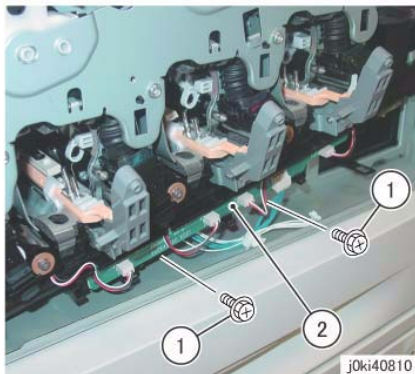
8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).



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**Figure 4 Disconnect the connectors**

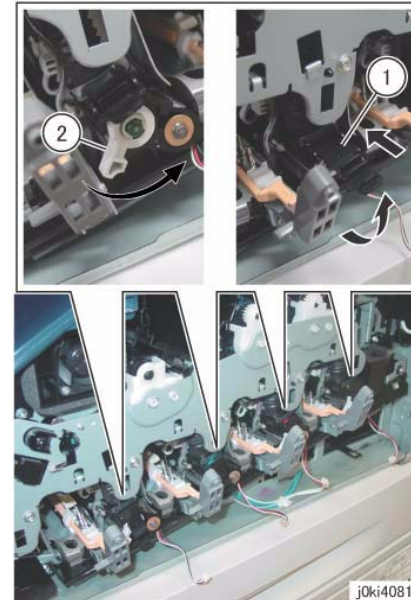
9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.



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**Figure 5 Remove the ATC PWB Assembly**

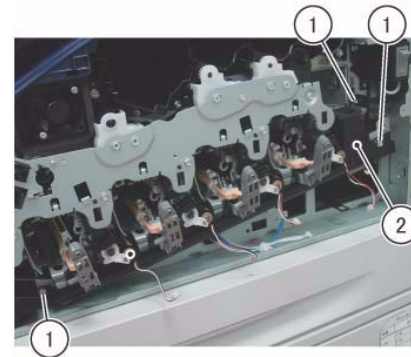
10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.



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**Figure 6 Close the shutters**

11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).
  - b. Remove the Waste Toner Pipe Assembly.

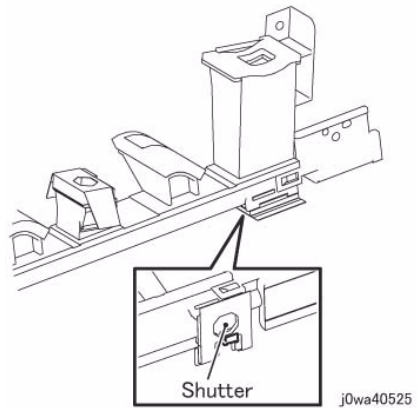


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**Figure 7 Remove the Waste Toner Pipe Assembly**

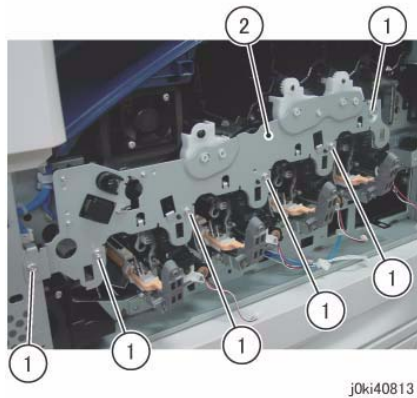


**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)



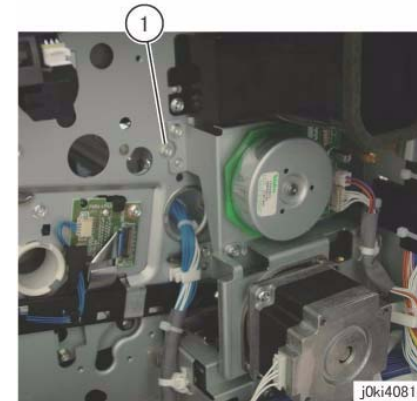
**Figure 8** Make sure the shutter is closed during Removal/Install

12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



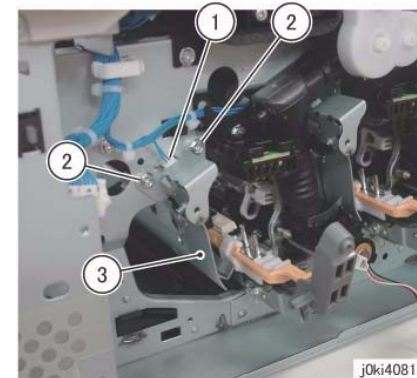
**Figure 9** Remove the Plate

13. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
14. Remove the MOB ADC Assembly. (REP 9.16)
15. Remove the screw that secures the Erase Lamp Unit (K) at the rear. (Figure 10)
  - a. Remove the screw.



**Figure 10** Remove the screw

16. Remove the Erase Lamp Unit (K). (Figure 11)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Erase Lamp Unit (K).

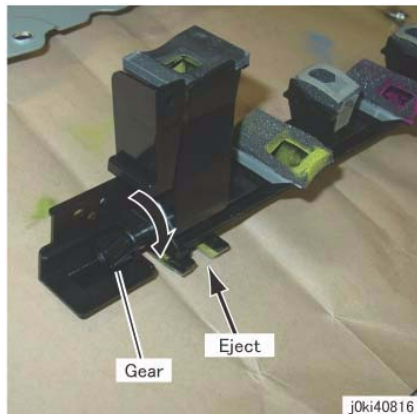


**Figure 11** Remove the Erase Lamp Unit (K)

### Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 12)



**Figure 12 Siphon the cleaner from the outlet at the Waste Box side**

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

## REP 9.7 Erase Lamp Unit (Y, M, C)

### Parts List on PL 8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

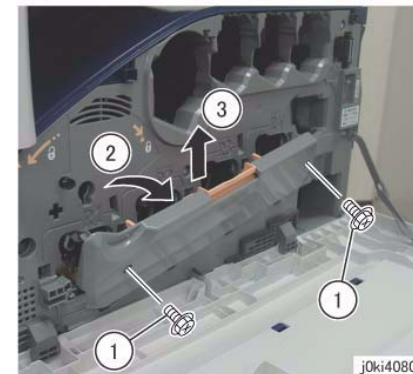
**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Because the removal procedure for the Erase Lamp Units (Y, M, C) is the same, the following describes only the procedure for the Erase Lamp Unit (C).

**NOTE:** Place paper under the removed Dispenser Pipe (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

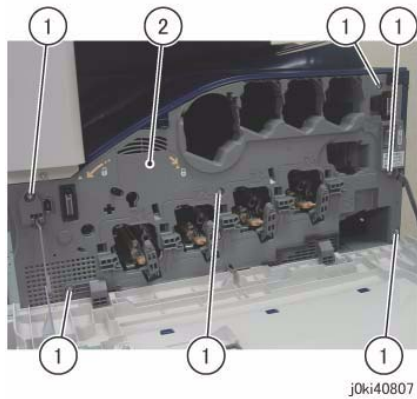
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - IBT Assembly (REP 9.2)
4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in Figure 1.
  - c. Remove the Drum Cover.



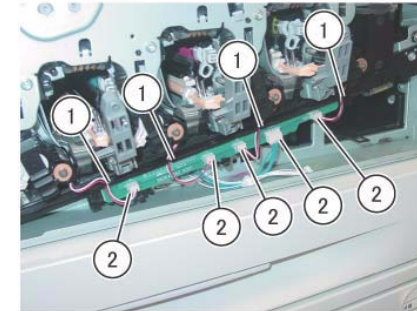
**Figure 1 Remove the Drum Cover**

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. (Figure 2)

- a. Remove the screws (x6).
- b. Remove the Front Cover together with the Inner Cover.



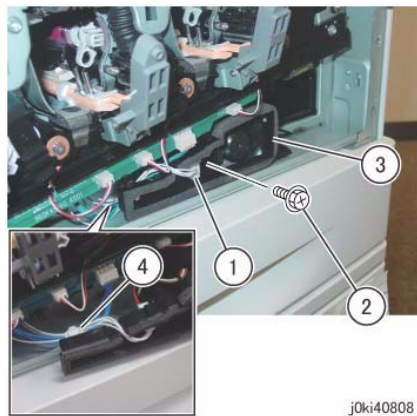
**Figure 2 Remove the Front and Inner Covers together**



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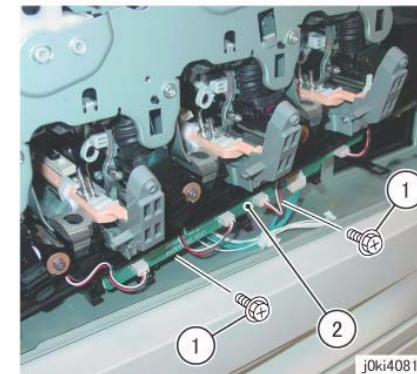
**Figure 4 Disconnect the connectors**

7. [7845/55]:  
Remove the Process 1 Fan and Duct. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screw.
  - c. Remove the Process 1 Fan and Duct.
  - d. Remove the cable band.



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**Figure 3 Remove the cable band**



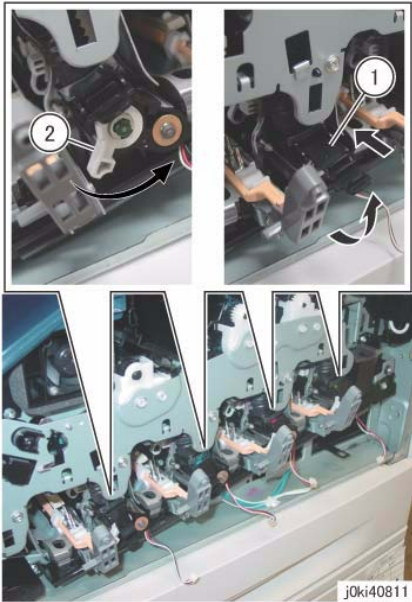
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**Figure 5 Remove the ATC PWB Assembly**

8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).

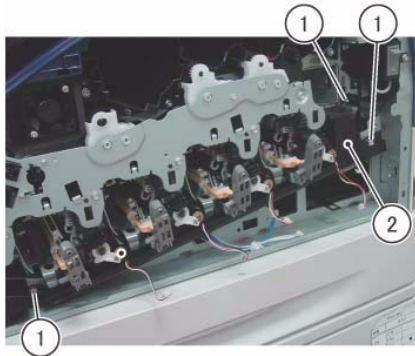
9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.

10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.



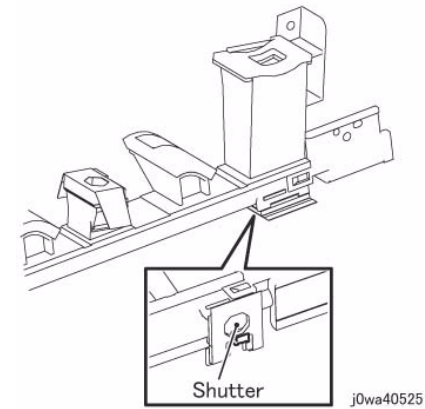
**Figure 6** Close the shutters (Y,M,C,K)

11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).
  - b. Remove the Waste Toner Pipe Assembly.



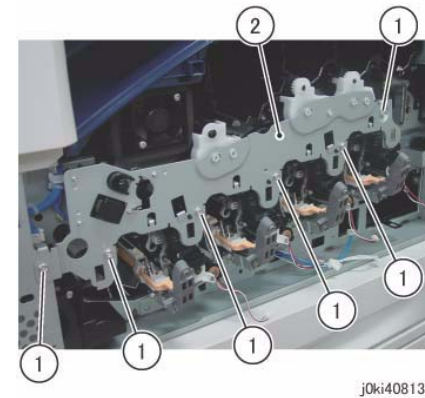
**Figure 7** Remove the Waste Toner Pipe Assembly

**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)



**Figure 8** Make sure the shutter is closed during Removal/Install

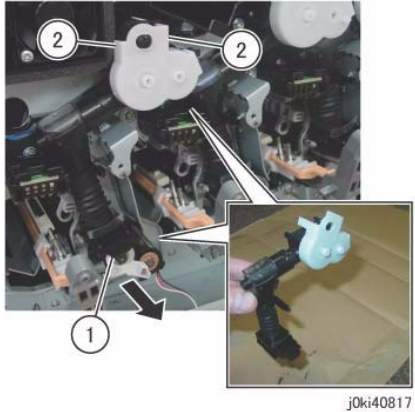
12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



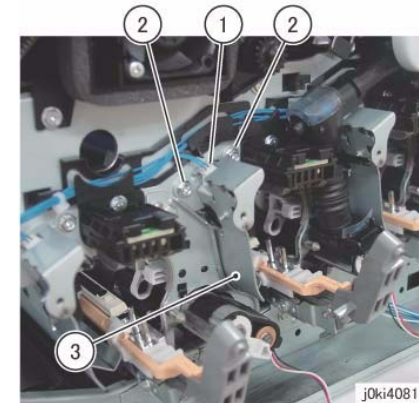
**Figure 9** Remove the Plate

13. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
14. Remove the Dispenser Pipe (K). (Figure 10)
  - a. Pull the joint section between the Dispenser Pipe (K) and the Guide Assembly (K) towards you.
  - b. Release the hooks (x2) and remove the Dispenser Pipe (K).



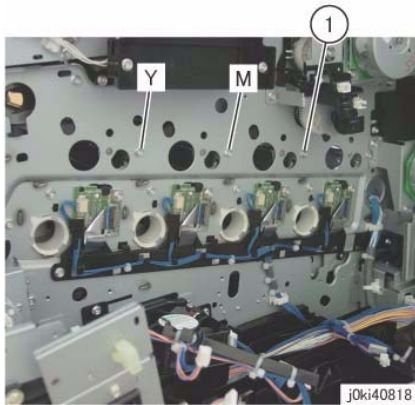


**Figure 10 Remove the Dispenser Pipe (k)**



**Figure 12 Remove the Erase Lamp Unit (C)**

15. Remove the screw that secures the Erase Lamp Unit (C) at the rear. (Figure 11)
  - a. Remove the screw.



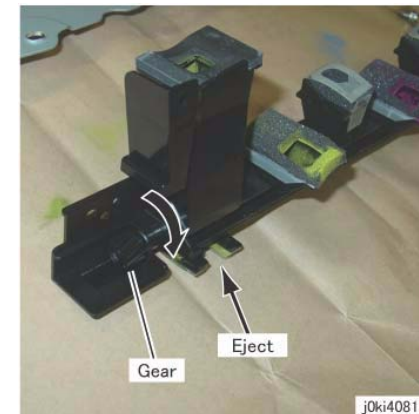
**Figure 11 Remove the screw**

16. Remove the Erase Lamp Unit (C). (Figure 12)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Erase Lamp Unit (C).

## Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 13)



**Figure 13 Siphon the cleaner from the outlet at the Waste Box side**

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

## REP 9.8 Agitator Motor Assembly

### Parts List on PL 8.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Disconnect all cables connected to the Control section on the right of the machine.
4. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Waste Box (PL 8.2)
  - Rear Lower Cover (REP 14.3)
  - Right Cover (PL 19.3)
  - HVPS (1st/2nd/DTC) (REP 1.1)
  - Remove the Drum/Dev. Drive Unit:
    - 7830/35 (REP 4.3)
    - 7845/55 (REP 4.4)
5. Slide the GFI Chassis Assembly. (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Remove the screws (x4).
  - c. Slide the GFI Chassis Assembly.

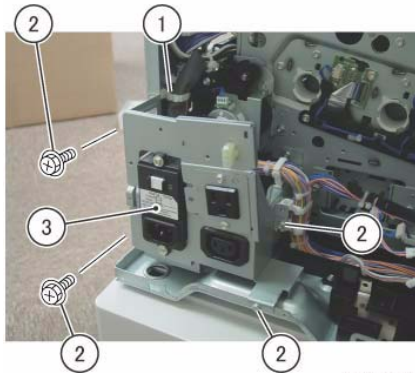


Figure 1 Slide the GFI Chassis Assembly

6. Remove the Harness Holder. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Release the wire harness from the hook.

- c. Remove the cable band.
- d. Remove the screws (x2).
- e. Remove the Harness Holder.

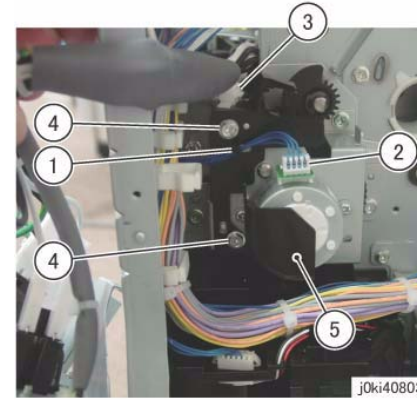


Figure 2 Remove the Harness Holder

7. Remove the gear and the bearing. (Figure 3)
  - a. Remove the KL-Clip.
  - b. Remove the gear.
  - c. Remove the bearing.

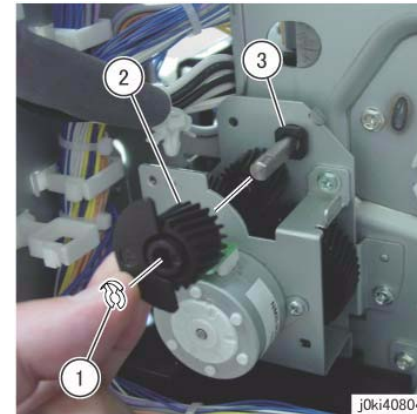


Figure 3 Remove the Gear and bearing

8. Remove the Agitator Motor Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove the Agitator Motor Assembly.

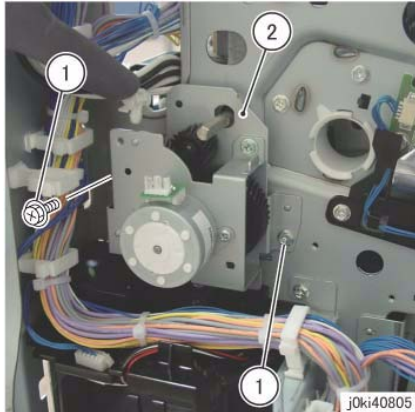


Figure 4 Remove the Agitator Motor Assembly

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 9.9 2nd BTR Assembly

Parts List on [PL 14.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the 2nd BTR Roll surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the L/H Cover Unit.
4. Remove the 2nd BTR Assembly. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Press the Lever in the direction of the arrow.
  - c. Remove the 2nd BTR Assembly.

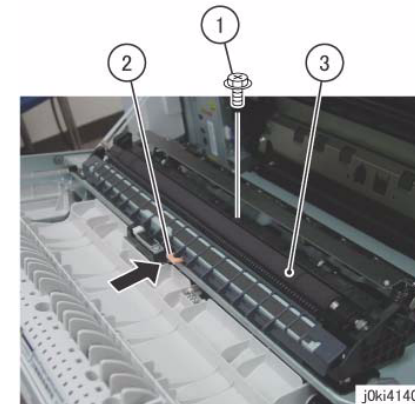


Figure 1 Remove the 2nd BTR Assembly

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [dC135](#) to reset the HFSI counter.

## REP 9.10 LED Print Head Assembly (Y, M, C, K)

### Parts List on [PL 2.1](#)

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

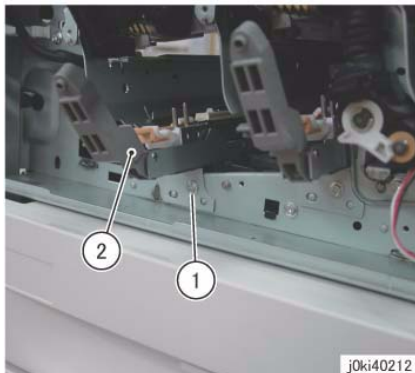
**NOTE:** Because the removal procedure for the LPH Units (Y, M, C, and K) are the same, the following describes only the procedure for the LPH Unit (K).

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Place paper under the Developer Housing Assembly (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) ([REP 9.5](#))
  - Toner Cartridge (Y, M, C, K) ([PL 5.1](#))
  - Waste Box ([PL 8.2](#))
  - Transfer Belt Cleaner Assembly ([REP 9.1](#))
  - Tension Lever ([PL 6.1](#))
4. Remove the Developer Housing Assembly (K). ([REP 9.14](#))
5. Remove the LPH Unit (K). ([Figure 1](#))
  - a. Remove the screw.
  - b. Remove the LPH Unit (K).



**Figure 1 Remove the LPH Unit (K)**

#### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 9.11 LPH Cable Assembly (7830/35)

### Parts List on [PL 2.2](#)

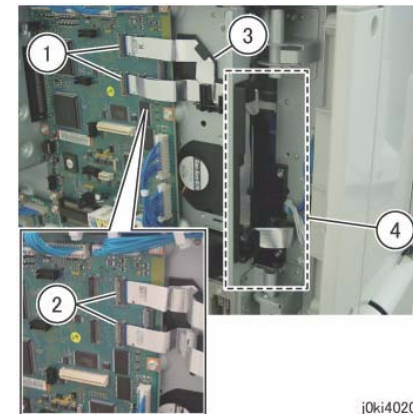
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

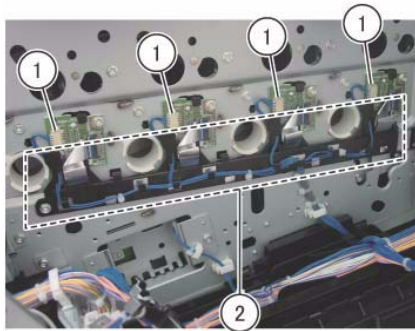
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Disconnect all cables connected to the Control section on the right of the machine.
4. Remove the following parts:
  - Drum (Y, M, C, K) ([REP 9.5](#))
  - Rear Lower Cover ([REP 14.3](#))
  - Left Rear Upper Cover ([PL 19.2](#))
5. Disconnect the LPH Cables (x4) from the MCU PWB. ([Figure 1](#))
  - a. Disconnect the LPH Cables (x2).
  - b. Disconnect the LPH Cables (x2).
  - c. Release the LPH Cable from the cable holder.
  - d. Release the LPH Cable from the cable holder.



**Figure 1 Disconnect the LPH Cables**

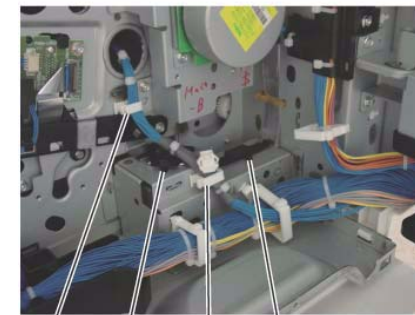
6. Remove the HVPS (06A2). ([REP 1.1](#))
7. Remove the Drum/Dev. Drive Unit:
  - 7830/35 ([REP 4.3](#))
  - 7845/55 ([REP 4.4](#))
8. Release the wire harness from the Harness Holder. ([Figure 2](#))
  - a. Disconnect the connectors (x4).
  - b. Release the wire harness from the Harness Holder.





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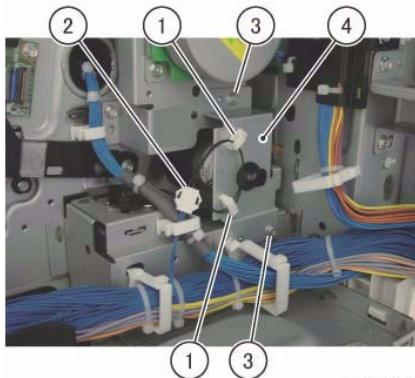
**Figure 2 Release the wire harness**



j0ki40214

**Figure 4 Remove the Cable Supports**

9. Remove the Takeaway Clutch. (Figure 3)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screws (x2).
  - d. Remove the Bracket and Takeaway Clutch.

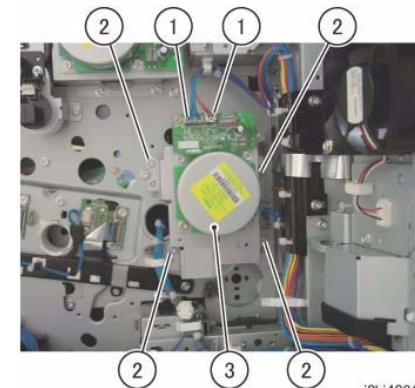


j0ki40213

**Figure 3 Remove the Takeaway Clutch**

10. Remove the Cable Supports (x2). (Figure 4)
  - a. Release the wire harness from the clamps (x2).
  - b. Remove the Cable Support.
  - c. Remove the Cable Support.

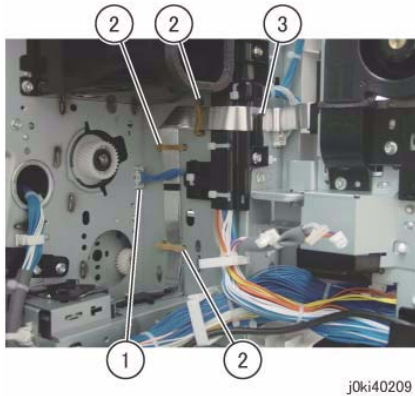
11. Remove the Main Drive Assembly. (Figure 5)
  - a. Disconnect the connector.
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



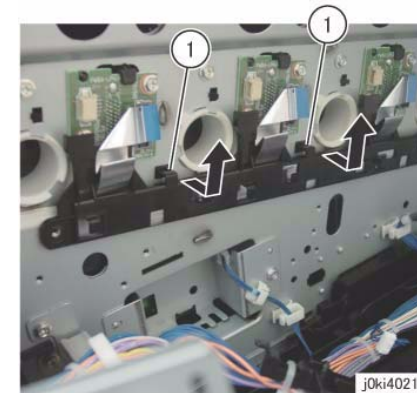
j0ki40215

**Figure 5 Remove the Main Drive Assembly**

12. Release the LPH Cable. (Figure 6)
  - a. Disconnect the connector.
  - b. Release the LPH Cable from the clamps (x3).
  - c. Release the LPH Cable from the cable holder.

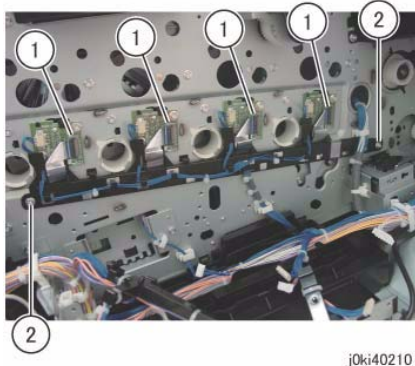


**Figure 6 Release the LPH Cable**

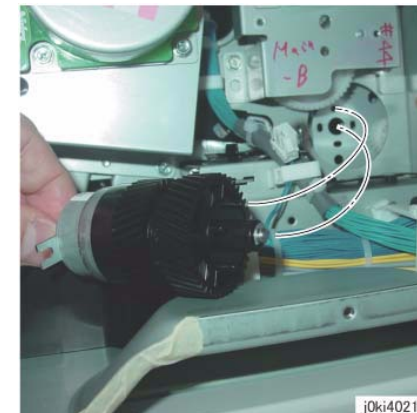


**Figure 8 Remove the LPH Cable Assembly**

13. Remove the screws that secure the LPH Cable Assembly. (Figure 7)
  - a. Disconnect the LPH Cables (x4).
  - b. Remove the screws (x2).
  - c. Remove the LPH Cable Assembly.



**Figure 7 Remove the screws**



**Figure 9 Install the Takeaway Clutch**

14. Remove the LPH Cable Assembly. (Figure 8)
  - a. Release the hooks (x2) and remove the LPH Cable Assembly in the direction of the arrow.

### Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Takeaway Clutch, align the bosses (x4) of the bearing to the installation holes. (Figure 9)

3. When installing the Bracket, insert the Bracket into the tab of the Takeaway Clutch. (Figure 10)



**Figure 10 Install the Bracket**

## REP 9.12 LPH Cable Assembly (7845/55)

### Parts List on [PL 2.2](#)

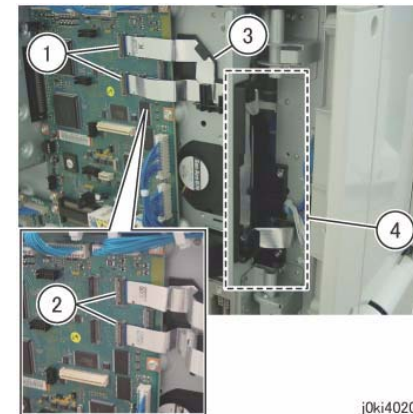
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

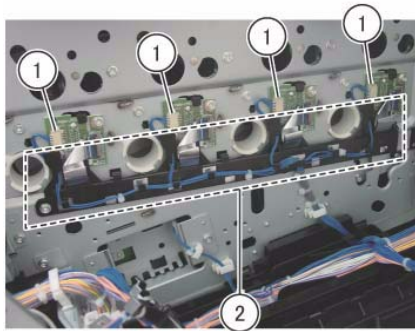
**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Disconnect all cables connected to the Control section on the right of the machine.
4. Remove the following parts:
  - Drum (Y, M, C, K) ([REP 9.5](#))
  - Rear Lower Cover ([REP 14.3](#))
  - Left Rear Upper Cover ([PL 19.2](#))
5. Disconnect the LPH Cables (x4) from the MCU PWB. ([Figure 1](#))
  - a. Disconnect the LPH Cables (x2).
  - b. Disconnect the LPH Cables (x2).
  - c. Release the LPH Cable from the cable holder.
  - d. Release the LPH Cable from the cable holder.



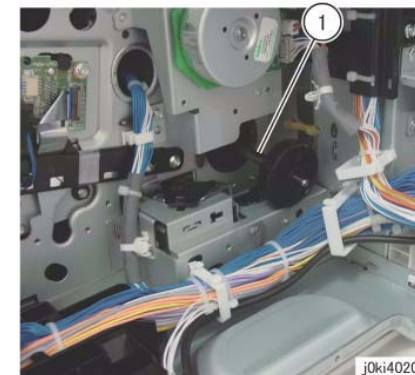
**Figure 1 Disconnect the LPH Cables**

6. Remove the HVPS (06A2). ([REP 1.1](#))
7. Remove the Drum/Dev. Drive Unit:
  - 7830/35 ([REP 4.3](#))
  - 7845/55 ([REP 4.4](#))
8. Release the wire harness from the Harness Holder. ([Figure 2](#))
  - a. Disconnect the connectors (x4).
  - b. Release the wire harness from the Harness Holder.



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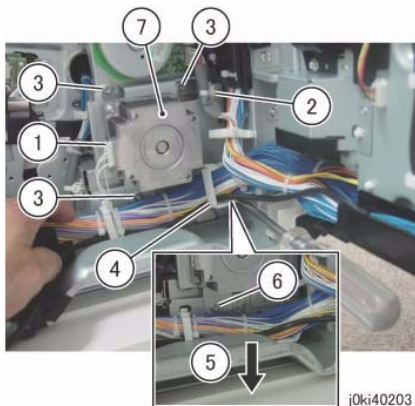
**Figure 2 Release the wire harness**



j0ki40204

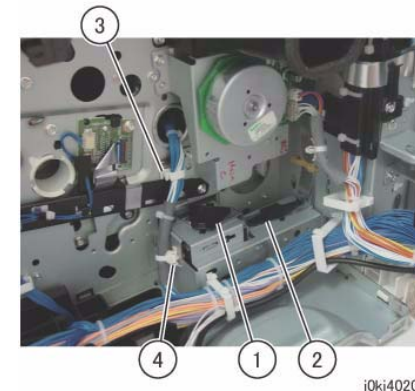
**Figure 4 Remove the gear and shaft**

9. Remove the Takeaway Motor. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the screws (x3).
  - d. Release the clamp.
  - e. Move the wire harness in the direction of the arrow.
  - f. Remove the screw.
  - g. Remove the Takeaway Motor.



j0ki40203

**Figure 3 Remove the Takeaway Motor**



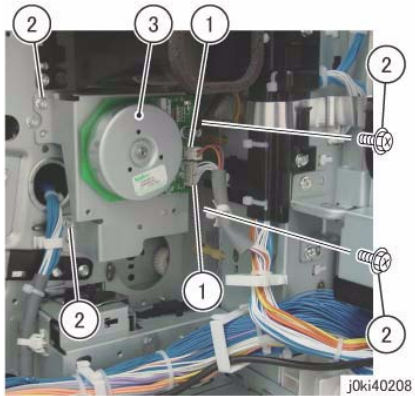
j0ki40207

**Figure 5 Remove the Cable Supports**

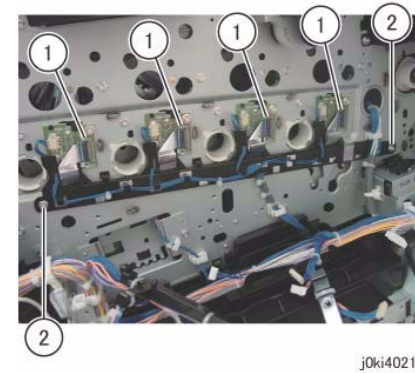
10. Remove the gear and shaft. (Figure 4)
  - a. Remove the gear and shaft.
11. Remove the Cable Supports (x2). (Figure 5)
  - a. Remove the Cable Support.
  - b. Remove the Cable Support.
  - c. Release the wire harness from the clamp.
  - d. Remove the cable band.

12. Remove the Main Drive Assembly. (Figure 6)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



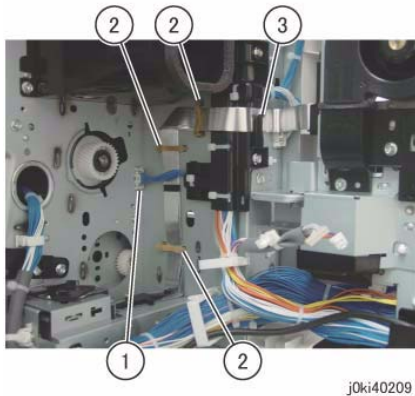


**Figure 6 Remove the Main Drive Assembly**



**Figure 8 Remove the screws**

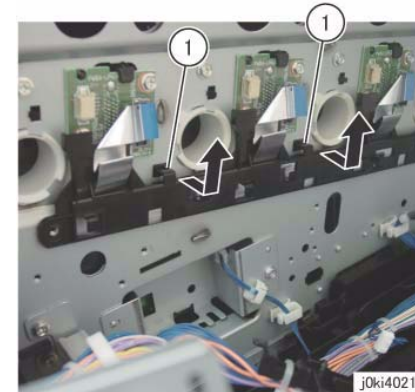
13. Release the LPH Cable. (Figure 7)
  - a. Disconnect the connector.
  - b. Release the LPH Cable from the clamps (x3).
  - c. Release the LPH Cable from the cable holder.



**Figure 7 Release the LPH Cable**

14. Remove the screws that secure the LPH Cable Assembly. (Figure 8)
  - a. Disconnect the LPH Cables (x4).
  - b. Remove the screws (x2).

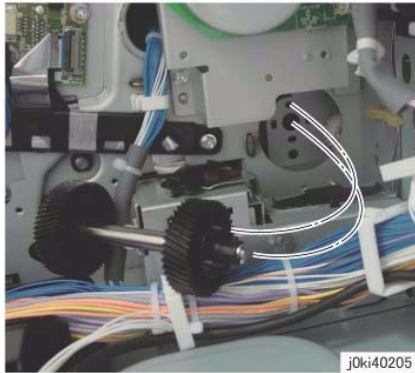
15. Remove the LPH Cable Assembly. (Figure 9)
  - a. Release the hooks (x2) and remove the LPH Cable Assembly in the direction of the arrow.



**Figure 9 Remove the LPH Cable Assembly**

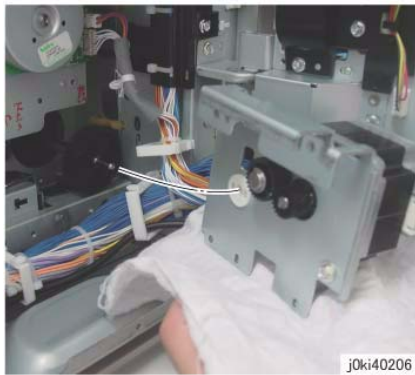
### Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the gear and shaft, align the bosses (x4) of the bearing to the installation holes. (Figure 10)



**Figure 10 Install the gear and shaft**

3. When installing the Takeaway Motor, align the shaft to the hole of the bearing. (Figure 11)



**Figure 11 Install the Takeaway Motor**

## REP 9.13 Toner Dispense Motor Assembly

### Parts List on PL 5.1

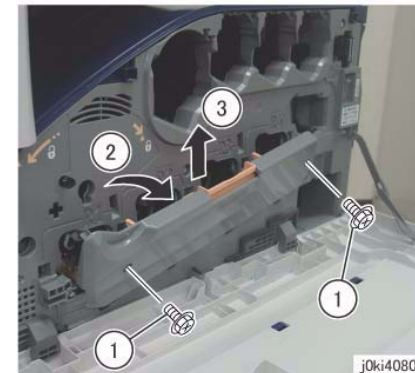
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

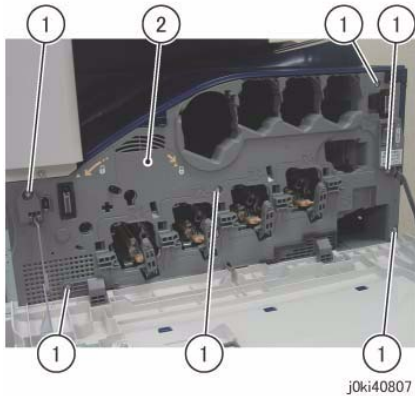
**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover.
  - c. Remove the Drum Cover.

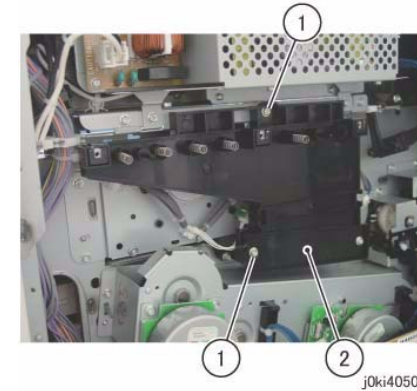


**Figure 1 Remove the Drum Cover**

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.

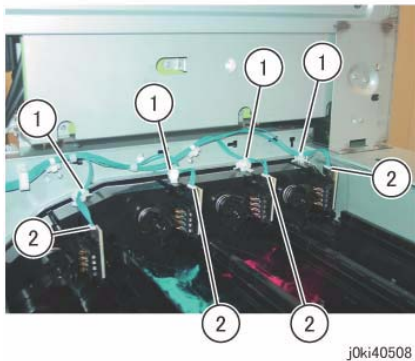


**Figure 2 Remove the Front and Inner Covers together**

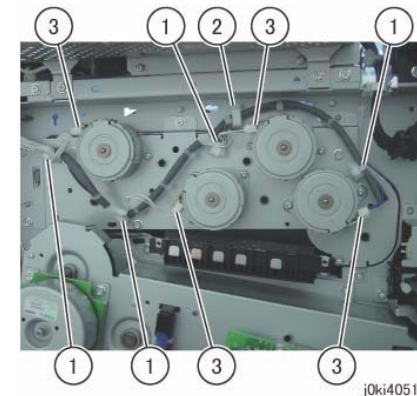


**Figure 4 Remove the Conductor Housing Assembly**

7. Remove the Top Rear Cover. (PL 19.2)
8. Remove the Top Cover. (REP 14.2)
9. Remove the Rear Lower Cover. (REP 14.3)
10. Open the PWB Chassis Unit. (REP 14.4)
11. Remove the HVPS (1st/2nd/DTC). (REP 1.1)
12. Disconnect the connectors (x4). (Figure 3)
  - a. Release the clamps (x4) of the wire harness.
  - b. Disconnect the connectors (x4).



**Figure 3 Disconnect the connectors**



**Figure 5 Disconnect the connectors**

13. Remove the Conductor Housing Assembly. (Figure 4)
  - a. Remove the screws (x3).
  - b. Remove the Conductor Housing Assembly.

14. Disconnect the connectors (x4). (Figure 5)
  - a. Remove the cable bands (x4).
  - b. Release the wire harness from the clamp.
  - c. Disconnect the connectors (x4).

15. Remove the Toner Dispense Motor Assembly. (Figure 6)
  - a. Remove the screws (x5).
  - b. Remove the Toner Dispense Motor Assembly.

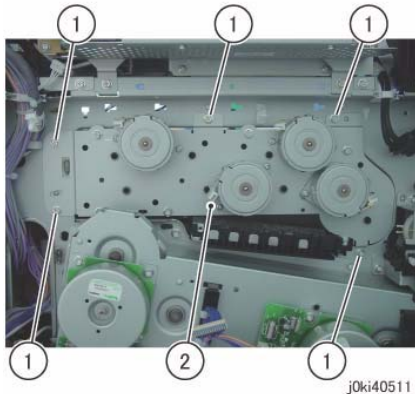


Figure 6 Remove the Toner Dispense Motor Assembly

### Replacement

- To install, carry out the removal steps in reverse order.

**NOTE:** If any of the Toner Dispense Motors (Y, M, C, K) was removed, align the connector sections to the arrows when installing. (Figure 7)

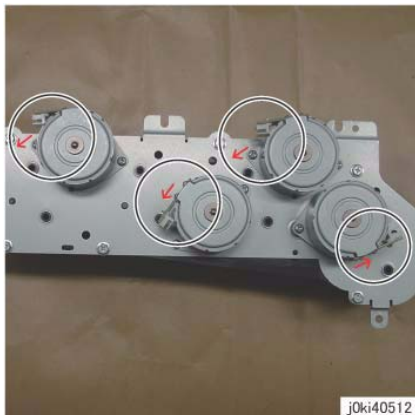


Figure 7 Align the connector sections to the arrows

## REP 9.14 Developer Housing Assembly (Y, M, C, K)

Parts List on [PL 5.2](#)

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Because the removal procedure for the Developer Housing Assemblies (Y, M, C, and K) is the same, the following describes only the procedure for the Developer Housing Assembly (K).

**NOTE:** When removing the Dev. Housing, pay attention to the following:

- Foreign substances in the Dev. Housing.
- Foreign substances on the surface of the Dev. Housing, especially on the Developer Material Roll and Lower Seal.
- Toner sticking to the gear of the Developer Housing Assembly.
- Toner sticking to the MOB ADC Assembly.

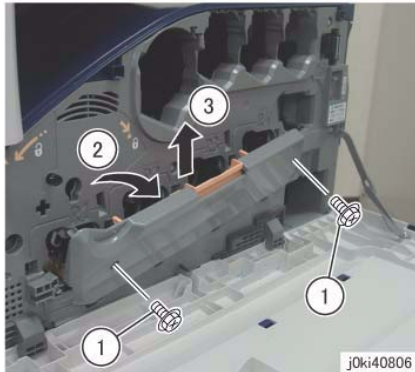
**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

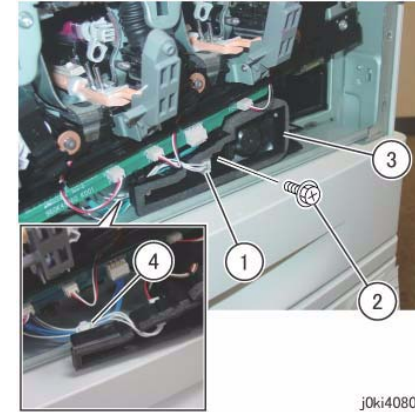
**NOTE:** Place paper under the Dispenser Assembly (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

- Press the **Job Status** button to check that there are no jobs in progress.
- Switch off the power and disconnect the power cord.
- Remove the following parts:
  - Drum (Y, M, C, K) ([REP 9.5](#))
  - Toner Cartridge (Y, M, C, K) ([PL 5.1](#))
  - Waste Box ([PL 8.2](#))
  - Transfer Belt Cleaner Assembly ([REP 9.1](#))
  - Tension Lever ([PL 6.1](#))
- Remove the Drum Cover. ([Figure 1](#))
  - Remove the screws (x2).
  - Open the Drum Cover.
  - Remove the Drum Cover.



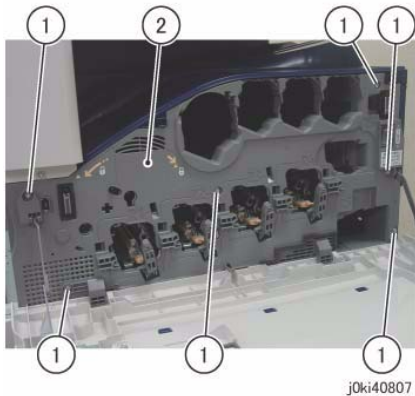


**Figure 1 Remove the Drum Cover**

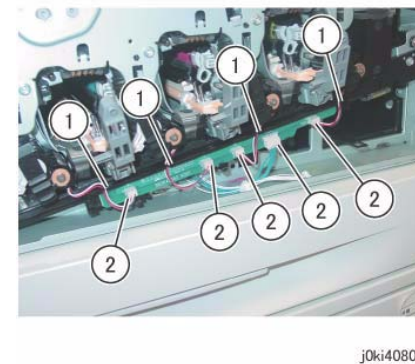


**Figure 3 Remove the Process 1 Fan and Duct**

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



**Figure 2 Remove the Front and Inner Covers together**

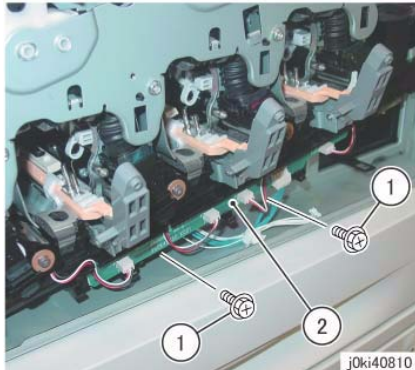


**Figure 4 Disconnect the connectors**

7. [7845/55]:
  - Remove the Process 1 Fan and Duct. (Figure 3)
    - a. Disconnect the connector.
    - b. Remove the screw.
    - c. Remove the Process 1 Fan and Duct.
    - d. Remove the cable band.

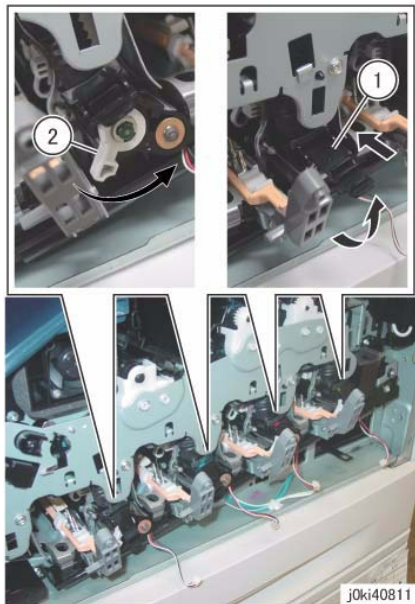
8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).

9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.



**Figure 5 Remove the ATC PWB Assembly**

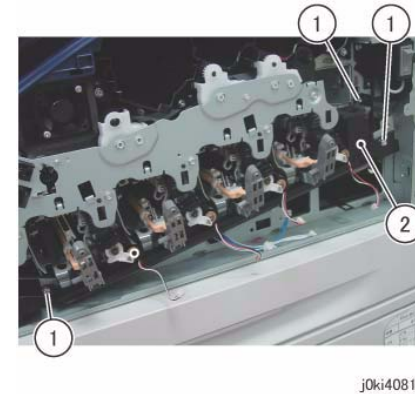
10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.



**Figure 6 Close the shutters (Y,M,C,K)**

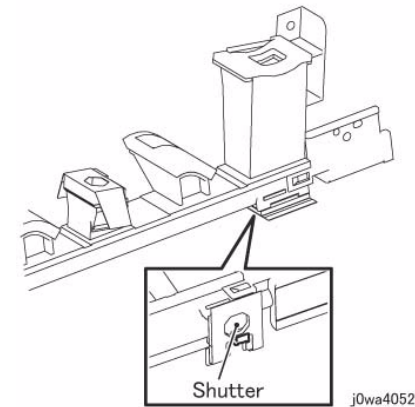
11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).

- b. Remove the Waste Toner Pipe Assembly.



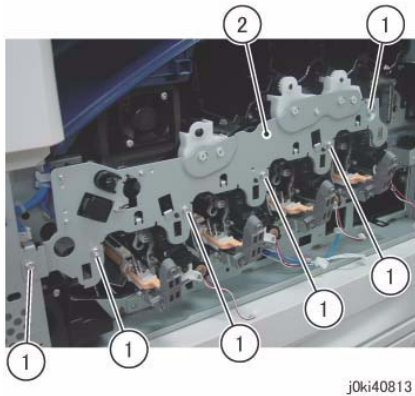
**Figure 7 Remove the Waste Toner Pipe Assembly**

**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)

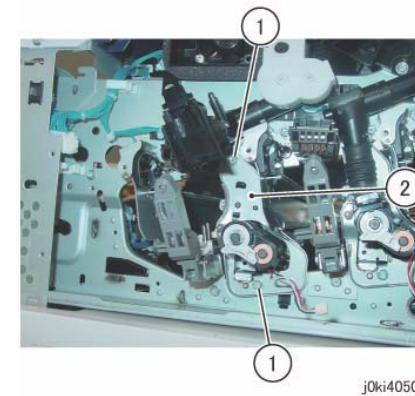


**Figure 8 Make sure the shutter is closed during Removal/Install**

12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.

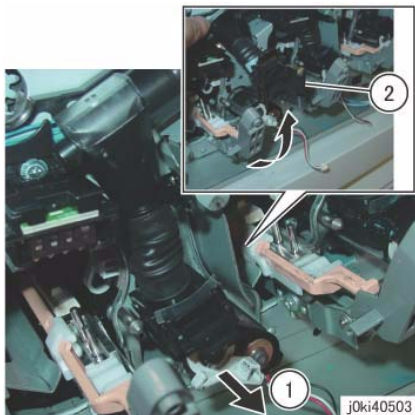


**Figure 9 Remove the Plate**



**Figure 11 Remove the Dev. Plate Assembly**

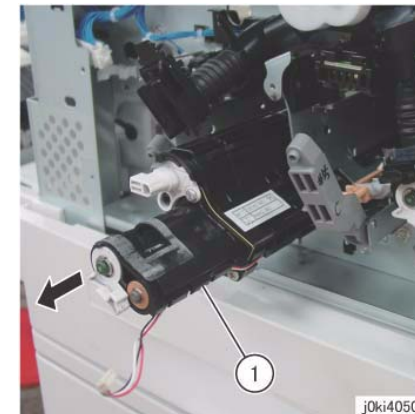
13. Slide the Dispenser Pipe (K). (Figure 10)
  - a. Pull the joint section between the Dispenser Pipe (K) and the Developer Housing Assembly (K) in the direction of the arrow.
  - b. Open the Dispenser Pipe (K) upwards.



**Figure 10 Slide the Dispenser Pipe (K)**

14. Remove the Dev. Plate Assembly. (Figure 11)
  - a. Remove the screws (x2).
  - b. Remove the Dev. Plate Assembly.

15. Remove the Developer Housing Assembly (K). (Figure 12)
  - a. Remove the Developer Housing Assembly (K).

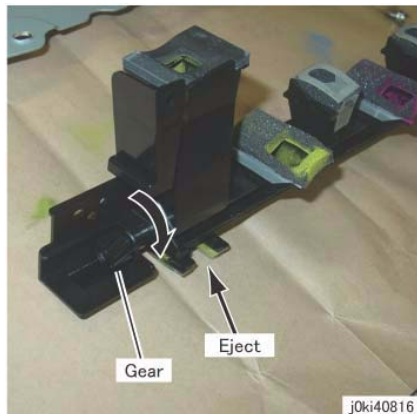


**Figure 12 Remove the Developer Housing Assembly (K)**

### Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 13)



**Figure 13** Siphon the cleaner from the outlet at the Waste Box side

**NOTE:** If there is toner stuck to the MOB ADC Assembly, it has to be cleaned.

**NOTE:** Before installing the Developer Housing Assembly, check the locations on the Frame that are indicated in the following figure and clean it thoroughly if any toner, etc. are found to have gotten stuck there. (Figure 14)



**Figure 14** Check/clean before Installing the Developer Housing Assembly

**NOTE:** If the Developer Housing Assembly is installed with toner stuck to the gears, it will cause banding of the gear, hastened wear and tear, and etc. (Figure 15)



**Figure 15** Check/clean Developer Housing Assembly gears

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

2. If it was replaced, supply the Developer Housing Assembly with new Developer. (REP 9.15)

**NOTE:** When replacing the Developer Housing Assembly, put the removed Developer Housing Assembly into the provided plastic bag without removing the Developer from it, and collect it back.

3. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.
4. Obtain the value of the ATC Sensor that is installed to the replaced Developer Housing Assembly and perform dC950 ATC Sensor Setup.
5. Perform dC949 ATC Default Developer Setup on the replaced Developer Housing Assembly.
6. Obtain the NVM values of the Developer Housing Assembly Replacement Target Color that is found on the inspection sheet that comes with the machine (ATC Setup Coefficient, ATC Setup Offset, ATC\_Barcode\_No, and deltaATC target Setup correction) and overwrite the values of the inspection sheet.



## REP 9.15 Developer

### Parts List on PL 5.2

#### Removal

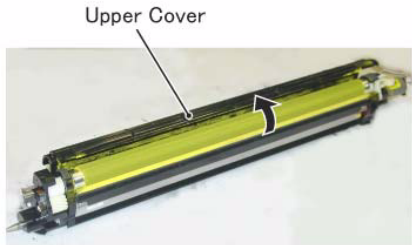
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** When replacing the Developer, spread paper on the floor in advance to keep the site clean.

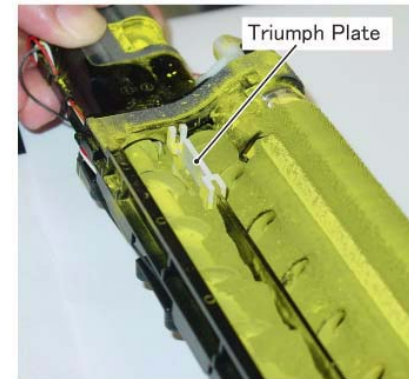
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
  - Developer Housing Assembly (REP 9.14)
4. Remove the Upper Cover. (Figure 1)



j0wa40515

Figure 1 Remove the Upper Cover

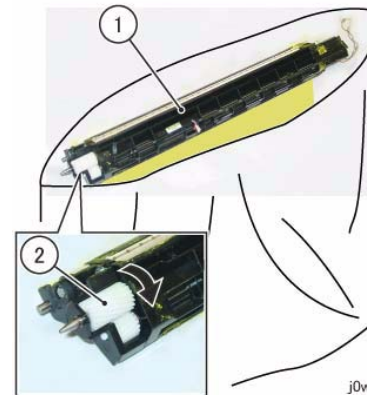
5. Remove the Triumph Plate. (Figure 2)



j0wa40517

Figure 2 Remove the Triumph Plate

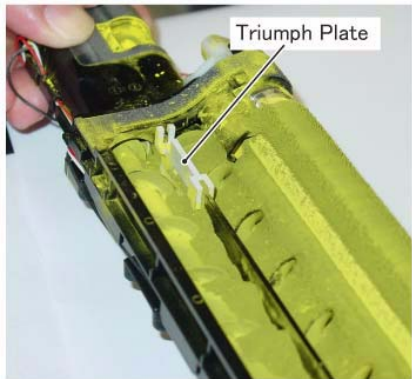
6. Put the Developer Housing Assembly into the plastic bag that comes bundled with the Developer and turn it upside down, then rotate the gear clockwise as shown in the figure to eject the Developer. (Figure 3)
  - a. Turn the Developer Housing Assembly upside down.
  - b. Rotate the gear in clockwise direction.



j0wa40516

Figure 3 Put the Developer Housing Assembly in a plastic bag

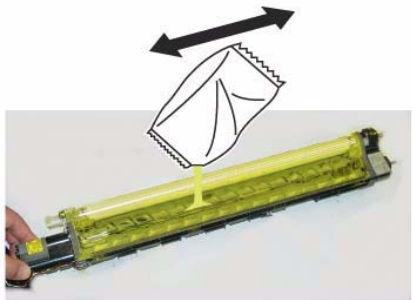
7. Install the Triumph Plate. (Figure 4)



j0wa40517

**Figure 4 Install the Triumph Plate**

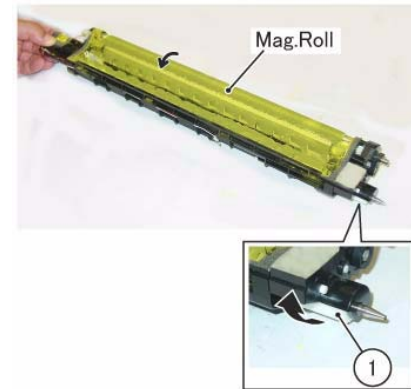
8. Hold the Developer Housing Assembly steady with your hand and supply the new Developer to the Mag Roll side. (Figure 5)



j0wa40518

**Figure 5 Supply the new developer to the Mag Roll side**

9. Rotate the gear indicated in the figure clockwise to even out the Developer on the Mag Roll. (Figure 6)
  - a. Rotate the gear in clockwise direction.

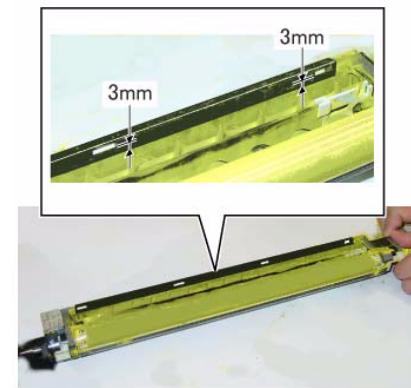


j0wa40519

**Figure 6 Rotate the gear clockwise**

**NOTE:** After the Developer on the Mag Roll is evened out, take note of the following points.

- Make sure that the Developer does not go beyond the line that is approx. 3mm below the Upper Cover installation slot hole. (Figure 7)



j0wa40520

**Figure 7 Make sure the Developer does not go beyond the line**

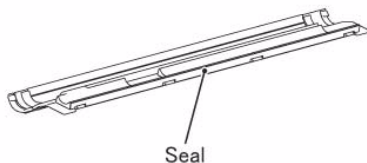
- Make sure that no Developer or toner has gotten stuck to the locations shown in the figure. If there is any, clean it up by using dry cloth, etc. (Figure 8)



j0wa40521

**Figure 8 Make sure that no Developer or toner is stuck**

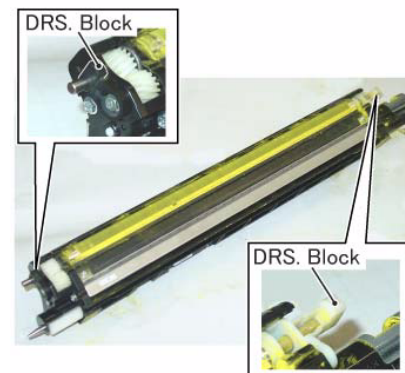
10. Make sure that no Developer or toner has gotten stuck to the seal section indicated in the figure, on the Upper Cover that was removed in Step 2. If there is any, clean it up by using a vacuum cleaner or by gently using a dry cloth, etc. (Figure 9)



j0wa40522

**Figure 9 Make sure that no Developer or toner is stuck to the seal**

11. Reinstall the Upper Cover that was removed in Step 2.
12. Turn the Developer Housing Assembly upside down and check for the following.
  - Make sure that no Developer or toner has gotten stuck to the DRS Block locations indicated in the figure. If there is any, clean it up by using dry cloth, etc. (Figure 10)



j0wa40523

**Figure 10 Make sure that no Developer or toner is stuck to the DRS Block locations**

- Make sure that no Developer or toner has gotten stuck to the gear locations indicated in the figure by turning the gear clockwise. If there is any, clean it up by using a vacuum cleaner or a brush, etc. (Figure 11)



j0wa40524

**Figure 11 Make sure that no Developer or toner is stuck to the gears**

### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 9.16 MOB ADC Assembly

### Parts List on [PL 18.5](#)

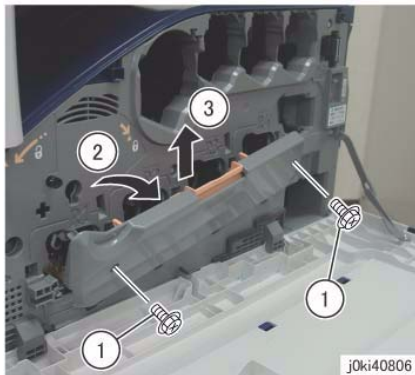
#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

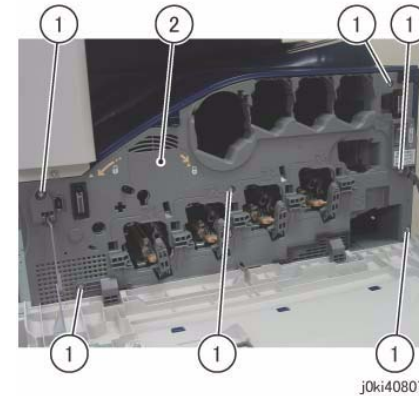
**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) ([REP 9.5](#))
  - Toner Cartridge (Y, M, C, K) ([PL 5.1](#))
  - Waste Box ([PL 8.2](#))
  - Transfer Belt Cleaner Assembly ([REP 9.1](#))
  - Tension Lever ([PL 6.1](#))
4. Remove the Drum Cover. ([Figure 1](#))
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in [Figure 1](#).
  - c. Remove the Drum Cover.



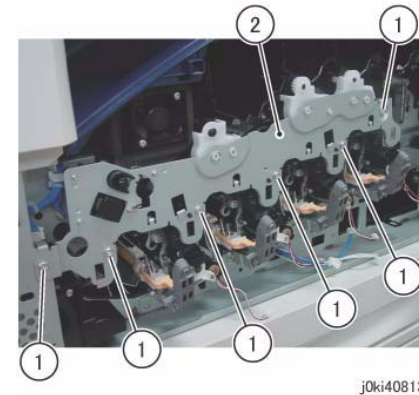
**Figure 1 Remove the Drum Cover**

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. ([Figure 2](#))
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



**Figure 2 Open the L/H Cover**

7. Remove the Plate. ([Figure 3](#))
  - a. Remove the screws (x6).
  - b. Remove the Plate.



**Figure 3 Remove the Plate**

8. Remove the Plate. (7830/35: [Figure 4](#)) (7845/55: [Figure 5](#))
  - a. Release the hooks (x2) and remove the Plate.



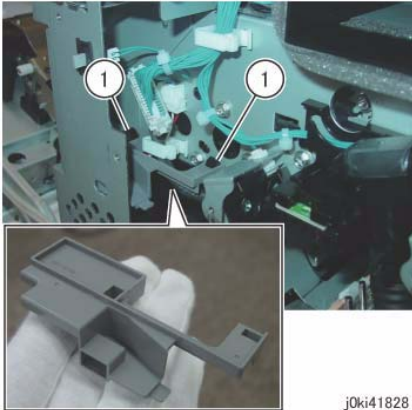


Figure 4 Release the Hooks and Remove the Plate

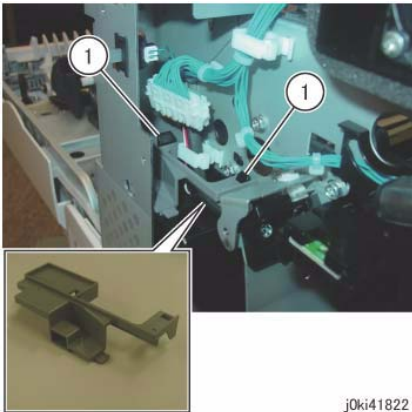


Figure 5 Release the Hooks and Remove the Plate

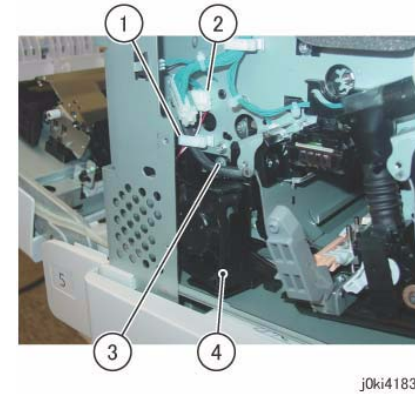


Figure 6 Remove the Process 2 Fan and Duct

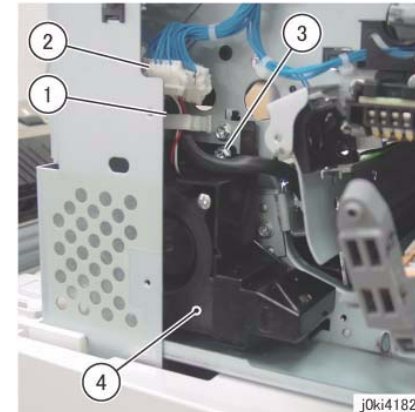
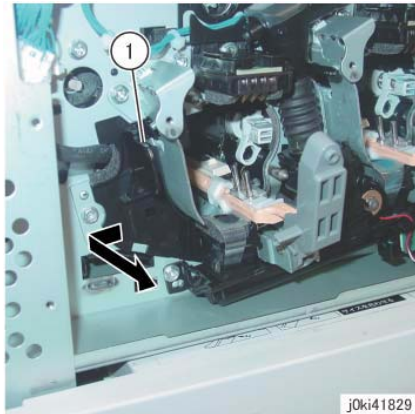


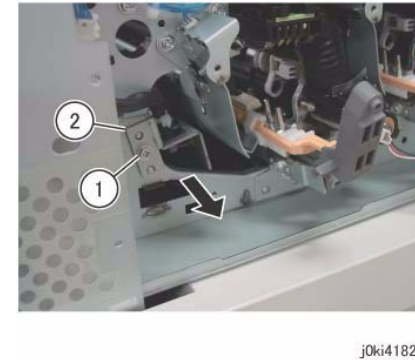
Figure 7 Remove the Process 2 Fan and Duct

9. Remove the Process 2 Fan and Duct. (7830/35: [Figure 6](#)) (7845/55: [Figure 7](#))
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screw.
  - d. Remove the Process 2 Fan and Duct.

10. [7830/35]:
  - Remove the Plate. ([Figure 8](#))
    - a. Remove the Plate in the direction of the arrow.

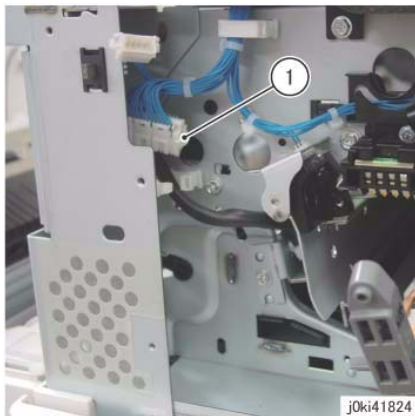


**Figure 8 Remove the Plate**



**Figure 10 Remove the MOB ADC Assembly**

11. Disconnect the connector. (Figure 9)
  - a. Disconnect the connector.



**Figure 9 Disconnect the connectors**

12. Remove the MOB ADC Assembly. (Figure 10)
  - a. Remove the screw.
  - b. Remove the MOB ADC Assembly.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 10.1 Fuser

### Parts List on PL 7.1

#### Removal

#### WARNING

Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.

**DANGER:** Ne pas manipuler les éléments du four avant de les laisser refroidir. Certains éléments du four fonctionnent à des températures très élevées et peuvent causer de graves blessures s'ils sont touchés.

**AVVERTENZA:** Non maneggiare i componenti del fusore finché non sono raffreddati. Alcuni di questi componenti funzionano ad alte temperature e possono provocare gravi ferite se vengono toccati.

**VORSICHT:** Die Fixieranlage sollte erst gehandhabt werden, wenn diese genügend abgekühlt ist. Einige Teile der Fixieranlage erzeugen übermäßige Hitze und führen bei der Berührung zu schweren Verbrennungen.

**AVISO:** No manipule los componentes del fusor antes de que se enfrien. Algunos de los componentes del fusor funcionan a altas temperaturas y pueden ocasionar daños personales graves si se los toca.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the L/H Cover Unit.
4. Remove the Fuser. (Figure 1)
  - a. Loosen the Knob Screws (x2).
  - b. Remove the Fuser.

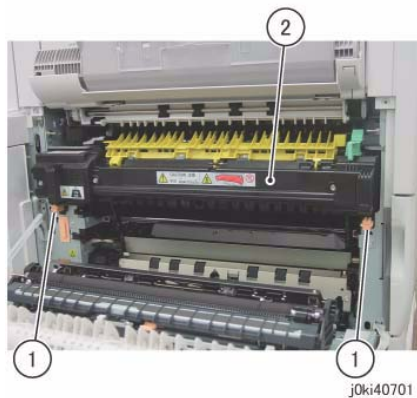


Figure 1 Remove the Fuser

#### Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use **dC135** to reset the HFSI counter.

## REP 10.2 Duplex Assembly

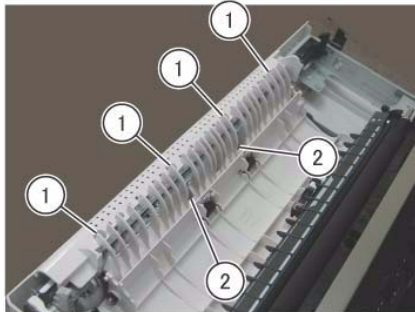
### Parts List on PL 14.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the 2nd BTR Roll surface with your hands.

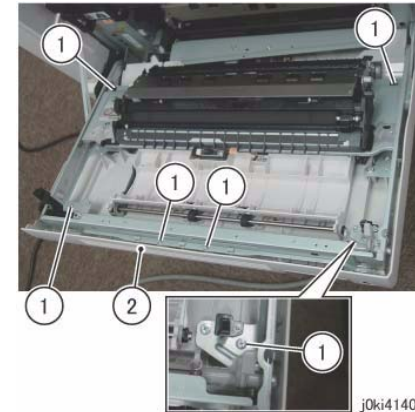
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the L/H Cover Unit.
4. Remove the chute. (Figure 1)
  - a. Remove the screws (x4).
  - b. Remove the Tapping Screws (x2).
  - c. Remove the chute.



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**Figure 1 Remove the Chute**

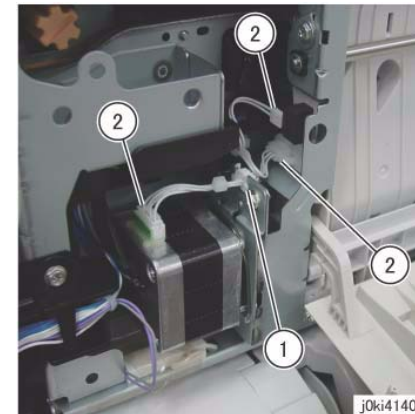
5. Remove the L/H Cover. (Figure 2)
  - a. Remove the Tapping Screws (x6).
  - b. Remove the L/H Cover.



j0ki41407

**Figure 2 Remove the L/H Cover**

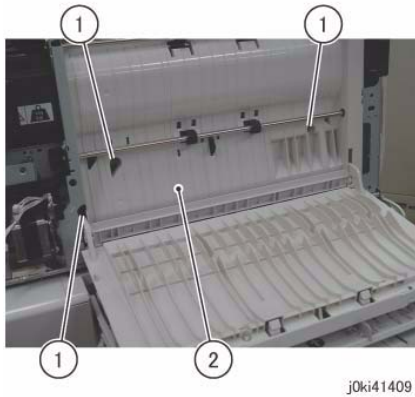
6. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connectors (x3).



j0ki41408

**Figure 3 Disconnect the connectors**

7. Remove the Duplex Assembly. (Figure 4)
  - a. Remove the screws (x3).
  - b. Remove the Duplex Assembly.



**Figure 4 Remove the Duplex Assy**

### **Replacement**

1. To install, carry out the removal steps in reverse order.



## REP 11.1 Exit/OCT 1 Assembly

### Parts List on PL 17.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Exit 2 Assembly. (REP 11.2)
4. Remove the Motor Cover. (Figure 1)
  - a. Release the wire harness from the hook.
  - b. Disconnect the connector.
  - c. Remove the Tapping Screw.
  - d. Remove the Motor Cover.

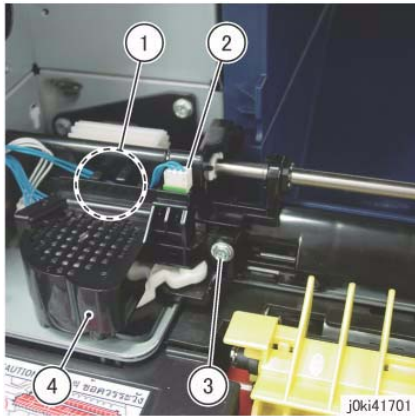


Figure 1 Remove the Motor Cover

5. Disconnect the connector. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Slide and remove the Belt.
  - c. Remove the screws (x2).

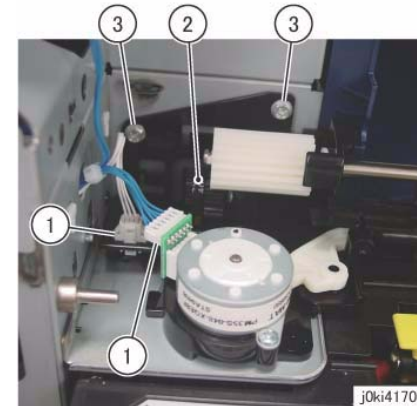


Figure 2 Disconnect the connectors

6. Remove the Exit/OCT 1 Assembly. (Figure 3)
  - a. Slide the Bearing.
  - b. Remove the Exit/OCT 1 Assembly.

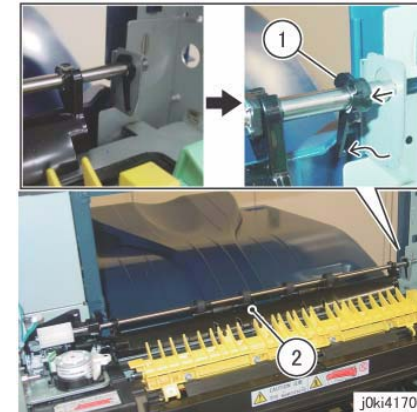


Figure 3 Remove the Exit/OCT 1 Assy

#### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 11.2 Exit 2 Assembly

### Parts List on PL 17.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the L/H Cover Unit.
4. Remove the Front Left Cover. (PL 19.2)
5. Remove the Left Rear Upper Cover. (PL 19.2)
6. Remove the Paper Weight. (Figure 1)
  - a. Release the hook and remove the Paper Weight.

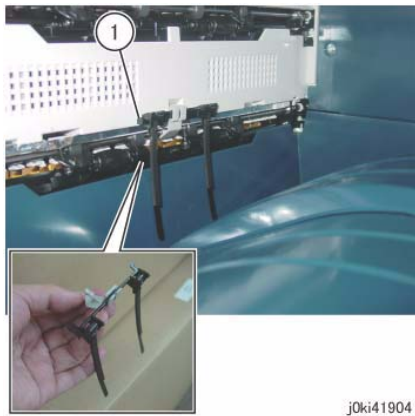


Figure 1 Remove the Paper Weight

7. Remove the Exit 2 Assembly. (Figure 2)
  - a. Disconnect the connector.
  - b. Remove the screws (x4).
  - c. Remove the Exit 2 Assembly.

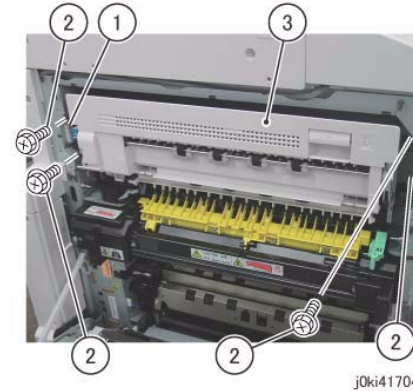


Figure 2 Remove the Exit 2 Assy

#### Replacement

1. To install, carry out the removal steps in reverse order.



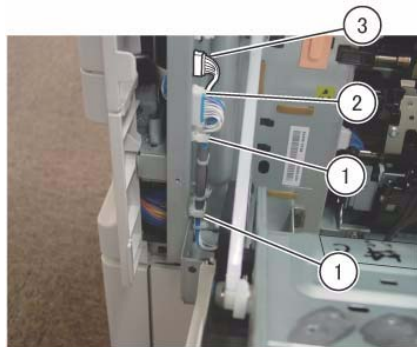
## REP 14.1 L/H Cover Unit

### Parts List on PL 14.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

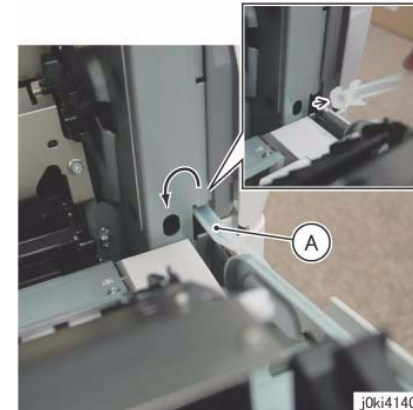
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Left Rear Lower Cover. (PL 19.2)
4. Open the L/H Cover Unit.
5. Disconnect the connector. (Figure 1)
  - a. Release the wire harness from the clamps (x2).
  - b. Disconnect the connector.
  - c. Disconnect the connector.



j0ki41401

**Figure 1 Disconnect the connectors**

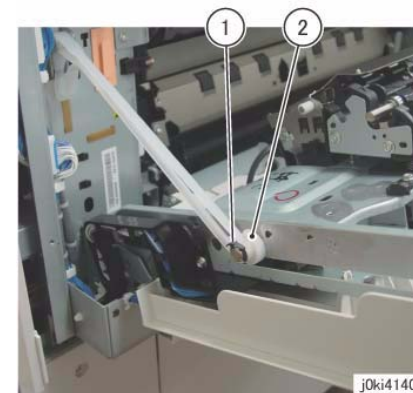
6. Rotate the Front Support 90 degree counterclockwise and remove it from hole of the Frame. (Figure 2)  
(A) Front Support



j0ki41402

**Figure 2 Rotate and Remove the Front Support**

7. Remove the Rear Support from the L/H Cover Unit. (Figure 3)
  - a. Remove the KL-Clip.
  - b. Remove the Rear Support.



j0ki41403

**Figure 3 Remove the Rear Support**

8. Remove the L/H Cover Unit. (Figure 4)
  - a. Remove the L/H Cover Unit from the studs (x2) of the hinge.

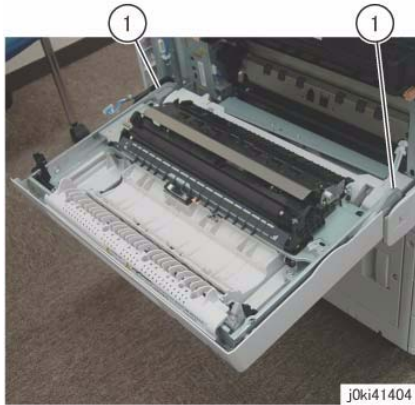


Figure 4 Remove the L/H Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 14.2 Top Cover

### Parts List on PL 19.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in the figure.
  - c. Remove the Drum Cover.

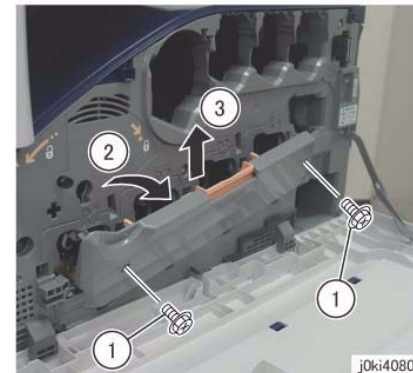
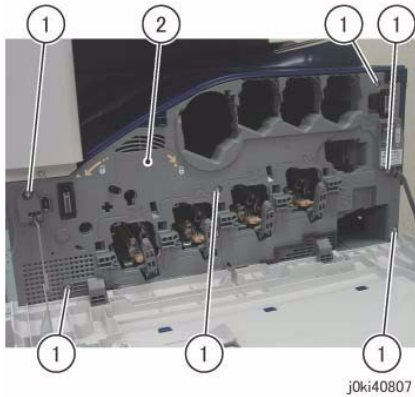
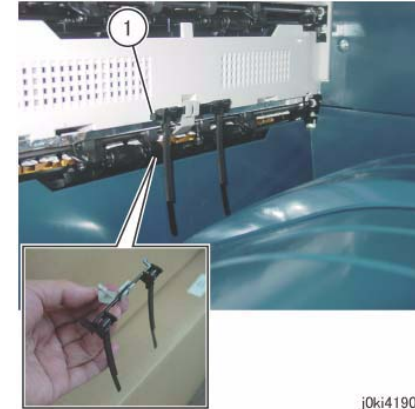


Figure 1 Remove the Drum Cover

5. Open the L/H Cover Unit.
6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.

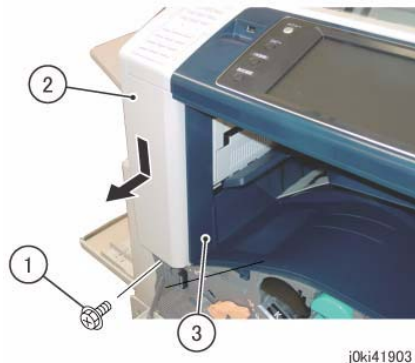


**Figure 2 Remove the L/H Cover**



**Figure 4 Remove the Paper Weight**

7. Remove the Front Left Cover and the Exit Front Cover. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Front Left Cover in the direction of the arrow.
  - c. Remove the Exit Front Cover.



**Figure 3 Remove the Front Left and Front Exit Covers**

8. Remove the Paper Weight. (Figure 4)
  - a. Release the hook and remove the Paper Weight.

9. Remove the Top Cover. (Figure 5)
  - a. Remove the screw.
  - b. Remove the Top Cover.



**Figure 5 Remove the Top Cover**

### Replacement

1. To install, carry out the removal steps in reverse order.

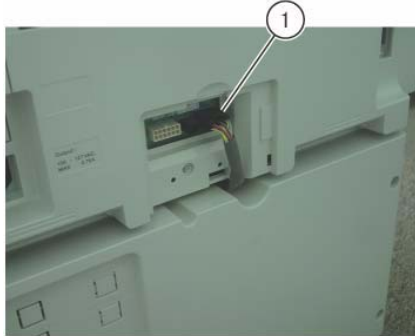
## REP 14.3 Rear Lower Cover

### Parts List on PL 19.3

#### Removal

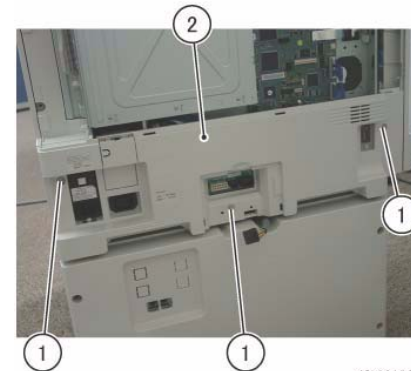
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following parts:
  - Filter Cover (PL 19.3)
  - Control Unit Connector Cover (PL 19.3)
  - Rear Upper Cover (PL 19.3)
  - MCU Cover (PL 19.3)
4. Disconnect the connector. (Figure 1)
  - a. Disconnect the connector.



j0ki41901

**Figure 1 Disconnect the connectors**



j0ki41902

**Figure 2 Remove the Rear Lower Cover**

#### Replacement

1. To install, carry out the removal steps in reverse order.

5. Remove the Rear Lower Cover. (Figure 2)
  - a. Remove the screws (x3).
  - b. Remove the Rear Lower Cover.

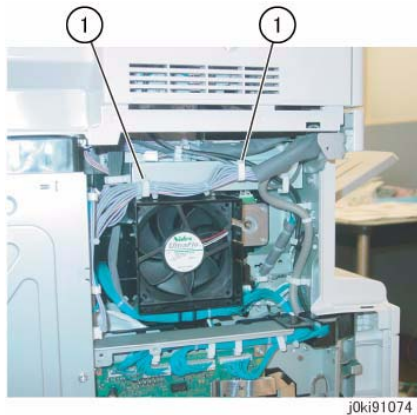
## REP 14.4 Opening/Closing the PWB Chassis Unit

### Parts List on [PL 18.1](#)

#### Removal

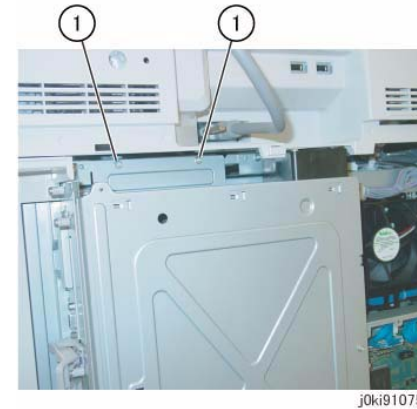
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Control Unit Connector Cover. ([PL 19.3](#))
4. Disconnect all cables connected to the Control Unit.
5. Remove the Rear Lower Cover. ([REP 14.3](#))
6. Release the wire harness from the clamp. ([Figure 1](#))
  - a. Release the wire harness from the clamps (x2).



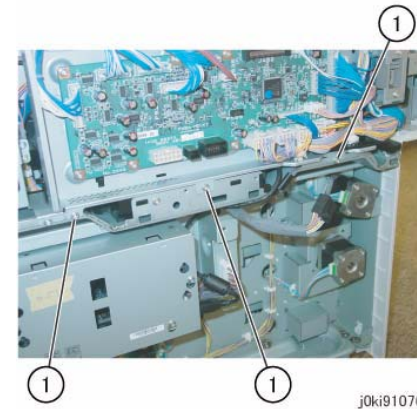
**Figure 1 Release the Wire Harness**

7. Remove the screws that secure the PWB Chassis Unit. ([Figure 2](#))
  - a. Remove the screws (x2).



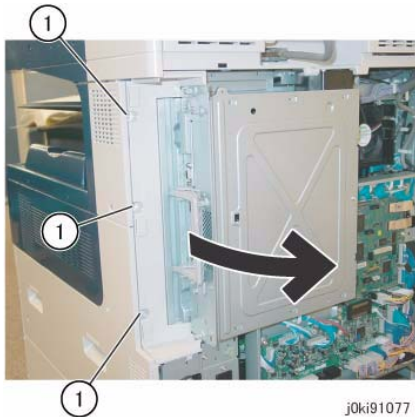
**Figure 2 Remove the screws**

8. Remove the screws that secure the PWB Chassis Unit. ([Figure 3](#))
  - a. Remove the screws (x3).



**Figure 3 Remove the screws that secure the PWB Chassis**

9. Open the PWB Chassis Unit. ([Figure 4](#))
  - a. Remove the screws (x3) and open the PWB Chassis Unit.



**Figure 4 Open the PWB Chassis**

### **Replacement**

1. To install, carry out the removal steps in reverse order.



## REP 19.1 HCF Tray 6

Parts List on [PL 28.1](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the HCF Tray by pulling the tray toward you.
4. Remove all paper from the tray.
5. Using a small screwdriver, or other small, blunt instrument, release the stopper on each rail of the tray by inserting the screwdriver into the hole of the stopper and pulling the tray toward you.
6. Remove the tray by pulling it toward you.

### Replacement

1. Slide the rails (2) into the HCF housing.
2. Line up the rails of the tray with the adjoining rails of the HCF and push the tray into place.
3. Place previously removed paper, or fresh paper, into the tray.

## REP 19.2 HCF Feeder

Parts List on [PL 28.1](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the HCF Tray ([REP 19.1](#)).
4. Open the Feeder Top Cover.
5. Remove the (2) screws used to secure the HCF Feeder on its rail ([Figure 1](#)).

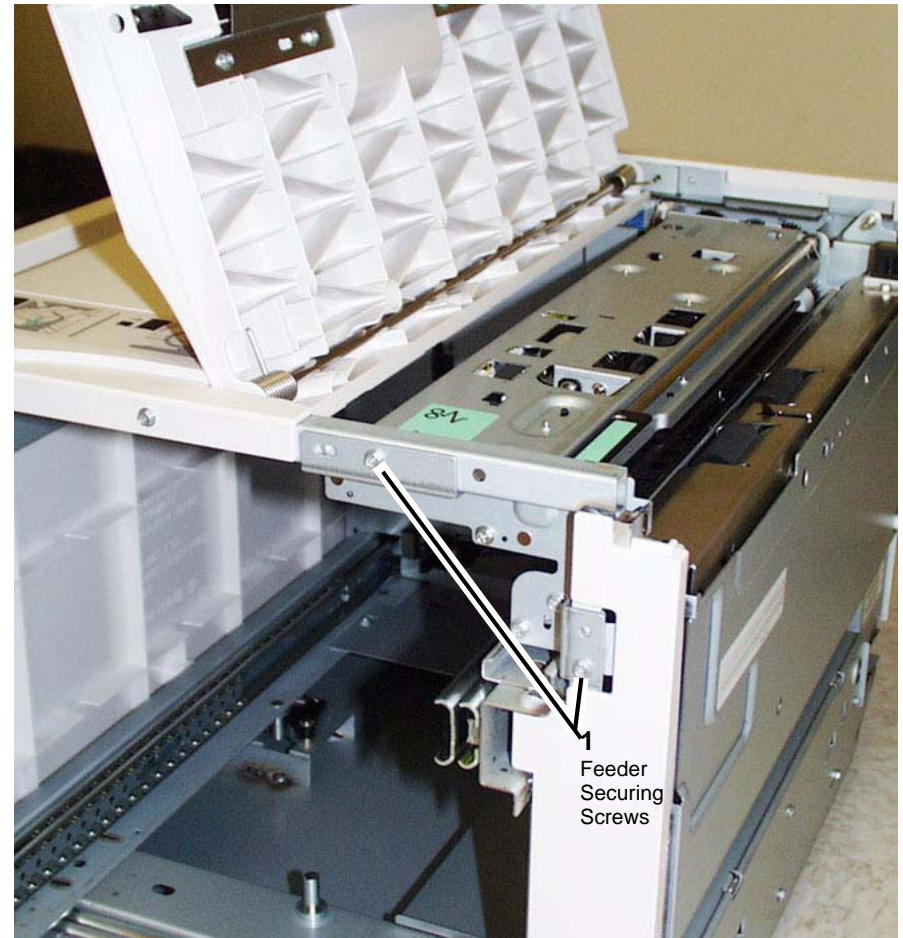


Figure 1 Feeder Securing Screws

6. Slide the HCF Feeder toward you.

### Replacement

1. Position the HCF Feeder's bottom rail-following feet (2) onto the internal HCF rail.
2. Slide the HCF Feeder back into the HCF until it seats.

#### CAUTION

*Do not over tighten the HCF Feeder screws.*

3. Reinstall the two securing screws and tighten until snug.

## REP 19.3 HCF Un-docking

Parts List on [PL 28.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Unplug the HCF Power Cable connected to the left rear of the copier/printer.
4. Grasping the HCF by its upper corners, pull the HCF away from the copier/printer to expose the HCF Docking Base ([Figure 1](#)).

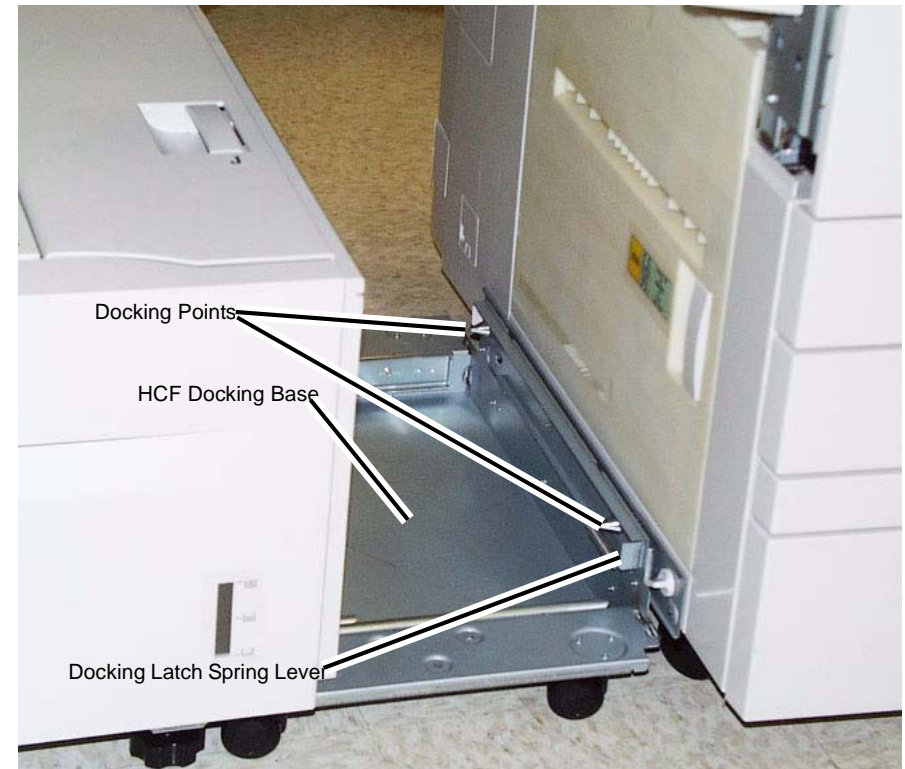


Figure 1 Exposing the docking base

5. Release the Docking Latch Spring Lever on the right side of the Docking Base.
6. Pull the HCF away from the copier/printer to un-dock it from the copier/printer.

### Replacement

1. Push the HCF toward the two Docking Points on the left side of the printer.
2. Align the holes in the HCF Docking Base with the Docking Points on the printer/copier.



**NOTE:** Rotate the Caster of the copier/printer so that it does not interfere with docking.

3. Push the HCF into place.
4. Reattach the HCF Power Cable.

## REP 19.4 HCF Tray Cables

Parts List on [PL 28.3](#)

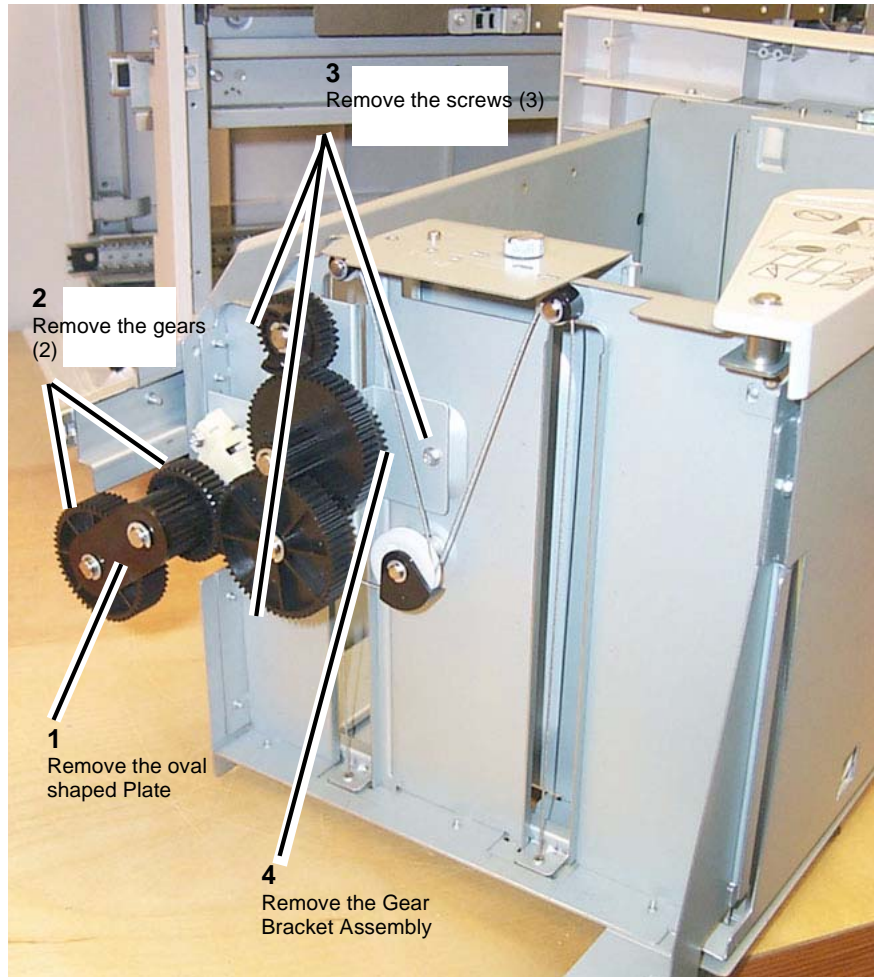
### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.

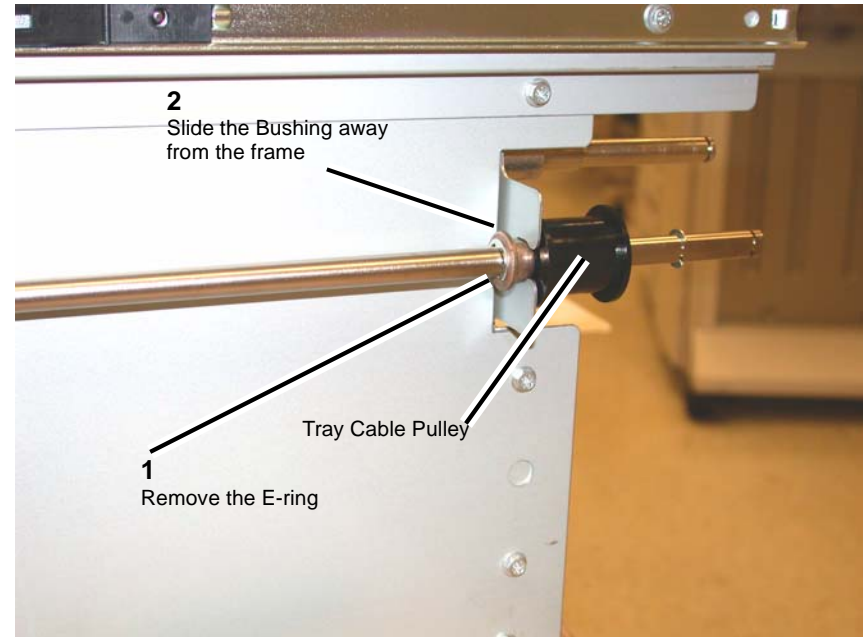
### Removing the HCF Rear Tray Cables

1. Remove the HCF Tray ([REP 19.1](#))
2. Remove the Gear Bracket Assembly ([Figure 1](#)).



**Figure 1 Gear Bracket Assembly**

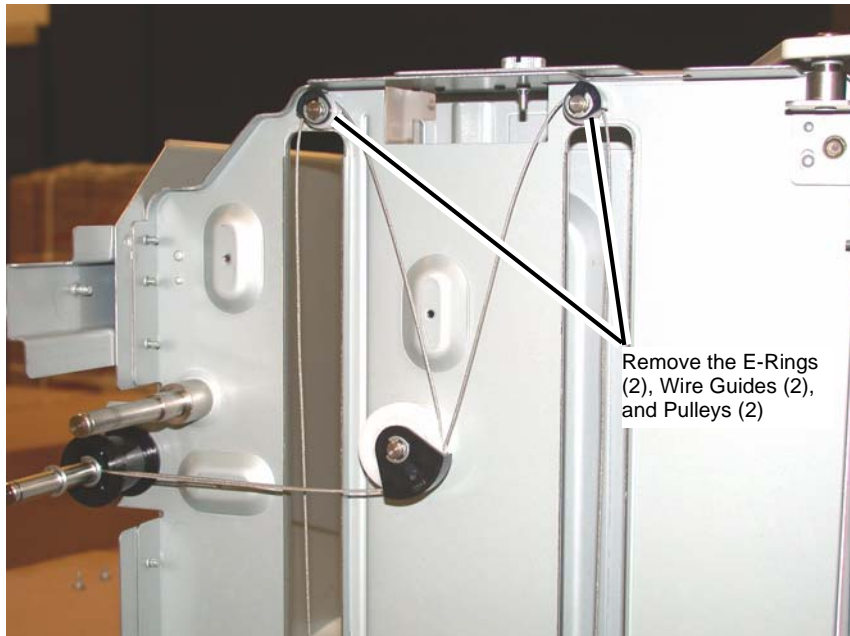
3. At the rear of the HCF Tray, begin to free up movement of the Tray Cable Pulley (Figure 2).



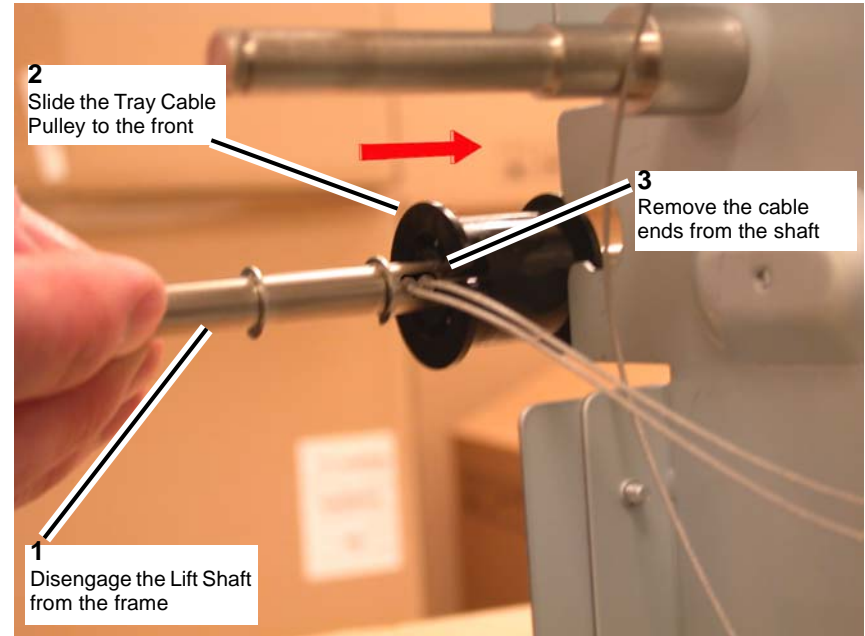
**Figure 2 Lift Shaft Rear Tray Cable Pulley**

**NOTE:** You will not be able to release the cable ends from underneath the Tray Cable Pulley until you perform the next step, which puts slack in the cable enabling the Lift Shaft to be disengaged from its bracket, and the Tray Cable Pulley moved farther to the left releasing the cable ends.

4. Prepare to remove the Rear Tray Cable (Figure 3).



**Figure 3** Preparing to remove the Rear Tray Cable



**Figure 4** Releasing the Cable ends from the Lift Shaft

5. When both sections of the cable are slack, disengage the Lift Shaft from the frame and slide the Tray Cable Pulley to the front of the Lift Shaft to release the Rear Lift Cable ends that are trapped in the pocket underneath the Tray Cable Pulley (Figure 4).

6. Remove the Rear Tray Cable (Figure 5, Figure 6).

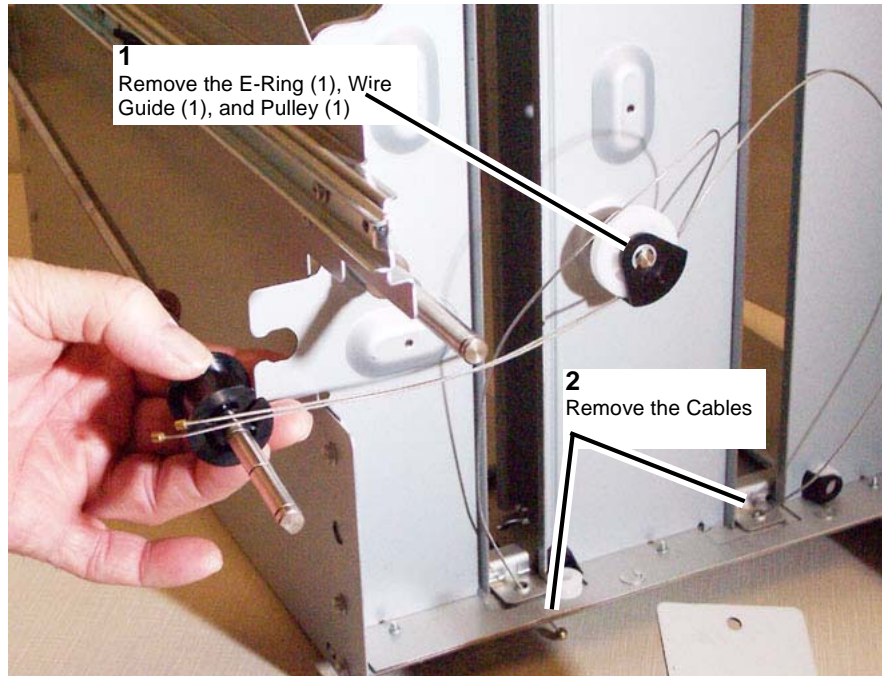


Figure 5 Removing the Rear Tray Cables

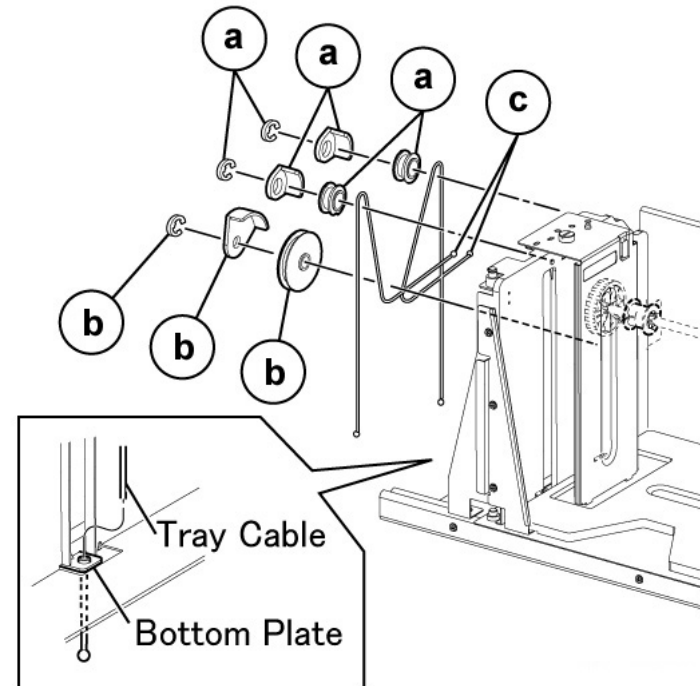


Figure 6 Rear Tray Cable details

#### Removing the HCF Front Tray Cables

1. Remove the (5) screws securing the HCF Tray's Front Cover.
2. At the front of the HCF Tray, begin to free up movement of the front Tray Cable Pulley (Figure 7).
  - a. Remove the E-Ring on the Lift Shaft.
  - b. Slide the bearing to the rear on the Lift Shaft.
  - c. Front Tray Cable Pulley

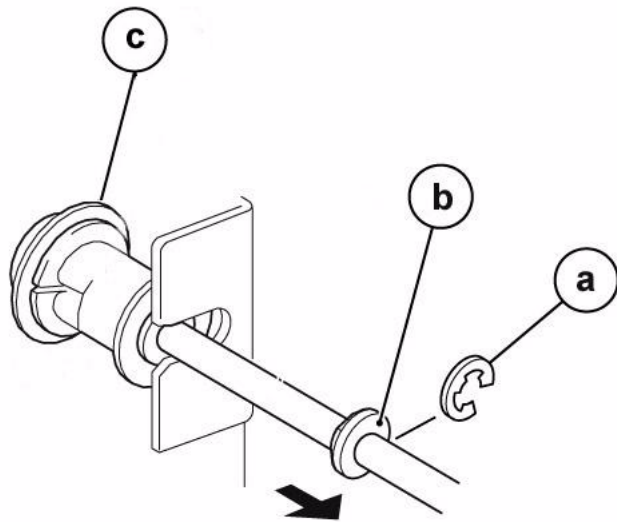


Figure 7 Lift Shaft Front Tray Cable Pulley

**NOTE:** You will not be able to release the cable ends from underneath the Tray Cable Pulley until you perform the next step, which puts slack in the cable enabling the Lift Shaft to be disengaged from its bracket, and the Tray Cable Pulley moved farther to the right releasing the cable ends.

3. Remove the E-Rings, Wire Guides, and Pulleys from the front of the HCF Tray (Figure 8).

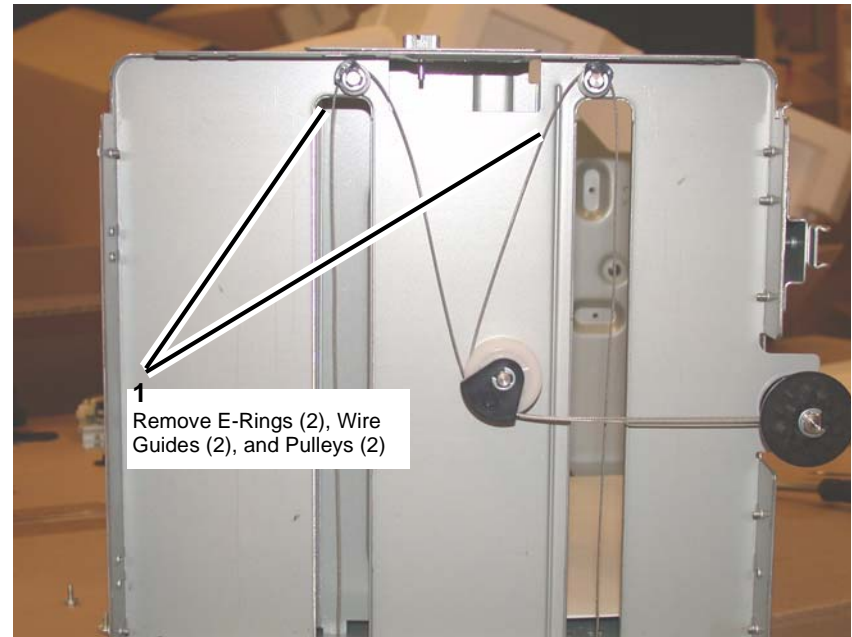


Figure 8 Preparing to remove the Front Tray Cables

4. When both sections of the cable are slack, disengage the Lift Shaft from the frame and slide the Tray Cable Pulley to the front of the Lift Shaft to release the Rear Lift Cable ends that are trapped in the pocket underneath the Tray Cable Pulley (Figure 9).



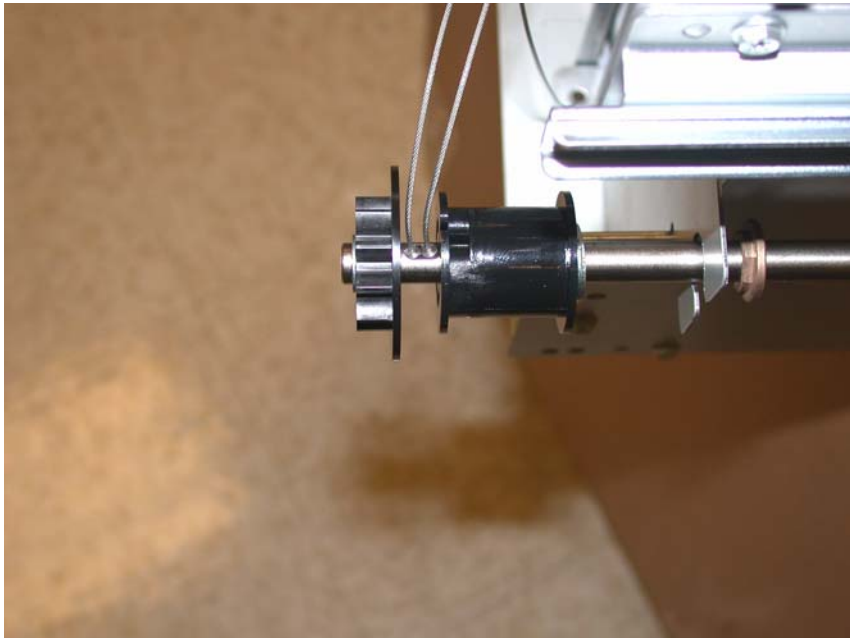


Figure 9 Releasing the Cable ends from the Lift Shaft

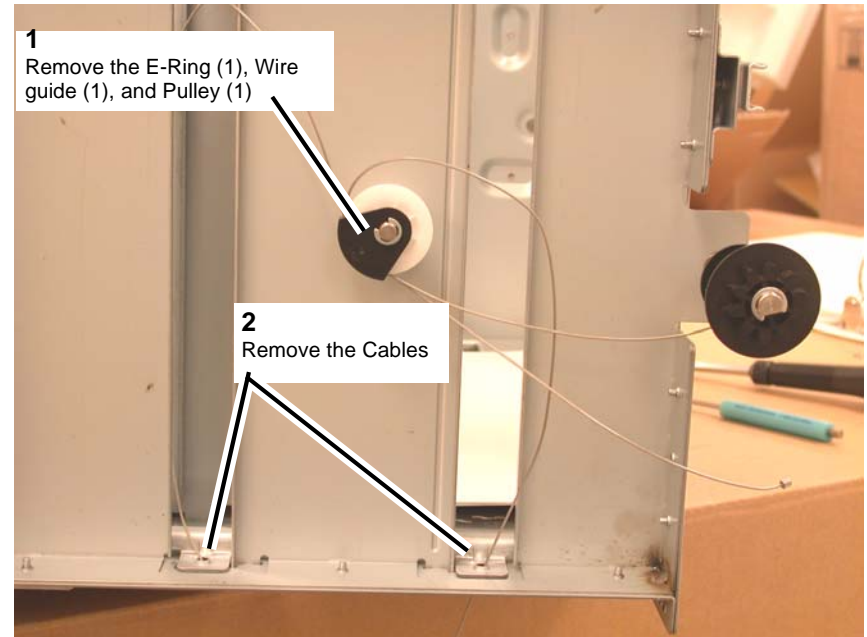


Figure 10 Removing the Front Tray Cables

5. Remove the Front Tray Cables (Figure 10, Figure 11).

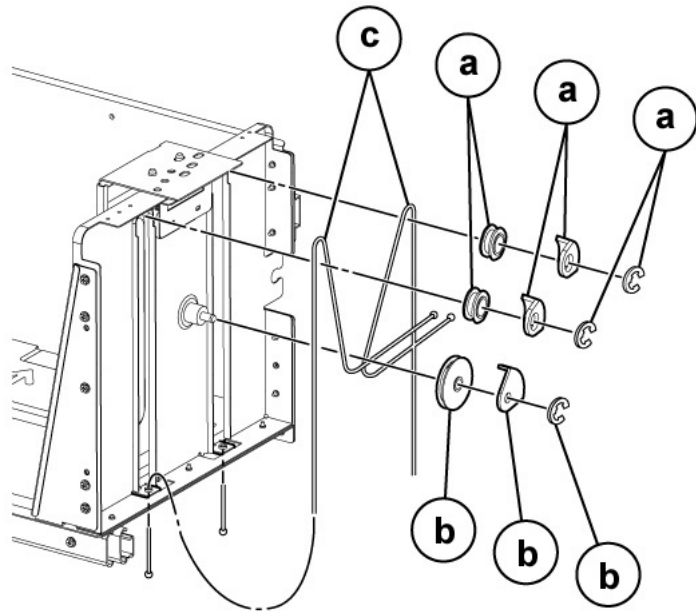


Figure 11 Front Tray Cable details

### Replacement

1. Install the front Tray Cable by carrying out the removal steps in reverse order.
2. Install the rear Tray Cable by carrying out the removal steps in reverse order.
3. Reinstall the HCF Tray's Front Cover.
  - a. Make sure to raise the gear on the Indicator Shaft so that it meshes with the adjoining Lift Shaft gear.
  - b. Replace the (5) Installation Screws.
4. Reinstall the HCF Tray by lining up the rails of the tray with the adjoining rails of the HCF and pushing the tray into place.

## REP 19.5 HCF Feed, Nudger, Retard Rolls

Parts List on [PL 28.5](#), [PL 28.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

**NOTE:** Remove and replace the Retard/Feed/Nudger Rolls at the same time.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Feeder Top Cover.
4. Release the green Lever to open the Upper Feeder Assembly to reveal the (3) rolls.

**NOTE:** For reference purposes, the single roll in the Upper Feeder Assembly is the Nudger roll. The double roll in the Upper Feeder Assembly is the Feed Roll. The larger double roll in the Lower Feeder component is the Retard Roll.

5. Remove each roll by squeezing the roll's shaft at both ends and lifting the roll up and out of the HCF (Figure 1).



Figure 1 Removing rolls

### Replacement

1. Install each new roll by squeezing its shaft at both ends and sliding the roll into place.
2. check that the rolls turn freely.

3. Flip down the Upper Feeder Assembly.
4. Close the Feeder Top Cover of the HCF.

## REP 19.6 HCF Feed Shaft

Parts List on [PL 28.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the HCF Feeder ([REP 19.2](#))
4. Place the Feeder on a flat surface.
5. Open the Upper Feeder Assembly by releasing the green lever.
6. Remove the Nudger Roll by squeezing the roll's shaft at both ends (with the thumb and forefinger of one hand) and lifting the roll up and out of the HCF.
7. Remove the E-Ring and bearing on the Feed Shaft (at the Nudger Roll end of the shaft).
8. Move the bearing at the opposite end of the shaft to the right, and slide the Feed Shaft to the right to remove.

### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 19.7 HCF Retard Lever Spring

Parts List on [PL 28.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the HCF Feeder ([REP 19.2](#))
4. Place the Feeder on a flat surface and release the green Lever to open the Upper Feeder Assembly.
5. Remove the Lower Chute (2 screws).
6. Remove the plastic Cover by removing (4) screws.
7. Remove the Retard Roll.
8. Remove the E-Rings on the Lever and Spring.
9. Remove the Lever.
10. Remove the Spring ([Figure 1](#)).

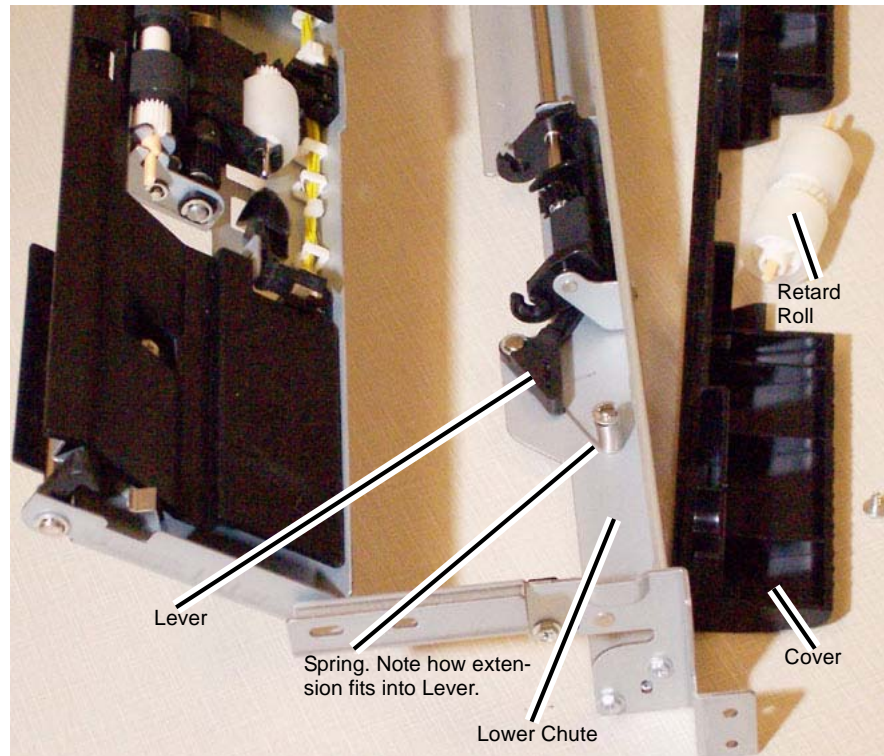


Figure 1 Removing the Retard Lever Spring

### Replacement

**NOTE:** Make sure the plastic pads on the Lower Chute fit in the track before pushing it in.

1. To install, carry out the removal steps in reverse order.

## REP 19.8 HCF Nudger Bracket/Nudger Lever/Torsion Spring

Parts List on [PL 28.4](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the HCF Feed Shaft ([REP 19.6](#))
4. Disassemble the Feed Shaft by removing (4) E-Rings and unscrewing the Nudger Support that retains the Torsion Spring.

### Replacement

1. Install replacement parts.
2. Carry out the removal steps in reverse order.

## REP 19.9 HCF Casters

Parts List on [PL 28.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Un-dock the HCF ([REP 19.3](#)).
4. Remove all paper from the HCF Tray.
5. Roll the HCF away from the copier/printer.
6. Turn the HCF over onto its left side to expose the casters on the underside of the HCF.
7. Remove (3) installation screws per caster.

### Replacement

1. Install a new caster or casters, by tightening the (3) installation screws per caster.
2. Turn the HCF back up to an upright position.
3. Roll the HCF back toward the copier/printer.
4. Place previously removed paper, or fresh paper, into the HCF Tray.
5. Dock the HCF.

## REP 19.10 HCF Takeaway Roll

Parts List on [PL 28.7](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the HCF Feed Motor ([REP 19.12](#))
4. Remove the Lower Chute ([Figure 1](#)).
  - Remove the (2) securing screws.

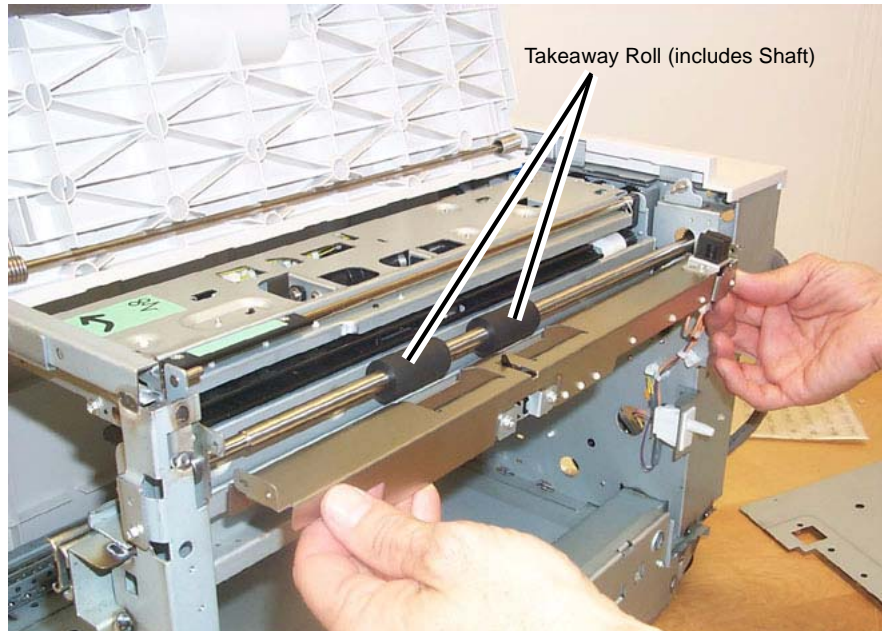


Figure 1 Removing the Lower Chute

5. Slide the Takeaway Roll to the right until the left side is released, then lower the roll to remove.

### Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing, enter into Diagnostic mode and then clear the DC135HFSI counter.

## REP 19.11 HCF PWB

Parts List on [PL 28.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Un-dock the HCF ([REP 19.3](#)).
4. Remove the plastic Rear Cover.
  - Remove the (4) securing screws.
5. Disconnect all of the connectors connected to the HCF PWB.
6. Remove the (4) screws securing the HCF PWB.
7. Remove the HCF PWB.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 19.12 HCF Feed Motor

### Parts List on [PL 28.4](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Un-dock the HCF ([REP 19.3](#)).
4. Remove the plastic Rear Cover.
  - Remove the (4) securing screws.

**NOTE:** Be careful when removing the motor as it is meshed to a hidden gear.

5. Supporting the motor with one hand, remove the HCF Feed Motor ([Figure 1](#)).
  - Disconnect the electrical Connector (1).
  - Remove the (2) securing screws.



Figure 1 Removing the HCF Feed Motor

#### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 21.1 (Pro) Finisher Front Door

Parts List on [PL 21.3](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Remove the Front Door ([Figure 1](#)).

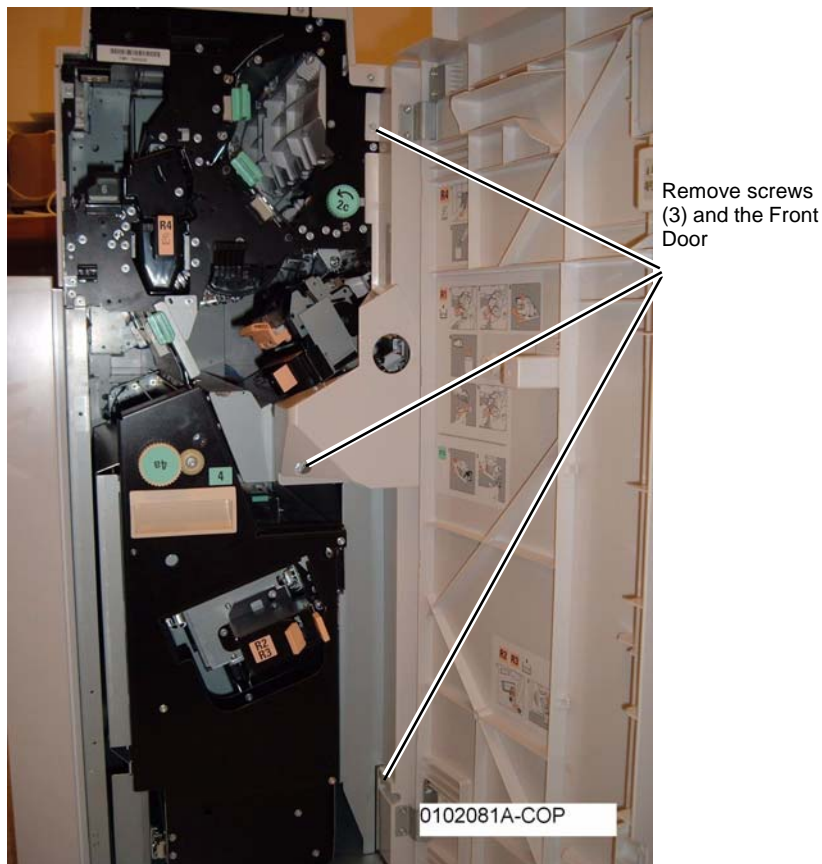


Figure 1 Removing the Front Door

## REP 21.2 (Pro) Finisher Rear Upper Cover

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([Figure 1](#)).

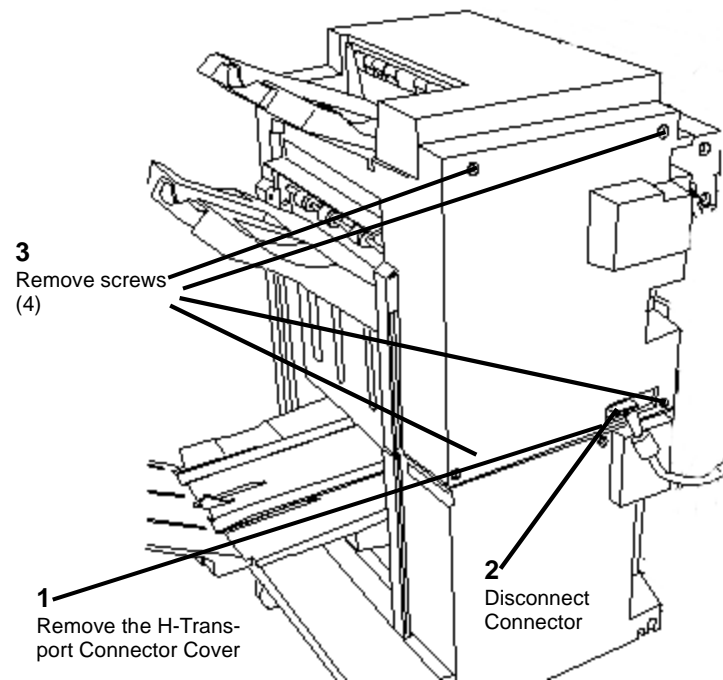


Figure 1 Removing the Rear Upper Cover

## REP 21.3 (Pro) Finisher Rear Lower Cover

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Lower Cover ([Figure 1](#)).

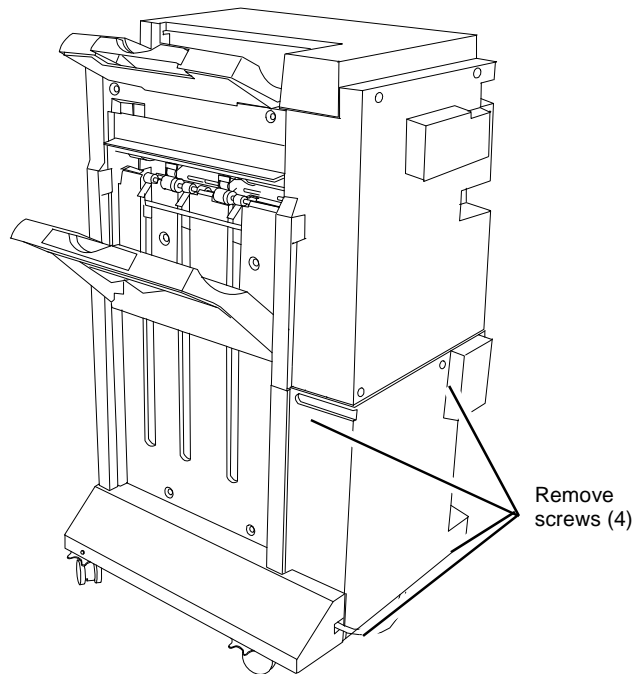


Figure 1 Removing the Rear Lower Cover

## REP 21.4 (Pro) Finisher Top Cover

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Remove the Rear Upper Cover ([REP 21.2](#)).
5. Remove the Top Tray ([REP 21.6](#)).
6. Remove screws ([Figure 1](#)).

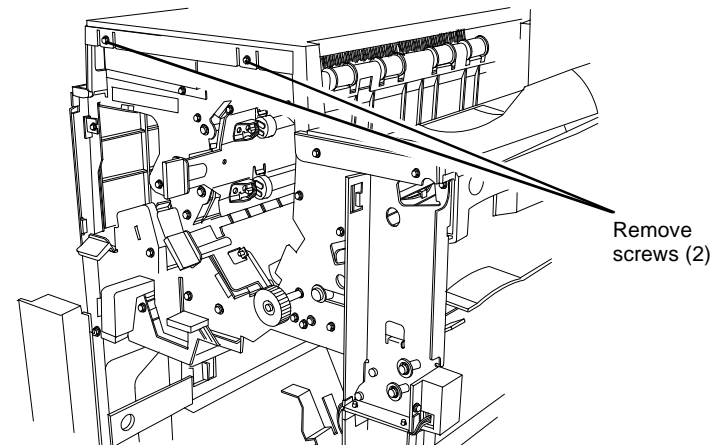


Figure 1 Removing screws

7. Remove the Top Cover ([Figure 2](#)).

## REP 21.5 (Pro) Finisher Front Top Cover

Parts List on [PL 21.3](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door ([REP 21.1](#)).
4. Remove the Top Cover ([REP 21.4](#)).
5. Remove Front Top Cover ([Figure 1](#)).

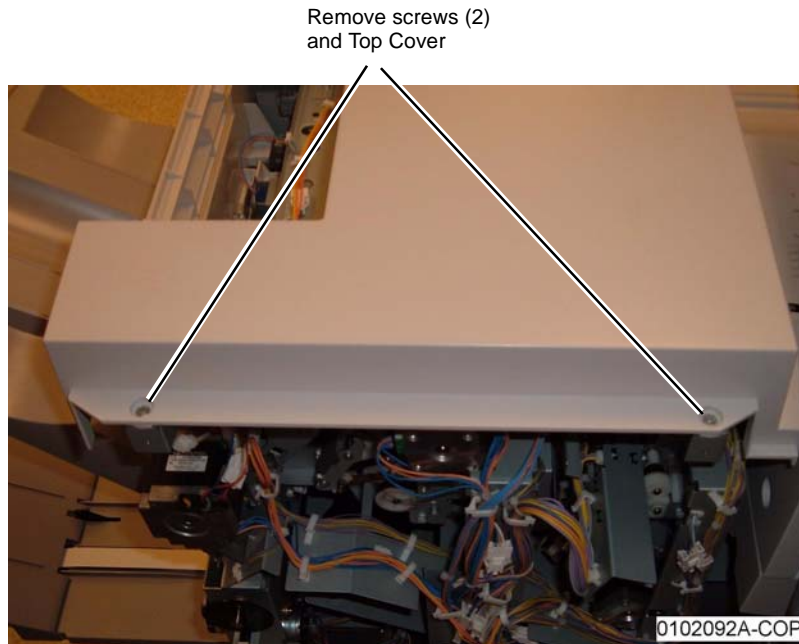


Figure 2 Removing the Top Cover

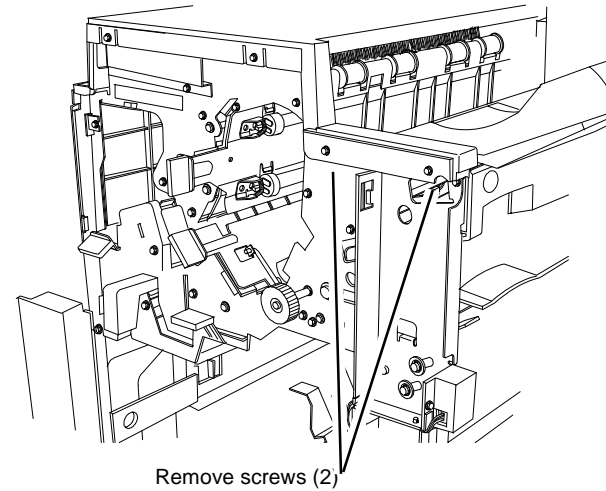


Figure 1 Removing the Front Top Cover

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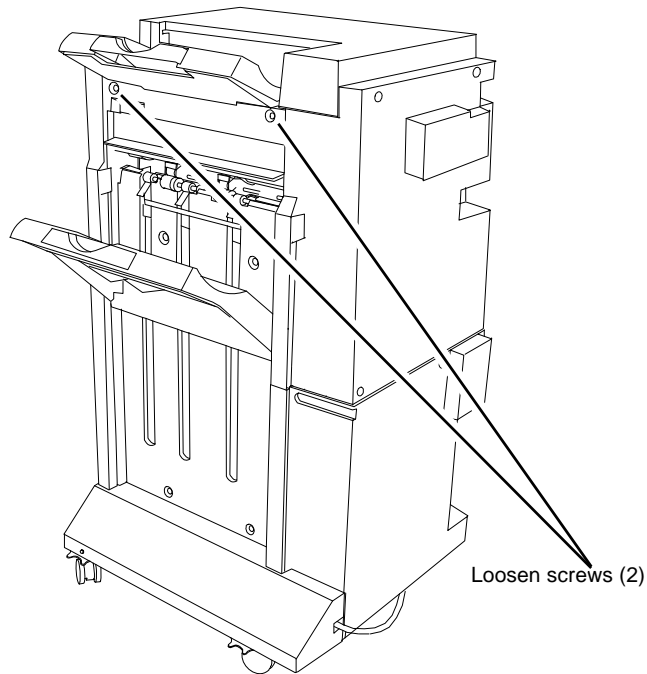
## REP 21.6 (Pro) Finisher Top Tray

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Loosen screws ([Figure 1](#)).



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**Figure 1 Loosening Screws (2)**

4. Lift and remove the Top Tray.

## REP 21.7 (Pro) Finisher Eject Cover

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

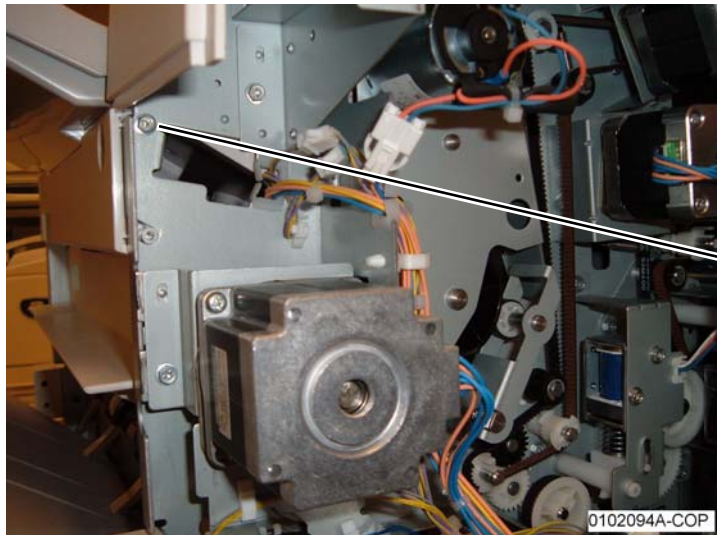
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door ([REP 21.1](#)).
4. Remove the Rear Upper Cover ([REP 21.2](#)).
5. Remove screw ([Figure 1](#)).



**Figure 1 Removing screw**

6. Remove the Eject Cover ([Figure 2](#)).





Remove screw (1) and Eject Cover

Figure 2 Removing the Eject Cover

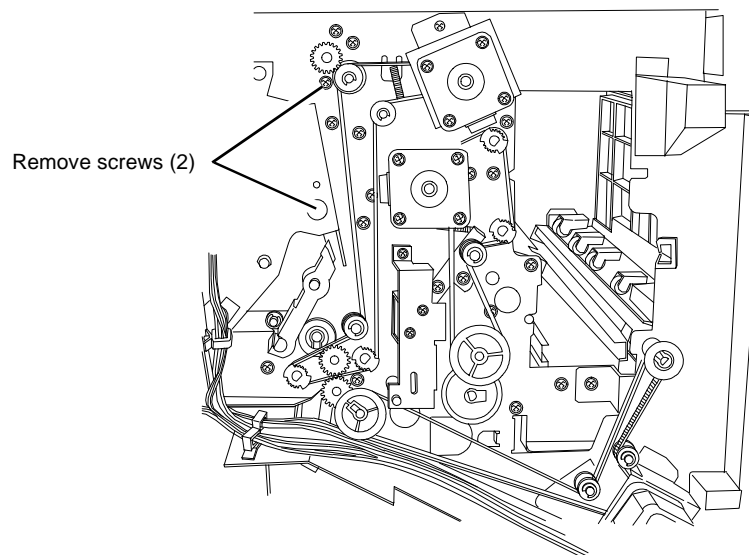
## REP 21.8 (Pro) Finisher Tray Spring Guide

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door ([REP 21.1](#)).
4. Remove the Rear Upper Cover ([REP 21.2](#)).
5. Remove the Top Cover ([REP 21.4](#)).
6. Remove the Front Top Cover ([REP 21.5](#)).
7. Remove the Top Tray ([REP 21.6](#)).
8. Remove screws on the rear of the Finisher ([Figure 1](#)).



Remove screws (2)

Figure 1 Removing screws on the rear of the Finisher

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9. Remove screws on the front of the Finisher ([Figure 2](#)).

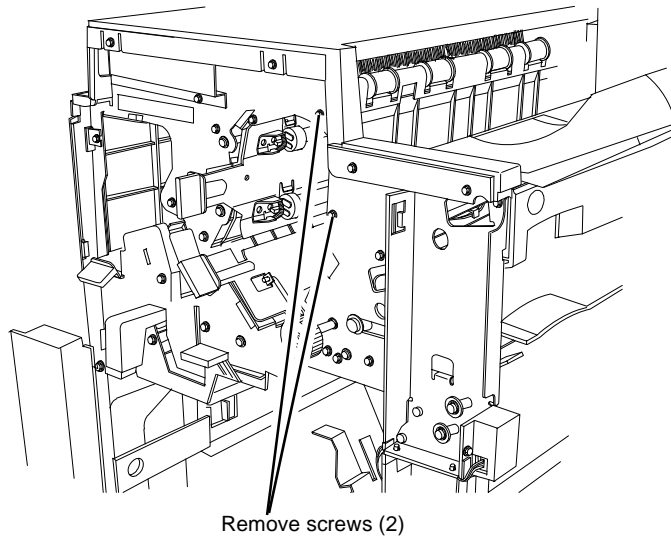
## REP 21.9 (Pro) Finisher Inner Cover

Parts List on [PL 21.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Stacker Tray ([PL 21.2](#)).
4. Remove the Inner Cover ([Figure 1](#)).



**Figure 2 Removing screws on the front of the Finisher**

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10. Remove screws (2) securing the Top Tray Full Sensor Bracket to the Tray Spring Guide.

Remove screws (4)



**Figure 1 Removing the Inner Cover (Professional Finisher shown)**

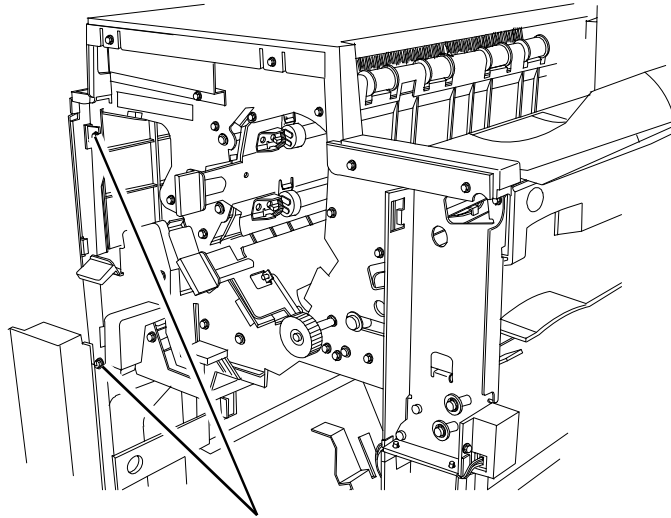
## REP 21.10 (Pro) Finisher Left Top Cover

Parts List on [PL 21.3](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Finisher from the IOT ([REP 21.11](#)).
4. Remove the Left Top Cover ([Figure 1](#)).



Loosen screws (2)

**Figure 1** Removing the Left Top Cover

## REP 21.11 (Pro) Finisher

Parts List on [PL 21.1](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the H-Transport Connector Cover ([PL 21.2](#)).
4. Remove the MCU Cover.
5. Disconnect the three connectors ([Figure 1](#)).

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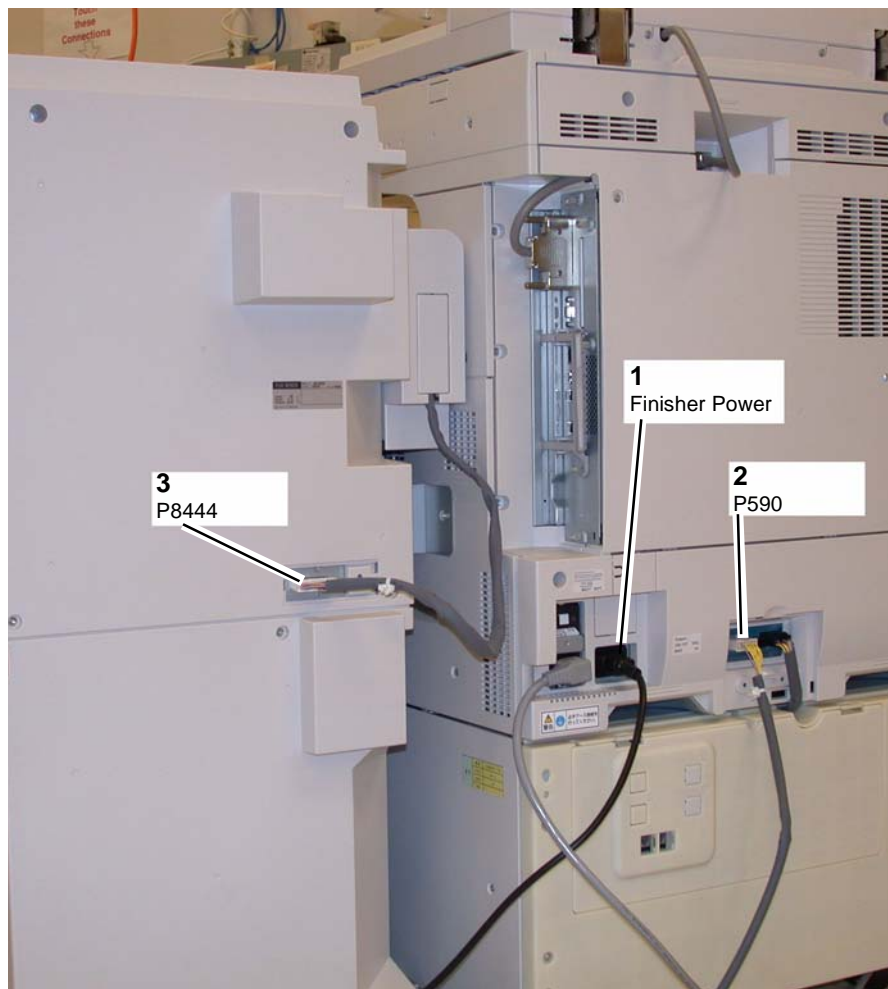


Figure 1 Disconnecting connectors

6. Open the Front Door.
7. Separate the Finisher from the IOT (Figure 2).

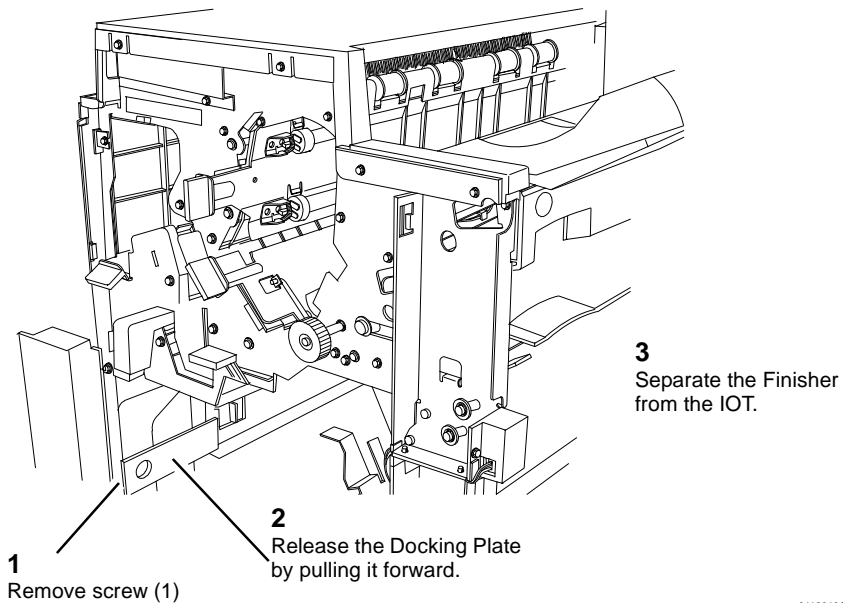


Figure 2 Separating the Finisher from the IOT

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### Replacement

1. If the IOT and Finisher has been moved to a new location, check (ADJ 12.2) Finisher Leveling.

## REP 21.12 (Pro) Finisher H-Transport Assembly

Parts List on [PL 21.1](#); [PL 21.24](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Disconnect the H-Transport Wire Harness from the Finisher ([Figure 1](#)).
  - a. Remove the Connector Cover ([PL 21.2](#)).
  - b. Disconnect the Wire Harness ( [J8444](#)) from the Finisher ( [P8444](#)).
  - c. Replace the Connector Cover.
4. Remove the Finisher ([REP 21.11](#)).
5. Remove (2) screws ([Figure 2](#)).
6. Remove the H-Transport Assembly ([Figure 3](#)).

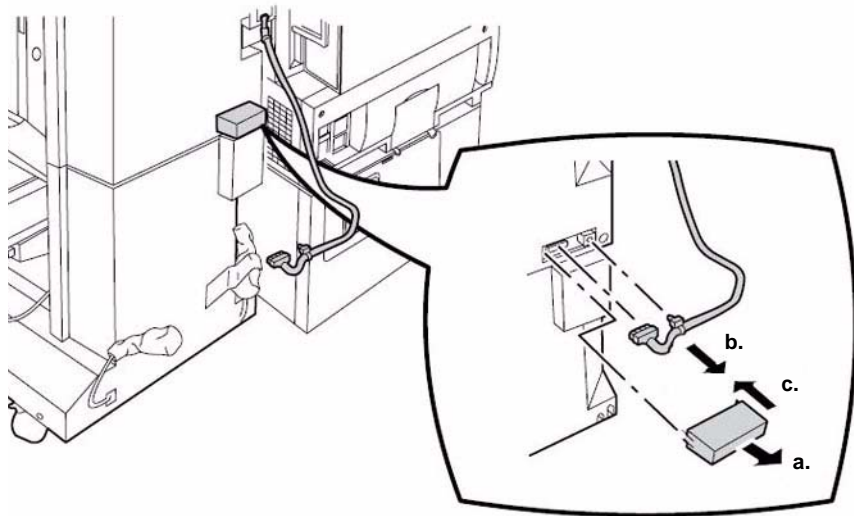


Figure 1 H-Transport Assembly to Finisher Wire Harness Connectors

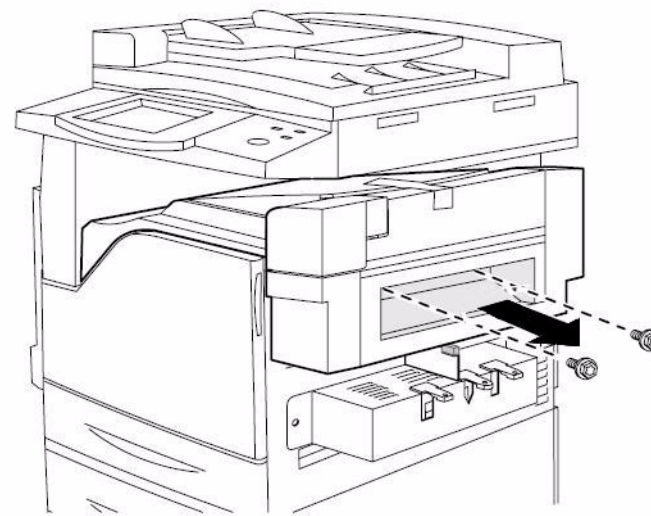


Figure 2 Removing Finisher H-Transport Assembly screws (2)

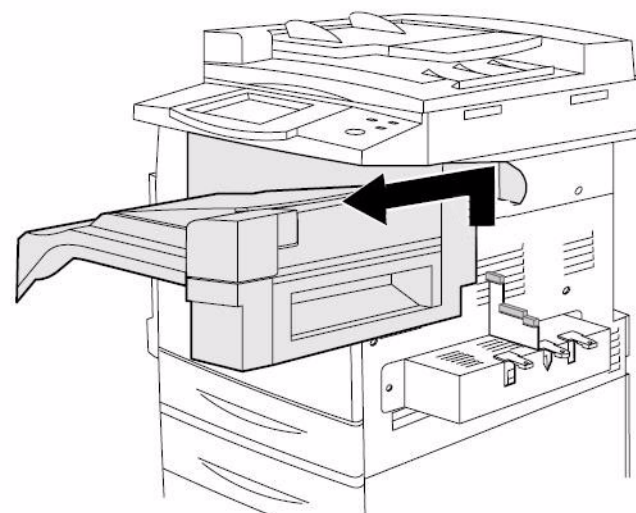


Figure 3 Removing the Finisher H-Transport Assembly



## REP 21.13 (Pro) Finisher Punch Frame Assembly

Parts List on [PL 21.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Remove screws ([Figure 1](#)).

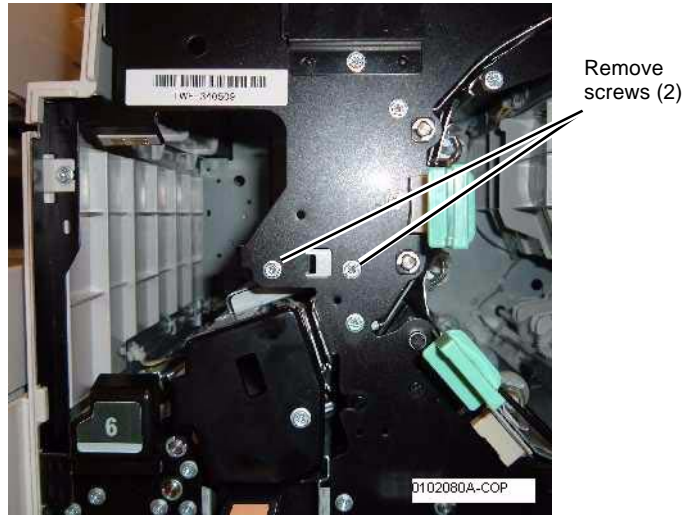
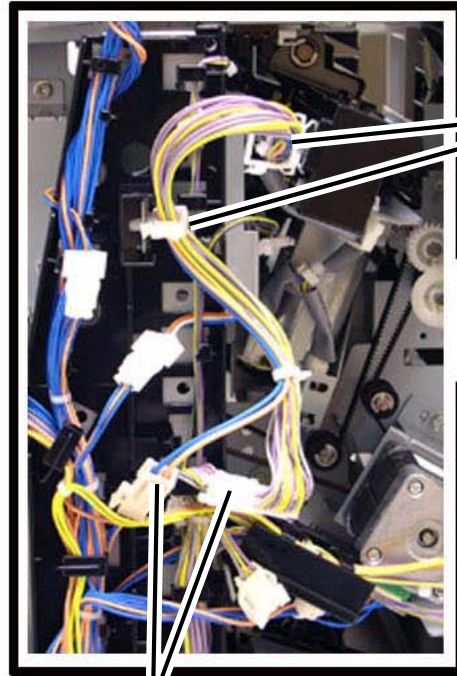


Figure 1 Removing screws

5. Remove the Rear Upper Cover ([REP 21.2](#)).

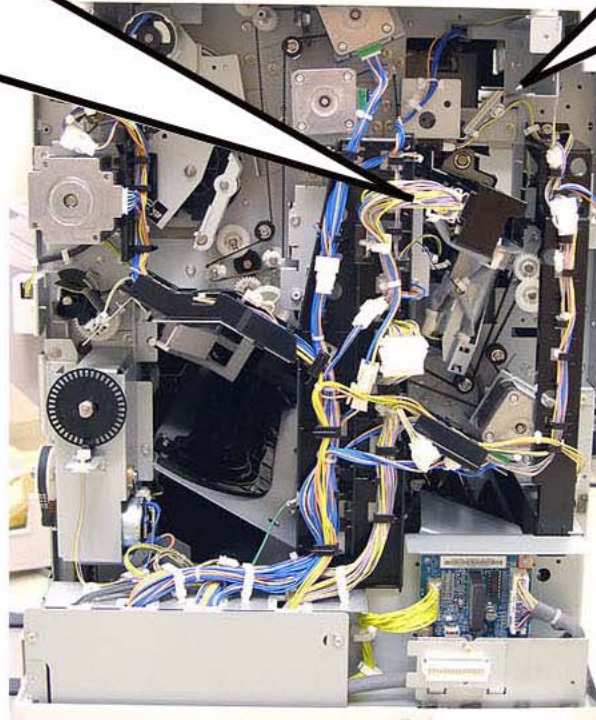
**NOTE:** In order not to damage the Registration Motor Drive Belt during the next step, use caution when removing the Punch Frame Assembly from the Finisher.

6. Disconnect the connectors ([Figure 2](#)).



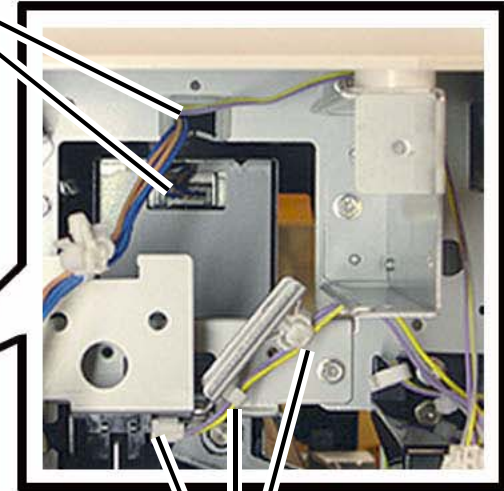
**3**  
Disconnect the two connectors.

**4**  
Remove the wire harness from the two cable guides.



**VIEW FROM BACK OF PRINTER**

**1**  
Disconnect the connector, remove the wires from the wire clip and route the wires out of the way.

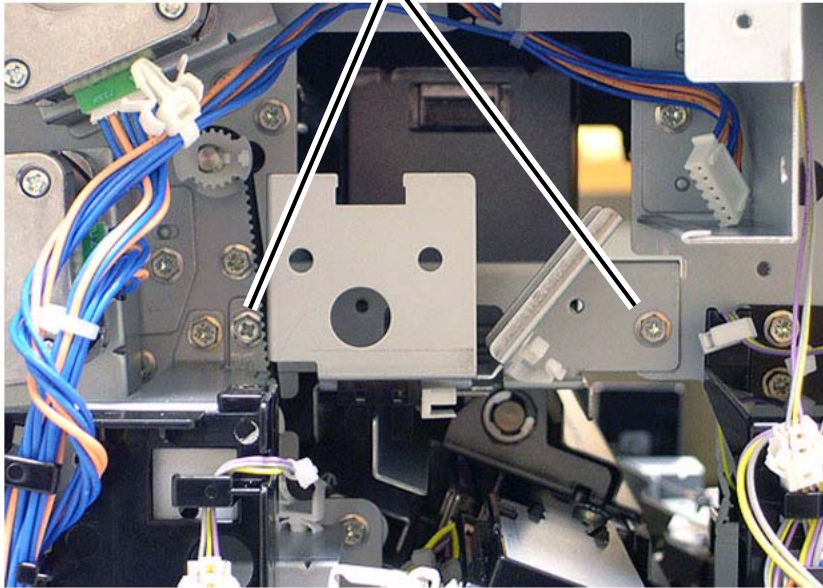


**2**  
Disconnect the connector and remove the wires from the two cable ties. Route the wires out of the way.

**Figure 2 Disconnecting the connectors**

7. Remove the two rear Punch Frame Assembly mounting screws (Figure 3).

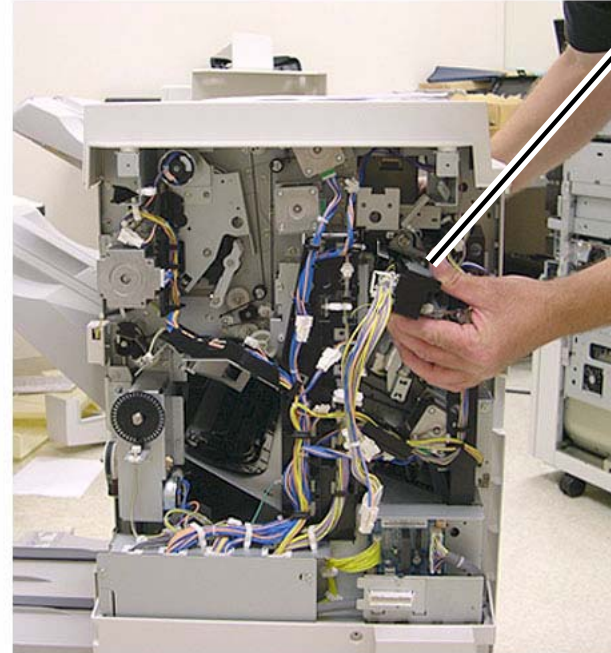
- 1 Remove the two mounting screws.



**Figure 3 Removing the two Mounting Screws**

8. Remove the Punch Frame Assembly from the printer ([Figure 4](#)).

- 1 Support the Punch Frame Assembly from the front and rear ends and carefully remove it from the printer.



**Figure 4 Removing the Punch Frame Assembly**

## **Replacement**

1. Reinstallation is the reverse of the Removal procedure.



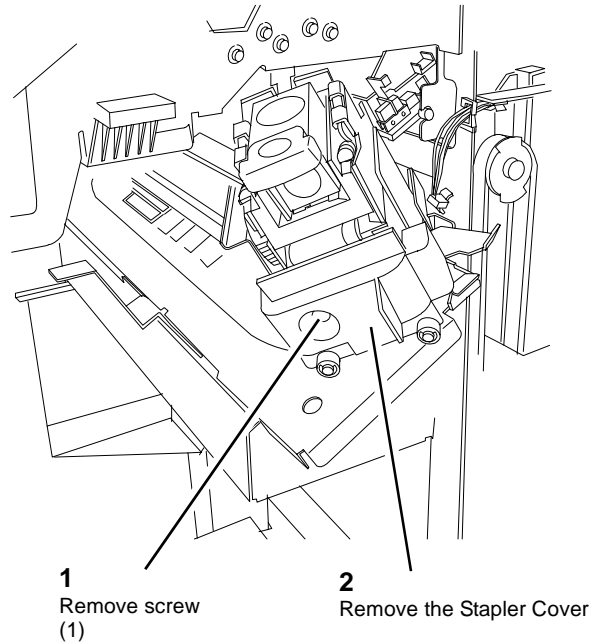
## REP 21.14 (Pro) Finisher Stapler Assembly

Parts List on [PL 21.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

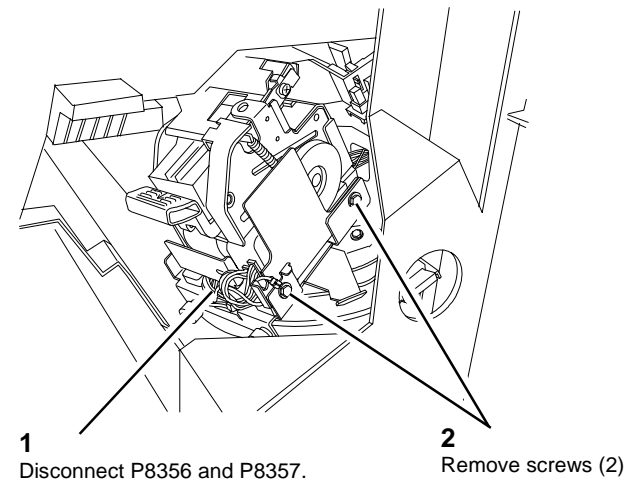
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Remove Stapler Cover ([Figure 1](#)).



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**Figure 1 Removing the Stapler Cover**

5. Remove the Stapler Assembly ([Figure 2](#)).



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**Figure 2 Removing the Stapler Assembly**

## REP 21.15 (Pro) Finisher Stapler Rail

### Parts List on [PL 21.6](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Stapler Assembly ([REP 21.14](#)).
4. Remove the Inner Cover ([REP 21.9](#)).
5. Remove the Stapler Carriage ([Figure 1](#)).

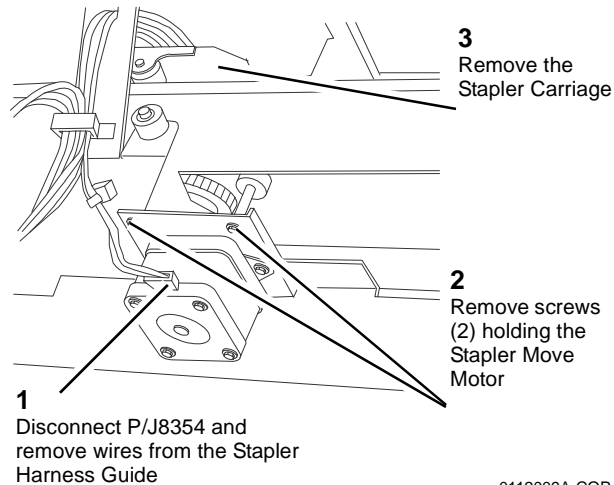


Figure 1 Removing the Stapler Carriage

6. Remove screws (6) holding the Stapler Rail.

## REP 21.16 (Pro) Finisher Booklet Maker

### Parts List on [PL 21.1](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Pull out the Booklet Maker Unit until it stops.
5. Remove the Booklet Maker Stopper (black bracket on left side panel near the rear, 1 screw).
6. Remove the Booklet Maker Unit ([Figure 1](#)).

**NOTE:** Use caution to avoid personal injury and/or damage to the Booklet Maker when removing the Booklet Maker Unit from the Finisher.

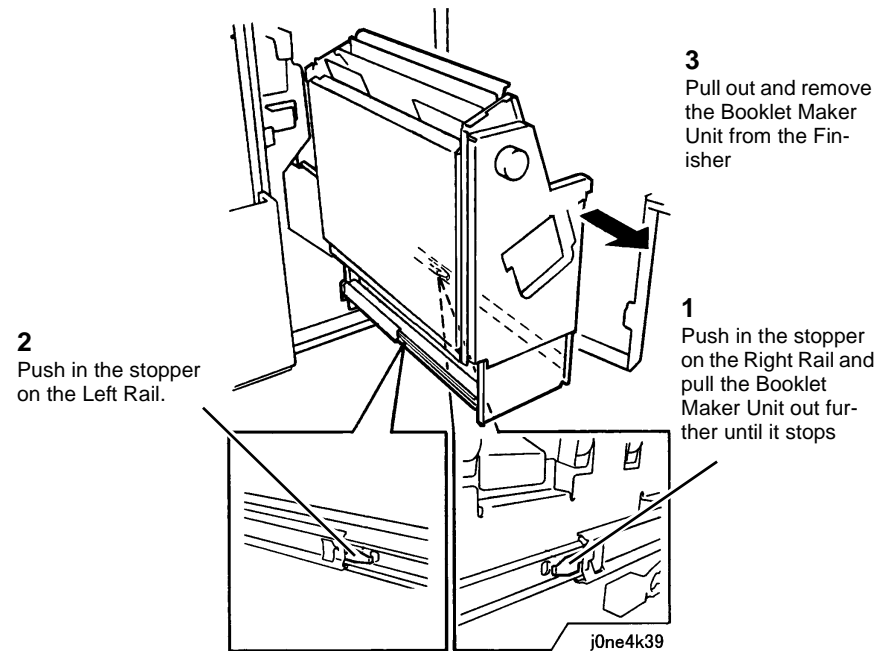


Figure 1 Removing the Booklet Maker Unit

#### Replacement

1. Perform the installation in the reverse order of the removal procedure, starting with attaching the Left Rail then the Right Rail.

## REP 21.17 (Pro) Finisher Booklet Stapler

Parts List on [PL 21.16](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. If the Booklet Maker Unit has been removed from the Finisher ([REP 21.16](#)), go to [Figure 1](#).
4. Open the Front Door.
5. Pull out the Booklet Drawer Unit.
6. Remove the Booklet Stapler ([Figure 1](#)).

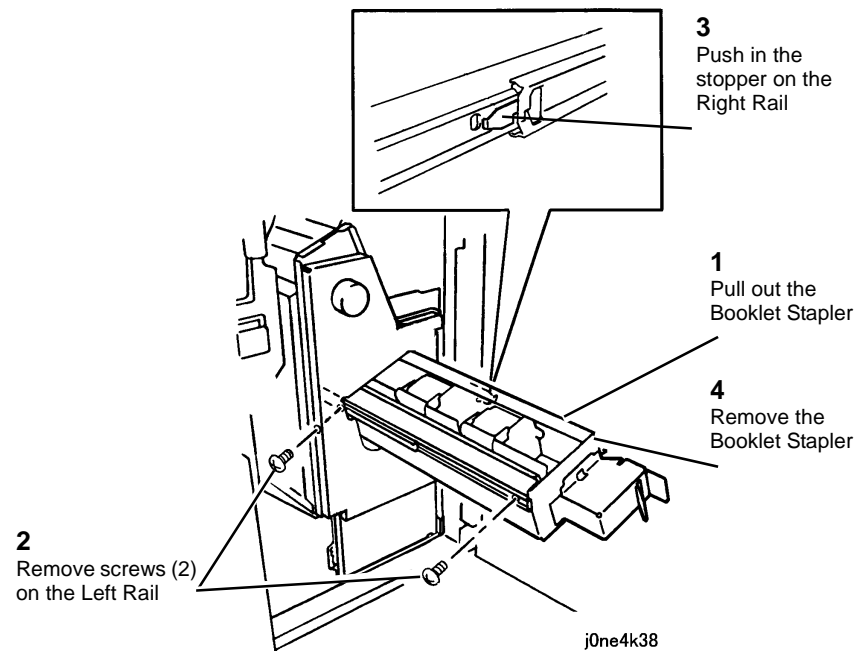


Figure 1 Removing the Booklet Stapler

## REP 21.18 (Pro) Finisher Compiler Tray

Parts List on [PL 21.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([REP 21.2](#)).
4. Remove the Front Door ([REP 21.1](#)).
5. Remove screw securing the Compiler Tray ([Figure 1](#)).

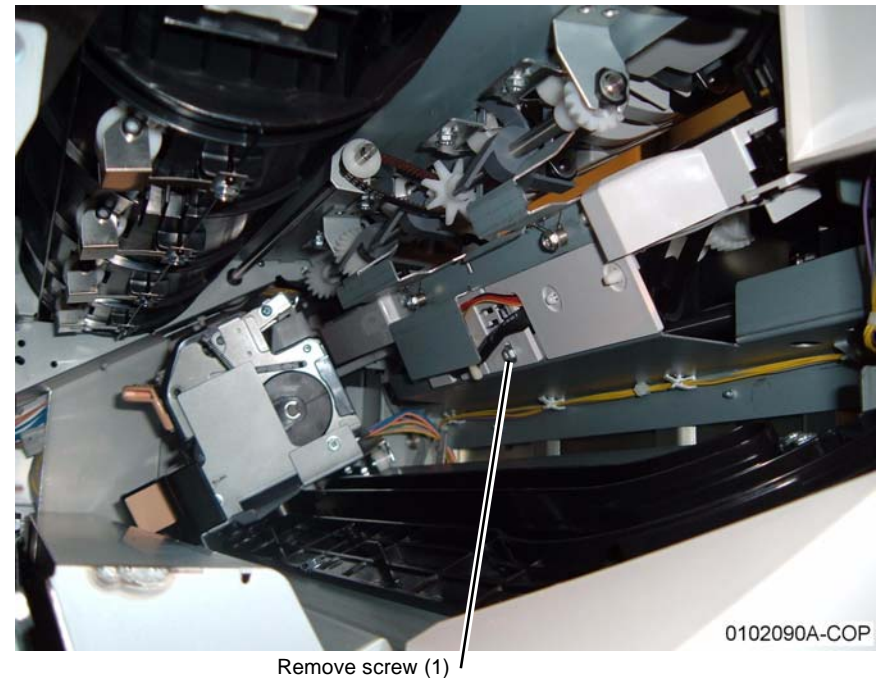


Figure 1 Removing screw securing the Compiler Tray

6. Remove the Stapler Assembly ([REP 21.14](#)).
7. Remove the Inner Cover ([REP 21.9](#)).
8. Disconnect the Compiler Harness ([Figure 2](#)).

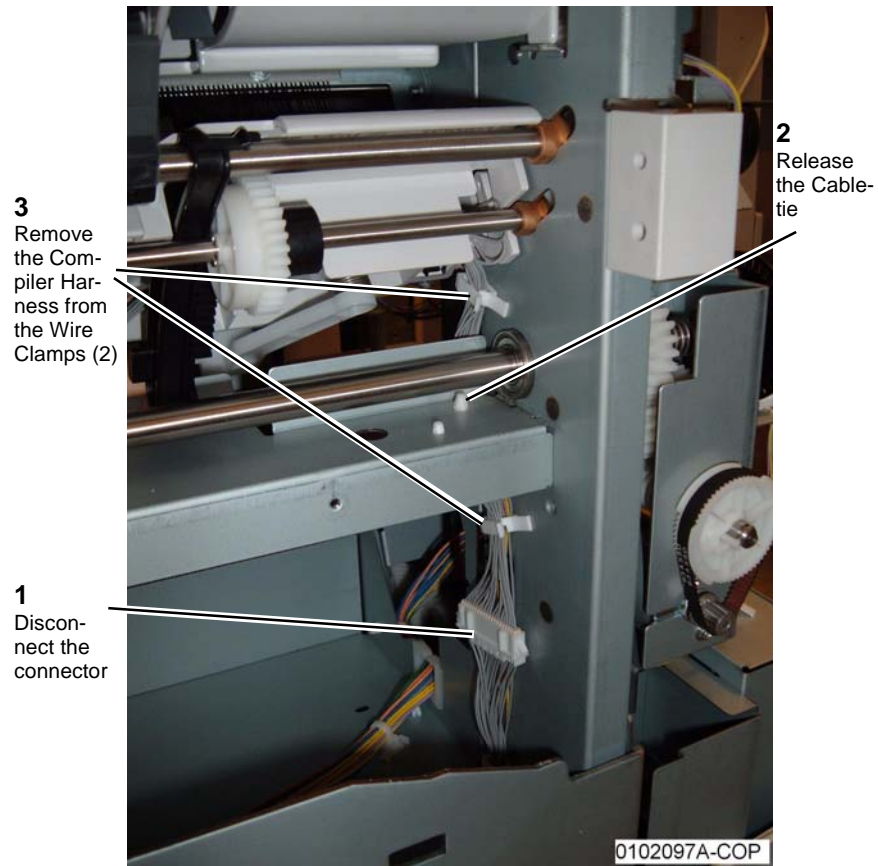


Figure 2 Disconnecting the Compiler Harness

9. Remove the Compiler Tray.
  - a. Push in the Front Tab (Figure 3).

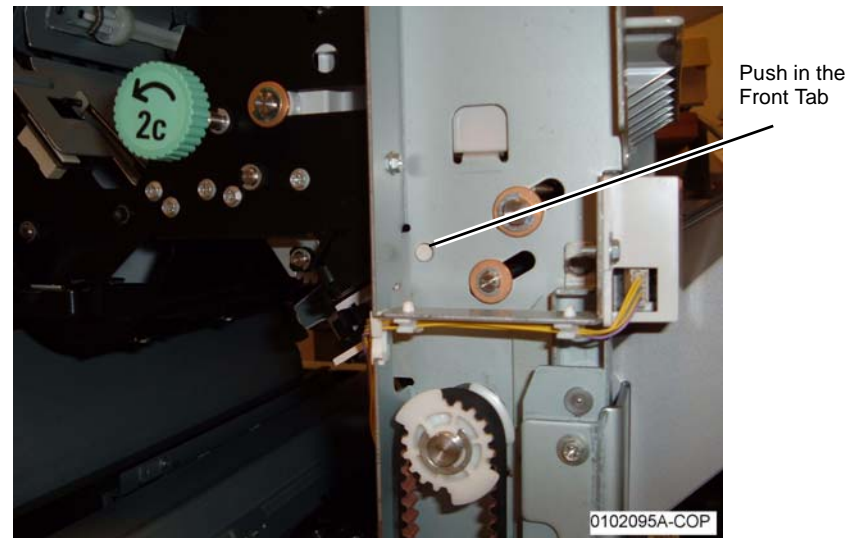


Figure 3 Pushing in the Front Tab

- b. Push in the Rear Tab (Figure 4).

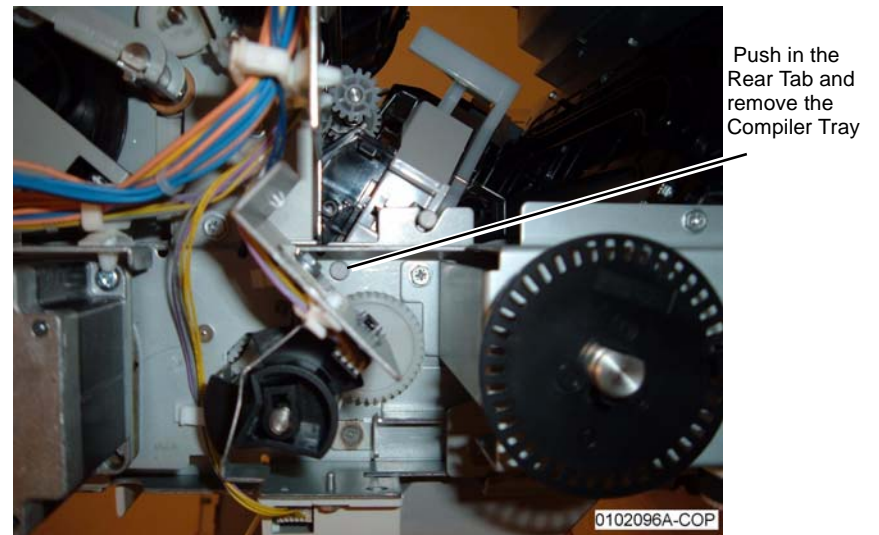


Figure 4 Pushing in the Rear Tab



## REP 21.19 (Pro) Finisher Stacker Tray Position

Parts List on [PL 21.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([REP 21.2](#)).

**NOTE:** In the next step, while disengaging the Elevator Pulley, hold the Stacker Tray with one hand.

4. Disengage the Elevator Pulley ([Figure 1](#)).

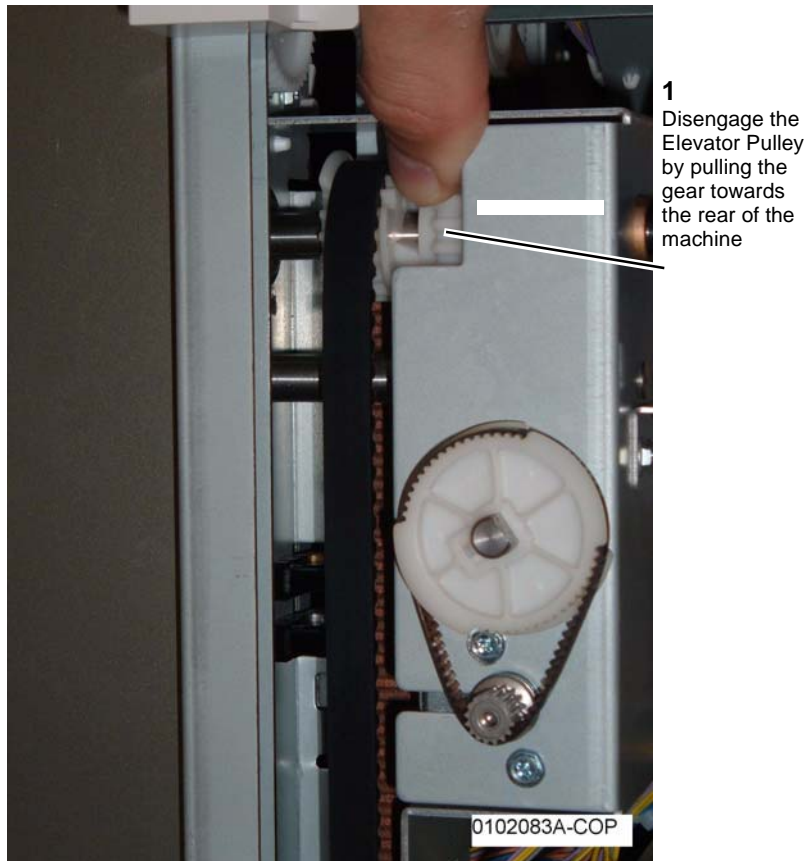


Figure 1 Disengaging the Elevator Pulley

5. Manually move the Stacker Tray Bracket up or down.

## REP 21.20 (Pro) Finisher Paddle Shaft

Parts List on [PL 21.9](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Manually move the Stapler Assembly towards the rear of the machine.
5. Remove the Rear Upper Cover ([REP 21.2](#)).
6. Remove the Paddle Shaft ([Figure 1](#)).

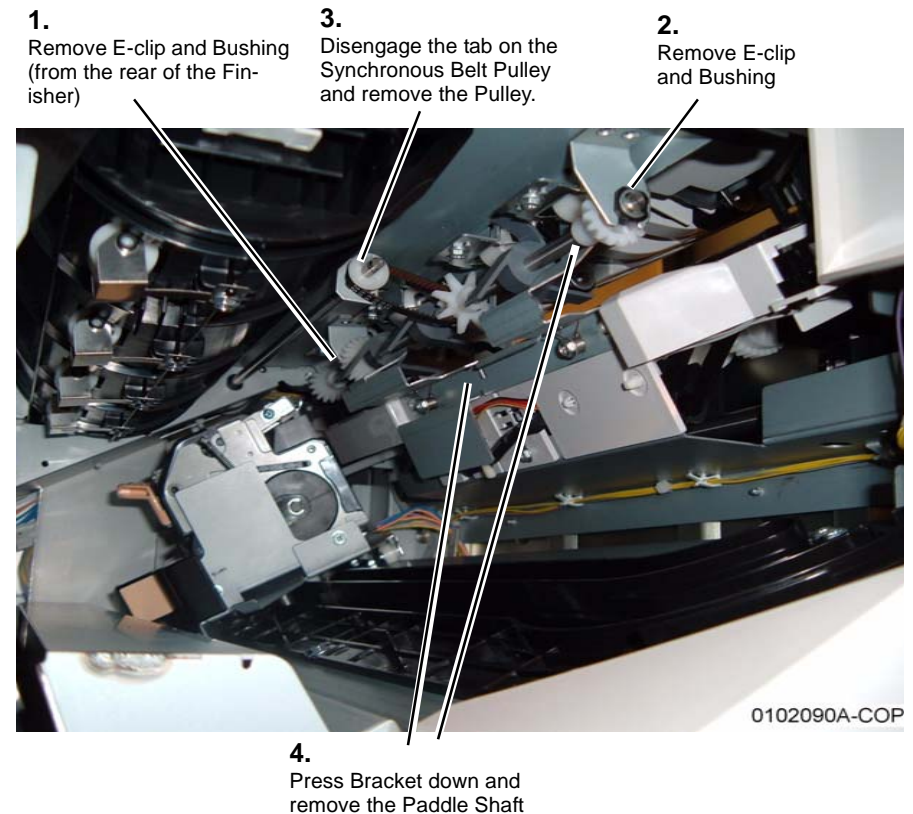


Figure 1 Removing the Paddle Shaft

### Replacement

1. Reinstall components in the reverse order of the removal procedure.

## REP 21.21 (Pro) Finisher Stacker Drive Belt

### Parts List on [PL 21.4](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door ([REP 21.1](#)).
4. Remove the Rear Upper Cover ([REP 21.2](#)).
5. Remove the Rear Lower Cover ([REP 21.3](#)).
6. Perform [REP 21.19](#) Stacker Tray (position the Stacker Tray in the lowest position).
7. Remove the rear Stacker Drive Belt ([Figure 1](#)).

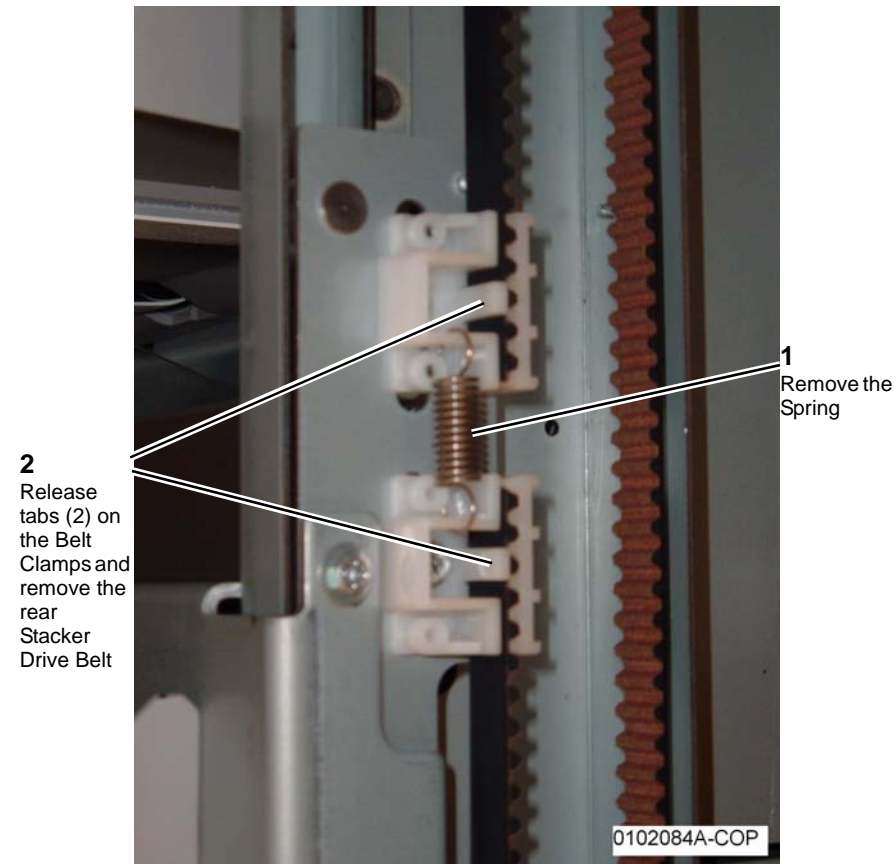


Figure 1 Removing the rear Stacker Belt

8. Remove the front Stacker Drive Belt ([Figure 2](#)).

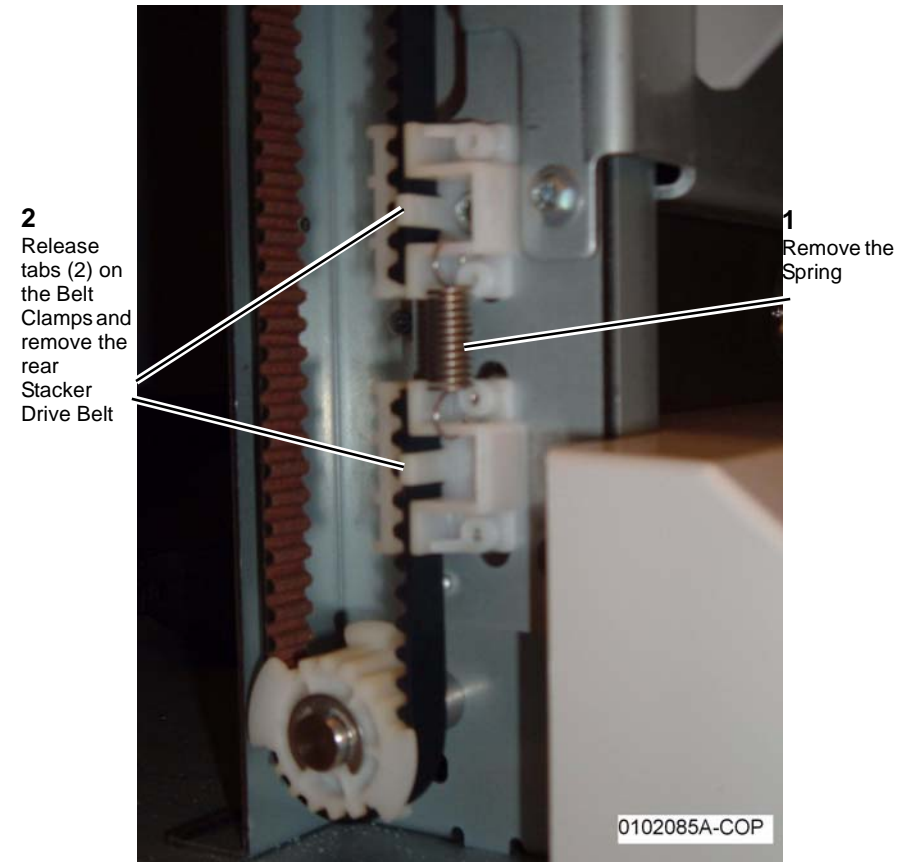


Figure 2 Removing the front Stacker Belt

#### Replacement

1. Reinstall components in the reverse order of the removal procedure. Refer to [Figure 2](#) and [Figure 1](#) for Stacker Drive Belt positioning in the Belt Clamps.

## REP 21.22 (Pro) Finisher Buffer Path Sensor

Parts List on [PL 21.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Finisher from the IOT ([REP 21.11](#)).
4. Remove the Punch Assembly ([REP 21.13](#)).
5. Remove the Left Top Cover ([REP 21.10](#)).
6. Remove the Buffer Path Sensor ([Figure 1](#)).

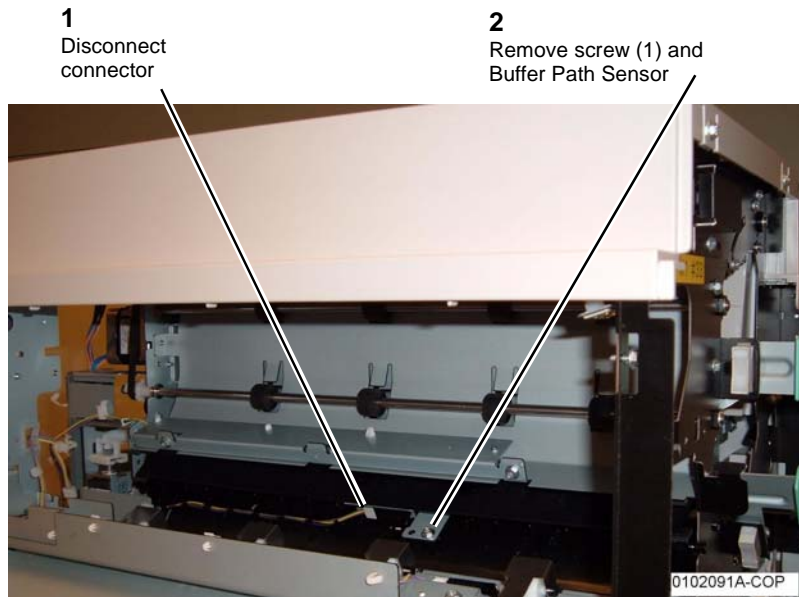


Figure 1 Removing the Buffer Path Sensor

## REP 21.23 (Pro) Finisher Gate Sensor

Parts List on [PL 21.11](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Finisher from the IOT ([REP 21.11](#)).
4. Remove the Punch Assembly ([REP 21.13](#)).
5. Remove the Left Top Cover ([REP 21.10](#)).
6. Remove the Gate Sensor ([Figure 1](#)).

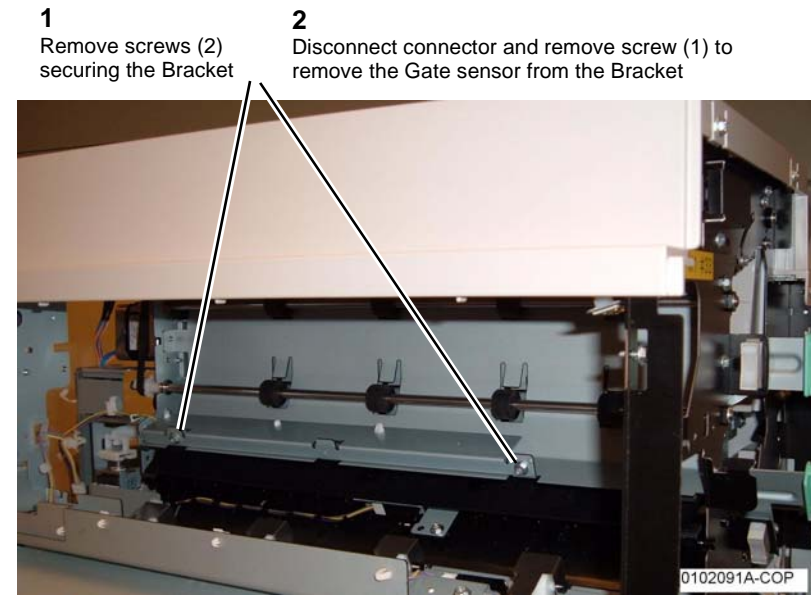


Figure 1 Removing the Gate Sensor

## REP 21.24 (Pro) Finisher Top Tray Full Sensor

Parts List on [PL 21.11](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door ([REP 21.1](#)).
4. Remove the Rear Upper Cover ([REP 21.2](#)).
5. Remove the Top Cover ([REP 21.4](#)).
6. Remove the Front Top Cover ([REP 21.5](#)).
7. Remove the Top Tray ([REP 21.6](#)).
8. Remove the Tray Spring Guide ([REP 21.8](#)).
9. Disconnect P/J8322 and remove screw (1) securing the Top Tray Full Sensor to the Sensor Bracket.

## REP 21.25 (Pro) Finisher Buffer Roll

Parts List on [PL 21.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([REP 21.2](#)).
4. Route the wires out of the Harness Bracket ([Figure 1](#)).

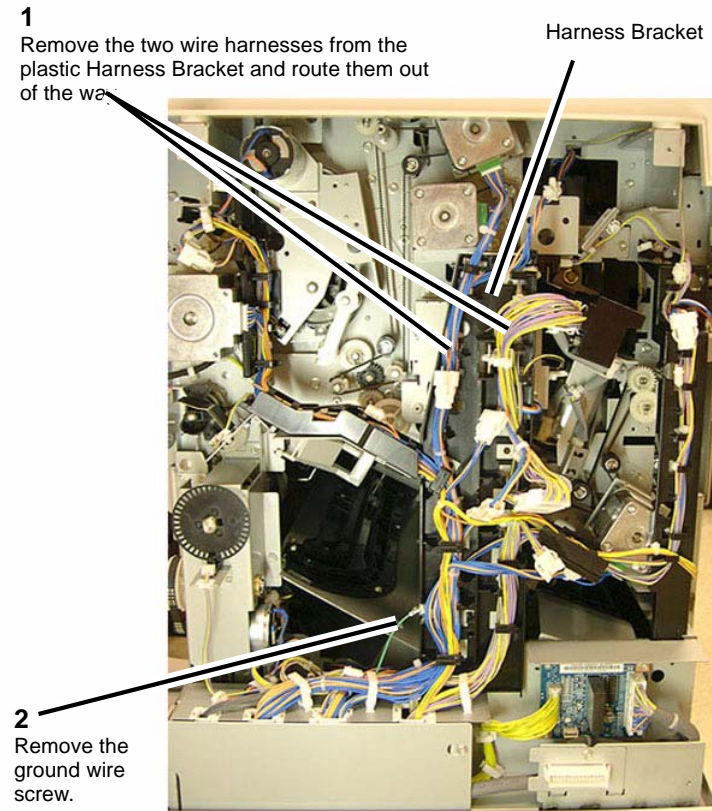
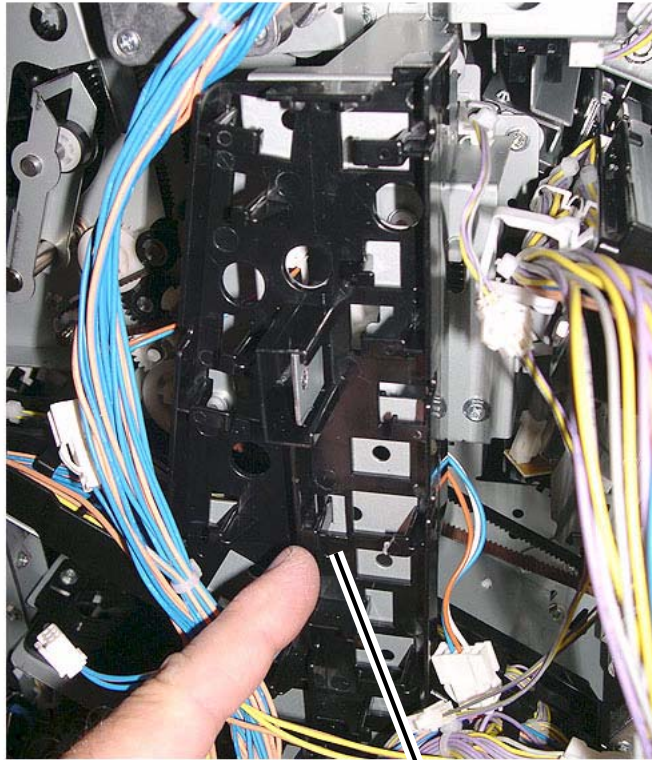


Figure 1 Routing the Wires out of the Harness Bracket

5. Remove the Harness Bracket ([Figure 2](#)).

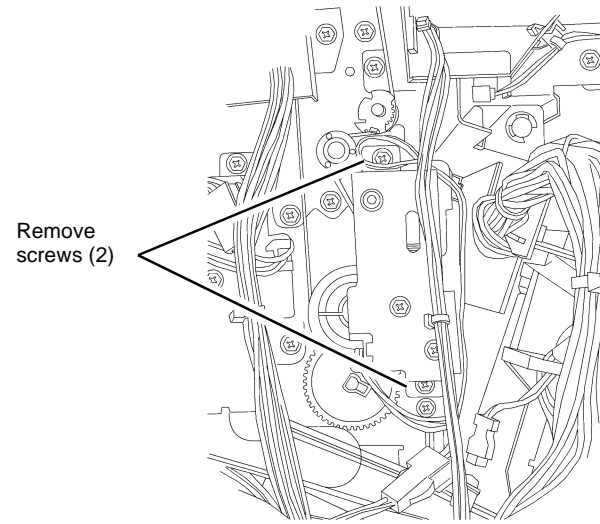




- 2** Remove the Harness Bracket from the machine.
- 1** Detach the Harness Bracket by releasing the two plastic clips at the back of the bracket.

**Figure 2 Removing the Harness Bracket**

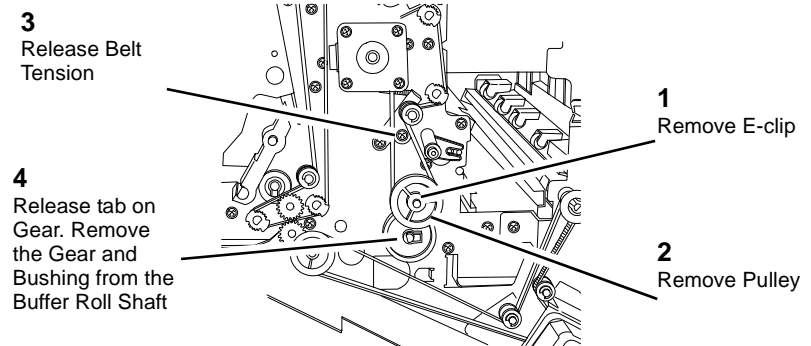
- 6. Remove the Transport Gate Solenoid Bracket (Figure 3).



**Figure 3 Removing the Transport Gate Solenoid Bracket**

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- 7. Remove Pulley and Gear (Figure 4).



**Figure 4 Removing Pulley and Gear**

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- 8. Open the Front Door.
- 9. Manually move the Stapler Assembly towards the back of the Finisher.

10. Remove the Buffer Roll (Figure 5).

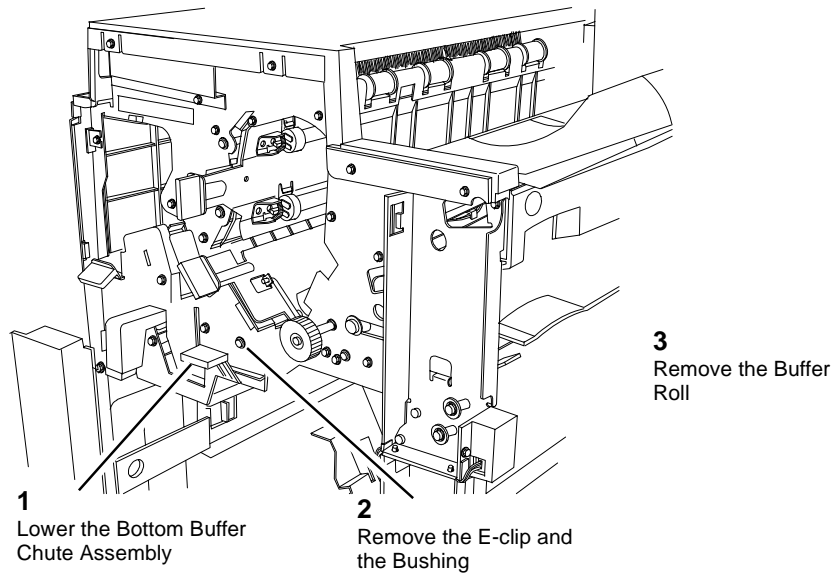


Figure 5 Removing the Buffer Roll

### Replacement

1. Ensure that the Transport Gate is in the correct position when re-assembling.

## REP 21.26 (Pro) Finisher Bottom Buffer Chute Assembly

Parts List on [PL 21.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the Front Door.
4. Remove the Booklet Maker Unit ([REP 21.16](#)).
5. Remove the Baffle ([Figure 1](#)).

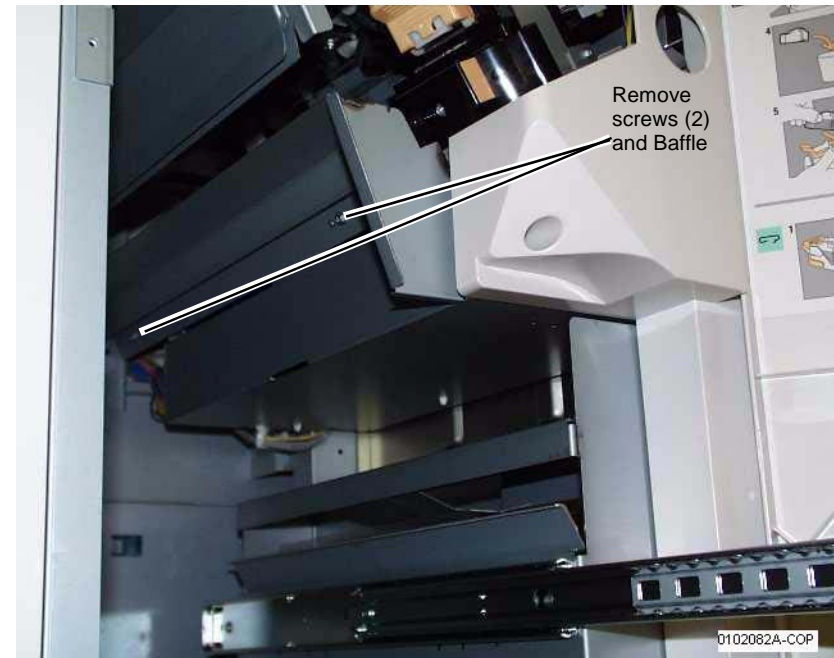
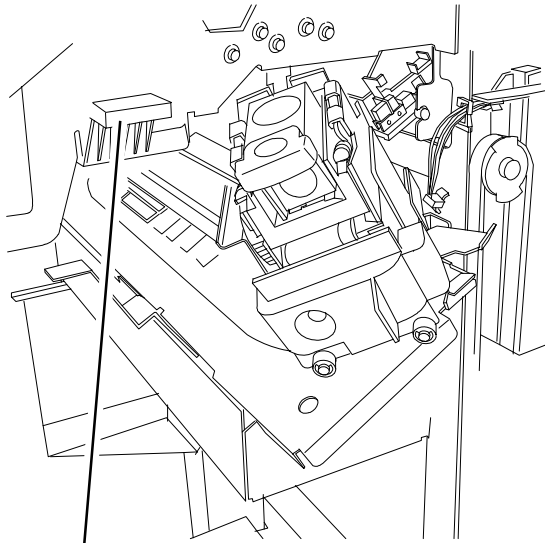


Figure 1 Removing Baffle

6. Remove the Bottom Buffer Chute Assembly ([Figure 2](#)).



Lower the Bottom Buffer Chute Assembly and remove it

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Figure 2 Removing the Bottom Buffer Chute Assembly

## REP 21.27 (Pro) Finisher H-Transport Drive Belt

Parts List on [PL 21.26](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Finisher ([REP 21.11](#)).
4. Remove the H-Transport Assembly ([REP 21.12](#)) and place it upside down on a secure flat surface.
5. Release the tension from the belt ([Figure 1](#)):
  - a. Use the Tension Bracket Assembly to release initial tension from the belt ([PL 21.24](#))
  - b. Slide the belt off of the two pulleys

b. Slide the belt off of the two pulleys

a. Tension Bracket Assembly

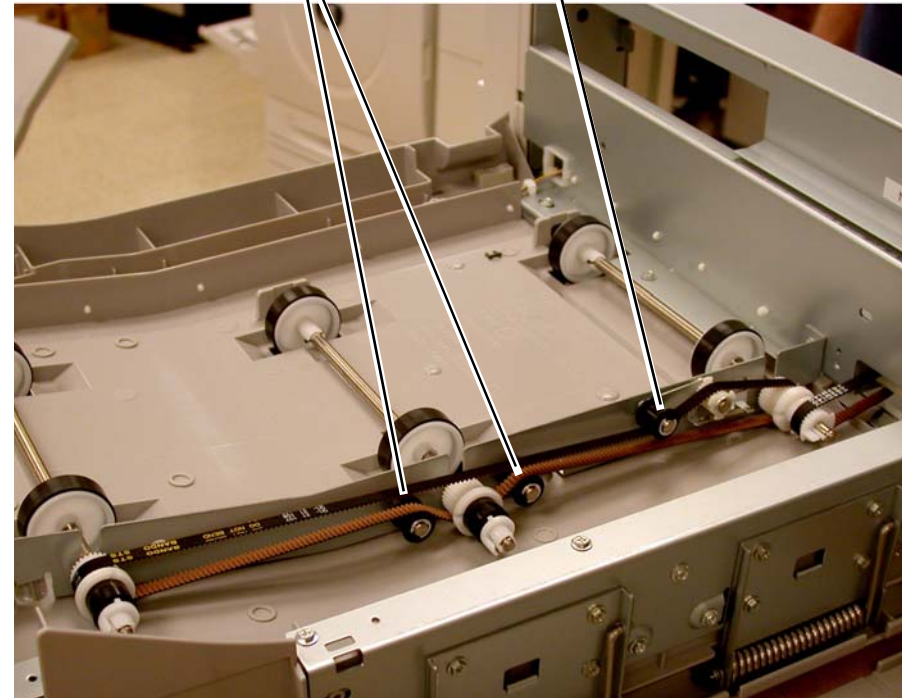


Figure 1 Releasing tension from the Drive belt

**NOTE:** Note the position of the Drive belt in relationship to the gears and pulleys for correct re-installation.

6. Remove the Drive Belt (PL 21.26): (Figure 2)
  - a. Remove the clip from the Roll Shaft Assembly (PL 21.26).
  - b. Lift up on the belt side of the Roll Shaft Assembly then remove the smaller belt from the pulley.
  - c. Remove the Drive belt.

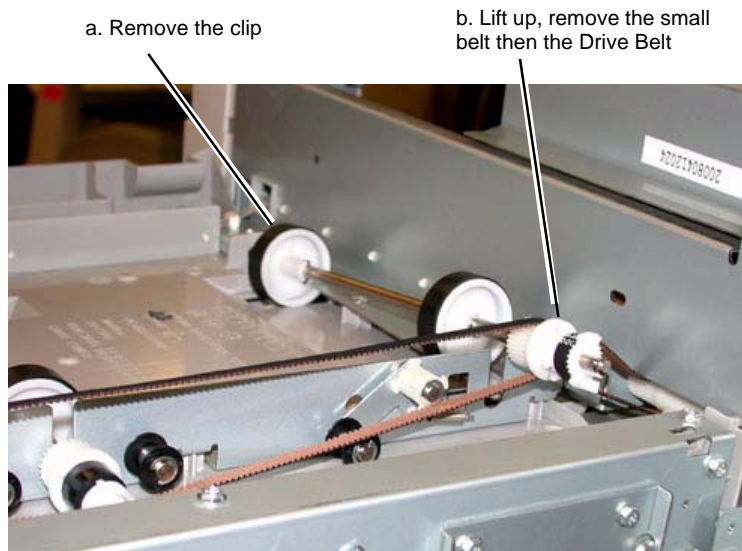


Figure 2 Removing the H-Transport Drive belt

## REP 21.28 (Pro) Finisher Eject Chute Assembly

### Parts List on PL 21.7

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Front Door (REP 21.1).
4. Remove the Rear Upper Cover (REP 21.2).
5. Remove the Top Tray (REP 21.6).
6. Remove the Eject Cover (REP 21.7).
7. Remove E-clip and Bushing from the Eject Pinch Shaft (Figure 1).

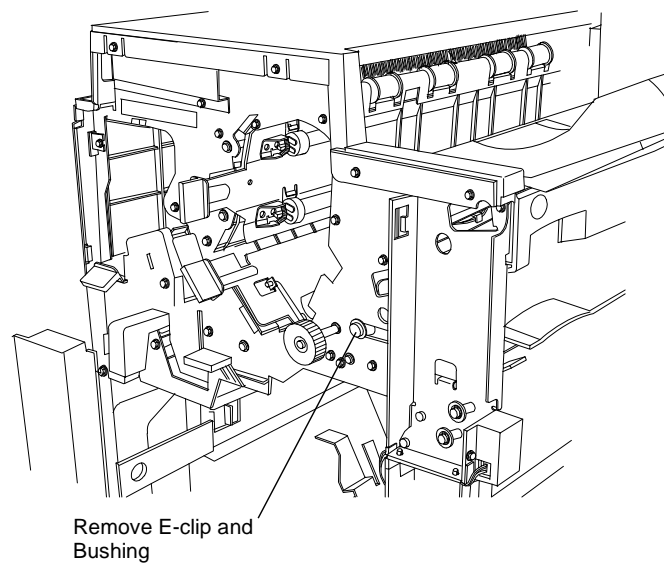


Figure 1 Removing E-clip and Bushing

8. Remove Pinch Springs and screws from the Eject Pinch Shaft (Figure 2).

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## REP 21.29 (Pro) Finisher PWB

### Parts List on Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Check and record Finisher software version (GP 6).
4. Remove the Finisher Rear Upper Cover (REP 21.2).
5. Remove the Finisher Rear Lower Cover (REP 21.3).
6. Remove the Finisher PWB Cover (4 screws).
7. Remove the Finisher PWB (Figure 1).

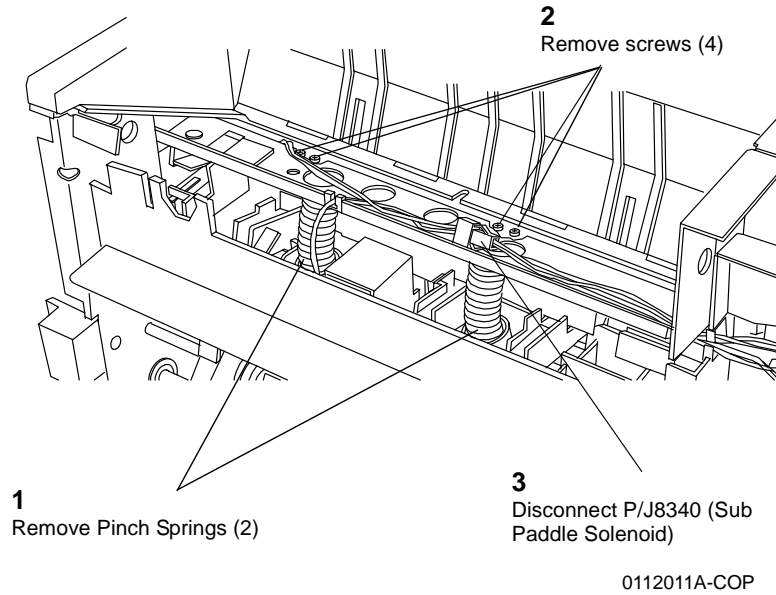


Figure 2 Removing Pinch Springs and screws

9. Remove the Eject Chute Assembly (Figure 3).

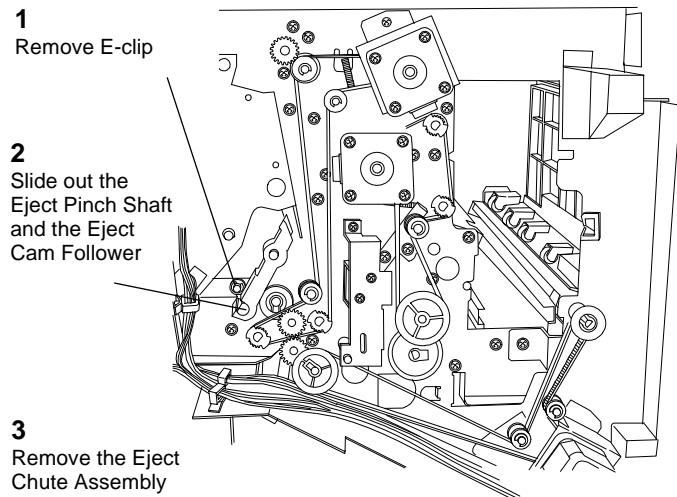
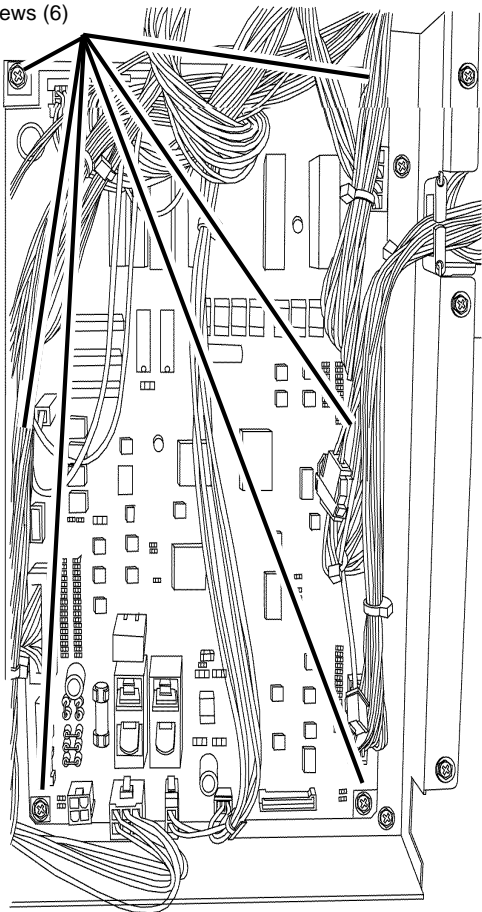


Figure 3 Removing the Eject Chute Assembly

**2**  
Remove screws (6)



**1**  
Remove connectors (13 for A Finisher, 15 for P Finisher)

- 763-011 - Hole Punch Configuration
  - 3 = 2/3 hole
  - 4 = 2/4 hole
- 763-012 - Finisher configuration
  - 0 = w/o Booklet Maker
  - 1 = w/ Booklet Maker

**Figure 1 Finisher PWB**

## Replacement

1. Check Finisher software version (GP 6) and compare with software version recorded in Step 1 of the removal procedure.
2. If the current software version is lower than the previous version, load the Finisher software (GP 9). Use single platform, not All-in 1file.
3. Check the following NVM locations and reset if required to match the Finisher configuration:
  - 763-001 - Finisher Type
    - 3 = w/o Booklet Maker
    - 4 = w/ Booklet Maker

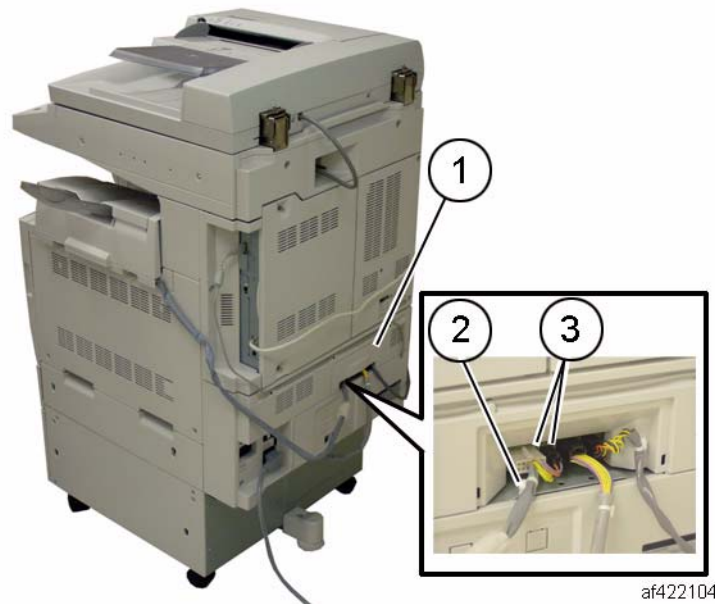
## REP 22.1 Integrated Office Finisher

### Parts List on [PL 22.1](#)

#### Removal

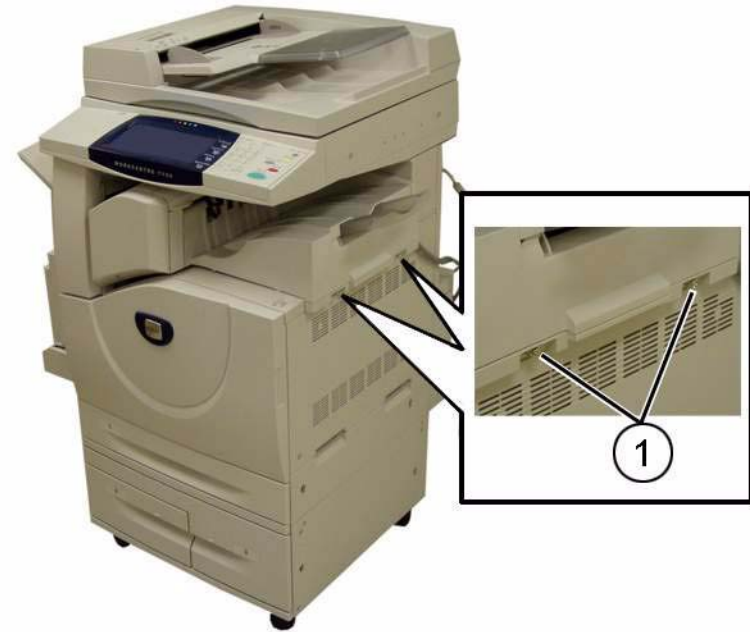
**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Switch off the power and disconnect the power cord
4. Disconnect the Integrated Office Finisher Wire Harness ([Figure 1](#)):
  - (1)Remove Cover.
  - (2)Remove Clamp.
  - (3)Disconnect Connectors (2).



**Figure 1** Disconnecting harness

5. Loosen the Thumb Screws (2) ([Figure 2](#)):



**Figure 2** Loosen the Thumb Screws

6. Remove the Integrated Office Finisher.

#### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.2 (Int) Paddle Belt

### Parts List on [PL 22.3](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Remove the front Pulley ([Figure 1](#)):
  - (1)Remove E-Clip.
  - (2)Remove Flange.
  - (3)Remove Belt from Pulley.
  - (4)Remove Pulley.

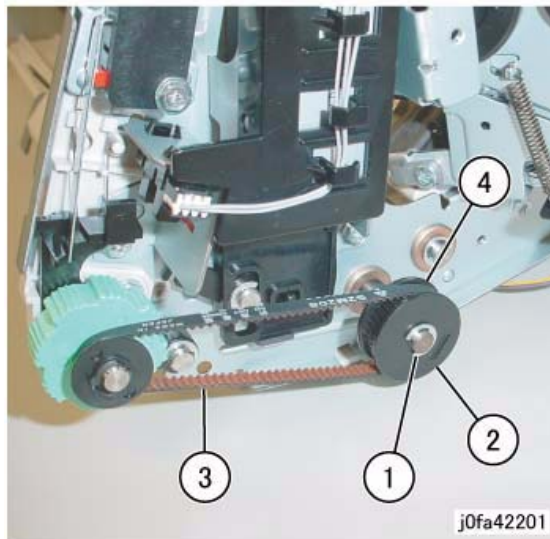


Figure 1 Removing the Pulley

6. Remove the Front Bearing ([Figure 2](#)):
  - (1)Remove Bearing.

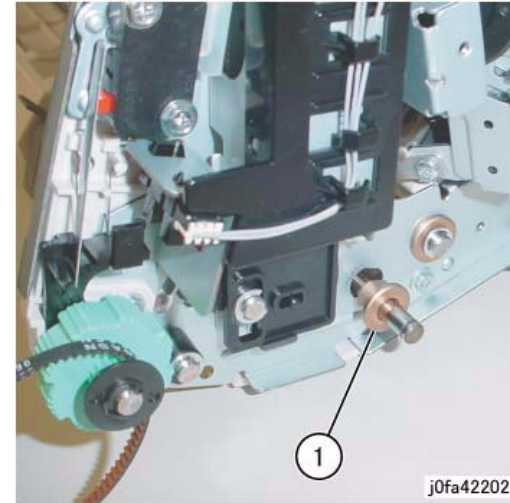


Figure 2 Removing the Front Bearing

7. Remove the Rear Gear ([Figure 3](#)):
  - (1)Remove E-Clip.
  - (2)Remove Gear.

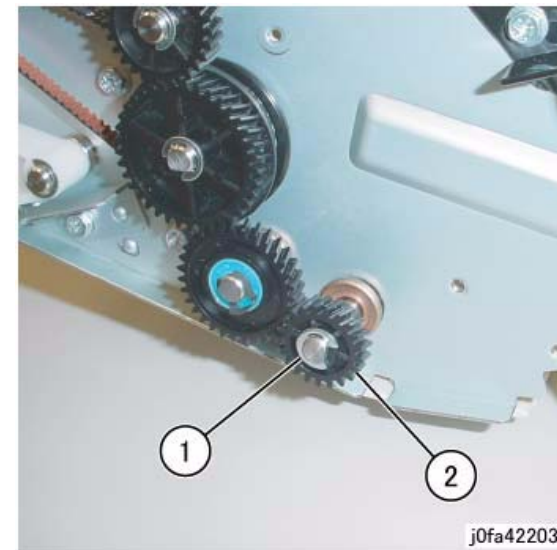


Figure 3 Removing the Gear

8. Remove the Rear Bearing ([Figure 4](#)):



(1)Remove Bearing.

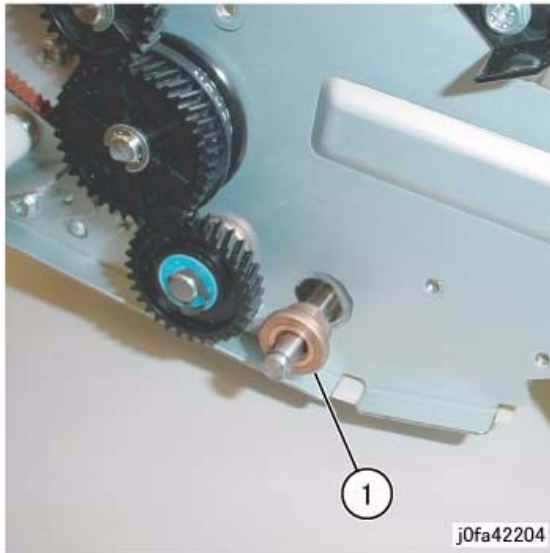


Figure 4 Removing the Bearing

9. Remove the Paddle Link Assembly (Figure 5):  
(1)Remove Paddle Link Assembly.

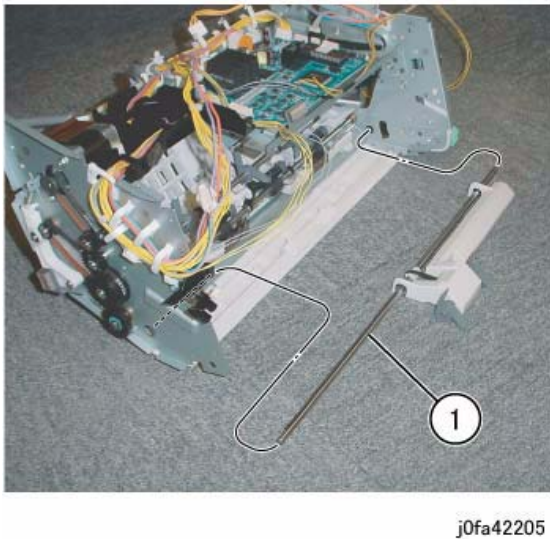


Figure 5 Removing the Paddle Link Assembly

10. Remove the Bearing (Figure 6):

- (1)Remove E-Clip.
- (2)Remove Bearing.

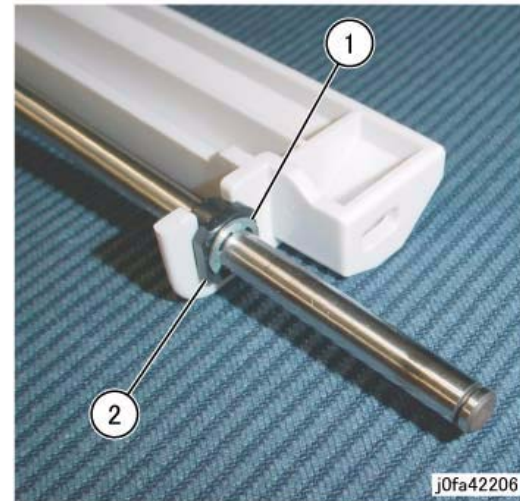


Figure 6 Removing Bearing

11. Remove the Shaft Assembly (Figure 7):

- (1)Remove Paddle Belt from Pulley.
- (2)Remove Shaft Assembly in the direction of the arrow.

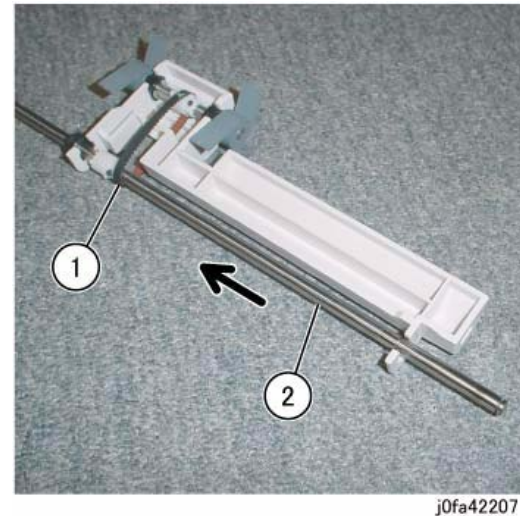


Figure 7 Removing Shaft Assembly

12. Remove the Paddle Belt (Figure 8):
  - (1)Remove E-Clips (2).
  - (2)Move Bearings (2) in the direction of the arrow.
  - (3)Remove Sub Paddle Shaft Assembly.
  - (4)Remove Paddle Belt.

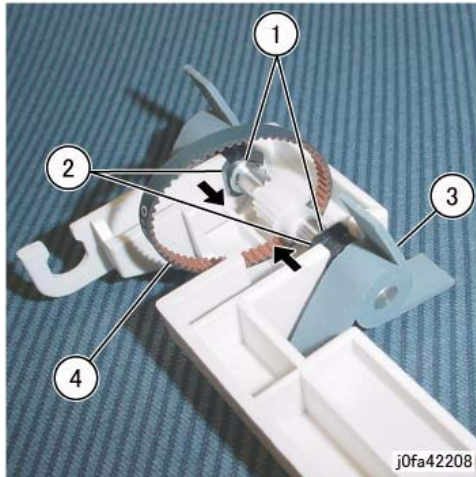


Figure 8 Removing the Paddle Belt

### Replacement

1. Reverse the removal procedure for replacement.
2. Install the Paddle Link Assembly as shown in Figure 9.



Figure 9 Installing the Paddle Link Assembly

## REP 22.3 (Int) Sub Paddle Solenoid

### Parts List on PL 22.3

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Turn over the Integrated Office Finisher.
6. Remove the Bottom Cover (PL 22.2)
7. Disconnect the Connector (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connector.

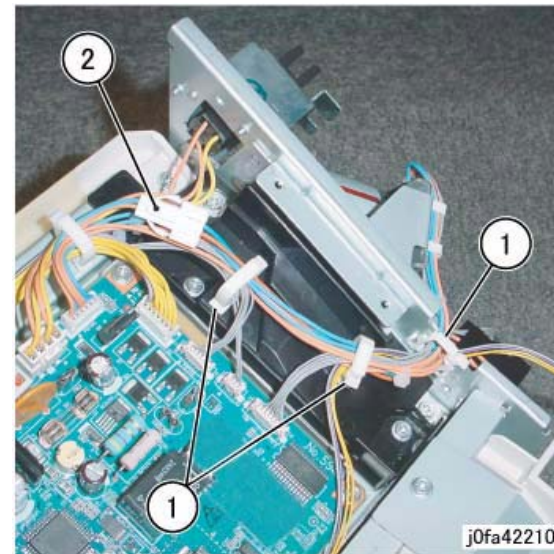
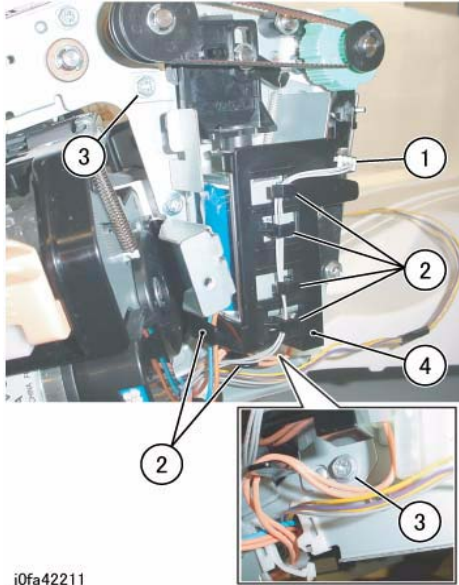


Figure 1 Disconnecting the Connector

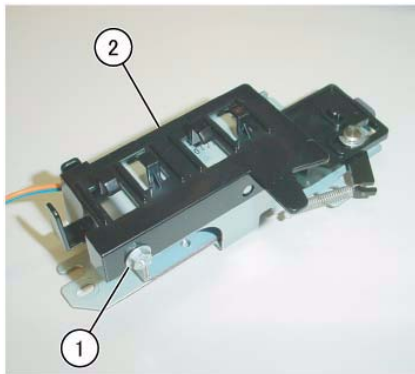
8. Turn over the Integrated Office Finisher.
9. Remove the Sub Paddle Solenoid Assembly (Figure 2):
  - (1)Disconnect Connector.
  - (2)Release Wire from Hook.
  - (3)Remove Screws (2).
  - (4)Remove Sub Paddle Solenoid Assembly.



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**Figure 2 Removing the Sub Paddle Solenoid Assembly**

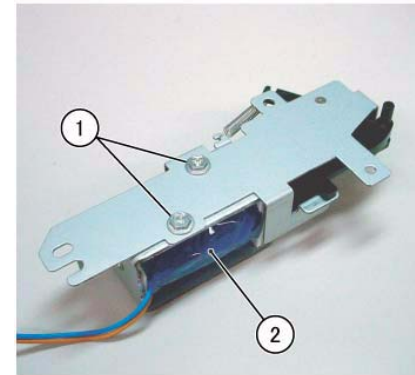
10. Remove the Support (Figure 3):
  - (1) Remove Screw.
  - (2) Remove Support.



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**Figure 3 Removing the Support**

11. Remove the Sub Paddle Solenoid (Figure 4):
  - (1) Remove Screws (2).
  - (2) Remove the Sub Paddle Solenoid.

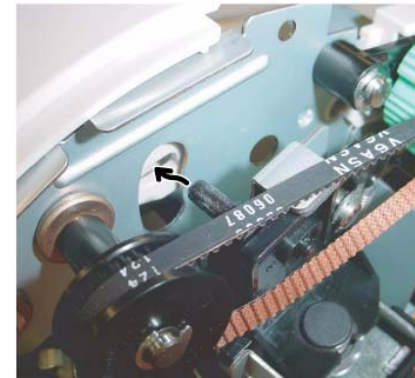


j0fa42213

**Figure 4 Removing the Sub Paddle Solenoid**

### Replacement

1. Reverse the removal procedure for replacement.
2. Install the Sub Paddle Assembly as shown in Figure 5.



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**Figure 5 Installing the Sub Paddle Assembly**



## REP 22.5 (Int) Staple Assembly

### Parts List on PL 22.4

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Remove the Staple Assembly (Figure 1):
  - (1)Remove Clamps (2).
  - (2)Disconnect Connectors (2).
  - (3)Remove Screws (2).
  - (4)Remove Staple Assembly.

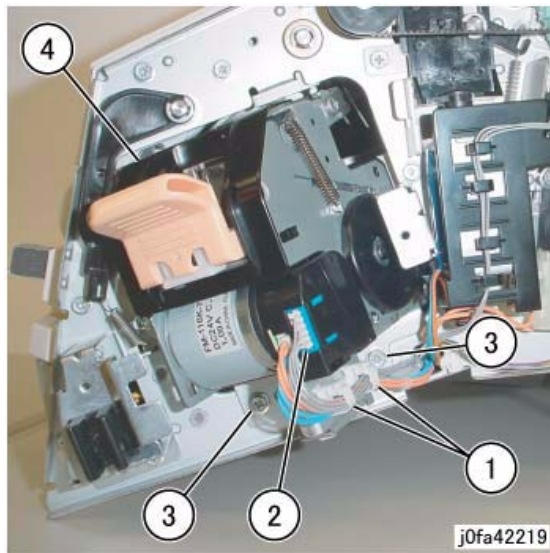


Figure 1 Removing the Staple Assembly

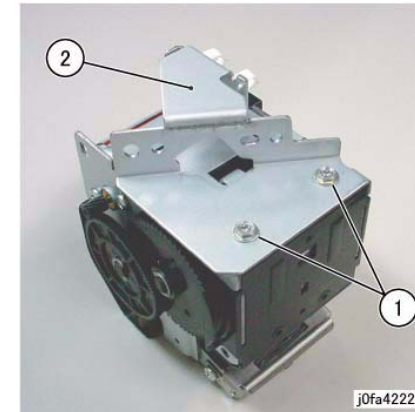


Figure 2 Removing the Bracket

#### Replacement

1. Reverse the removal procedure for replacement.

6. Remove the Bracket from the Staple Assembly (Figure 2):
  - (1)Remove Screws (2).
  - (2)Remove Bracket.

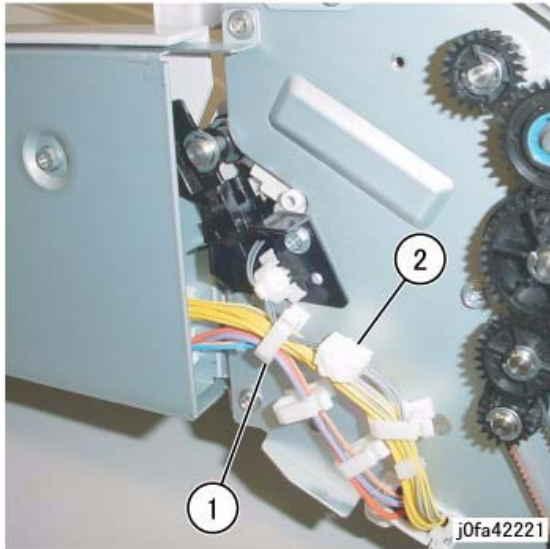
## REP 22.6 (Int) Set Clamp Home Sensor

### Parts List on [PL 22.4](#)

#### Removal

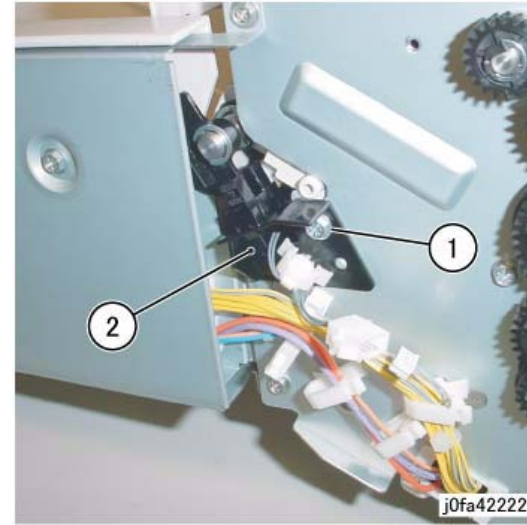
**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Rear Cover ([PL 22.1](#))
5. Disconnect the Connector ([Figure 1](#)):
  - (1)Release Clamp and remove the wire.
  - (2)Disconnect Connector.



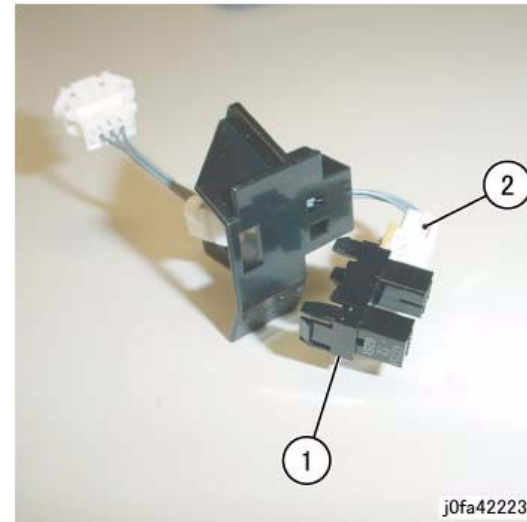
**Figure 1 Disconnecting Connector**

6. Remove the Set Clamp Home Sensor Assembly ([Figure 2](#)):
  - (1)Remove Screw.
  - (2)Remove Set Clamp Home Sensor Assembly.



**Figure 2 Removing the Set Clamp Home Sensor Assembly**

7. Remove the Set Clamp Home Sensor ([Figure 3](#)):
  - (1)Remove Set Clamp Home Sensor from Bracket.
  - (2)Disconnect Connector.



**Figure 3 Removing the Set Clamp Home Sensor**

#### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.7 (Int) Exit Roll Assembly

### Parts List on PL 22.4

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Remove the Rear Cover (PL 22.1)
6. Remove the Left Cover (PL 22.2)
7. Remove the Upper Frame Section (Figure 1):
  - (1)Remove Screw and Bracket.
  - (2)Remove Screws (2).
  - (3)Remove Screw and Bracket.
  - (4)Remove Screws (2).
  - (5)Remove the Upper Frame Section

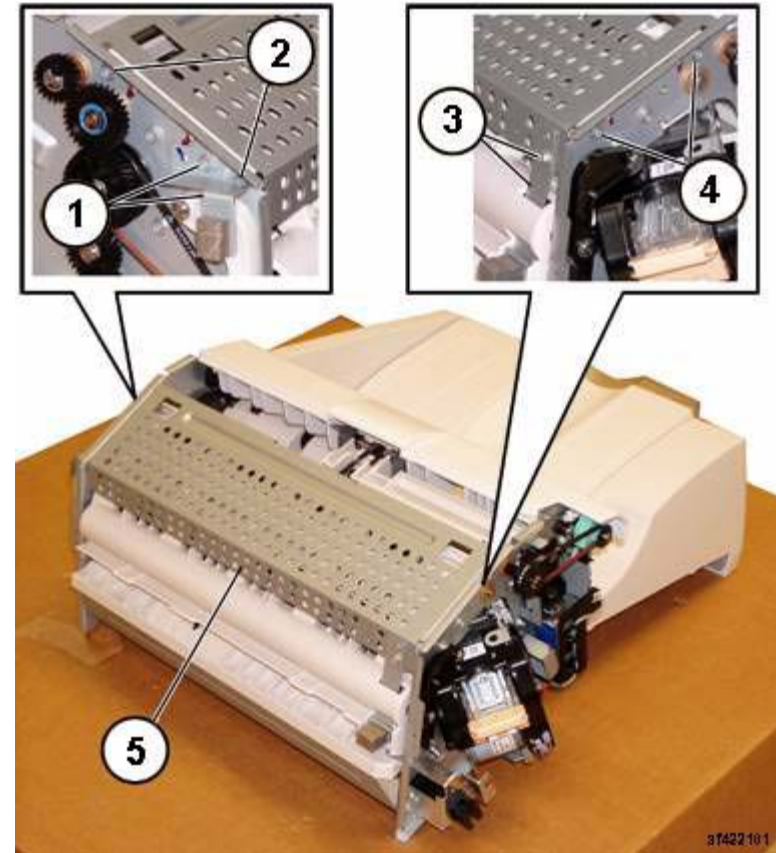


Figure 1 Removing the Upper Frame Section

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

8. Remove the Upper Chute Assembly (Figure 2):
  - (1)Remove Screws (2).
  - (2)Remove Screw.
  - (3)Carefully Remove the Upper Chute Assembly.

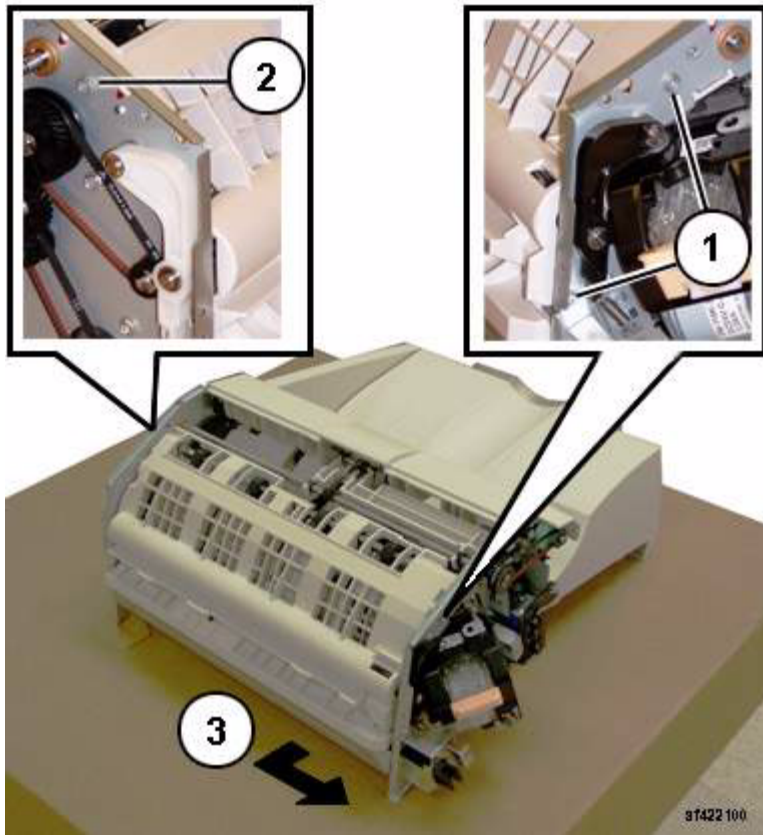


Figure 2 Removing the Upper Chute Assembly

9. Remove the Exit Roll Assembly (Figure 3):
  - (1) Remove E-ring and Bearing.
  - (2) Remove E-ring and Bearing.
  - (3) Remove the Exit Roll Assembly.

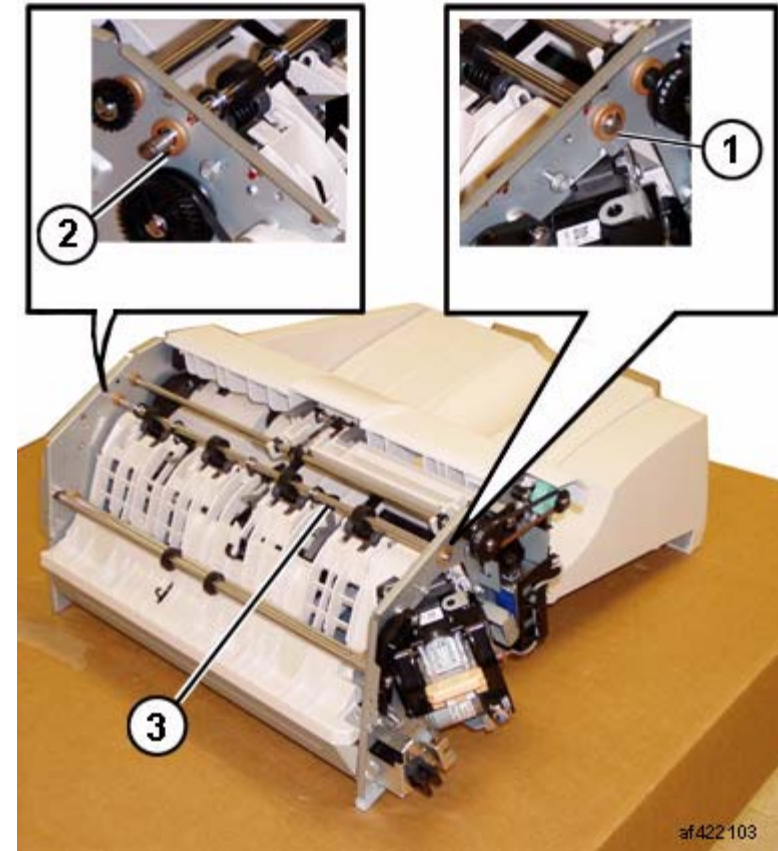


Figure 3 Removing the Exit Roll Assembly

### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides on the Upper Chute (PL 22.6) are not folded back on top of the Exit Roll Assembly.



## REP 22.8 (Int) Pinch Roll

Parts List on [PL 22.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Remove the Pinch Roll ([Figure 1](#)):  
(1)Raise Springs (4) in the direction of the arrow.  
(2)Remove Pinch Rolls (4).

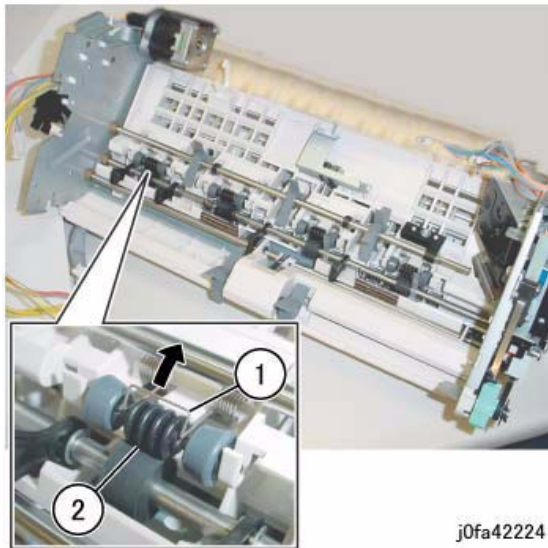


Figure 1 Removing the Pinch Rolls

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.9 (Int) Finisher Entrance Sensor

Parts List on [PL 22.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Turn over the Integrated Office Finisher.
5. Remove the Bottom Cover ([PL 22.2](#))
6. Remove the Connector Bracket ([Figure 1](#)):  
(1)Release Clamps (3) and remove the wire.  
(2)Disconnect Connectors (5).  
(3)Remove Screws (2).  
(4)Remove Connector Bracket.

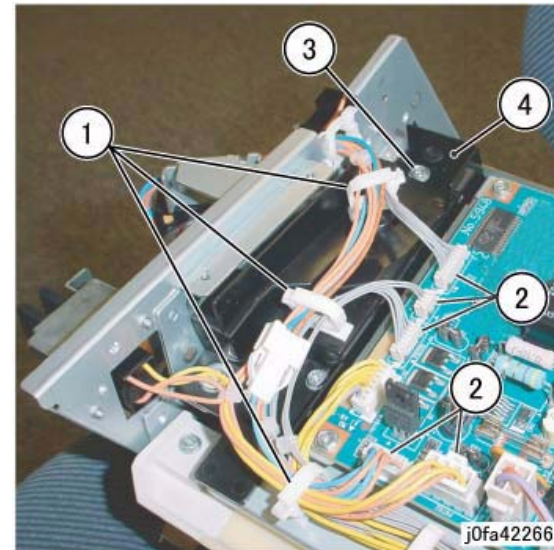
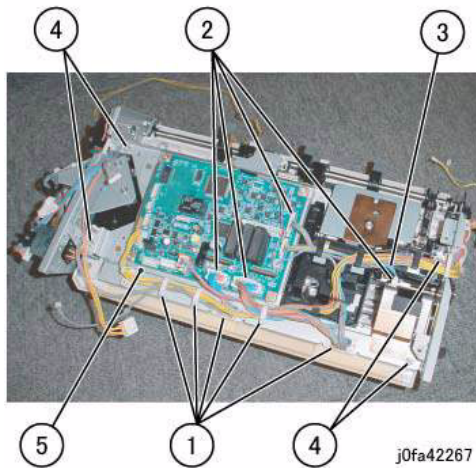


Figure 1 Removing the Connector Bracket

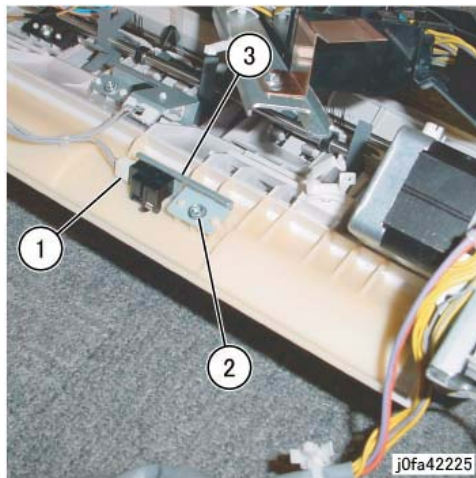
7. Remove the Bottom Plate ([Figure 2](#)):  
(1)Release Clamps (5) and remove the wire.  
(2)Disconnect Connectors (8).  
(3)Remove Wire from Hook.  
(4)Remove Screws (4).  
(5)Remove Bottom Plate.





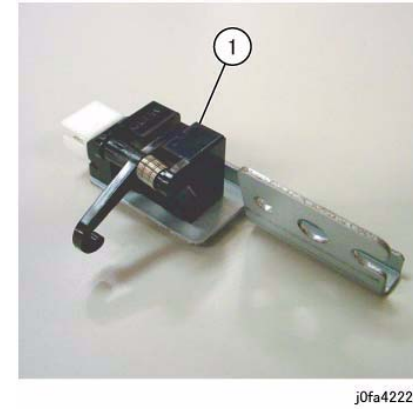
**Figure 2 Removing the Bottom Plate**

8. Remove the Finisher Entrance Sensor Assembly (Figure 3):
  - (1) Disconnect Connector.
  - (2) Remove Self-tapping Screw.
  - (3) Remove Finisher Entrance Sensor Assembly.



**Figure 3 Removing the Finisher Entrance Sensor Assembly**

9. Remove the Finisher Entrance Sensor (Figure 4):
  - (1) Remove Finisher Entrance Sensor from Bracket.



**Figure 4 Removing the Finisher Entrance Sensor**

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.10 (Int) Compiler Exit Sensor

### Parts List on PL 22.5

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Turn over the Integrated Office Finisher.
5. Remove the Bottom Cover (PL 22.2)
6. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

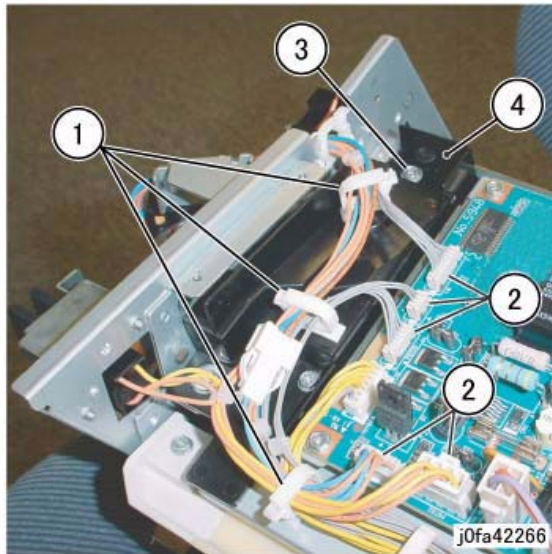


Figure 1 Removing the Connector Bracket

7. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Release Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.

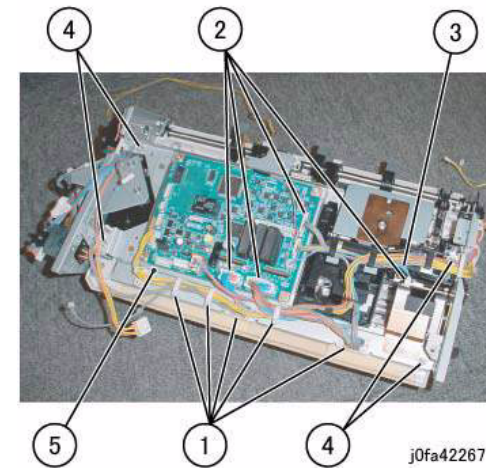


Figure 2 Removing the Bottom Plate

8. Remove the Compiler Exit Sensor Assembly (Figure 3):
  - (1)Remove Screw.
  - (2)Remove Compiler Exit Sensor Assembly.

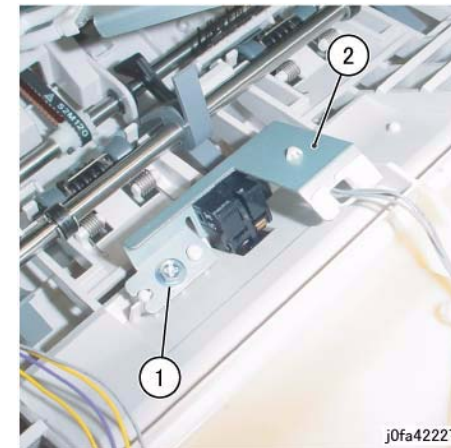


Figure 3 Removing the Compiler Exit Sensor Assembly

9. Remove the Compiler Exit Sensor (Figure 4):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Disconnect Connector.
  - (3)Remove Compiler Exit Sensor.

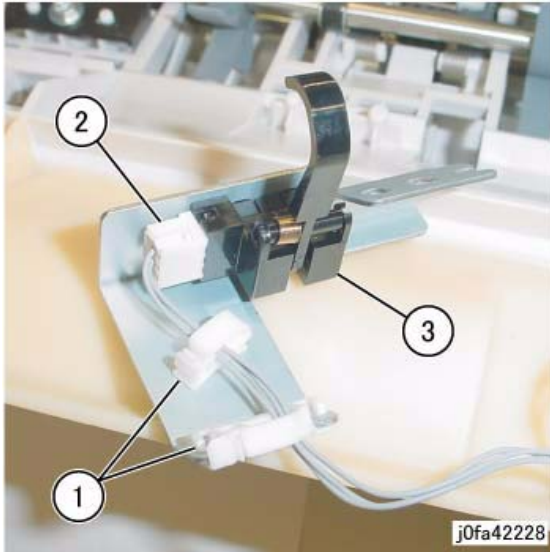


Figure 4 Removing the Compiler Exit Sensor

### Replacement

1. Reverse the removal procedure for replacement.

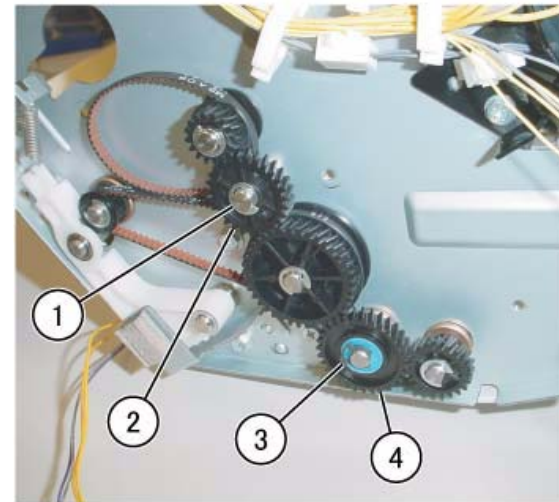
## REP 22.11 (Int) Main Paddle Shaft Assembly

Parts List on [PL 22.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Remove the Gear ([Figure 1](#)):
  - (1)Remove E-Clip.
  - (2)Remove Gear.
  - (3)Remove KL-Clip.
  - (4)Remove Gear.

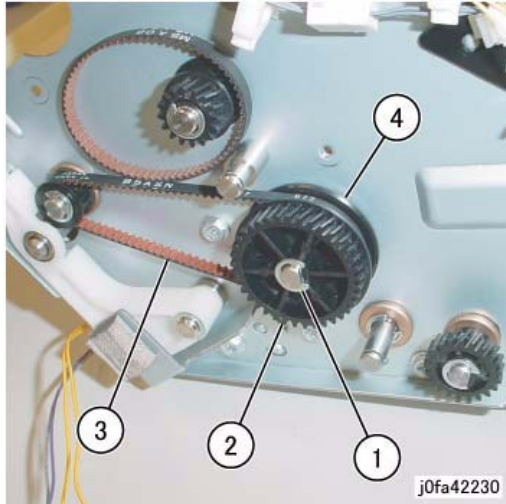


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Figure 1 Removing the Gear

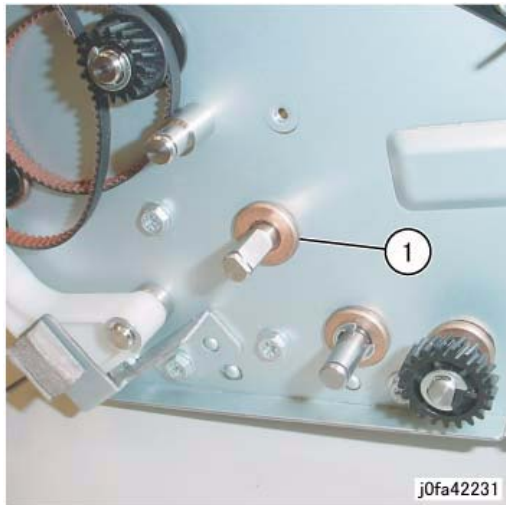
6. Remove the Gear Pulley ([Figure 2](#)):
  - (1)Remove E-Clip.
  - (2)Remove Gear.
  - (3)Remove Flange.





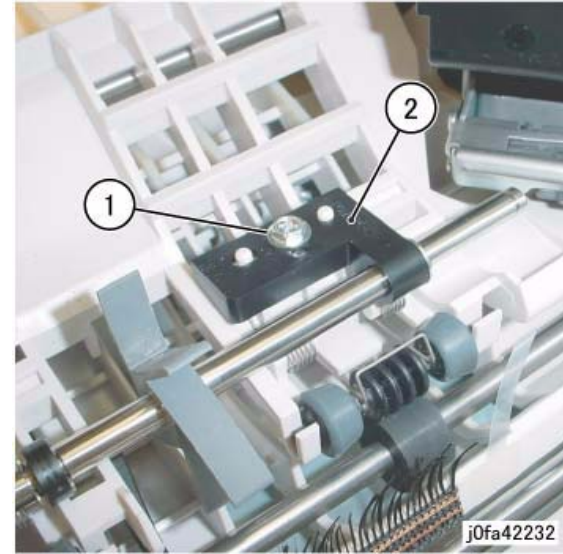
**Figure 2 Removing the Gear Pulley**

7. Remove the Bearing (Figure 3):  
 (1)Remove Bearing.



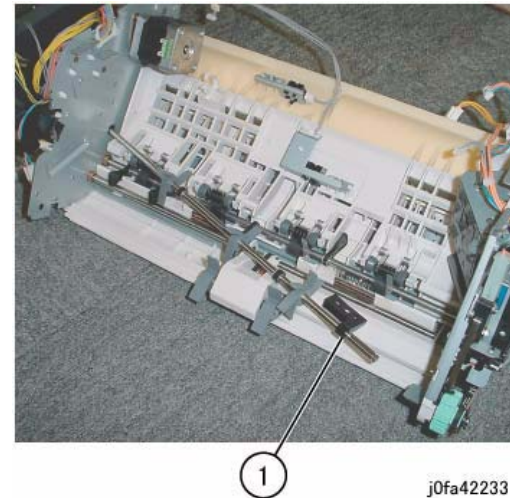
**Figure 3 Removing the Bearing**

8. Remove the Support Bearing from the Entrance Lower Chute Assembly (Figure 4):  
 (1)Remove Self-tapping Screw.  
 (2)Remove Support Bearing.



**Figure 4 Removing the Support Bearing**

9. Remove the Main Paddle Shaft Assembly (Figure 5):  
 (1)Remove Main Paddle Shaft Assembly.



**Figure 5 Removing the Main Paddle Shaft Assembly**

10. Remove the Support Bearing from the Main Paddle Shaft Assembly (Figure 6):  
 (1)Remove E-Clip.

(2)Remove Support Bearing.

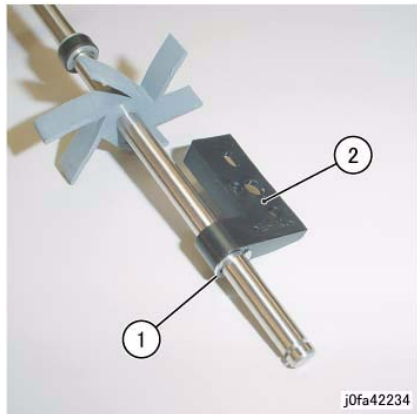


Figure 6 Removing the Support Bearing

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.12 (Int) Lower Chute Assembly

Parts List on [PL 22.5](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Turn over the Integrated Office Finisher (Transport).
6. Remove the Stapler Assembly ([Figure 1](#)):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Disconnect Connectors (2).
  - (3)Remove Screws (2).
  - (4)Remove Stapler Assembly.

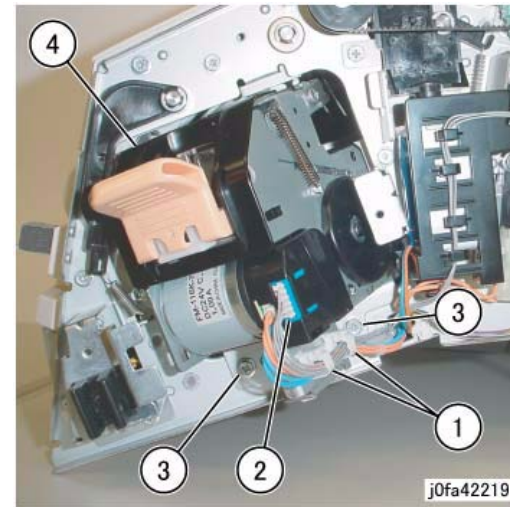
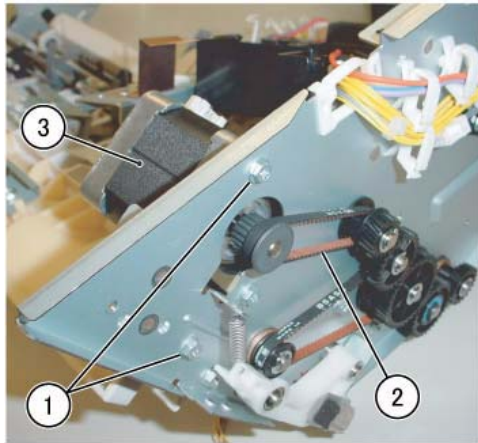


Figure 1 Removing the Stapler Assembly

7. Turn over the Integrated Office Finisher.
8. Remove the Transport Motor ([Figure 2](#)):
  - (1)Remove Screws (2).
  - (2)Remove Belt from Pulley.
  - (3)Remove Transport Motor.

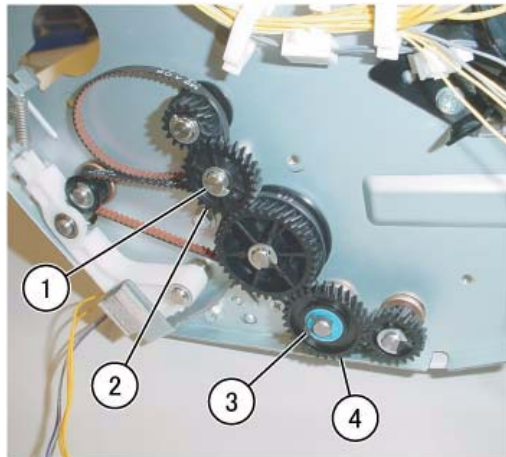


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**Figure 2 Removing the Transport Motor**

9. Remove the Gear (Figure 3):

- (1)Remove E-Clip.
- (2)Remove Gear.
- (3)Remove KL-Clip.
- (4)Remove Gear.



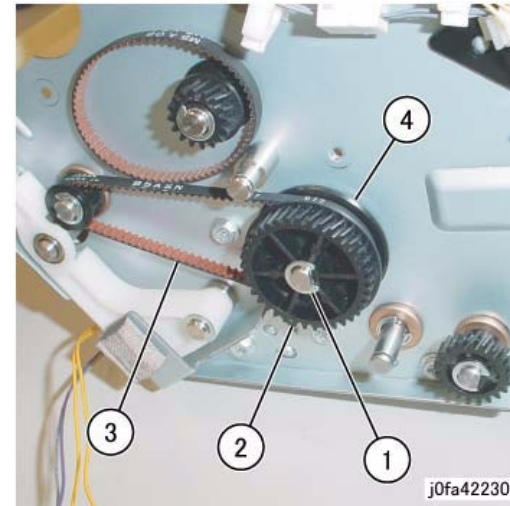
j0fa42229

**Figure 3 Removing the Gear**

10. Remove the Gear Pulley (Figure 4):

- (1)Remove E-Clip.

- (2)Remove Gear.
- (3)Remove Pulley from Belt.
- (4)Remove Flange.

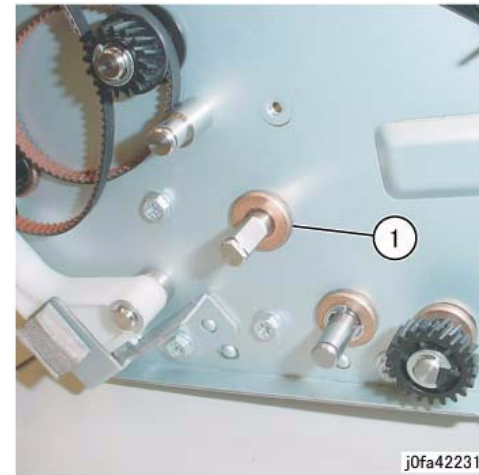


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**Figure 4 Removing the Gear Pulley**

11. Remove the Bearing (Figure 5):

- (1)Remove the Bearing.



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**Figure 5 Removing the Bearing**

12. Remove the Entrance Lower Chute Assembly (Figure 6):

- (1)Remove Screws (2).

- (2) Loosen Screws (2).
- (3) Remove Entrance Lower Chute Assembly.

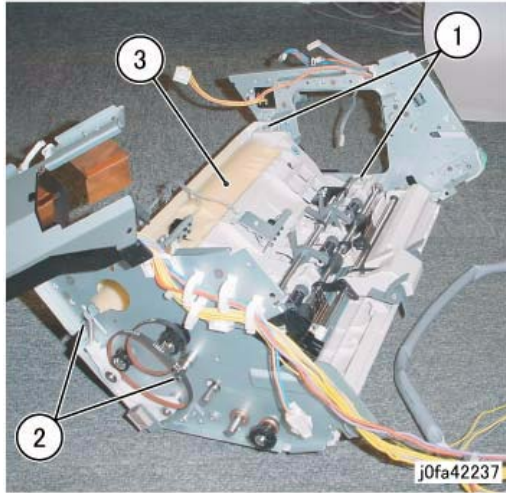


Figure 6 Removing the Entrance Lower Chute Assembly

### Replacement

- 1. Reverse the removal procedure for replacement.

## REP 22.13 (Int) Entrance Roll Assembly

Parts List on [PL 22.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
- 4. Remove the Inner Front Cover ([PL 22.1](#))
- 5. Remove the Rear Cover ([PL 22.1](#))
- 6. Remove the Left Cover ([PL 22.2](#))
- 7. Remove the Upper Frame Section ([Figure 1](#)):
  - (1) Remove Screw and Bracket.
  - (2) Remove Screws (2).
  - (3) Remove Screw and Bracket.
  - (4) Remove Screws (2).
  - (5) Remove the Upper Frame Section



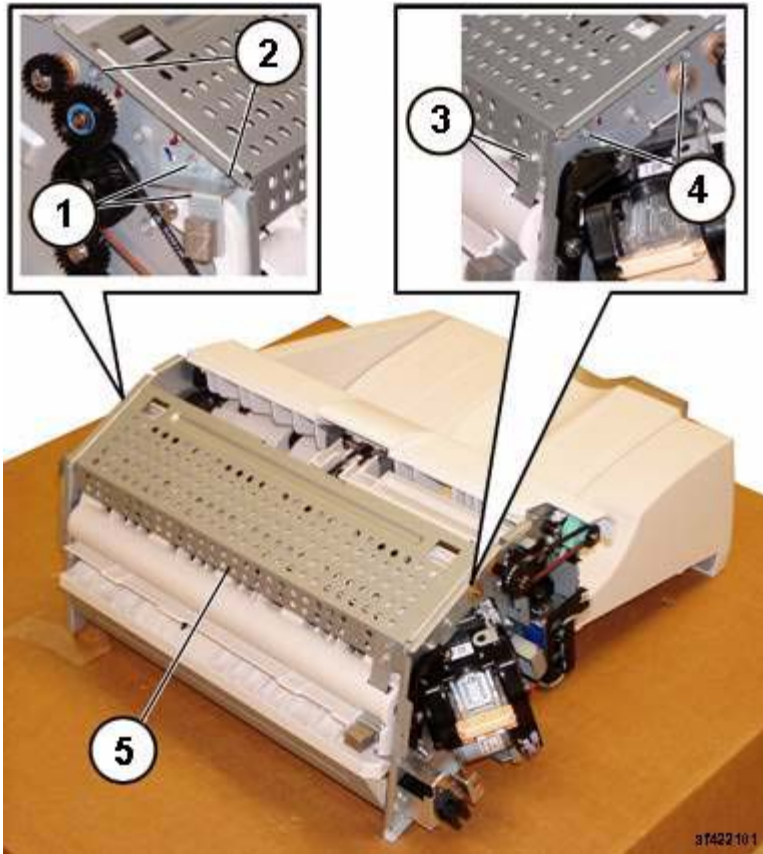


Figure 1 Removing the Upper Frame Section

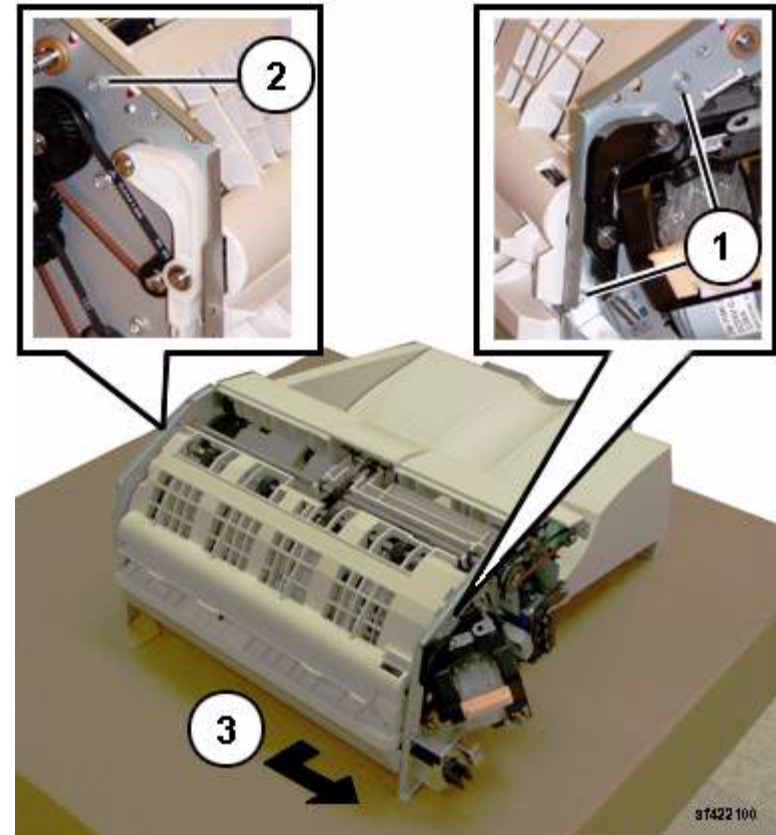


Figure 2 Removing the Upper Chute Assembly

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

8. Remove the Upper Chute Assembly (Figure 2):
  - (1) Remove Screws (2).
  - (2) Remove Screw.
  - (3) Carefully Remove the Upper Chute Assembly.

9. Remove the Entrance Roll Assembly (Figure 3):
  - (1) Disconnect Spring.
  - (2) Remove E-Rings (2).

**NOTE:** Capture the Bearing

- (3) Remove Arm.
- (4) Slide Shaft out of the Bearing in the Arm.



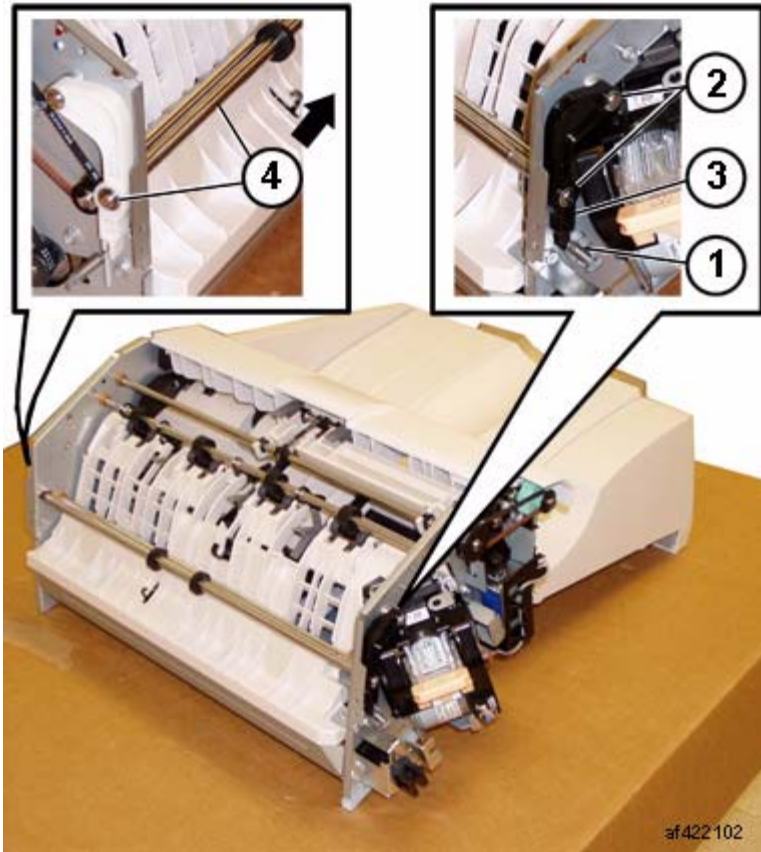


Figure 3 Removing the Gear

## REP 22.14 (Int) Upper Chute Assembly

Parts List on [PL 22.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Inner Front Cover ([PL 22.1](#))
5. Remove the Rear Cover ([PL 22.1](#))
6. Remove the Left Cover ([PL 22.2](#))
7. Remove the Upper Frame Section ([Figure 1](#)):
  - (1) Remove Screw and Bracket.
  - (2) Remove Screws (2).
  - (3) Remove Screw and Bracket.
  - (4) Remove Screws (2).
  - (5) Remove the Upper Frame Section

### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides on the Upper Chute ([PL 22.6](#)) are not folded back on top of the Exit Roll Assembly.

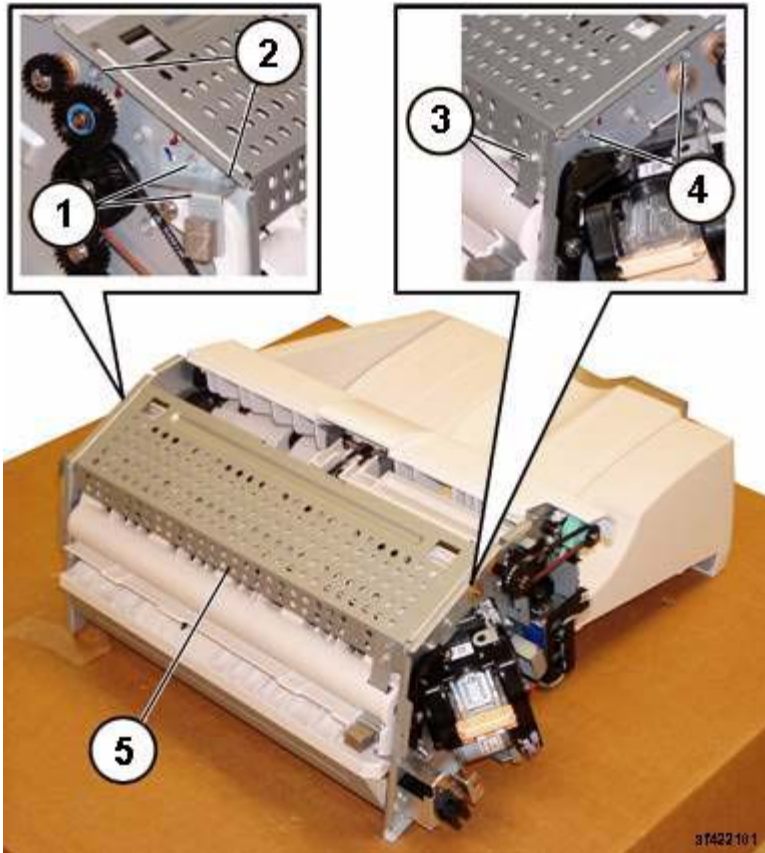


Figure 1 Removing the Upper Frame Section

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

8. Remove the Upper Chute Assembly (Figure 2):
  - (1) Remove Screws (2).
  - (2) Remove Screw.
  - (3) Carefully Remove the Upper Chute Assembly.

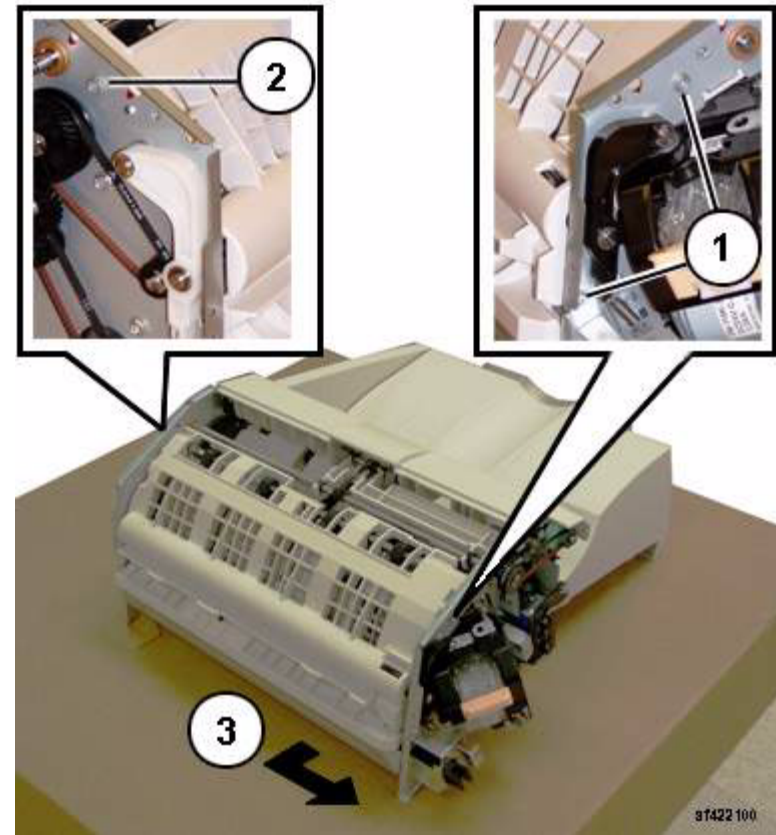


Figure 2 Removing the Upper Chute Assembly

### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides (PL 22.6) are not folded back on top of the Exit Roll Assembly.

## REP 22.15 (Int) Finisher PWB

Parts List on [PL 22.7](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Turn over the Finisher.
5. Remove the Bottom Cover ([PL 22.2](#))
6. Remove the Finisher PWB ([Figure 1](#)):
  - (1)Disconnect Connectors (12).
  - (2)Remove Screws (4).
  - (3)Remove Finisher PWB.

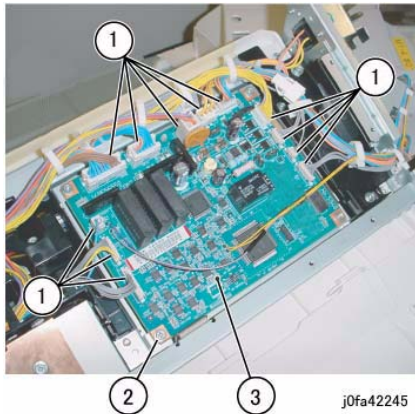


Figure 1 Removing the Finisher PWB

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.16 (Int) Stacker Tray Assembly

Parts List on [PL 22.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Inner Front Cover ([PL 22.1](#))
5. Remove the Rear Cover ([PL 22.1](#))
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover ([PL 22.2](#))
8. Remove the Tray Cover ([PL 22.2](#))
9. Disconnect Connector ([Figure 1](#)):
  - (1)Release Clamp.
  - (2)Remove Clamp.
  - (3)Release and remove Wire from Hook.
  - (4)Release Clamp.
  - (5)Disconnect Connector.
  - (6)Release and remove Wire from Hook.

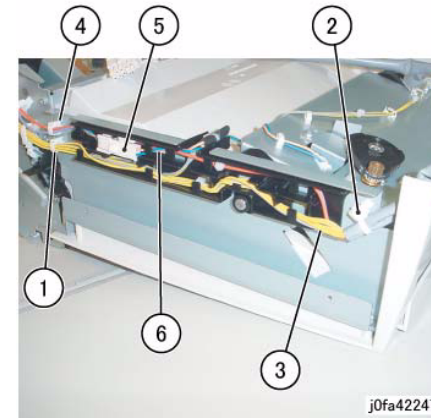
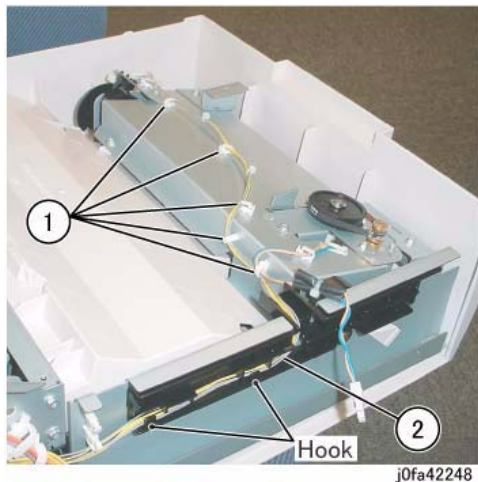


Figure 1 Disconnecting the Connector

10. Release the Clamps and the Hook to remove the wire ([Figure 2](#)):
  - (1)Release Clamps (5).
  - (2)Remove Wire from Hook.

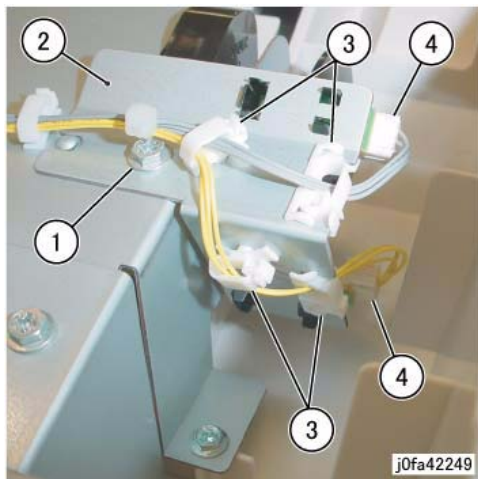




**Figure 2 Disconnecting the Wire**

11. Remove the Stacker Sensor Assembly (Figure 3):

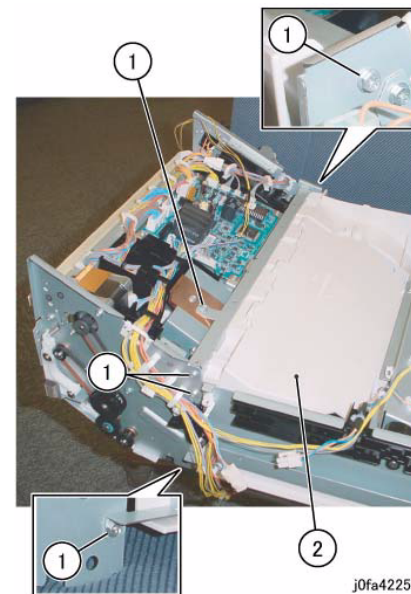
- (1) Remove Screw.
- (2) Remove Stacker Sensor Assembly.
- (3) Release Clamps (4).
- (4) Disconnect Connectors (2).



**Figure 3 Removing the Stacker Sensor Assembly**

12. Remove the Stacker Tray Assembly (Figure 4):

- (1) Remove Screws (5).
- (2) Remove Stacker Tray Assembly.



**Figure 4 Removing the Stacker Tray Assembly**

### Replacement

1. Reverse the removal procedure for replacement.
2. Install the Stacker Tray Assembly and Integrated Office Finisher as shown in Figure 5.



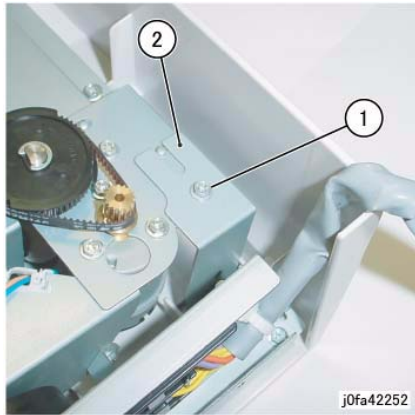
**Figure 5 Installing the Stacker Tray Assembly**

## REP 22.17 (Int) Stacker Shaft Assembly

### Parts List on [PL 22.8](#)

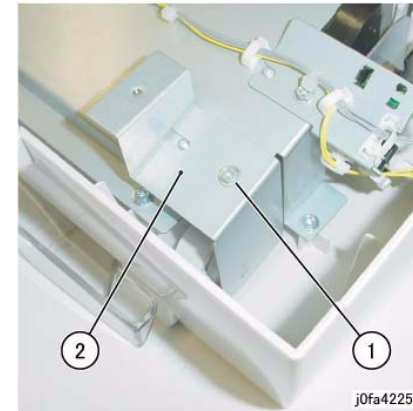
#### Removal

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Rear Cover ([PL 22.1](#))
5. Turn over the Integrated Office Finisher.
6. Remove the Tray Cover ([PL 22.2](#))
7. Remove the rear Bracket ([Figure 1](#)):
  - (1)Remove Screw.
  - (2)Remove Bracket.



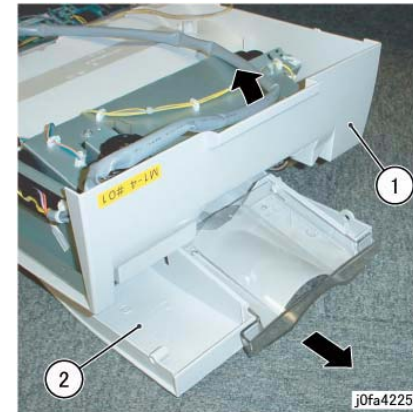
**Figure 1 Removing the Rear Bracket**

8. Remove the front Bracket ([Figure 2](#)):
  - (1)Remove Screw.
  - (2)Remove Bracket.



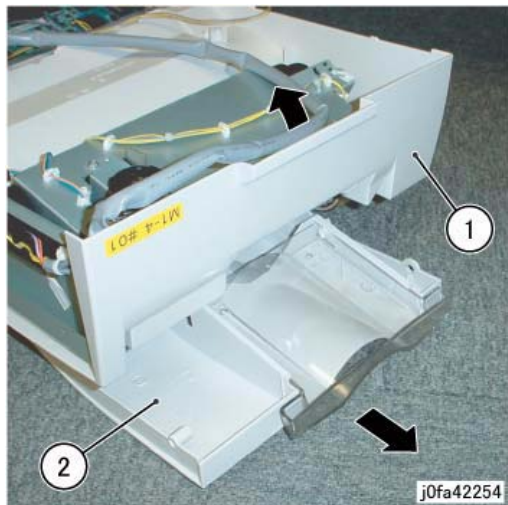
**Figure 2 Removing the Front Bracket**

9. Remove the Top Tray ([Figure 3](#)):
  - (1)Raise Integrated Office Finisher slightly in the direction of the arrow.
  - (2)Remove Top Tray.



**Figure 3 Removing the Top Tray**

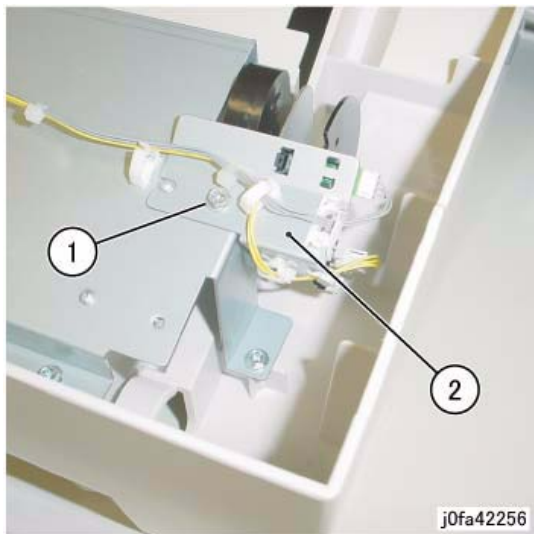
10. Disconnect Connector ([Figure 4](#)):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Release Wire from Hook.
  - (3)Disconnect Connector.



**Figure 4 Disconnecting the Connector**

11. Remove the Stacker Sensor Assembly (Figure 5):

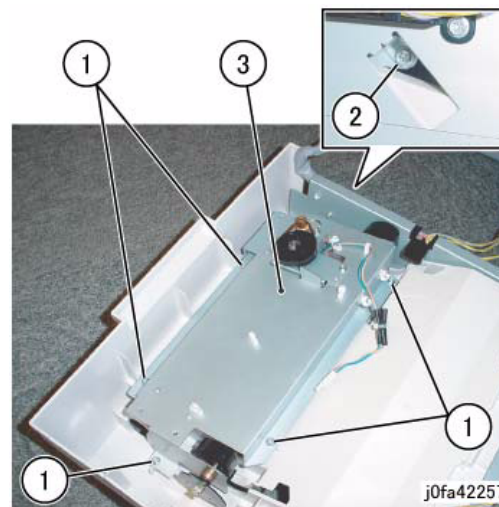
- (1) Remove Screw.
- (2) Remove Stacker Sensor Assembly.
- (3) Remove Wire from Clamps (5)



**Figure 5 Removing the Stacker Sensor Assembly**

12. Remove the Stacker Assembly (Figure 6):

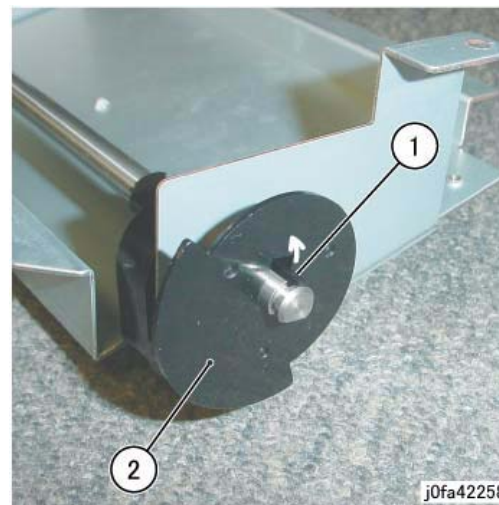
- (1) Remove Self-tapping Screws (5).
- (2) Remove Screw.
- (3) Remove Stacker Assembly.



**Figure 6 Removing the Stacker Assembly**

13. Remove the Actuator (Figure 7):

- (1) Unhook.
- (2) Remove Actuator.



**Figure 7 Removing the Actuator**



14. Move the Bearing (Figure 8):
  - (1) Remove E-Clip.
  - (2) Move Bearing in the direction of the arrow.

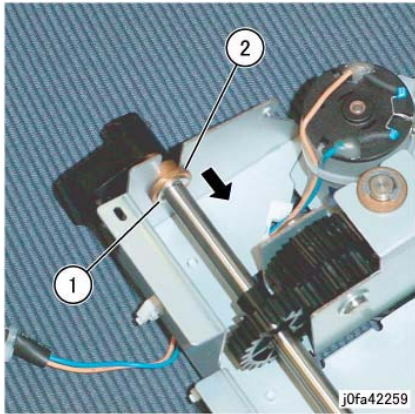


Figure 8 Moving the Bearing

15. Remove the Stacker Shaft Assembly (Figure 9):
  - (1) Remove Stacker Shaft Assembly in the direction of the arrow.

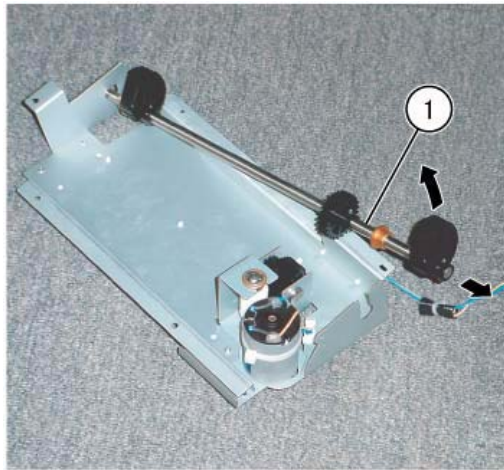


Figure 9 Removing the Stacker Shaft Assembly

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.18 (Int) Stacker Motor

### Parts List on PL 22.8

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Rear Cover (PL 22.1)
5. Turn over the Integrated Office Finisher.
6. Remove the Tray Cover (PL 22.2)
7. Disconnect the Connector (Figure 1):
  - (1) Release Clamps (3) and remove the wire.
  - (2) Release Wire from Hook.
  - (3) Disconnect Connector.

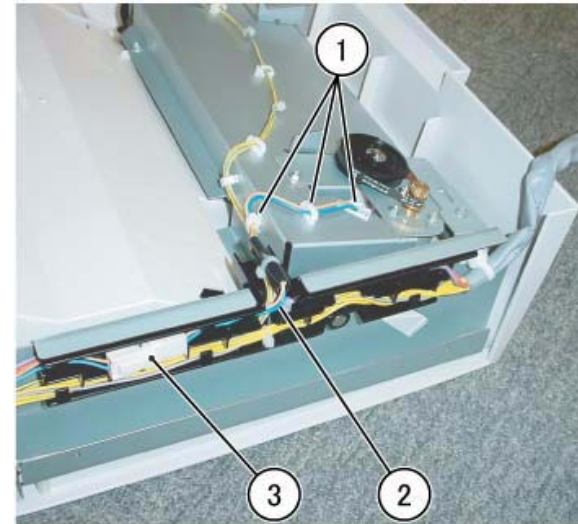
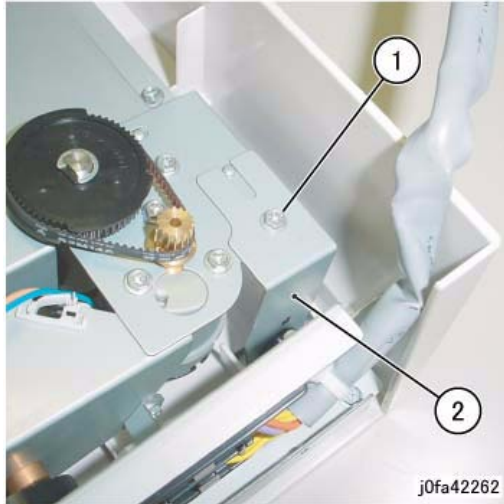


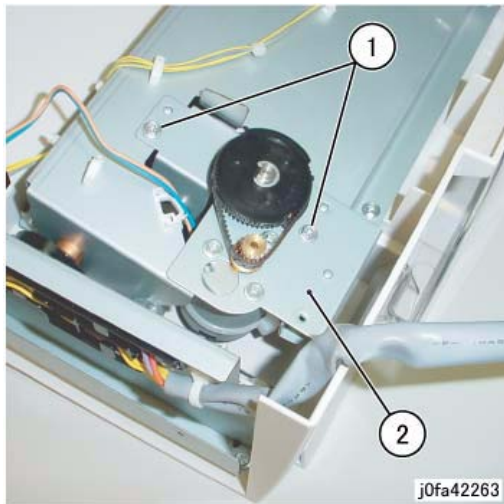
Figure 1 Disconnecting the Connector

8. Remove the Bracket (Figure 2):
  - (1) Remove Screw.
  - (2) Remove Bracket.



**Figure 2 Removing the Bracket**

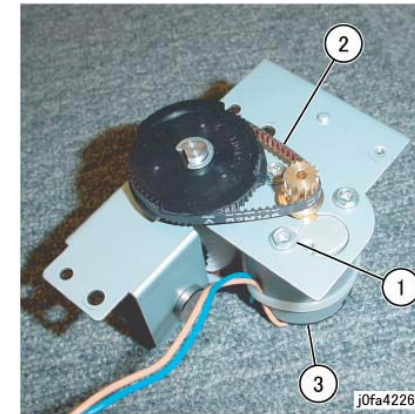
9. Remove the Stacker Motor Assembly (Figure 3):
  - (1) Remove Screws (2).
  - (2) Remove Stacker Motor Assembly.



**Figure 3 Removing the Stacker Motor Assembly**

10. Remove the Stacker Motor (Figure 4):
  - (1) Remove Screws (3).
  - (2) Remove Belt from Pulley.

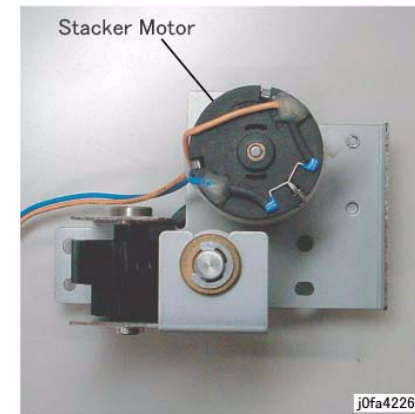
(3) Remove Stacker Motor.



**Figure 4 Removing the Stacker Motor**

### Replacement

1. Reverse the removal procedure for replacement.
2. Install the Stacker Motor as shown in Figure 5.



**Figure 5 Installing the Stacker Motor**



## REP 22.19 (Int) Stacker Sensor

Parts List on [PL 22.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Rear Cover ([PL 22.1](#))
5. Turn over the Integrated Office Finisher.
6. Remove the Tray Cover ([PL 22.2](#))
7. Remove the Stacker Sensor Assembly ([Figure 1](#)):
  - (1)Release the wire from the Clamp.
  - (2)Remove Screw.
  - (3)Remove Stacker Sensor Assembly.
  - (4)Disconnect the Sensor Connector and remove Sensor from Bracket (5)

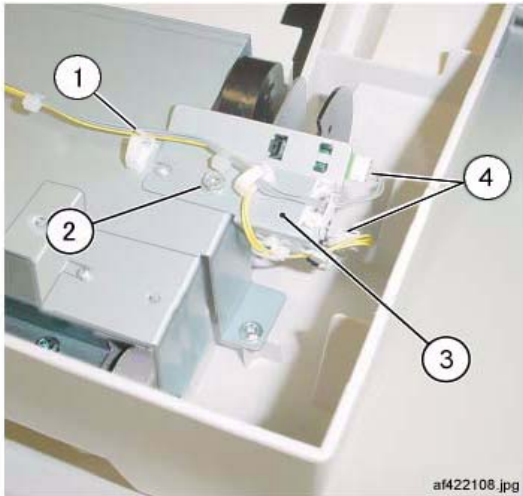


Figure 1 Removing the Stacker Stack Sensor Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.20 (Int) Compiler Assembly

Parts List on [PL 22.9](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Inner Front Cover ([PL 22.1](#))
5. Remove the Rear Cover ([PL 22.1](#))
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover ([PL 22.2](#))
8. Remove the Tray Cover ([PL 22.2](#))
9. Remove the Connector Bracket ([Figure 1](#)):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

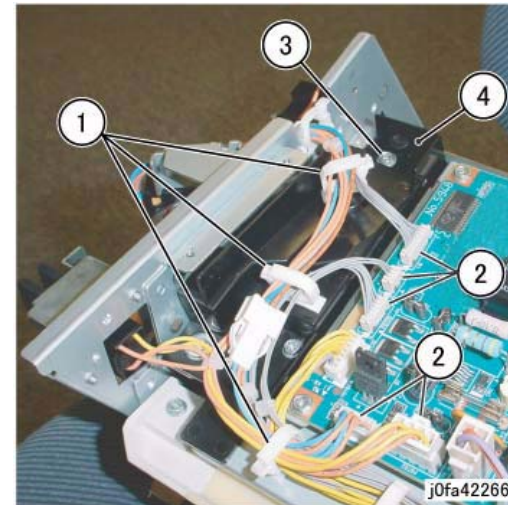
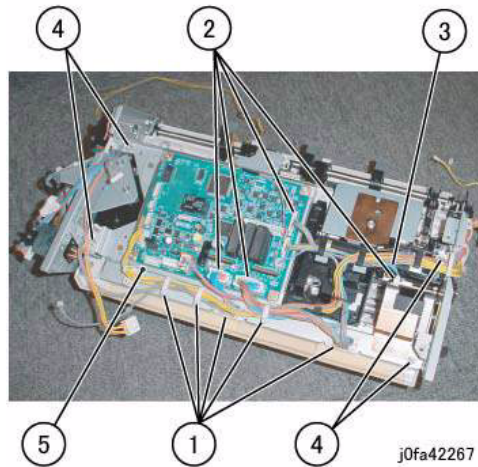


Figure 1 Removing the Connector Bracket

10. Remove the Bottom Plate ([Figure 2](#)):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).

(5)Remove Bottom Plate.



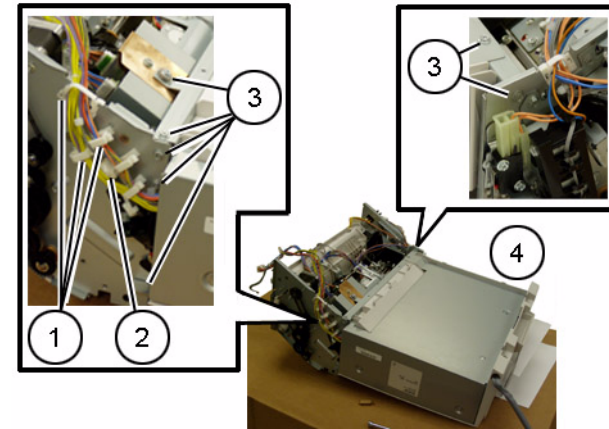
**Figure 2 Removing the Bottom Plate**

11. Release the Clamp from the wire (Figure 3):  
(1)Release Clamp and remove the wire.



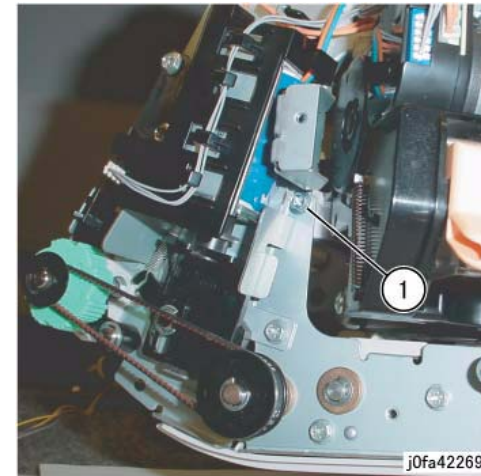
**Figure 3 Releasing the Clamp**

12. Remove the Stacker Tray (Figure 4):  
(1)Release wires from Clamps (5)  
(2)Disconnect the Connector  
(3)Remove Screws (7)  
(4)Remove the Stacker Tray



**Figure 4 Removing the Stacker Tray**

13. Remove the front Self-tapping Screw (Figure 5):  
(1)Remove Self-tapping Screw.



**Figure 5 Removing the Self-tapping Screw**

14. Remove the rear Screw (Figure 6):  
(1)Remove Screw.

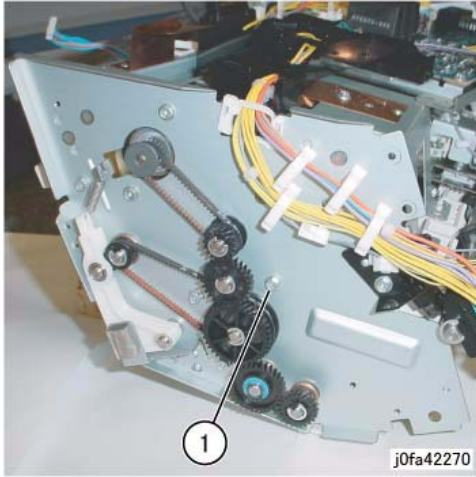


Figure 6 Removing the Screw

15. Remove the Compiler Assembly (Figure 7):
  - (1) Remove Compiler Assembly.

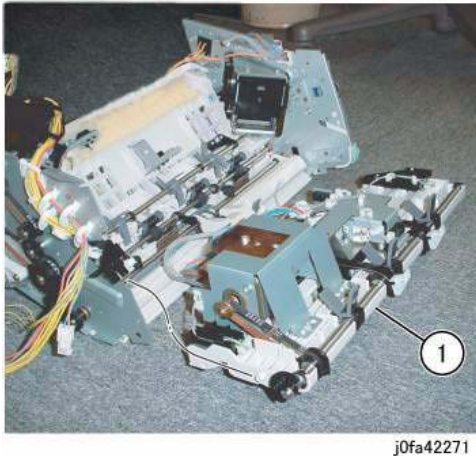


Figure 7 Removing the Compiler Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.21 (Int) Set Clamp Shaft

Parts List on [PL 22.9](#)

### Removal

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([PL 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Remove the Bracket Assembly (Figure 1):
  - (1) Release Clamps (2) and remove the wire.
  - (2) Remove Screws (2).
  - (3) Remove Bracket Assembly.

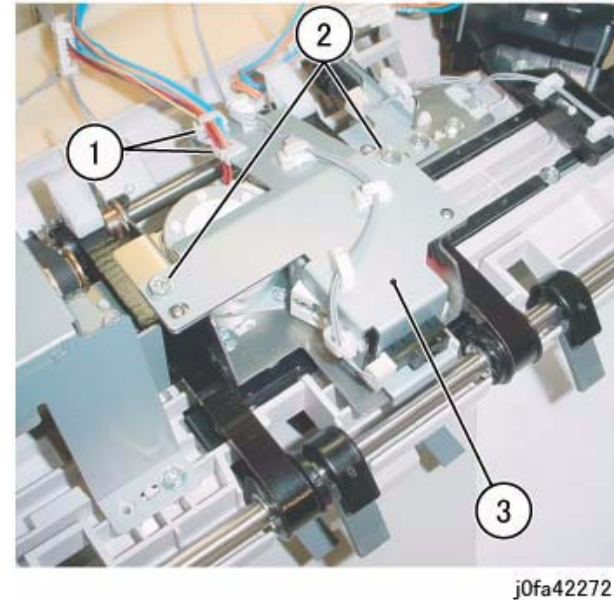
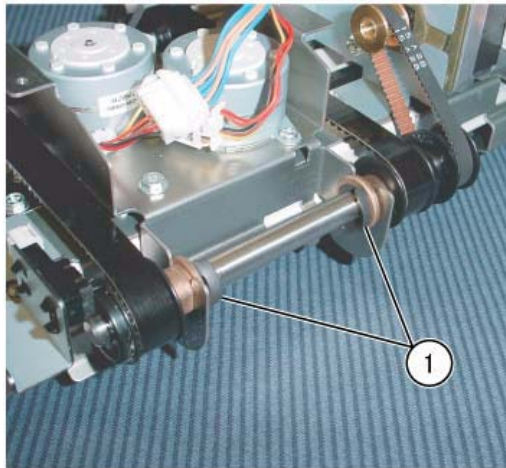


Figure 1 Removing the Bracket Assembly

6. Remove the KL-Clips from the Eject Shaft (Figure 2):
  - (1) Remove KL-Clips (2).

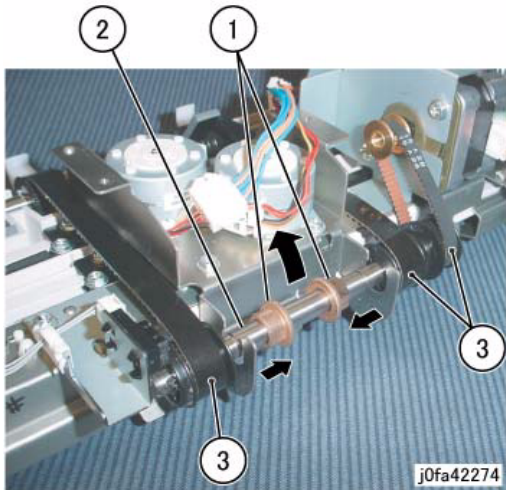




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**Figure 2 Removing the KL-Clips**

7. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3):
  - (1) Move Bearings (2) in the direction of the arrow.
  - (2) Remove Eject Shaft in the direction of the arrow.
  - (3) Remove Belt from Pulley.

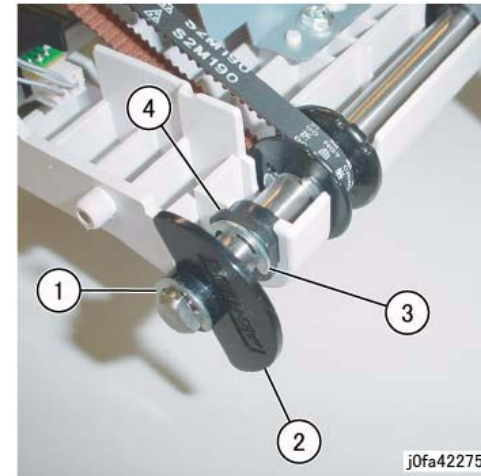


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**Figure 3 Removing the Eject Shaft**

8. Remove the Actuator and the Bearing (Figure 4):
  - (1) Remove E-Clip.

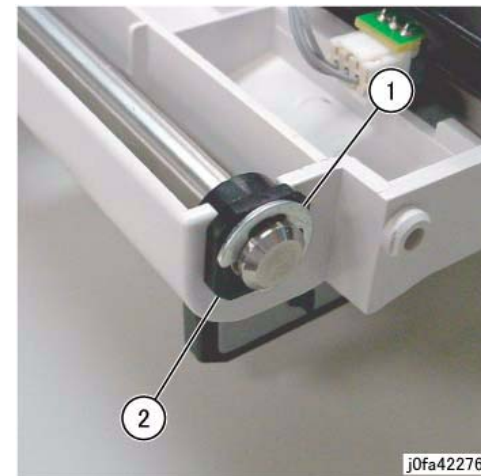
- (2) Remove Actuator.
- (3) Remove E-Clip.
- (4) Remove Bearing.



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**Figure 4 Removing the Actuator and Bearing**

9. Remove the Bearing (Figure 5):
  - (1) Remove E-Clip.
  - (2) Remove Bearing.



j0fa42276

**Figure 5 Removing the Bearing**

10. Remove the Set Clamp Shaft (Figure 6):
  - (1) Move Set Clamp Shaft in the direction of the arrow.

- (2)Remove Belts (3) from Pulleys (3).
- (3)Remove Set Clamp Shaft in the direction of the arrow.

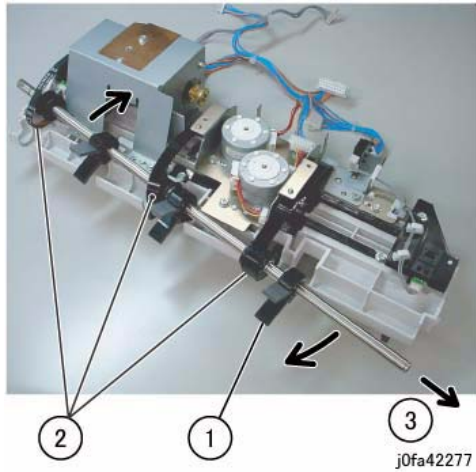


Figure 6 Removing the Set Clamp Shaft

### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install and align the Eject Belt with marks on the Pulleys (Figure 7):

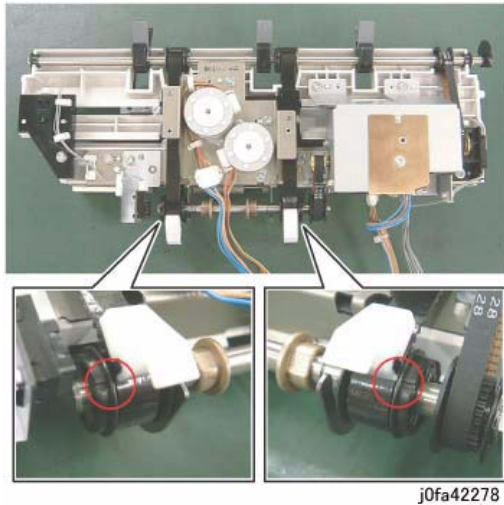


Figure 7 Installing the Eject Belt

## REP 22.22 (Int) Eject Belt

### Parts List on PL 22.9

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (PL 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the Front/Rear Tamper Motor Assembly (REP 22.26)
- 6. Move the Eject Home Sensor Assembly (Figure 1):
  - (1)Remove Screw.
  - (2)Move Eject Home Sensor Assembly.

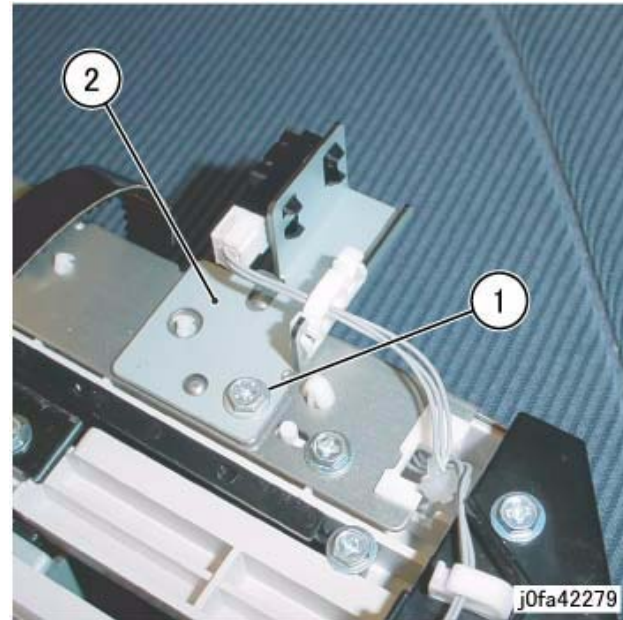
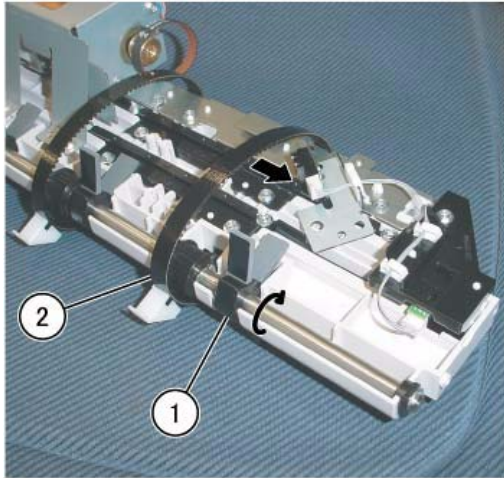


Figure 1 Moving the Eject Home Sensor Assembly (j0fa42279)

- 7. Remove the Eject Belt (Figure 2):
  - (1)Move the blades of Set Clamp Shaft in the direction of the arrow.
  - (2)Remove Eject Belt in the direction of the arrow.

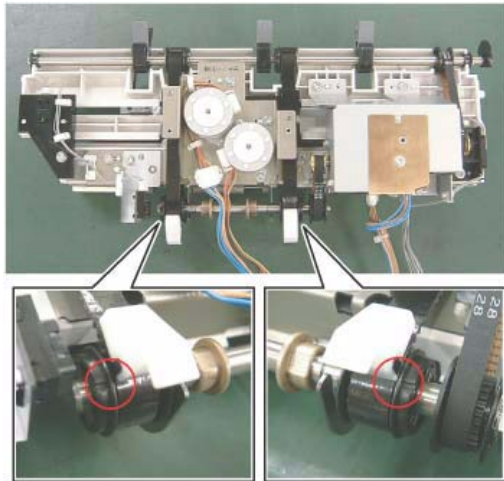


j0fa42280

Figure 2 Removing the Eject Belt

### Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys (Figure 3):



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Figure 3 Installing the Eject Belt

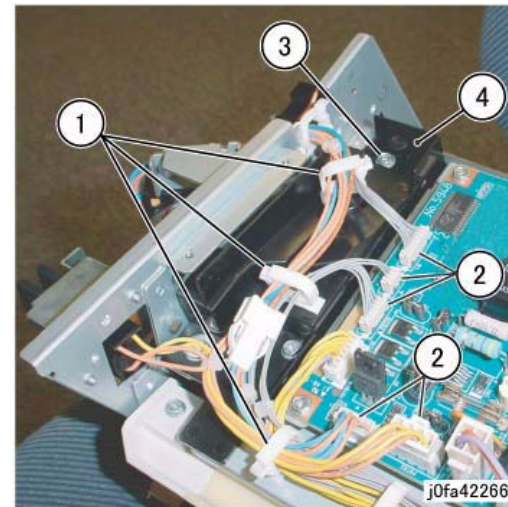
## REP 22.23 (Int) Eject/Set Clamp Motor Assembly

### Parts List on PL 22.9

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Remove the Rear Cover (PL 22.1)
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover (PL 22.2)
8. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

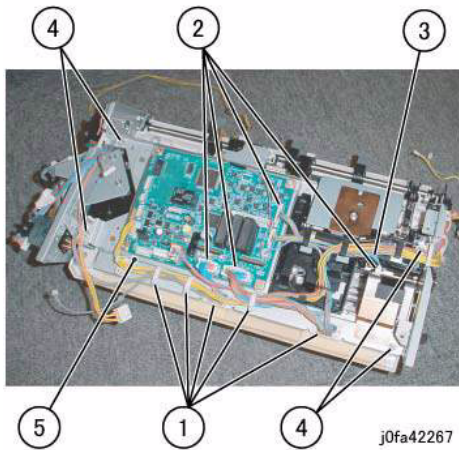


j0fa42266

Figure 1 Removing the Connector Bracket

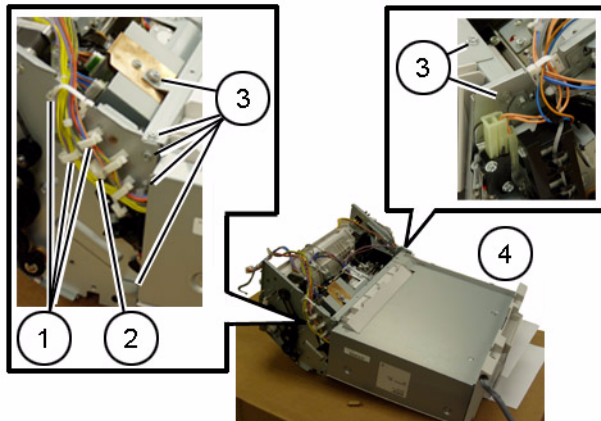
9. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.





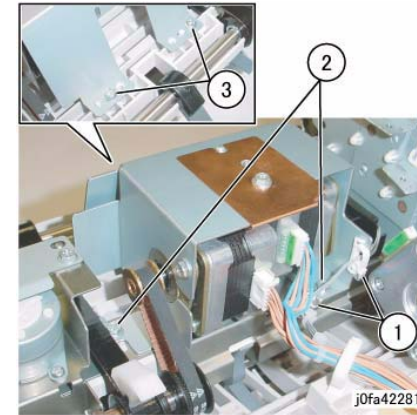
**Figure 2 Removing the Bottom Plate**

10. Remove the Stacker Tray (Figure 3):
  - (1)Release wires from Clamps (5)
  - (2)Disconnect the Connector
  - (3)Remove Screws (7)
  - (4)Remove the Stacker Tray



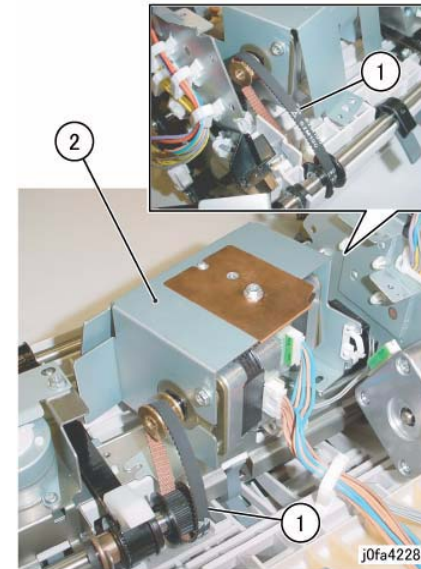
**Figure 3 Removing the Stacker Tray**

11. Remove the screws securing the Eject/Set Clamp Motor Assembly (Figure 4):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Screws (2).
  - (3)Remove Self-tapping Screws (2).



**Figure 4 Removing Screws**

12. Remove the Eject/Set Clamp Motor Assembly (Figure 5):
  - (1)Remove Belts (2) from Pulley.
  - (2)Remove Eject/Set Clamp Motor Assembly.



**Figure 5 Removing the Eject/Set Clamp Motor Assembly**

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.24 (Int) Rear Tamper Home Sensor

### Parts List on PL 22.9

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Remove the Rear Cover (PL 22.1)
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover (PL 22.2)
8. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

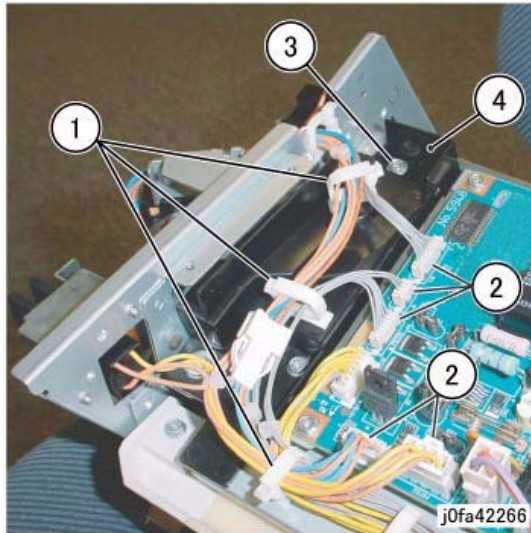


Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire form Hook.
  - (4)Remove Screw (4).

(5)Remove Bottom Plate.

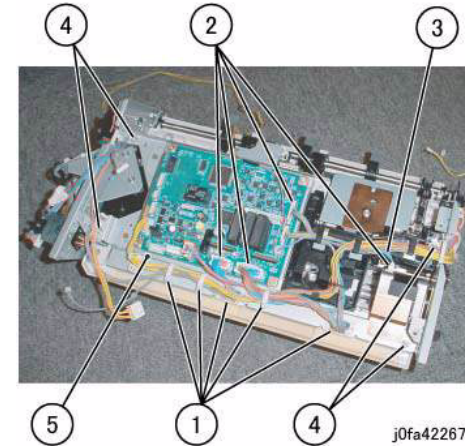


Figure 2 Moving the Bottom Plate

10. Remove the Rear Tamper Home Sensor Assembly (Figure 3):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Self-tapping Screw.
  - (3)Move Rear Tamper Home Sensor Assembly in order to disconnect the connector.

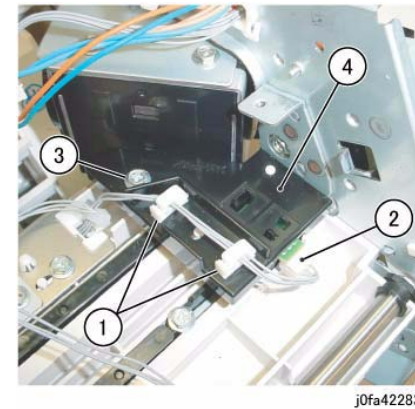


Figure 3 Removing the Rear Tamper Home Sensor Assembly

11. Remove the Rear Tamper Home Sensor (Figure 4):
  - (1)Remove Rear Tamper Home Sensor from the bracket.



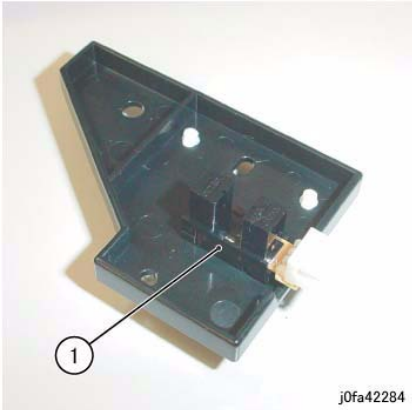


Figure 4 Removing the Rear Tamper Home Sensor

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.25 (Int) Eject Shaft Assembly

Parts List on [PL 22.9](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([PL 22.1](#)).
4. Remove the Compiler Assembly ([REP 22.20](#))
5. Remove the Bracket Assembly ([Figure 1](#)):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Screws (2).
  - (3)Remove Bracket Assembly.

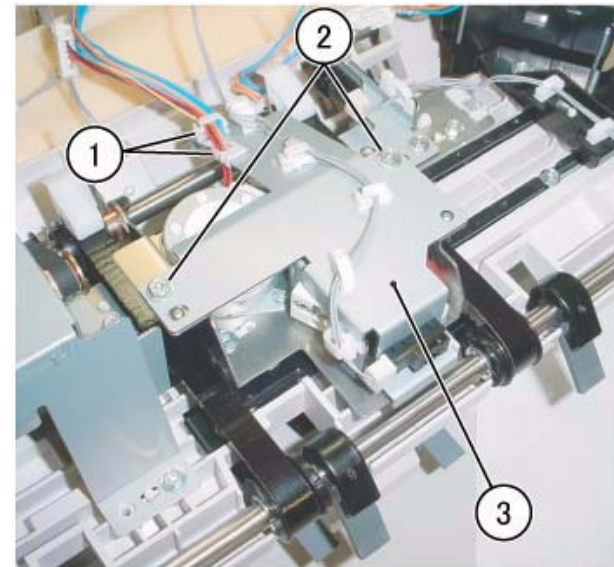
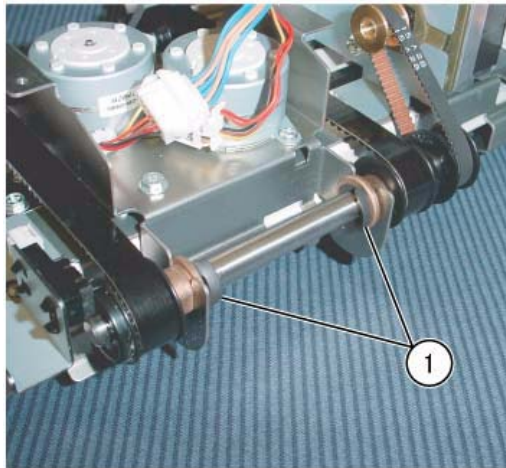


Figure 1 Removing the Bracket Assembly

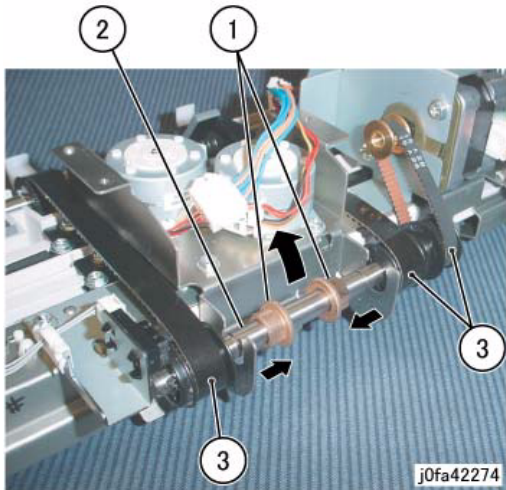
6. Remove the KL-Clips from the Eject Shaft ([Figure 2](#)):
  - (1)Remove KL-Clips (2).



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**Figure 2 Removing the KL-Clips**

7. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3):
  - (1) Move Bearings (2) in the direction of the arrow.
  - (2) Remove Eject Shaft in the direction of the arrow.
  - (3) Remove Belt from Pulley.



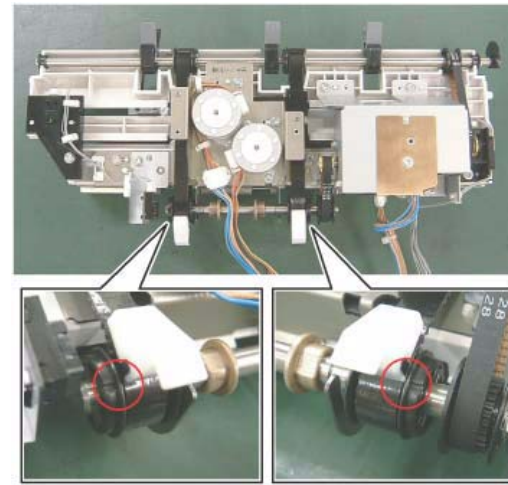
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**Figure 3 Removing the Eject Shaft**

## Replacement

1. Reverse the removal procedure for replacement.

2. Install and align the Eject Belt with marks on the Pulleys (Figure 4):



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**Figure 4 Installing the Eject Belt**

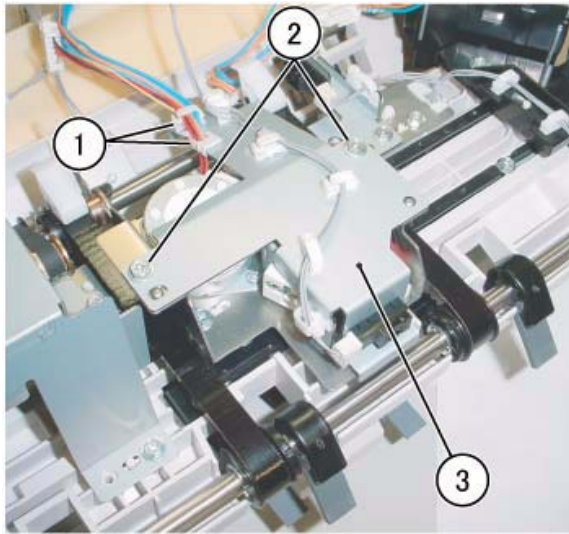
## REP 22.26 (Int) Front /Rear Tamper Motor Assembly

### Parts List on PL 22.10

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

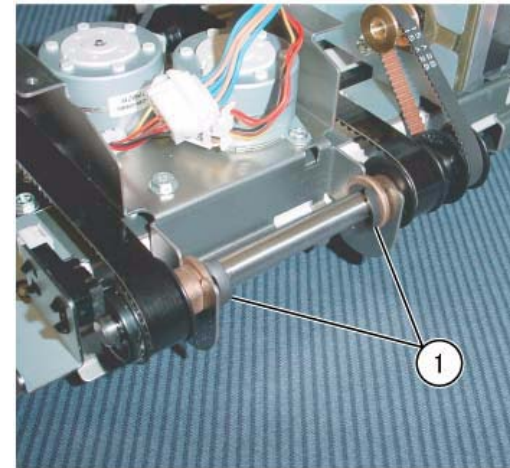
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (PL 22.1).
4. Remove the Compiler Assembly (REP 22.20)
5. Remove the Bracket Assembly (Figure 1):  
(1)Release Clamps (2) and remove the wire.  
(2)Remove Screws (2).  
(3)Remove Bracket Assembly.



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Figure 1 Removing the Bracket Assembly

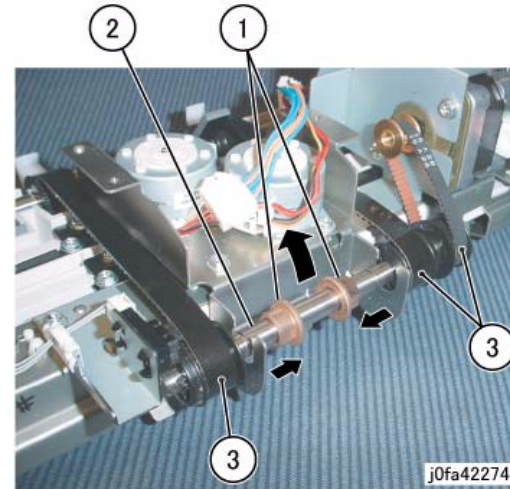
6. Remove the KL-Clips from the Eject Shaft (Figure 2):  
(1)Remove KL-Clips (2).



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Figure 2 Removing the KL-Clips

7. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3):  
(1)Move Bearings (2) in the direction of the arrow.  
(2)Remove Eject Shaft in the direction of the arrow.  
(3)Remove Belt from Pulley.



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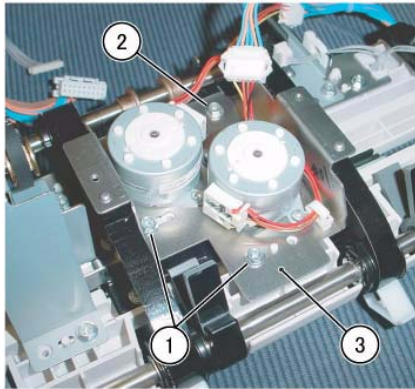
Figure 3 Removing the Eject Shaft

8. Remove the Front/Rear Tamper Motor Assembly (Figure 4):  
(1)Remove Self-tapping Screws (2).



(2)Remove Screw.

(3)Remove Front/Rear Tamper Motor Assembly.

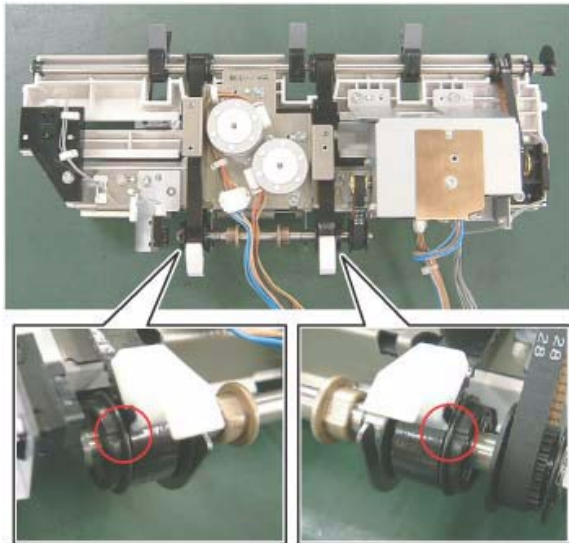


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Figure 4 Removing the Front/Rear Tamper Motor Assembly

### Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys (Figure 5):



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Figure 5 Installing the Eject Belt

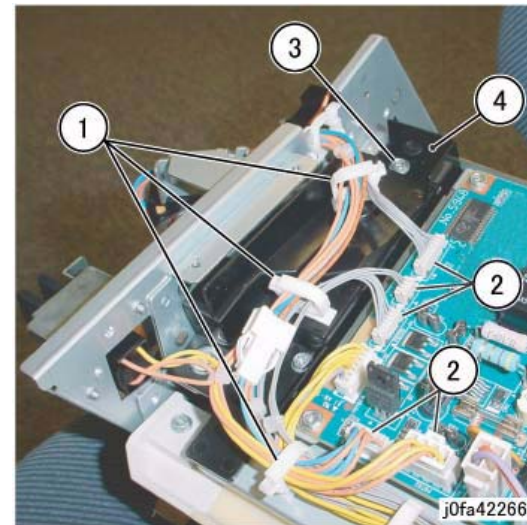
## REP 22.27 (Int) Front Tamper Home Sensor

Parts List on [PL 22.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

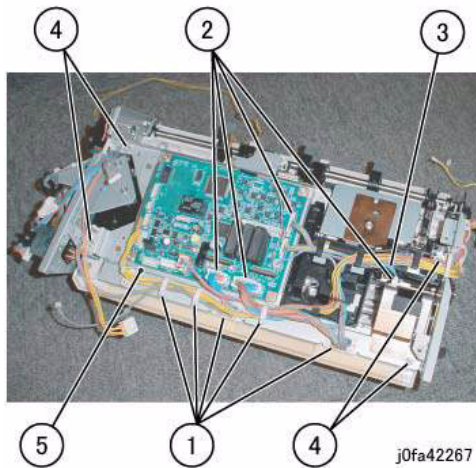
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine ([REP 22.1](#)).
4. Remove the Inner Front Cover ([PL 22.1](#))
5. Remove the Rear Cover ([PL 22.1](#))
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover ([PL 22.2](#))
8. Remove the Connector Bracket ([Figure 1](#)):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.



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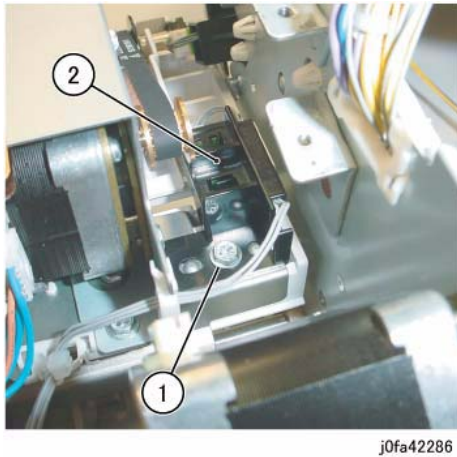
Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate ([Figure 2](#)):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.



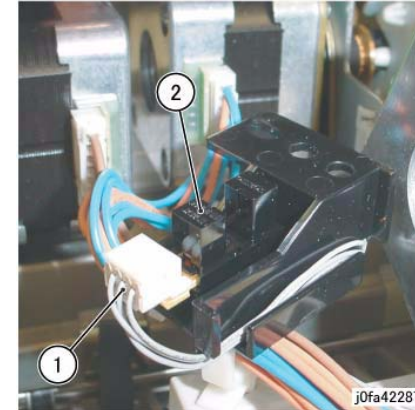
**Figure 2 Removing the Bottom Plate**

10. Remove the Front Tamper Home Sensor Assembly (Figure 3):
  - (1) Remove Screw.
  - (2) Remove Front Tamper Home Sensor Assembly.



**Figure 3 Removing the Front Tamper Home Sensor Assembly**

11. Remove the Front Tamper Home Sensor Assembly (Figure 4):
  - (1) Disconnect Connector.
  - (2) Remove Front Tamper Home Sensor Assembly.



**Figure 4 Removing the Front Tamper Home Sensor**

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.28 (Int) Eject Clamp Home Sensor

### Parts List on PL 22.10

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Turn over the Integrated Office Finisher.
5. Remove the Bottom Cover (PL 22.2)
6. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

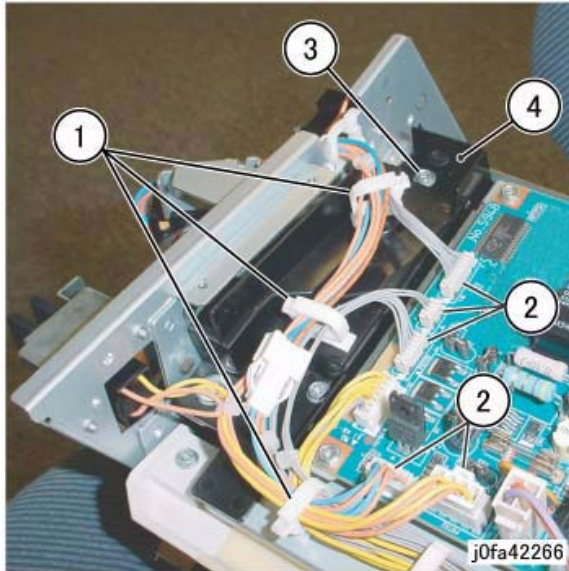


Figure 1 Removing the Connector Bracket

7. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.

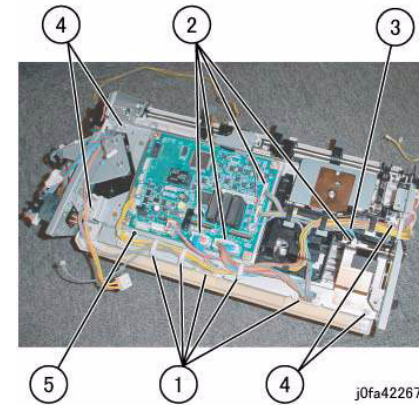


Figure 2 Removing the Bottom Plate

8. Remove the Eject Home Sensor (Figure 3):
  - (1)Release Clamp and remove the wire.
  - (2)Disconnect Connector.
  - (3)Remove Eject Home Sensor from the bracket.

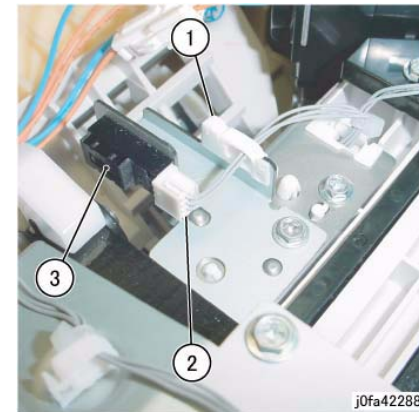


Figure 3 Removing the Eject Home Sensor

#### Replacement

1. Reverse the removal procedure for replacement.



## REP 22.29 (Int) Stack Height Sensor

### Parts List on PL 22.10

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Integrated Office Finisher from the machine (REP 22.1).
4. Remove the Inner Front Cover (PL 22.1)
5. Remove the Rear Cover (PL 22.1)
6. Turn over the Integrated Office Finisher.
7. Remove the Bottom Cover (PL 22.2)
8. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.

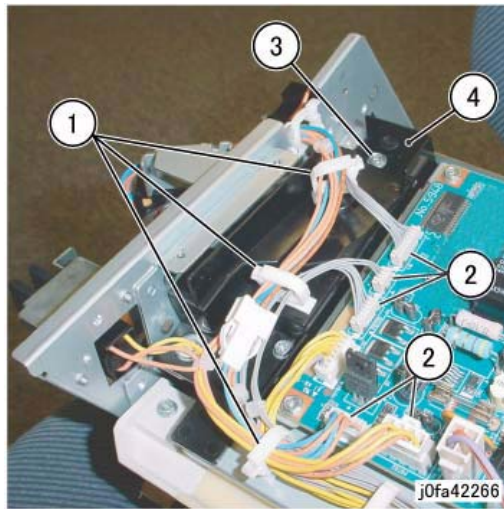


Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.

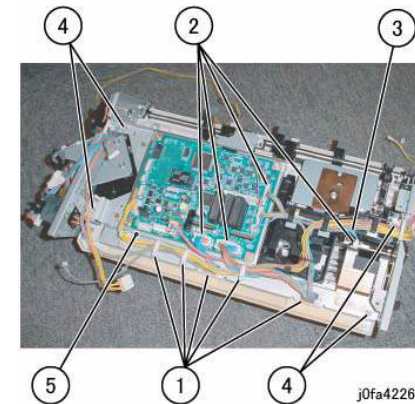


Figure 2 Removing the Bottom Plate

10. Remove the Stacker Tray (Figure 3):
  - (1)Release wires from Clamps (5)
  - (2)Disconnect the Connector
  - (3)Remove Screws (7)
  - (4)Remove the Stacker Tray

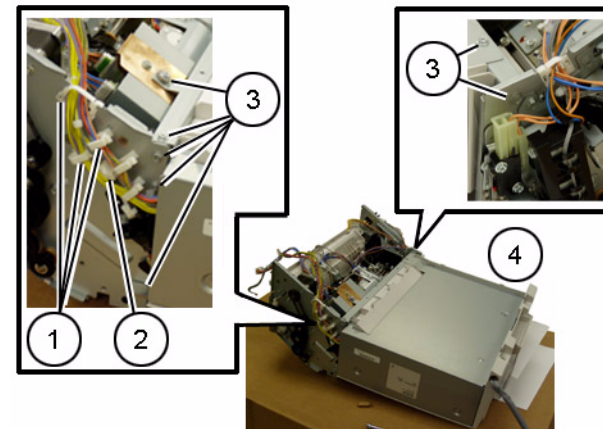
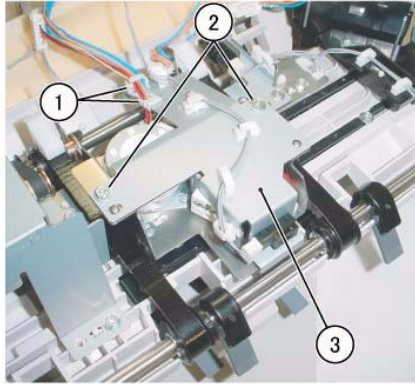


Figure 3 Removing the Stacker Tray

11. Remove the Bracket Assembly (Figure 4):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Screws (2).
  - (3)Remove Bracket Assembly.

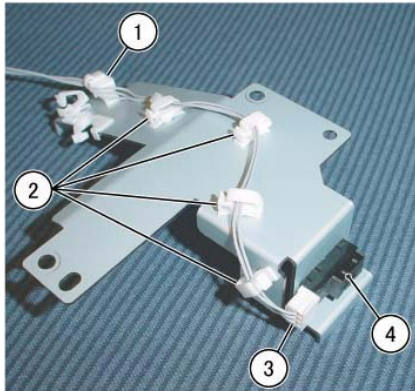


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**Figure 4 Removing the Bracket Assembly**

12. Remove the Stack Height Sensor (Figure 5):

- (1) Remove Clamp.
- (2) Release Clamps (4) and remove the wire.
- (3) Disconnect Connector.
- (4) Remove Stack Height Sensor from the bracket.



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**Figure 5 Removing the Stack Height Sensor**

### Replacement

1. Reverse the removal procedure for replacement.



## REP 23.1 (LX) H-Transport Assembly

Parts List on [PL 23.1](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher Assembly ([REP 23.5](#)).
4. Move the H-Transport Assembly ([Figure 1](#)).

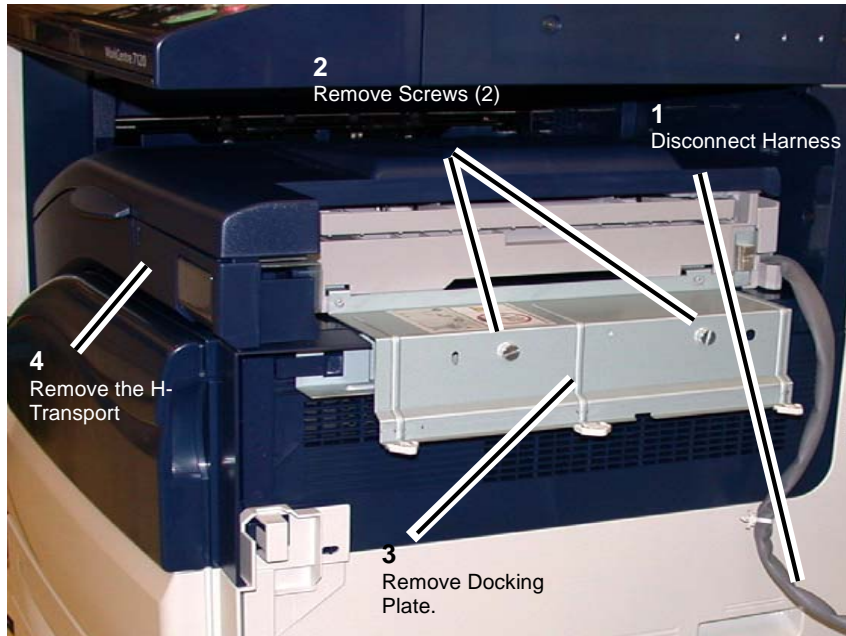


Figure 1 Removing the Docking Bracket

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.2 (LX) Hole Punch Assembly

Parts List on [PL 23.2](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open the H-Transport Top Cover and hold it open.
4. Open the H-Transport Front Cover.
5. Remove the Hole Punch Assembly ([Figure 1](#)).

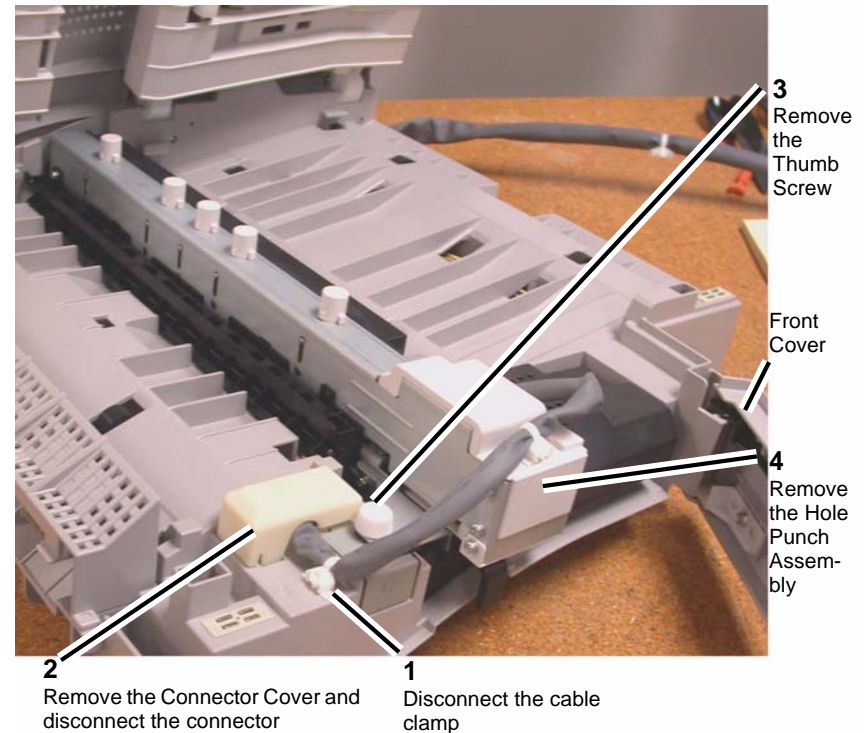


Figure 1 Removing the Hole Punch Assembly

### Replacement

1. Insert the Hole Punch Assembly rear locating pin into the H-Transport frame.
2. Install the Hole Punch Assembly in reverse order of removal.

## REP 23.3 (LX) H-Transport Belt

Parts List on [PL 23.4](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the H-Transport Assembly ([REP 23.1](#)).
4. Remove the screws (2) on the H-Transport Rear Cover and remove the Cover.
5. Loosen the screws (2) on the Tension Bracket ([Figure 1](#)).
6. Remove the Belt.

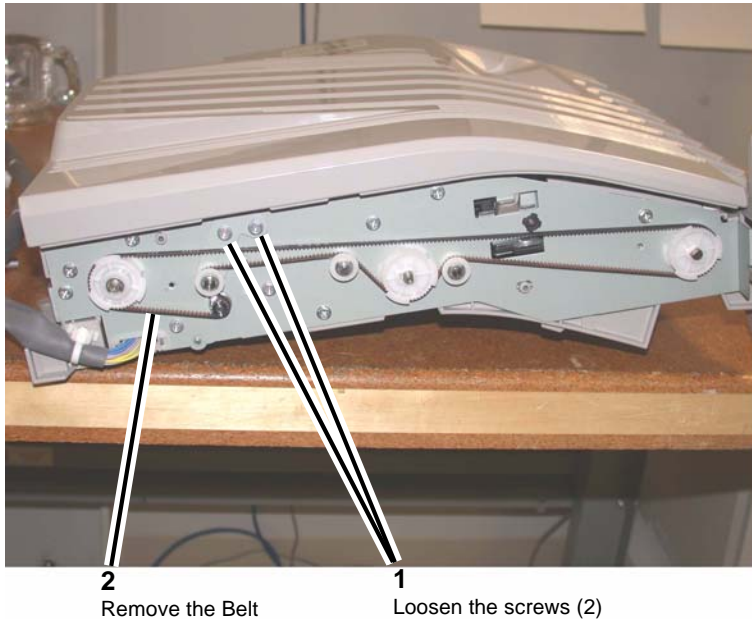


Figure 1 Removing the H-Transport Belt

### Replacement

Install the H-Transport Belt in reverse order of removal.

## REP 23.4 (LX) H-Transport Motor

Parts List on [PL 23.4](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the H-Transport Assembly ([REP 23.1](#)).
4. Remove the H-Transport Rear Cover.
5. Place the H-Transport top down on a work surface.
6. Remove the H-Transport motor ([Figure 1](#)).

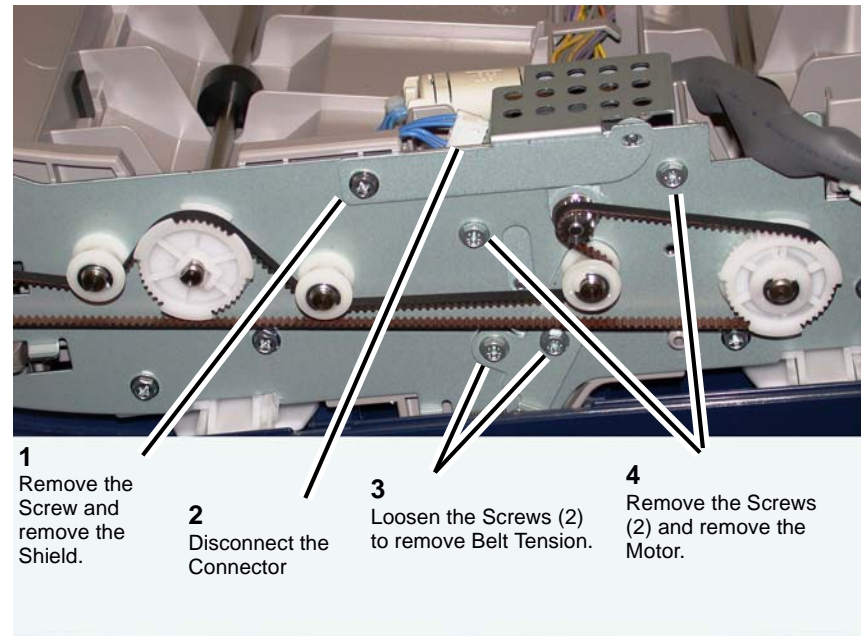


Figure 1 Removing the H-Transport Drive Motor

### Replacement

Replace in reverse order of removal.

## REP 23.5 (LX) Finisher Undocking

### Parts List on [PL 23.1](#)

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the Printer power cord.
3. Disconnect the Finisher Power Cord, the H-Transport Connector and the Finisher Connector from the IOT.

#### CAUTION

*The Finisher is unstable when not docked with the Printer. Use care when handling an undocked Finisher so that it does not fall over.*

4. Rotate the Feet (2) to free the Finisher. ([Figure 1](#))

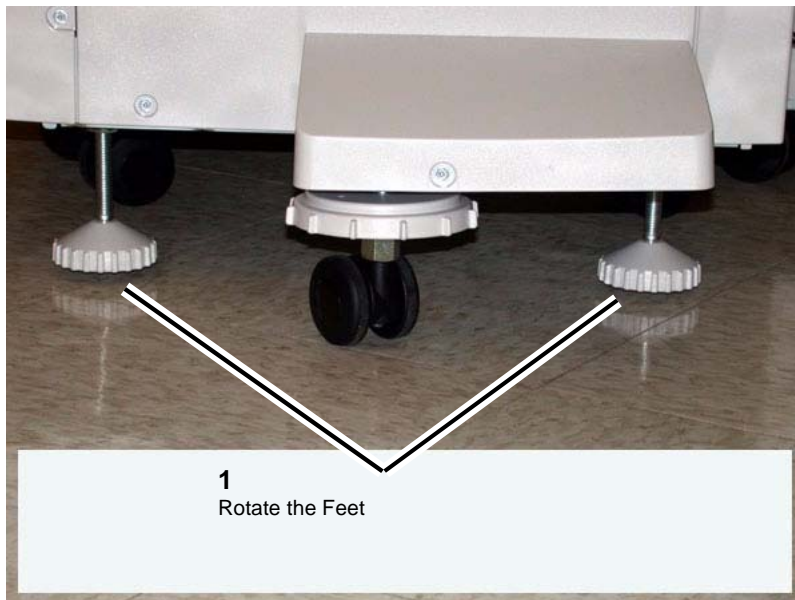


Figure 1 Finisher Feet

5. Open the Front Door of the Finisher.
6. Release the Screw that secures the Docking Plate and detach the Finisher.
  - (1) Remove the Screw.
  - (2) Pull the Docking Plate Lever towards you and detach the Finisher. ([Figure 2](#))

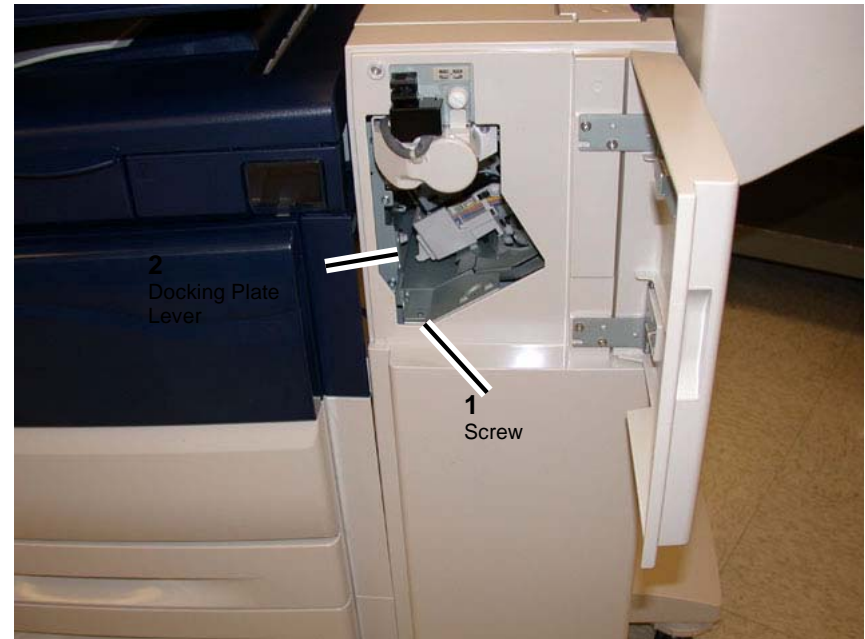


Figure 2 Finisher Lever

#### Replacement

1. Align the Printer Docking Bracket with the cut outs in the Finisher Docking Bracket.
2. Mate the Printer and the Finisher until it latches.
3. Check that the Finisher is firmly latched to the Printer.
4. Perform the remainder of the replacement procedure in reverse order of removal.

## REP 23.6 (LX) Front Cover Assembly

Parts List on [PL 23.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).

### CAUTION

*Do not drop the Booklet Maker Thumb screw into the Finisher.*

4. Remove the Booklet Maker and set aside ([REP 23.31](#)).
5. Open the Finisher upper Front Door.
6. Remove the screws (5).
7. Remove the Front Cover Assembly.

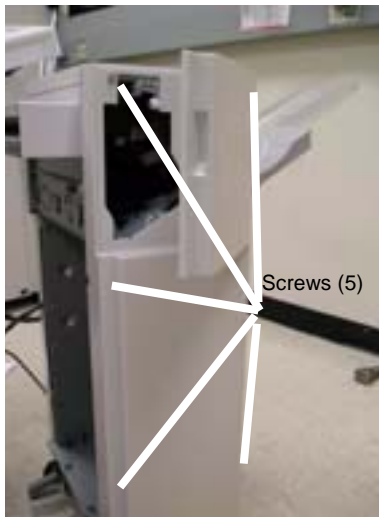


Figure 1 Front Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.7 (LX) Rear Upper Cover

Parts List on [PL 23.6](#)

### Removal

1. Switch off the power and disconnect the power cord.
2. Undock the Finisher ([REP 23.5](#)).
3. Remove the Booklet Maker ([REP 23.31](#)).
4. Remove the Rear Upper Cover.
  - (1) Remove the screws (4).
  - (2) Remove the Rear Upper Cover.

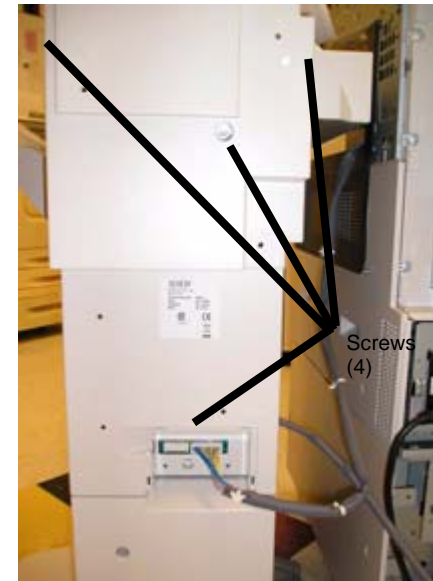


Figure 1 Rear Upper Cover

### Replacement

1. To install, carry out the removal steps in reverse order.



## REP 23.8 (LX) Rear Lower Cover

Parts List on [PL 23.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).
4. Remove the Rear Lower Cover.
  - a. Remove the screws (3).
  - b. Remove the Cover.

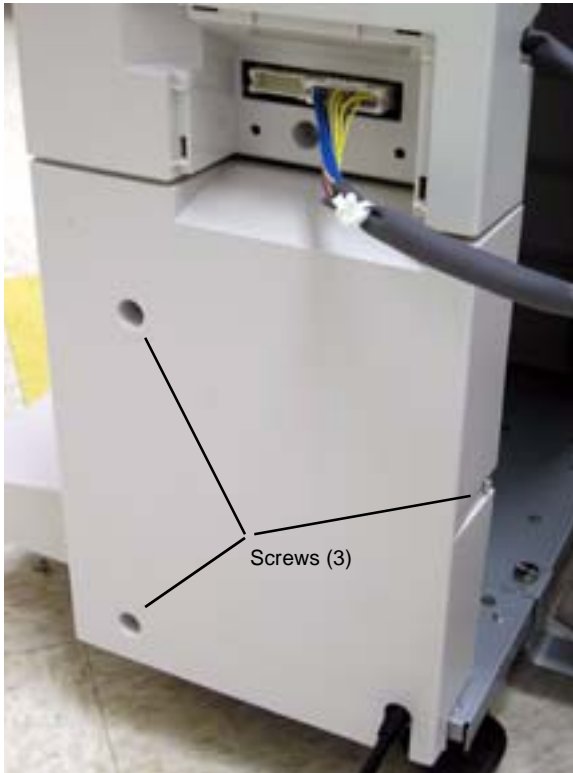


Figure 1 Rear Lower Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.9 (LX) Eject Cover

Parts List on [PL 23.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Eject Cover ([Figure 1](#)).
  - a. Unlatch the Eject Cover, and move it to the left.
  - b. Remove the Retaining Screw (1).
  - c. Push the Latch through the hole in the Cover.
  - d. Remove the Cover by moving it to the left.

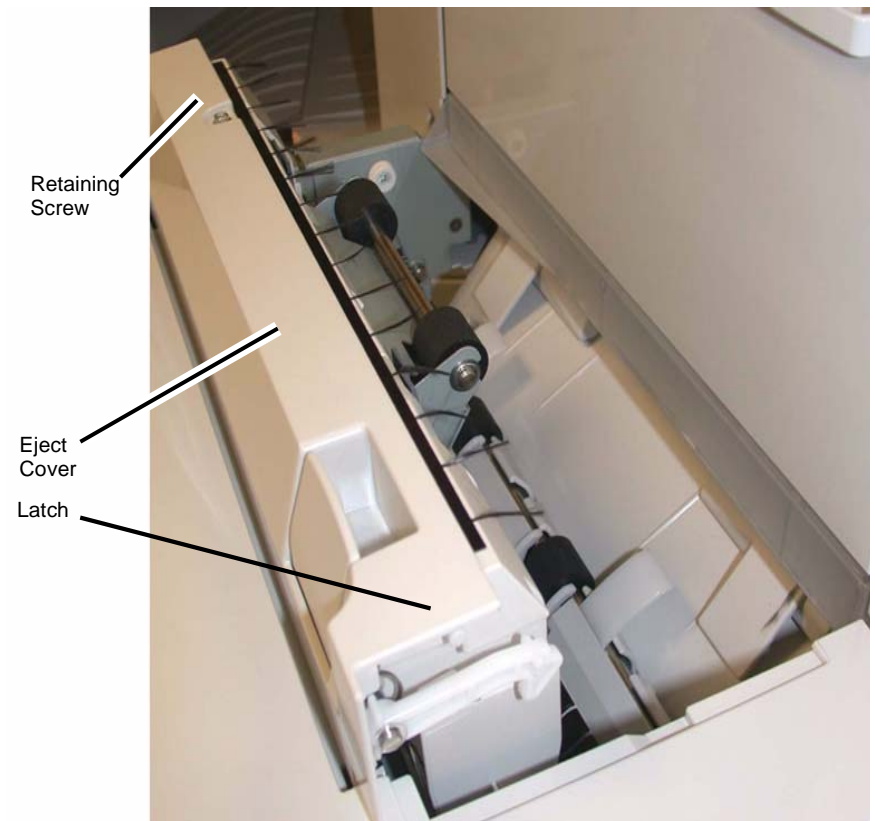
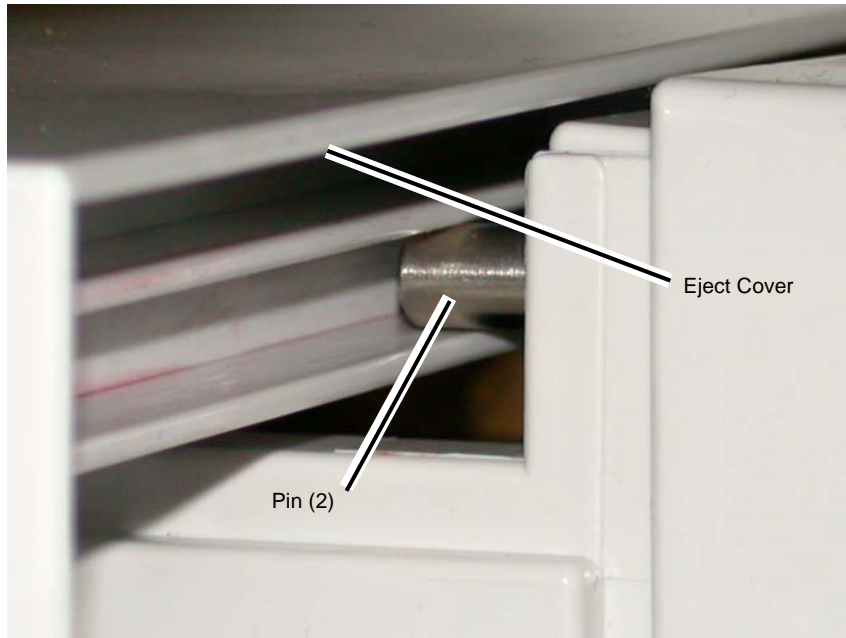


Figure 1 Removing the Eject Cover

## Replacement

1. Align the Eject Cover with the Pins (2) on both sides, and slide it to the right (Figure 2).

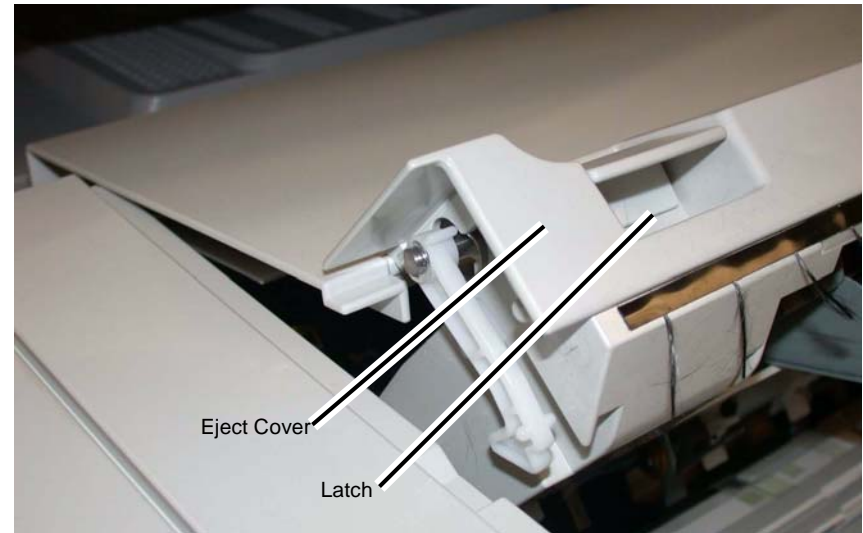
**NOTE:** The left side of the Cover is now captured by the Pins and cannot be lifted up.



**Figure 2** Aligning the Eject Cover

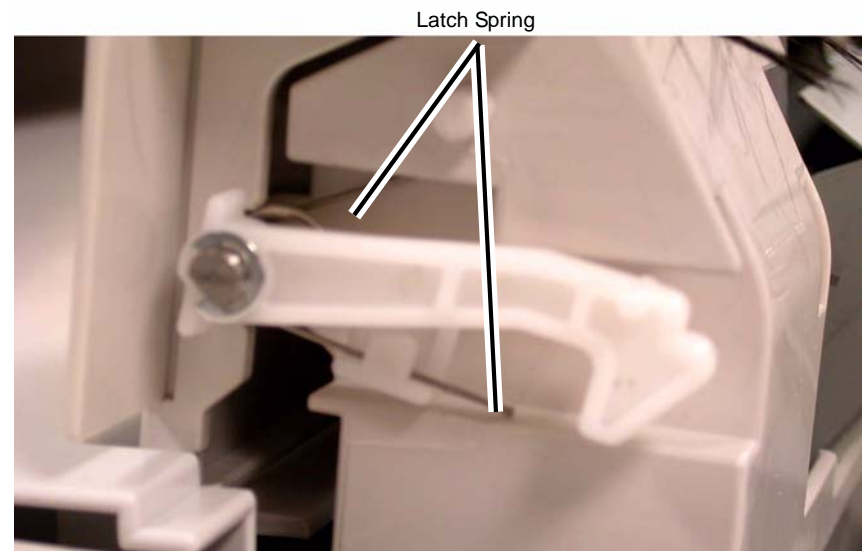
2. Position the Eject Cover so that the Latch is inserted in the hole (Figure 3).

**NOTE:** The Latch must be outside the hole.



**Figure 3** Inserting the Latch through the hole in the Cover

3. Place the Latch Spring in the position shown (Figure 4).



**Figure 4** Positioning the Latch Spring

4. Make sure the Latch Hook and Latch Pin are positioned as shown (Figure 5).

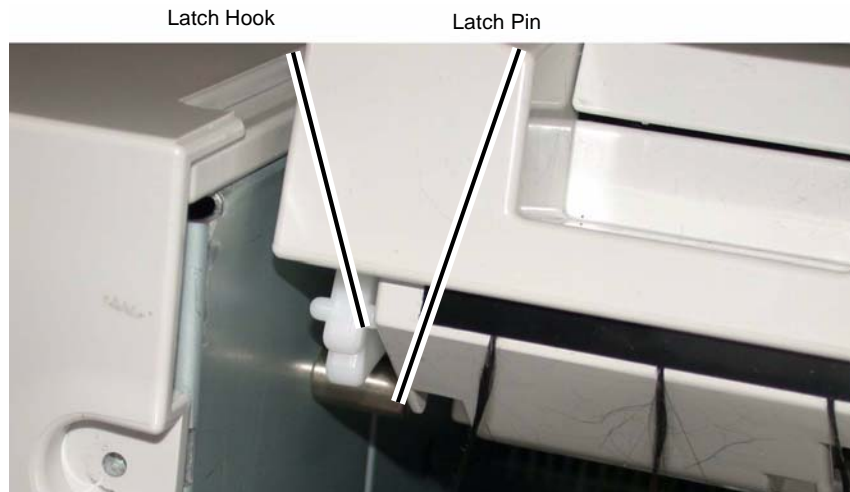


Figure 5 Positioning the Latch Hook and Latch Pin

5. Install the Retaining Screw (1) (Figure 6).

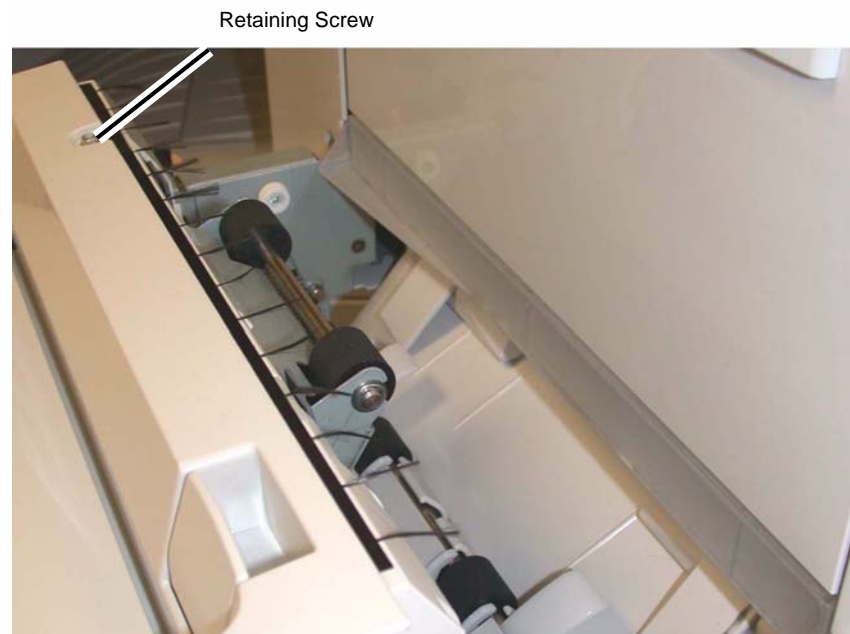


Figure 6 Installing the Retaining Screw

## REP 23.10 (LX) Foot Cover

Parts List on [PL 23.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Screw (1) (Figure 1).
4. Remove the Foot Cover.

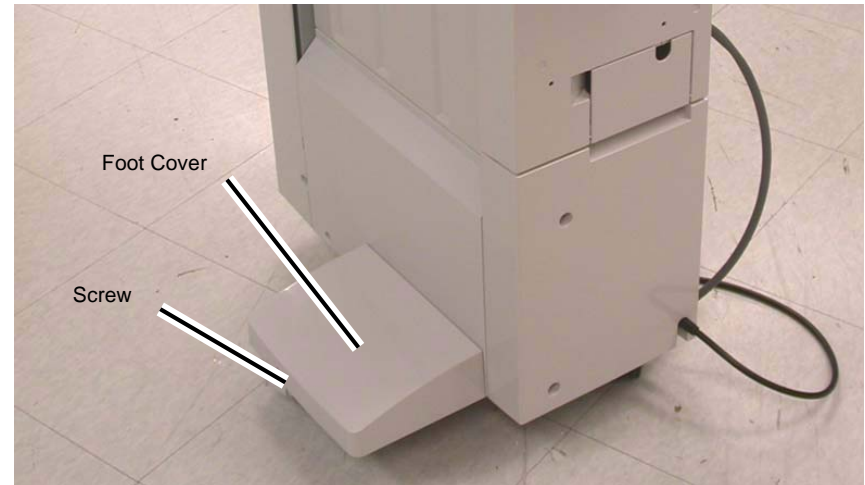


Figure 1 Removing the Foot Cover

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.11 (LX) Stacker Lower Cover

Parts List on [PL 23.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Foot Cover ([REP 23.10](#)).
4. Remove the Screws (2) ([Figure 1](#)).
5. Remove the Stacker Lower Cover.

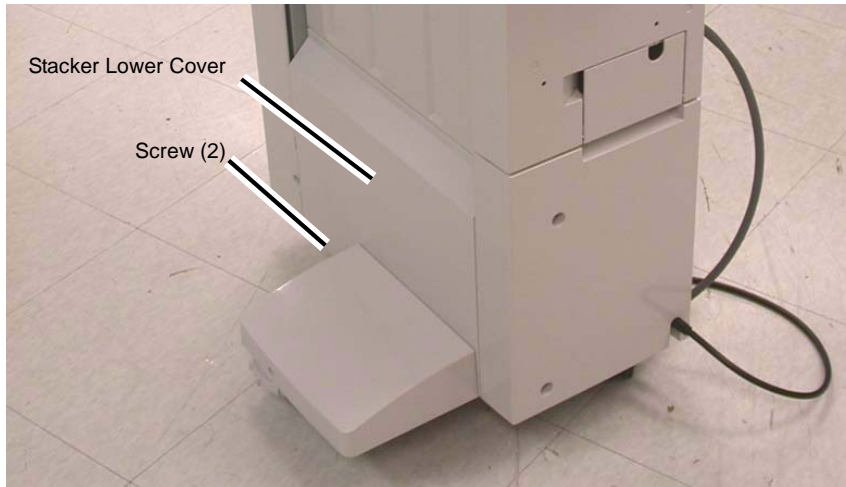


Figure 1 Removing the Stacker Lower Cover

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.12 (LX) Stacker Upper Cover

Parts List on [PL 23.7](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Stacker Tray ([REP 23.20](#)).
4. Remove the Stacker Lower Cover ([REP 23.11](#)).
5. Remove the Screws (6) ([Figure 1](#)).
6. Remove the Stacker Upper Cover.

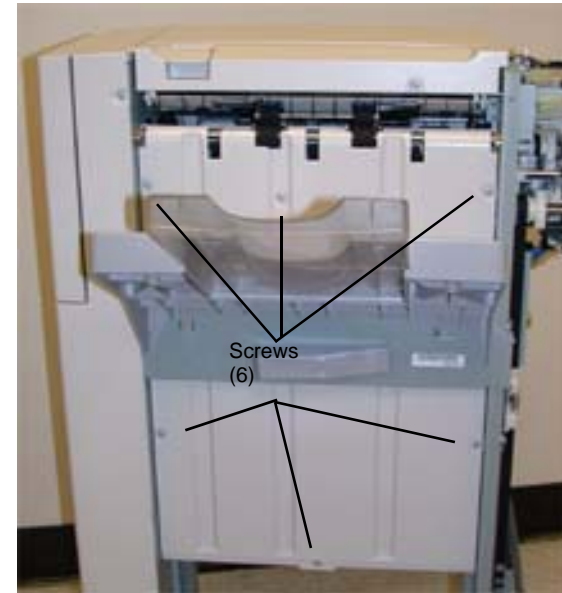


Figure 1 Removing the Stacker Upper Cover

### Replacement

1. Reverse the removal procedure for replacement.



## REP 23.13 (LX) Stack Height Sensors 1 and 2

Parts List on [PL 23.11](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([REP 23.7](#)).
4. Remove the Stack Height Sensor 1 or 2 ([Figure 1](#)).
  - a. Disconnect the connector.
  - b. Remove the Sensor.

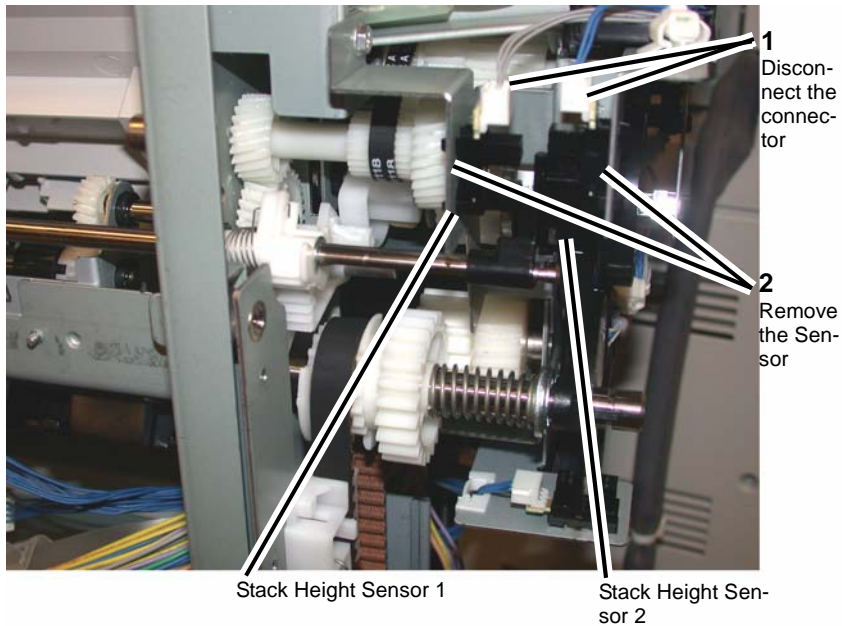


Figure 1 Removing the Stack Height Sensor 1 or 2

## REP 23.14 (LX) Sub Paddle Solenoid Assembly

Parts List on [PL 23.10](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Eject Cover ([REP 23.9](#)).
4. Remove the Sub Paddle Solenoid Assembly ([Figure 1](#)).
  - a. Disconnect the connector.
  - b. Remove the wires from the wire clamps
  - c. Remove the screw (1) from the Sub Paddle Solenoid Assembly.
  - d. Remove the Sub Paddle Solenoid Assembly.

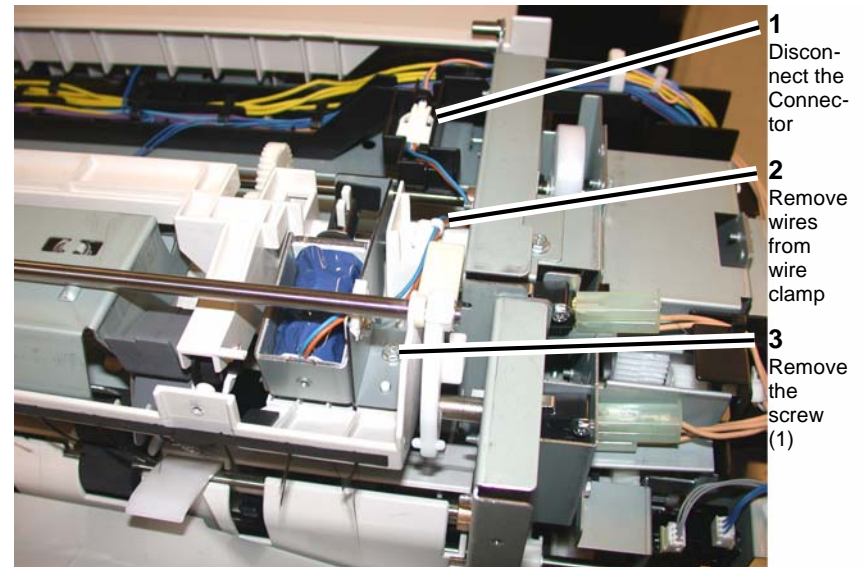


Figure 1 Removing the Sub Paddle Solenoid Assembly

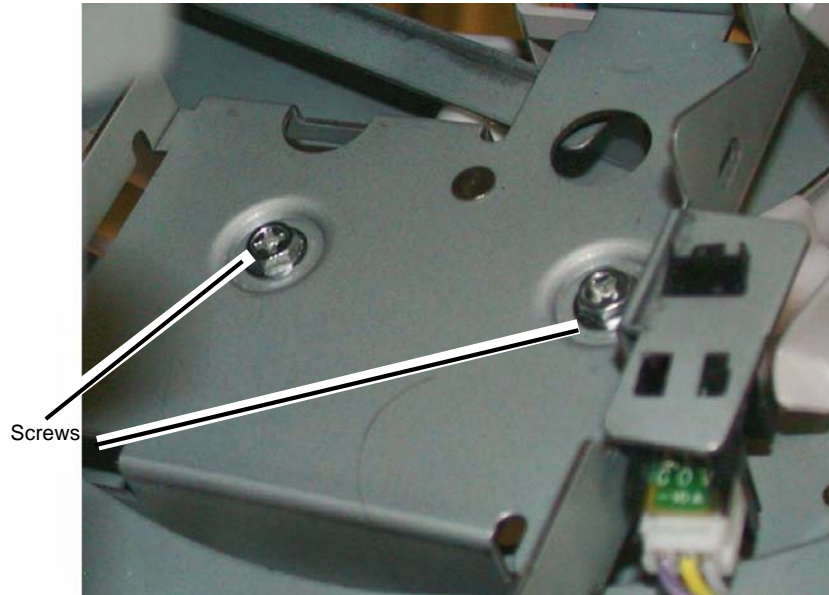
## REP 23.15 (LX) Stapler Motor

### Parts List on [PL 23.8](#)

#### Removal

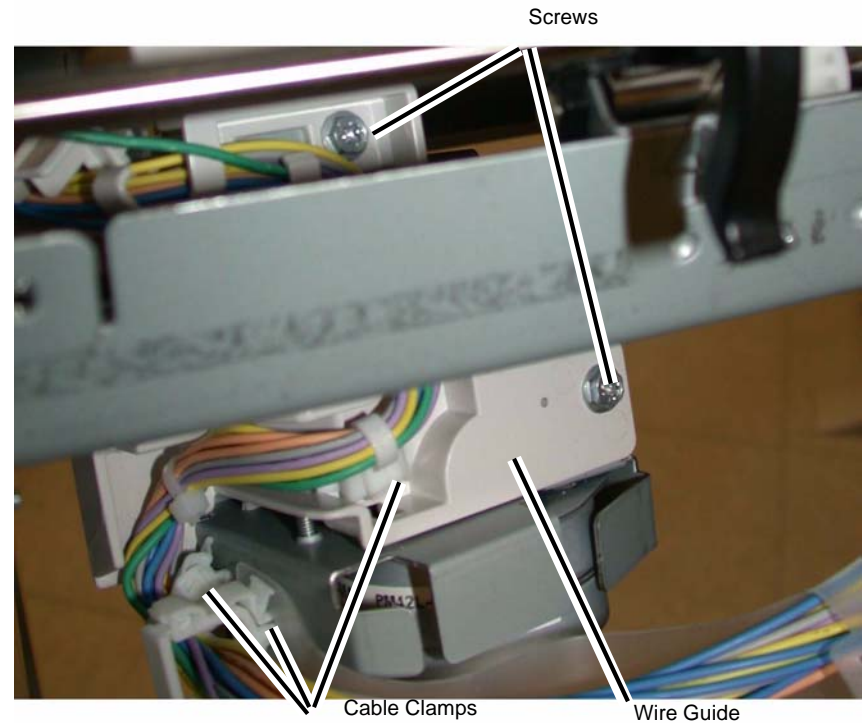
**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Finisher Stapler Assembly ([REP 23.16](#)).
4. Remove the Screws (2) ([Figure 1](#)).



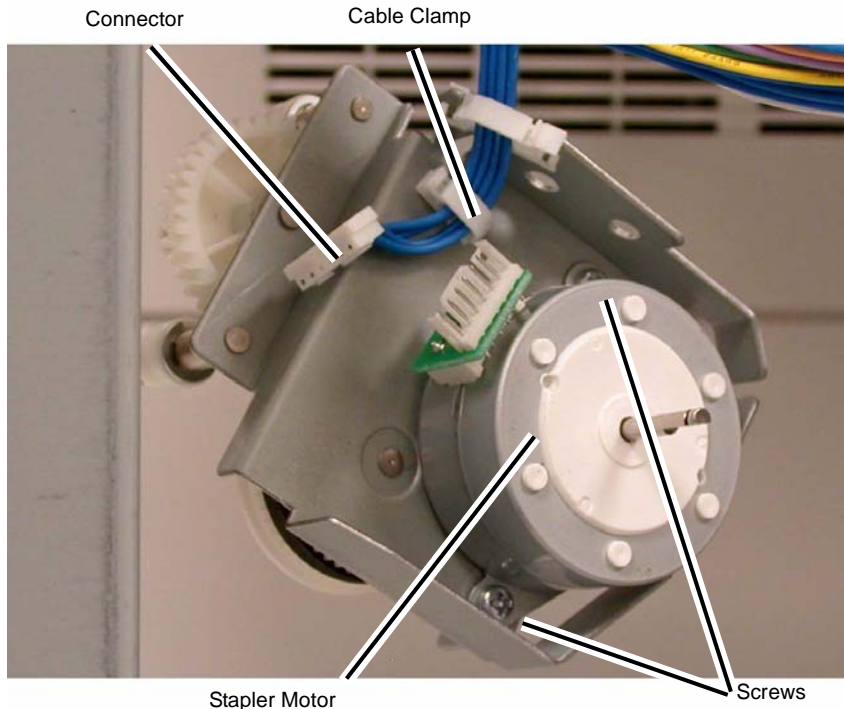
**Figure 1 Removing the Screws**

5. Remove the Wire Guide ([Figure 2](#)).
  - a. Pull out the Cable Clamps (3), and remove the wires from the Wire Guide.
  - b. Remove the Screws (2).
  - c. Remove the Wire Guide.



**Figure 2 Removing the Wire Guide**

6. Remove the Stapler Motor ([Figure 3](#)).
  - a. Remove the wires from the Cable Clamp.
  - b. Disconnect the Connector.
  - c. Remove the Screws (2).
  - d. Remove the Stapler Motor.



**Figure 3 Removing the Stapler Motor**

### Replacement

1. Reverse the removal procedure for replacement.

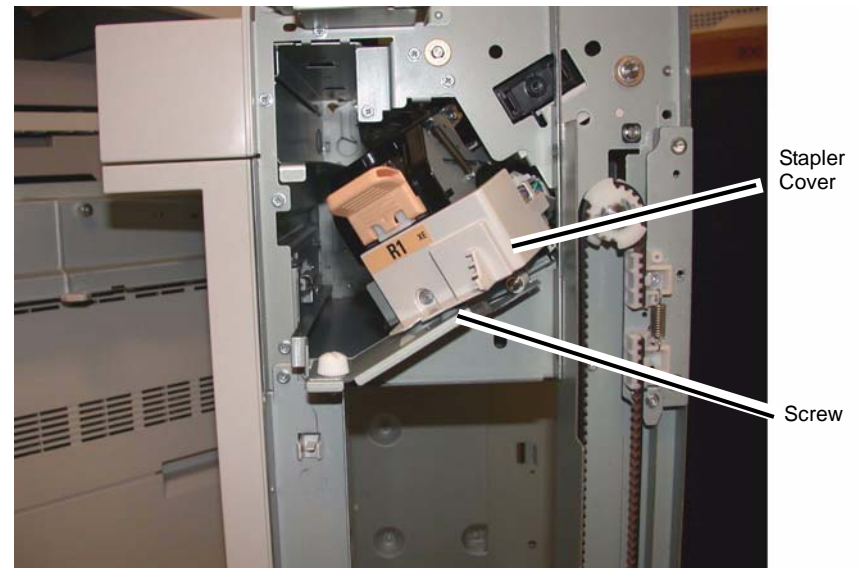
## REP 23.16 (LX) Finisher Stapler Assembly

Parts List on [PL 23.8](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

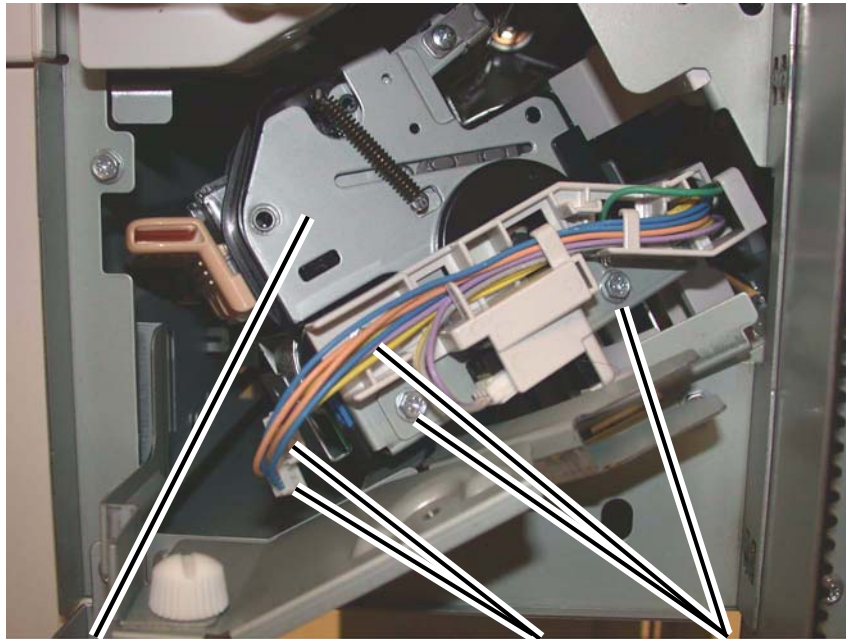
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Creaser Knife Assembly ([REP 23.18](#)).
4. Remove the Front Cover Assembly ([REP 23.6](#)).
5. Remove the Stapler Cover ([Figure 1](#)).
  - a. Remove the Screw.
  - b. Remove the Stapler Cover.



**Figure 1 Removing the Stapler Cover**

6. Remove the Finisher Stapler Assembly ([Figure 2](#)).
  - a. Disconnect the Connectors (2).
  - b. Remove the Screws (3).
  - c. Remove the Finisher Stapler Assembly.





Finisher Stapler Assembly      Connectors (2)      Screws (3)

**Figure 2 Removing the Finisher Stapler Assembly**

### Replacement

Reverse the removal procedure for replacement.

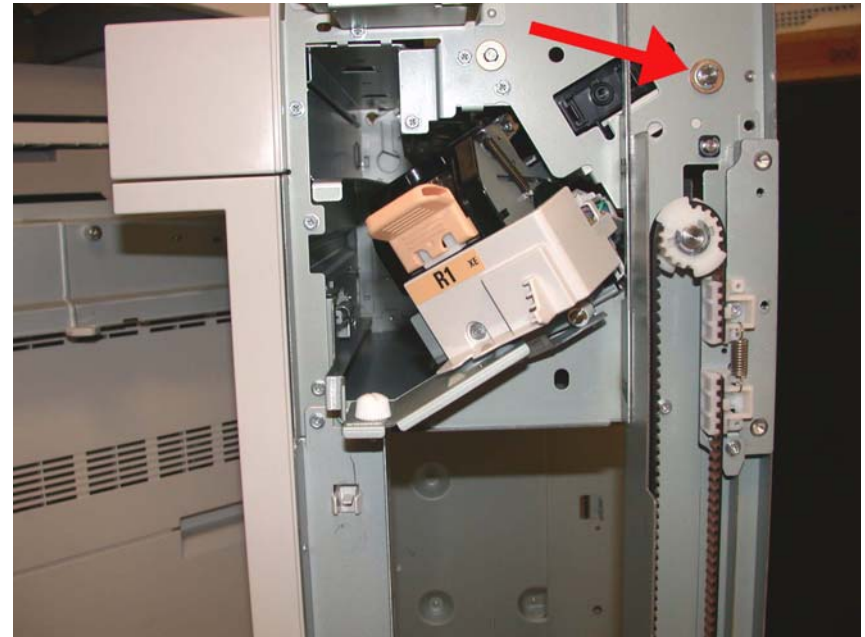
## REP 23.17 (LX) Compiler Tray Assembly

Parts List on [PL 23.12](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

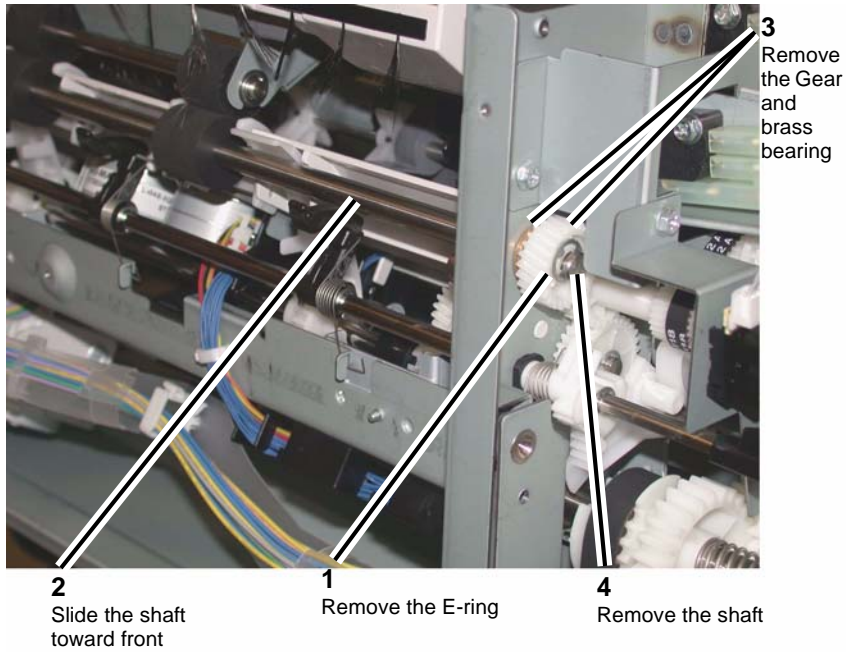
1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).
4. Remove the Front Cover ([REP 23.6](#)).
5. Remove the Rear Upper Cover ([REP 23.7](#)).
6. Remove the Foot Cover ([REP 23.10](#)).
7. Remove the Stacker Lower Cover ([REP 23.11](#)).
8. Remove the Stacker Tray ([REP 23.20](#)).
9. Remove the Stacker Upper Cover ([REP 23.12](#)).
10. Remove the Eject Cover ([REP 23.9](#)).
11. Preparing to remove the Eject Roller Shaft ([Figure 1](#)).



**Figure 1 Removing the E-ring and brass bearing**

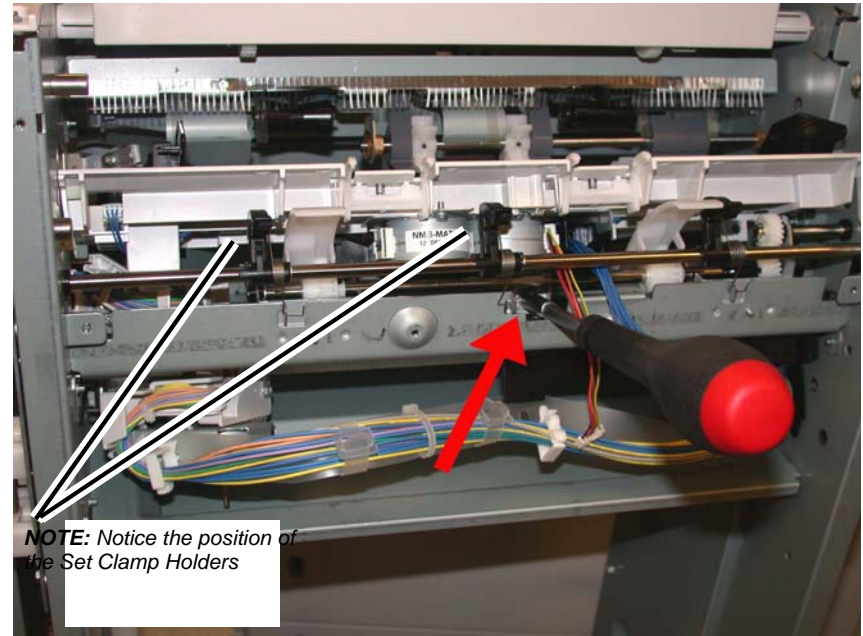
12. Remove the Eject Roll Shaft ([Figure 2](#)).
  - a. Remove the E-ring and brass bearing from the front of the shaft.
  - b. Remove the E-ring,

- c. Slide the Eject Roller shaft toward the front.
- d. Remove the Gear, and brass bushing.
- e. Remove the Eject Roll from the Finisher.



**Figure 2 Removing the Eject Roll Shaft**

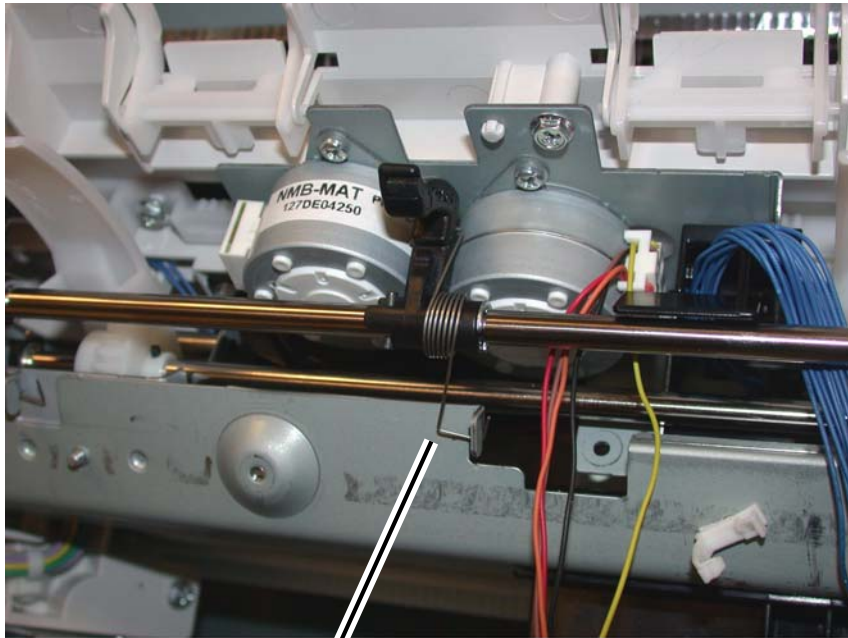
- 13. Remove the Compiler Tray screw (Figure 3).



**Figure 3 Removing the Compiler Tray screw**

**NOTE:** Notice the position and orientation of the Set Clamp Holders.

- 14. Disconnect the springs from the Set Clamp Holders (3) (Figure 4).



Disconnect spring from the Holders (3)

**Figure 4 Disconnecting the Set Clamp Holder Springs**

15. Remove the front E-ring and the bushing from the Set Clamp Shaft Assembly (Figure 5).

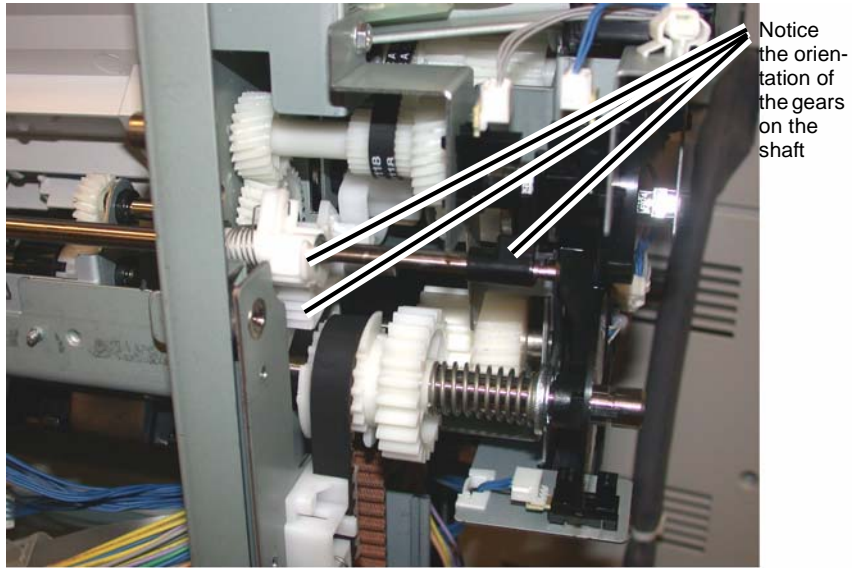


**Figure 5 Removing the front E-ring from the Set Clamp Shaft**

**NOTE:** Notice the position and orientation of the Set Clamp Shaft gear and the cam gear that it engages. When installing the Set Clamp Shaft these gears must engage in the same manner (Figure 6).

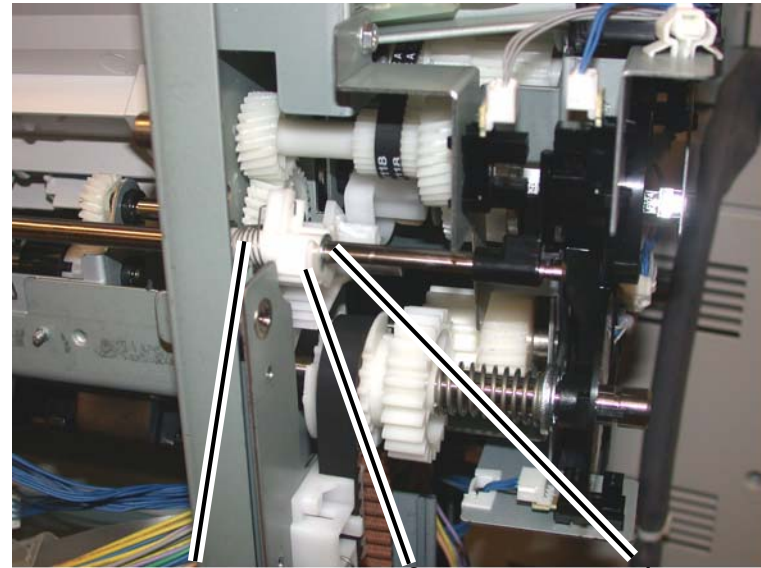
16. Remove the rear E-ring from the Set Clamp Shaft (Figure 7).





Notice the orientation of the gears on the shaft

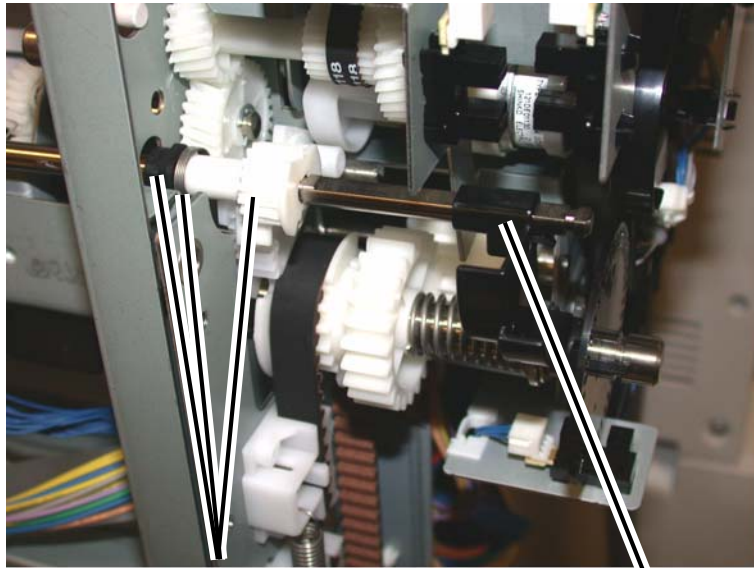
**Figure 6 Set Clamp Shaft gear orientation**



3 Disconnect the Spring from the Gear  
 2 Slide the Gear away from the frame  
 1 Remove the E-ring from the frame

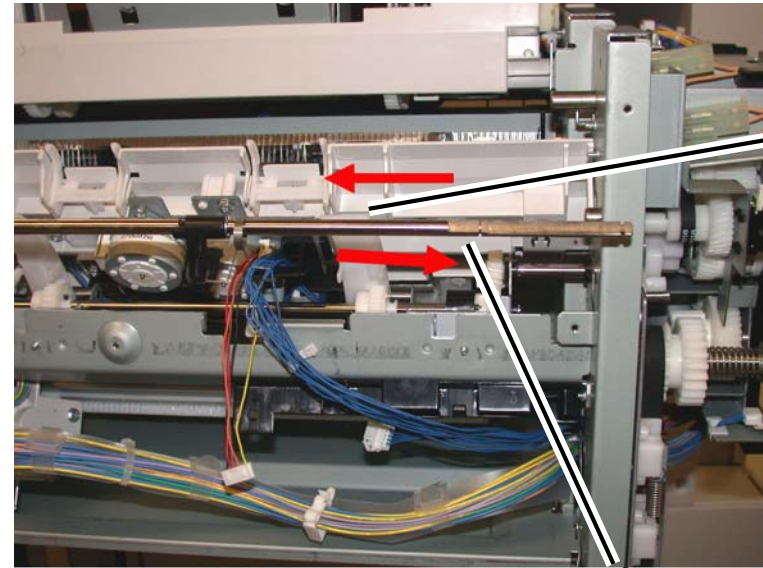
**Figure 7 Preparing to remove the Set Clamp Shaft**

17. Slide the Gear, Spring and the Bushing away from the frame (Figure 8).



**2** Slide the Gear, Spring and Bushing toward the end of the Shaft  
**1** Unlock and remove the Flag

**Figure 8 Preparing to remove the Set Clamp Shaft**



**1** Slide the Shaft toward the front

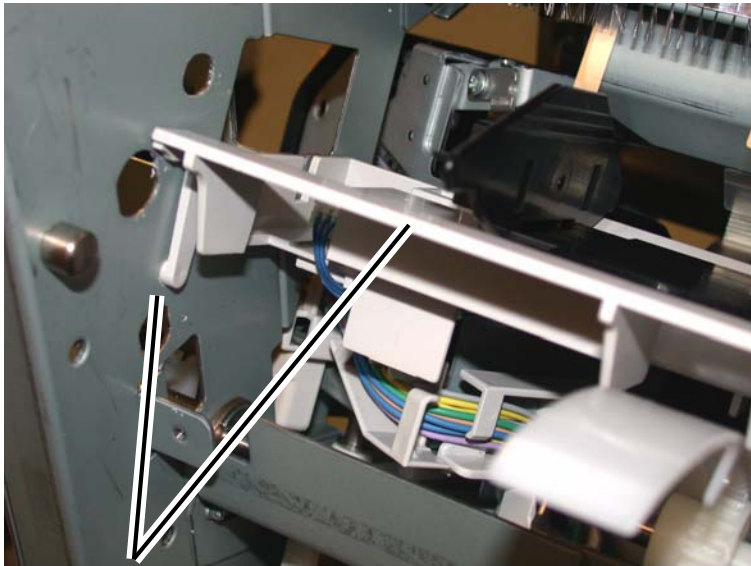
**2** Slide the Shaft toward the rear and remove

**Figure 9 Removing the Set Clamp Shaft**

18. Slide the Set Clamp Shaft to the front to clear the rear frame then slide the Shaft to the rear and remove it from the Finisher (Figure 9).

19. Remove the Compiler Tray Assembly (Figure 10).





Remove the Compiler Tray Assembly

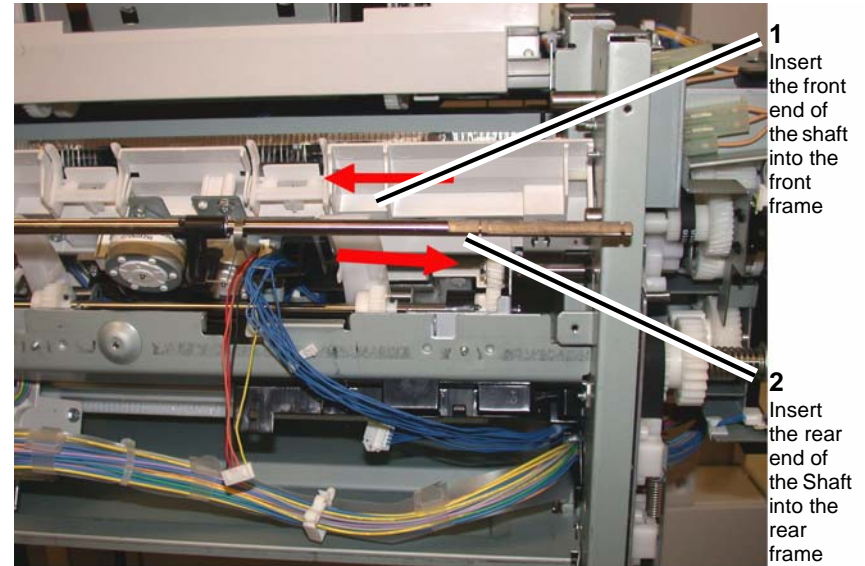
**Figure 10 Remove the Compiler Tray Assembly**

20. Usually this level of Compiler Tray Assembly removal is for the purpose of removing the Front or Rear Tamper Motors, or the Front or Rear Tamper Home Sensors or the Compiler Tray No Paper Sensor.

However if the Compiler Tray Assembly must be completely removed from the Finisher, it will be necessary to disconnect all of the wire harness connectors to the Tamper Motors, Tamper Home Sensors and No Paper Sensor and disconnect the wires from all wire harness guides.

### Replacement

1. Route the wire harness through the wire guides and connect the proper connectors to the No Paper Sensor, the Tamper Home Sensors and the Tamper Motors.
2. Place the Compiler Tray Assembly into position.
3. Install the Set Clamp Shaft front end into the front frame (Figure 11).
4. Slide the Shaft toward the front until the rear end of the Shaft can be inserted into the rear frame (Figure 11).

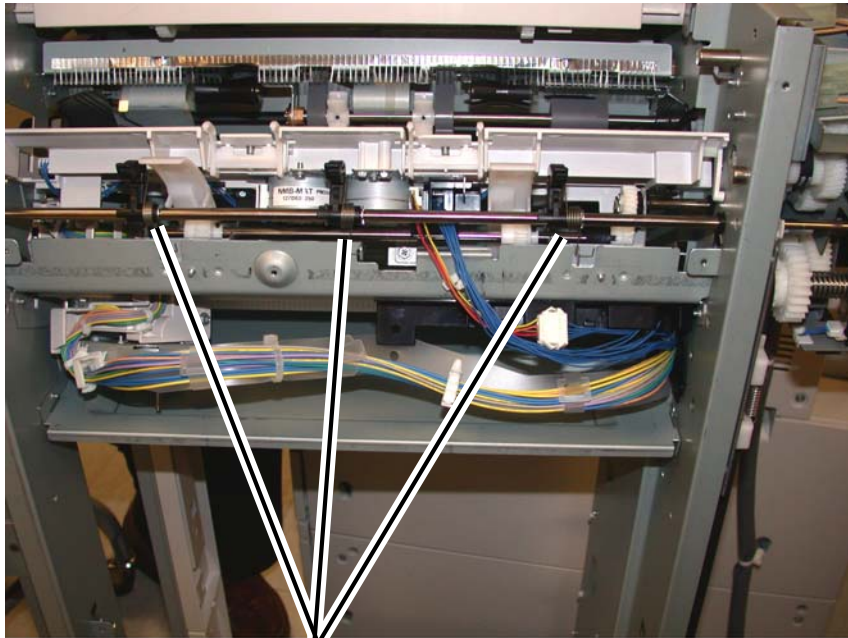


1  
Insert  
the front  
end of  
the shaft  
into the  
front  
frame

2  
Insert  
the rear  
end of  
the Shaft  
into the  
rear  
frame

**Figure 11 Installing the Set Clamp Shaft into position**

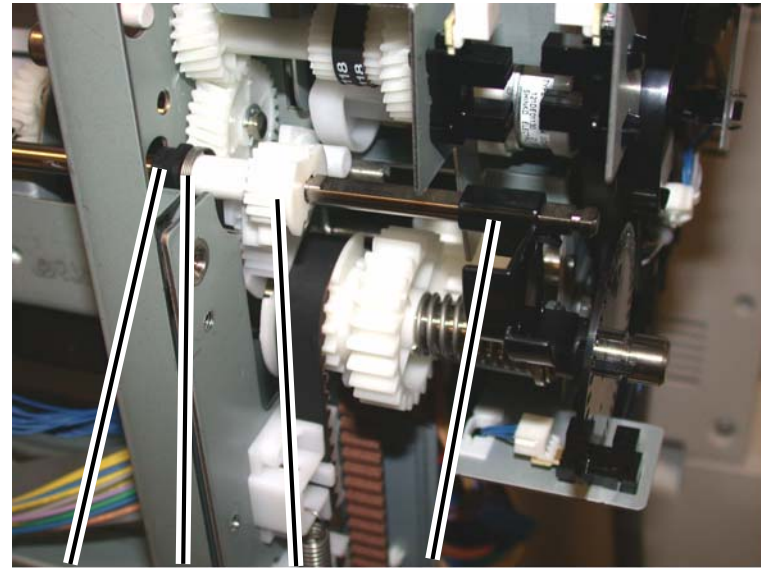
5. Slide the 3 Set Clamp Holders with Springs into the correct location on the Shaft (Figure 12).



Holders and Springs in correct location on the Shaft

**Figure 12 Preparing to install the Holder Springs**

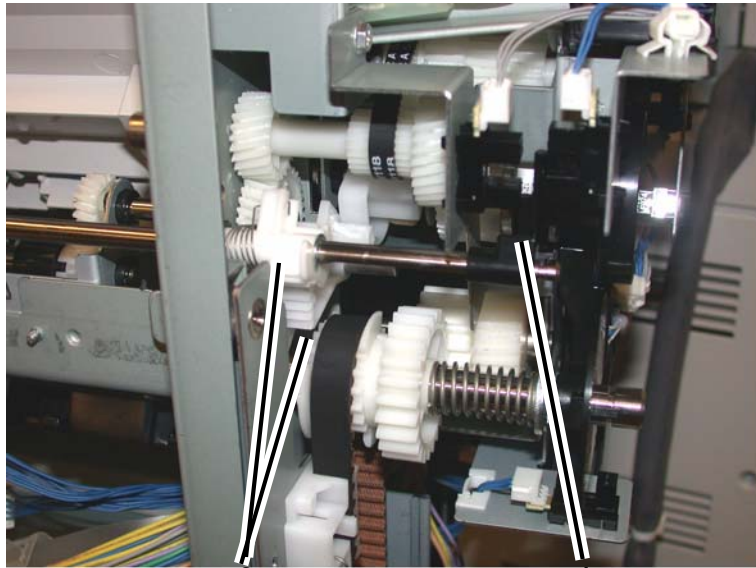
6. Install the Bushing, Spring and Gear onto the rear end of the Set Clamp Shaft (Figure 13).



**1** Bearing    **2** Spring    **3** Gear    **4** Install the Stack Height Sensor Flag onto the rear end of the Shaft as shown

**Figure 13 Installing the Bushing, Spring and Gear**

7. Rotate the Set Clamp Shaft until the Stack Height Sensor Flag is in the correct position then position the 2 gears into the configuration (Figure 14).

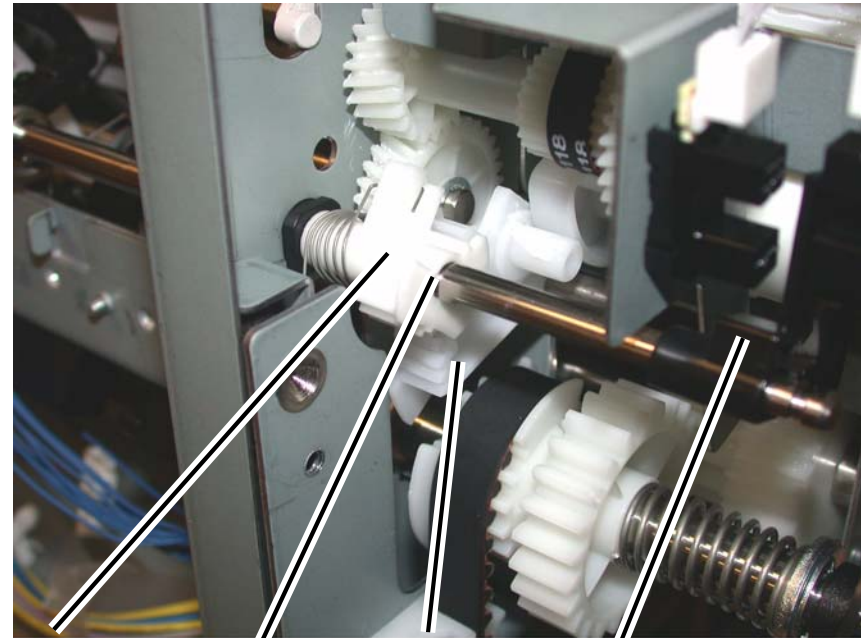


2  
Position the 2 Gears

1  
Rotate shaft until Stack  
Height Flag is in position

**Figure 14 Aligning the Gears and Stack Height Sensor Flag**

8. Attach the Spring to the gear and slide the Gear into position.
9. Ensure that the 2 Gears and Stack Height Sensor Flag is in the position shown (Figure 15) and install the E-ring.



Shaft Gear  
position on Pin-  
ion Gear

Install the E-  
ring

Pinion Gear  
position

Flag

**Figure 15 Orientation of 2 Gears and Stack Height Sensor Flag**

10. Install the Bushing onto the front end of the Set Clamp Shaft and install the E-ring (Figure 16).

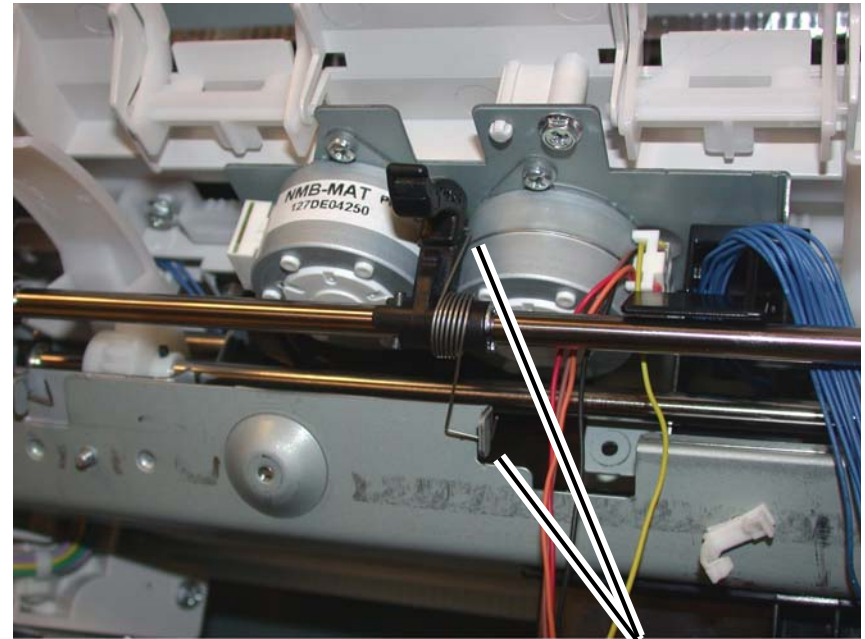




Install the Bushing and the E-ring

**Figure 16 Installing the Bushing and E-ring**

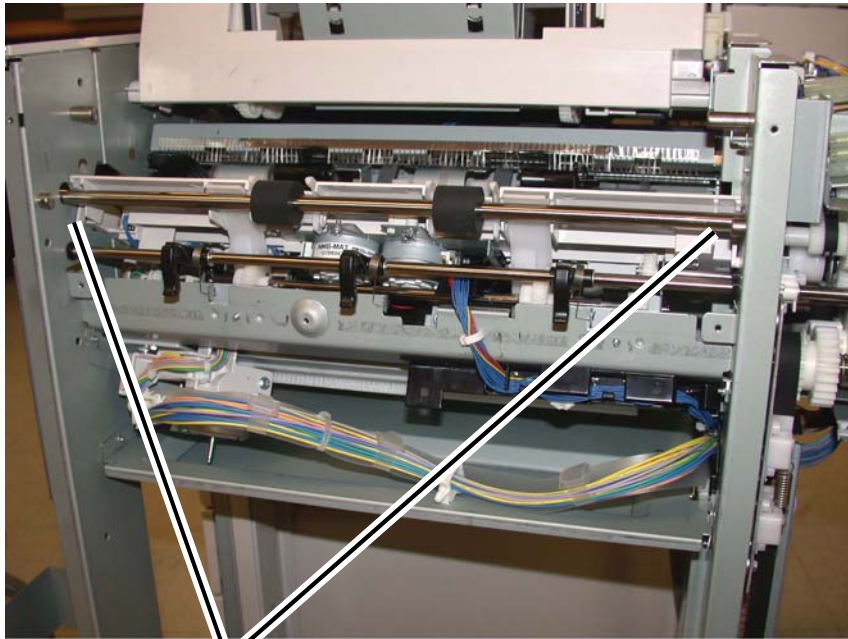
11. Ensure that the Set Clamp Holder Springs are connected (Figure 17).



Spring attaches in 2 spots

**Figure 17 Attaching the Set Clamp Holder Springs**

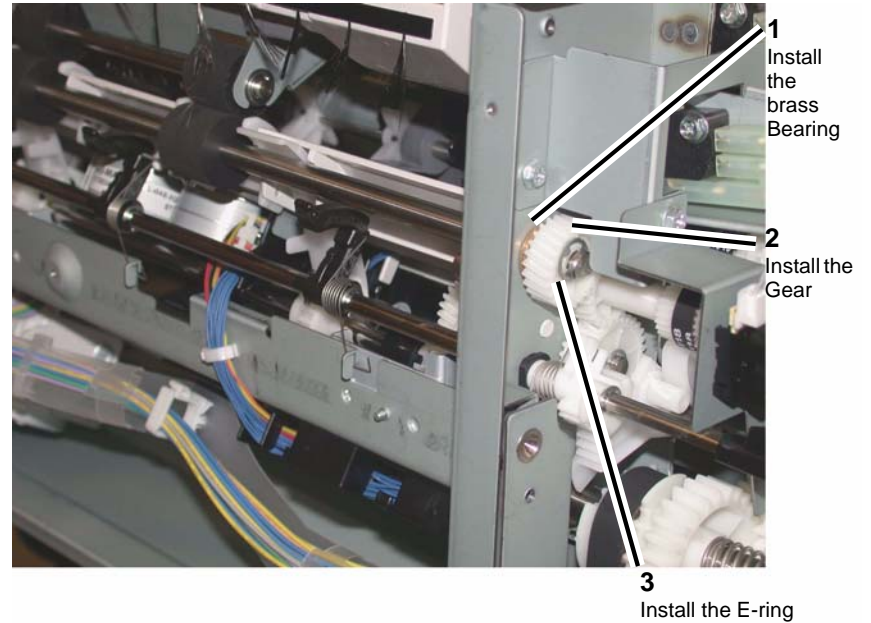
12. Install the Eject Roll Shaft.
  - a. Place the Eject Roll Shaft into position in the front and rear frame (Figure 18).



Eject Roll Shaft in position

**Figure 18 Preparing to install the Eject Roll Shaft**

- b. Install the brass bearing, the Gear and the E-ring onto the rear of the Eject Roll Shaft (Figure 19).



**Figure 19 Installing the Eject Roll Shaft rear parts**

- c. Install the brass bearing and E-ring onto the front of the Eject Roll Shaft (Figure 20).

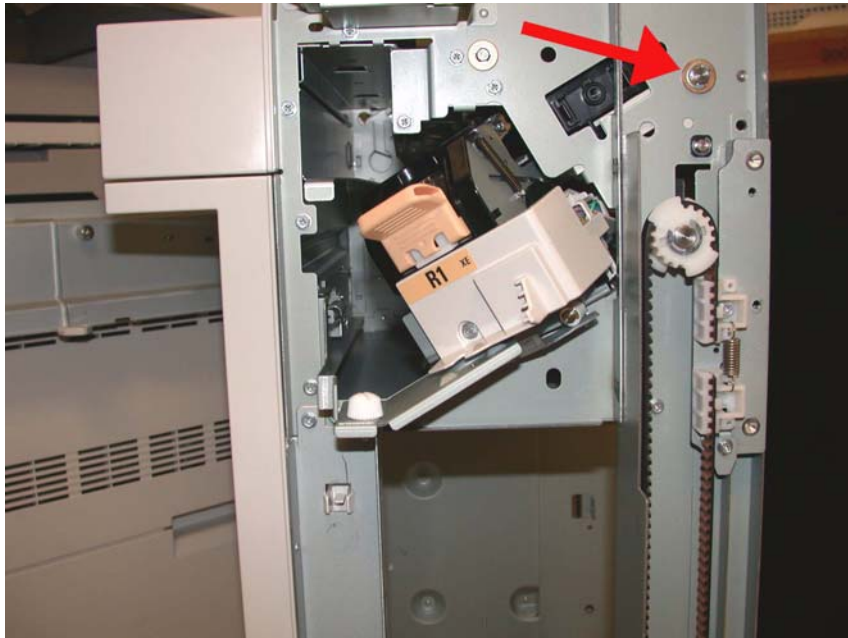


Figure 20 Installing the brass bearing and E-ring

13. Install the Compiler Tray screw (1).
14. Install the Eject Cover (REP 23.9).
15. Install the Stacker Upper Cover (REP 23.12).
16. Install the Stacker Tray (REP 23.20).
17. Install the Stacker Lower Cover (REP 23.11).
18. Install the Foot Cover (REP 23.10).
19. Install the Rear Upper Cover (REP 23.7).
20. Install the Front Cover (REP 23.6).
21. Dock the Finisher to the IOT (REP 23.5).

## REP 23.18 (LX) Crease Assembly

Parts List on [PL 23.14](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Crease Assembly (Figure 1).
  - a. Open the Finisher Front Door.
  - b. Remove the Guard.

**NOTE:** Pull out the Cable Tie to obtain additional slack in the wires.

- c. Disconnect the Cable.
- d. Remove the Thumbscrew.
- e. Pull the Crease Assembly straight out.

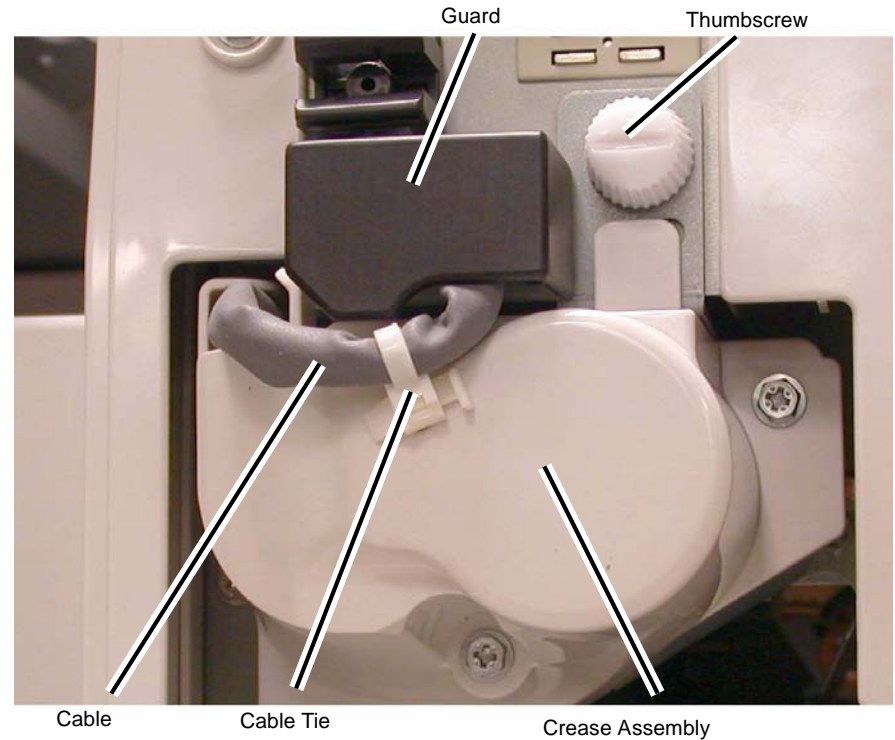


Figure 1 Removing the Crease Assembly

## Replacement

**NOTE:** Make sure the Locating Pins (2) are properly engaged (Figure 2).

1. Reverse the removal procedure for replacement.

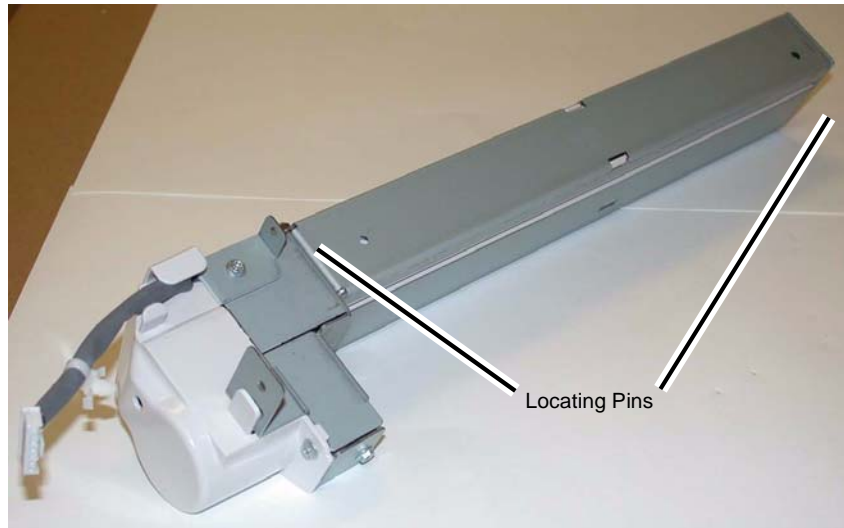


Figure 2 Crease Assembly

## REP 23.19 (LX) Stacker Elevator Motor

Parts List on [PL 23.7](#)

### Removal

#### CAUTION

*Make sure to lower the Carriage Tray to the lowest position before removing the Stacker Elevator Motor Assembly.*

1. If the machine has a Booklet Assembly, remove the Booklet Assembly. ([REP 23.31](#))
2. Undock the Finisher. ([REP 23.5](#))
3. Remove the following parts:
  - Rear Upper Cover ([PL 23.7](#))
4. Move the Carriage Tray to the lowest position. ([Figure 1](#))
  - a. Move the gear in the direction of the arrow.
  - b. Lower the Carriage Tray until it can go no lower.

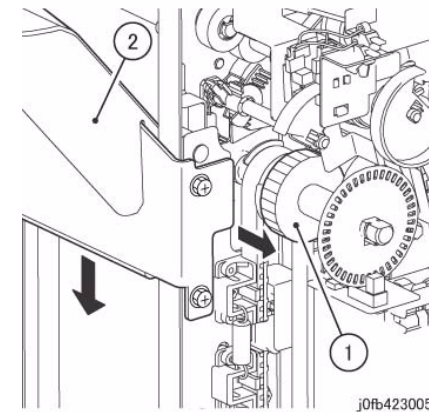
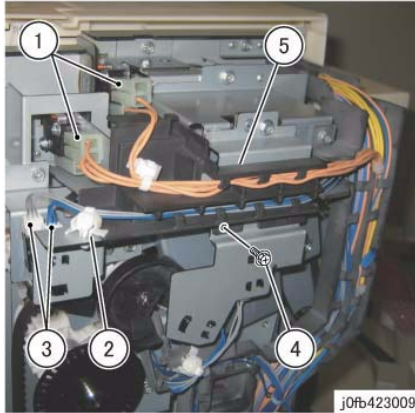


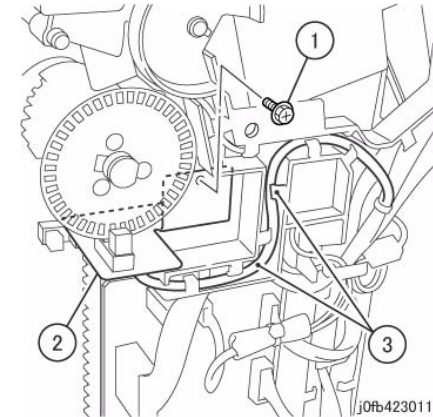
Figure 1 Lower the Tray

5. Remove the Harness Guide. ([Figure 2](#))
  - a. Disconnect the connectors (x2) of the Interlock Switch.
  - b. Remove the clamp.
  - c. Disconnect the connectors (x2).
  - d. Remove the screw.
  - e. Remove the harness guide.





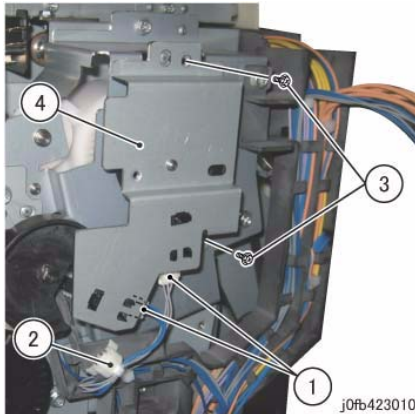
**Figure 2 Disconnect Connectors**



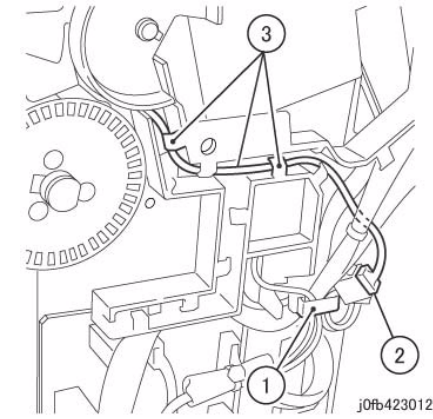
**Figure 4 Sensor**

6. Remove the bracket. (Figure 3)
  - a. Disconnect the connectors (x2).
  - b. Remove the clamp.
  - c. Remove the screws (x2).
  - d. Remove the bracket.

8. Disconnect the Set Clamp Clutch and release the harness from the Harness Guide. (Figure 5)
  - a. Release the clamp.
  - b. Disconnect the connector.
  - c. Release the harness from the Harness Guide.



**Figure 3 Remove the Bracket**

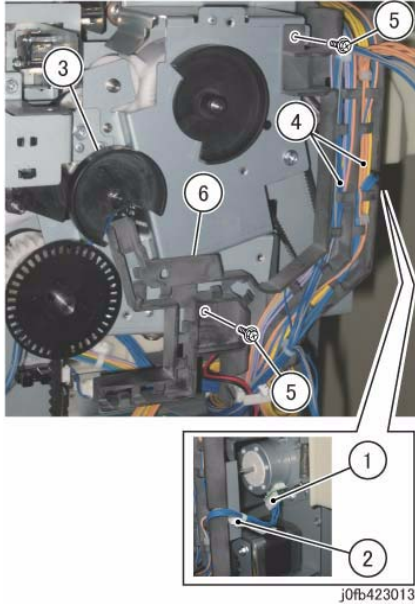


**Figure 5 Set Clamp**

7. Remove the Stacker Encoder Sensor together with its bracket. (Figure 4)
  - a. Remove the screw.
  - b. Remove the Sensor and bracket.
  - c. Release the harness.

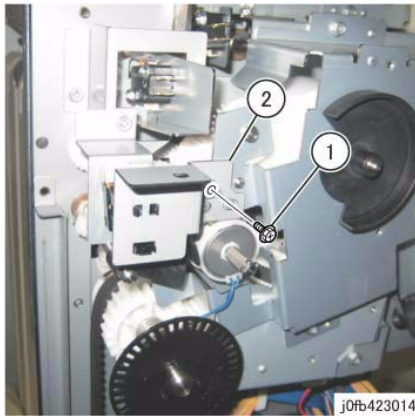
9. Remove the Harness Guide. (Figure 6)
  - a. Disconnect the connector.
  - b. Remove the clamp.
  - c. Remove the Actuator.
  - d. Release the harness from the Harness Guide.
  - e. Remove the screws (x2).
  - f. Remove the harness guide.





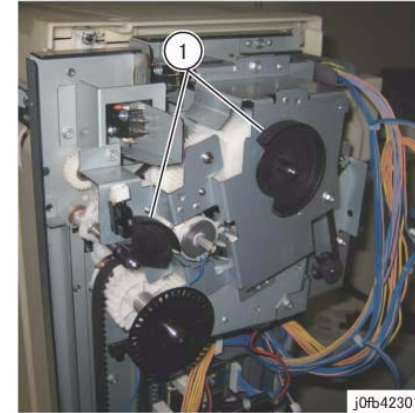
**Figure 6 Harness Guide**

10. Remove the Stacker Height Sensor 2 together with its bracket. (Figure 7)
  - a. Remove the screw.
  - b. Remove the Stacker Height Sensor 2 and bracket.



**Figure 7 Stack Sensor**

11. Remove the Actuators (x2). (Figure 8)
  - a. Remove the Actuators (x2).

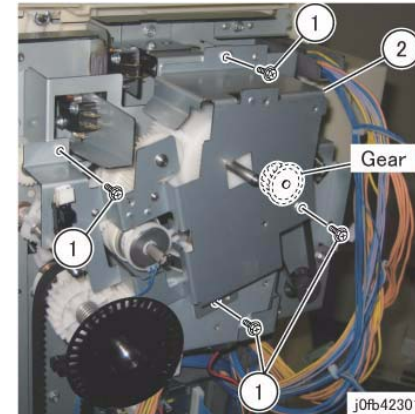


**Figure 8 Actuators**

12. Remove the screws (x4) and remove the bracket. (Figure 9)
 

**NOTE:** When removing the bracket, be careful as the gear at the back of the bracket can easily drop and get lost.

  - a. Remove the screws (x4).
  - b. Remove the bracket.



**Figure 9 Bracket**

13. Remove the Transport Motor Assembly. (Figure 10)
  - a. Remove the spring.
  - b. Disconnect the connector.
  - c. Remove the screws (x3).
  - d. Remove the Transport Motor Assembly.

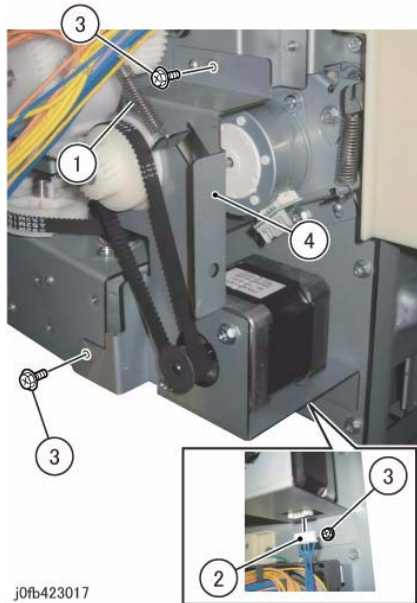


Figure 10 Transport Motor

14. Remove the Stacker Elevator Motor Assembly. (Figure 11)
  - a. Disconnect the connector.
  - b. Remove the screws (x3).
  - c. Remove the Stacker Elevator Motor Assembly.

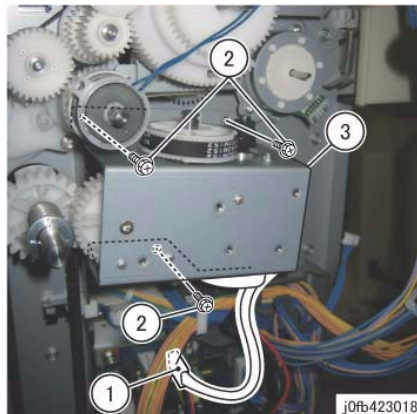


Figure 11 Elevator Motor

15. Remove the belt and the pulley from the Stacker Elevator Motor Assembly. (Figure 12)
  - a. Remove the belt.

- b. Remove the pulley.

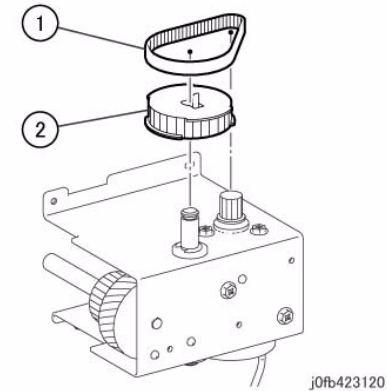


Figure 12 Belt/Pulley

### Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following when performing the installation.

**NOTE:** When installing the bracket, affix the tab of the Set Clamp Clutch to the position shown in the figure. (Figure 13)

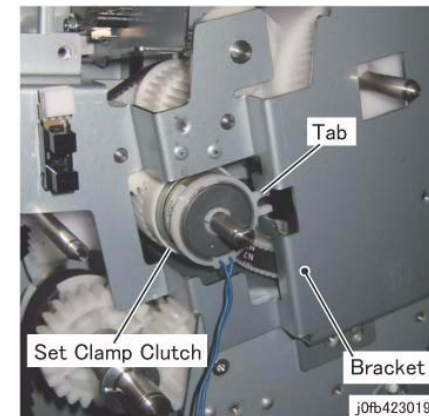


Figure 13 Tab

## REP 23.20 (LX) Stacker Tray

Parts List on [PL 23.7](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the following:
  - a. Booklet Maker Assembly (if installed) ([REP 23.31](#)).
  - b. Front Cover Assembly ([REP 23.6](#)).
  - c. Rear Upper Cover ([REP 23.7](#)).
4. Remove the Stacker Tray ([Figure 1](#)).
  - a. Remove the Screws (4).
  - b. Remove the Stacker Tray.

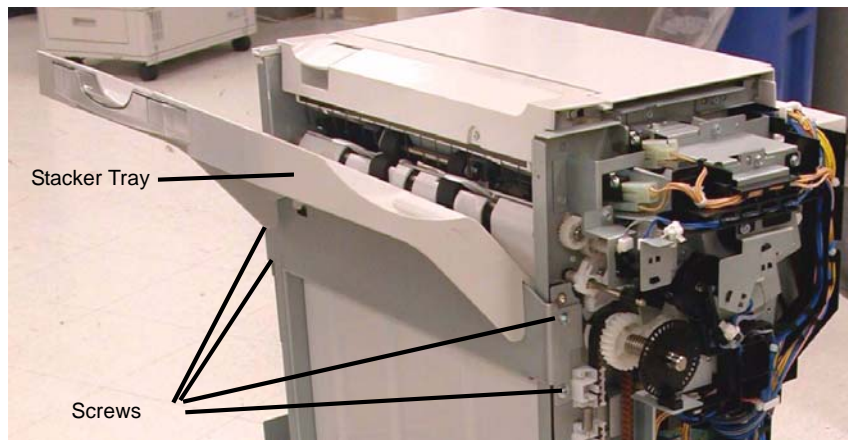


Figure 1 Removing the Stacker Tray

### Replacement

Reverse the removal procedure for replacement.

## REP 23.21 (LX) Eject Belt

Parts List on [PL 23.13](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).
4. Remove the Booklet Maker ([REP 23.31](#)).
5. Remove the Rear upper Cover ([REP 23.7](#)).
6. Remove the Eject Motor Assembly ([REP 23.22](#)).
7. Remove the Eject Motor ([REP 23.25](#)).
8. Remove the Eject Belt.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.22 (LX) Eject Motor Assembly

Parts List on [PL 23.11](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).
4. Remove the Booklet Maker ([REP 23.31](#)).
5. Remove the Rear Upper Cover ([REP 23.7](#)).
6. Preparing to remove the Eject Motor Assembly.
  - a. Disconnect the Eject Motor connector
  - b. Remove the wire harness from the Harness Guide
  - c. Disconnect the wire harness clamps (2)
  - d. Remove the screws (2) from the Harness Guide and move the Harness Guide aside.
  - e. Disconnect the Spring
  - f. Remove the Eject Motor Assembly screws (4)
7. Remove the Eject Motor Assembly.

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.23 (LX) Finisher PWB

Parts List on [PL 23.16](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Upper Cover ([REP 23.7](#)).
4. Remove the Finisher PWB ([Figure 1](#)).
  - a. Disconnect the Connectors (9).
  - b. Remove the Screws (5).
  - c. Remove the Finisher PWB.

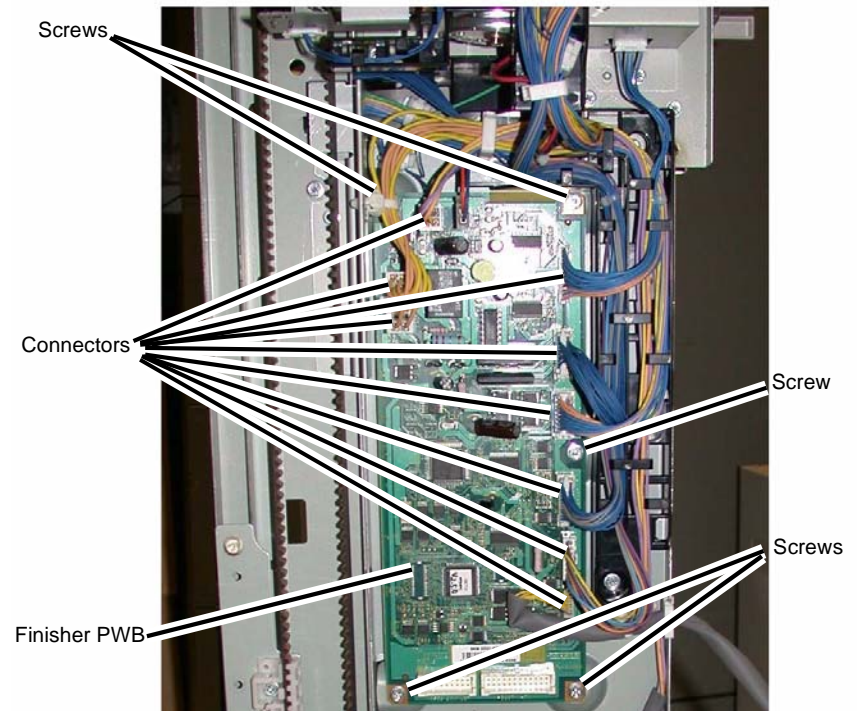


Figure 1 Removing the Finisher PWB

### Replacement

1. Reverse the removal procedure for replacement.



## REP 23.24 (LX) Finisher LVPS

Parts List on [PL 23.16](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Rear Lower Cover ([REP 23.8](#)).
4. Remove the Finisher LVPS ([Figure 1](#)).
  - a. Disconnect the Connectors (2).
  - b. Remove the Screws (4).
  - c. Remove the Finisher LVPS.

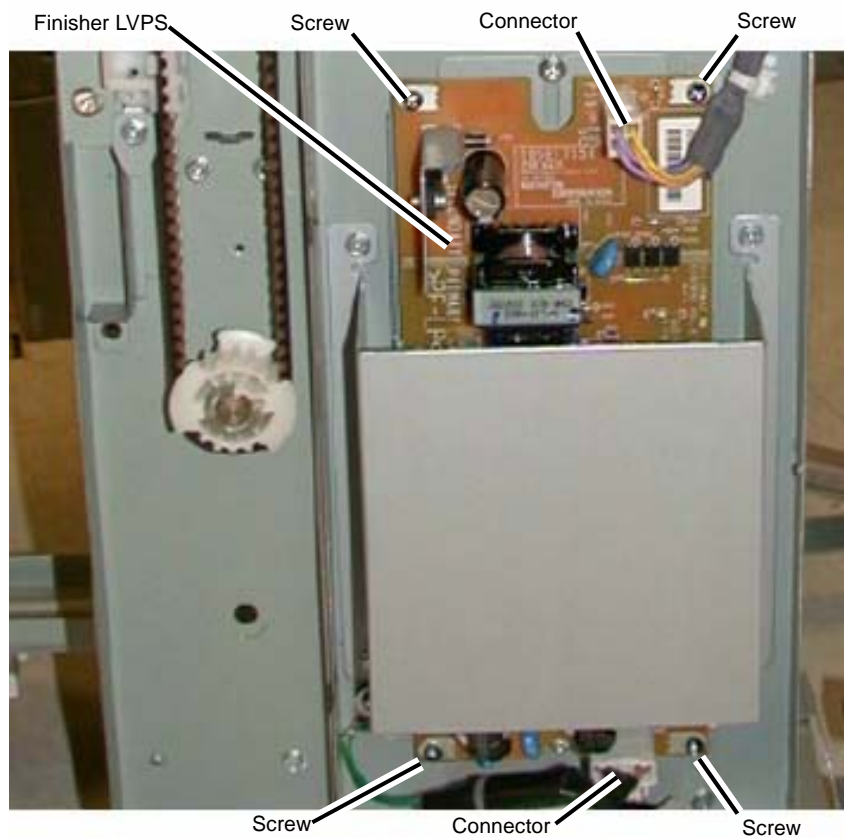


Figure 1 Removing the Finisher LVPS

### Replacement

Reverse the removal procedure for replacement.

## REP 23.25 (LX) Eject Motor

Parts List on [PL 23.11](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Undock the Finisher ([REP 23.5](#)).
4. Remove the Booklet Maker ([REP 23.31](#)).
5. Remove the Rear Upper Cover ([REP 23.7](#)).
6. Remove the Eject Motor Assembly ([REP 23.22](#)).
7. Remove the Eject Motor.
  - a. Remove the screws (2)
  - b. Remove the Eject motor

### Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.26 (LX) Front/Rear Tamper Motor

Parts List on [PL 23.12](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Compiler Tray ([REP 23.17](#)).
4. Turn the Compiler Tray over on a work surface.
5. Remove the Tamper Motor ([Figure 1](#)).
  - a. Release the wires from the wire guide.
  - b. Remove the screw (1) and remove the wire guide.
  - c. Disconnect the Tamper Motor connector.

**NOTE:** The Rear Tamper Motor connector has already been disconnected.

- d. Remove the screws (2).
- e. Remove the Tamper Motor.

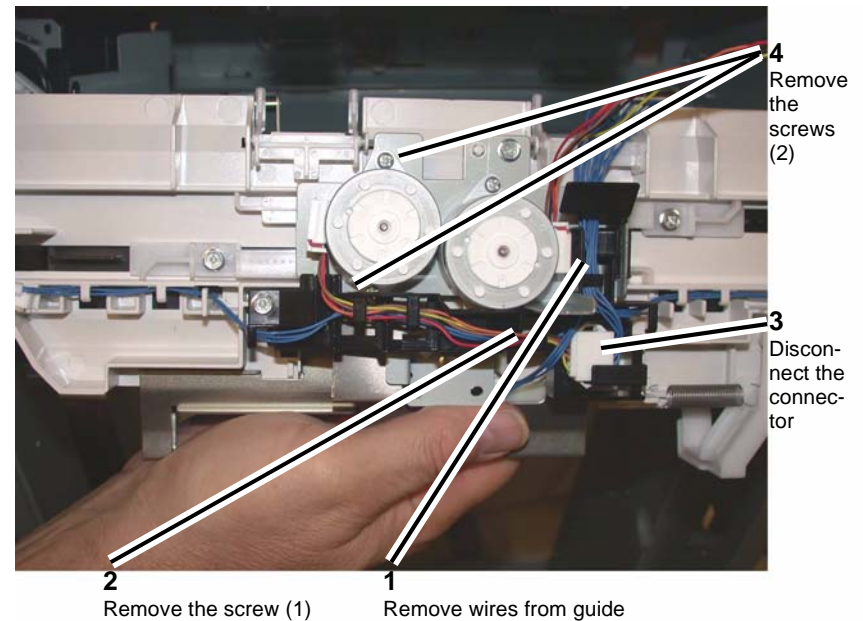


Figure 1 Removing the Tamper Motor

### Replacement

Replace in reverse order of removal.

## REP 23.27 (LX) Front/Rear Tamper Home Sensors

Parts List on [PL 23.12](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Compiler Tray Assembly ([REP 23.17](#)).
4. Turn the Compiler Tray over on a work surface ([Figure 1](#)).
5. Disconnect the connector.
6. Remove the Front or Rear Tamper Home Sensor ([PL 23.12](#)).

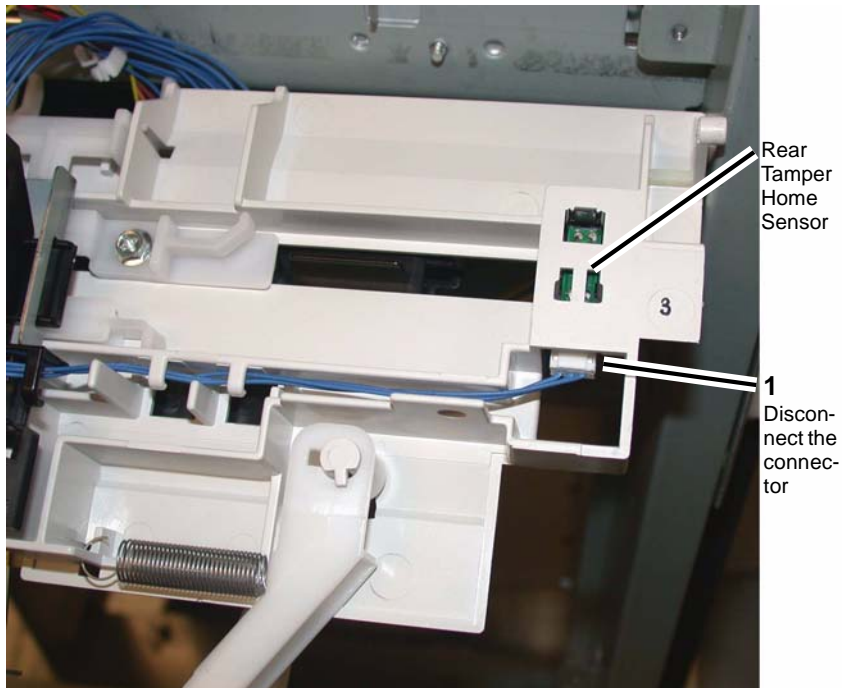


Figure 1 Removing the Front or Rear Tamper Home Sensor

## REP 23.28 (LX) Compiler No Paper Sensor

Parts List on [PL 23.12](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Compiler Tray Assembly ([REP 23.17](#)).
4. Turn the Compiler tray over on a work surface.
5. Remove the screw (1) that secures the bracket ([PL 23.12](#)) ([Figure 1](#)).

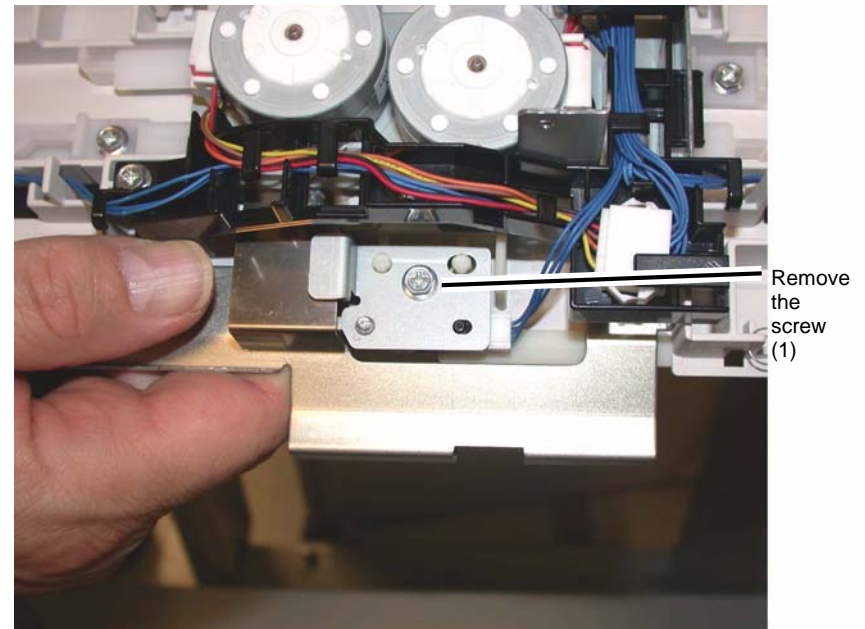
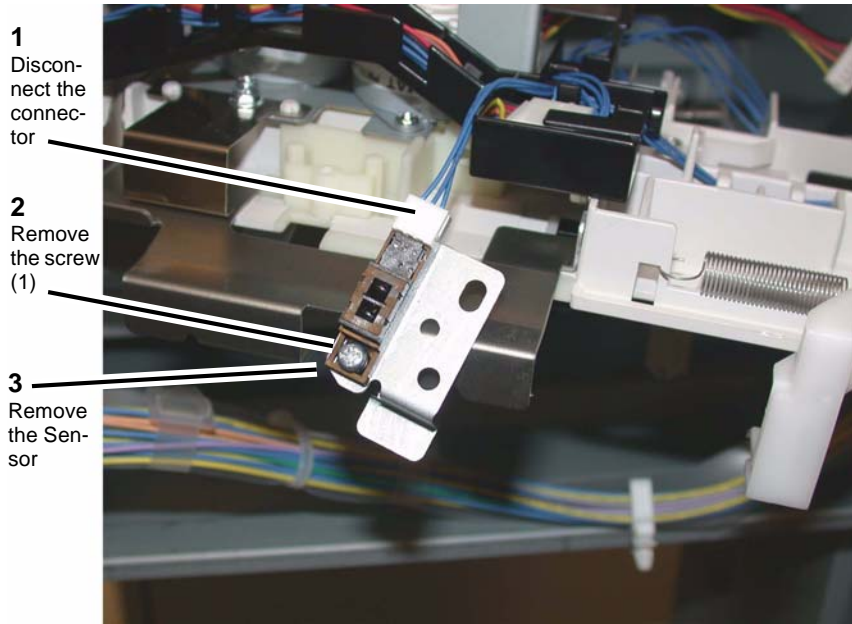


Figure 1 Removing the Bracket

6. Disconnect the connector ([Figure 2](#)).
7. Remove the screw (1) that secures the sensor.
8. Remove the Compiler No Paper Sensor.



- 1 Disconnect the connector
- 2 Remove the screw (1)
- 3 Remove the Sensor

Figure 2 Removing the Compiler No Paper Sensor

## REP 23.29 (LX) Front/Rear Carriage Assembly

Parts List on [PL 23.7](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.

**NOTE:** Ensure that the Stacker Tray is in the top position.

2. Switch off the power and disconnect the power cord.
3. Remove the Finisher Front Cover ([REP 23.6](#)).
4. Remove the Rear Upper and Rear Lower Covers ([REP 23.7](#), [REP 23.8](#)).
5. Remove the Stacker Tray ([REP 23.20](#)).
6. Removing the Carriage Assembly ([Figure 1](#)).
  - a. Disconnect and remove the Spring.

**NOTE:** The Carriage Bearings (2 each Assembly) are not fastened to the shafts. Use care to catch the Bearings when the Carriage Assembly is removed.

- b. With a 6 inch common screwdriver, move the belt Clamp latch aside and remove the Stacker Belt and Carriage Assembly.

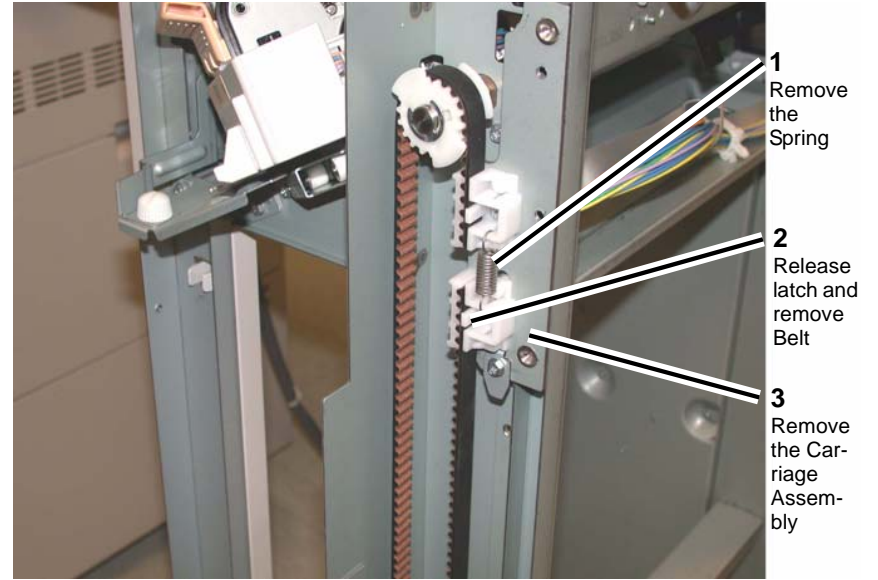


Figure 1 Removing the Carriage Assembly



## Replacement

**NOTE:** Ensure that the Front and Rear Carriage Assemblies are installed at the same height.

1. Install the Front or Rear Carriage Assemblies in the reverse order of removal.

## REP 23.30 (LX) Booklet PWB

Parts List on [PL 23.21](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet PWB Cover ([REP 23.35](#)).
4. Remove the Booklet PWB ([Figure 1](#)).
  - a. Disconnect the Connectors (5).
  - b. Remove the Screws (4).
  - c. Remove the Booklet PWB.

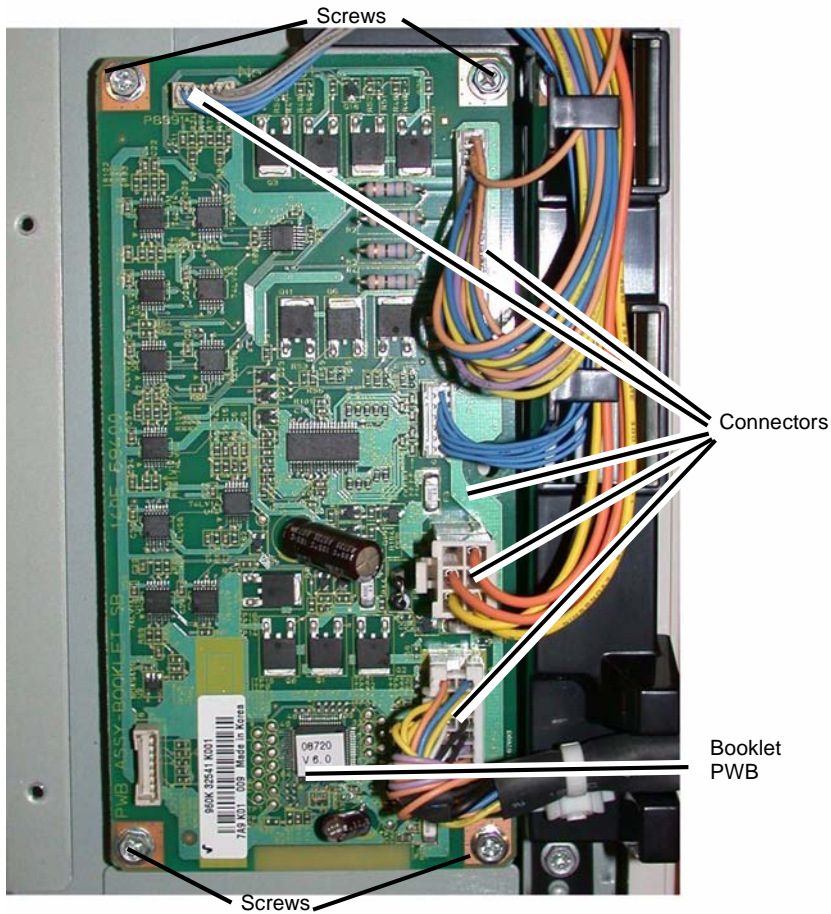


Figure 1 Removing the Booklet PWB

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.31 (LX) Booklet Maker Assembly

Parts List on [PL 23.6](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Unlatch the Eject Cover, and move it all the way to the left ([Figure 1](#)).
4. Remove the Thumbscrews (2) ([Figure 1](#)).



Figure 1 Eject Cover and Thumbscrew

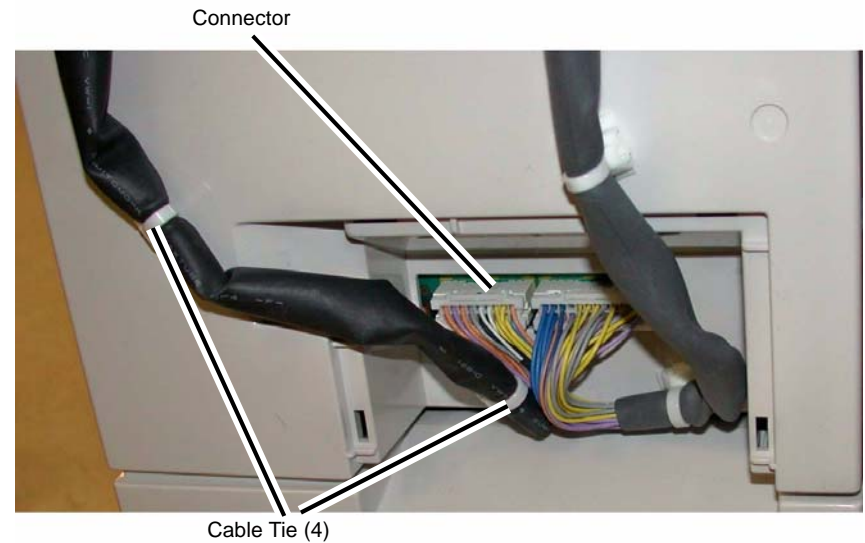
5. Disconnect the Booklet Maker Assembly from the Finisher.
  - a. Remove the Connector Cover ([Figure 2](#)).



Connector Cover

**Figure 2 Connector Cover**

- b. Disconnect the Connector (Figure 3).
- c. Pull out the Cable Ties (4).



**Figure 3 Disconnecting the Booklet Maker Assembly**

- 6. Lift the Booklet Maker Assembly off the Locating Pins (4), and remove (Figure 4).

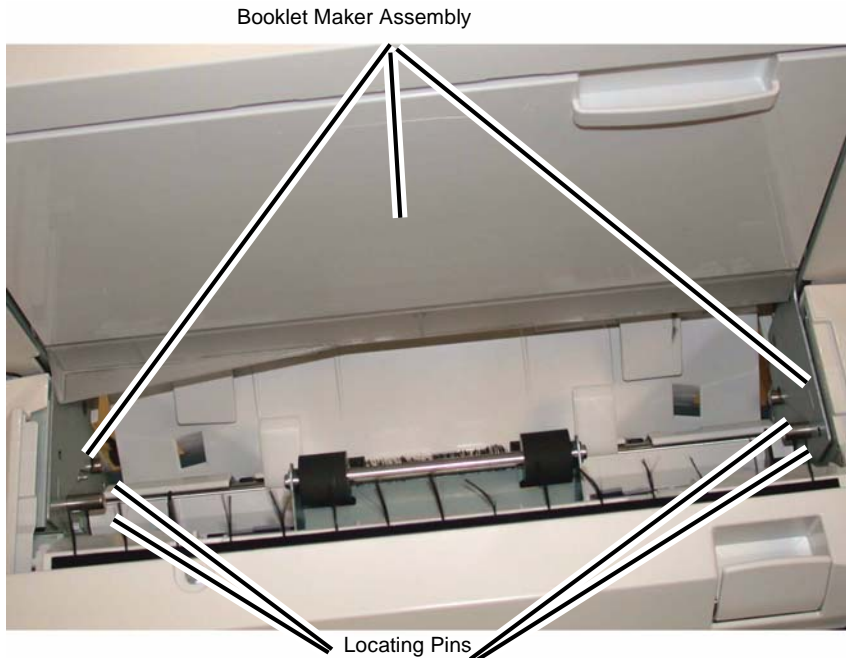


Figure 4 Removing the Booklet Maker Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.32 (LX) Booklet Front Cover

Parts List on [PL 23.17](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Maker Assembly from the Finisher ([REP 23.31](#)).
4. Remove the Booklet Front Cover.
  - a. Remove the Screw (1) ([Figure 1](#)).



Figure 1 Removing the Booklet Front Cover

- b. Remove the Screws (2) ([Figure 2](#))
  - c. Remove the Booklet Front Cover.

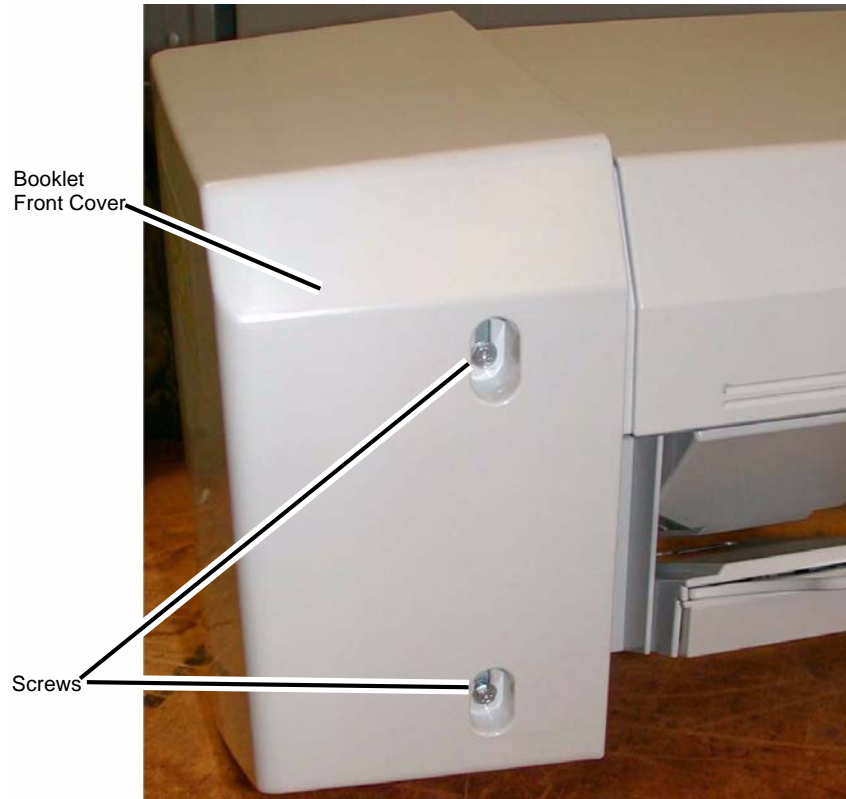


Figure 2 Removing the Booklet Front Cover

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.33 (LX) Booklet Rear Cover

Parts List on [PL 23.17](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Maker Assembly from the Finisher ([REP 23.31](#)).
4. Remove the Booklet PWB Cover ([REP 23.35](#)).
5. Remove the Booklet Rear Cover.
  - a. Remove the Self-tapping Screws (2) ([Figure 1](#)).
  - b. Remove the Booklet Side Cover.

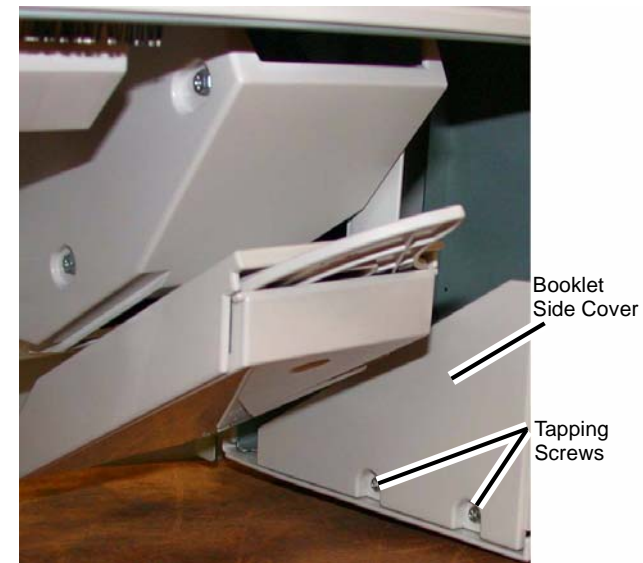


Figure 1 Removing the Booklet Side Cover

- c. Remove the Screw (1) ([Figure 2](#)).
- d. Remove the Booklet Rear Cover.



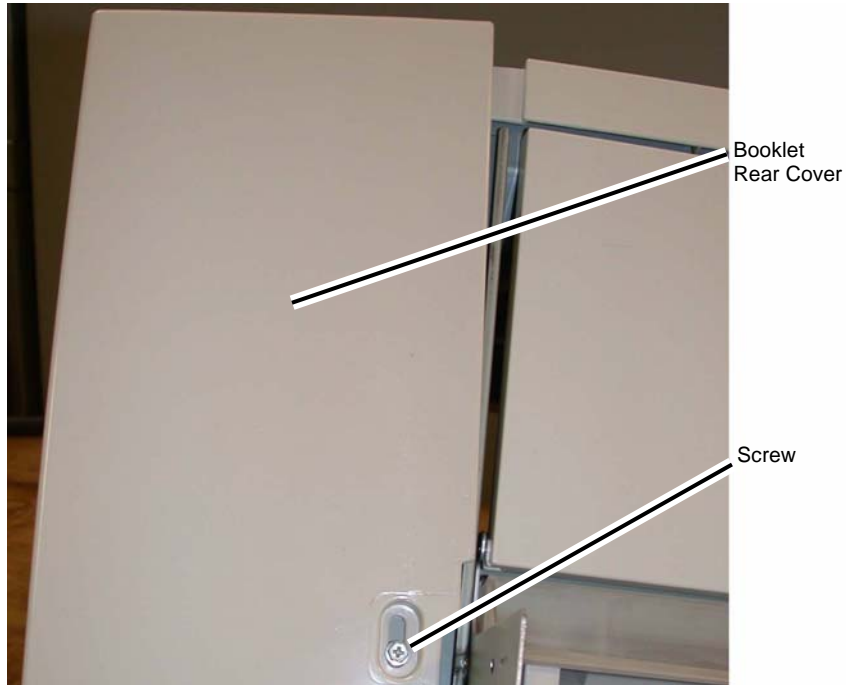


Figure 2 Removing the Booklet Rear Cover

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.34 (LX) Booklet Top Cover

Parts List on [PL 23.17](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Front Cover ([REP 23.32](#)).
4. Remove the Booklet Rear Cover ([REP 23.33](#)).
5. Remove the Booklet Top Cover ([Figure 1](#)).
  - a. Remove the Screws (4).
  - b. Remove the Booklet Top Cover.

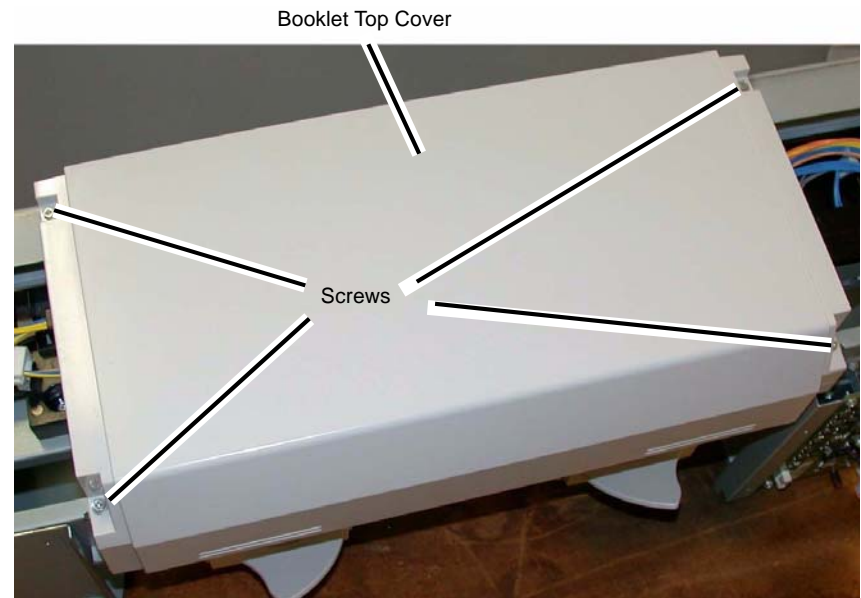


Figure 1 Removing the Booklet Top Cover

### Replacement

Reverse the removal procedure for replacement.

## REP 23.35 (LX) Booklet PWB Cover

Parts List on [PL 23.17](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet PWB Cover ([Figure 1](#)).
  - a. Remove the Self-tapping Screws (2).
  - b. Remove the Screws (2).
  - c. Remove the Booklet PWB Cover.

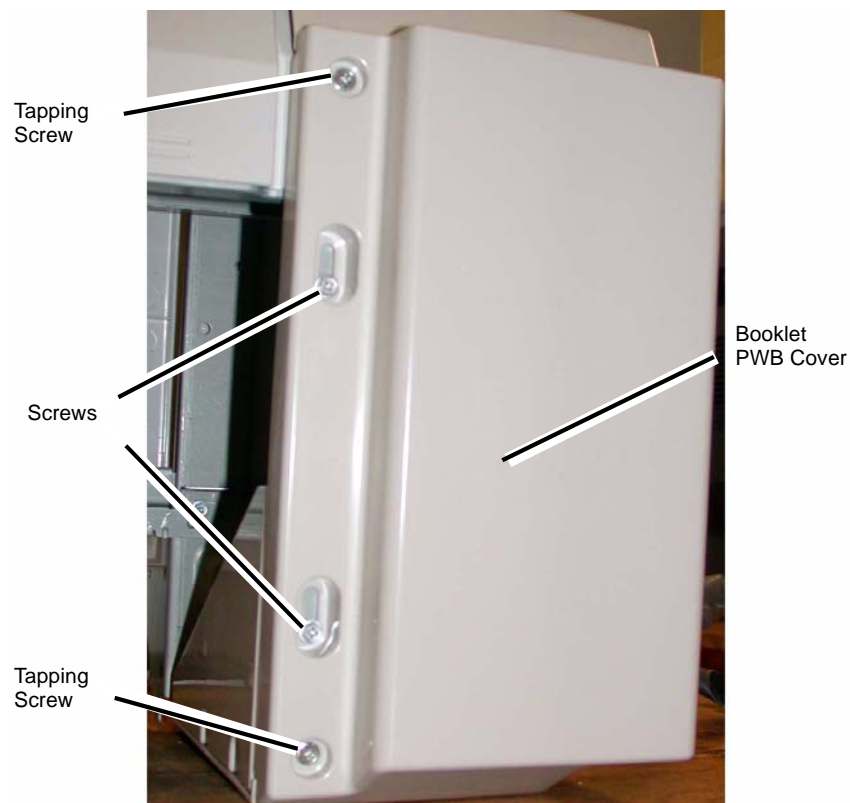


Figure 1 Removing the Booklet PWB Cover

### Replacement

Reverse the removal procedure for replacement.

## REP 23.36 (LX) Booklet Left Cover

Parts List on [PL 23.17](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Maker from the Finisher ([REP 23.31](#)).
4. Remove the Booklet Maker Left Cover.
5. Align the slots at the front and rear of the Booklet Maker Left Cover with the flats on the Mounting Pins.
6. Move the Booklet Maker Left Cover by allowing the flats on the Mounting Pins to slide through the slots in the Cover.

### Replacement

1. Reverse the removal procedure for replacement.



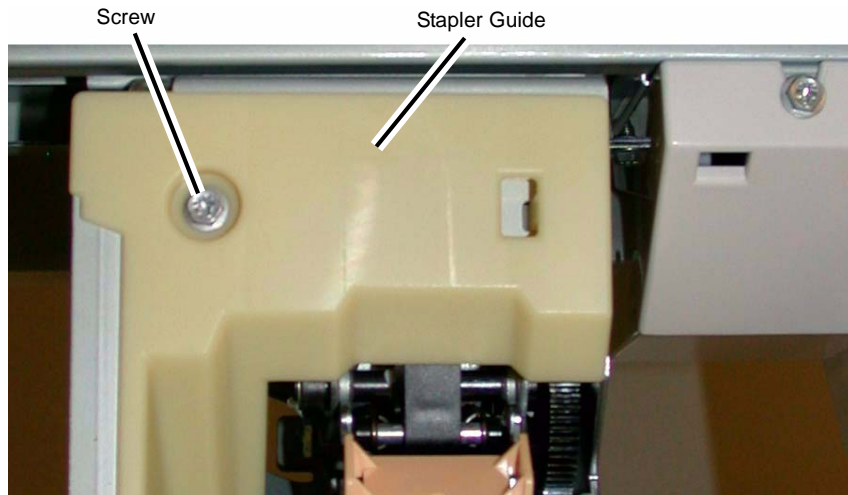
## REP 23.37 (LX) Booklet Front/Rear Stapler

Parts List on [PL 23.19](#), [PL 23.20](#)

### Removal

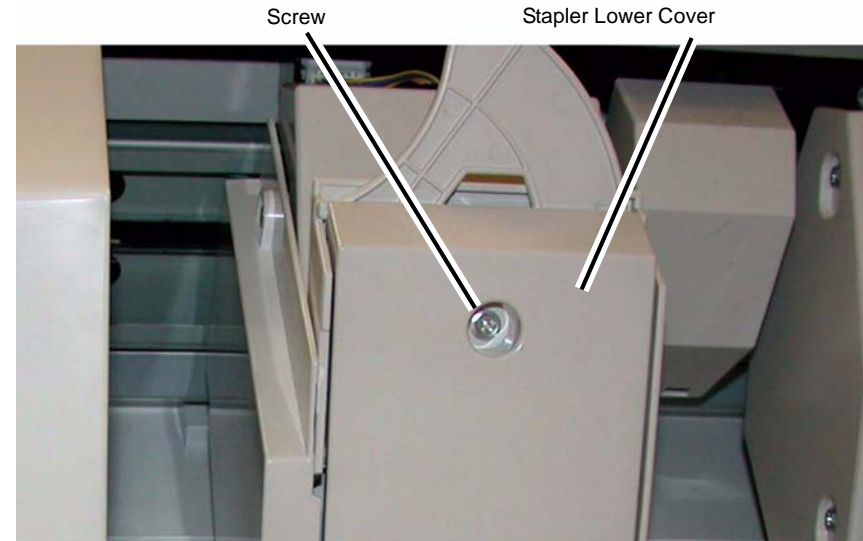
**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Maker Assembly from the Finisher ([REP 23.31](#)).
4. Remove the Stapler Guide ([Figure 1](#)).
  - a. Remove the Screw (1).
  - b. Remove the Stapler Guide.



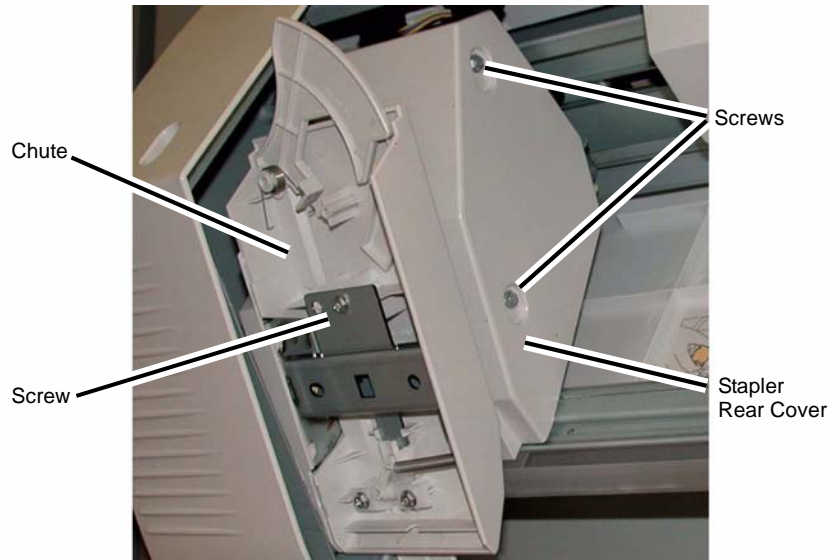
**Figure 1** Removing the Stapler Guide

5. Remove the Stapler Lower Cover ([Figure 2](#)).
  - a. Remove the Screw (1).
  - b. Remove the Stapler Lower Cover.



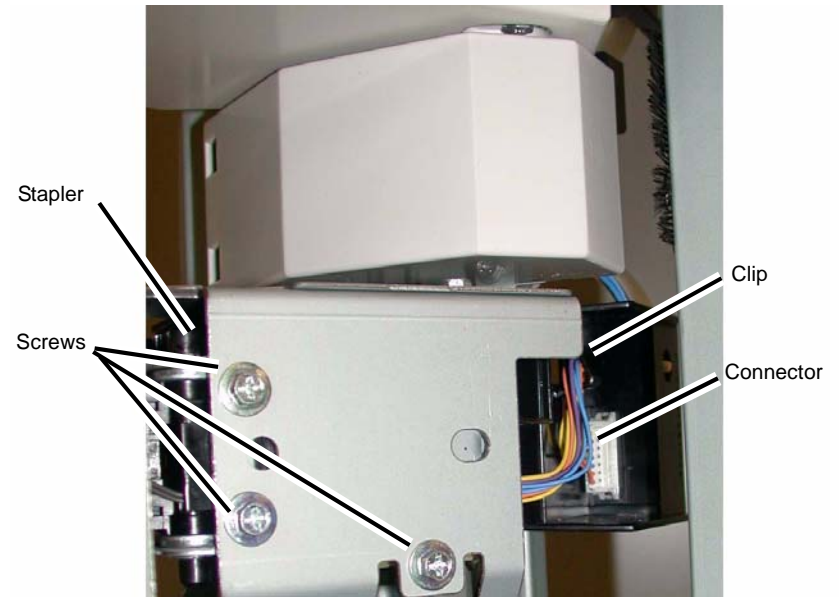
**Figure 2** Removing the Stapler Lower Cover

6. Remove the Chute ([Figure 3](#)).
  - a. Remove the Screw (1).
  - b. Remove the Chute.
7. Remove the Stapler Rear Cover ([Figure 3](#)).
  - a. Remove the Screws (2).
  - b. Remove the Stapler Rear Cover.



**Figure 3 Removing the Chute and Stapler Rear Cover**

8. Remove the Stapler (Figure 4).
  - a. Release the wires from the Clip.
  - b. Disconnect the Connector.
  - c. Remove the Screws (3).
  - d. Remove the Stapler.



**Figure 4 Removing the Stapler**

### Replacement

1. Reverse the removal procedure for replacement.

## REP 23.38 (LX) Booklet Stapler Move Motor

Parts List on [PL 23.18](#)

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Remove the Booklet Maker Assembly from the Finisher ([REP 23.31](#)).
4. Remove the Cover for the Booklet Stapler Move Motor ([Figure 1](#)).
  - a. Remove the Screw (1).
  - b. Remove the Cover.

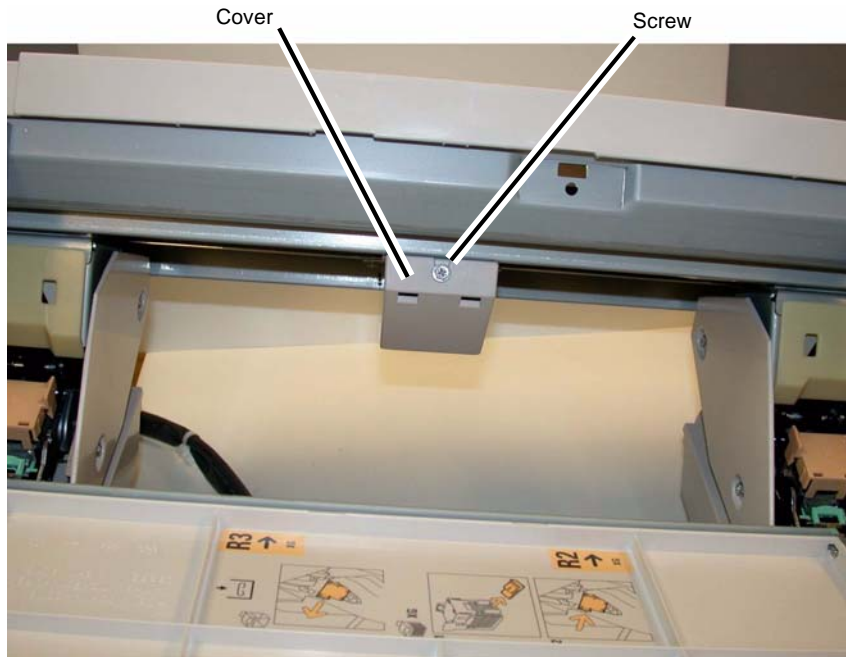


Figure 1 Removing the Cover

5. Remove the Booklet Stapler Move Motor ([Figure 2](#)).
  - a. Open the Clip and release the wires.
  - b. Disconnect the Connector.
  - c. Remove the Screws (3).
  - d. Remove the Booklet Stapler Move Motor.

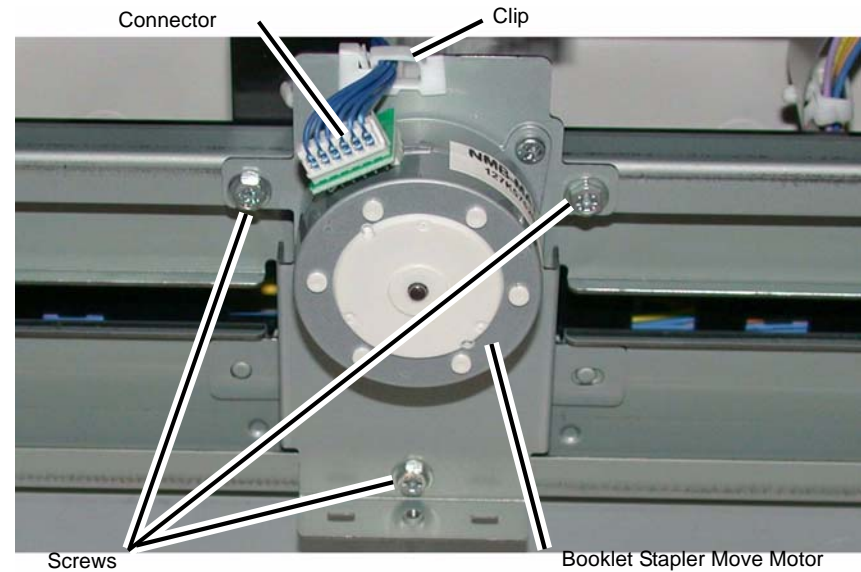


Figure 2 Removing the Booklet Stapler Move Motor

### Replacement

1. Reverse the removal procedure for replacement.

## ADJ 4.1 UI Diagnostic Tests

### Purpose

This series of tests are built into the UI software to test the functionality of the UI display, UI pixels and color fidelity, Touch Screen response and Control Panel buttons and LEDs.

### Procedure

To display the UI Diagnostic Tests menu, simultaneously press the \*, #, and C buttons. The menu displays a list of 6 choices. You can select the tests from either the Touch Screen or by using the number key pad on the Control Panel. Each test will have one or more subtests. These tests are selectable from the number keys on the control panel. You can exit any of the top level tests by pressing the 0 button on the Control panel.

1. **LCD Pixel Test** - This test displays five choices.

- 1 - Red Pixel Test
- 2 - Green Pixel Test
- 3 - Blue Pixel Test
- 4 - All White Pixel Test
- 5 - All Black Pixel Test
- 0 - Exit routine

When 1 is pressed, the screen turns red. When 2 is pressed, the screen turns green etc.

2. **Touch Panel Calibration** - Use the Touch Pen for this routine. Start the test and touch the cross hatch locations as they are displayed. This will set the correct points of origin for the display.
3. **Touch Panel Test** - A small square will display wherever you touch the screen. This will demonstrate the function of the touch screen. If your touch does not produce a color or grey square, the touch screen is defective.
4. **Button Test** - This routine test the functions of the Buttons on the control panel and displays the results on the UI as a color change on the button display.
5. **Display Vertical Test** - This test displays eight different vertical gradient patterns. These patterns are selected with the numeric key pad on the control panel:
  - 1 - Red Grey Scale
  - 2 - Green Grey Scale
  - 3 - Blue Grey Scale
  - 4 - Display 3 Vertical
  - 5 - Display 33 Vertical
  - 6 - Display 50 Vertical
  - 7 - Display 100 Vertical
  - 8 - Display 200 Vertical
  - 0 - Exit routine
6. **LED Test** - This routine tests the functionality of the LEDs on the Control panel. Select the test to perform and press the buttons on the control panel that have LEDs associated with them; the display on the UI will indicate which button was detected, and the LED will light. Also, pressing the Blink button will cause the LEDs to blink in a pattern after the LEDs have been switched on.

Select 0 to exit the procedure.



## ADJ 5.1 DADF Lead-Skew Adjustment

### Parts List on PL51.1

#### Purpose

To correct the feeding of the original by adjusting the position of the DADF. (DADF Lead-Skew, Perpendicularity)

#### Check

1. Place the Test Chart 82E8220 on the Platen Glass.
2. Place 11x17" paper in Tray 1.
3. Make a copy using the following settings in Copy mode.
  - a. On the UI Ready to Copy Screen, select the Copy tab.
  - b. Under Output Color select Black and White.
  - c. Under the Paper Supply select 11x17" paper size.
  - d. Under 2 Sided Copying select 1 Sided.
  - e. Reduce / Enlarge should be set to 100%.
  - f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
  - g. Make a copy.

**NOTE:** The copy made from the Platen Glass will be used as the original in the DADF.

4. Place the copy made from the Platen Glass into the DADF and make 3 copies.
5. Check that the difference in the distance between the side and the Edges at the 100mm mark and the 300mm mark in the 3 copies is within 0.5mm. (Figure 1)

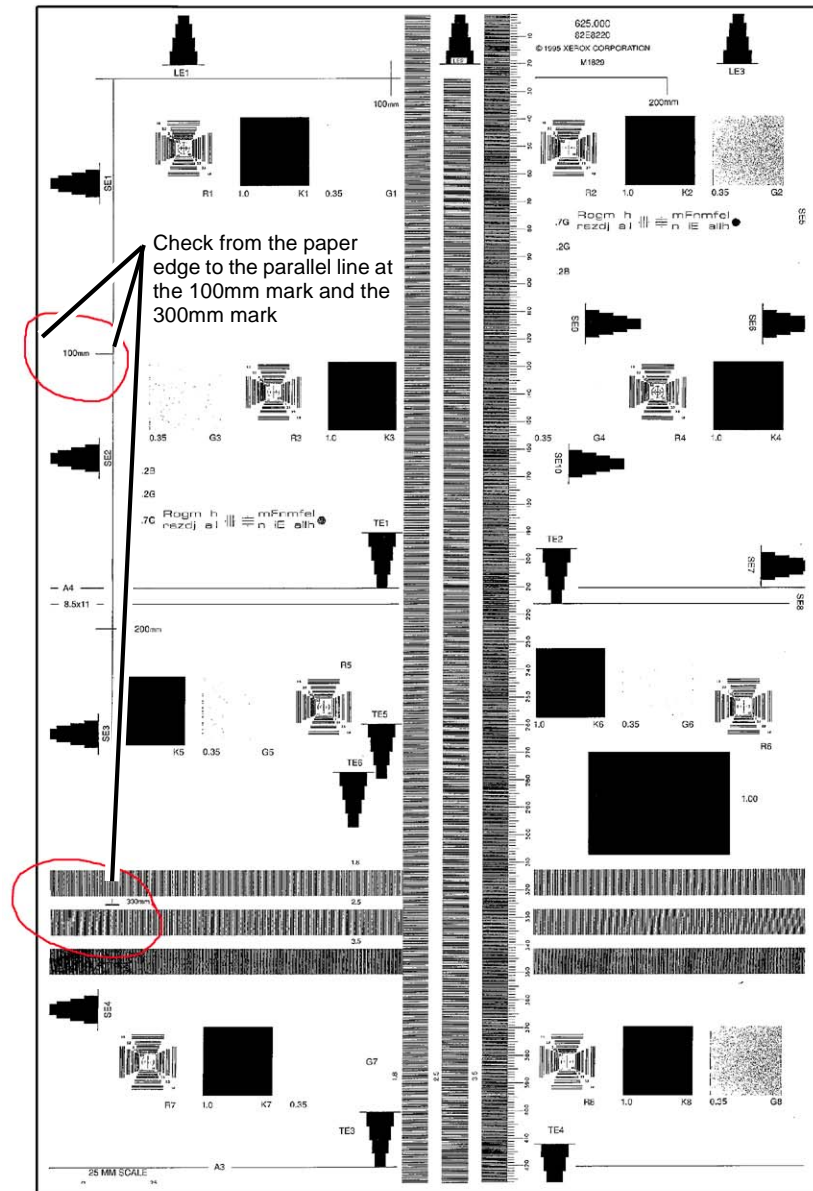


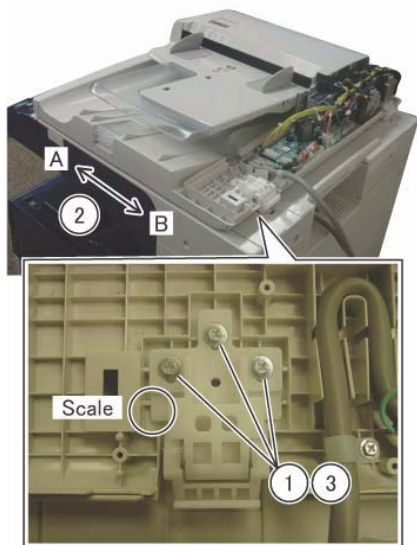
Figure 1 Checking the Skew

6. If the value is not within the specified range, perform the Adjustment:



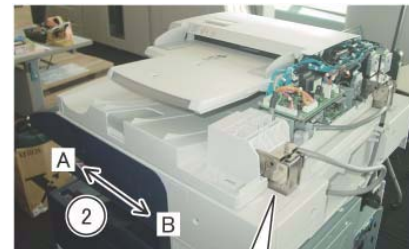
## Adjustment

1. Remove the DADF Rear Cover. (REP 5.4)
2. Adjust the position of the DADF by moving the DADF in direction A or B. (Figure 2 for 2 Pass or Figure 3 for 1 Pass)
  - a. Loosen the screws (x3 for 2 Pass) (x4 for 1 Pass).
  - b. Move the DADF in direction A or B.
  - c. Tighten the screws (x3 for 2 Pass) (x4 for 1 Pass).



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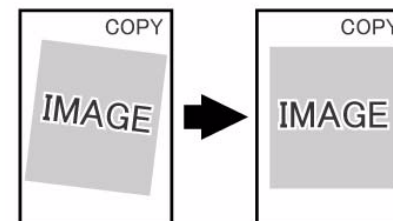
Figure 2 Skew Adjust (2 Pass)



j0kt45586

Figure 3 Skew Adjust (1 Pass)

- The DADF moved in direction A. (Figure 4)

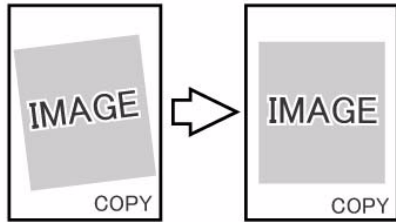


j0ku42044

Figure 4 Direction A correction

- The DADF moved in direction B. (Figure 5)





j0ku42043

**Figure 5 Direction B correction**

3. Reinstall the DADF Rear Cover.
4. After adjustment, perform DADF Side Registration ([ADJ 5.2](#)) and DADF Lead Edge Registration. ([ADJ 5.3](#)).

## ADJ 5.2 DADF Side Registration

### Parts List on PL 51.1

#### Purpose

To adjust the original to the proper position (drum shaft direction) on the Platen.

**NOTE:** The following adjustments must be made before carrying out checking and adjustment.

- IOT Side Registration ([ADJ 9.1](#))
- IIT Lead Edge Registration ([ADJ 6.2](#))
- IIT Side Edge Registration ([ADJ 6.3](#))
- DADF Lead-Skew Adjustment ([ADJ 5.1](#))

**NOTE:** DADF Side Registration is adjusted using the NVM for every paper width.

#### Check

##### Create a test pattern

1. To create a Cross Line Test Pattern, use a plain white sheet of 8.5x11"/A4 paper and fold the sheet precisely in half lengthwise and width wise. Then with a straight edge draw a straight line in the lengthwise crease and a straight line in the width wise crease. Label the top for orientation purposes. ([Figure 1](#))

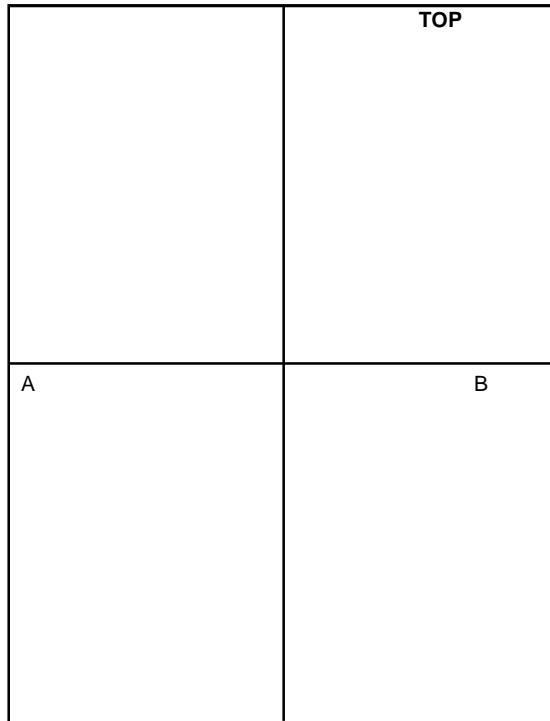


Figure 1 Creating a Test Pattern Original

#### DADF Side Edge Registration Check - Side 1

1. Load Tray 1 with 8.5x11"/A4 paper.
2. Place the new Cross Line Test Pattern on the DADF with the word TOP **Face Up** and towards the rear of the DADF.
3. Select the following:
  - Tray 1
  - 1-1 Sided.
  - 100%
  - 1 copy
4. Make one copy to the center tray.
5. Remove the copy from the center tray and **Flip the copy left to right**.
6. Fold the copy in half parallel to the short edge (Fold A to B line in [Figure 1](#)).
7. Check that the fold line is within 2.0mm from the reference line. If the value is not within the specified range, perform the Adjustment. If the Check is OK, perform the DADF Side Edge Registration Check - Side 2.

#### DADF Side Edge Registration Check - Side 2

1. Place the Cross Line Test Pattern on the DADF with the word TOP **Face Down** and towards the rear of the DADF.
2. Select the following:
  - Tray 1
  - 2-2 Sided.
  - 100%
  - 1 copy
3. Make one copy to the center tray.
4. Remove the copy from the center tray, but **DO NOT FLIP** the copy this time.
5. Fold the copy in half parallel to the short edge (A to B in [Figure 1](#)).
6. Check that the fold line is within 2.0mm from the reference line.

**NOTE:** Side 2 Registration should track Side 1 closely. In the event that it does not, perform the adjustment, and attempt to equalize the registration for both sides.

#### Adjustment

##### Side 1 Adjustment

1. Enter **UI Diagnostic (CSE) Mode**. Select the Adjustments tab.
2. Select **dC131 NVM Read/Write**.
3. Change the value in location 711-272 to perform the correction (all sizes).
4. Increase the value to move the image toward "TOP." Each step represents 0.1% change (0.0847mm per step).
5. Repeat Check and Adjustment until the measurement is within the specified range.

Table 1 Side 1 of 1 Sided or 2 Sided mode

	NVM	Document Width	Document Size
1	711-272	For all sizes	For all sizes
2	715-056	139.7~148.0mm	A5 SEF, 5.5x8.5" SEF
3	715-058	182.0~194.0mm	B5 SEF, 16K SEF
4	715-060	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-062	210.0mm	A4 SEF, A5 LEF
6	715-064	214.9~215.9mm	Letter SEF, Legal SEF, 5.5x8.5" LEF, 8.46x12.4" SEF, 8.5x13" SEF
7	715-066	254.0~257.0mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-068	266.7~267.0mm	16K LEF, 8K LEF, 8x10.5" LEF
9	715-070	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
10	715-072	297.0mm	A4 LEF, A3 SEF

6. Enter the value to perform correction for each size in "NVM: 715-056 to 072".

##### Side 2 Adjustment

1. Enter **UI Diagnostic (CSE) Mode**. Select the Adjustments tab.
2. Select **dC131 NVM Read/Write**.
3. Change the value in location 711-274 to perform the correction (all sizes).

4. Increase the value to move the image toward "TOP." Each step represents 0.1% change (0.0847mm per step).
5. Repeat Check and Adjustment until the measurement is within the specified range.

**Table 2 Side 2 of 2 Sided mode**

	NVM	Document Width	Document Size
1	711-274	For all sizes	For all sizes
2	715-057	139.7~148.0mm	A5 SEF, 5.5x8.5" SEF
3	715-059	182.0~194.0mm	B5 SEF, 16K SEF
4	715-061	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-063	210.0mm	A4 SEF, A5 LEF
6	715-065	214.9~215.9mm	Letter SEF, Legal SEF, 5.5x8.5" LEF, 8.46x12.4" SEF, 8.5x13" SEF
7	715-067	254.0~257.0mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-069	266.7~267.0mm	16K LEF, 8K LEF, 8x10.5" LEF
9	715-071	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
10	715-073	297.0mm	A4 LEF, A3 SEF

6. Enter the value to perform correction for each size in "NVM: 715-057 to 073".

## ADJ 5.3 DADF Lead Edge Registration (2 Pass)

### Parts List on PL1.4

#### Purpose

To adjust the original to the proper position (original feed direction) on the Platen.

**NOTE:** The following adjustments must be made before carrying out checking and adjustment.

- IOT Lead Edge/Side Edge Registration (ADJ 9.1)
- IIT Lead Edge Registration (ADJ 6.2)
- IIT Side Edge Registration (ADJ 6.3)
- DADF Lead-Skew Adjustment (ADJ 5.1)

#### Check

1. Place the 82E8220 Test Pattern on the Document glass with the trade mark and part number as the lead edge.
2. Set up the machine to make two sided copies of the test pattern as follows:
  - a. On the UI Ready to Copy Screen, select the Copy tab.
  - b. Under Output Color select Black and White.
  - c. Under the Paper Supply select 11x17" paper size.
  - d. Under 2 Sided Copying select 1 to 2 Sided.
  - e. Reduce / Enlarge should be set to 100%.
  - f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
3. Select a Quantity of 5.
4. Press the **Start** button to make a copy of side 1.
5. After side 1 is made, place a small piece of paper with the words side 2 written on it, onto the Document Glass and under the 82E8220 Test Pattern. (Figure 1)
 

**NOTE:** Side 2 can now be identified by the word "side 2" copied from the small piece of paper placed on the Document Glass under the test pattern from previous step.
6. Press the **Start** button to make a copy of side 2.
 

**NOTE:** The 2 sided copies will be used to run duplex sets for measurement through the DADF.
7. Place the 2 sided copies into the DADF and make one set of 2 sided copies.
8. On side 1 and side 2, measure on the scale from the 10 mm line to the edge of the paper. The measurement should as follows. (Table 1)
 

If the value is not within the specified range, perform the Adjustment:

**Table 1 Specification**

Item	Simplex	Duplex
Lead Edge	10 ± 0.5mm	10 ± 0.5mm

Piece of paper to identify side 2

The 10 mm line is located on this scale

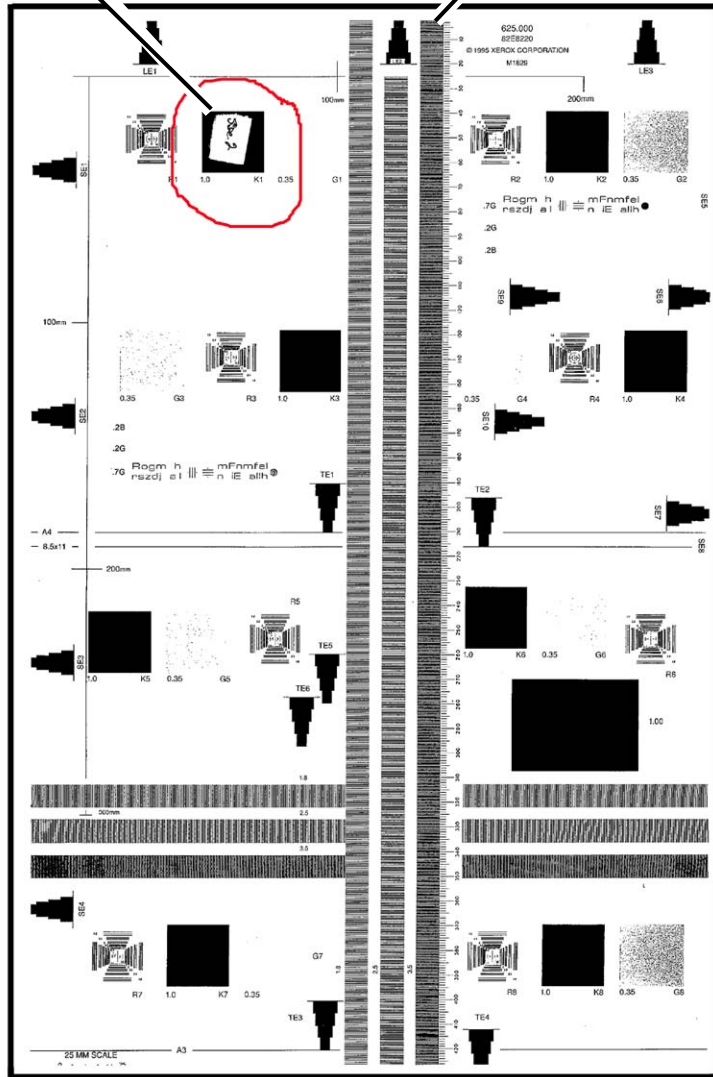


Figure 1 Identifying side 2

9. If the value is not within the specified range, perform the Adjustment:

## Adjustment

1. Enter the Diagnostic mode (Accessing UI Diagnostics.).
2. Select NVM Read/Write.
3. Adjust the Lead Edge using the NVM locations specified in Table 2 until the measured value falls within specifications.
  - each bit equals approximately 0.06 mm
  - increasing the value moves the image toward the Lead Edge

Table 2 NVM List

Chain Link	Name	Min.	Initial	Max
711-140	DADF Lead Reg. Adjustment (Side 1) Replace All	80	129	230
711-141	DADF Lead Reg. Adjustment (Side 2) Replace All	80	129	230

4. Repeat Check and Adjustment until the Lead Edge measurement is within the specified range.
5. Repeat the procedure for Side 1 until the value is within the specified range (10+/-1.5mm) for each Magnification Ratio.  
Adjust the following NVM values (Scan Speed) for any differences in the Magnification Ratios.
  - a. WorkCenter 7830/7835

Table 3

NVM	Scan Speed	Magnification Ratio
DC131[711-007]	220.0	25.0~100.0%
DC131[711-010]	146.7	100.1~150.0%
DC131[711-012]	110.0	150.1~200.0%
DC131[711-014]	73.3	200.1~300.0%
DC131[711-015]	55.0	300.1~400%

- b. WorkCenter 7845/7855

Table 4

NVM	Scan Speed	Ratio
DC131[711-004]	330.0	25.0~100.0%
DC131[711-007]	220.0	100.1~150.0%
DC131[711-009]	165.0	150.1~200.0%
DC131[711-012]	110.0	200.1~300.0%
DC131[711-013]	82.5	300.1~400%

6. Repeat the procedure for Side 2 until the value is within the specified range (10+/-1.5mm) for each Magnification Ratio.

Adjust the following NVM values (Scan Speed) for any differences in the Magnification Ratios.

- a. WorkCenter 7830/7835

Table 5

NVM	Scan Speed	Magnification Ratio
DC131[711-027]	220.0	25.0~100.0%
DC131[711-030]	146.7	100.1~150.0%
DC131[711-032]	110.0	150.1~200.0%
DC131[711-034]	73.3	200.1~300.0%
DC131[711-035]	55.0	300.1~400%

- b. WorkCenter 7845/7855

Table 6

NVM	Scan Speed	Ratio
DC131[711-024]	330.0	25.0~100.0%
DC131[711-027]	220.0	100.1~150.0%
DC131[711-029]	165.0	150.1~200.0%
DC131[711-032]	110.0	200.1~300.0%
DC131[711-033]	82.5	300.1~400%

## ADJ 5.4 DADF Lead Edge Registration (1 Pass)

### Purpose

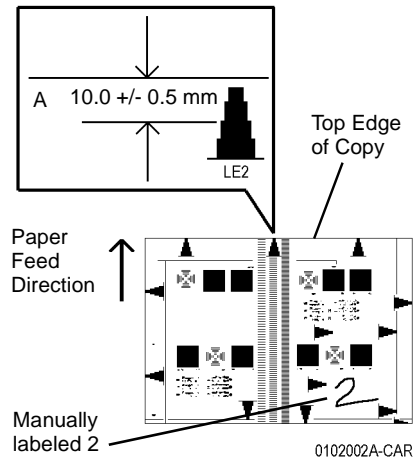
Align image scanned from document with top edge of paper.

**NOTE:** The following adjustments must have been completed.

- IOT Lead Edge/Side Edge Registration Adjustment (ADJ 9.1)
- IIT Lead Edge Registration Adjustment ADJ 6.2
- IIT Side Edge Registration Adjustment ADJ 6.3
- DADF Lead Skew Adjustment ADJ 5.1

### Check

1. Make two copies from the Platen Glass to be used as DADF originals.
  - a. Register Geometric Test Pattern 82E8220 (11 x 17 / A3) on the Platen with the lead edge metrics LE1 through LE3 against the left registration guide.
  - b. Select the following:
    - On the UI Ready to Copy Screen, select the Copy tab.
    - 1→1 Sided
    - Under Output Color select Black and White.
    - A4 or 8 1/2 x 11 Long Edge Feed Paper Supply
    - 100% Reduce/Enlarge
    - 2 Copies
    - On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
  - c. Press **Start** and write DADF Original 1 on the first copy and DADF Original 2 on the second copy.
2. Verify Lead Edge Registration of the DADF Originals.
  - a. On copy 2 (Original 2), measure the distance between the top edge of the copy and the reference line on metric LE2, and write A and the measurement on copy 2.
  - b. Check that A is 10.0 ±0.5 mm. If A is 10.0 ±0.5 mm, go to step 3.  
If A is not 10.0 ±0.5 mm, check the following and then return to the beginning of this procedure.
    - IOT Lead Edge/Side Edge Registration Adjustment (ADJ 9.1)
    - IIT Lead Edge Registration Adjustment ADJ 6.2
    - IIT Side Edge Registration Adjustment ADJ 6.3



**Figure 1 Verifying Top Edge Registration of DADF Originals**

3. Check DADF Top Edge Registration for Side 1.
  - a. Load both DADF Originals in the DADF, 1 on top, with lead edge metrics LE1 through LE3 facing toward the left.
  - b. Select the following:
    - 1→1 Sided
    - A4 or 8.5 x 11 Long Edge Feed Paper Supply
    - 100% Reduce/Enlarge
    - 2 Copies
  - c. Press **Start** and discard the first set.
  - d. On Side 1 (labeled DADF Original 1) of the second set of copies, measure the distance between the top edge of the copy and the reference line on metric LE2, and write B and the measurement on copy 1.
  - e. Compare B to A. B must be within  $0 \pm 2.2$  mm of A.  
If the difference between B and A is greater than 2.2 mm, go to step 1 of the Adjustment.  
Otherwise, go to the next step below.
4. Check the DADF Lead Edge Registration for Side 2.
  - a. Make a 2 sided test pattern.
    - i. Load DADF Originals 1 and 2 face up, 1 on top, with lead edge metrics LE1 through LE3 facing toward the left.
    - ii. Select 1 to 2 sided and press **Start** to make the 2 sided test pattern.
  - b. Make test copies.
    - i. Load the 2 sided test pattern with Side 1 up, and lead edge metrics LE1 through LE3 facing toward the left.
    - ii. Select the following:
      - 2 to 1 sided

- A4 or 8.5 x 11 Long Edge Feed Paper Supply
- 100% Reduce/Enlarge
- 2 Copies

- iii. Press **Start** and discard the first set.
- c. Check that the lead edge metrics are same distance from the edge of paper for both copies.  
If the difference is greater than 2.2 mm, go to step 2 of the adjustment.  
Otherwise, the DADF Lead Edge Registration is good.

### Adjustment

1. Adjust Side 1 DADF Lead Edge Registration.
  - a. Enter NVM Read/Write (**dC131**) [711-140 Side1 Lead Registration Offset NVM].  
**NOTE:** For adjustment purposes, 25 numbers in NVM equals approximately 1 mm of adjustment.
  - b. If B is more than A, increase the NVM value.  
If B is less than A, decrease the NVM value.
  - c. Check results of adjustment and adjust if required.
2. Adjust Side 2 DADF Lead Edge Registration.
  - a. Enter following NVM Read/Write (**dC131**) [711-141 Side2 Lead Registration Offset NVM]  
**NOTE:** For adjustment purposes, 25 numbers in NVM equals approximately 1 mm of adjustment.
  - b. If Side 2 edge metric is farther away from edge than Side 1, increase the NVM value.  
If Side 2 edge metric is closer to edge than Side 1, decrease the NVM value.
  - c. Check results of adjustment and adjust as required.  
**NOTE:** 2 to 2-sided or 2 to 1-sided must be selected to view a change in [711-141]. [711-141] produces no change in 1 to 2-sided copying.

**Table 1 NVM List**

Chain	Link	Name	Min	Initial	Max	Increment	Remarks
711	140	DADF Lead Registration Adjust-ment (Side 1) Replace All	0	122	244	0.0414mm	Side 1
711	141	DADF Lead Registration Adjust-ment (Side 2) Replace All	0	122	244	0.0414mm	CVT-Side 2

**NOTE:** As the corresponding NVM 711-001 to 711-011 will be rewritten when NVM 711-140 is rewritten, be careful when NVM 711-001 to 711-011 are changed individually.

**NOTE:** As the corresponding NVM 711-015 to 711-025 will be rewritten when NVM 711-141 is rewritten, be careful when NVM 711-015 to 711-025 are changed individually.

## ADJ 6.1 Full/Half Rate Carriage Position Adjustment

### Parts List on [PL 1.6](#)

#### Purpose

Adjust the position of the Full/Half Rate Carriage.

#### Adjustment

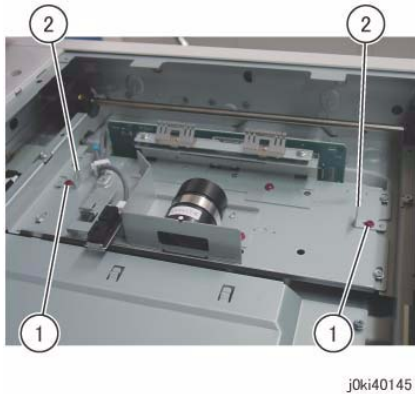
**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Adjust the position of Full/Half Rate Carriage at the front and rear separately. Only the procedures for the rear side is described here. The procedures for the front side is the same as for the rear side.

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Open DADF or the Platen Cover.
4. Remove the Platen Glass. ([REP 6.2](#))
5. Remove the Lens Cover Assembly. ([PL 1.5](#))
6. Remove the jig pin from the Lens Assembly. ([Figure 1](#))

**NOTE:** When removing the jig pin, never remove the screws (x4) that secure the Lens Base.

- a. Remove the screws (x2).
- b. Remove the jig pins (x2).



**Figure 1 Remove the Jig pins**

7. Check that the Pulley at the front side is firmly secured. If the Pulley is loose, tighten the set screws (x2). ([Figure 2](#))



**Figure 2 Tighten the front pulley**

8. Loosen the set screws (x2) that secure the Pulley at the rear side. ([Figure 3](#))



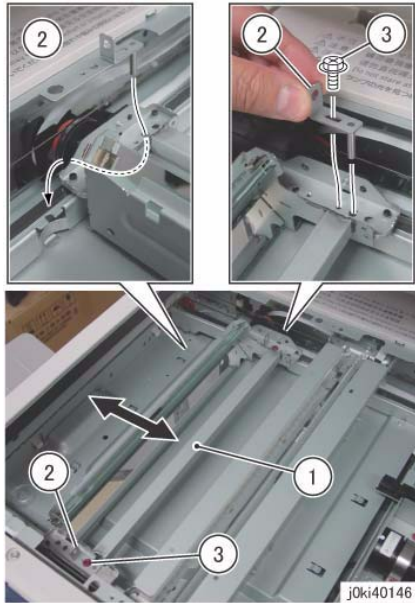
**Figure 3 Loosen the rear Pulley**

9. Position the Half Rate Carriage. ([Figure 4](#))
  - a. Move the Half Rate Carriage to the jig pin insertion position.
  - b. Set the jig pins (x2).

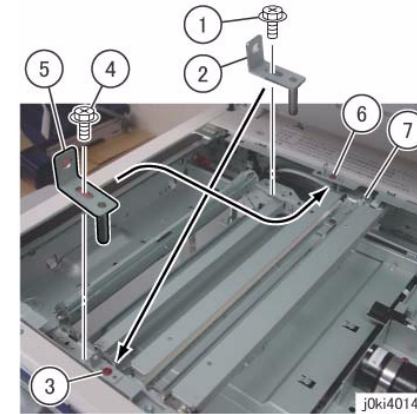
**NOTE:** Make sure the jig pins are aligned as shown in the figure.

- c. Tighten the screws (x2).



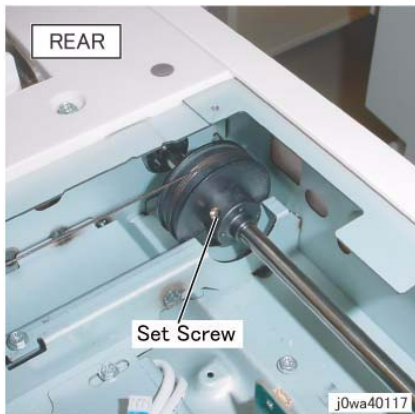


**Figure 4 Position the Half Rate Carriage**



**Figure 6 Secure the cable to the Full Rate Carriage**

10. Tighten one of the set screws (x2) (either side) that kept the Pulley at the rear side loose. (Figure 5)



**Figure 5 Tighten one of the set screws**



**Figure 7 Tighten the set screw**

11. Secure the cable to the Full Rate Carriage at the rear side. (Figure 6)
- Remove the screw.
  - Set the Tool Pin that was placed at the rear side of the Half Rate Carriage to the front side of the Full Rate Carriage.

12. Tighten the set screw that kept the Pulley at the rear side loose. (Figure 7)

13. Manually move the Full Rate Carriage to ensure that it moves smoothly.  
 14. Restore the Tool Pins to their original states.  
 15. Restore the Lens Cover Assembly to its original state.

- c. Tighten the screw.  
 d. Remove the screw.  
 e. Set the Tool Pin that was placed at the front side of the Half Rate Carriage to the rear side of the Full Rate Carriage.  
 f. Tighten the screw.  
 g. Tighten the affixed screws.

## ADJ 6.2 IIT Lead Edge Registration

### Parts List on PL 1.1

### Purpose

To adjust the IIT scan timing in the Slow Scan direction and to correct the copy position.

### Check

#### CAUTION

*Perform this adjustment only if absolutely required; the IIT Lead Edge Registration affects the precision of the document size detection.*

**NOTE:** Before performing this procedure, make sure that the IOT Lead Edge Registration is correct. Refer to [ADJ 9.1](#), IOT Side/Lead Edge Registration.

1. Place the Geometric Test Pattern (82E8220) on the Platen Glass correctly and make copies with the following settings:
  - Copy Mode: Black
  - Paper Size: 11 x 17 in or A3
  - Magnification: 100%
  - No. of Copies: 2
2. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the LE2 scale is 10.0mm +/- 1.6mm ([Figure 1](#)).

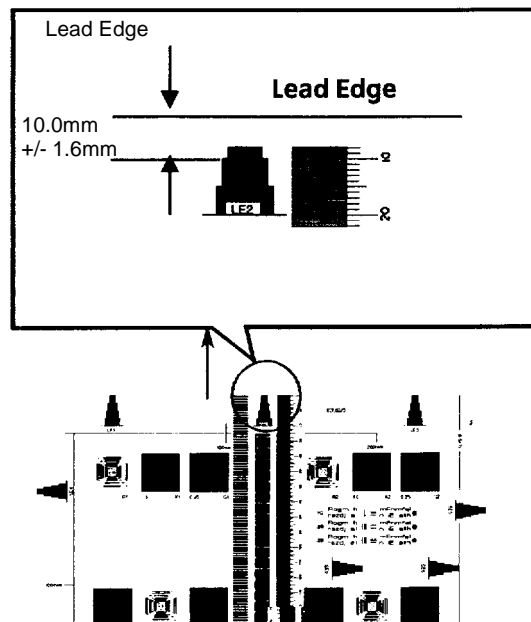


Figure 1 Checking IIT Lead Registration

3. If the value is not within the specified range, Perform the Adjustment:

### Adjustment

1. Enter the Diagnostic mode ([UI Diagnostic \(CSE\) Mode](#)).
2. Select [dC131](#) location [715-050].
3. Change the value.
  - 1 increment: 0.034mm
  - Increment of the value: The image moves to the Tail Edge.
  - Decrement of the value: The image moves to the Lead Edge.
4. Repeat Check and Adjustment until the Lead Edge measurement is within the specified range.

## ADJ 6.3 IIT Side Registration

### Parts List on [PL 1.1](#)

#### Purpose

To adjust the IIT scan timing in the Fast Scan direction and to correct the copy position.

#### Check

#### CAUTION

*Perform this adjustment only if absolutely required; the IIT Side Edge Registration affects the precision of the document size detection.*

**NOTE:** Before performing this procedure, make sure that the IOT Side Edge Registration is correct. (Refer to [ADJ 9.1](#), IOT Side/Lead Edge Registration.)

1. Load 11 x 17 in. or A3 paper into Tray 2.
2. Place the Geometric Test Pattern (82E8220) on the Platen Glass correctly and make copies with the following settings:
  - Copy Mode: Black
  - Paper Tray: Tray 2
  - Magnification: 100%
  - No. of Copies: 2
3. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the SE2 and SE3 scales is 10.0mm +/- 1.6mm ([Figure 1](#)).

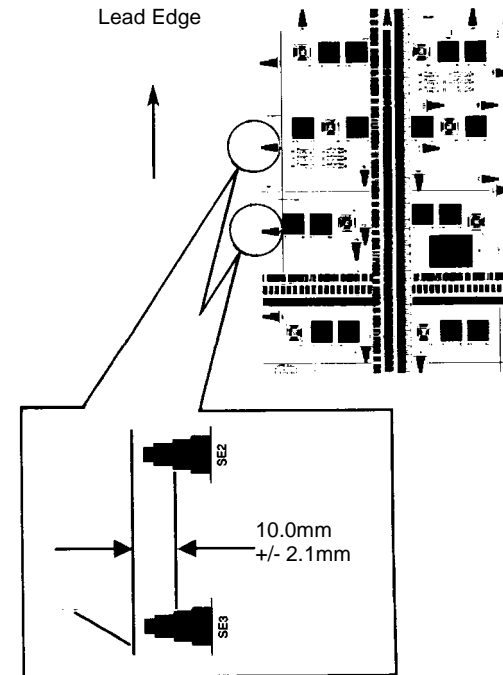


Figure 1 Checking IIT Side Edge Registration

4. If the value is not within the specified range, perform the Adjustment:

#### Adjustment

1. Enter the Diagnostic mode ([UI Diagnostic \(CSE\) Mode](#)).
2. Enter [dC131](#) location [715-053].  
Change the value.
  - 1 increment = 0.075mm
  - increasing the value = The image moves IN.
  - decreasing the value = The image moves OUT.
3. Repeat Check and Adjustment until the Side Edge measurement is within the specified range.

## ADJ 6.5 IIT Calibration

### Purpose

The purpose of this procedure is to calibrate the optics in the IIT for optimal performance.

There are two adjustments included in the IIT Calibration Adjustment.

- **White Reference Adjustment** - Calculates and sets the White Reference Correction Coefficient.
- **CCD Calibration** - Corrects the IIT sensitivity dispersion.

### Adjustment

**NOTE:** NOTE: After performing ADJ 6.5 IIT Calibration, images copied or scanned may appear lighter. Images may not show much detail below 10%, particularly in Yellow.

**NOTE:** If the CCD Lens Assembly (PL 1.3) was replaced, perform ADJ 6.6 Optical Axis Correction before performing IIT Calibration.

#### CAUTION

Do not select the **Optical Axis Calibration** button unless the Lens Kit was replaced.

1. Clean the Optics:
  - a. Switch off the power and allow the Exposure Lamp to cool off.
  - b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
  - c. Clean the Exposure Lamp with a clean cloth and Film Remover.
  - d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
2. Enter the **UI Diagnostic (CSE) Mode**.
3. Select the **Adjustment** tab.
4. Select **dC131 NVM Read/Write**.
5. Confirm the following NVM Read/Write (**dC131**) location **715-518 IIT Paper Code** is set to **5** for **XC** (Digital Color Xpressions) or **6** for **XE** (Color Tech+). If NVM location 715-518 is incorrect, change to the correct value.

**NOTE:** If the value displayed is something other than 5, 6, or 1, then the scanner NVM is corrupt. Perform **dC301 NVM Initialization**.
6. Exit **dC131**.
7. Select **dC945 IIT Calibration** from the UI.
8. Select the **White Reference Platen** button.
9. Place 1 sheet of 11x17/A3 Color Expressions (or equivalent 98 brilliance paper) on the platen.
10. Press **Start**.
11. **IIT Calibration in Process** will appear on the UI screen.
12. When the **IIT Calibration Completed** message appears, select the White Reference DADH button.

**NOTE:** The **IIT Calibration Completed** message only appears for about 5 seconds, then the message changes to **The device is offline**.
13. Remove the sheet of paper from the platen and place it in the DADF.
14. Press **Start**.

15. **IIT Calibration in Process** will appear on the UI screen.
16. When the **IIT Calibration Completed** message appears, select the **CCD/LED Calibration** (7530/35) or the **CCD/LED Calibration - Side 1** (7845/55) button.

**NOTE:** The **IIT Calibration Completed** message only appears for about 5 seconds, then the message changes to **The device is offline**.
17. Remove the white paper. Place the Color Test Pattern 82E13120 on the platen with the Lead Edge (LE) on the left.
18. Press **Start**.
19. The message **IIT Calibration in Process** will appear on the UI screen.
20. When the calibration is complete, the obtained data is displayed in the **Results** box.
  - a. Ensure that the **Results** box shows a green check mark in the left most section of the box indicating that the results are OK.
  - b. If the **Results** box does not show OK (if a red X is shown in the left most area of the box), return to step 1 and repeat this procedure.
  - c. If, after repeating the procedure, the **Results** box still does show OK, go to the **362-900 RAP** and troubleshoot the problem.
21. Perform the **CIS Calibration - Side 2** (7845/55 only).
  - a. Select the **CIS/LED Calibration - Side 2** button.
  - b. Place the Test Pattern 82E13120 in the DADF with the color pattern down and Lead Edge on the left (in) side, then press **Start**.
22. The message **IIT Calibration in Process** will appear on the UI screen.
23. When the calibration is complete, the obtained data is displayed in the **Results** box.
  - a. Ensure that the **Results** box shows a green check mark in the left most section of the box indicating that the results are OK.
  - b. If the **Results** box does not show OK (if a red X is shown in the left most area of the box), remove the CIS (**REP 55.19**), clean the optics and reinstall the CIS in the machine.
  - c. Return to step 21 and repeat this procedure. If, after repeating the procedure, the **Results** box still does not show OK go to **RAP 366-900** and troubleshoot the problem.

## ADJ 6.6 Optical Axis Correction

### Parts List on [PL 1.1](#)

#### Purpose

The purpose of this adjustment is to align the CCD with the lens.

#### CAUTION

*This procedure should only be performed if the Lens Kit is replaced, or if the documentation specifically directs.*

#### Check

1. Install the Platen Glass.

#### CAUTION

*Stray light will adversely affect the check. If there is significant ambient light around the machine (especially fluorescent light), open the platen cover as little as required to start the scan, and/or shroud the machine with a drop cloth in order to keep as much stray light as possible away from the Lens and CCD.*

2. Ensure the document cover or DADF is partially raised and that there is nothing on the platen glass.
3. Enter **UI Diagnostics (UI Diagnostic (CSE) Mode)**. Select the **Adjustments** tab, **dC945 IIT Calibration**, select the **Optical Axis Correction** button and press **Start**.
4. Check the results in the **Optical Axis Set Results** box. If the result is OK (if a **green check mark** is displayed in the left most area of the **Results** box), the check is good. Go to [ADJ 6.5](#) and adjust the IIT Calibration.
5. If a red **X** is displayed in the **Results** box, perform the **Adjustment**.

#### Adjustment

1. Remove the Platen Glass and the Optics cover.
2. Place an index mark on the barrel of a 5.5mm nut driver. [Figure 1](#) shows the tool and the adjusting nuts.

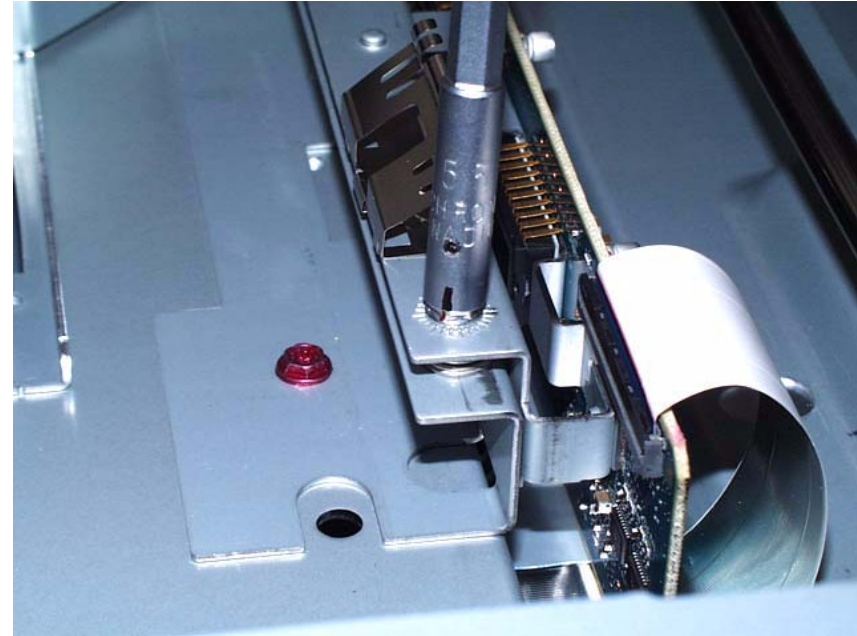


Figure 1 Tool and Front Optics Adjusting Nut

3. Check the results in the **Front Nut Correction Angle** and the **Rear Nut Correction Angle** box. The values displayed indicate the amount and direction of the correction required:
  - + means rotate clockwise
  - - means rotate counterclockwise
  - The amount of correction is displayed in degrees. Each division around the nut represents 15 degrees (divide the displayed value by 15 to get the number of divisions). If a value higher than 990 is displayed, this may indicate that insufficient light is entering the CCD. Make sure that the Lens and Platen Glass are clean.
4. Make the indicated correction for both the front and rear screws,
5. Reinstall the Platen Glass and the Optics cover, then select on **Start** on the screen.
6. Repeat the **Check** and **Adjust** until the the **green check mark** is displayed in the **Results** box.
7. Reinstall the Optics Cover and reinstall the Platen Glass.
8. Go to [ADJ 6.5](#) and adjust the IIT Calibration.

## ADJ 7.1 Tray 5 (MSI) Guide Adjustment

### Purpose

This procedure calibrates the paper size detection circuits for Tray 5. It should be performed when the MSI size sensor is replaced or a size detection error occurs

### Adjustment

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dc740 MSI Side Guide Adjustment**.
4. Push the paper guides to their minimum width.
5. Select the **Minimum** button, then select **Read Width**. When the machine software has read the width of the Paper Guides, select **Write Width**. This measurement will then be written into NVM.
6. Push the paper guides to their maximum width.
7. Select the **Maximum** button, then select **Read Width**. When the machine software has read the width of the Paper Guides, select **Write Width**. This measurement will then be written into NVM.
8. Place a sheet of paper in Tray 5 and select **User Defined**, then select **Read Width**. Check to ensure accurate reading of the paper width.





## ADJ 9.1 Lead Edge/Side Edge Registration

### Purpose

The purpose is to adjust the position of the printed image on the page. This is done by changing the value of the Lead Edge Registration and Side Edge Registration in **dC129**. This controls where the ROS writes the image.

For the independent IIT Reg Adjustment, refer to **dC945** IIT Calibration - Optical Axis Correction. For the IIT/DADF Skew Adjustment, refer to the IIT/DADF Adjustment Procedures, respectively.

### Specification

The specifications for Lead Edge and Side Edge are shown in the table below.

**Table 1 Specification**

Item	Simplex	Duplex	Tray 5 / Bypass
Lead Edge	10±1.5mm	10±1.9mm	10±2.2mm
Side Edge	8.5±2.0mm	8.5±2.4mm	8.5±3.0mm

### Introduction

This series consists of the following procedures:

- Lead Edge Registration, Bond/Plain Paper, Trays 1-4 and 6, Sides 1 and 2. One Lead Edge setting applies to all.
- Lead Edge Registration, Bond/Plain Paper, Tray 5 / Bypass, Sides 1 and 2.
- Side Edge Registration, All Trays (1 - 6), Sides 1 and 2, each set separately.

**NOTE:** Whenever you adjust registration, you must perform the entire series, in the sequence given. Read the entire procedure before performing the adjustment.

### Lead Edge Registration (Bond/Plain Paper)

#### Purpose

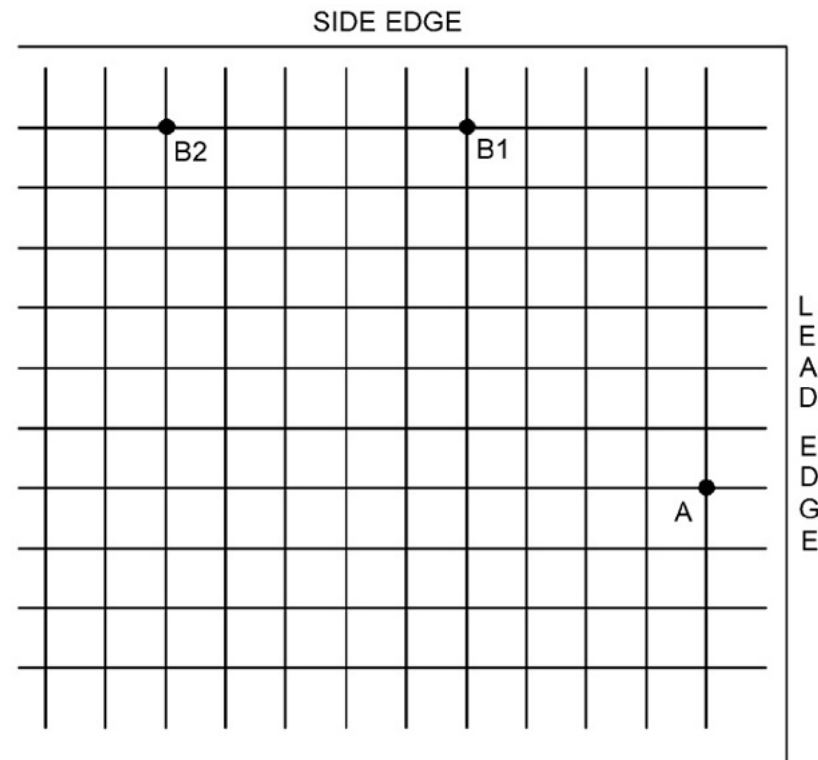
To correctly register the lead edge of the image in relation to the lead edge of the paper. There is a single Side 1 lead edge setting for Trays 1 - 4 and 6; there is a similar Side 2 lead edge setting for these trays. There are separate lead edge settings for Side 1 and Side 2 of the Tray 5/ Bypass.

#### Check

##### Checking Baseline Lead Edge Registration (Side 1)

1. Load Trays 1 and 2, and the Tray 5 / Bypass, with 11 x 17 / A3 Bond/Plain paper. Load Trays 3, 4, and 6 with 8 1/2 x 11 / A4 Bond/Plain paper. If you changed Paper Type or Weight from what was originally installed, make sure that you **Change Description...** on the **Tray Settings** screen. Remember to **Confirm** the changes.
2. The routine automatically selects the appropriate NVM location to set, based on the Paper Type setting for the trays. Ensure that the correct **Size** and **Weight** are displayed in the **Media Type** window.
3. Enter the **UI Diagnostic (CSE) Mode**.

4. Select the Adjustments tab.
5. Select **dC129**.
6. Make the following selections:
  - a. Select **Side 1**, if not already selected.
  - b. Set **Paper Supply** to **Tray 1**, if not already set.
  - c. Select 5 for **Print Count**.
7. Select **Print** on the UI Diagnostics screen.
8. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1," and "Side 1," and the location of the Lead Edge of each sheet.
9. Take the third print and measure from the lead edge to point A (as shown on **Figure 1**). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
10. If the measured value is not 10±1.5mm, perform the Adjustment. If the Check is OK, proceed to **Checking Side 2 Lead Edge Registration**.



**Figure 1 Test Pattern Measurement Points**

## Checking Side 2 Lead Edge Registration

**NOTE:** The grid pattern for side 1 does not align with the side 2 grid pattern; do not attempt to set registration by aligning the grids.

1. Make the following selections:
  - a. Select **Tray 1**.
  - b. Select **Side 2**.
  - c. Select 5 for **Print Count**, if not already selected.
2. On the UI Diagnostics select **Print**. (Click **Start** on the PWS screen.)
3. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1" and "Side 2," and the location of the Lead Edge of each sheet.
4. Take the third print and measure from the lead edge to point A (as shown on [Figure 1](#)). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
5. If the measured value is not  $10\pm 1.9\text{mm}$ , perform the Adjustment. If the Check is OK, proceed to **Checking Tray 5 / Bypass Lead Edge Registration**.

## Checking Tray 5 / Bypass Lead Edge Registration

1. Select Tray 5 (MSI) from the **Feeder Tray** drop down menu.
2. Make the following selections:
  - a. Select **Side 1**.
  - b. Select 5 for **Print Count**, if not already selected.
3. Select **Print**.
4. Take the third print and measure from the lead edge to point A (as shown on [Figure 1](#)). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
5. If the measured value is not  $10\pm 2.2\text{mm}$ , perform the Adjustment. When the measured value falls within the specification, select the Side 2 radio button and repeat steps 1 through 4 to check registration for Side 2.
6. If the Check for Tray 5 / Bypass Side 2 is not  $10\pm 2.2\text{mm}$ , perform the Adjustment. If the Check is OK, proceed to **Side Edge Registration**.

## Adjustment

1. Use the Right and Left Arrow buttons to increase or decrease the amount of lead edge spacing. The right arrow increases the lead edge spacing (moves the grid pattern to the left). The left arrow decreases the lead edge spacing (moves the grid pattern to the right). Each increment of the displayed value is .32mm.
2. After adjustment, repeat the Check procedure to see if the measured value of the Lead Edge (A) now falls within the specification of [Table 1](#).
3. Repeat Adjustment steps 1 through 3 until the measured value falls within the specification.

## Side Edge Registration

### Purpose

To correctly register the side edge of the image in relation to the outboard edge of the paper.

### Check

1. Check that paper is loaded in all trays, and that the paper guides are adjusted correctly.
2. Make the following selections:

- a. Select **Side 1**.
  - b. Select **Tray 1**.
  - c. Select 5 for **Print Count**, if not already selected.
3. On the UI Diagnostics screen select **Print**. (Click **Start** on the PWS screen.)
  4. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1," and "Side 1," and the location of the Lead Edge and Side Edge of each sheet.

**NOTE:** With the lead edge to the right, the side edge to be checked will be at the top.
  5. Take the third print and measure the following:
    - For paper larger than letter size, measure from the intersection between the 1st line from the side edge and the 10th line from the lead edge of the paper (point B2 on [Figure 1](#)).
    - For letter size (8.5 x 11 / A4), measure from the intersection between the 1st line from the side edge and the 5th line from the lead edge of the paper (point B1 on [Figure 1](#)).
  6. If the measured value is not  $8.5\pm 2.0\text{mm}$ , perform the Adjustment.
  7. If the measurement is within specification, select Trays 2 through 4 and repeat steps 1 through 5 for each successive tray. Perform the Adjustment, if the measurement is not within specification.
  8. If the measurement is within specification, select the Side 2 radio button, select Trays 1 through 4 and repeat steps 1 through 5 for each successive tray for Side 2.
  9. If the measured value for Trays 2 through 4, and Tray 6 (Side 2) is not  $8.5\pm 2.4\text{mm}$ , perform the Adjustment, where applicable.
  10. If the measurement is within specification, select Tray 5 and repeat steps 1 through 5 for Side 1 of the Tray 5 / Bypass.
  11. If the measured value for Side 1 of the Tray 5 / Bypass is not  $8.5\pm 3.0\text{mm}$ , perform the Adjustment.
  12. If the measurement is within specification, select the **Side 2** radio button and repeat steps 1 through 5 for Side 2 of the Tray 5 / Bypass.
  13. If the measured value for Side 2 of the Tray 5 / Bypass is not  $8.5\pm 3.0\text{mm}$ , perform the Adjustment.

## Adjustment

1. Use the Up and Down Arrow buttons to increase or decrease the amount of side edge spacing. The Up arrow increases the side edge spacing (moves the image away from the outboard edge of the paper). The Down arrow decreases the side edge spacing (moves the image towards the outboard edge of the paper). Each increment of the displayed value is .35mm.
2. After adjustment, repeat the Check procedure to see if the measured value of the Side Edge (A) now falls within the specifications of [Table 1](#).
3. Repeat Adjustment steps 1 through 3 until the measured value falls within the specification.

## ADJ 9.2 Edge Erase Value Adjustment

### Purpose

To correct both (Rear/Front) sides and Lead Edge erase values of the image.

**NOTE:** .

### Prerequisite

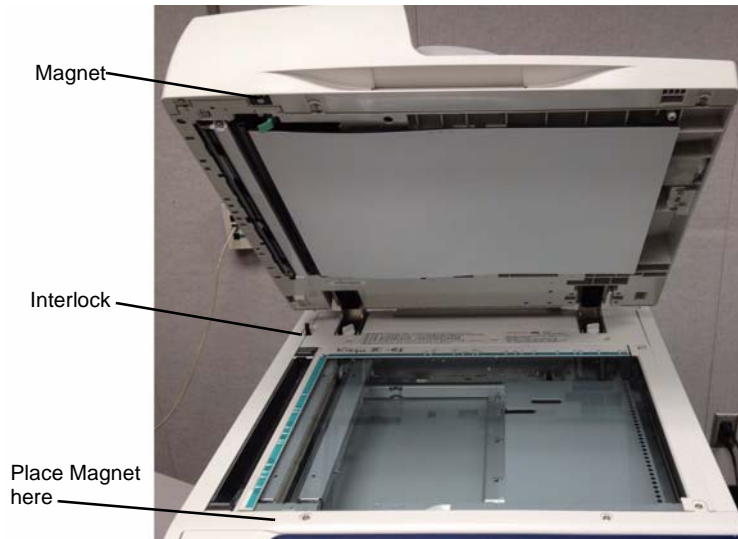
The IOT Lead Edge/Side Edge Registration ([ADJ 9.1](#)) must be checked, and adjusted if required.

### Check

1. Specify a Tray loaded with paper. Make a black copy without using any originals and leaving the Platen Cover open.

To make a copy with the platen open:

- a. Remove the magnet from the DADF housing ([Figure 1](#)).
- b. Place the magnet over the area on the console where the magnet would touch when the DADF is closed ([Figure 1](#)).
- c. Hold down the DADF Interlock ([Figure 1](#)) while pressing **Start**.



**Figure 1 Making a copy with the Platen open**

2. Check that the margins are 4mm at the side and 2mm at both Lead and Trail Edges.

### Adjustment

1. Enter the [UI Diagnostic \(CSE\) Mode](#), then select [dC131 NVM Read / Write](#).
2. Adjust the following NVM locations such that the measured value is 4mm at the top, and 2mm at both sides and Trail Edge ([Table 1](#)).

If the setting value is increased, the erase value increases.

**Table 1 NVM List**

Chain Link	Name	Min.	Initial	Max	Step
749-418	SIDE NORMAL ERASE ADJUSTMENT	20	20	255	0.1mm increments
749-417	TOP NORMAL ERASE ADJUSTMENT	40	40	255	0.1mm increments
749-419	END NORMAL ERASE SIDE Reg ADJUSTMENT	20	20	255	0.1mm increments

3. After adjustment, make another black copy without using any originals and leaving the Platen Cover open.
4. Adjust until the margins are 4mm at both sides and 2mm at both Lead and Trail Edges.

## ADJ 9.3 ProCon On/Off Print Check

### Purpose

This procedure performs a Minisetup, outputs a printed test pattern for visual analysis, and prints a Job End patch. Selected process control NVM values are displayed, and a check for hidden process-control-related faults is performed.

There are 2 modes in this procedure:

- Procon On mode - the routine is run with ATC/ADC correction per the ProCon lookup table (LUT) and customer mode settings.
- Procon Off mode: - the routine is run with ATC/ADC/LUT bypassed, using the default settings for potential.

### Check

1. Ensure that there is 11 x 17 in/A3 paper in Tray 1.
2. Ensure that TRC (ADJ 9.13) values are set at midpoint.
3. Enter the **UI Diagnostic (CSE) Mode**.
4. Select the **Adjustments** tab, then select **dC937 Pro Con On/Off Print**.

**NOTE:** Disregard any NG readings that are displayed when you first enter the routine - the data are only valid after **Print** has been selected.

5. Select the **Process Control On** button, then select **Print**. Minisetup will be executed in 4 color mode. 1 sheet of the built-in test pattern **Pcon PG 200C** will be printed and the job end patch created.
6. Check the ProCon status screen for any failures. If **Fail** is displayed, perform the Adjustment.
7. Examine the printed test pattern. Compare the output to the Color Test Pattern (Figure 1). Check the density and color shift of the medium/high density areas, and the reproduced density and color shift of the highlights. If a problem is detected, perform the Adjustment.

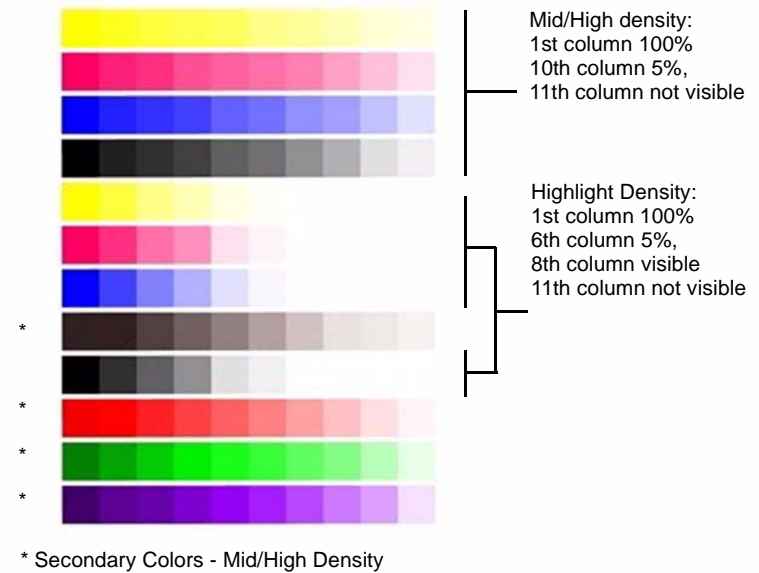


Figure 1 Color Test Pattern

### Adjustment

1. If NG is displayed, carry out the following failure correction as appropriate, then repeat the Check.
  - For **ADC Shutter Open** failures go to the **392-649** RAP.
  - For **ADC Shutter Closed** failures go to the **392-650** RAP.
  - For **ADC Sensor** failures go to the **392-651** RAP.
  - For **ADC Patch** failures go to the **392-670** (Y) RAP, **392-671** (M) RAP, **392-672** (C) RAP, or the **392-673** (K) RAP.
  - For **ATC Average** failures go to the **392-665** (Y) RAP, **392-666** (M) RAP, **392-667** (C) RAP, or **392-668** (K) RAP.
  - For **ATC Amplitude** failures go to the **392-657** (Y) RAP, **392-658** (M) RAP, **392-659** (C) RAP, or the **392-660** (K) RAP.
  - For **Temperature** failures go to the **392-661** RAP.
  - For **Humidity** failures go to the **392-662** RAP.
  - For **ADC Minisetup** failures go to the **392-662** (Y) RAP, **392-676** (M) RAP, **392-677** (C) RAP, or the **392-678** (K) RAP.
2. Record the values in the **ProCon On/Off Values** window.
3. Select the **ProCon Off** button, then select **Print**. Minisetup will be executed in 4C mode. 1 sheet of the built-in test pattern **Pcon PG 200C** will be printed and the job end patch created.  
ProCon Off switches off the Grid Voltage Control, and ADC Gradation Control:

- Grid Voltage Control Off: For medium/high density problems, this allows you to differentiate between developing/transfer problems in IOT elements status and Grid Voltage Control problems due to Procon ADC.
  - ADC Gradation Control: When reproduced highlights are poor, this allows you to differentiate between problems with the IOT itself and problems with the ADC Gradation Adjustment.
4. Compare the output of the ProCon On and ProCon Off prints. Evaluate according to one of the following Problem Statements:
- Both ProCon On and ProCon Off prints are unacceptable
    - For poor Highlight reproduction, perform [ADJ 9.14](#) (Tone-up/Tone-down).
    - If the problem involves a single color, it may be the Developer and/or power supplies, Photoreceptor/BCR/Scoro tron, and/or power supplies, or ROS. Repair or replace as required.
    - If the problem involves all colors, check the 2nd BTR, its power supply, and the Transfer Belt.
  - ProCon Off print is OK, but ProCon On print is unacceptable
    - Replace the MOB/ ADC Sensor Assembly ([PL 18.5](#)).

## ADJ 9.5 Thin Line Correction Mode Adjustment

### Purpose

The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600dpi/1200dpi thin lines.

Because of the dispersion due to the difference in the machines, thin lines, especially slanted ones, tend to break up.

When this happens, use the Thin Line Correction Mode to correct it.

**NOTE:** The Thin Line Correction Mode might cause defects to appear in images when in use.

1. Interference in the form of banding in ladder images
2. LPH streaks appearing in high temperature environment

Because of these reasons, keep the adjustment amount as low as possible.

### Adjustment

1. Enter the [UI Diagnostic \(CSE\) Mode](#), select [dC131](#) NVM Read / Write, and perform the Thin Line Correction by adjusting the following NVMs.
2. NVM 749-006, 1200 Only Fine Line Correction - 0: OFF (also perform correction for 600dpi), 15: ON (only perform correction for 1200dpi)  
If the Thin Line Correction is also to be performed for 600dpi, use 0. The default value is 15.
3. NVM 749-007, Thin Line Correction Switch - 0: Thin Line Correction OFF, 1: Thin Line Correction ON.  
The default value is 0.
4. Thin Line Correction Amount Adjustment ([Table 1](#)):

**Table 1 Thin Line Correction**

NVM Address	Contents	Initial Value	Adjustment Range
749-243	Thin Line Correction Amount Y Color	200	140~255
749-244	Thin Line Correction Amount M Color	200	140~255
749-245	Thin Line Correction Amount C Color	200	140~255
749-246	Thin Line Correction Amount K Color	200	140~255

The smaller the value, the more emphasis the thin line gets (amount of exposure is increased).

Amount of exposure is increased by: 30% for 140, 20% for 160, and 10% for 180. (Default value - Adjustment value)/2 = amount of increased exposure in %.

The recommended value is 160.

5. 752-006 Thin Line Correction ADC\_Switch - 0: OFF, 1: ON.  
Although this is normally set as 0 (OFF) during use, if the highlight reproduction is overdone, set this to 1 (ON).  
Default value is 0.

## ADJ 9.6 LPH Exposure Amount Fine Adjustment

### Purpose

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

### Correction Area

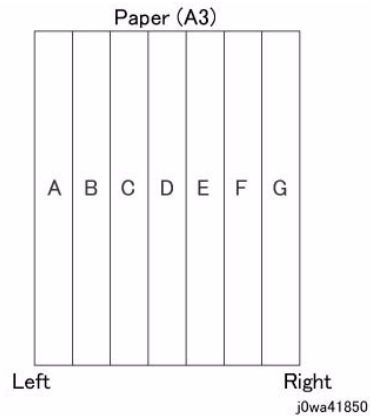


Figure 1 Correction Areas

Table 1 Distance

	A	B	C	D	E	F	G
Distance from the left of image (MM.)	0	52	103	154	206	257	308.9

As shown in Figure 1, the LPH zone is divided into 7 areas by setting the 6 points - from A (left most edge) to G (right most edge).

Adjustment is performed at each area to lower the LPH exposure amount until the density is even.

**NOTE:** There are cases where point A or G will lie beyond the image zone. Furthermore, the 154mm mark is the center of the image.

**NOTE:** As an overly large adjustment might cause jumps in gradation, make the adjustments as small as possible.

The adjustment amount (%) is not = amount of change in density.

The actual exposure level includes a process that converts the brightness of ADC Sensor Position to 100%.

### Adjustment

1. LPH Exposure Amount Fine Adjustment ON/OFF Switch Selector

To enable the LPH Exposure Amount Fine Adjustment function, set the following NVM as ON (Table 2).

Table 2 NVM

NVM Names	NVM Address	Contents	Initial Value	Adjustment Range
Smile Correction Switch	749-005	0: OFF 1: ON	0	0 or 1

2. Selection of Correction Method:

The LPH Exposure Amount Fine Adjustment can be done by:

- a. Correcting the density skew in the IN-OUT direction
  - b. Selecting a pre-prepared pattern to perform the correction
  - c. Using custom correction to manually correct the adjustment amount for each area
- A combination of the various correction methods can be used. However, the correction cannot go beyond the 0 to -20 (%) range.
- a. IN/OUT Density Correction (Table 3):

Corrects the IN-OUT density skew in the axis direction of the photoreceptor.

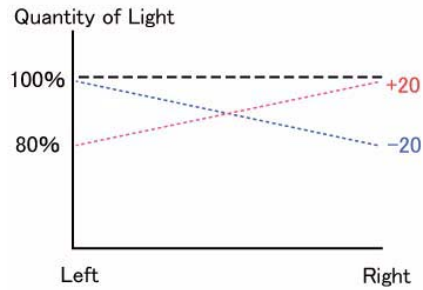
When there is density skew from the left to the right of the image, the adjustment amount to correct that has to be set for each color.

Setting Range is -20 to 20 (%).

Table 3 In/Out Density NVM

NVM Names	NVM Address		Initial Value	Adjustment Range
In Out Tendency (IN/OUT correction)	749-191	Y	0	-20~20
	749-192	M	0	-20~20
	749-193	C	0	-20~20
	749-194	K	0	-20~20





j0wa41851

Figure 2 IN/OUT density correction

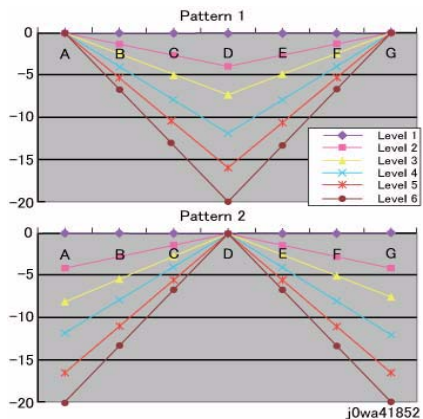
\*Although there is also an adjustment range at the positive side, it only involves reducing the brightness at the IN side or the OUT side and therefore will not have any correction that goes above 100%.

b. Pattern Selection Correction:

If you have elected to perform correction based on Pattern Selection, select the Pattern 1~6 and Level 1~6 that is most suitable for the density correction from the following figures (Figure 3, Figure 4, Figure 5).

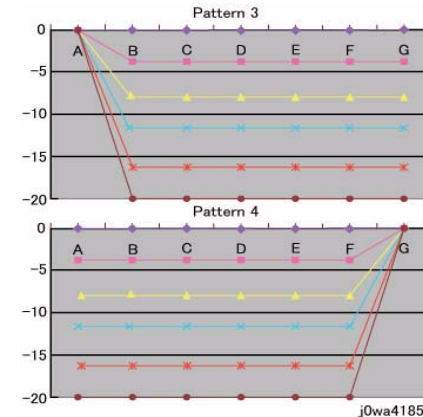
The selected Pattern (Table 4) and Level (Table 5) are reflected as LPH Brightness Correction by changing the following NVM values.

As there are separate NVMs for each color, they can each be corrected independently.



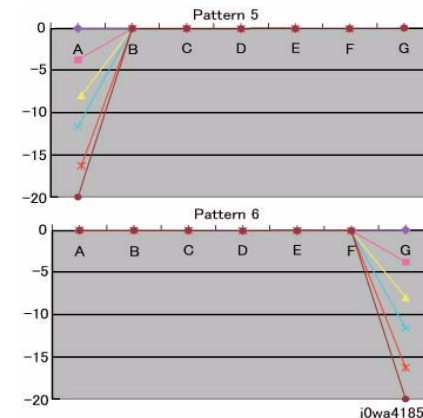
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Figure 3 Patterns 1 and 2 selection



j0wa41853

Figure 4 Patterns 3 and 4 selection



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Figure 5 Patterns 5 and 6 selection

Table 4 Correction Pattern NVM

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Pattern (Pattern Selection)	749-195	Y	1	1~6
	749-196	M	1	1~6
	749-197	C	1	1~6
	749-198	K	1	1~6



**Table 5 Correction Level NVM**

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Level	749-235	Y	0	255
	749-236	M	0	255
	749-237	C	0	255
	749-238	K	0	255

**NOTE:** Take note that "0,5" for Pattern means "Disabled" and "1" for Level means "No correction".

c. Custom Correction:

If you have elected to perform density correction by custom correction, you must input the required adjustment amount for the correction of every area into the NVM for each YMCK color (Table 6).

Be careful as only negative correction can be performed for density correction.

**Table 6 Custom Correction NVM**

NVM Names	NVM Address	Contents		Initial Value							Adjustment Range	
				A	B	C	D	E	F	G		
Custom Correction Value	749-203~209	R/E (%)	Y	0	0	0	0	0	0	0	0	-20~20
	749-210~216	within Pulse	M	0	0	0	0	0	0	0	0	-20~20
	749-217~223	Width Variable	C	0	0	0	0	0	0	0	0	-20~20
	749-224~230	Range	K	0	0	0	0	0	0	0	0	-20~20

\*The NVM Addresses correspond in ascending order to ABCDEFG.

\*Although there is also an adjustment range at the positive side, the brightness will saturate at 100%. The positive correction of up to the 100% range will only be applied when the exposure amount has been corrected towards the negative side at IN-OUT Density Correction or Pattern Selection Correction.

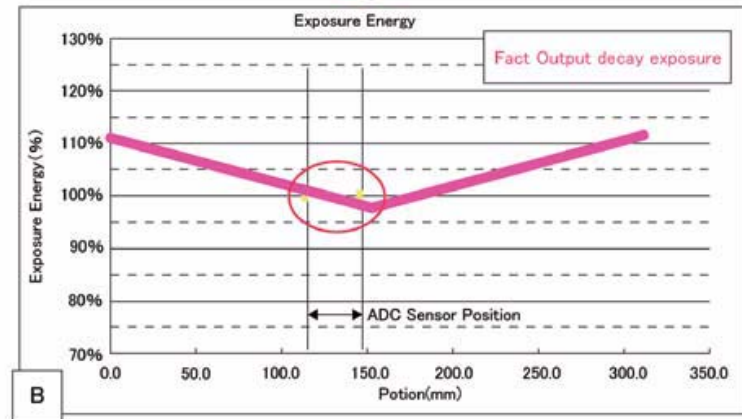
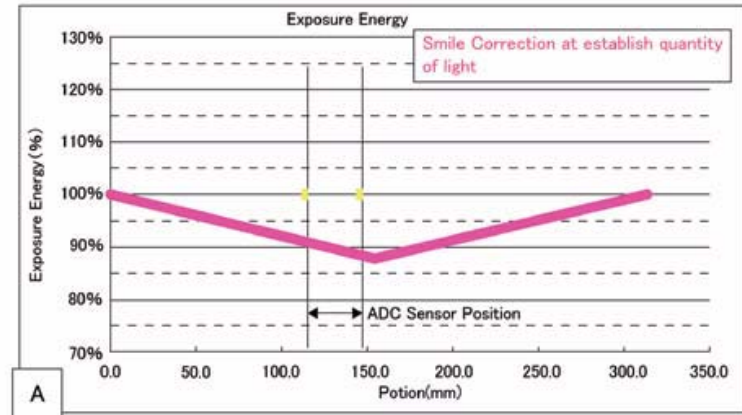
The above 3 types of correction can be used in combination. However, the total amount of exposure adjustment for these Smile Corrections are restricted to be within 0 to -20%.

[Sum of Correction 0~20%] = [IN-OUT Adjustment Amount%] + [Pattern Selection Adjustment Amount %] + [Custom Adjustment Amount %] If the total from the 3 corrections add up to less than -20%, it will be uniformly limited to -20%.

If it is larger than 0%, then it will be uniformly limited to 0%.

The above are the restrictions that apply to the exposure amount correction and correction by Smile Correction function. However, within the actual machine, after the exposure amount correction by Smile Correction, it will enter another process to calibrate the exposure at the ADC Sensor Position to be 100%. As a correction is applied to the exposure amount after a Smile Correction, the exposure amount in the vicinity of 114 to 144mm from the left of the image becomes 100%, while it is relatively higher or lower for the rest of the positions.

Reference sample



**Figure 6 Exposure Energy Measurement**

As shown in Figure 6-B, the control is such that the final exposure at the ADC Sensor Position becomes 100%. By this, the exposure amount that was corrected by Smile Correction (Figure 6-A) is corrected again until it is at the actual output level (Figure 6-B). (The figures are the exposure models when Pattern 1, Level 4 correction has been performed.)

## ADJ 9.7 ATC Sensor Setup

### Purpose

#### CAUTION

*This procedure should only be performed when the ATC Sensor or Developer Housing is being replaced, **OR** when there is reason to believe that the calibration values in NVM are incorrect.*

To set the calibration values **ATC Correction Coefficient**, **ATC Correction Offset** in NVM to calibrate the new ATC Sensor.

### Check

1. If an ATC Sensor or Developer Housing was replaced, perform the first procedure listed in **Adjustment**
2. If there is reason to believe that the calibration values in NVM are incorrect, perform the following:
  - a. Enter the Diagnostic Mode (**UI Diagnostic (CSE) Mode**).
  - b. From the **Adjustments Tab** screen, select the **dC950 ATC Sensor** button.
  - c. Select **Measurements**.
  - d. Check the values in the window. The default values for each color are:
    - ATC Coefficient - 1024
    - ATC Correction Offset - 0
  - e. If the screen displays all default values, perform the second procedure listed in **Adjustment**.
  - f. If the measurement result is NG, check that the ATC Sensor is connected and undamaged.

### Adjustment

#### Procedure for new ATC Sensors

Perform these steps if you have just replaced an ATC Sensor or a Developer Housing:

1. Locate the ATC Sensor calibration code on the ATC Sensor. This is the 3-digit number in the 3rd line of text on the label (it will always start with a zero).
2. Enter the Diagnostic Mode.
3. From the **Adjustments Tab** screen, select the **dC950 ATC Sensor** button.
4. Enter the last 2 digits of this code into the appropriate column of the display, using the up/down arrows.
5. Press the **Calibrate** button.

#### Procedure to restore ATC Calibration values

Perform steps 1 or 2 as appropriate if you need to restore ATC Sensor NVM calibration values:

1. If a known good Machine Settings file exists, use it to restore Machine Settings.
2. If a known good file is not available, if one or more ATC Sensors have been replaced, or if you are not sure of the replacement status, perform the following:
  - a. Remove the Developer Housings (**REP 9.11**).
  - b. Locate the ATC Sensor calibration code on the ATC Sensor. This is the 3-digit number in the 3rd line of text on the label (it will always start with a zero).
  - c. Enter the Diagnostic Mode.
  - d. From the **Adjustments Tab** screen, select the **dC950 ATC Sensor** button.

- e. Enter the last 2 digits of this code into the appropriate column of the display, using the up/down arrows.
- f. Press the **Calibrate** button on the Control Panel.

## ADJ 9.8 Default Developer ATC Setup

### Purpose

Immediately after the replacement of a Developer Housing with known toner density, this sets the ATC Target Value by having the ATC Sensor measure the toner density of the developer. This can also work as the check function of the ATC Sensor.

### Adjustment

1. Enter the Diagnostic Mode (**UI Diagnostic (CSE) Mode**).
2. From the **Adjustments Tab** screen, select the **dC950 ATC Sensor** button.
3. Select **Measurements**.
4. Check the values in the window. The default values for each color are:
  - ATC Coefficient - 1024
  - ATC Correction Offset - 0
5. If the measurement result is NG, check that the ATC Sensor is connected and undamaged.

## ADJ 9.9 Registration Measurement Cycle

### Purpose

To measure the color registration and display the status by indicating OK/NG.

This cycle performs the color Registration measurement that includes the detection of AC component to determine the condition of AC control (Drum Drive, Belt Drive, etc.), which is one of the color Registration components.

**NOTE:** *Correction is not performed.*

- Performs Registration measurement to determine the condition of the AC control.
- Checks that the Belt control etc. are operating normally.
- Measures/displays the amount of color shift relative to Black in the Fast Scan/Slow Scan direction.
- Displays the result of comparison with the target value as OK/NG.

### Adjustment

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the Adjustments tab.
3. Select **dC671 Measurement Cycle**.
4. Select **Shift Amount**.
5. Press **Start**. **OK** or **NG** will be displayed in the **Judgement** column.

If NG is displayed:

1. Go to **GP 6**. Press the **Machine Status** button on the Control Panel. The **Machine Status** screen opens.
2. Select the **Billing Meter/Print Report** tab.
3. Select **Print Report/List**.
4. Press the **CE** button. The **CE** screen opens.
5. Press the **Failure Report** button.
6. Press the **Start** button. The report is printed.
7. Examine the Failure report to see if there are any Chain **089** fault codes. These are only on the Failure report and are printed on page 3.
8. Troubleshoot these codes.

## ADJ 9.10 Registration Control Setup Cycle

### Purpose

To set the most appropriate Registration Control correction value for skew etc. at setup, or after replacing any of the following parts:

- LPH replacement/detachment
- 2nd BTR replacement/detachment
- Transfer Belt replacement/detachment IBT CLN Unit replacement/detachment
- IBT Module replacement/detachment (recommended) Developer replacement/detachment

The Setup Cycle is made up of the following 2 functions.

Function 1: Performed right after assembling or during field installation or when replacing a key part. Also, this is a Registration Control Full Cycle that can be performed in the Diagnostic mode right after the NVM is initialized. Executing this function corrects the Color Registration into the predefined range. The corrected shift amount for each color is saved in the NVM and it is displayed at normal completion.

Function: On entering a setup cycle, the IOT does not start. The Registration Control shift correction amount is displayed automatically on the UI screen and is used as a tool for determining the cause when a failure occurs.

### Adjustment

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the Adjustments tab.
3. Select **dC675 Registration Control Setup**.
4. Select **Setup**.
5. Select **Start**. The shift amount for each color is corrected automatically.
6. Perform **ADJ 9.9**.

## ADJ 9.11 Registration Control Sensor Check Cycle

### Purpose

This is a self-diagnostic cycle for checking that the misregistration detection system (MOB Sensor) is operating normally. The color shift amount is detected using Cyan patch. Any misregistration detected in the MOB sensor is displayed on the screen.

This detection result is compared again with the target value to determine the pass/fail (OK/NG) status. Correction is not performed.

### Adjustment

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the Adjustments tab.
3. Select **dC673 Registration Control Sensor Check**.
4. Select **Start**.
5. When the test completes, the results will be displayed. If the measured value for any parameter is larger than the target value by 10, NG is displayed in the Judgement column.
  - If NG, check that Cyan is being printed; if so, replace the MOB Sensor Assembly.
  - If Cyan is not being printed, there is a problem in Development or 1st Transfer.

## ADJ 9.12 Copy Color Balance Manual Adjustment

### Purpose

To adjust Copy Mode Color Balance to meet the customer's preference, by increasing or decreasing the center value for each color (YMC), in low density, medium density, and high density ranges.

#### CAUTION

*Perform this adjustment only to correct a strong customer complaint. Altering the setpoints will affect Copy, but will have no effect on Print mode. Also, there is quite a bit of overlap between the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary.*

*Ensure that the customer is aware and agreeable to the fact that performing this adjustment will **permanently** alter the copy output of the machine, and will not have any effect on printer output.*

*The only way to change the output characteristics or return them to the default will be on a subsequent service call.*

**NOTE:** The adjustments made in this procedure will have no effect on output made using the B/W mode.

### Adjustment

**NOTE:** For this procedure, use two originals to implement and verify the process.

- Obtain a customer original that clearly shows the area, color, and density that the customer wishes changed.
- Use the density gradient section located in the lower half of the Color Test Pattern 82E13120.

Before beginning the procedure, if possible mark the customer original to differentiate it from copies.

1. While still in customer mode change the machine settings to Basic Copier Mode per [Table 1](#) in Section 1.
2. Make 2 copies each of the Color Test Pattern and the customer original (4 copies total) and mark them "Before"
3. Enter the [UI Diagnostic \(CSE\) Mode](#).
4. Select the **Adjustments** tab.
5. Select **dc919 Color Balance Adjustment**.
6. Evaluate the areas of the customer original and the two copies that the customer wishes to change and determine which color or colors to change, and in which density levels, low, medium or high to make the changes. Use the information in the following note to aid in your determinations.

#### NOTE:

- The changes that can be made with this adjustment are fairly small and may be hard to see, especially in the mid to high density areas of the output.
- Deciding what colors to change is usually a somewhat subjective judgement as to color and density unless the customer has readings from a colorimeter and a densitometer and has specific color and density data available. Use the principles learned in basic color theory as to which combinations of C M Y produce particular R G B colors to make the determination as to which C M Y color or colors to change.

- Color changes will be more pronounced and easier to see in R, G or B areas of the output than in the areas that are closer to pure C, M or Y
  - As you make the changes, be aware of density and color changes that may be occurring in other areas of the customer's original.
  - If a particular color is not present in the customer's original, changes to that color will not appear in the copy output for that original. Use the copies made from the Color Test Pattern to evaluate changes that may be occurring to colors and densities not present in the customer's original.
  - Changing K will not change any hue, but will affect all colors in terms of density.
7. Select **Read Values** to get the current values.  
**NOTE:** Selecting **Reset Values** will return ALL values to 0.
  8. For each color, enter in the new values for Low, Medium, and High. The default is 0, and the range is from -3 to +3.
  9. Select **Write Values** to save the values entered.
  10. Perform a Call Closeout, then switch the machine power off then on.
  11. Make 2 copies of each original. Ask the customer if the desired result is achieved. If the desired result has been achieved, record the values for C M Y in the Service Log.
  12. If desired image quality has not been achieved, compare and evaluate the density changes that will be seen by comparing the C M Y areas of the copies with the Color Test Pattern, and color and density changes that will be seen by comparing copies with the R G B areas of the Color Test Pattern to aid in determining what further changes to make.
  13. Repeat steps 2 through 12 until the customer is satisfied with the image quality.

## ADJ 9.13 TRC Manual Adjustment

### Purpose

To adjust image quality (TRC) to meet the user's preference, by increasing or decreasing the center value of gradation correction for each (YMCK) color, in low density, medium density, and high density ranges.

#### CAUTION

*Perform this adjustment only to correct a strong customer complaint. Altering the setpoints will affect both Print and Copy modes. Also, there is quite a bit of overlap between the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary.*

*Ensure that the customer is aware and agreeable to the fact that performing this adjustment will **permanently** alter the copy and printer output of the machine.*

*The only way to change the output characteristics or return them to the default will be on a subsequent service call.*

**NOTE:** The adjustments made to K in this procedure will have an effect on output made using the B/W mode.

**NOTE:** There is interaction between this adjustment and the settings made in dC919 for copy output. If this adjustment is made, it may be necessary to perform dC919 to achieve desired customer image quality results for copying.

### Adjustment

1. While still in customer mode change the machine settings to Basic Copier Mode per Table 1 in Section 1.
2. Print 2 copies of the customer file that they are using as their image quality standard and mark them "Before"
3. Enter the **UI Diagnostic (CSE) Mode**.
4. Select the **Adjustments** tab.
5. Select **dC919 Color Balance Adjustment** and perform the following:
  - a. Read the low, medium and high density values for C M Y and K. If all values are zero, proceed to step 6.
  - b. Record any values that are **not** zero.
  - c. Select **Reset Values**.
6. Select **dc924 TRC Manual Adjustment**.
7. Under the **Adjustment Options** tab, select **Enabled**.
8. Select **Read Values** to get the current values of low, medium and high density for each color.

**NOTE:** Selecting **Reset Values** will return ALL values to 0.

9. Evaluate the areas of the customer original and the two copies that the customer wishes to change and determine which color or colors to change, and in which density levels, low, medium or high to make the changes. Use the information in the following note to aid in your determinations.

#### NOTE:

- Deciding what colors to change is usually a somewhat subjective judgement as to color and density unless the customer has readings from a colorimeter and a densitometer and has specific color and density data available. Use the principles learned in basic color theory as to which combinations of C M Y produce particular R G B colors to make the determination as to which C M Y color or colors to change.
  - Color changes will be more pronounced and easier to see in R, G or B areas of the output than in the areas that are closer to pure C, M or Y
  - As you make the changes, be aware of density and color changes that may be occurring in other areas of the customer's original.
  - If a particular color is not present in the customer's original, changes to that color will not appear in the copy output for that original. Use the copies made from the Color Test Pattern to evaluate changes that may be occurring to colors and densities not present in the customer's original.
  - Changing K will not change any hue, but will affect all colors in terms of density.
10. For each color, enter in the new values for Low, Medium, and High. The default is 0, and the range is from -128 to +127.
  11. Select **Write Values** to save the values entered.
  12. Perform a Call Closeout, then switch the machine power off then on.
  13. Make 2 prints. Ask the customer if the desired result is achieved.
  14. Repeat steps 2 through 14 until the customer is satisfied with the image quality.
  15. If any non-zero values were recorded in step 5, perform the following:
    - a. Enter the **UI Diagnostic (CSE) Mode**
    - b. Select the **Adjustments** tab.
    - c. Select **dC919 Color Balance Adjustment**
    - d. Re-enter the values recorded in step 5 for each color. Be sure to select **Write Values** before moving on to the next color.
  16. Perform a Call Closeout, then switch the machine power off then on.
  17. Ask the customer to make a copy using an original that they normally use to check image quality. If the customer is satisfied with image quality, return to the **Call Flow** RAP.
  18. If the customer is not satisfied with image quality, perform the dC919 procedure.

## ADJ 9.14 Toner Density Setup (Tone Up/Down)

### Purpose

This procedure manually increases or decreases toner concentration (TC). It is used when a xerographic problem or out-of-toner condition has prevented process control from maintaining the TC target value.

This procedure does not change any parameters; it performs a one-time change to TC. It is important that the problem that caused the low or high TC condition is resolved before performing this adjustment.

### Check

1. Enter the [UI Diagnostic \(CSE\) Mode](#).
2. Select the Adjustments tab.
3. Select [dC937](#) Pro Con On/Off Print.
4. Select **Print**.
5. Compare the values for **ATC Average** with the values for **ATC Target**. If the values differ by more than 25 bits for Y, M, or C; or by more than 50 bits for K, perform the **Adjustment**.

### Adjustment

1. Enter the [UI Diagnostic \(CSE\) Mode](#).
2. Select the **Adjustments** tab.
3. Select [dC991](#) Tone Up/Tone Down.
4. For each color that is above or below target, enter a value between -99 and 99 into the row and select This value is the number of tone up or tone down cycles to be performed. Negative values increase the **ATC Average**; positive values decrease **ATC Average**.
5. **Start** on the UI.
6. Repeat as required until **ATC Average** matches **ATC Target**. If the measured (average) value cannot be set to the target, there is a problem in either the toner delivery system (Dispenser, low toner sensor, etc.), or in the TC detection circuitry.

## ADJ 9.16 MAX Setup

### Purpose

This procedure checks, and, if necessary, adjusts, several Image Quality factors so that optimum copy and print quality can be consistently obtained, by stabilizing the development potential and copy density.

### Check

1. Reset the TRC Adjust values ([ADJ 9.13](#)) to midpoint (0).
2. Perform the ProCon On/Off Print check ([ADJ 9.3](#)). If the check is good, go to [5](#).
3. If the prints display any Inboard-to-Outboard density variation, perform the Adjustment.
4. If Print quality is OK but Copy quality is bad, perform the **IIT Procedures** portion of the Adjustment.
5. Perform the following as required by the customer: TRC Adjust ([ADJ 9.13](#)). The adjustment is complete. DO NOT perform the Adjustment unless problems are encountered in this Check.

### Adjustment

Max Setup consists of several separate procedures that should be performed in the following sequence:

#### IOT Procedures

1. Verify the ATC Sensor Setup ([ADJ 9.7](#)), then proceed to [2](#). Ensure that the calibration codes have not been reset to the default values.
2. Perform the ProCon On/Off Print check ([ADJ 9.3](#)), then proceed to [3](#).
3. If the prints display any Inboard-to-Outboard density variation go to [dC612](#). Print out test pattern #12 - In/out adjustment\_primary color (4C). Evaluate the prints for inboard-to-outboard density variation. If problems are observed, perform [ADJ 9.11](#), then proceed to [4](#).
4. If Print quality is OK but Copy quality is bad, go to the **IIT Procedures**; otherwise proceed to [5](#).
5. Perform the following as required by the customer: TRC Adjust ([ADJ 9.13](#)).

#### IIT Procedures

Perform these steps ONLY if sent here from the **IOT Baseline Checks**. IIT Calibration **SHOULD NOT** be performed as a routine part of the Adjustment.

1. If any IIT or IPS repairs were performed, perform the IIT Calibration ([dC945](#)), then proceed to [2](#).
2. Make a copy of the ProCon On pattern that was printed in [2](#) of the Baseline Checks. Compare the copy to the original print. Return to [5](#) of the IOT Procedures.



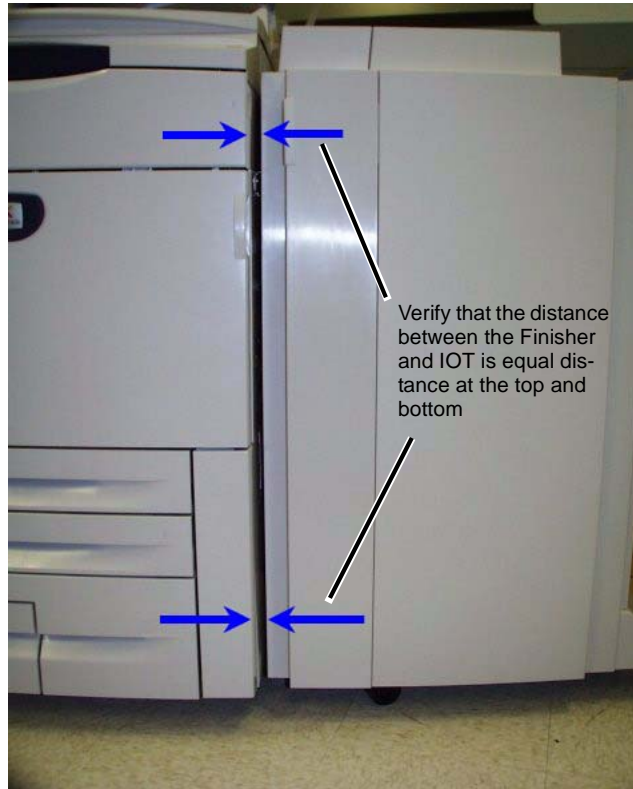
## ADJ 12.1 Professional Finisher Leveling

### Purpose

The Finisher level should be checked if the machine has been moved to a new location or if the machine is having Booklet Quality issues or entrance jams.

### Adjustment

1. Press the **Job Status** button to check that there are no jobs in progress.
2. Switch off the power and disconnect the power cord.
3. Verify that the Finisher is properly latched and secured to the IOT.
4. Verify that the Finisher is Level and parallel with the IOT ([Figure 1](#)).



**Figure 1 Verifying Finisher Level**

5. Adjust the Finisher Level so that it is parallel with the IOT ([Figure 2](#)).



**Figure 2 Leveling the Finisher**

6. When Finisher is parallel to the IOT, verify that the H-Transport does not interfere with the Finisher Entrance Gate.

## ADJ 12.2 Professional Finisher Booklet Fold Skew

### Purpose

To adjust the Booklet Maker so that the fold is square.

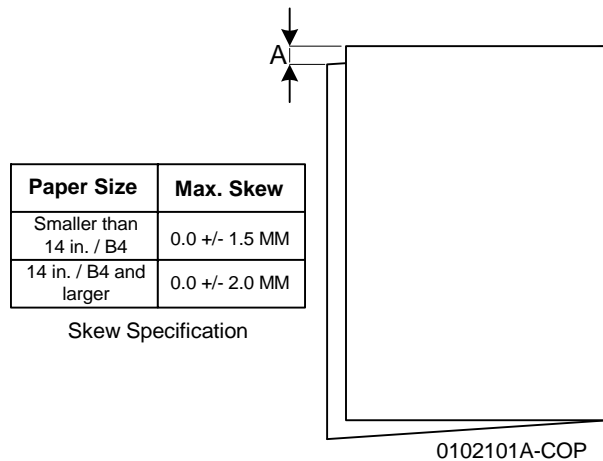
### Check

1. Set machine up according to instructions in [Table 1](#) and run a set of each Booklet job. Label each booklet.

**Table 1 Booklet Jobs**

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

2. Measure the skew (A) on all sheets of paper and verify against the Skew Specification table in [Figure 1](#).



**Figure 1 Skew Specification**

3. If the fold is within specification on all sheets, go to [ADJ 12.5 Booklet Fold Position](#). If any of the sheets are out of specification, go to the adjustment.

### Adjustment

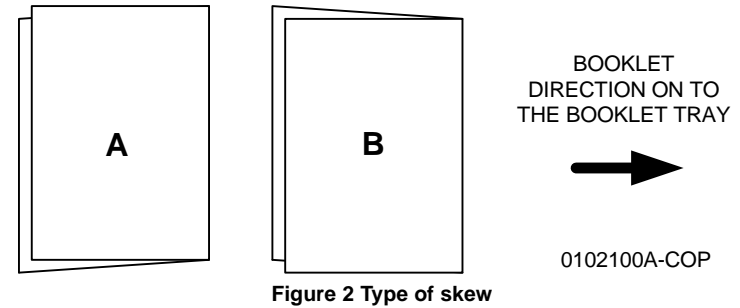
1. Determine the type of Fold Skew:

- a. Set machine up according to instructions in [Table 2](#).

**Table 2 Booklet Jobs**

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Booklet Size
1	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

- b. Observe the booklet as it comes out on to the Booklet Tray ([Figure 2](#)) and determine the type of skew.



2. Adjust the Booklet skew ([Figure 3](#)).

## ADJ 12.3 Professional Finisher Booklet Fold Position

### Purpose

The purpose of this adjustment is to set up the Booklet Maker so that the fold is in the center of the booklet. Several setups are required so that fold position can be set for paper size, set size, unstapled and stapled sets.

### Check

**NOTE:** This procedure cannot be performed from Paper Trays 3 or 4 as the folding activity requires Short Edge Feed (SEF).

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Enter UI Diagnostic (CSE) Mode.

**NOTE:** There are 10 different fold position parameters available in UI diagnostics. All of them will need to be adjusted.

4. If the NVM Setting Value List for the Finisher is available, select dC131 from the **Adjustments** Tab, and enter the recorded values for the NVM locations listed in Table 1. Then, proceed to the next step.
5. Under the **Adjustments** Tab, select dC128.
6. On the dC128 screen, select the **Type** and **Position Adjustment** parameter for Job #1 in Table 1. Select a paper tray containing SEF paper larger than B4 (11 x 17"/A3 preferred)
7. Touch the **Test Print** button to print a sample.
8. Measure and record "X1" and verify Fold Position on that job against the Fold Specification table in Figure 1.

1. Open the Front Door and slide out the Booklet Maker

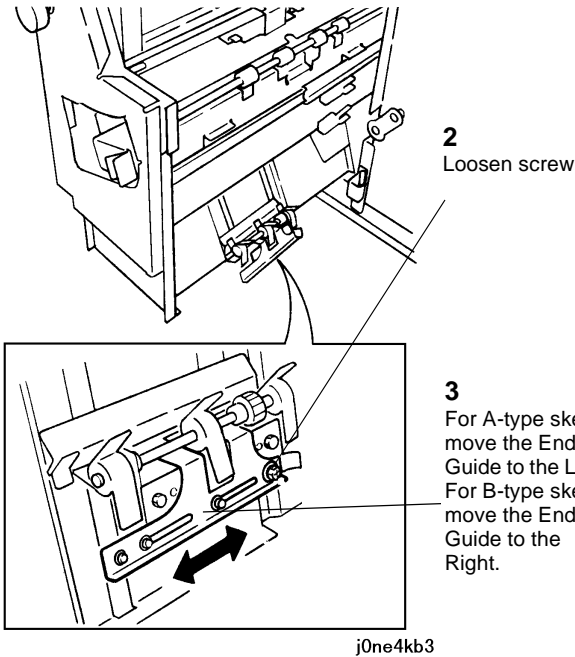
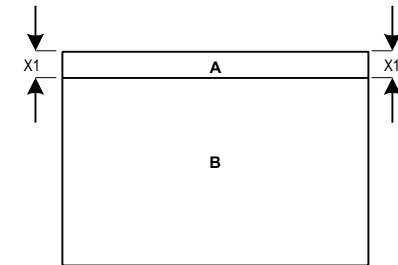


Figure 3 Adjusting the Fold Skew

3. Set machine up according to instructions in Table 1 and re-run sample job.
4. Repeat steps 1 - 3 until the Fold Skew setup meets specification or customer request.
5. After adjustment is done, go to ADJ 12.3 Booklet Fold Position.

Paper Size	X1
Smaller than 14 in. / B4	0.0 +/- 1.5 MM
14 in. / B4 and larger	0.0 +/- 2.0 MM

Fold Position Specification



Note: Example showing A-side longer than B-side

NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.

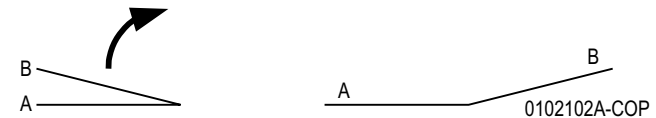


Figure 1 Fold Specification

9. If the particular fold is not within specification, perform the Adjustment.
10. Repeat steps 6 - 9 for all other jobs in [Table 1](#). Make sure that you select an appropriate paper tray for the booklet size being adjusted.
11. When the fold is within specification on all jobs, go to the Booklet Staple Position (Staple on Fold) ([ADJ 12.4](#)).

**Table 1 Fold Position jobs**

Job	Type	Position Adjustment	Pro. Fin. NVM
1	Bi-fold	Booklet Bi-fold position - B4 or larger	763-106
2	Booklet	Plain Booklet - 2 sheet fold position	763-133
3	Booklet	Plain Booklet - 3 or more sheet fold position.	763-134
4	Booklet	Stapled Booklet 2 sheet fold position B4 or larger	763-108
5	Booklet	Stapled Booklet 3 sheet fold position B4 or larger	763-152
6	Booklet	Stapled Booklet 4 sheet fold position B4 or larger	763-153
7	Booklet	Stapled Booklet 5/7 sheet fold position B4 or larger	763-154
8	Booklet	Stapled Booklet 8/14 sheet fold position B4 or larger	763-155
9	Booklet	Stapled Booklet 15 sheet fold position B4 or larger	763-145
10	Booklet	Booklet Tamper Shift Position	763-115

### Adjustment

1. For each Test Print that was out of spec:
  - a. To make the 'B' side ([Figure 1](#)) longer, increase the value. To make the 'B' side shorter, decrease the value. Each count is equal to about 0.2 mm (5 counts will move the fold position 1mm).
  - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
2. Check output against specifications in [Figure 1](#). Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

## ADJ 12.4 Professional Finisher Booklet Staple Position (Staple on Fold)

### Purpose

The purpose of this Adjustment is to set up the machine so that the Staples are within specification on the folded booklet.

### Check

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification ([ADJ 12.2](#)).
3. Ensure that the Fold Position is within specification ([ADJ 12.3](#)).
4. Enter **UI Diagnostic (CSE) Mode**.

**NOTE:** There are 6 different Staple-on Fold parameters available in UI diagnostics. All of them will need to be adjusted.

5. If the NVM sheet for the Finisher is available (Tray 1 compartment), select **dc131** from the **Adjustments** Tab, and enter the recorded values for the NVM locations listed in [Table 1](#).
6. Under the **Adjustments** Tab, select **dc128**.
7. On the **dc128** screen, select the **Type** and **Position Adjustment** parameter for Job #1 in [Table 1](#). Select a paper tray containing paper larger than B4 (11 x 17"/A3 preferred)
8. Touch the **Test Print** button to print a sample.
9. Measure and record X1 and compare the staple position against the specification in ([Figure 1](#)). Ensure that all staples are within +/- 1.0 mm of the fold (X1 dimension).
10. If X1 is out of specification, perform the Adjustment procedure.
11. Repeat steps 7 - 10 for all other jobs in [Table 1](#). Make sure that you select an appropriate paper tray for the booklet size being adjusted.
12. When the staple position is within specification on all jobs, go to ([ADJ 12.5](#)) Booklet Staple Alignment.

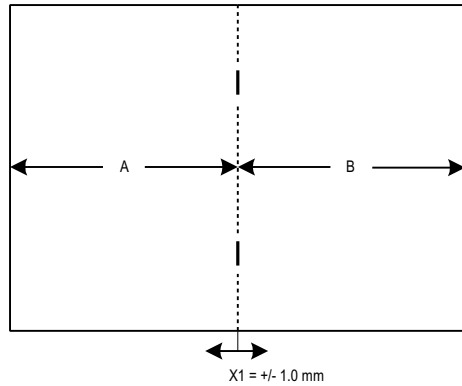
## ADJ 12.5 Professional Finisher Booklet Staple Alignment

### Purpose

To center the Staple Position on the fold in the SE direction.

### Check

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Ensure that the Fold Position is within specification (ADJ 12.3).
4. Ensure that the Staple Position is within specification (ADJ 12.4).
5. Enter **UI Diagnostic (CSE) Mode > Adjustments > dC 128 Fold Position Adjustment**.
6. From the drop-down menu, select **Booklet Staple**.
7. Select the paper tray to be tested.
8. On a scrap piece of paper, record the **Stored NVM Value**.
9. Select **Test Print**.
10. When the test print is completed, remove it from the Output Tray. Open the booklet up and perform the following:
  - Record the number of the test print (test print 1, test print 2, etc.).
  - Label the outboard edge of the print (for X1 measurement).
11. Measure X1 and verify against specification in Figure 1.



NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.

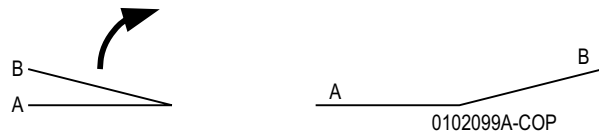


Figure 1 Staple Position

Table 1 Staple Position Jobs

Job	Type	Position Adjustment	Pro Fin. NVM
1	Booklet	Stapled Booklet 2 sheet staple and fold position B4 or larger	763-110
2	Booklet	Stapled Booklet 2 sheet staple and fold position smaller than B4	763-111
3	Booklet	Stapled Booklet 3 sheet staple and fold position	763-147
4	Booklet	Stapled Booklet 4 sheet staple and fold position	763-148
5	Booklet	Stapled Booklet 5/7 sheet staple and fold position	763-149
6	Booklet	Stapled Booklet 8/14 sheet staple and fold position	763-150

### Adjustment

1. For each Test Print that was out of spec:
  - a. To move the staples to the right (toward the B side) (Figure 1), increase the value; to move the staples to the left, decrease the value. Each count is equal to about .1 mm (10 counts to move the staple position 1mm).
  - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
2. Check output against specifications in Figure 1. Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

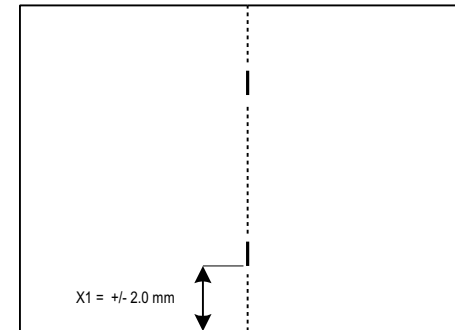


Figure 1 Staple Specification

PAPER SIZE / ORIENTATION	X1
8.5 X 11 / SEF	42.5 mm
8.5 X 13 / SEF	42.5 mm
8.5 X 14 / SEF	42.5 mm
11 X 17 / SEF	74.2 mm
8 K / SEF	68 mm
A4 / SEF	39.5 mm
A3 / SEF	83 mm
B4 / SEF	63 mm

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12. If X1 is within specification, the Adjustment is complete. If X1 is out of specification, perform the Adjustment procedure.

### Adjustment

**NOTE:** X1 will be adjusted in dC 128 using the **Adjust** tab on the UI.

- To increase X1, the current NVM value should be decreased.
  - To decrease X1, the current NVM value should be increased.
  - 1 NVM count will move the staple position 0.26mm. (10 counts will move the staple position about 2.6mm).
1. Estimate the correction needed on the paper size(s) that did not meet specification.
  2. Using the **Adjust** tab on the UI, adjust the NVM value up or down as required.

**NOTE:** The **Write NVM** tab must be selected in order for the NVM change to be visible on the test print.

3. Select the **Write NVM** tab.
4. Select the **Test Print** tab to run the job.
5. Measure X1 and compare against the specifications in (Table 1).
6. Repeat the Adjustment until the Staple Alignment meets specification or customer request.

**Table 1 Booklet Jobs**

<b>Job</b>	<b>Select Paper Supply</b>	<b>Select Booklet Creation Mode</b>	<b>Originals in DADF</b>	<b>Booklet Size</b>
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

## **ADJ 12.6 Professional Finisher Booklet Wrinkle**

### **Purpose**

To prevent the Booklet Cover from getting wrinkled.

### **Check**

- Press the **Job Status** button to check that there are no jobs in progress.
- Switch off the power and disconnect the power cord.
- Verify that the customer is not running jobs that are out of specification.
- Check Fold Rollers for wear or contamination.

### **Adjustment**

1. Remove the Booklet Maker (REP 21.16).
2. Remove KL-clip (Figure 1).





Figure 1 Removing the KL-clip

3. Remove the Booklet Maker Front Cover (Figure 2).



Figure 2 Removing the Booklet Maker Front Cover

4. Adjust the front Spring tension (Figure 3).



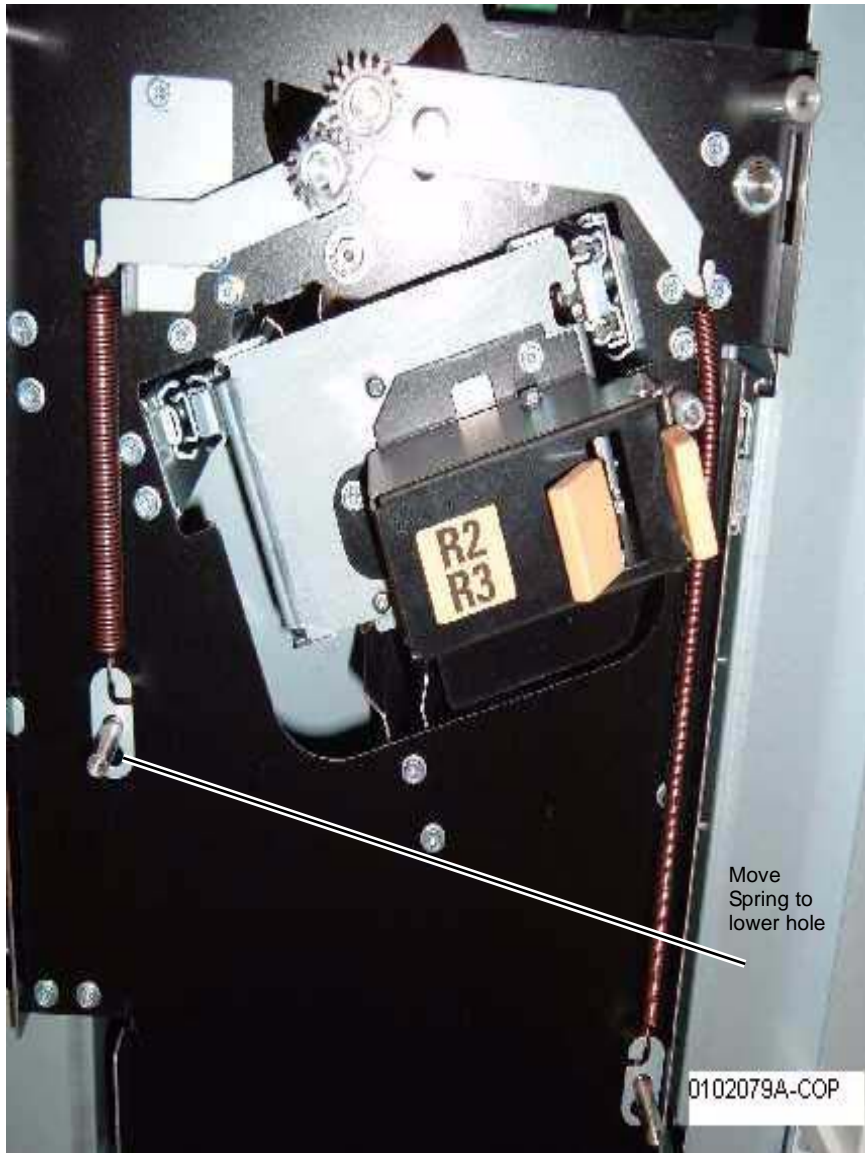


Figure 3 Adjust the front Spring tension



Figure 4 Adjusting the rear Spring tension

5. Adjust the rear Spring tension (Figure 4).

## ADJ 12.7 Professional Finisher Booklet Fold Position (Fine Adjustment)

### Purpose

The purpose with this adjustment is to set up the Booklet Maker so that the fold is in the center of the booklet. Several setups are needed depending on paper size, set size, unstapled or stapled sets.

### Check

1. Ensure that the trays used are correctly programmed.
2. Ensure that the Fold Skew is within specification (ADJ 12.2).
3. Ensure that the Fold Position is within specification (ADJ 12.3).
4. Ensure that the Staple Position is within specification (ADJ 12.4).
5. Set machine up according to instructions in Table 1 and run 1 set of each job. Label each booklet.

Table 1 Fine Adjustment

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets
2	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets
3	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	10 sheets of 8.5 x 11 / A4 LEF	5 - 7 sheets (setup is for 5 - 7 sheets)
4	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	16 sheets of 8.5 x 11 / A4 LEF	8 - 14 sheets (setup is for 8 - 14 sheets)
5	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets
6	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets
7	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	10 sheets of 8.5 x 11 / A4 LEF	5 - 7 sheets (setup is for 5 - 7 sheets)
8	11 x 17 / A3 SEF	16 sheets of 8.5 x 11 / A4 LEF	8 - 14 sheets (setup is for 8 - 14 sheets)	
9	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	30 sheets of 8.5 x 11 / A4 LEF	15 sheets

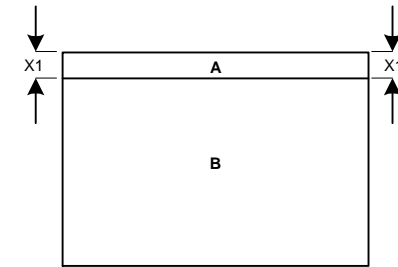
Table 1 Fine Adjustment

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size
10	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	30 sheets of 8.5 x 11 / A4 LEF	15 sheets

6. Measure X1 and verify Fold Position on each job against the Fold Specification table in Figure 1.

Paper Size	X1
Smaller than 14 in. / B4	0.0 +/- 1.5 MM
14 in. / B4 and larger	0.0 +/- 2.0 MM

Fold Position Specification



Note: Example showing A-side longer than B-side

NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.

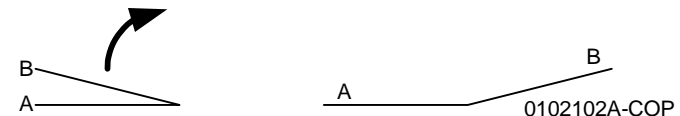


Figure 1 Fold Specification

7. If the fold is within specification on each job, go to the Booklet Staple Position (Staple on Fold Fine Adjustment) (ADJ 12.8). If any of the booklets are out of specification, go to the Adjustment procedure.

### Adjustment

1. Enter dC131.
2. Perform adjustment using the NVM locations in Table 2.

**NOTE:** If the “A”-side is longer than the “B”-side, the current NVM value should be increased. If the “B”-side is longer than the “A”-side, the current NVM value should be decreased.

**Table 2 Fine Adjustment NVM locations**

Job #	NVM	Default	Range	Remark
1	763-141	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
2	763-142	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
3	763-143	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
4	763-144	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
5	763-152	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
6	763-153	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
7	763-154	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
8	763-155	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
9	763-145	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
10	763-146	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.

- Set up and re-run the job/s that were subject to adjustment (Table 1).
- Check output against specifications in Figure 1.
- Repeat steps 2 - 4 until the Fold Position meets specification or customer request.
- After adjustment is done, go to ADJ 12.8 Booklet Staple Position (Staple on Fold Fine Adjustment).

## ADJ 12.8 Professional Finisher Booklet Staple Position (Staple on Fold Fine Adjustment)

### Purpose

To set up the machine so that the Staples are within specification on the folded booklet.

### Check

- Ensure that the trays used are correctly programmed.
- Ensure that the Fold Skew is within specification (ADJ 12.2).
- Ensure that the Fold Position is within specification (ADJ 12.3).
- Ensure that the Staple Position (Staple on Fold) is within specification (ADJ 12.4).
- Ensure that the Fold Position (Fine Adjust) is within specification (ADJ 12.7).
- Set machine up according to instructions in Table 1 and run 1 set of each Booklet job. Label each booklet.

**Table 1 Booklet Jobs**

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets
2	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets
3	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	10 sheets of 8.5 x 11 / A4 LEF	5 sheets (setup is for 5 - 7 sheets)
4	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	16 sheets of 8.5 x 11 / A4 LEF	8 sheets (setup is for 8 - 14 sheets)

- Measure A and B on both Booklet jobs and verify X1 against specification in Figure 1.
- If X1 is within specification, the complete Booklet Maker setup is done. If X1 is out of specification, go to the Adjustment procedure.

## ADJ 12.9 Finisher LX Hole Punch Position

### Purpose

This procedure sets the distance from the trail edge of the punched sheet to the center of the punched holes.

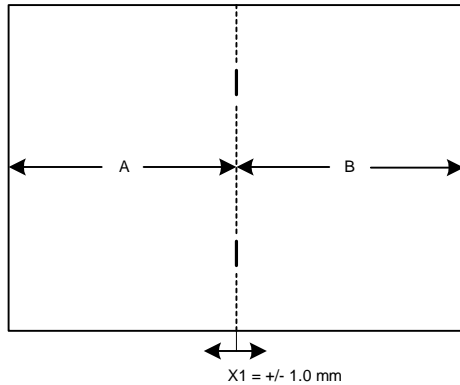
**NOTE:** This adjustment is normally performed by the customer, via *Tools mode*.

### Check

1. Enter **Service Copy (Tools) Mode**. Select **Troubleshooting**, then **Hole Position Adjustment**.
2. Choose whether you want separate adjustments for different sizes.
3. Press **Print** on the UI.
4. Measure the distance between the trail edge of the sheet and the center of the bottom hole. If the distance is not 10 +/- 3 mm, perform the Adjustment

### Adjustment

1. Use the buttons on the UI to move the holes left or right. When the computed correction is made, select **Adjust**.
2. Repeat the Check and Adjustment until the measurement is correct
3. When the adjustment is complete, log out of Service Copy mode.



NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.

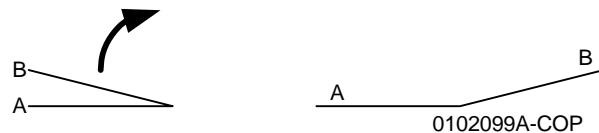


Figure 1 Staple Position

### Adjustment

1. Enter **dC131**.
2. Perform adjustment using the NVM locations in [Table 2](#).

**NOTE:** If the "A"-side is longer than the "B"-side, increase the current NVM value. If the "B"-side is longer than the "A"-side, decrease the current NVM value.

Table 2 NVM locations

Job #	NVM	Default	Range	Remark
1	763-147	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
2	763-148	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
3	763-149	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
4	763-150	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.

3. Set up and run the job/s that were subject to adjustment ([Table 1](#)).
4. Check output against specifications in [Figure 1](#).
5. Repeat steps 2 - 4 until the Staple Position meets specification or customer request.

## ADJ 12.10 Finisher LX Booklet Crease/Staple Position

### Purpose

This procedure centers the crease and staple positions in the booklet.

*NOTE: This adjustment is normally performed by the customer, via Tools mode.*

### Adjustment

1. Enter **Service Copy (Tools) Mode**. Select **Troubleshooting**, then **Crease and Staple Adjustment**.
2. Select the paper size to be set, and load paper of that size into tray 5 (MSI).
3. Follow the instructions on the UI to Check/Adjust the Crease position and the Staple position.
4. When the adjustment is complete, log out of Service Copy mode.

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# Introduction

## Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

## Organization

### Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

### Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

### Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

### Part Number Index

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

## Other Information

### Abbreviations

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

Table 1 Abbreviations

Abbreviation	Meaning
<b>A3</b>	297 x 594 Millimeters
<b>A4</b>	210 x 297 Millimeters
<b>A5</b>	148 x 210 Millimeters
<b>AD</b>	Auto Duplex
<b>AWG</b>	American Wire Gauge
<b>EMI</b>	Electro-Magnetic Induction
<b>GB</b>	GigaByte
<b>KB</b>	Kilo Byte
<b>MB</b>	Mega Byte
<b>MM</b>	Millimeters
<b>MOD</b>	Magneto Optical Drive
<b>NOHAD</b>	Noise Ozone Heat Air Dirt
<b>PL</b>	Parts List
<b>P/O</b>	Part of

Table 1 Abbreviations

Abbreviation	Meaning
<b>R/E</b>	Reduction/Enlargement
<b>REF:</b>	Refer to
<b>SCSI</b>	Small Computer Systems Interface
<b>W/</b>	With
<b>W/O</b>	Without

Table 2 OP Cos

Operating Companies	
Abbreviation	Meaning
<b>NASG - US</b>	North American Solutions Group - US
<b>NASG - Canada</b>	North American Solutions Group - Canada
<b>XE</b>	Xerox Europe

## Symbology

Symbology used in the Parts List section is identified in the Symbology section.

## Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

## Subsystem Information

### Use of the Term “Assembly”

The term “assembly” will be used for items in the part number listing that include other itemized parts in the part number listing. When the word “assembly” is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

### Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

### Tag

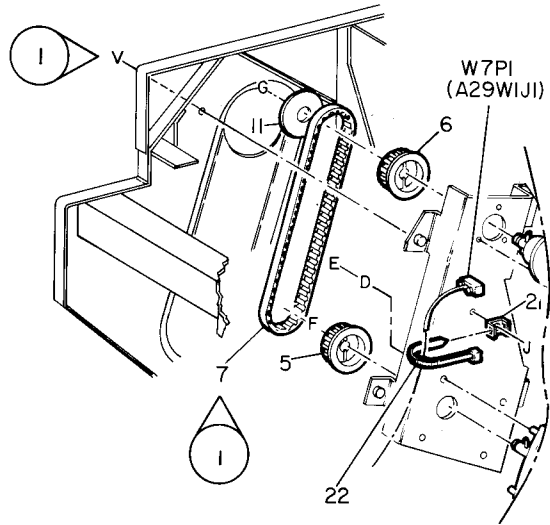
The notation “W/Tag” in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as “W/Tag”, install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

## Symbology

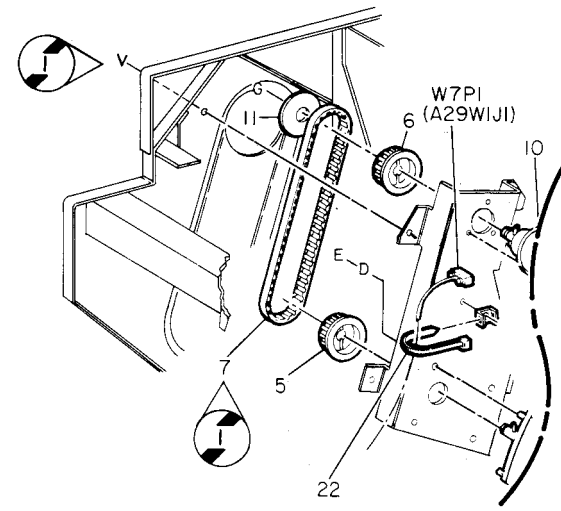
A Tag number within a circle pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1). Information on the modification is in the Change Tag Index.



O	Z004	A
850	PL	M I

Figure 1 With Tag Symbol

A Tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the Tag number within the circle (Figure 2).



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850	PL	M I

Figure 2 Without Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3). Information on the modification is in the Change Tag Index.

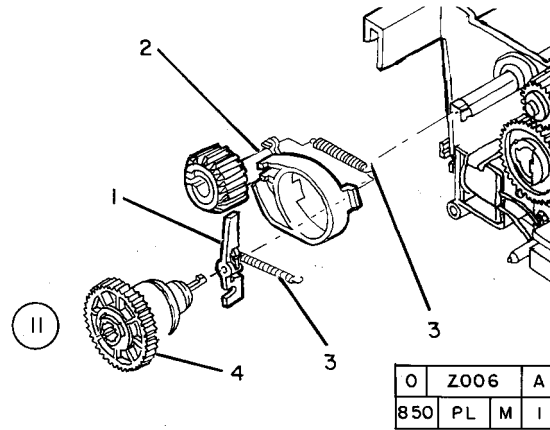


Figure 3 Entire Drawing With Tag Symbol

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4).

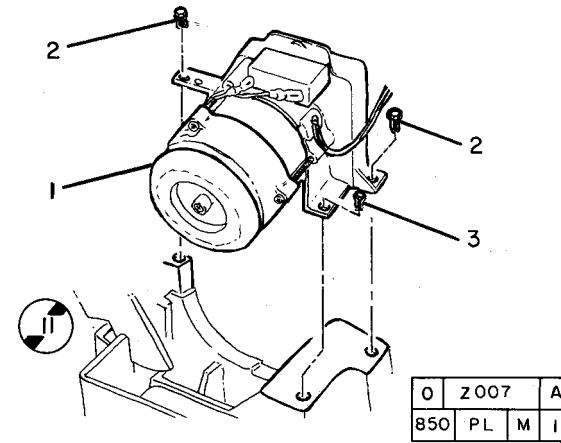


Figure 4 Entire Drawing Without Tag Symbol

## PL 1.1 Platen/IIT Cover

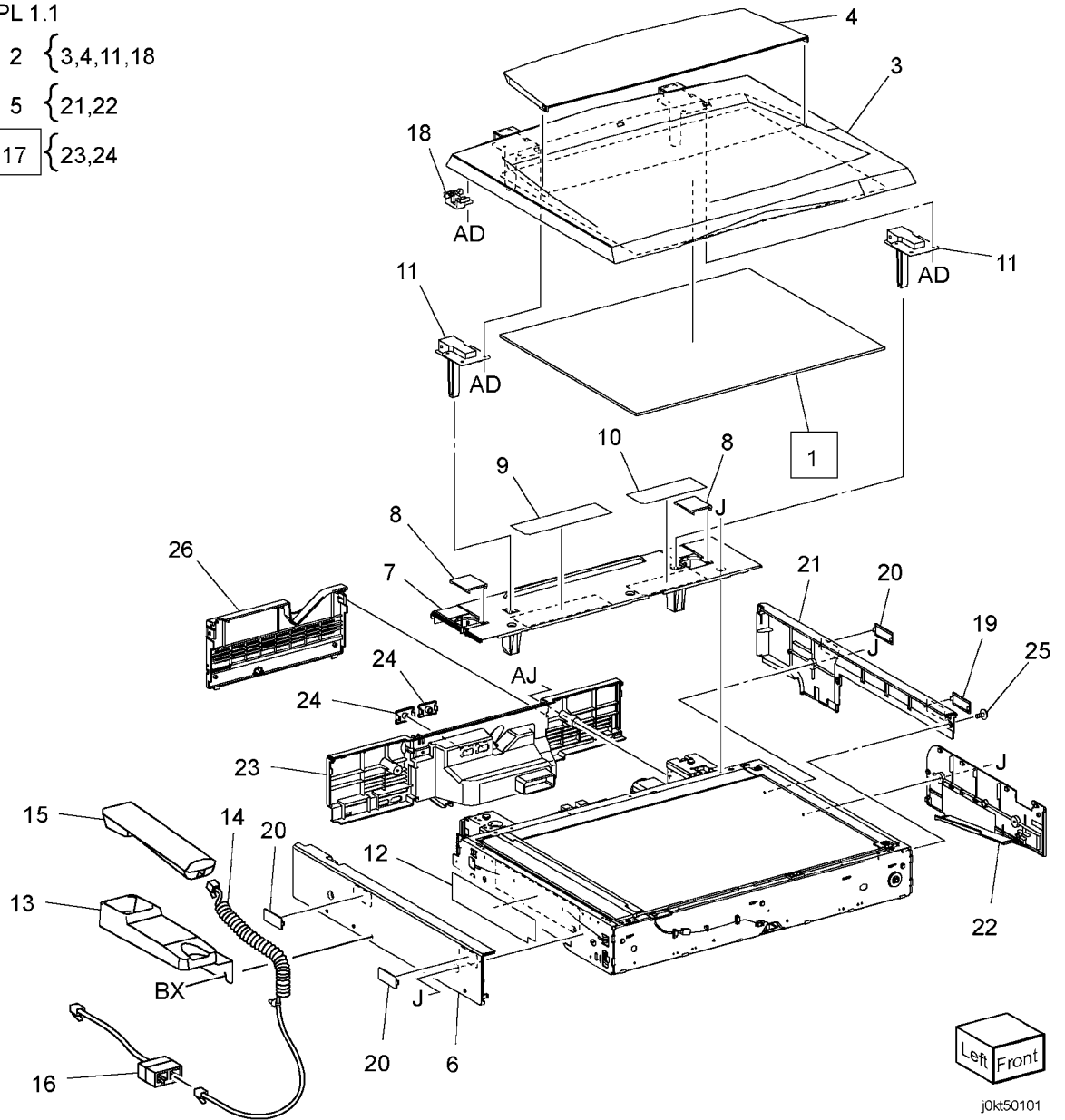
Item	Part	Description
1	-	Platen Cushion (Not Spared)
2	-	Platen Cover
3	-	Platen Cover (P/O PL 1.1 Item 2)
4	-	Pocket Cover (P/O PL 1.1 Item 2) (FX Only)
5	-	IIT Right Cover (Not Spared)
6	848E78390	IIT Left Cover
7	-	IIT Top Cover
-	848E80100	IIT Top Cover (DADF-130)
8	-	Hinge Cover
9	-	Label (Caution) (Not Spared)
10	-	Label (Not Spared)
11	-	Counter Balance (P/O PL 1.1 Item 2) ( )
12	-	Vaccum Out Filter (Not Spared)
13	-	Cradle Assembly (Not Spared)
14	-	Curl Cord
15	-	Handset
16	-	Wire Harness
17	848K62720	IIT Rear Cover
18	-	Actuator Plate (P/O PL 1.1 Item 2)
19	-	Blind Cover (Blue)
20	-	Blind Cover (Not Spared) (White)
21	-	IIT Right Cover (P/O PL 1.1 Item 5)
22	-	IIT Right Cover (P/O PL 1.1 Item 5)
23	-	IIT Rear Cover (P/O PL 1.1 Item 17)
24	-	USB Cover (P/O PL 1.1 Item 17)
25	-	Screw (Black)
26	848E81970	IIT Rear Cap Cover

PL 1.1

2 { 3,4,11,18

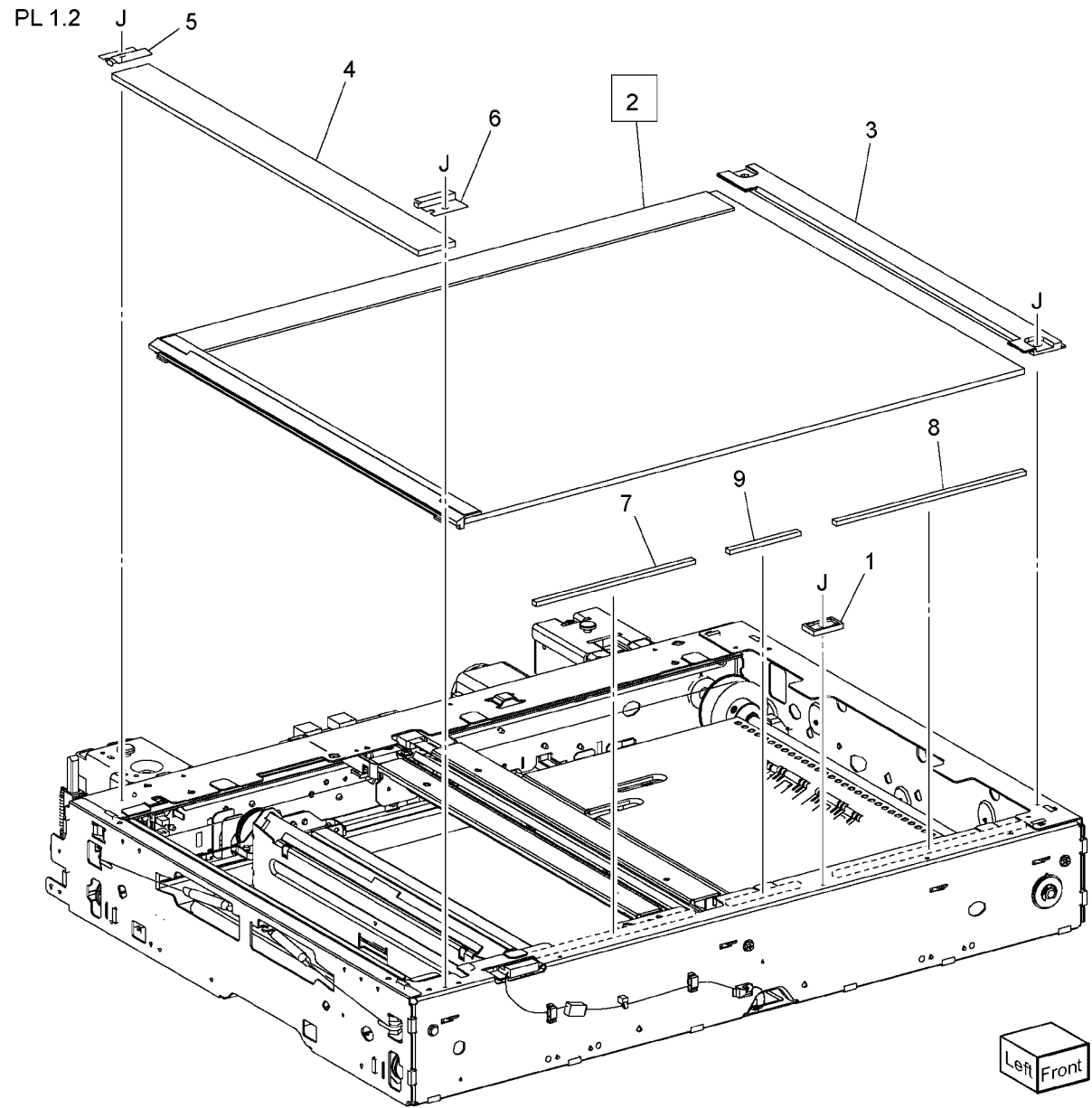
5 { 21,22

17 { 23,24



## PL 1.2 Control Panel/Platen Glass

Item	Part	Description
1	–	Glass Support (Not Spared)
2	090K93250	Platen Glass (REP 6.2)
3	815E40270	Plate
4	090K93011	CVT Platen Glass
5	868E04450	Rear Glass Support
6	868E04530	Front Glass Support
7	–	Seal (Left) (Not Spared)
8	–	Seal (Right) (Not Spared)
9	–	Seal (Center) (Not Spared)



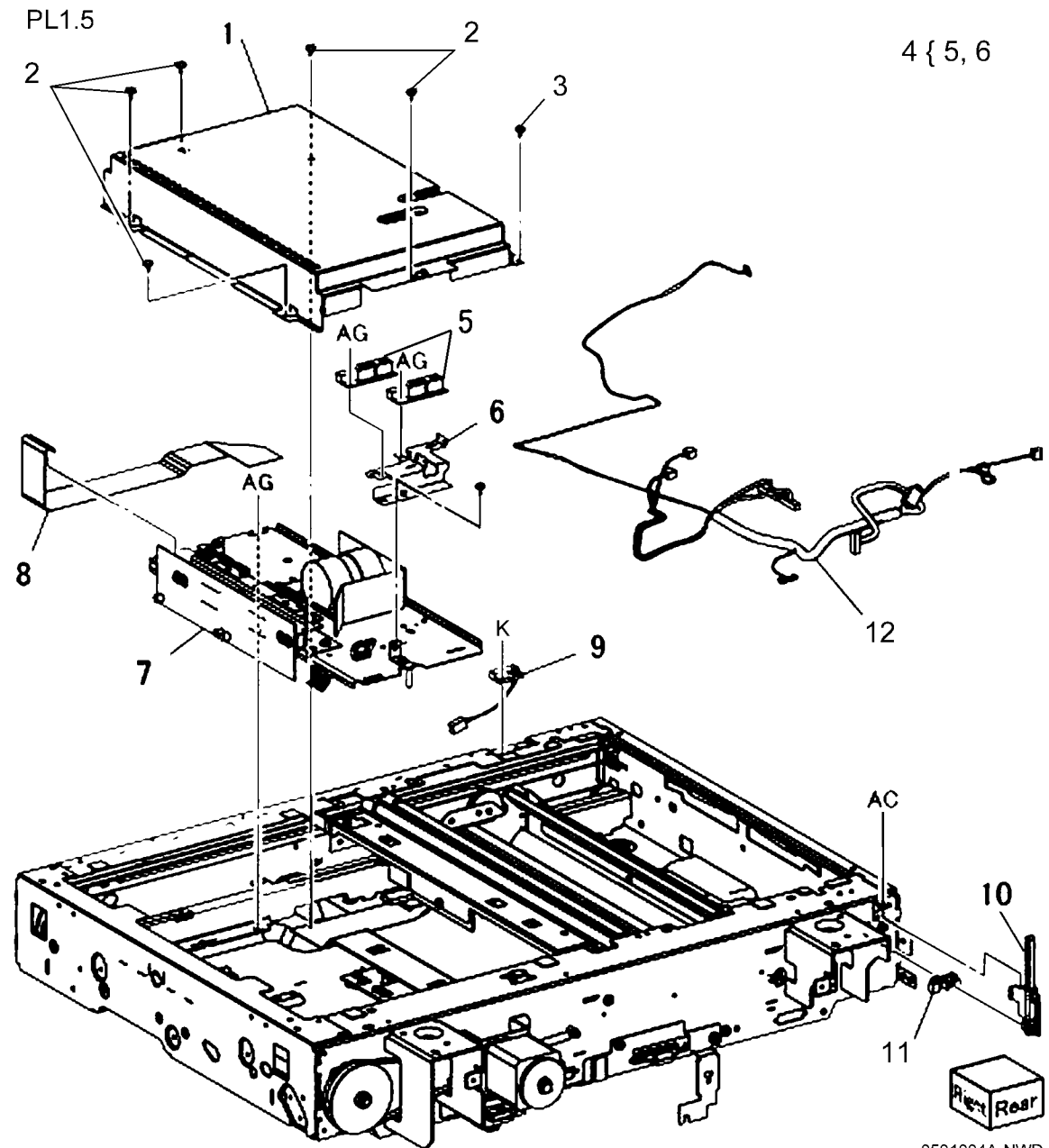
Left Front

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## PL 1.3 CCD Lens Assembly

Item	Part	Description
1	-	Lens Cover (Not Spared)
2	-	Screw (Not Spared)
3	-	Screw (Blue) (Not Spared)
4	130K73140	APS Sensor Assembly
5	130K64150	APS Sensor
6	-	Bracket (P/O PL 1.3 Item 4)
7	604K73710	CCD Lens Assembly
-	604K56050	CCD Lens Assembly (7545, 7556)
8	117K47560	CCD Flexible Print Cable
9	910W00901	Platen Interlock Switch
10	120K92541	Actuator Assembly
11	930W00123	Platen Angle Sensor
12	-	Wire Harness (Not Spared)

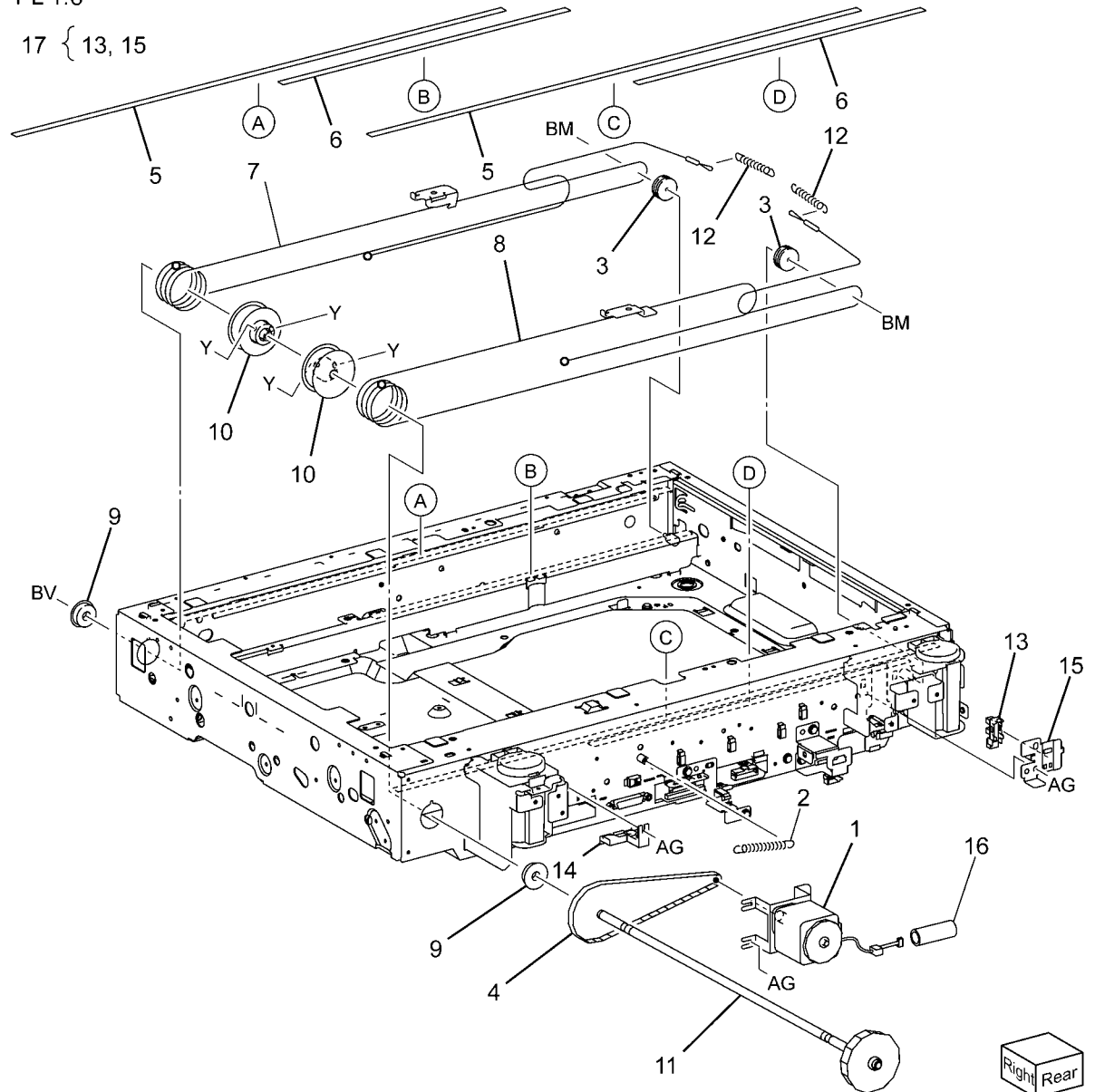


## PL 1.4 Carriage Cable/Motor

Item	Part	Description
1	127K49532	Carriage Motor (REP 6.6)
2	809E76950	Spring
3	020E37030	Pulley
4	023E26430	Belt
5	063E97330	Tape
6	-	Tape (Not Spared)
7	012K94410	Front Carriage Cable (REP 6.7)
8	012K94420	Rear Carriage Cable (REP 6.7)
9	413W91850	Bearing
10	020E45300	Capstan Pulley
11	006K86470	Capstan Shaft
12	809E76840	Spring
13	930W00123	IIT Registration Sensor
14	019E70050	Holder
15	-	Sensor Bracket (P/O PL 1.4 Item 17)
16	-	Tube (Not Spared)
17	130K76201	IIT Registration Sensor And Bracket

PL 1.6

17 { 13, 15



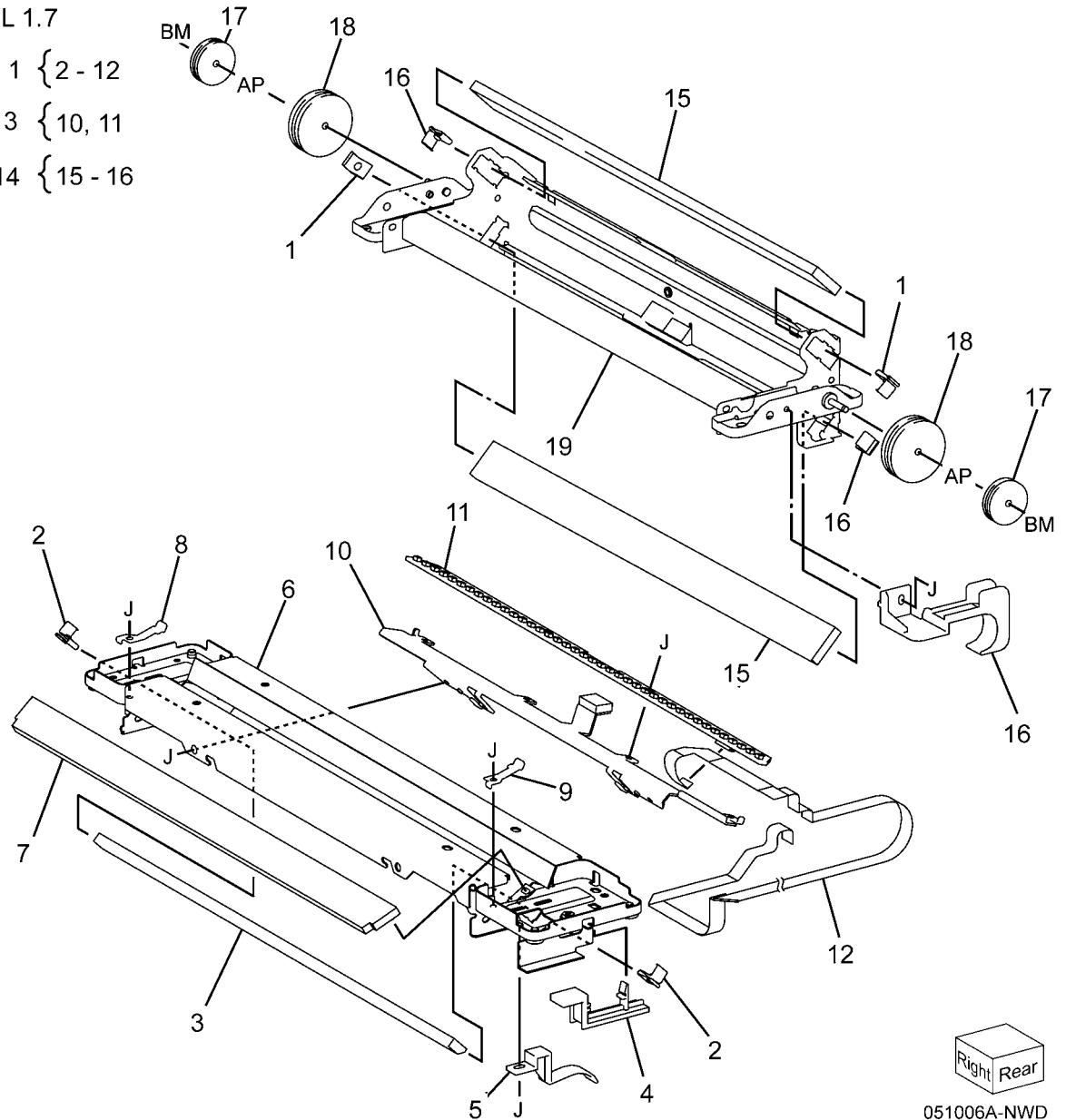
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# PL 1.5 Full/Half Rate Carriage

Item	Part	Description
1	041K96350	Full Rate Carriage (ADJ 6.2)
2	019E70080	Clip
3	-	No. 1 Mirror (P/O PL 1.5 Item 1)
4	-	Harness Guide (P/O PL 1.5 Item 1)
5	-	Harness Guide (P/O PL 1.5 Item 1)
6	-	Full Rate Carriage (P/O PL 1.5 Item 1)
7	-	Light Guide (P/O PL 1.5 Item 1) (REP 6.11)
8	-	Front Clip (P/O PL 1.5 Item 1)
9	-	Rear Clip (P/O PL 1.5 Item 1)
10	-	Bracket (P/O PL 1.5 Item 13)
11	960K61690	LED Lamp PWB (REP 6.9)
12	117E30981	LED Lamp Wire Harness (REP 6.10)
13	122K94580	LED Lamp
14	041K95910	Half Rate Carriage (ADJ 6.1)
15	-	No. 2/3 Mirror (P/O PL 1.5 Item 14)
16	-	Harness Guide (P/O PL 1.5 Item 14)
17	020E37030	Pulley
18	-	Pulley (P/O PL 1.5 Item 14)
19	-	Carriage Frame (P/O PL 1.5 Item 14)
20	-	Harness Guide (P/O PL 1.5 Item 14)

PL 1.7

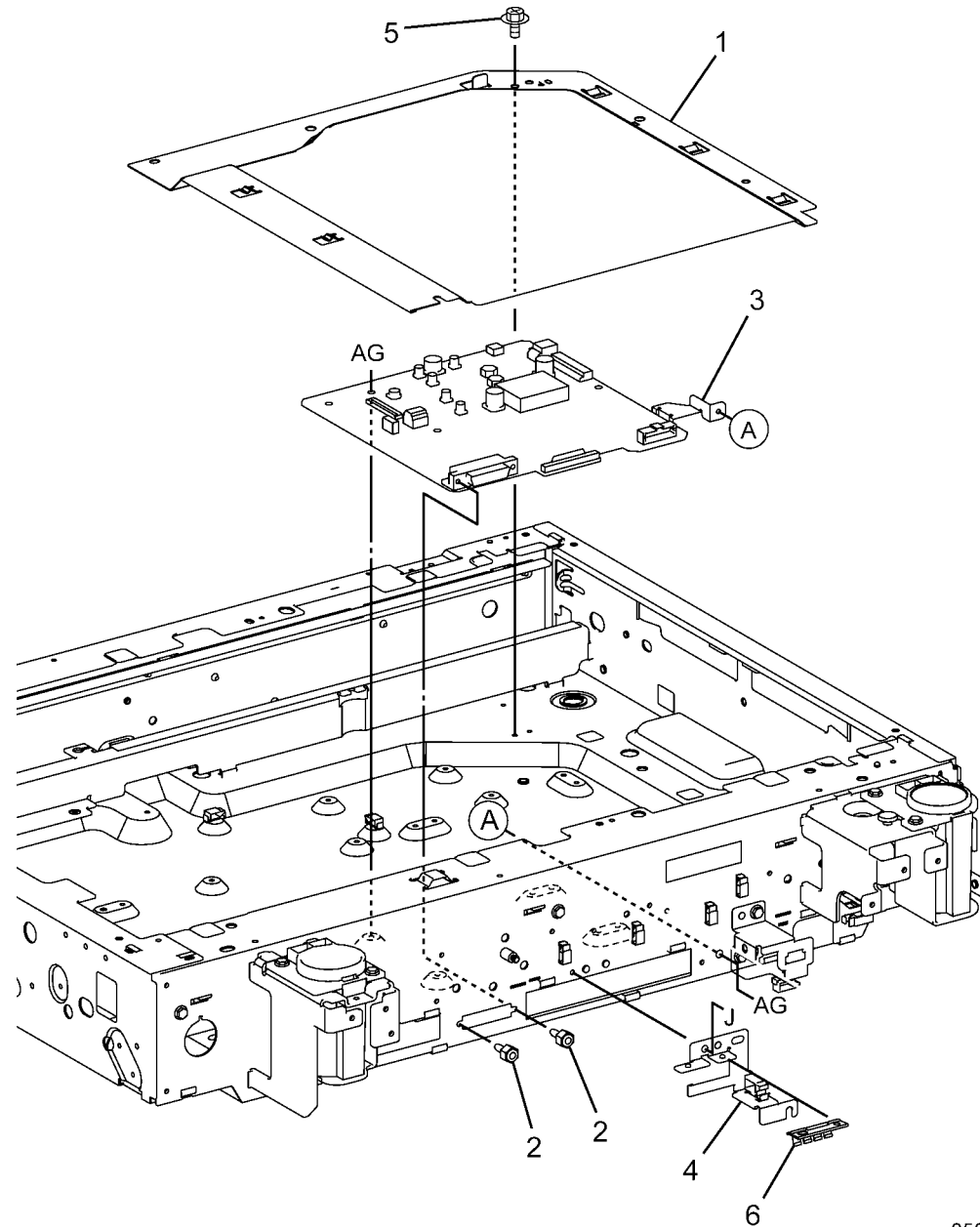
- 1 { 2 - 12
- 13 { 10, 11
- 14 { 15 - 16



Right Rear  
051006A-NWD

## PL 1.6 IIT/IPS PWB

Item	Part	Description
1	-	PWB Cover (Not Spared)
2	237W00178	Lock Screw
3	960K61760	IIT PWB Assembly (REP 6.12)
4	-	Harness Bracket (Not Spared)
5	-	Screw (Not Spared)
6	-	Conductor (Not Spared)
7	-	USB Hub PWB and Bracket (Not Spared)
8	-	Hub PWB (P/O PL 1.6 Item 7)
9	-	Bracket (P/O PL 1.6 Item 7)
10	-	USB Cable (Option)

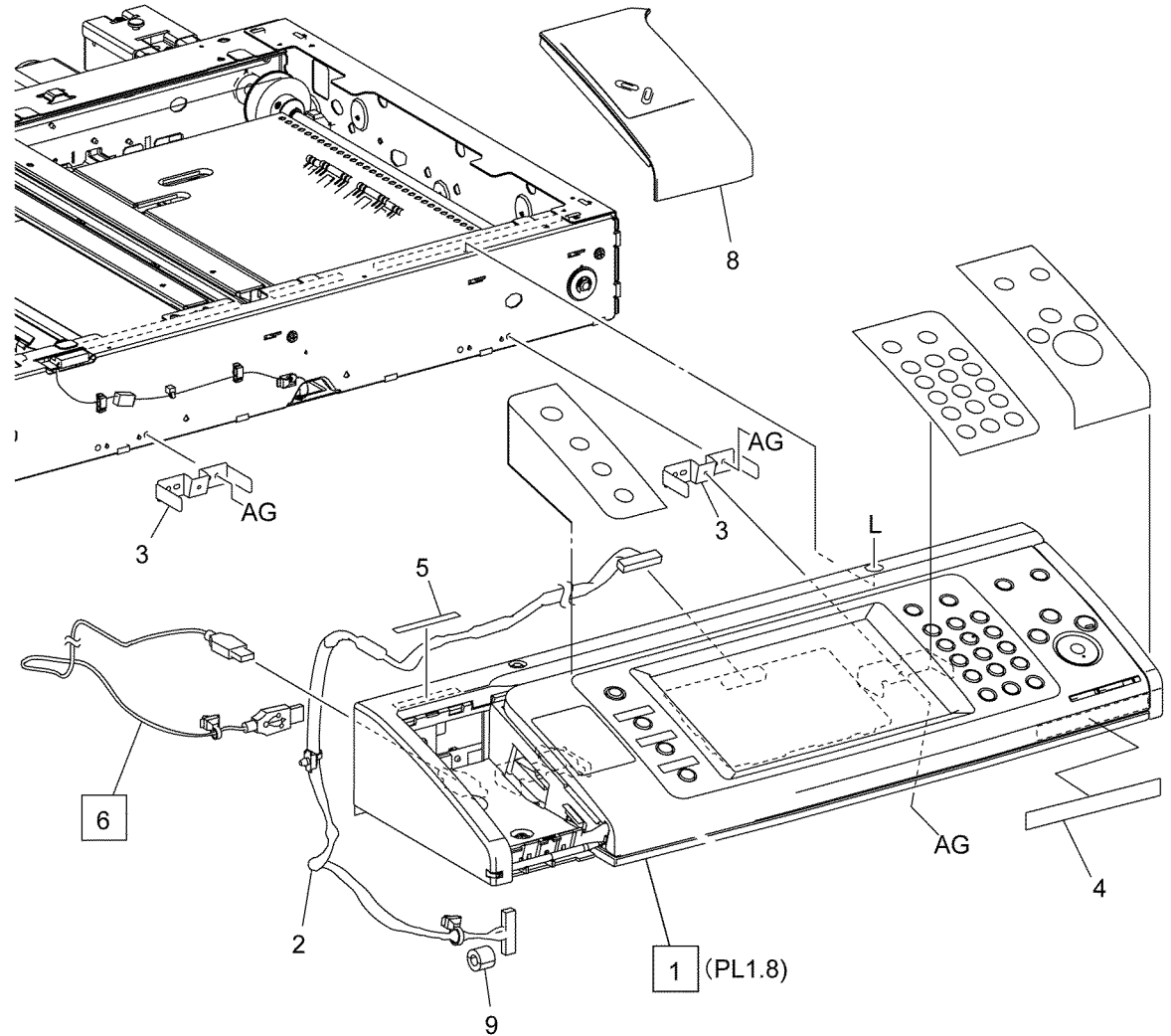


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## PL 1.7 Control Panel (2 of 2)

Item	Part	Description
1	848K69120	W85 Control Panel (XC)
–	848K69130	W85 Control Panel (XE)
2	962K73341	W85 UI Cable
3	–	Bracket (Not Spared)
4	604K84720	Name Label (Not Spared)
5	–	Caution Label
6	962K83261	USB Cable ( )
8	848E39872	Clip Cover (Not Spared)

PL 1.7

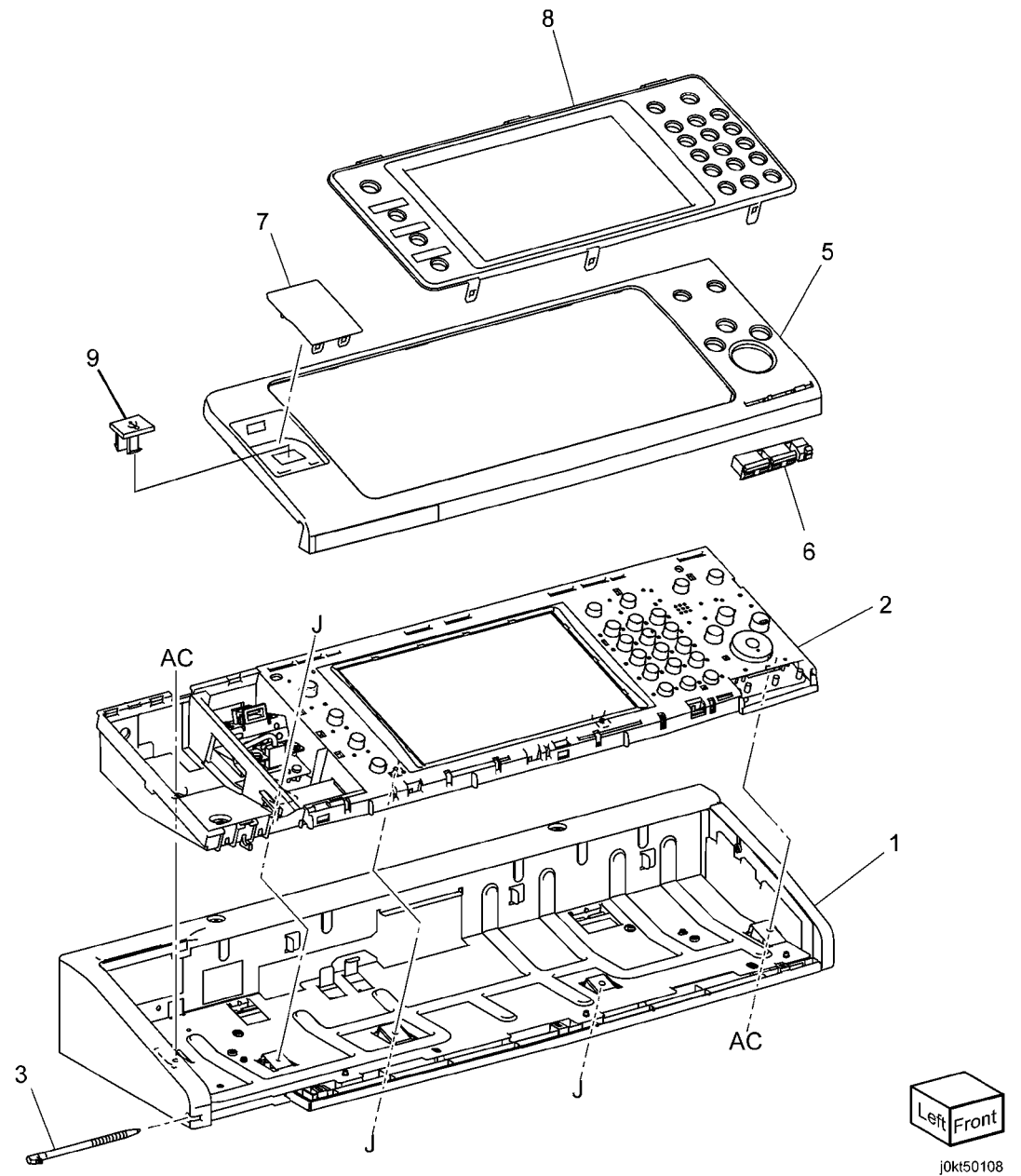


Left Front  
j0k150107

## PL 1.8 Control Panel (1 of 2)

Item	Part	Description
1	–	Outer Cover (Not Spared)
2	848K69130	W85 Console Assembly (XE)
–	848K69120	W85 Console Assembly (XC)
3	–	Stylus Pen
4	–	Overlay Cover Assembly (XC)
5	–	Overlay Cover Assembly (XE)
6	–	LED Lens (P/O PL 1.8 Item 4)
7	848E41080	USB Cover (P/O PL 1.8 Item 4)
8	–	Overlay Cover (FX)
9	848E55551	USB Plug

PL 1.8  
4 { 5-7

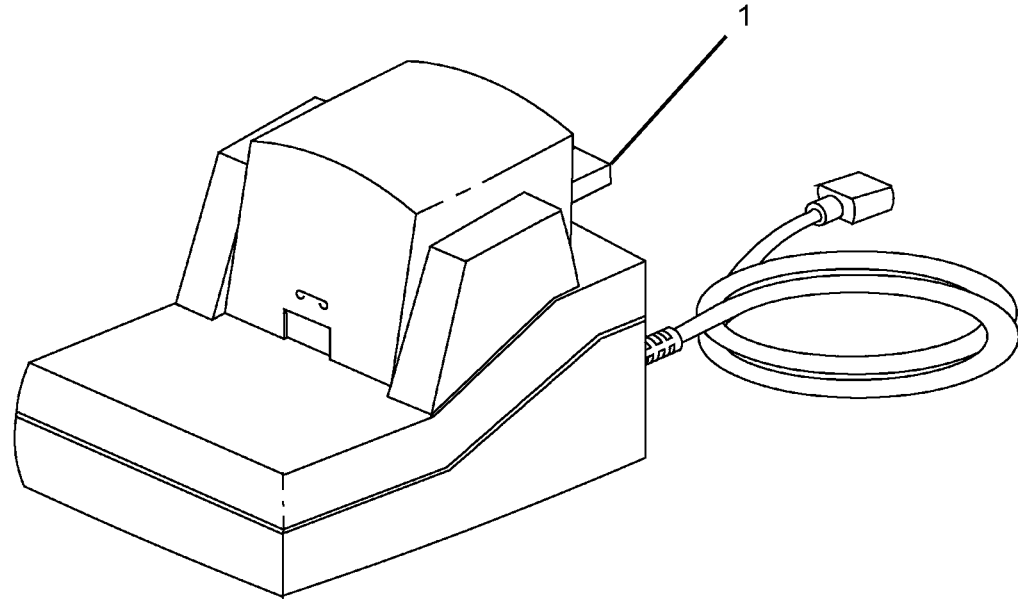


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## PL 1.9 Convenience Stapler

Item	Part	Description
1	604K35710	Convenience Stapler (110V)
-	604K35700	Convenience Stapler (220V)

PL 1.9

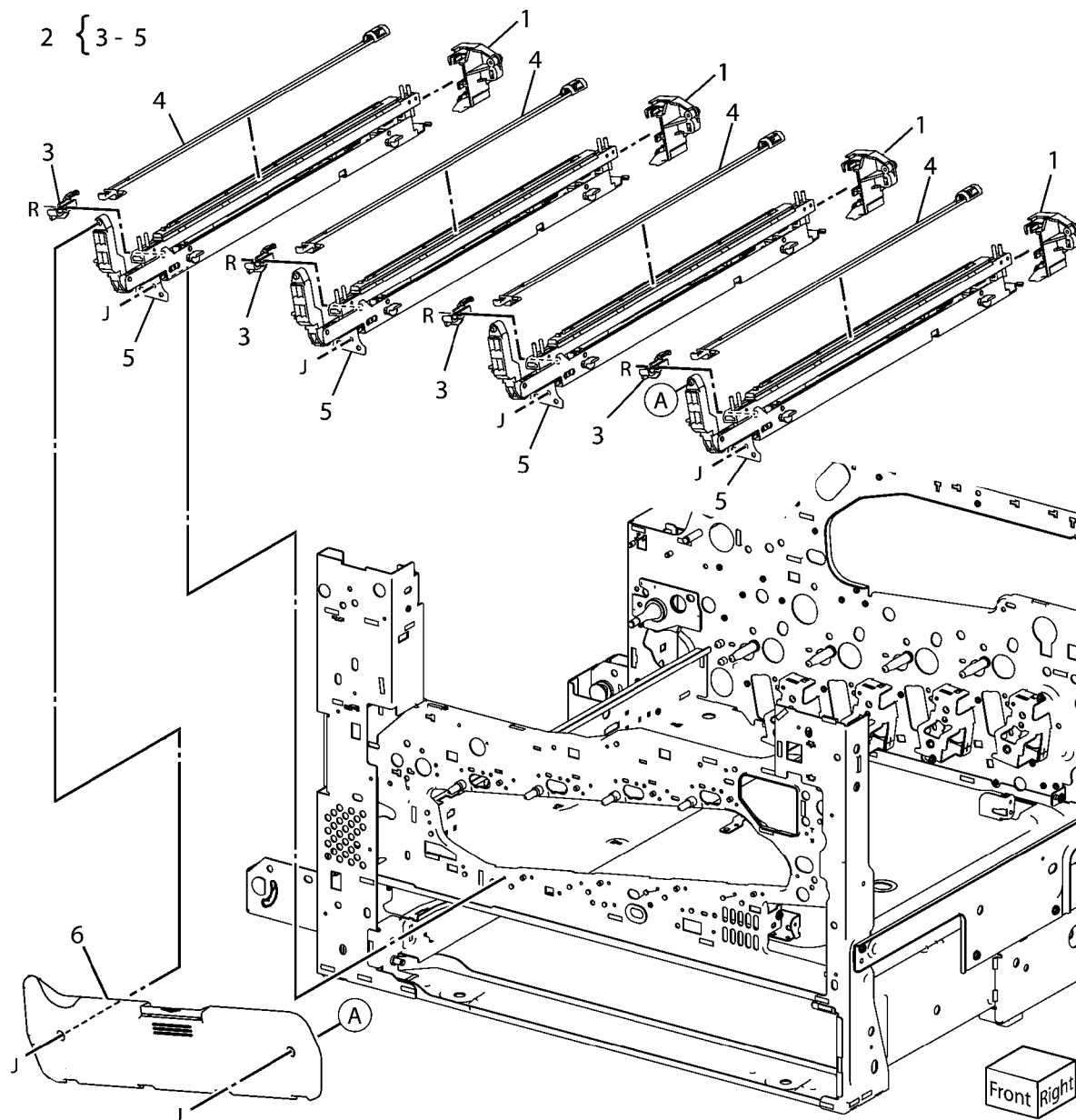


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## PL 2.1 LED Print Head (1 of 2)

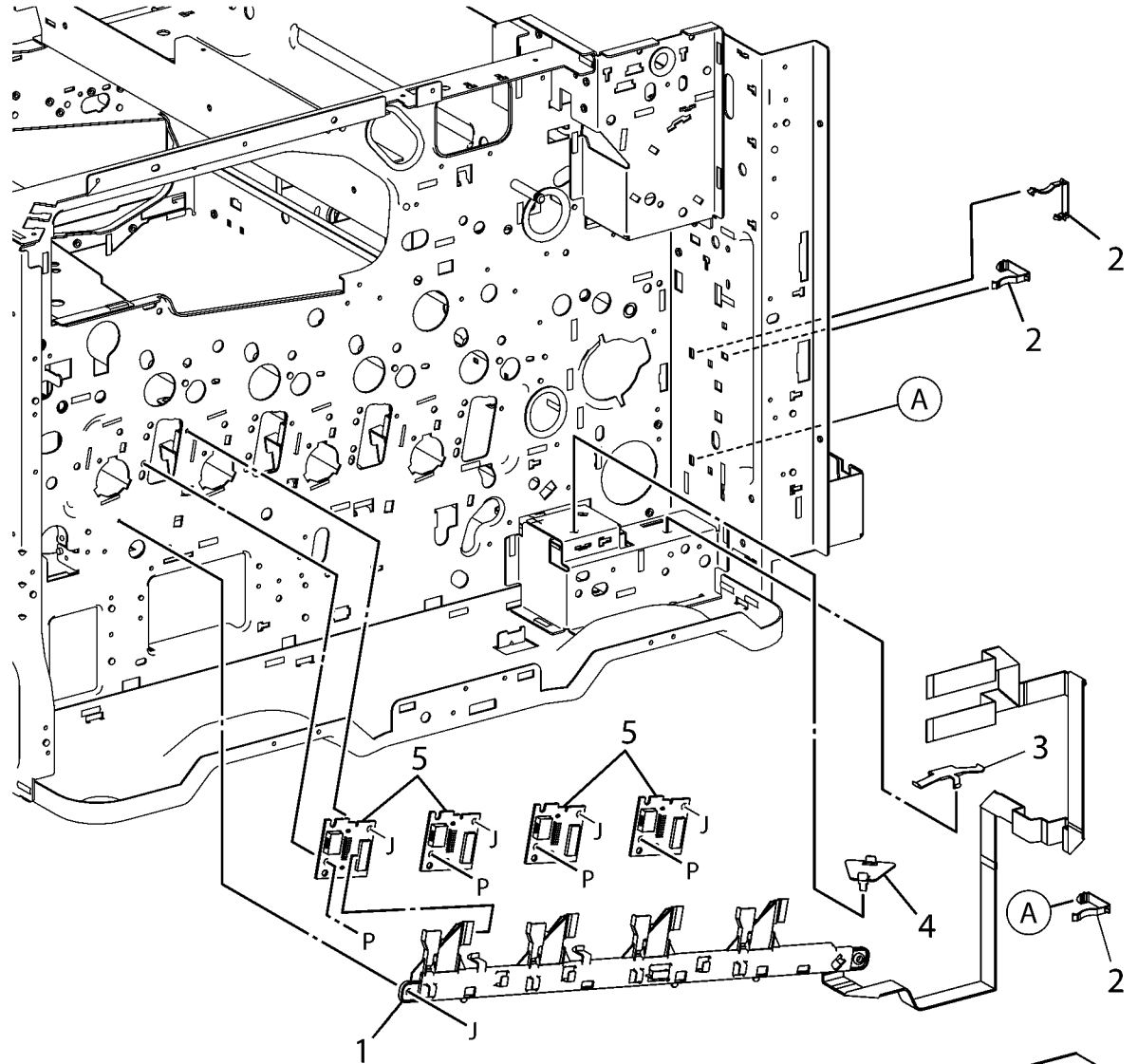
Item	Part	Description
1	019K12490	Rear Holder Assembly
2	130K78680	LED Print Head Assembly (REP 9.10)
3	-	Guide (P/O PL 2.1 Item 2)
4	042K93520	LED Print Head Cleaner
5	-	LED Print Head
6	011K04160	Drum Cover



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## PL 2.2 LED Print Head (2 of 2)

Item	Part	Description
1	952K02830	LED Print Head Cable Assembly (REP 9.11, REP 9.12)
2	868E07741	Cable Holder
3	868E14670	Cable Holder
4	868E07730	Cable Holder
5	960K36952	LED Print Head Rear PWB

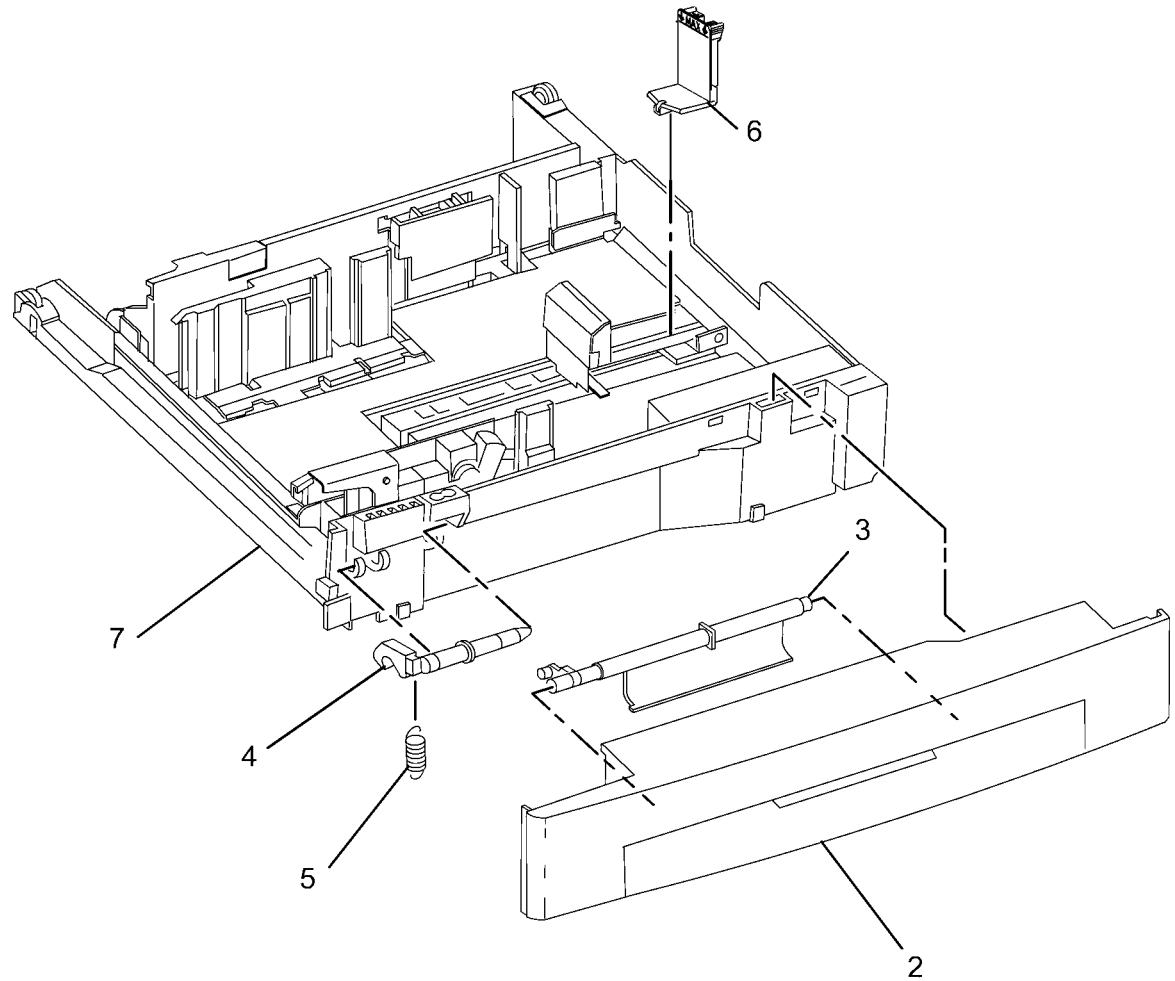


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## PL 2.16 Envelope Tray Assembly

Item	Part	Description
1	—	Envelope Tray Assembly
2	—	Front Cover
3	—	Lever
4	—	Latch
5	—	Spring
6	—	End Guide
7	—	Envelope Tray Frame (P/O PL 2.16 Item 1)

1 { 2 - 7



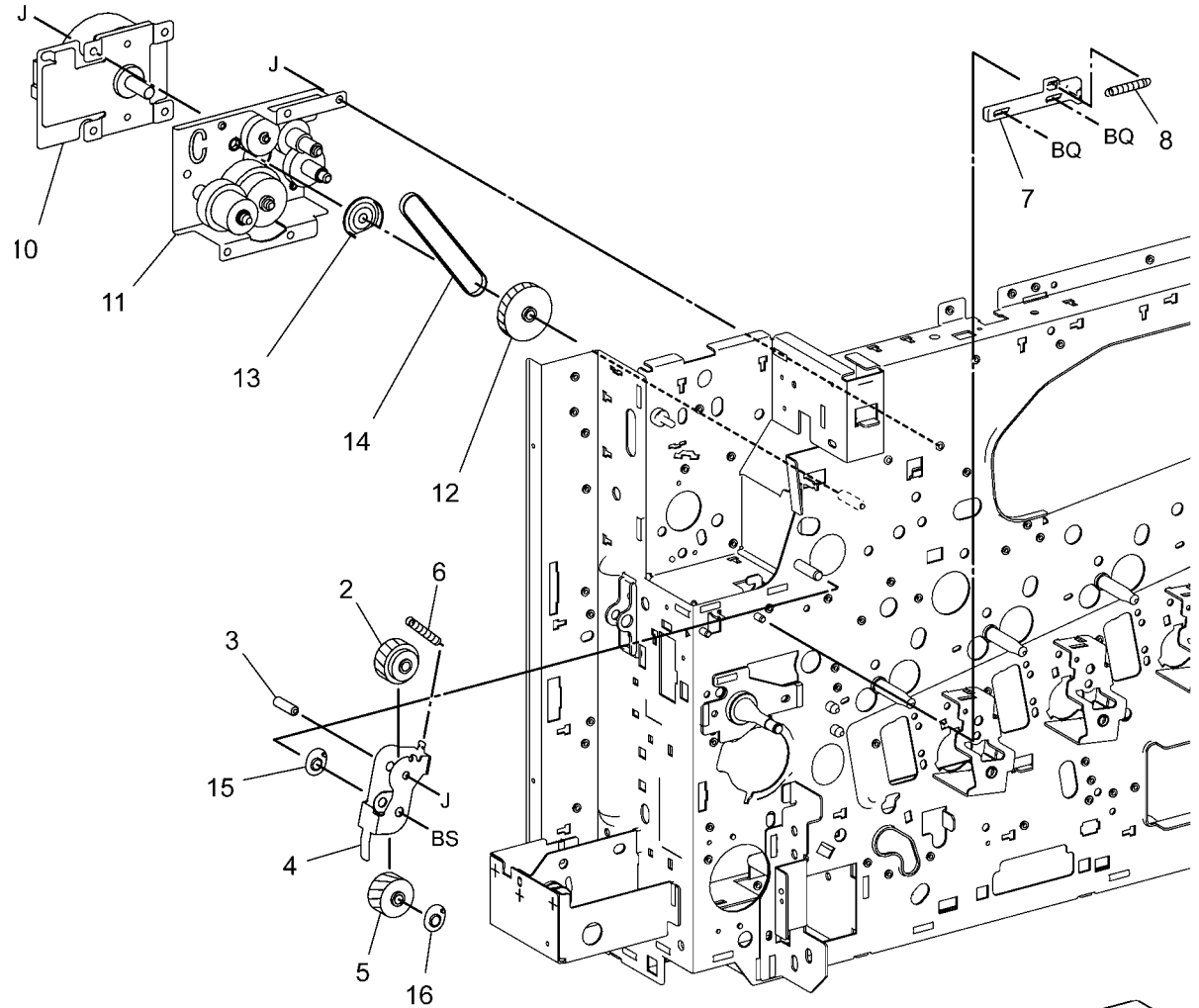
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## PL 3.1 Drives (1 of 4)

Item	Part	Description
1	068K64901	Fuser Input Bracket Assembly (2275, 3373, 3375)
2	—	Helical Gear (26T) (P/O PL 3.1 Item 1) (2275, 3373, 3375)
3	—	Fuser Shaft (P/O PL 3.1 Item 1)
4	—	Fuser Input Bracket (P/O PL 3.1 Item 1)
5	—	Helical Gear (25T) (P/O PL 3.1 Item 1) (2275, 3373, 3375)
6	809E74960	Spring
7	012E15930	Fuser Unit Link
8	809E74950	Spring
9	007K18550	Fuser Drive Motor Assembly (7830/35)
—	007K18580	Fuser Drive Motor Assembly (7845/55)
10	—	Fuser Drive Motor (P/O PL 3.1 Item 9) (4475, 5575)
11	—	Gear Bracket Assembly (P/O PL 3.1 Item 9)
12	807E27930	Helical Gear (40T/23T)
13	005E26140	Flange
14	423W10355	Belt
15	—	Bearing (P/O PL 3.1 Item 1)
16	—	Bearing (P/O PL 3.1 Item 1)

PL3.1

1 { 2 - 5, 15, 16  
9 { 10, 11



Left Front

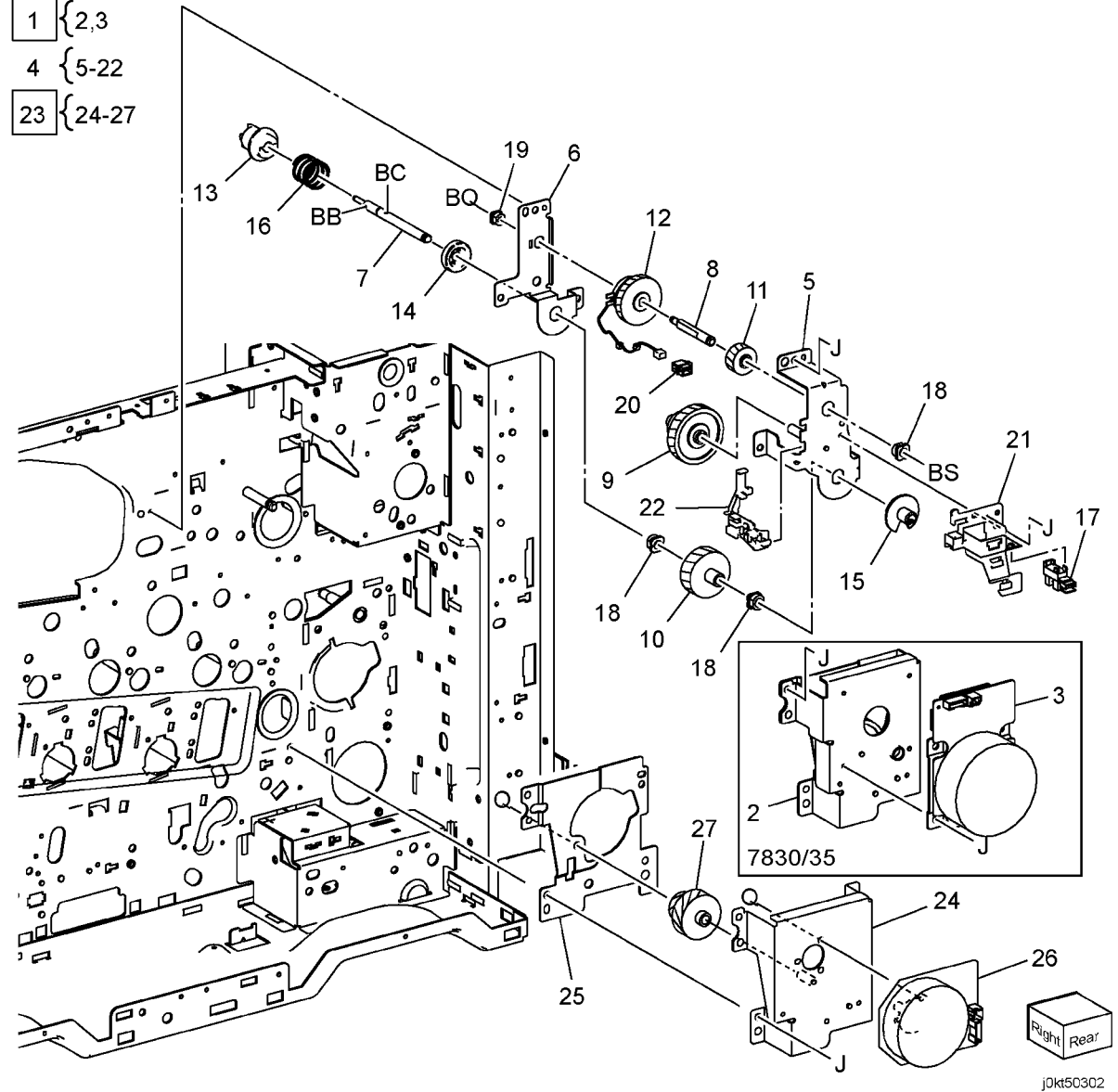
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## PL 3.2 Drives (2 of 4)

Item	Part	Description
1	007K18540	Main Drive Assembly (2275, 3373, 3375) (REP 4.1)
2	-	Bracket (P/O PL 3.2 Item 1)
3	127K64390	Main Drive Motor Assembly (2275, 3373, 3375)
4	007K98090	Retract Drive Assembly
5	-	Retract Bracket Assembly (P/O PL 3.2 Item 4)
6	-	Retract Lower Bracket (P/O PL 3.2 Item 4)
7	-	Retract Shaft (P/O PL 3.2 Item 4)
8	-	Clutch Shaft (P/O PL 3.2 Item 4)
9	-	Helical Gear (45T/23T) (P/O PL 3.2 Item 4)
10	-	Helical Gear (36T) (P/O PL 3.2 Item 4)
11	-	Helical Gear (21T) (P/O PL 3.2 Item 4)
12	121K40850	1st BTR Contact Retract Clutch
13	005E24620	Coupling
14	-	Retainer (P/O PL 3.2 Item 4)
15	-	Cam Wheel (P/O PL 3.2 Item 4)
16	-	Spring (P/O PL 3.2 Item 4)
17	930W00111	1st BTR Contact Retract Sensor
18	413W14660	Sleeve Bearing
19	-	Sleeve Bearing (P/O PL 3.2 Item 4)
20	-	Connector (P/O PL 3.2 Item 4)
21	-	Harness Holder (P/O PL 3.2 Item 4)
22	-	Harness Holder (P/O PL 3.2 Item 4)
23	007K18570	Main Drive Assembly (4475, 5575)
24	-	Main Motor (P/O PL 3.2 Item 23) (7545, 7556)
25	-	Bracket (P/O PL 3.2 Item 23) (7545, 7556)
26	127K64440	Main Drive Motor (4475, 5575)
27	-	Helical Gear (P/O PL 3.2 Item 23) (7545, 7556)

PL 3.2

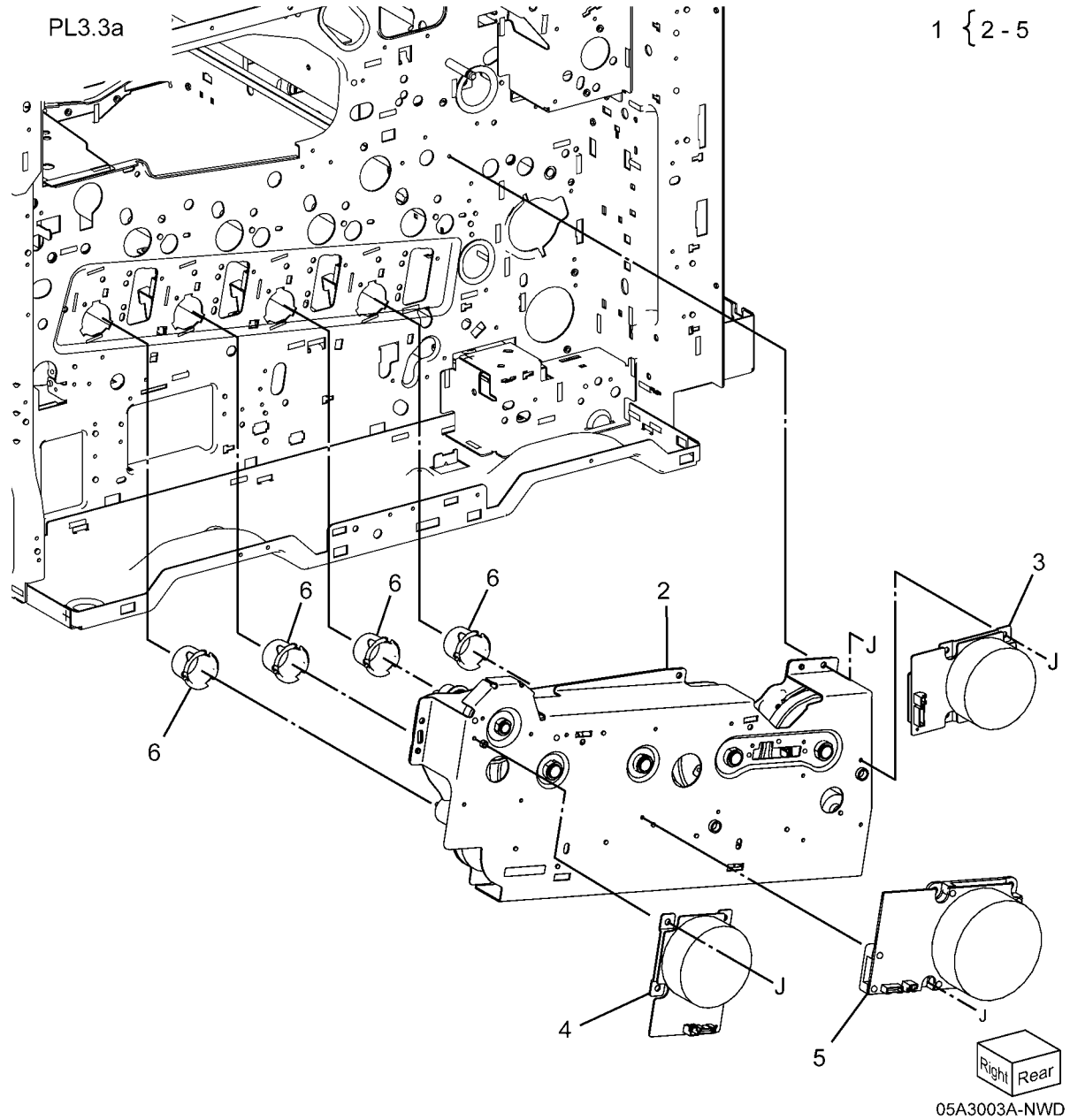
1 {2,3  
4 {5-22  
23 {24-27



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# PL 3.3A Drives (7830/7835)(3 of 4)

Item	Part	Description
1	007K18521	Drum/Developer Drive Assembly (REP 4.1)
2	-	Drive Assembly (P/O PL 3.3A Item 1)
3	127K64370	Drum/Developer Drive Motor (K)
4	127K64380	IBT Drive Motor Assembly
5	127K65970	Drum/Developer Driver Motor (Y, M, C)
6	055E56040	Gear Guide

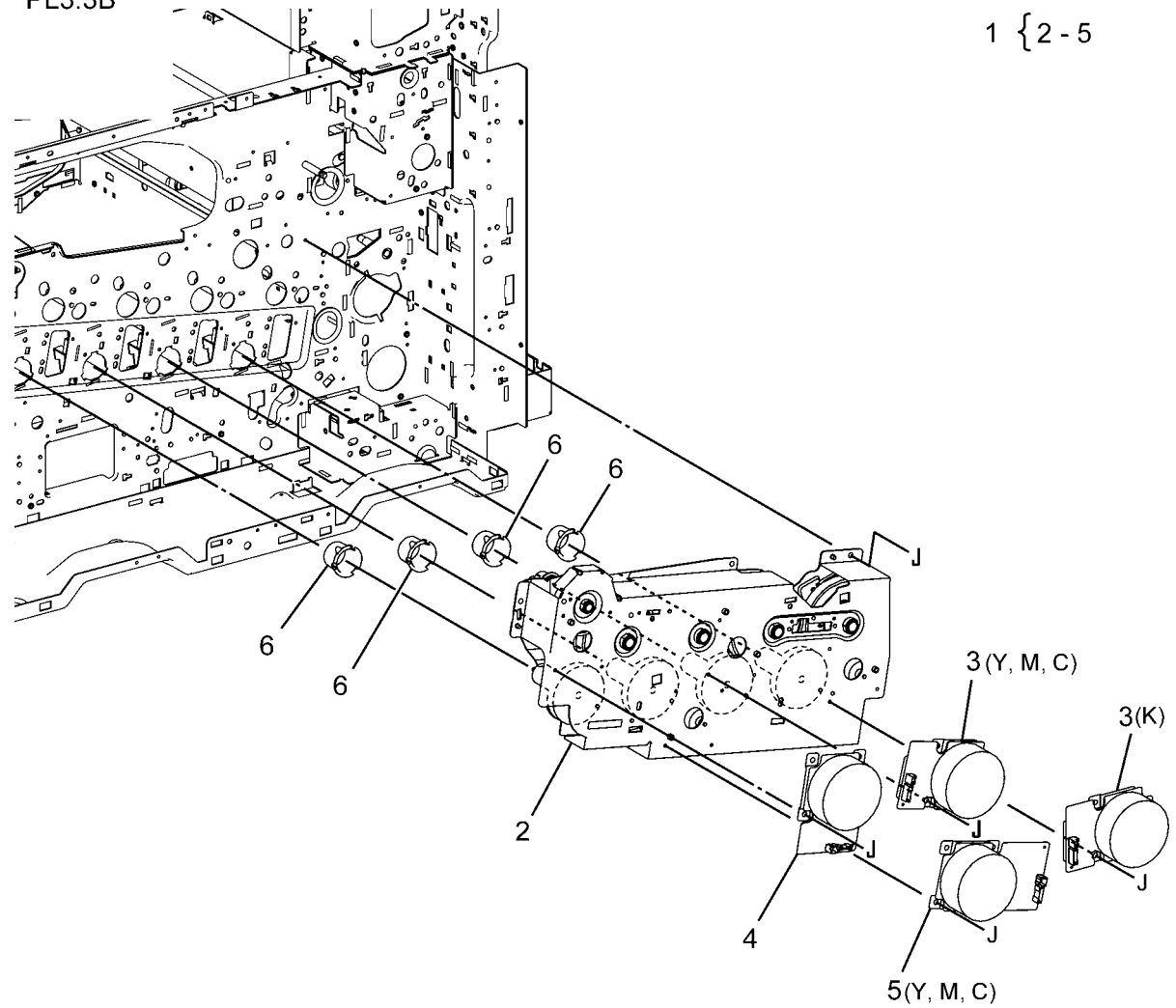


# PL 3.3B Drives (7845/7855)(4 of 4)

Item	Part	Description
1	007K18560	Drum/Developer Drive Assembly (REP 4.2)
2	—	Drive Assembly (P/O PL 3.3B Item 1)
3	127K64400	Developer Drive Motor (Y, M, C) / Drum /Developer Drive Motor (K) (P/O PL 3.3B Item 1)
4	127K64410	IBT Drive Motor (P/O PL 3.3B Item 1)
5	127K64420	Drum Drive Motor (Y, M, C) (P/O PL 3.3B Item 1)
6	055E56040	Gear Guide

PL3.3B

1 { 2 - 5



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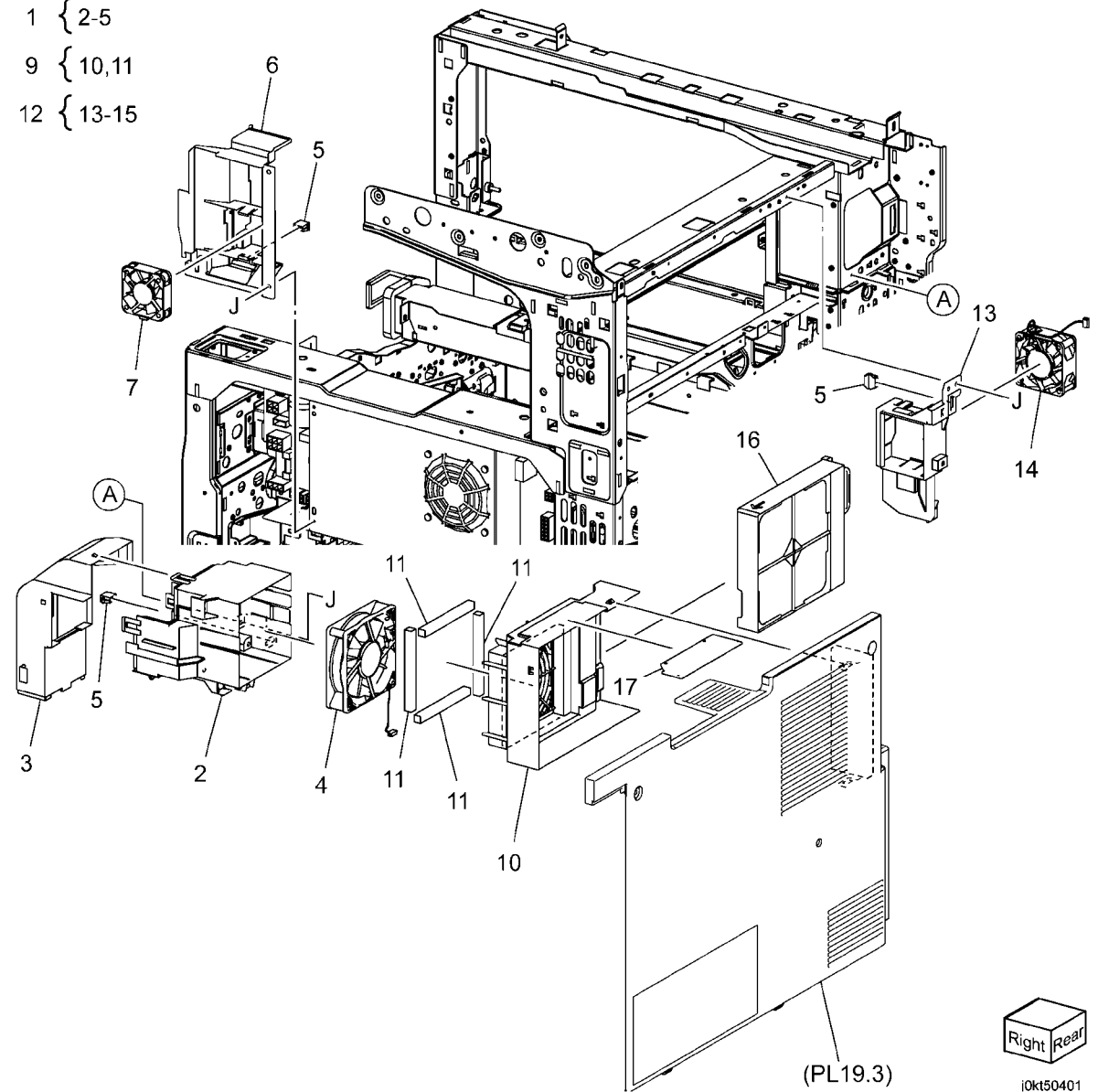


# PL 4.1 NOHAD Common

Item	Part	Description
1	054K48170	Fuser Fan And Duct
2	-	Duct (P/O PL 4.1 Item 1)
3	-	Duct (P/O PL 4.1 Item 1)
4	-	Fuser Fan (P/O PL 4.1 Item 1)
5	913W13170	Connector
6	-	LVPS Duct (Not Spared)
7	127K58360	Front LVPS Fan
9	054K48250	Filter Duct Assembly
10	-	Filter Duct (P/O PL 4.1 Item 9)
11	-	Seal (P/O PL 4.1 Item 9)
12	054K41490	IH Intake Fan And Duct High
13	-	Duct Low (P/O PL 4.1 Item 12)
14	127K60670	IH Intake Fan (7845/55)
-	127K66160	IH Intake Fan (7830/35)
16	-	Odor Filter

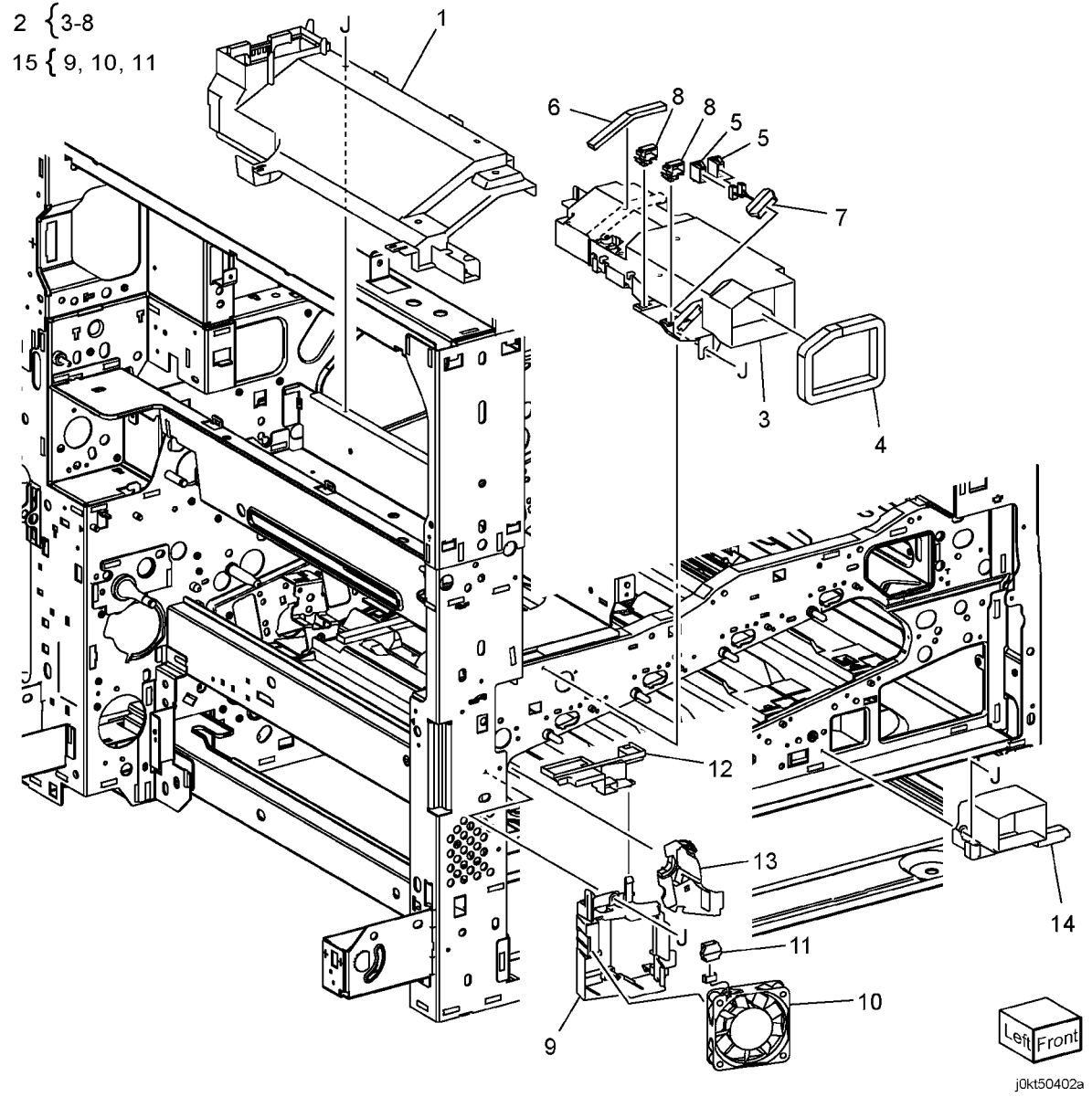
PL 4.1

- 1 { 2-5
- 9 { 10,11
- 12 { 13-15



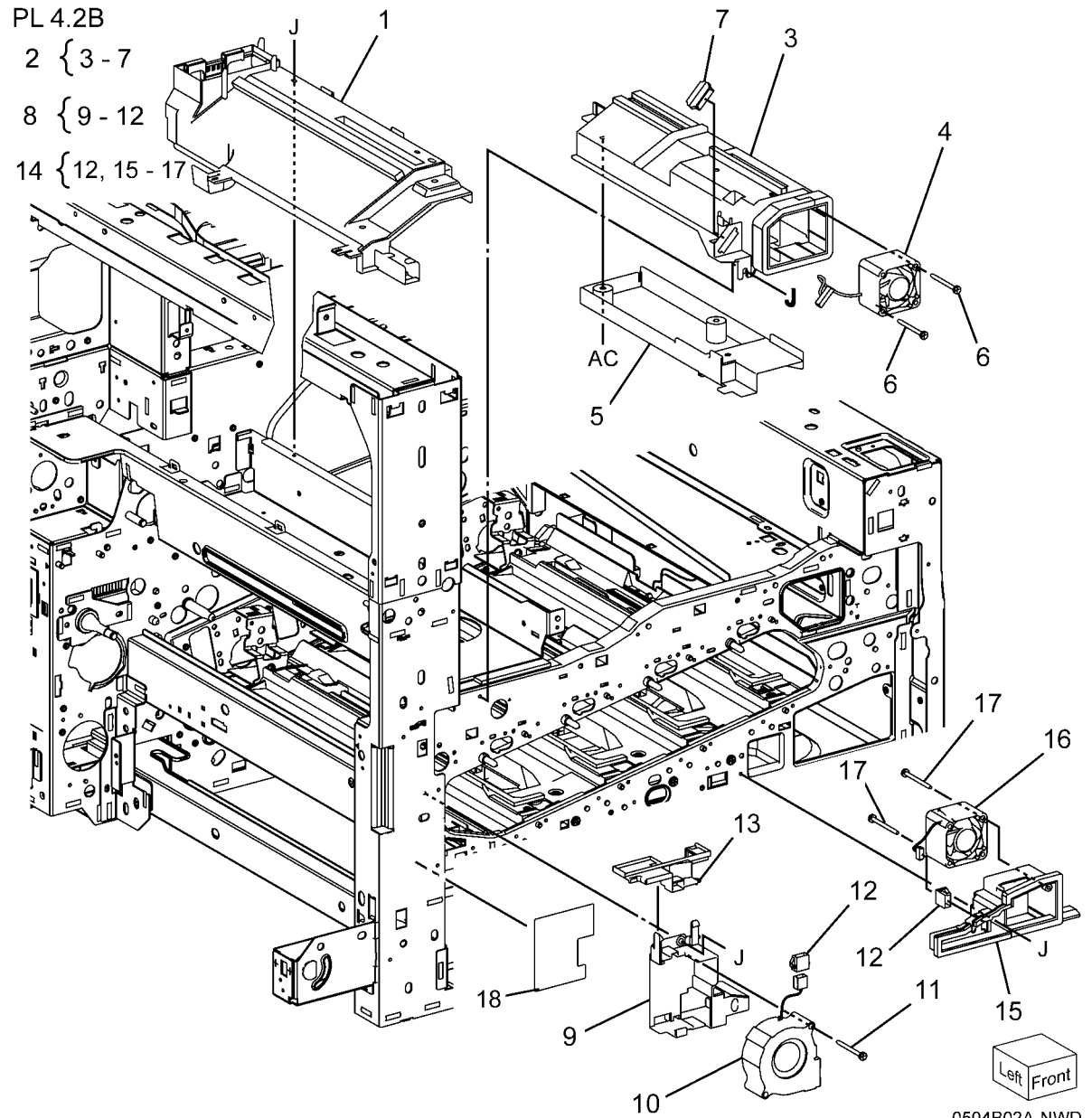
# PL 4.2A NOHAD (7830/7835)(1 of 3)

Item	Part	Description
1	054K36310	Center Duct
2	054K48510	IBT Fan And Duct Assembly
3	-	IBT Duct (P/O PL 4.2A Item 2)
4	-	Front Seal (Not Spared)
5	913W13170	Connector
6	-	Front Seal (P/O PL 4.2A Item 2)
7	-	IBT Fan Wire Harness (P/O PL 4.2A Item 2)
8	-	Seal (P/O PL 4.2A Item 2)
9	054E40470	P2 Duct (P/O PL 4.2A Item 15)
10	927W00214	Process 2 Fan (P/O PL 4.2A Item 15)
11	-	Connector (P/O PL 4.2A Item 15)
12	-	Plate (Not Spared)
13	-	Plate (Not Spared)
14	-	P1 Duct (Not Spared)
15	054K40410	Process 2 Fan Kit



# PL 4.2B NOHAD (7845/7855)(1 of 3)

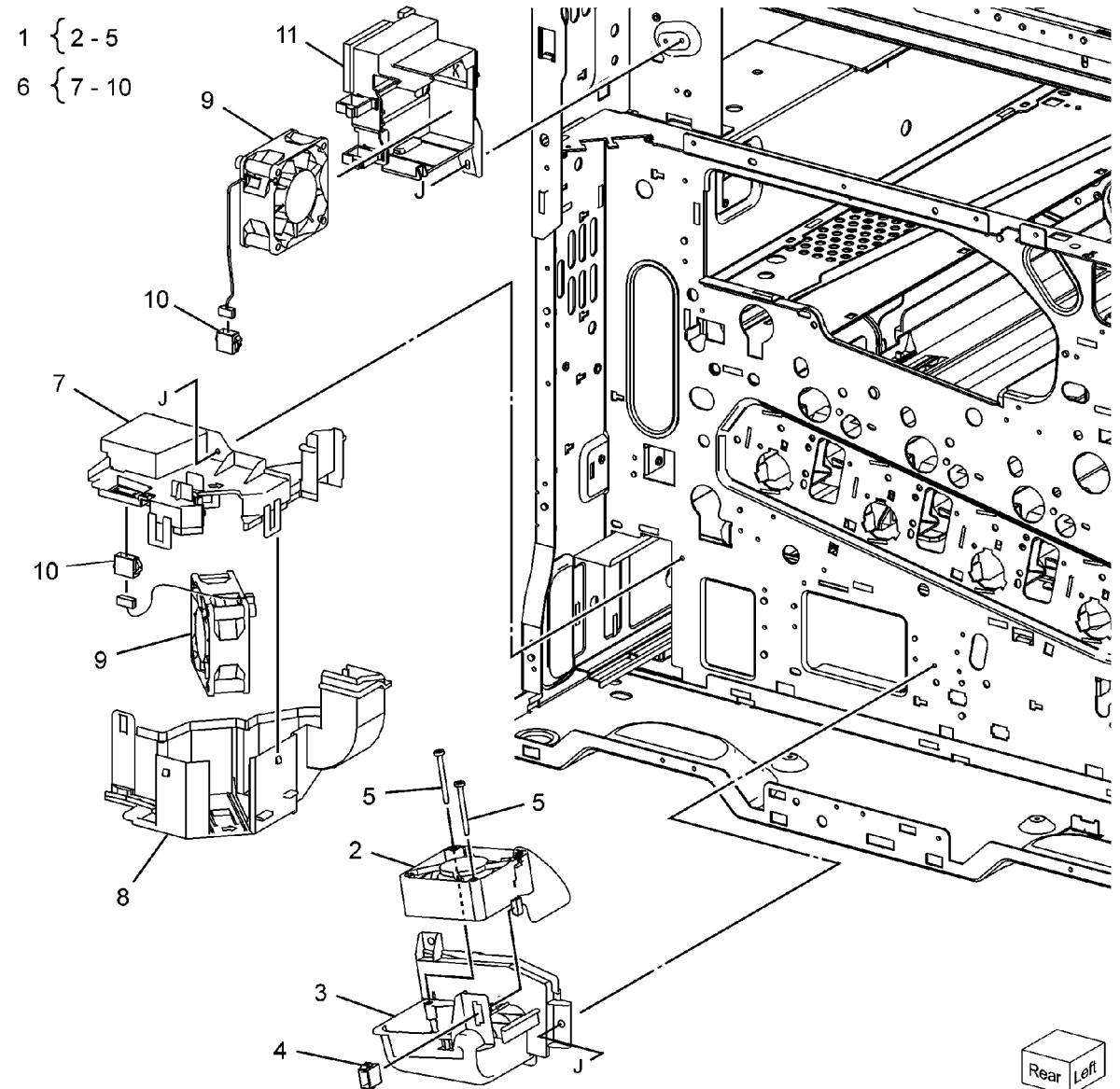
Item	Part	Description
1	-	Center Duct (Not Spared)
2	054K48210	Fan And Duct Assembly
3	-	Duct (P/O PL 4.2B Item 2)
4	-	Cartridge Fan (P/O PL 4.2B Item 2)
5	-	Plate (P/O PL 4.2B Item 2)
6	-	Screw (P/O PL 4.2B Item 2)
7	-	Connector (P/O PL 4.2B Item 2)
8	054K41440	P2 Duct (P/O PL 4.2B Item 19)
9	-	Process 2 Fan and Duct (P/O PL 4.2B Item 19)
10	-	Screw (P/O PL 4.2B Item 19)
11	913W13170	Connector (P/O PL 4.2B Item 19)
12	-	Plate (Not Spared)
13	054K48230	Process 1 Fan And Duct Assembly
14	-	P1 Duct (P/O PL 4.2B Item 13)
15	-	Process Fan 1 (P/O PL 4.2B Item 13)
16	-	Screw (P/O PL 4.2B Item 13)
17	-	Connector (P/O PL 4.2B Item 13)
19	-	Process 2 Fan Assembly



# PL 4.3A NOHAD (7830/7835)(2 of 3)

Item	Part	Description
1	054K47010	Bottom Fan And Duct Assembly
2	127K64480	Bottom Fan (P/O PL 4.3A Item 1)
3	-	Bottom Duct (P/O PL 4.3A Item 1)
4	913W13170	Connector
5	-	Screw (P/O PL 4.3A Item 1)
6	-	HVPS Fan And Duct Assembly
7	-	Upper Duct (P/O PL 4.3A Item 6)
8	-	Lower Duct (P/O PL 4.3A Item 6)
9	127K66140	IH Exhaust Fan
10	-	Connector (P/O PL 4.3A Item 6)
11	-	IH Exhaust Fan (Not Spared)
12	-	IH Exhaust Fan

## PL 4.3A



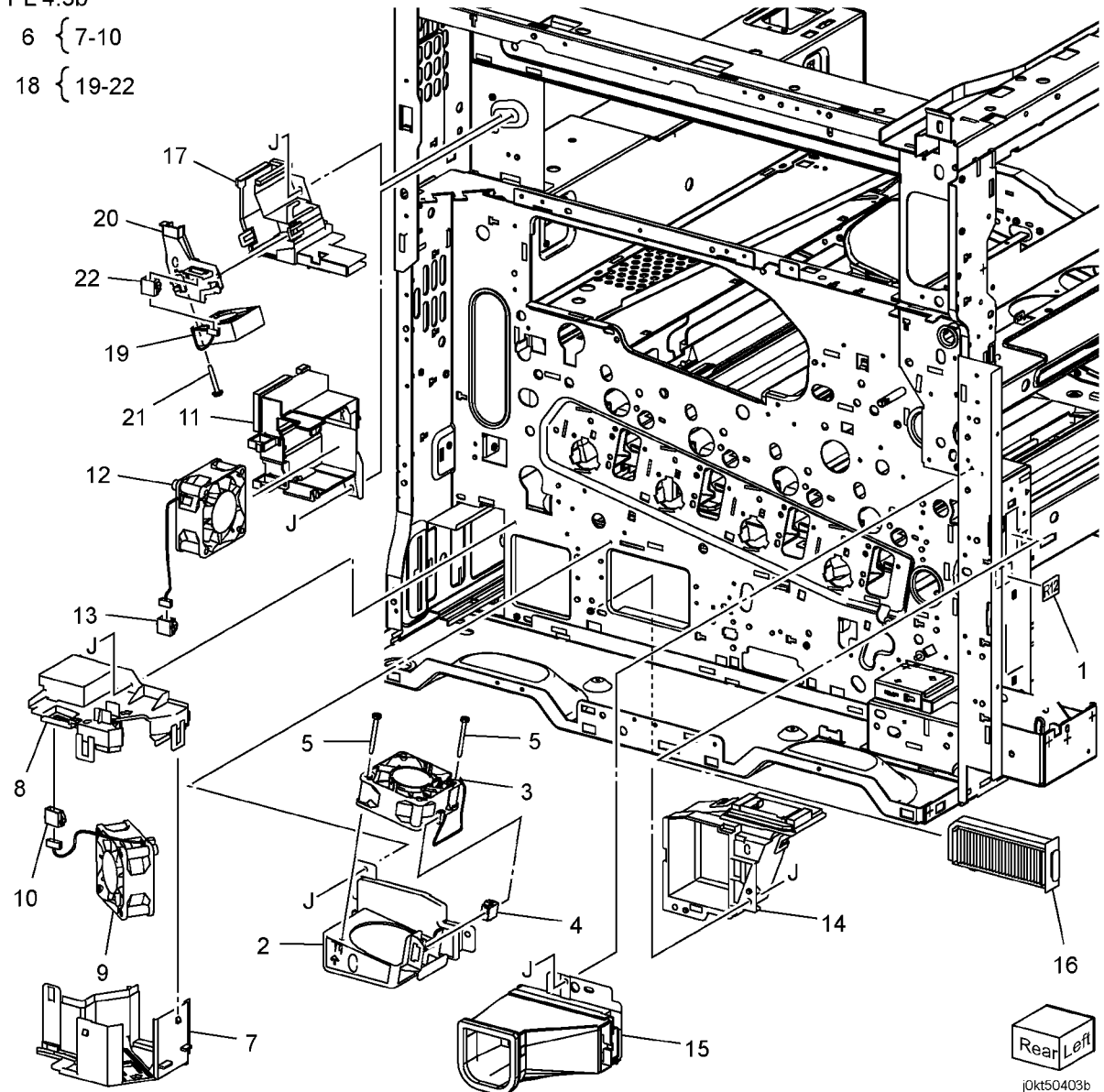
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# PL 4.3B NOHAD (7845/7855)(2 of 3)

Item	Part	Description
1	897E34340	Label (R12)
2	-	Bottom Duct (Not Spared)
3	127K64480	Bottom Fan
4	913W13170	Connector
5	-	Screw
6	-	M Fan And Duct Assembly (Not Spared)
7	-	Lower Duct (P/O PL 4.3B Item 6)
8	-	Upper Duct (P/O PL 4.3B Item 6)
9	127K66181	M Fan
10	-	Connector (P/O PL 4.3B Item 6)
11	-	IH Exhaust Duct (Not Spared)
12	-	IH Exhaust Fan
13	-	Connector (Not Spared)
14	-	Duct (Not Spared)
15	-	Section Duct (Not Spared)
16	053K93180	Suction Filter
17	-	Rear Fan Duct (Not Spared)
18	127K61230	C Exit Fan And Duct
19	127K60690	Exit Fan
20	-	Duct (P/O PL 4.3B Item 18)
21	-	Screw
22	-	Connector

PL 4.3b

6 { 7-10  
18 { 19-22



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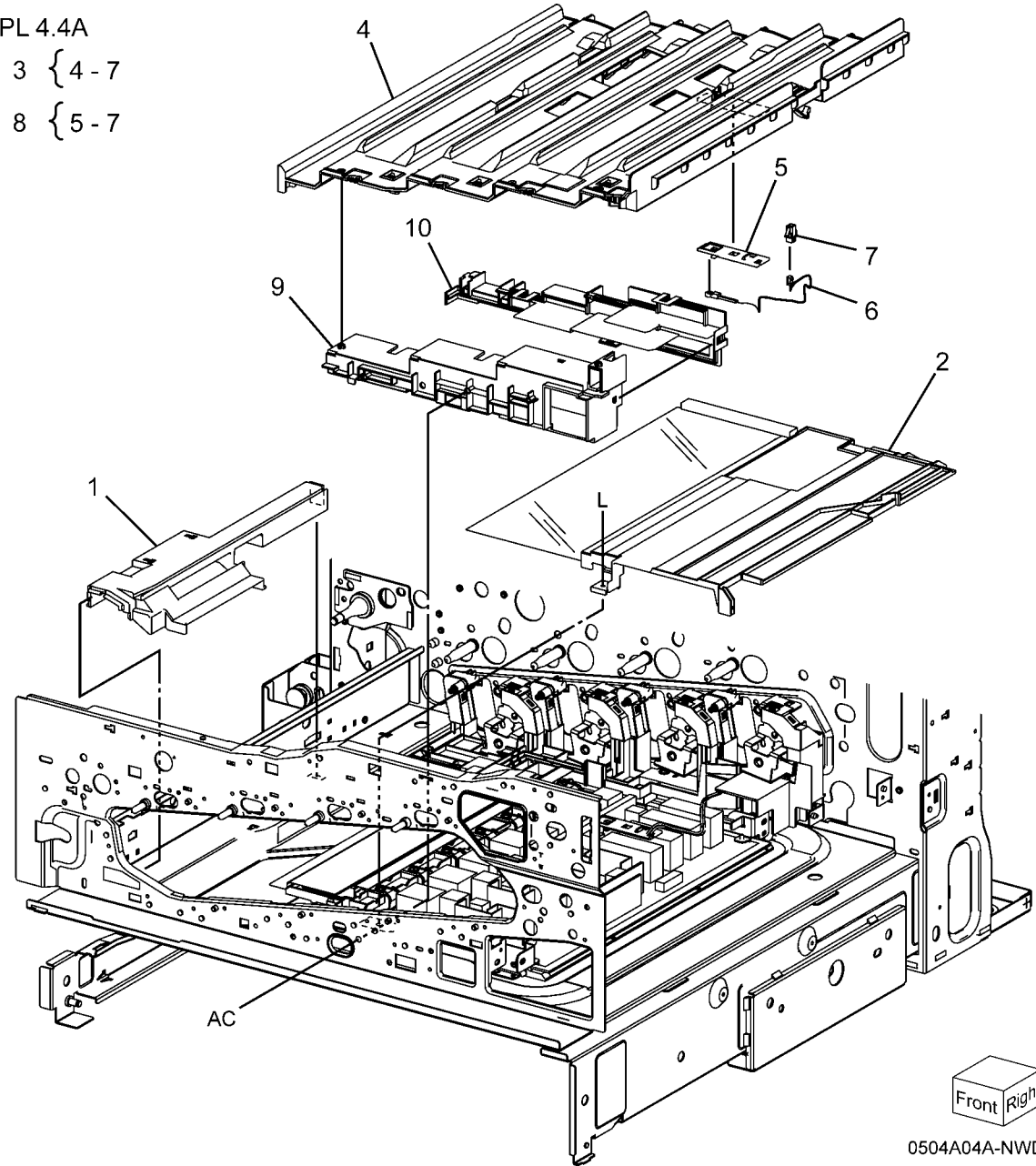
## PL 4.4A NOHAD (7830/7835)(3 of 3)

Item	Part	Description
1	-	Front Bottom Duct (Not Spared)
2	-	HVPS Cover
3	815K02610	Base Plate Assembly
4	-	Base Plate (P/O PL 4.4A Item 3)
5	-	Bracket (P/O PL 4.4A Item 3)
6	-	NOHAD Thermistor (P/O PL 4.4A Item 3)
7	-	Connector (P/O PL 4.4A Item 3)
8	130K71990	NOHAD Thermistor and Bracket Assembly
9	-	Front Duct (Not Spared)
10	-	Front Duct Plate (Not Spared)

PL 4.4A

3 { 4 - 7

8 { 5 - 7



Front Right  
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# PL 4.4B NOHAD (7845/7855)(3 of 3)

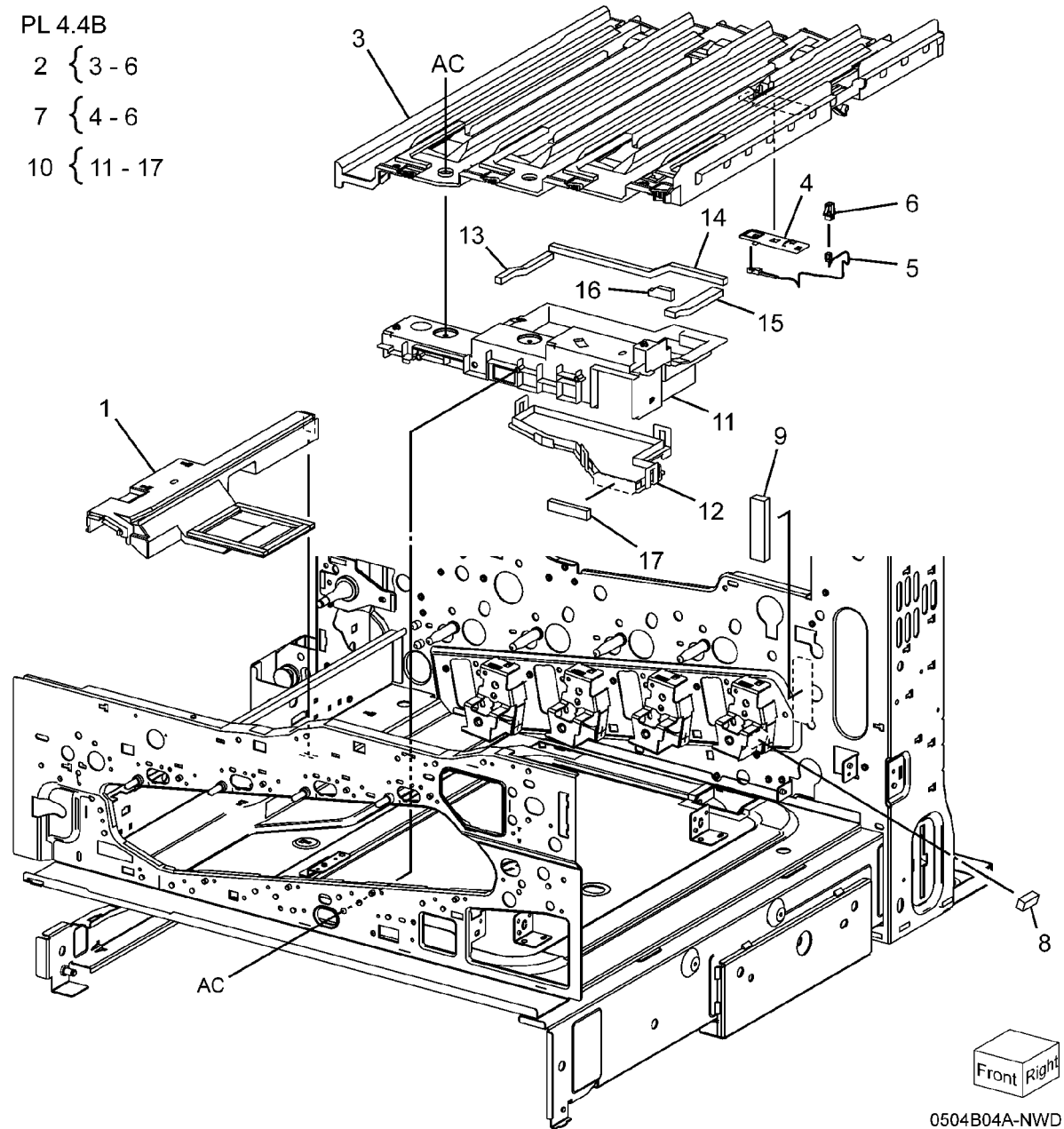
Item	Part	Description
1	-	Front Bottom Duct (Not Spared)
2	815K03601	Base Plate Assembly
3	-	Base Plate (P/O PL 4.4B Item 2)
4	-	Bracket (P/O PL 4.4B Item 2)
5	-	NOHAD Thermistor (P/O PL 4.4B Item 2, PL 4.4B Item 7)
6	-	Connector (P/O PL 4.4B Item 2, PL 4.4B Item 7)
7	130K71990	NOHAD Thermistor And Bracket Assembly
8	-	Seal (P/O PL 4.4B Item 7)
9	-	Seal (Not Spared)
10	-	Front Duct Assembly (Not Spared)
11	-	Front Duct (P/O PL 4.4B Item 10)
12	-	Lower Plate (P/O PL 4.4B Item 10)
13	-	Seal (P/O PL 4.4B Item 10)
14	-	Seal (P/O PL 4.4B Item 10)
15	-	Seal (P/O PL 4.4B Item 10)
16	-	Seal (P/O PL 4.4B Item 10)
17	-	Seal (P/O PL 4.4B Item 10)

PL 4.4B

2 { 3 - 6

7 { 4 - 6

10 { 11 - 17

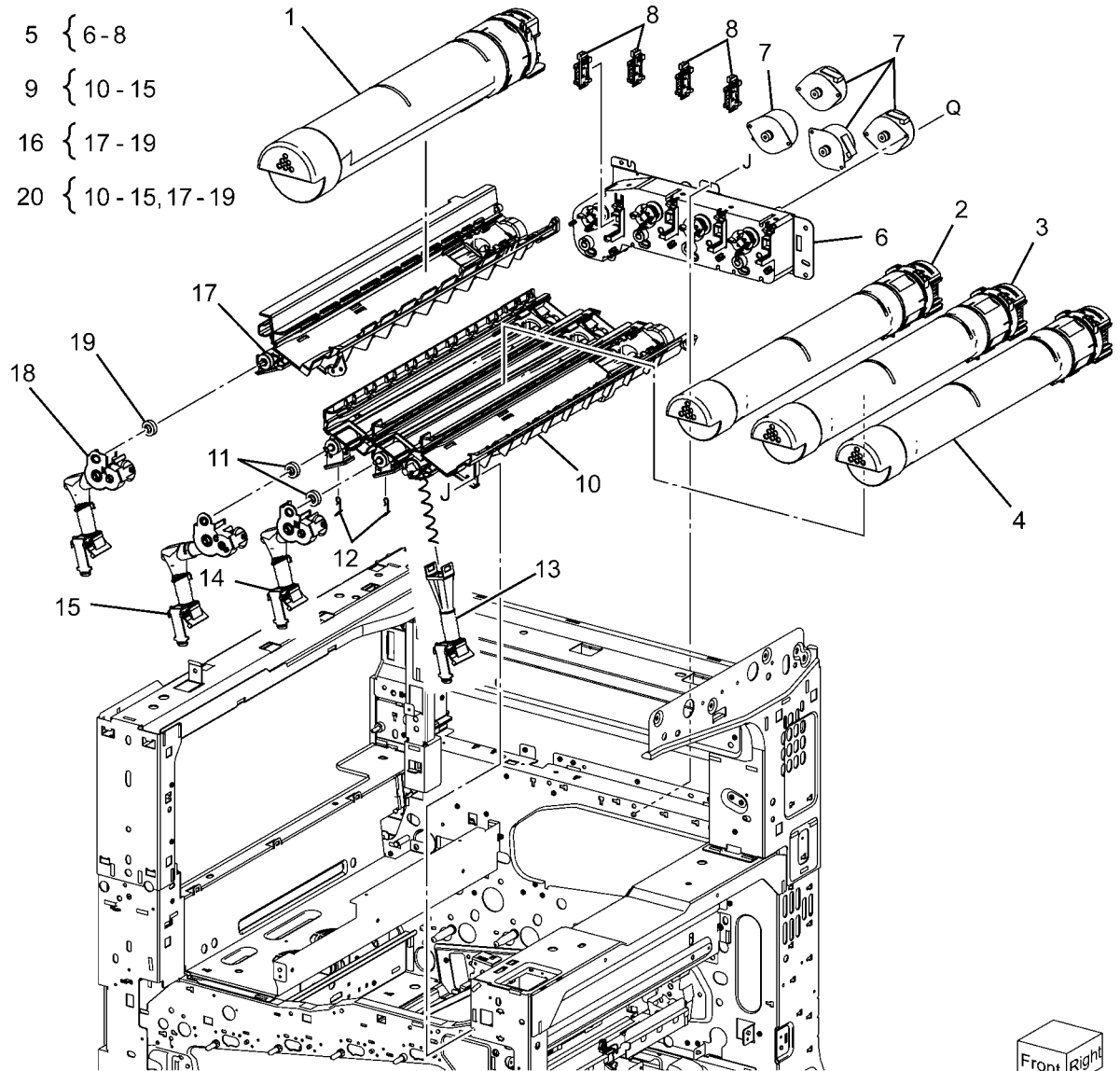




## PL 5.1 Development (1 of 2)

Item	Part	Description
1	006R01509	K-Toner (WW)
-	006R01513	K-Toner (NA/E)
-	006R01517	K-Toner (DMO)
2	006R01516	C-Toner (NA/E)
-	006R01520	C-Toner (DMO)
-	006R01512	C-Toner (WW)
3	006R01519	M-Toner (DMO)
-	006R01511	M-Toner (WW)
-	006R01515	M-Toner (NA/E)
4	006R01514	Y-Toner (NA/E)
-	006R01518	Y-Toner (DMO)
-	006R01510	Y-Toner (WW)
5	127K66670	Toner Dispense Motor Assembly (REP 9.13)
6	-	Dispense Assembly (P/O PL 5.1 Item 5)
7	127K65930	Toner Dispense Motor (K, C, M, Y)
8	113K83244	Toner CRUM Coupler Assembly
9	094K92391	Dispense Pipe Assembly (C, M, Y)
10	-	Guide Assembly (C, M, Y) (P/O PL 5.1 Item 9)
11	-	Auger Gear (Y, M, C) (P/O PL 5.1 Item 9)
12	-	Spring (P/O PL 5.1 Item 9)
13	052K96801	Dispenser Pipe (Y) (P/O PL 5.1 Item 9)
14	052K96811	Dispenser Pipe (M) (P/O PL 5.1 Item 9)
15	052K96821	Dispenser Pipe (C) (P/O PL 5.1 Item 9)
16	094K92402	Dispenser Pipe Assembly (K) (Low)
-	094K92770	Dispenser Pipe Assembly (K) (High) (4470, 5570)
17	-	Guide Assembly (P/O PL 5.1 Item 16)
18	052K96831	Dispenser Pipe (K) (P/O PL 5.1 Item 16)
19	-	Auger Gear (K) (P/O PL 5.1 Item 16)
20	094K92760	Dispenser Pipe Assembly (Y, M, C, K) (High)
-	094K92380	Dispenser Pipe Assembly (Y, M, C, K) (Low)

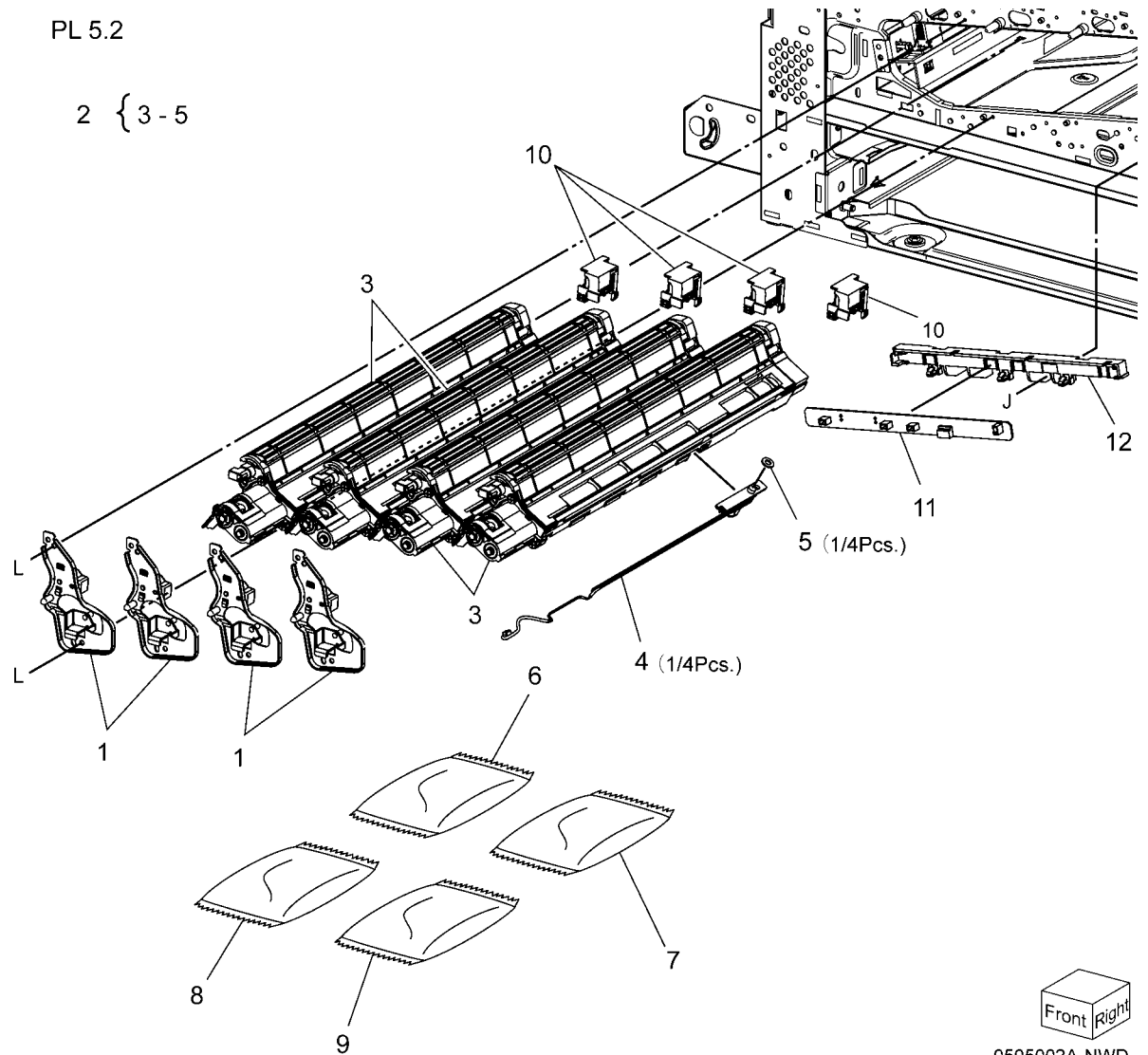
PL 5.1



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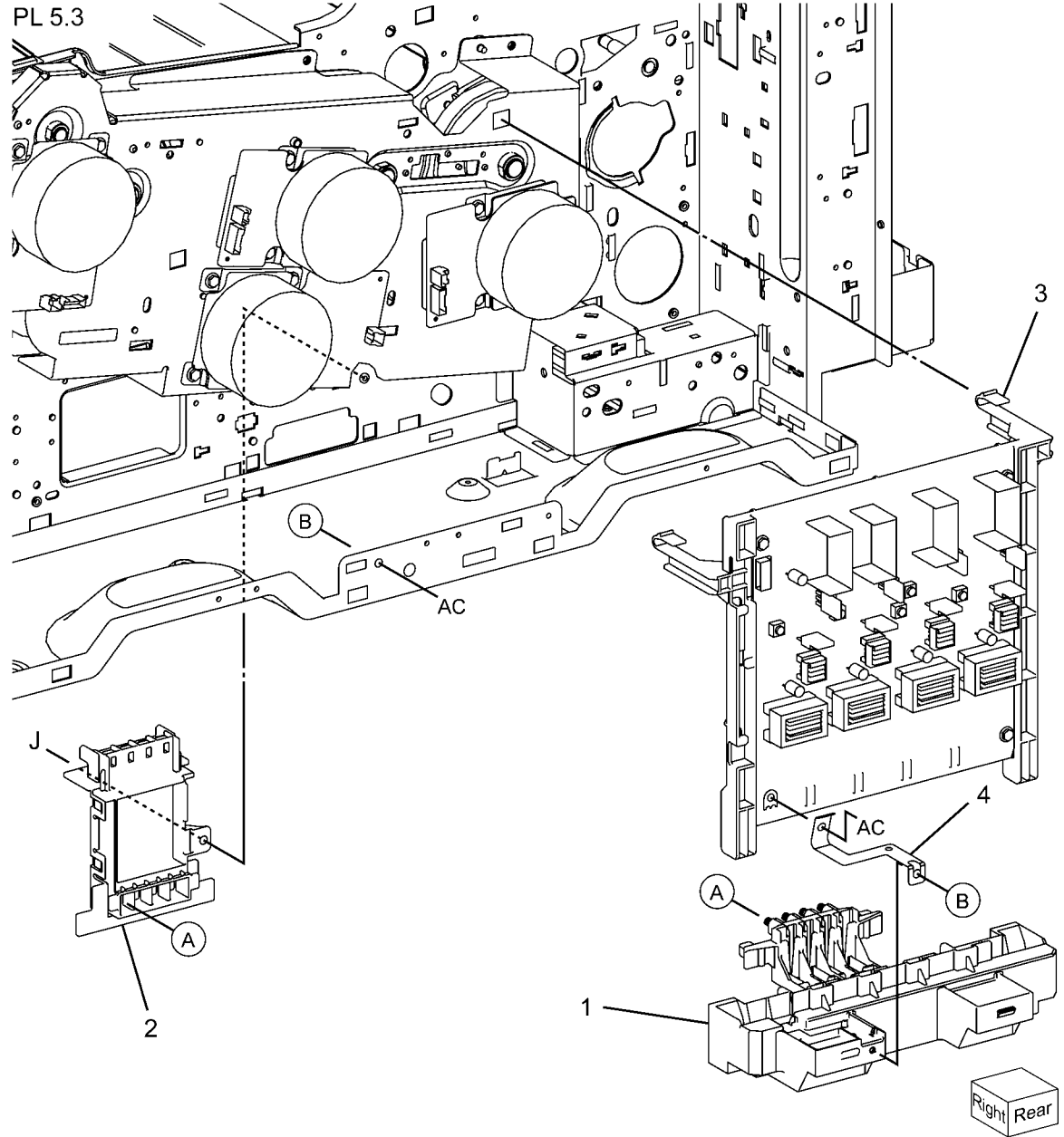
## PL 5.2 Development (2 of 2)

Item	Part	Description
1	015K77960	Developer Plate
2	848K65672	Developer Housing Assembly (K, C, M, Y) (REP 9.14)
3	-	Housing Assembly (P/O PL 5.2 Item 2)
4	130K71851	ATC Sensor (K, C, M, Y)
5	-	Seal (P/O PL 5.2 Item 2)
6	675K85030	Developer (K)
7	675K85040	Developer (C)
8	675K85050	Developer (M)
9	675K85060	Developer (Y) (REP 9.15)
10	010K91700	Plunger Assembly
11	960K49660	ATC PWB
12	849E96933	Bracket



# PL 5.3 HVPS Developer (7845/7855)

Item	Part	Description
1	848K37870	HVPS Housing
2	019K11110	Conductor Holder
3	815K09800	Developer HVPS (7545, 7556) (REP 1.2)
4	130E13880	Ground Conductor (7545, 7556)



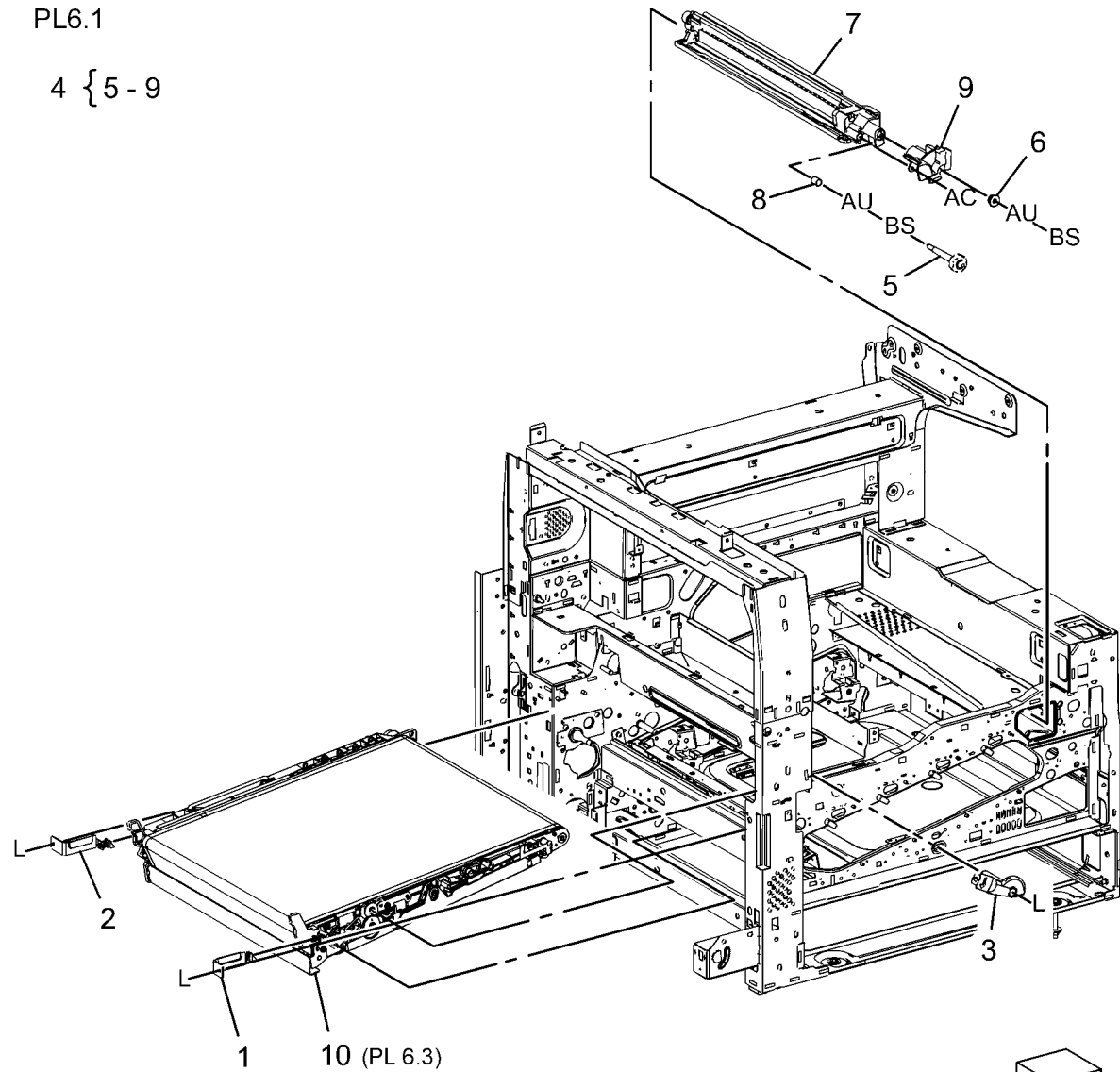
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## PL 6.1 Transfer (1 of 2)

Item	Part	Description
1	068K53690	Front Lock Bracket
2	068K53680	Rear Lock Bracket
3	003E78891	Tension Lever
4	042K94470	Transfer Belt Cleaner Assembly (REP 9.1)
5	-	Knob (P/O PL 6.1 Item 4)
6	-	Bearing (P/O PL 6.1 Item 4)
7	-	Transfer Belt Cleaner (P/O PL 6.1 Item 4)
8	-	Spring (P/O PL 6.1 Item 4)
9	-	Shutter (P/O PL 6.1 Item 4)
10	604K57383	IBT Assembly (REP 9.2)

PL6.1

4 { 5 - 9

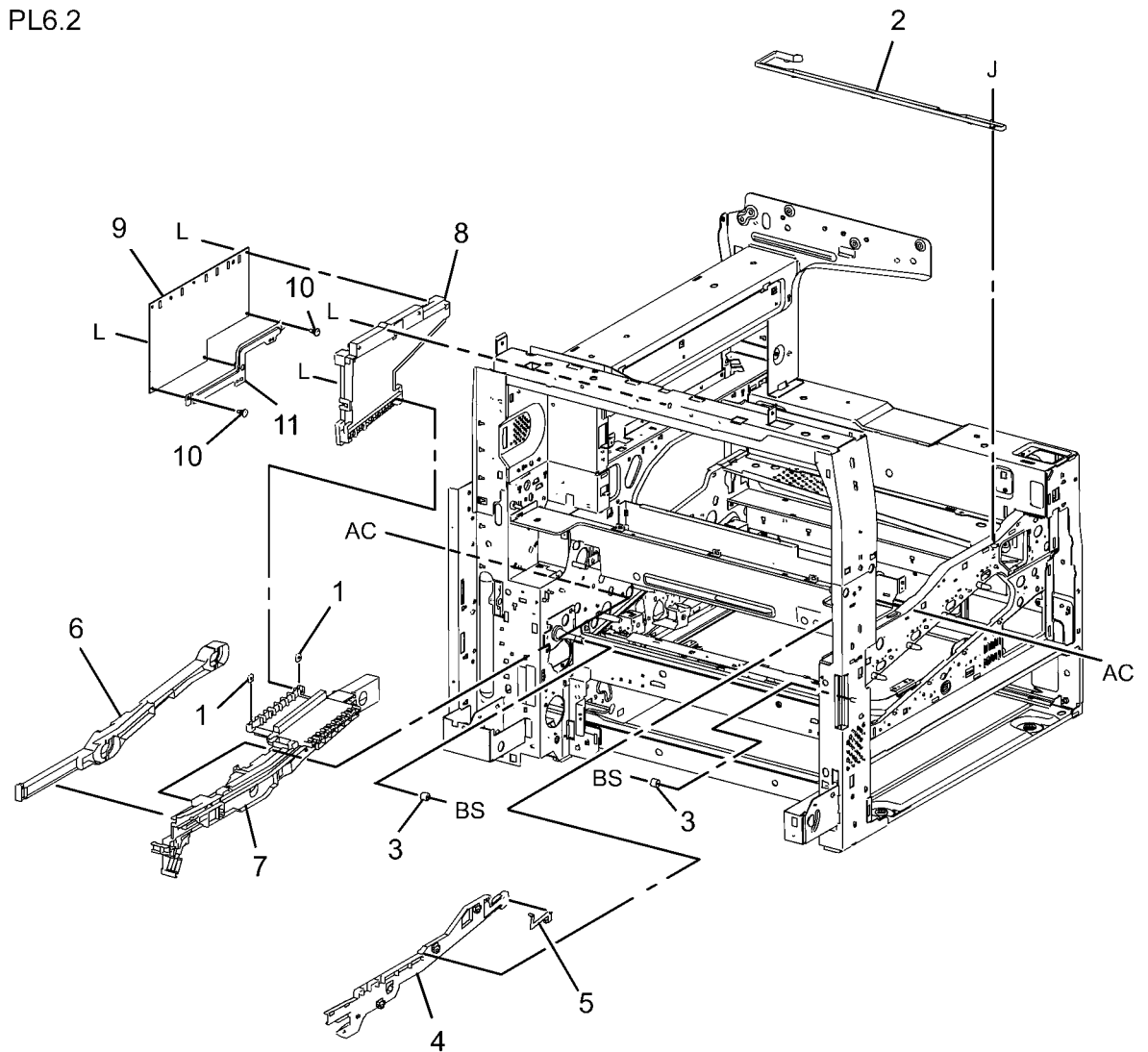


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## PL 6.2 Transfer (2 of 2)

Item	Part	Description
1	815E38150	Plate Nut
2	032K06050	IBT Cleaner Guide
3	013E36670	Metal Bearing
4	032E27610	IBT Front Guide
5	130E94310	Conductor
6	120E29340	Actuator
7	032K05310	Guide Assembly (Low)
-	032K06320	Guide Assembly (High Speed)
8	848K13960	Conductor Housing Assembly
9	105E20500	HVPS/Detack HVPS (REP 1.1)
10	-	PWB Support (Not Spared)
11	-	Bracket (Not Spared)

PL6.2

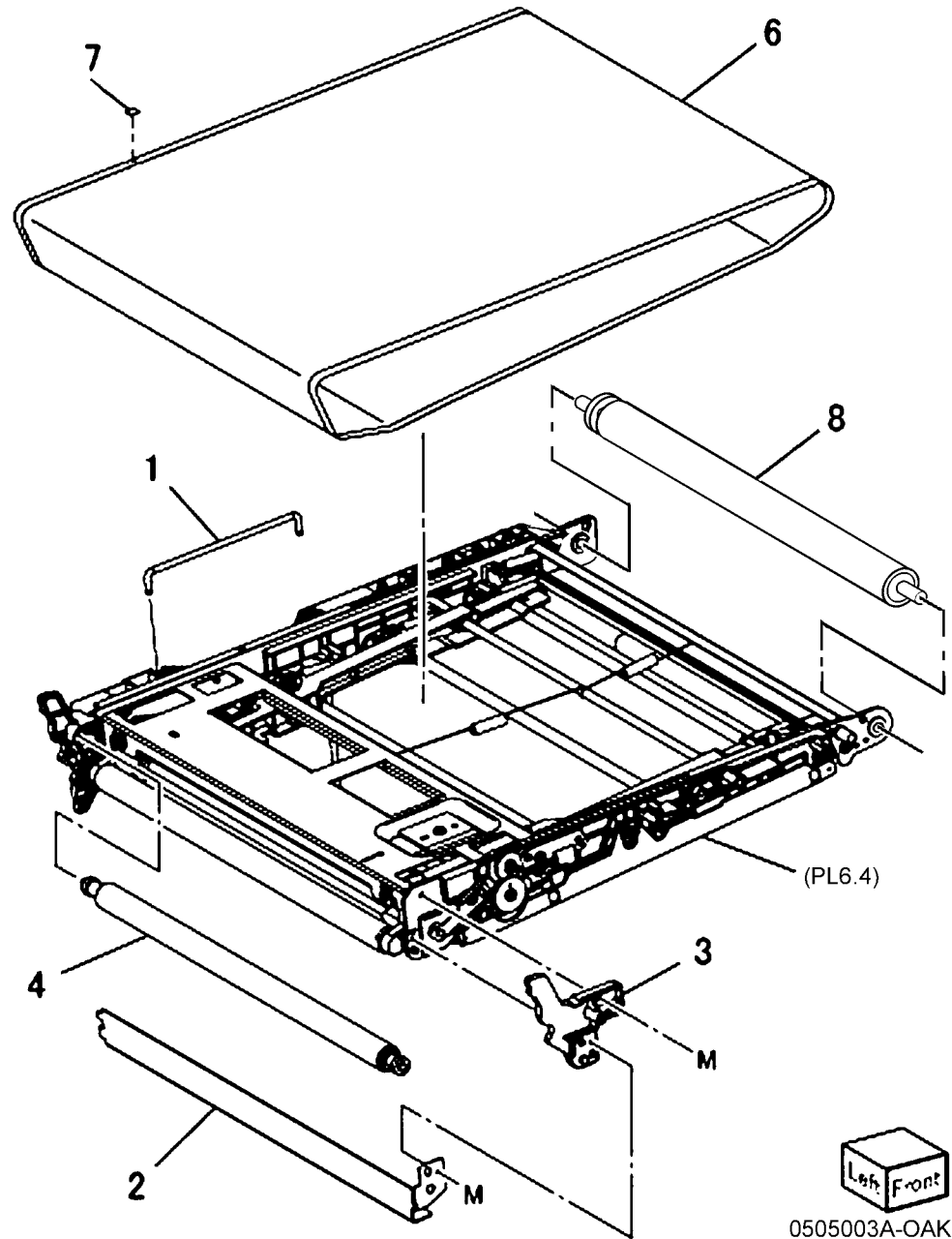


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## PL 6.3 IBT Assembly (1 of 2)

Item	Part	Description
1	003E75420	Handle
2	054K34290	Inlet Chute
3	801E03440	BUR Front Frame
4	059K54991	Back-up Roll
5	064K93621	Transfer Belt Assembly (REP 9.2)
6	-	Transfer Belt (P/O PL 6.3 Item 5)
7	-	TR0 Patch (P/O PL 6.3 Item 5) (REP 9.4)
8	604K57380	IBT Belt Assembly

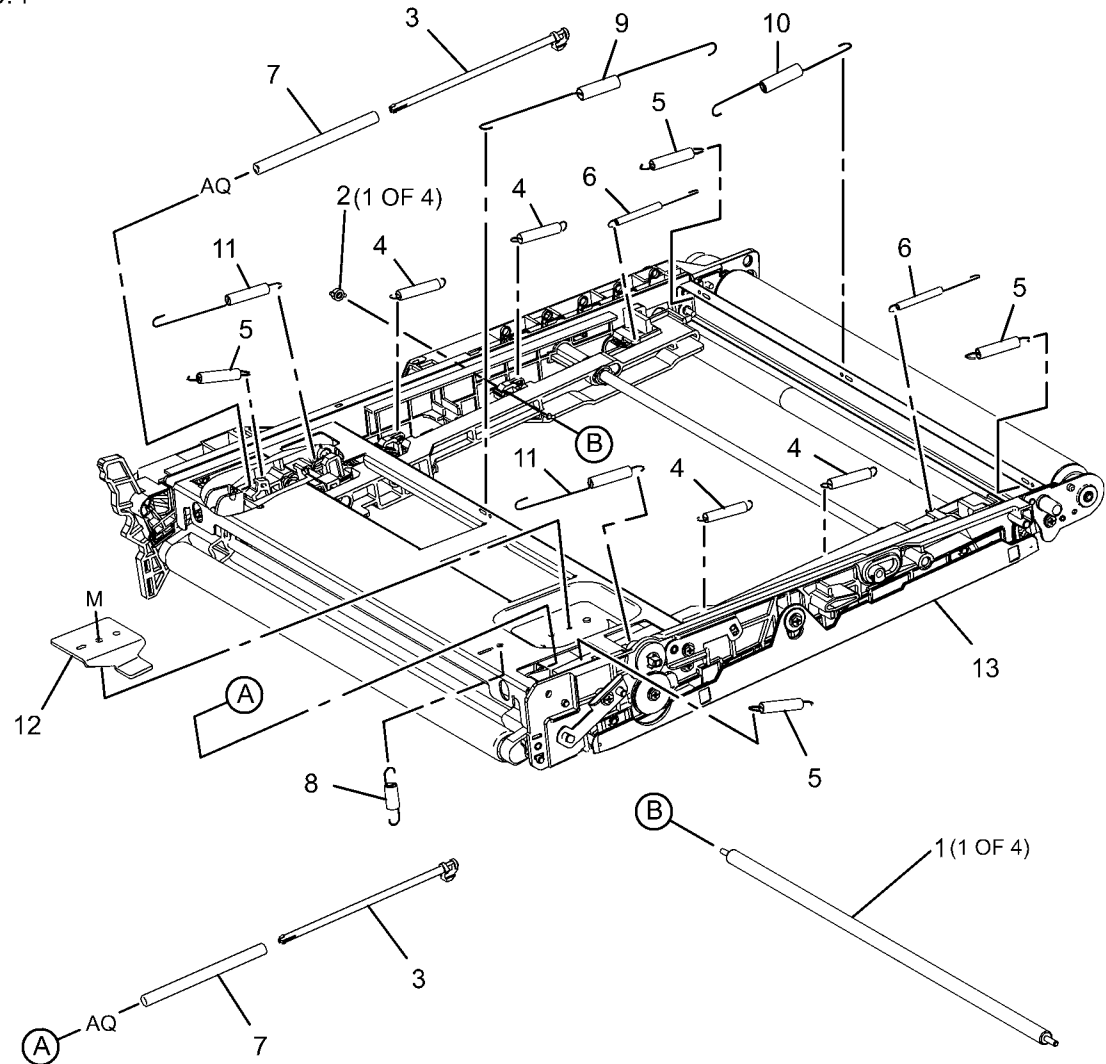
PL6.3  
5 { 6, 7



## PL 6.4 IBT Belt Unit (2 of 2)

Item	Part	Description
1	059E03290	1st BTR Roll
2	130E93970	1st BTR Conductor
3	806E21460	Tension Spring Shaft
4	809E74790	1st BTR Spring
5	809E74800	IR Spring
6	809E74810	BTR Spring
7	809E74870	Tension Spring
8	809E75300	Ground Spring
9	809E76310	Ground Center Spring
10	809E76320	Ground Right Spring
11	809E76810	BTR Spring
12	604K57383	IBT Belt Assembly
13	-	IBT Belt Assembly (P/O PL 6.1 Item 10)

PL6.4



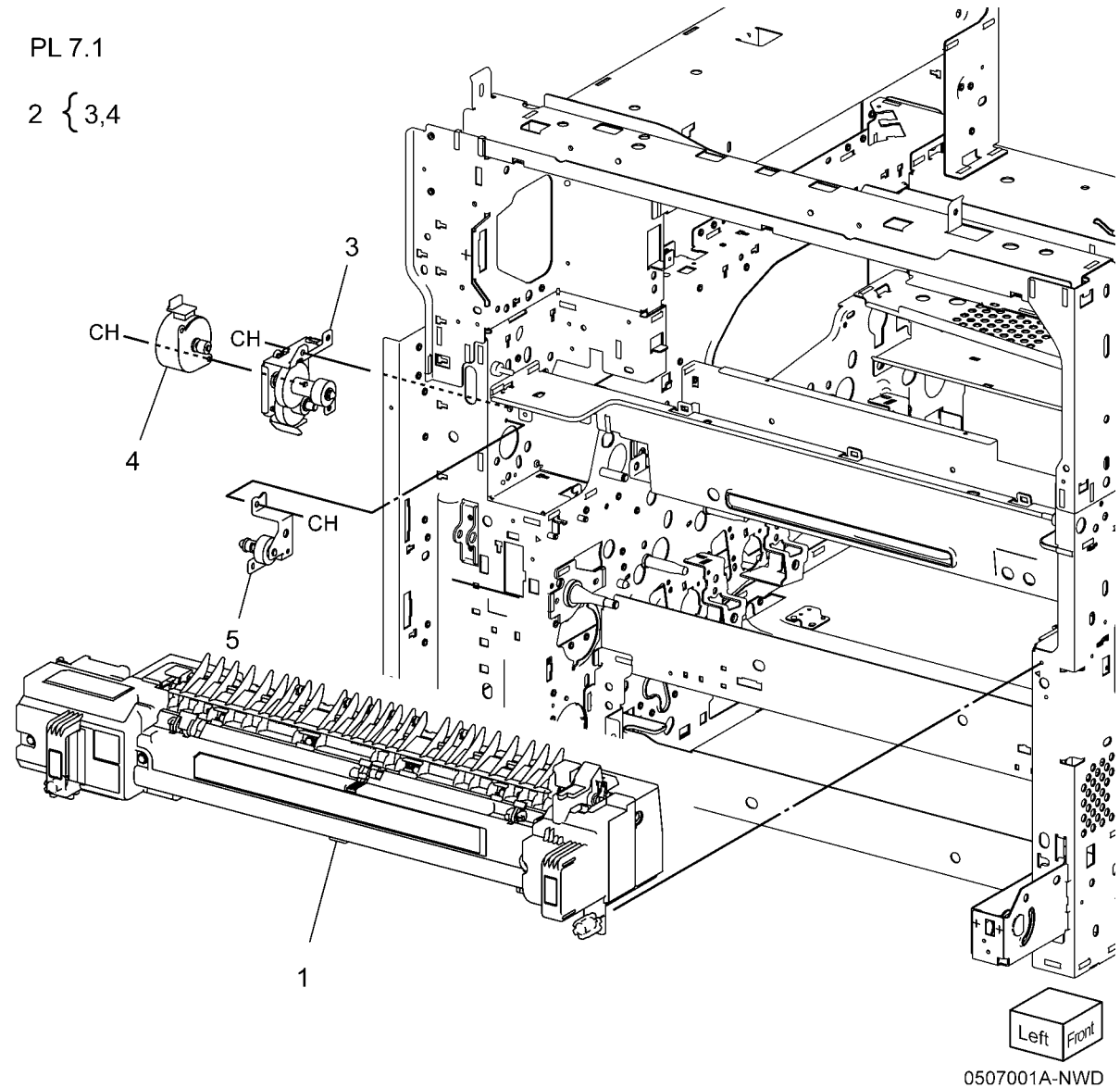
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## PL 7.1 Fuser

Item	Part	Description
1	604K62230	Fuser Assembly (220V) (7845, 7855)
-	604K62200	Fuser Assembly (120V) ((7830, 7835)
-	604K62210	Fuser Assembly (120V) ((7845, 7855)
-	604K62220	Fuser Assembly (220V) (7830, 7835) (REP 10.1)
2	007K16060	Retract Motor And Bracket Assembly
3	-	Motor Bracket (P/O PL 7.1 Item 2)
4	-	P/R Latch Motor (P/O PL 7.1 Item 2)
5	007K16071	Retract Gear

PL 7.1

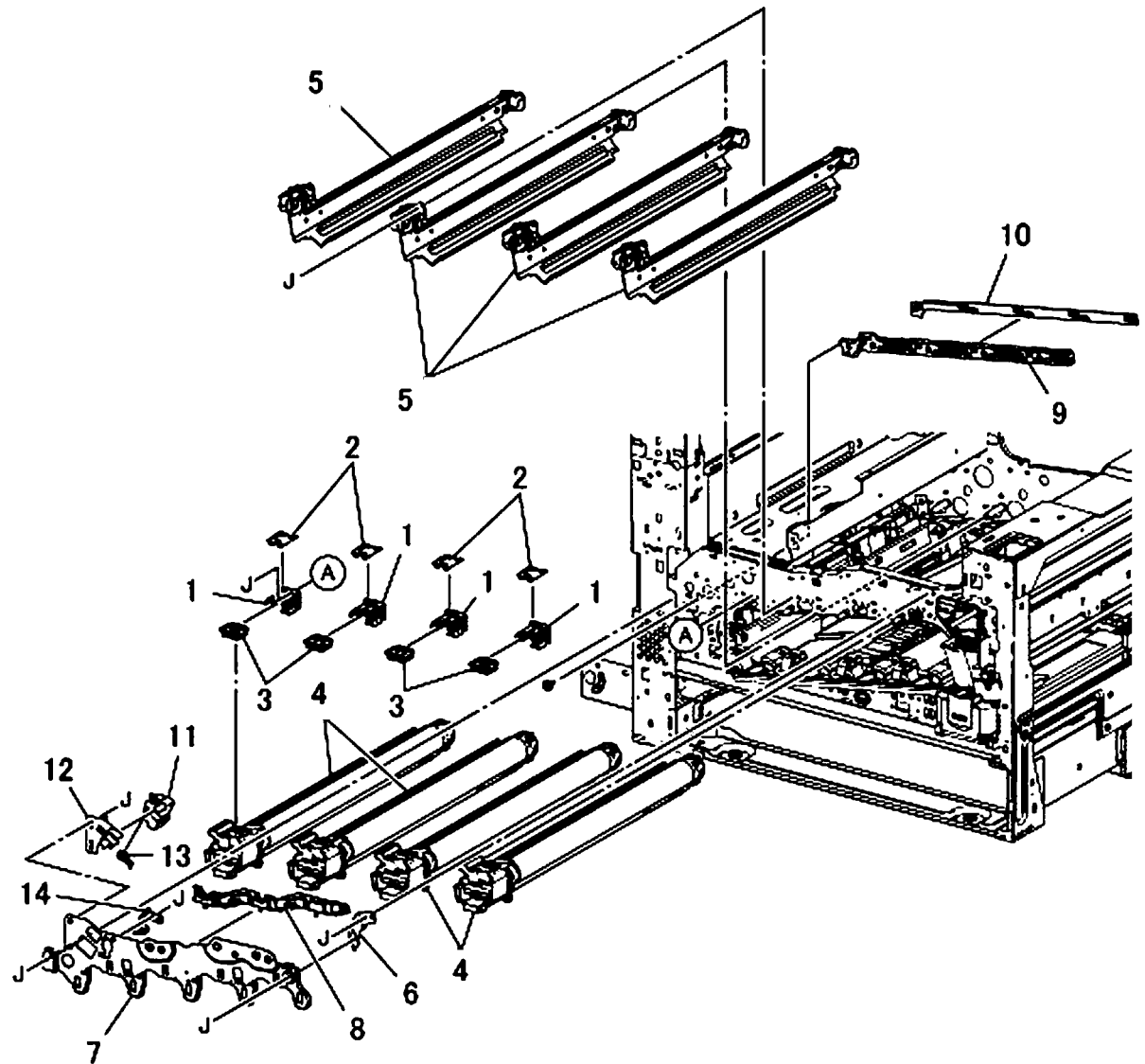
2 { 3,4





## PL 8.1 Xerographic (1 of 2)

Item	Part	Description
1	019K10731	CRUM Holder
2	848E21520	CRUM Cover
3	113K83481	CRUM Coupler Drum
4	013R00662	Drum Cartridge (REP 9.5)
5	032K04701	Erase Lamp Unit (REP 9.7)
6	868E06271	Bracket
7	868E06281	Plate
8	—	Harness Holder (Not Spared)
9	—	Harness Holder (Not Spared)
10	848E15090	Cover
11	011E20901	Handle Lock Lever
12	868E08980	Bracket
13	809E79410	Spring
14	809E79420	Spring



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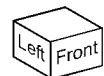
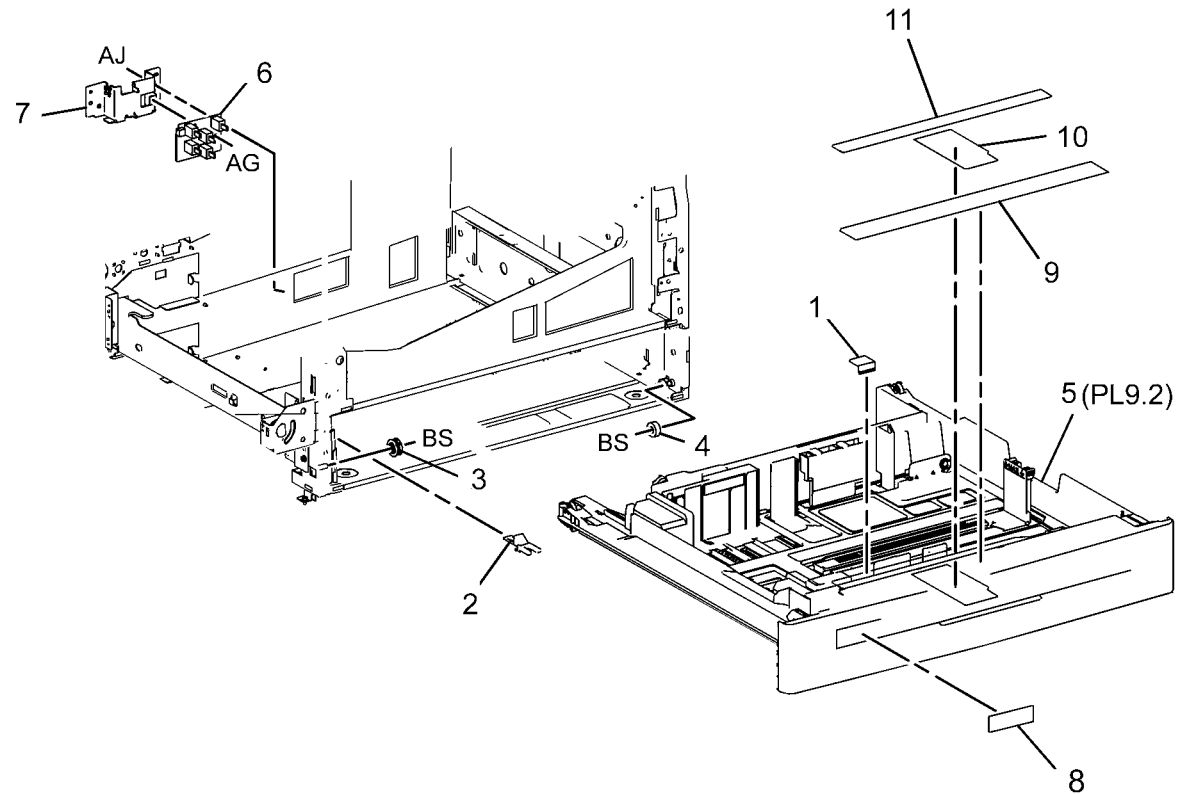


## PL 9.1 Tray 1/2 (1 of 2)

Item	Part	Description
1	014E59990	Slide Lock Block
2	003E76461	Front Stopper
3	059E03500	Front Left Roller
4	059E03510	Front Right Roller
5	050K69610	Tray 1 Assembly
6	110K11680	Paper Size Sensor Assembly
-	110K12100	Paper Size Sensor Assembly (Alternate)
7	-	Switch Bracket (Not Spared)
8	-	Tray 1, Tray 2 Label
9	-	Instruction Label
10	-	Side Size Label (Not Spared)
11	-	End Size Label (Not Spared)
12	604K62240	Tray Label Kit (REF: PL 10.2 Item 10, PL 10.2 Item 11)

PL9.1

12 { 8, PL10.2 ITEMS 10, 11



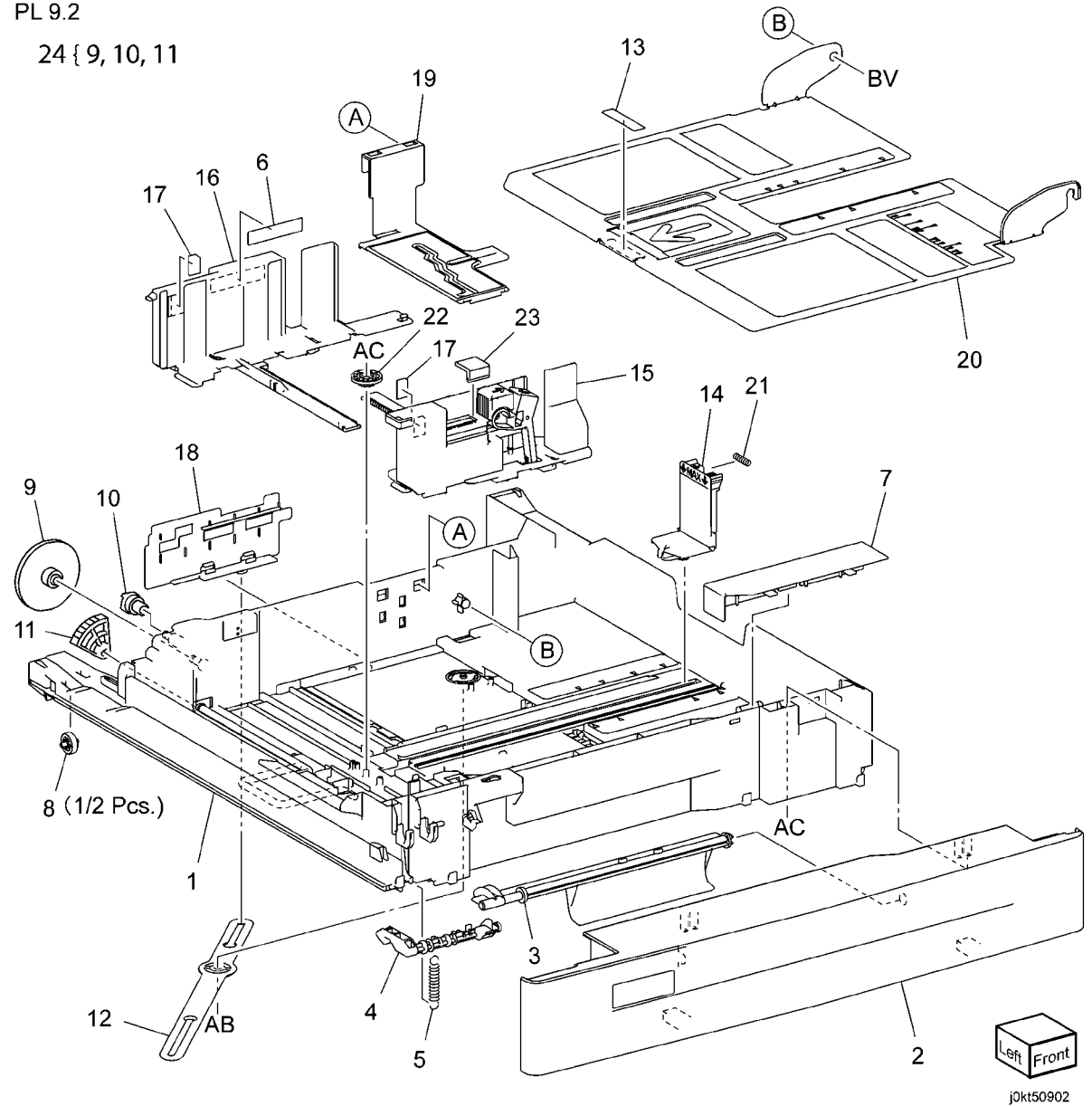
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## PL 9.2 Tray 1/2 (2 of 2)

Item	Part	Description
1	050K69610	Tray Assembly
2	848E15051	Front Trim Cover
3	011E24400	Tray Lever
4	003E75440	Latch
5	809E75730	Latch Spring
6	-	Label (Max) (Not Spared)
7	848E21141	Rail Cover
8	059E03522	Roller
9	007E78450	Gear (13/60T)
10	007E78431	Gear (13T)
11	007E78441	Gear (60T)
12	-	Link (Not Spared)
13	-	Bottom Pad Assembly (Not Spared) (Not Spared)
14	-	End Guide (Not Spared)
15	-	Front Side Guide Assembly (Not Spared)
16	-	Rear Side Guide (Not Spared)
17	-	Pad (Not Spared)
18	120E33930	End Guide Actuator (P/O PL 9.1 Item 1)
19	-	Side Actuator
20	-	Bottom Plate (Not Spared)
21	-	Spring (Not Spared)
22	807E13520	Pinion
23	010E93341	Slide Lock
24	604K20541	Gear Kit

**NOTE:** j0kt50902.tif 0509002anwd.tif

PL 9.2  
24 { 9, 10, 11

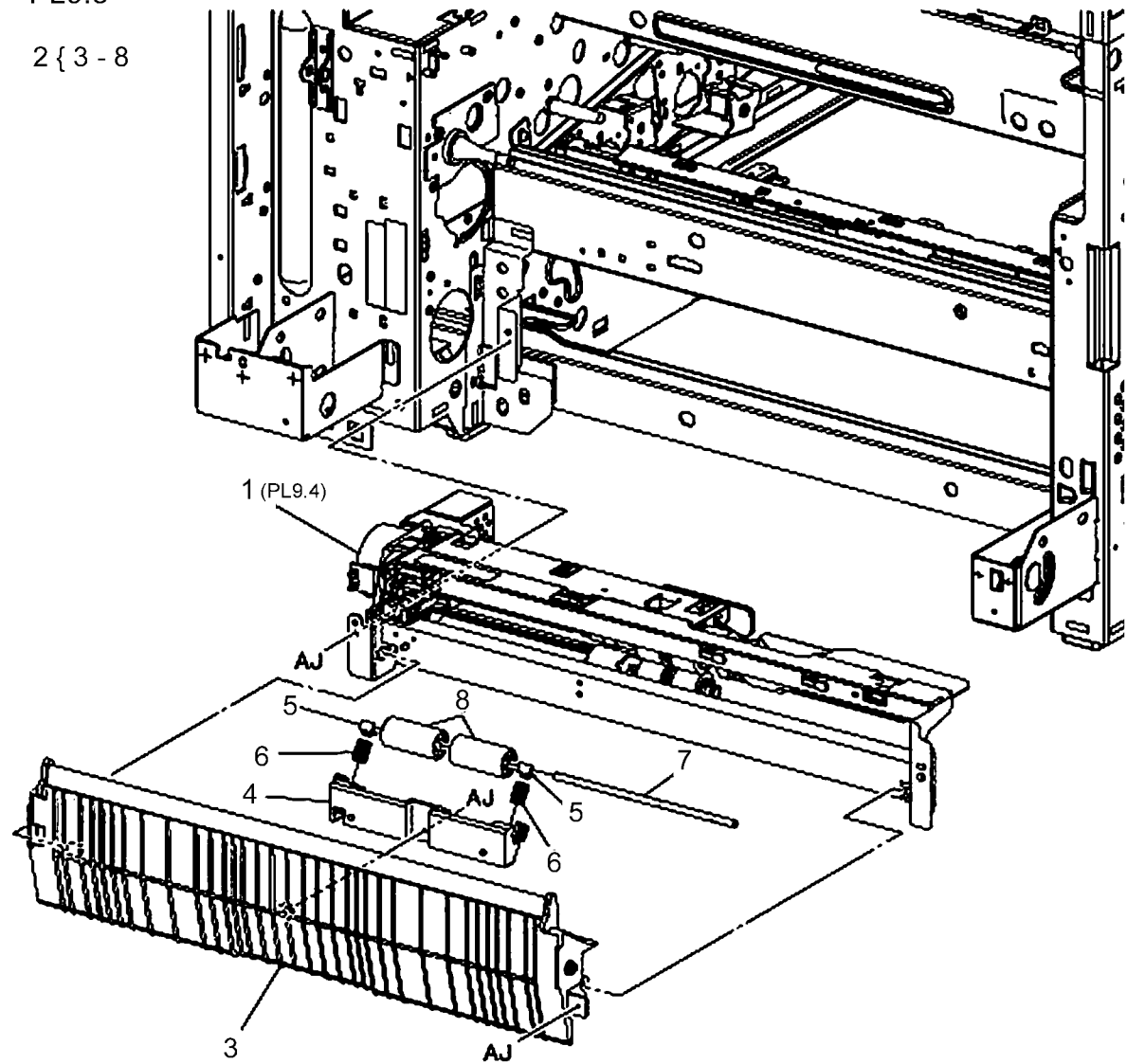


## PL 9.3 Tray 1 Feeder

Item	Part	Description
1	059K75190	Tray 1 Feeder Assembly (7830/35)
-	059K74820	Tray 1 Feeder Assembly (7845/55)
2	054K35142	Chute Assembly
3	-	Chute (P/O PL 9.3 Item 2)
4	-	Pinch Guide (P/O PL 9.3 Item 2)
5	-	Spacer (P/O PL 9.3 Item 2)
6	-	Spring (P/O PL 9.3 Item 2)
7	-	Pinch Shaft (P/O PL 9.3 Item 2)
8	-	Pinch Roll (P/O PL 9.3 Item 2)

PL9.3

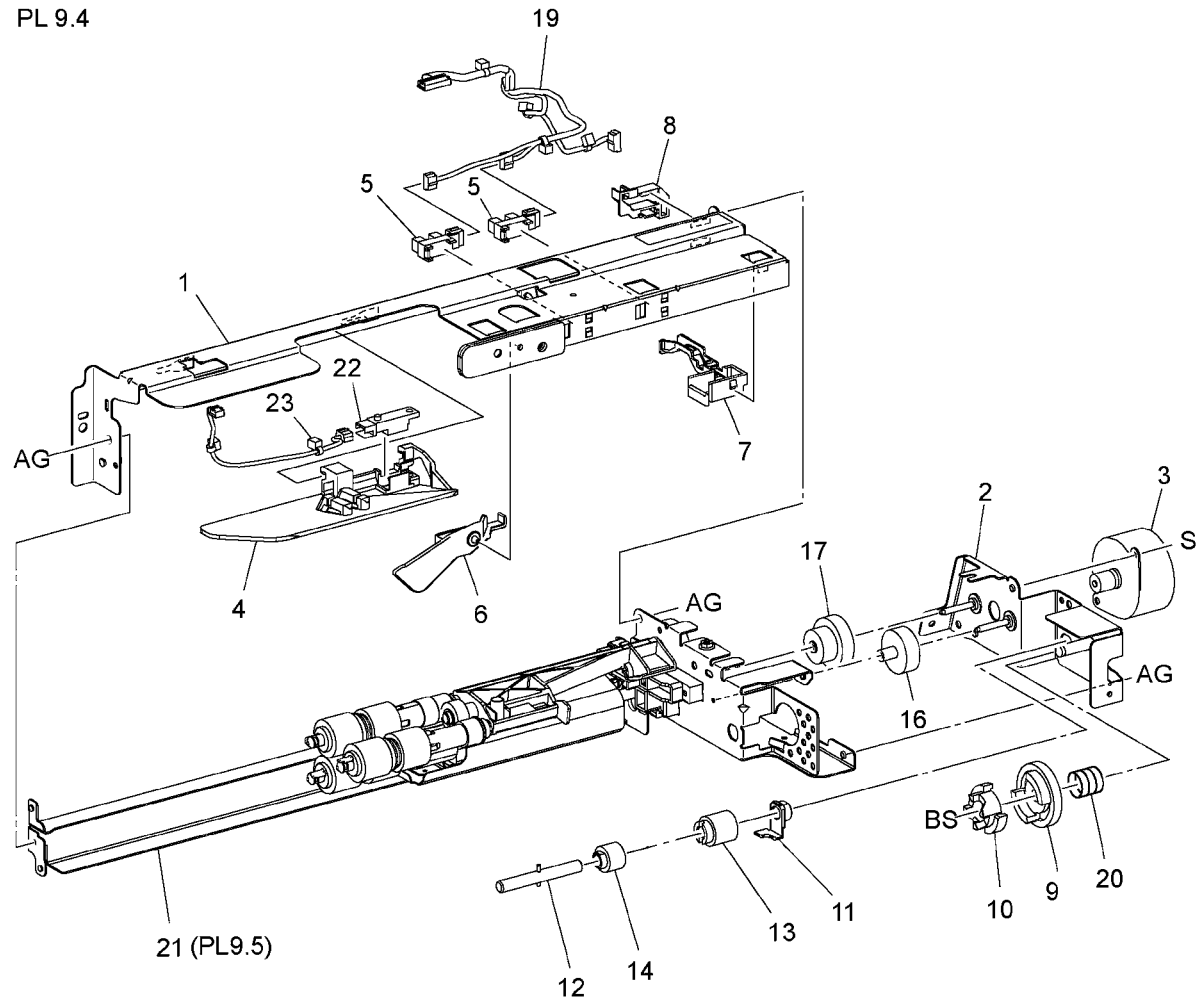
2 { 3 - 8



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## PL 9.4 Tray 1 Feeder Assembly (1 of 2)

Item	Part	Description
1	–	Upper Frame Assembly
2	–	Drive Bracket Assembly (P/O PL 9.3 Item 1)
3	127K52790	Tray 1 Feed/Lift Up Motor
4	–	Chute (Not Spared)
5	930W00113	Tray 1 Nudger Level Sensor, No Paper Sensor
6	120E22481	Actuator
7	–	Upper Harness Holder (P/O PL 9.3 Item 1)
8	–	Rear Harness Holder (P/O PL 9.3 Item 1)
9	807E00390	Gear (31T)
10	014E44770	Spacer
11	–	Bearing (P/O PL 9.3 Item 1)
12	006K23221	Drive Shaft
13	807E00800	Gear (13T)
14	007K16960	One Way Gear
–	005K83081	One Way Clutch
–	005K10100	One Way Clutch
–	007K98130	One Way Gear
16	807E20300	Helical Gear (25T)
17	807E20310	Helical Gear (29T/19T) (7830/35)
–	807E30640	Helical Gear (29T/19T) (7845/55) (4475, 5575)
19	–	Wire Harness (P/O PL 9.3 Item 1)
20	–	Spring (P/O PL 9.3 Item 1)
21	–	Roller Assembly (P/O PL 9.5)
22	930W00211	Tray 1 Pre Feed Sensor (7845/55)
23	–	Pre-Feed Sensor Harness (7845/55)

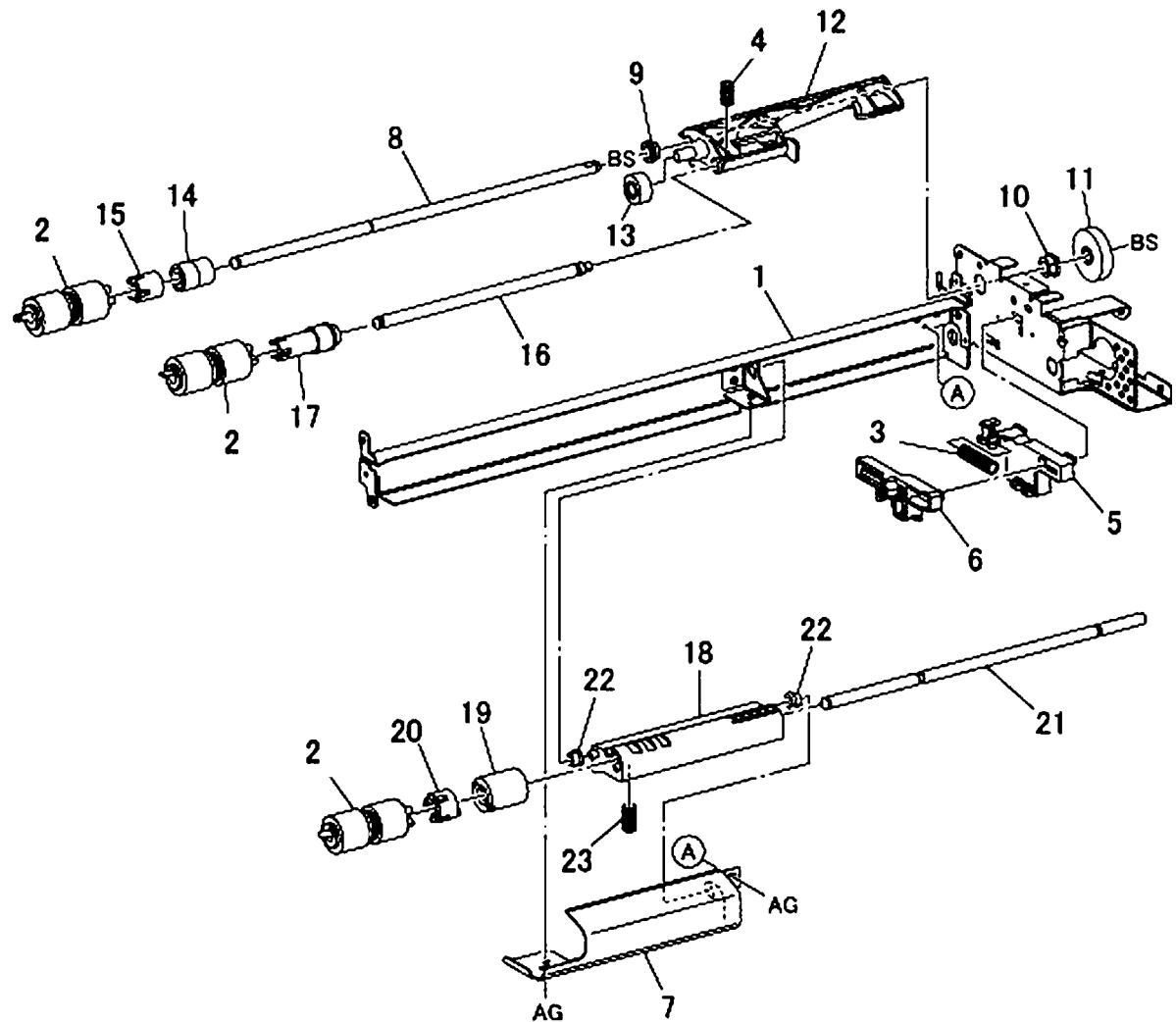


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# PL 9.5 Tray 1 Feeder Assembly (2 of 2)

PL 9.5

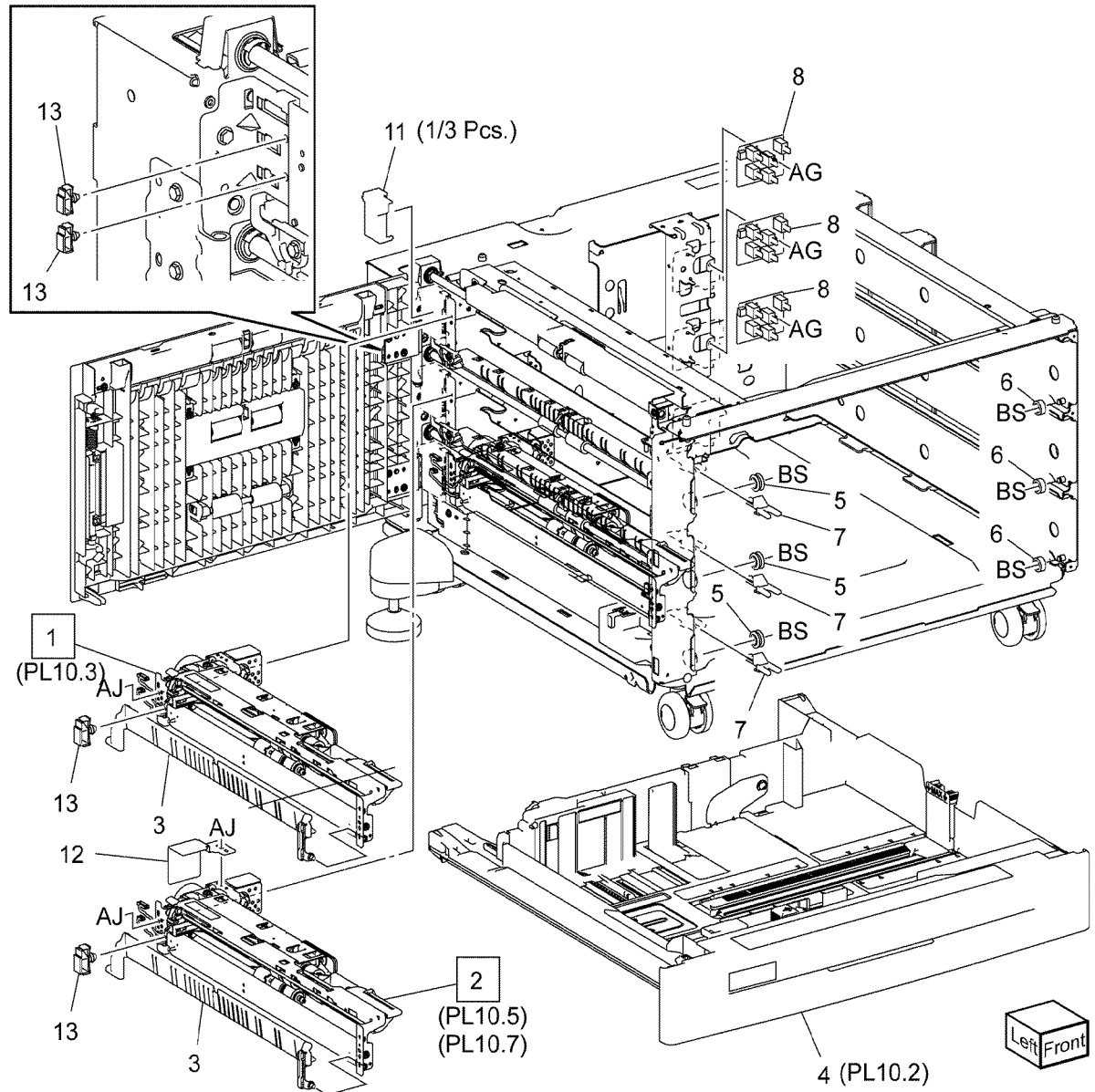
Item	Part	Description
1	-	Frame Assembly (P/O PL 9.3 Item 1)
2	604K56080	Feed/Nudger/Retard Roll Kit (3 Rolls/Kit) (REP 7.2)
3	-	Spring (P/O PL 9.3 Item 1)
4	-	Spring (P/O PL 9.3 Item 1)
5	-	Holder (P/O PL 9.3 Item 1)
6	-	Lever (P/O PL 9.3 Item 1)
7	-	Feed In Chute (P/O PL 9.3 Item 1)
8	-	Feed Shaft (P/O PL 9.3 Item 1)
9	-	Bearing (P/O PL 9.3 Item 1)
10	-	Sleeve Bearing (P/O PL 9.3 Item 1)
11	-	Helical Gear (30T) (P/O PL 9.3 Item 1)
12	-	Nudger Support (P/O PL 9.3 Item 1)
13	-	Spur Gear (29T) (P/O PL 9.3 Item 1)
14	-	Clutch Assembly (25T) (P/O PL 9.3 Item 1)
15	005K05890	One Wat Clutch
-	005K10080	One Way Clutch
16	-	Nudger Shaft (P/O PL 9.3 Item 1)
17	-	Gear (25T) (P/O PL 9.3 Item 1)
18	-	Retard Support (P/O PL 9.3 Item 1)
19	005K09290	Friction Clutch
-	005K83300	Friction Clutch
20	014E45030	Spacer
21	-	Retard Shaft (P/O PL 9.3 Item 1)
22	-	Retard Bearing (P/O PL 9.3 Item 1)
23	-	Spring (P/O PL 9.3 Item 1)



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# PL 10.1 Three Tray Module (3TM - 7830/35)

Item	Part	Description
1	059K74830	Tray 2, Tray 3, Tray 4 Feeder Assembly
3	054E36441	Feed Out Chute
4	050K69770	Tray 2, Tray 3, Tray 4 Unit
5	059E03500	Roller
6	059E03510	Roller
7	003E75431	Stopper
8	110K11680	Paper Size Sensor
12	-	Feeder Bracket (Not Spared)
13	-	Clamp (Not Spared)



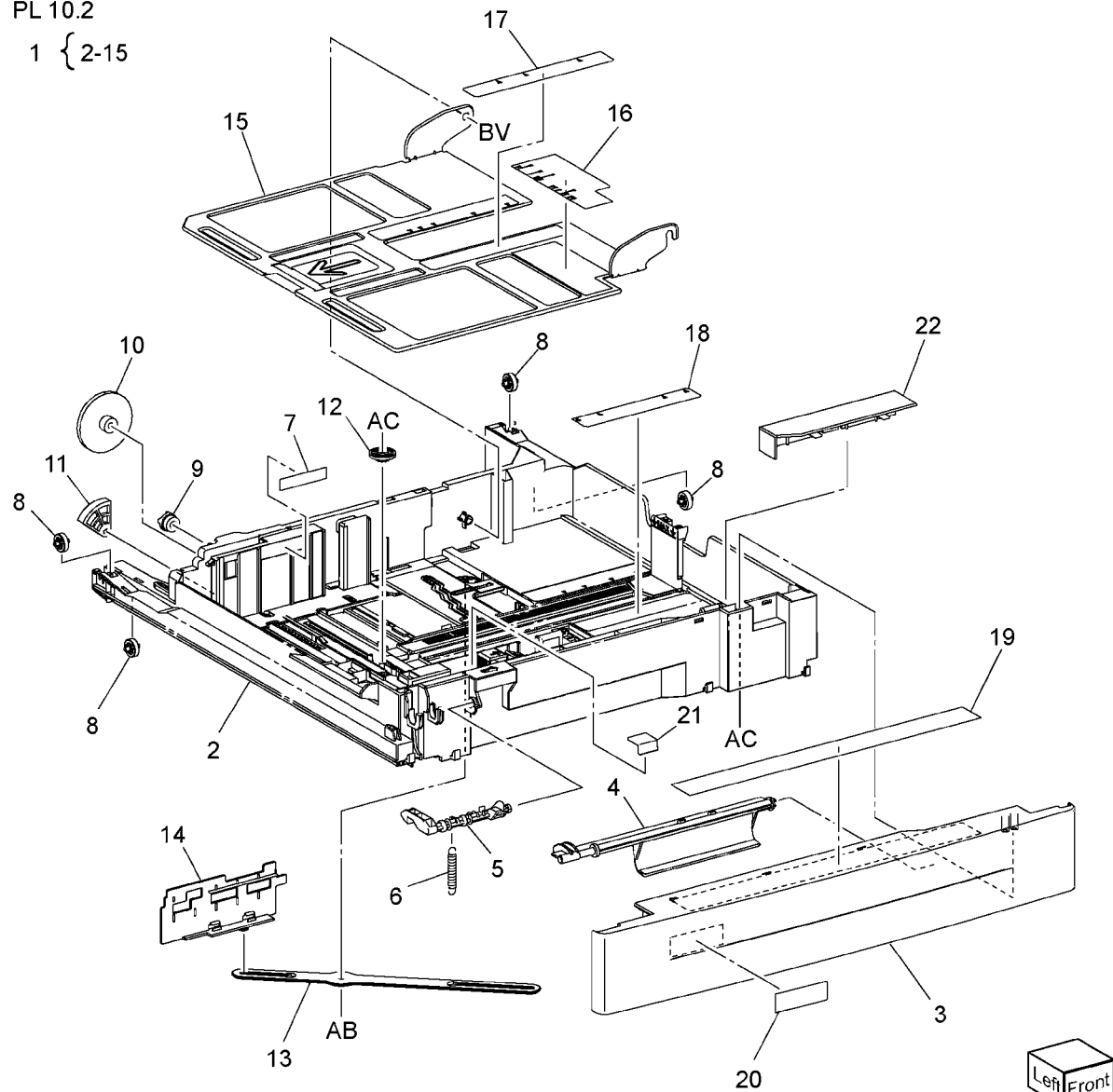
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# PL 10.2 Tray 2, 3, 4 Assembly (3TM - 7830/35)

Item	Part	Description
1	050K69770	Tray Assembly
2	-	Tray Assembly (P/O PL 10.2 Item 1)
3	848E64771	Front Cover (P/O PL 10.2 Item 1)
4	011E24092	Lever (P/O PL 10.2 Item 1)
5	003E76330	Latch (P/O PL 10.2 Item 1)
6	809E80250	Spring (P/O PL 10.2 Item 1)
7	893E09490	Label (Max) (P/O PL 10.2 Item 1)
8	-	Side Size Label
9	-	End Size Label
10	897E09931	Label (Instruction)
11	-	Tray Label (No 2)
12	-	Tray Label (No 3)
13	-	Tray Label (No 4)
14	-	Slide Lock Block (P/O PL 10.2 Item 1)
15	059E03522	Rear Roller (P/O PL 10.2 Item 1)
16	007E78431	Gear (13T) (P/O PL 10.2 Item 1)
17	007E78450	Gear (13T/60T) (P/O PL 10.2 Item 1)
18	007E78441	Gear (60T) (P/O PL 10.2 Item 1)
19	-	Pinion (P/O PL 10.2 Item 1)
20	-	Link (P/O PL 10.2 Item 1)
21	120E33840	End Actuator (P/O PL 10.2 Item 1)
22	-	Bottom Plate (P/O PL 10.2 Item 1)

PL 10.2  
1 { 2-15



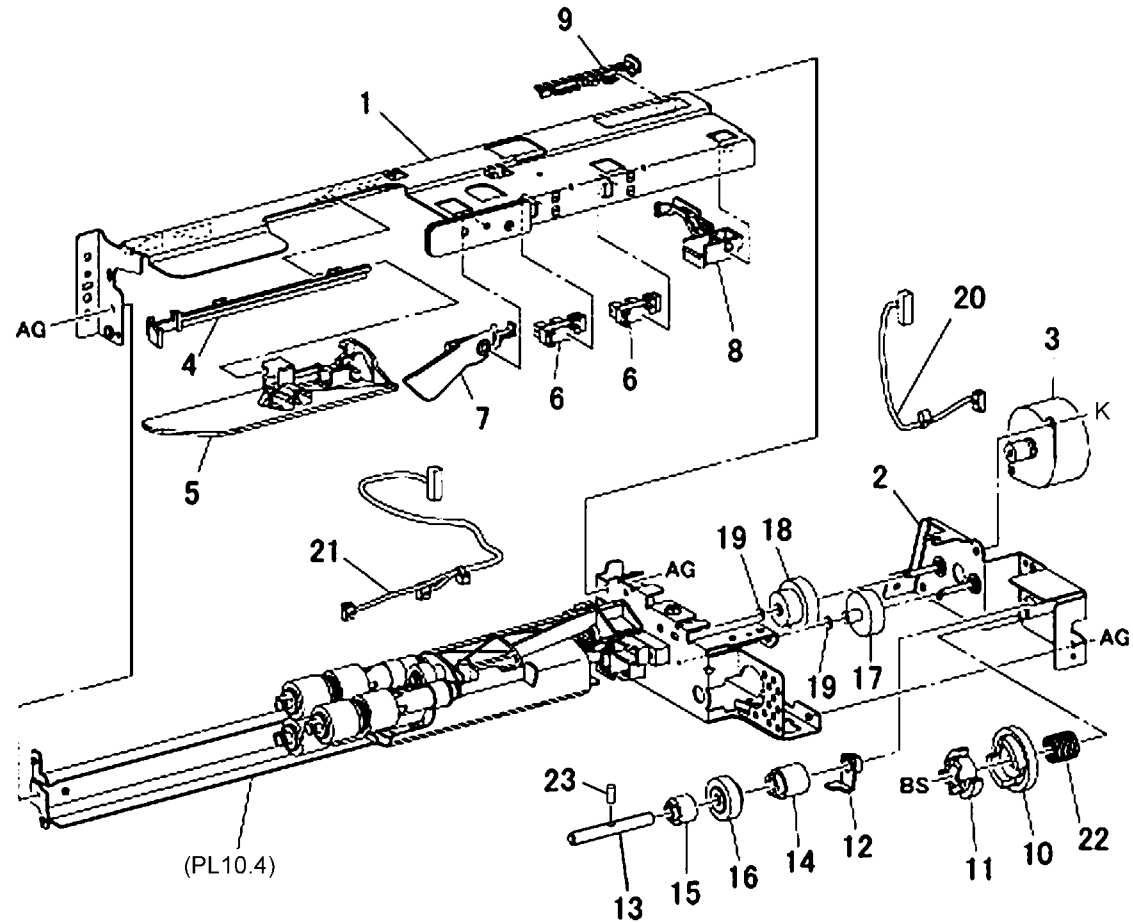
Left Front

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# PL 10.3 Tray 2, 3 & 4 Feeder Assembly (1 of 2) (3TM - 7830/35)

24 { 13, 23

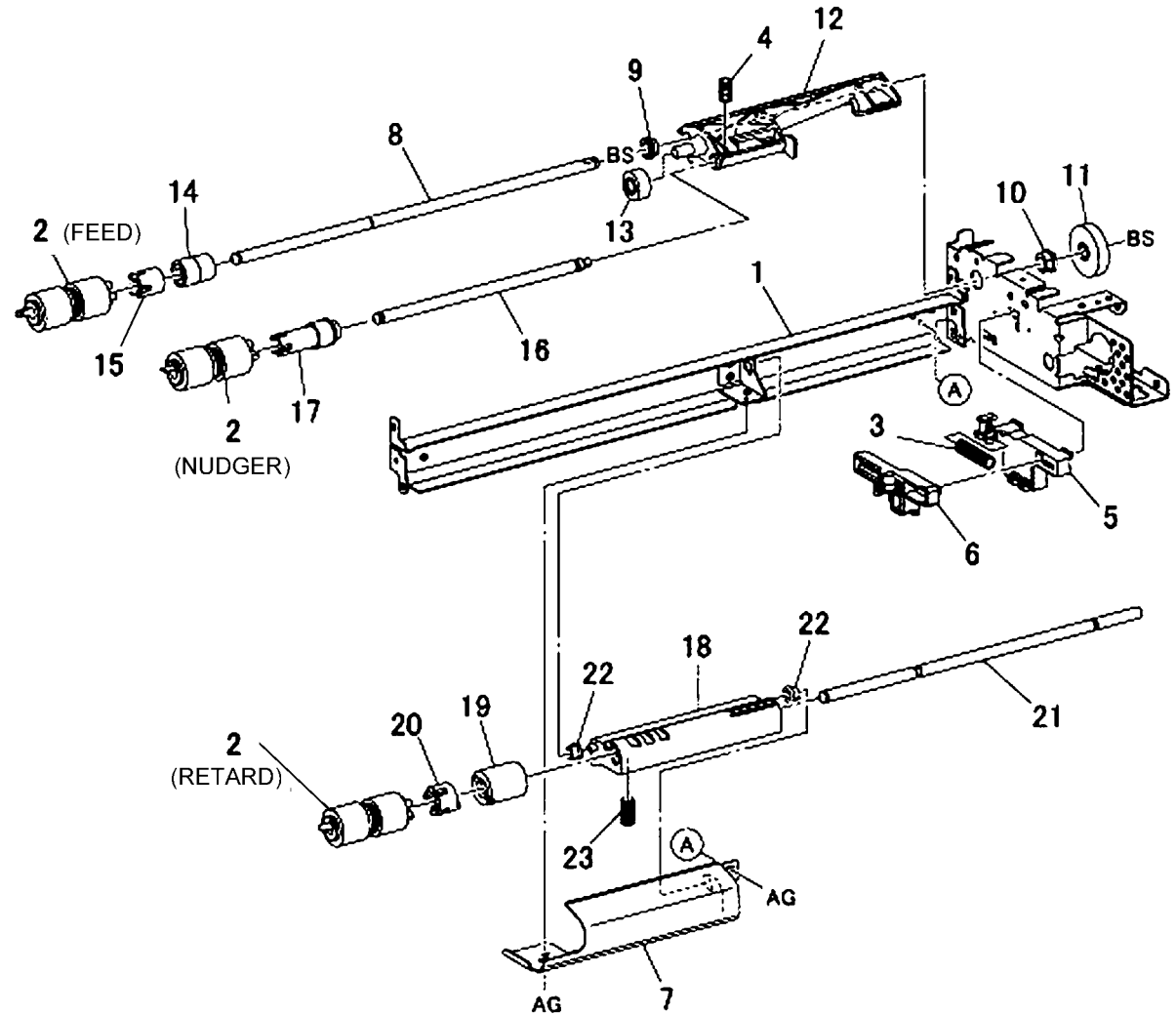
Item	Part	Description
1	-	Upper Frame Assembly (P/O PL 10.1 Item 1)
2	-	Drive Bracket Assembly (Not Spared)
3	127K52790	Feed/Lift Up Motor Assembly
5	-	Chute (Not Spared)
6	930W00113	Nudger Level Sensor, No Paper Sensor (Not Spared)
-	930W00123	Photo Int Sensor (Alternate)
7	120E22481	Actuator
8	-	Upper Harness Holder (P/O PL 10.1 Item 1)
9	-	Rear Harness Holder (P/O PL 10.1 Item 1)
10	807E00390	Gear (31T)
11	014E44770	Spacer
12	-	Shaft Bearing (Not Spared)
13	006K23221	Drive Shaft (P/O PL 10.3 Item 24)
14	807E00800	Gear (13T)
15	005K83081	One Way Clutch Assembly
-	005K10100	One Way Clutch (Alternate)
16	007K16960	One Way Gear
-	007K98130	One Way Gear Assembly (Alternate)
17	807E20300	Helical Gear (25T)
18	807E20310	Helical Gear (29T/19T)
20	-	Motor Harness Assembly (P/O PL 10.1 Item 1)
21	-	Sensor Motor Harness (P/O PL 10.1 Item 1)
22	-	Spring (P/O PL 10.1 Item 1)
23	-	Roller Assembly (P/O PL 10.3 Item 24)
24	-	Clamp



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# PL 10.4 Tray 2, 3 & 4 Feeder Assembly (3TM) (2 of 2)

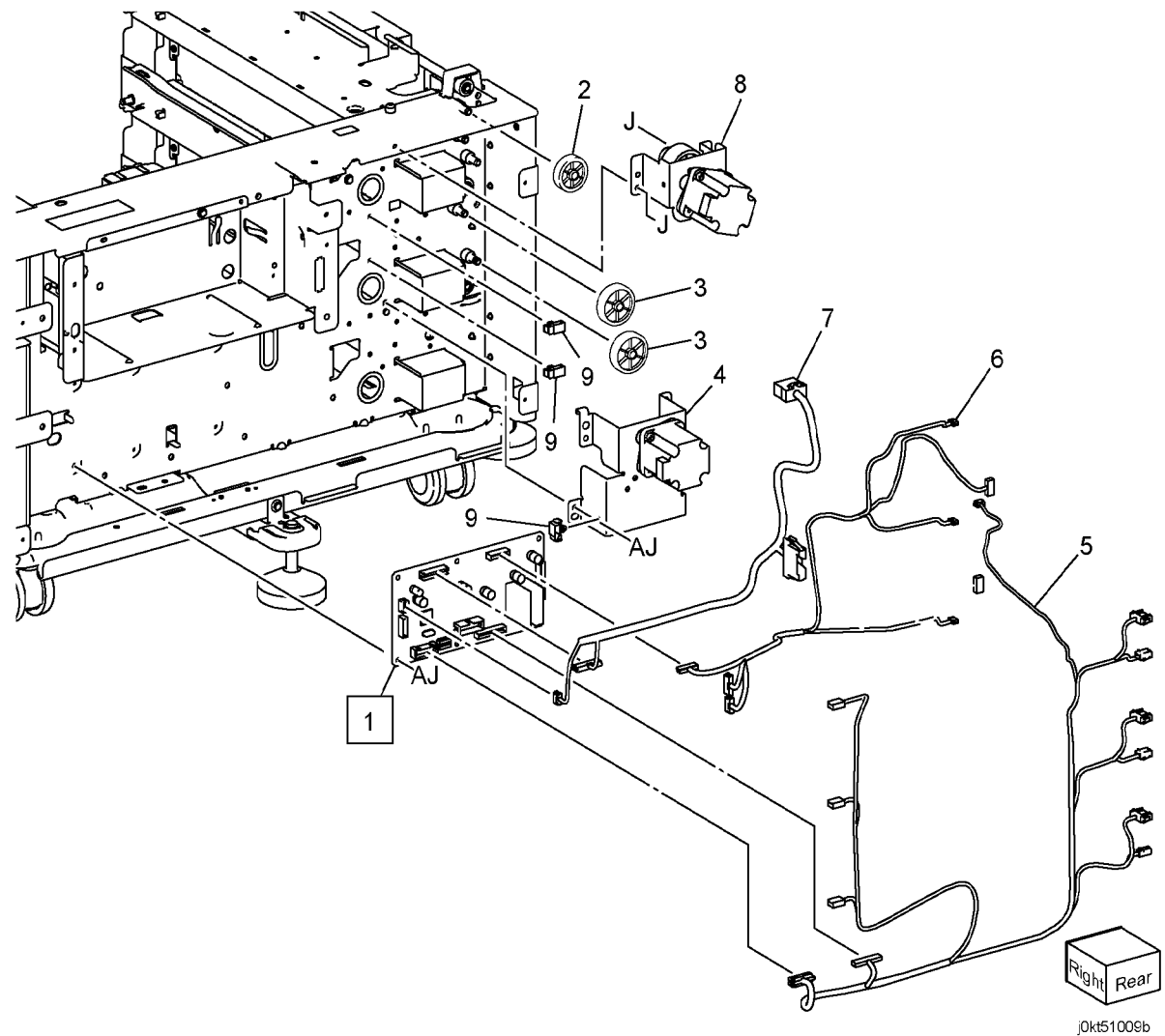
Item	Part	Description
1	-	Lower Frame Assembly (P/O PL 10.1 Item 1)
2	604K56080	Feed Roll, Nudger Roll, Retard Roll Kit (Qty 3 Per Kit)
5	-	Holder (P/O PL 10.1 Item 1)
6	-	Lever (P/O PL 10.1 Item 1)
7	-	Feed In Chute (P/O PL 10.1 Item 1)
8	-	Feed Shaft (P/O PL 10.1 Item 1)
9	-	Bearing (P/O PL 10.1 Item 1)
10	-	Plastic Bearing (P/O PL 10.1 Item 1)
11	-	Helical Gear (30T) (P/O PL 10.1 Item 1)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (P/O PL 10.1 Item 1)
14	005K10090	Clutch Assembly
-	005K08820	Clutch Assembly (25T) (Alternate)
15	005K05890	One Way Clutch
-	005K10080	One Way Clutch Assembly
16	-	Nudger Shaft (P/O PL 10.1 Item 1)
17	-	Gear (25T) (P/O PL 10.1 Item 1)
18	-	Retard Support (P/O PL 10.1 Item 1)
19	005K09290	Friction Clutch
-	005K83300	Friction Clutch Assembly (Alternate)
20	014E45030	Spacer
21	-	Retard Shaft (P/O PL 15.1 Item 1)
22	-	Retard Bearing (P/O PL 10.1 Item 1)
23	-	Compression Retard Spring (P/O PL 15.1 Item 1)
24	-	Nudger Compression Spring (P/O PL 10.1 Item 1)
25	-	Compression Lever Spring (P/O PL 10.1 Item 1)



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## PL 10.9 Electrical (3TM)

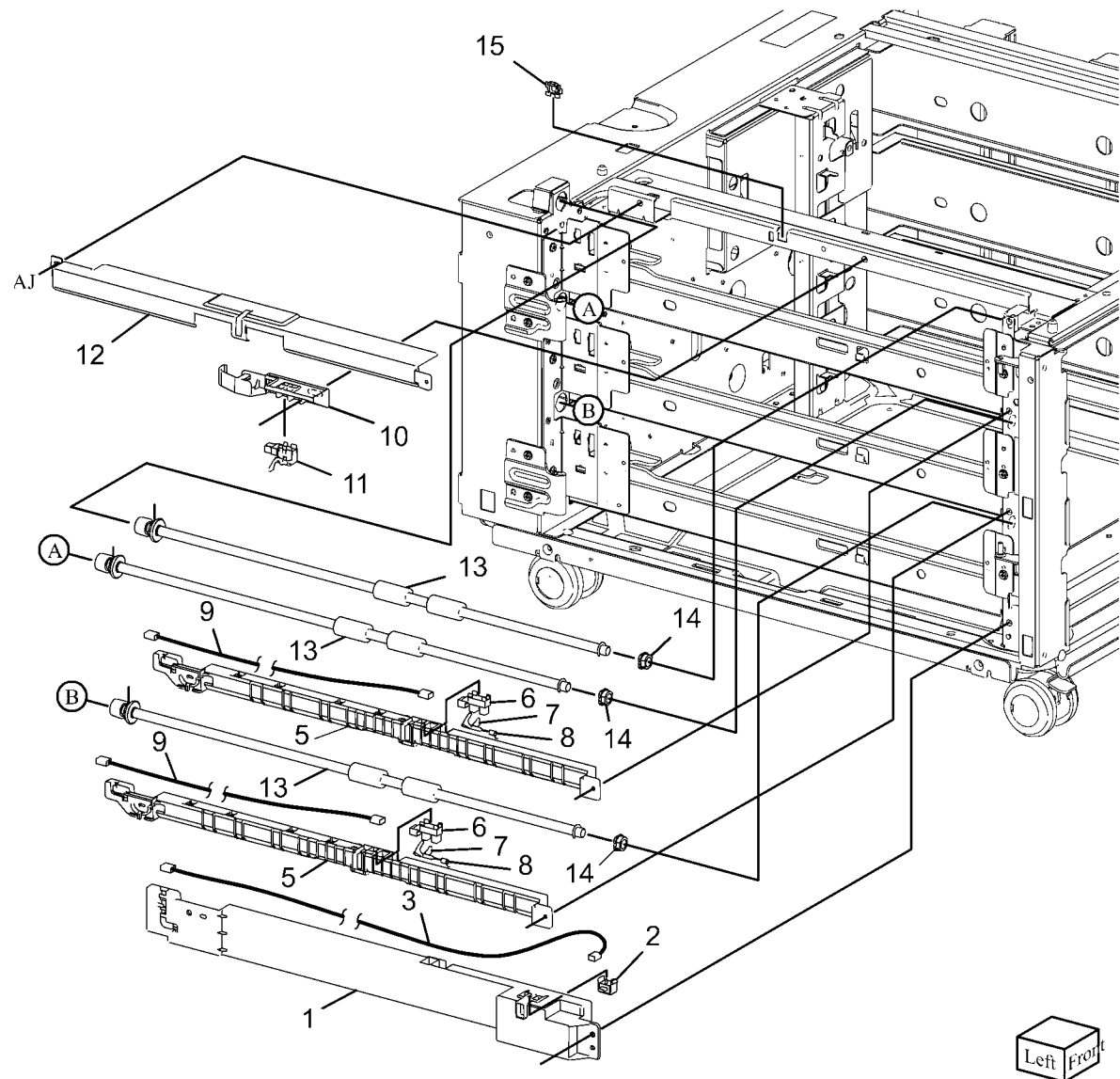
Item	Part	Description
1	960K62150	Tray Module PWB
2	807E20700	Gear (34T)
3	807E20720	Gear (39T)
4	127K65820	Take Away Motor
5	-	Sensor Harness Assembly (Not Spared)
6	-	Harness Assembly (Not Spared)
7	-	I/F Harness (Not Spared)
9	-	Fax Box Assembly (Not Spared)
10	-	USB Cable (Not Spared)
11	-	PWB Bracket (FAX G4) (Not Spared)
12	-	DC/DC Convert PWB (Not Spared)
13	-	PWB Support Bracket (Fax G4) (Not Spared)
14	-	Fax Clamp (Not Spared)
15	-	Wire Harness (Fax Mini) (Not Spared)
16	-	Wire Harness (Fax G4) (Not Spared)
17	-	Clamp (Not Spared)
18	-	Take Away Motor 2 Assembly



## PL 10.12 Roller (3TM)

Item	Part	Description
1	848E12671	Cover
2	110E12220	L/H Switch
3	—	Harness Assembly (Not Spared)
4	054K34143	Chute Assembly
5	—	Chute (P/O PL 10.12 Item 4)
6	—	Tray 3 Feed Out Sensor, Tray 4 Feed Out Sensor (P/O PL 10.12 Item 4)
7	—	Actuator Sensor (P/O PL 10.12 Item 4)
8	—	Spring (P/O PL 10.12 Item 4)
9	—	Harness Assembly (P/O PL 10.12 Item 4)
10	—	Swensor Guide (Not Spared)
11	130K64121	Tray 2 Feed Out Sensor
12	054E34301	Takeaway Chute
13	059K60191	Roll Assembly
14	413W14860	Bearing
15	120E18070	Clamp
16	—	EDS TTM Cover

4 { 5 - 9

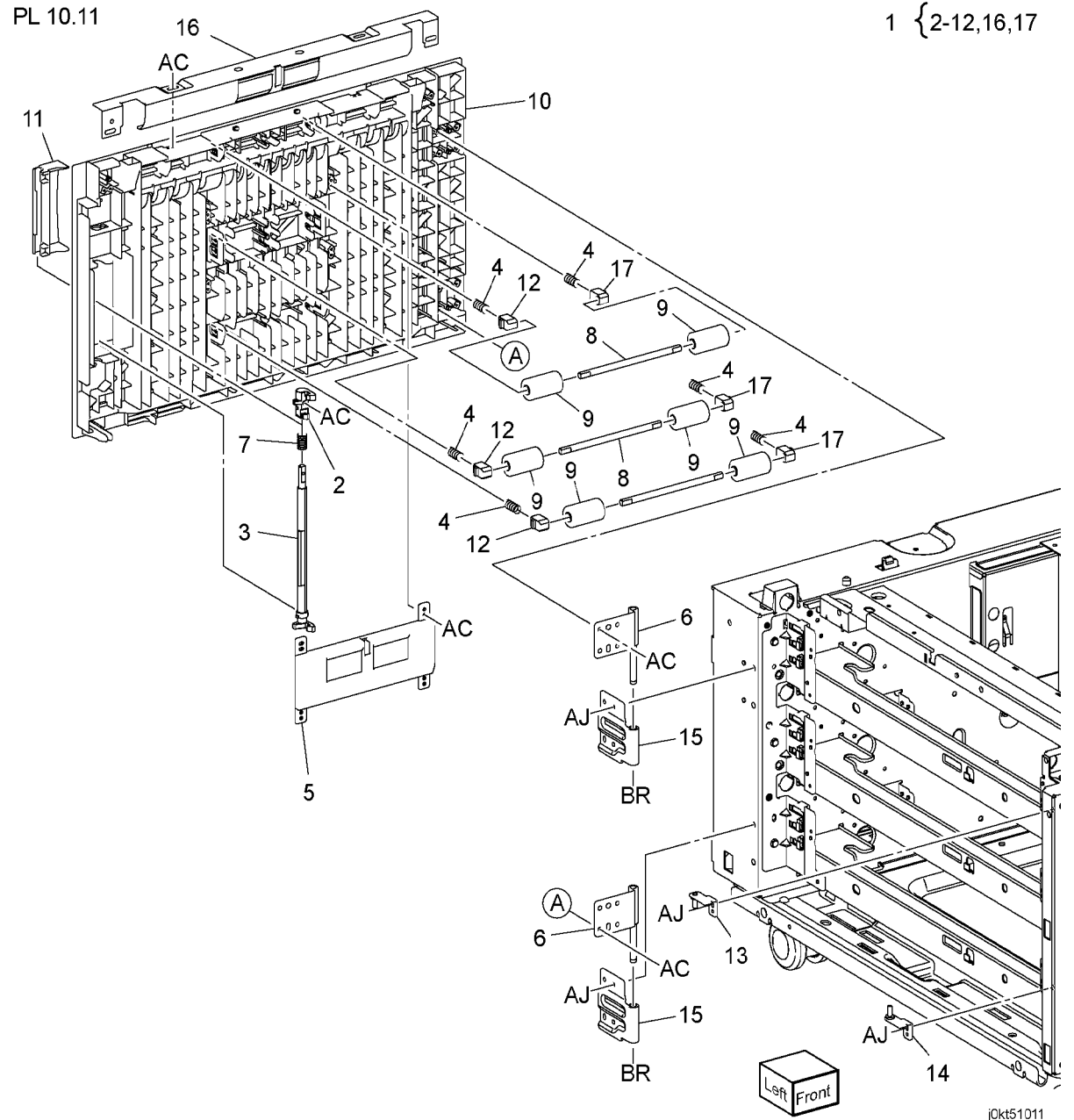


Left Front

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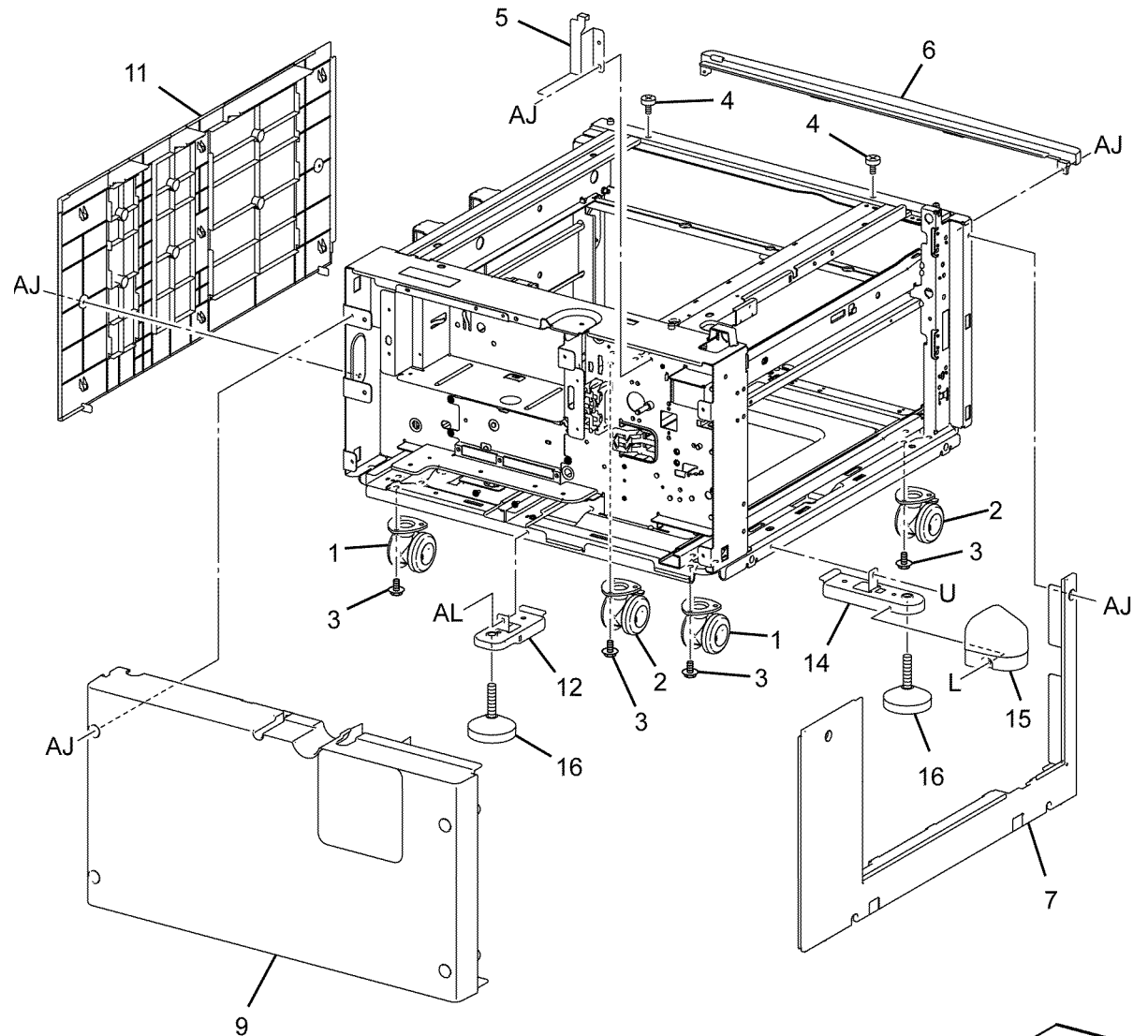
# PL 10.13 Left Hand Cover Assembly (3TM)

Item	Part	Description
1	848K62280	Left Hand Cover Assembly (Not Spared)
2	019E69600	Hook
3	803E08671	Latch (P/O PL 10.13 Item 1)
4	-	Spring Pinch (P/O PL 10.13 Item 1)
5	-	Chute Pinch
6	068K55791	Bracket Assembly (P/O PL 10.13 Item 1)
7	-	Spring (P/O PL 10.13 Item 1)
8	-	Pinch Shaft (P/O PL 10.13 Item 1)
9	059E99241	Pinch Roll
10	-	Left Hand Cover (P/O PL 10.13 Item 1)
11	003E75571	Handle
12	-	Pinch Bearing (Front)
13	068K55701	Upper Bracket Assembly
14	068K55711	Lower Bracket Assembly (Not Spared)
15	-	Bracket (Not Spared)
16	054E38240	Left Hand Chute (P/O PL 10.13 Item 1)
17	-	Pinch Bearing (Rear)
18	-	Front Pinch Bearing (Not Spared)
19	-	Right Pinch Bearing (Not Spared)
20	-	Left Hand Spring (Not Spared)
21	-	Pinch Chute (Not Spared)



## PL 10.14 Covers (3TM)

Item	Part	Description
1	417W41449	Caster Assembly
2	417W41349	Locking Caster Assembly
3	—	Screw
4	—	Docking Screw (Not Spared)
5	—	Docking Bracket (Not Spared)
6	—	Top Cover
7	—	Left Cover
9	848K56600	Rear Cover Assembly (Not Spared)
11	—	Right Cover
12	868E15860	Foot Bracket
14	868E20860	Foot Bracket L
15	848E45610	Foot Cover L
16	017K94590	Adjuster Foot Assembly



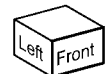
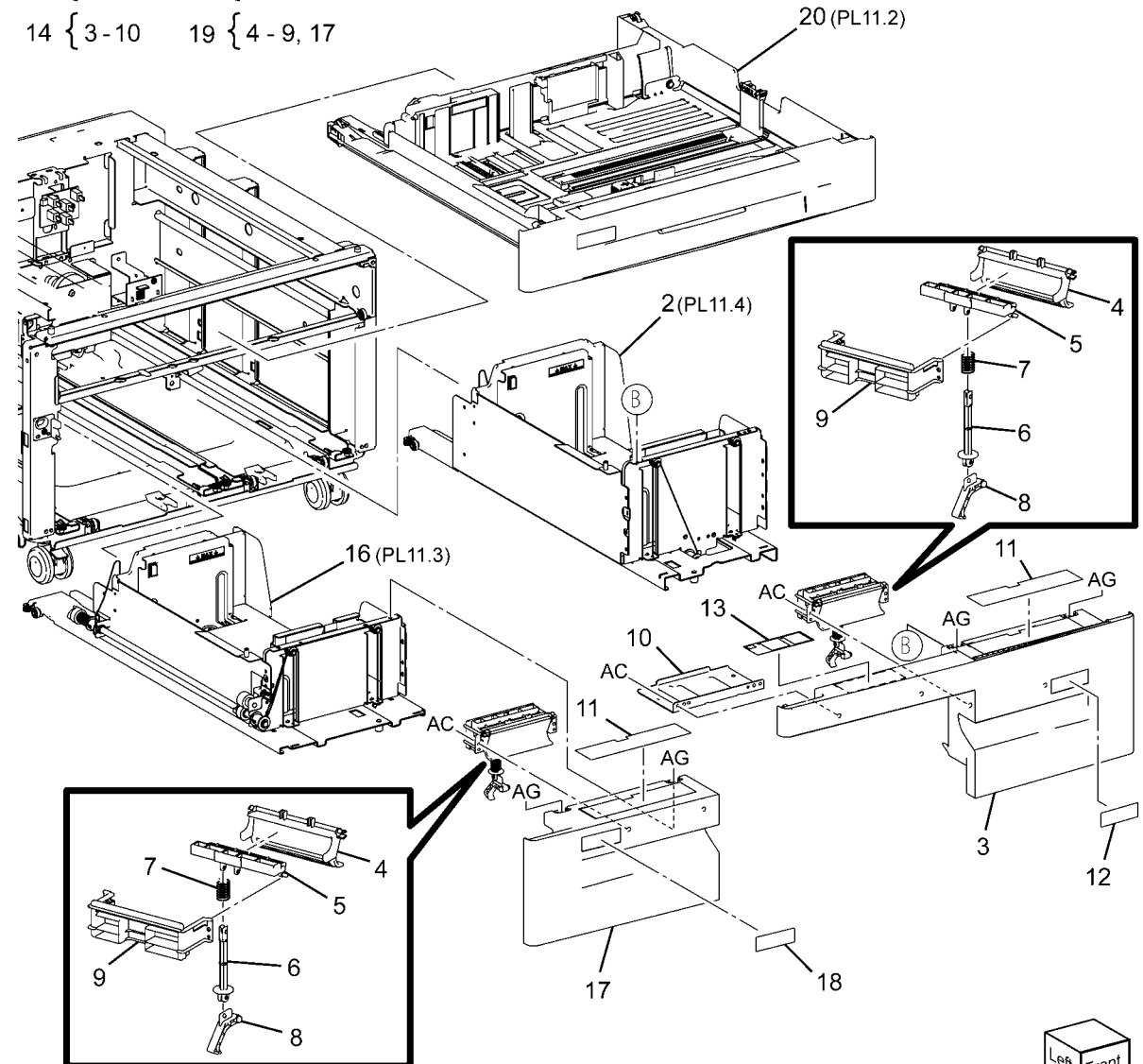
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# PL 11.1 Tandem Tray Assembly (TTM)

Item	Part	Description
1	050K60520	Tray 4 Assembly (REP 7.11)
2	-	Tray 4 (P/O PL 11.1 Item 1)
3	-	Tray 4 Cover (P/O PL 11.1 Item 14)
4	-	Lever (P/O PL 11.1 Item 14)
5	-	Link (P/O PL 11.1 Item 14)
6	-	Link (P/O PL 11.1 Item 14)
7	-	Spring (P/O PL 11.1 Item 14)
8	-	Latch (P/O PL 11.1 Item 14)
9	-	Cover (P/O PL 11.1 Item 14)
10	-	Transport Bracket (P/O PL 11.1 Item 14)
11	-	Label (Instruction) (P/O PL 11.1 Item 1)
12	-	Label (Tray No 4) (P/O PL 11.1 Item 1)
13	-	Label (P/O PL 11.1 Item 1)
14	848K20080	Tray 4 Cover
15	050K60500	Tray 3 Assembly
16	-	Tray 3 (P/O PL 11.1 Item 15)
17	-	Tray 3 Cover (P/O PL 11.1 Item 15)
18	-	Label (Tray No.3) (P/O PL 11.1 Item 15)
19	848K20090	Tray 3 Cover
20	050K69770	Tray 2 Assembly

PL11.1

1 { 2-13    15 { 16-25  
 14 { 3-10    19 { 4-9, 17



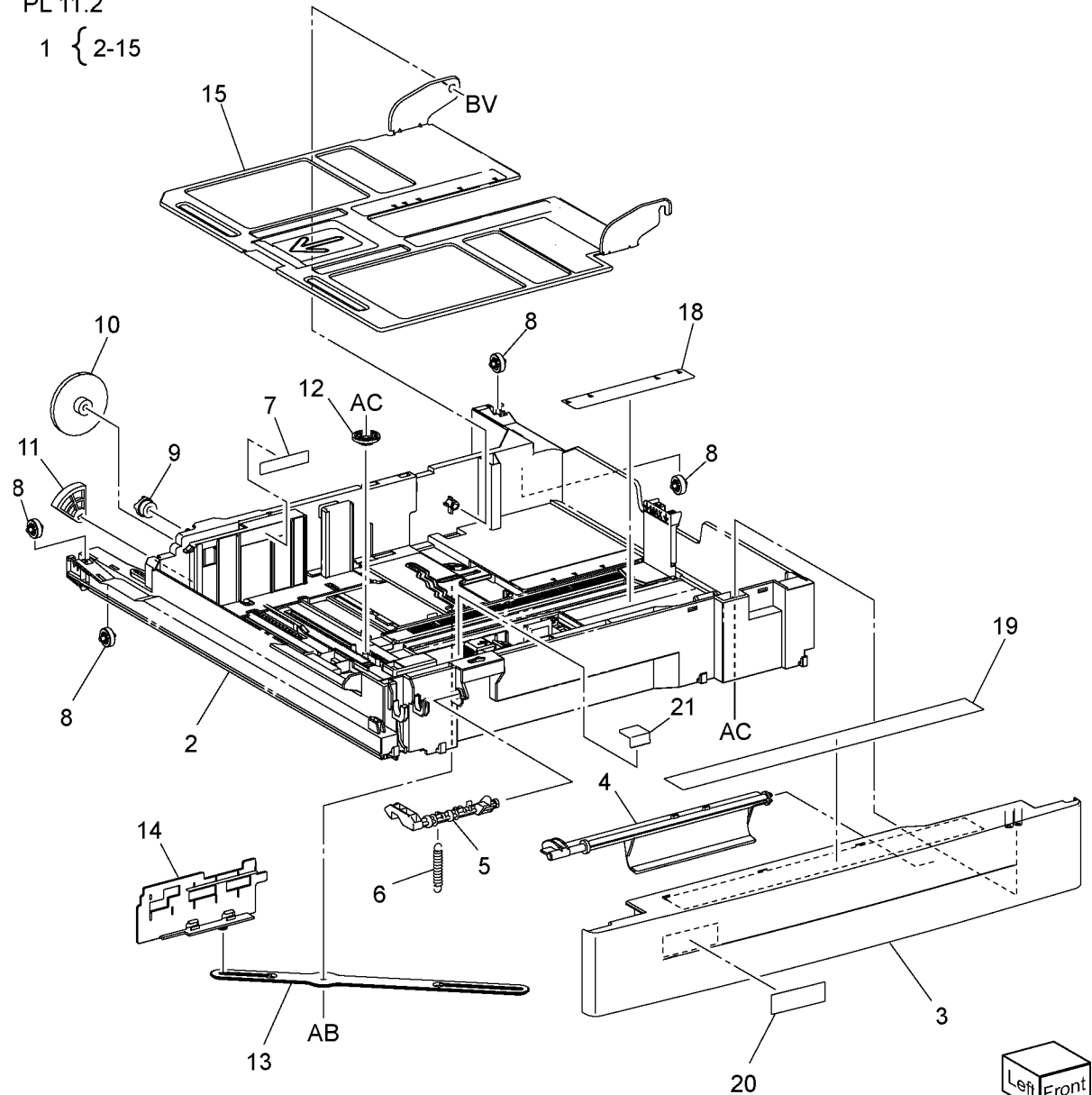
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## PL 11.2 Tray 2 (TTM)

Item	Part	Description
1	050K69770	Tray 2 Assembly (P/O PL 11.2 Item 1)
2	–	Tray Assembly (P/O PL 11.2 Item 1)
3	848E64771	Front Cover
4	011E24092	Lever
5	003E76330	Latch
6	809E80250	Spring
7	893E09490	Lab (Max) Kit
8	059E03522	Rear Roller
9	007E78431	Gear (13T)
10	007E78450	Gear (13T/60T)
11	007E78441	Gear (60T)
12	807E13520	Pinion
13	–	Link (P/O PL 11.2 Item 1)
14	120E33840	End Actuator
15	–	Bottom Plate (P/O PL 11.2 Item 1)
18	897E09931	Label (Instruction) (Not Spared)
19	–	Label Kit
20	604K20541	Gear Kit
21	–	Slide Lock Block

PL 11.2  
1 { 2-15

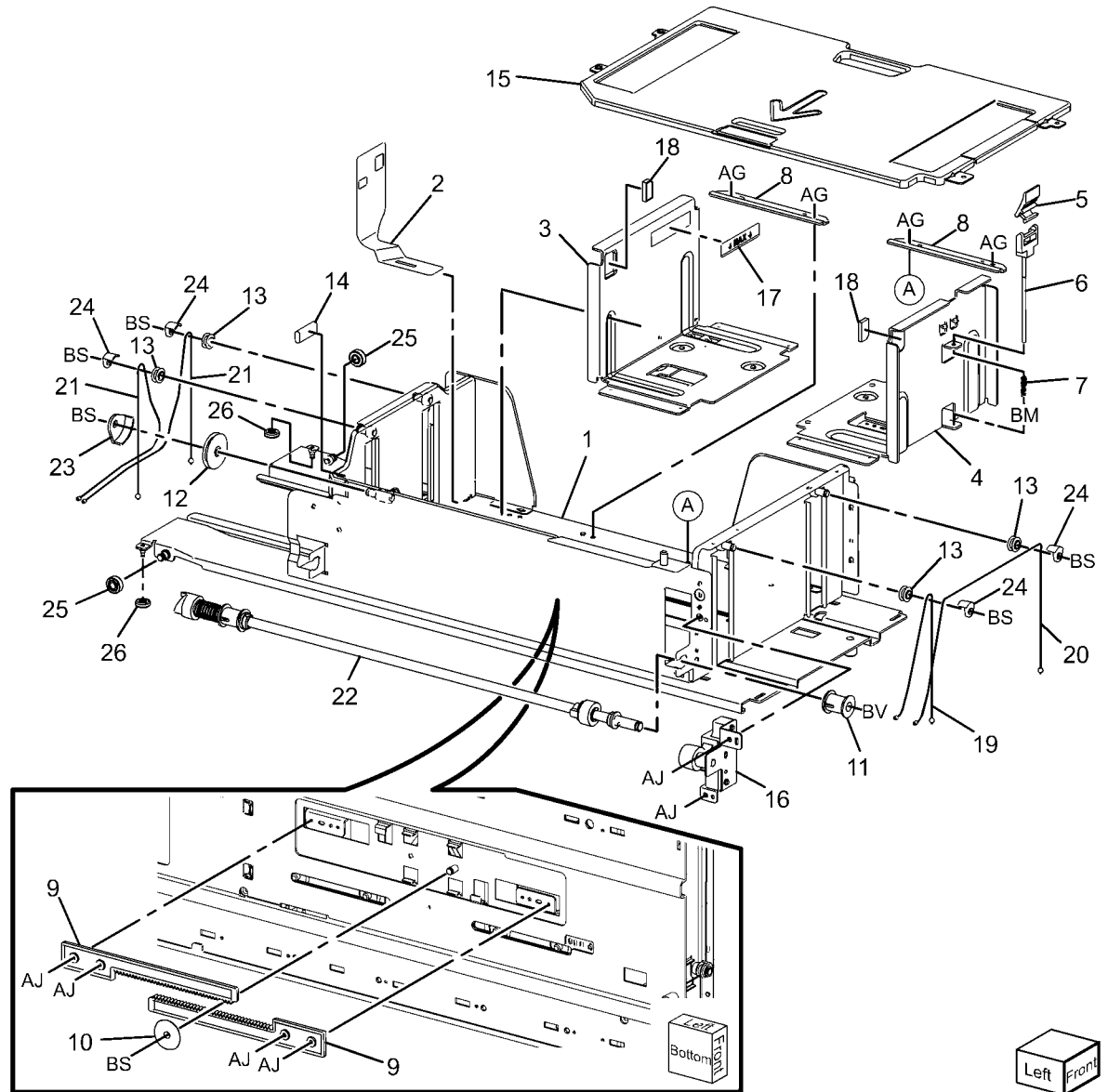


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# PL 11.3 Tray 3 (TTM)

Item	Part	Description
1	-	Base Tray (P/O PL 11.1 Item 15)
2	-	Size Actuator (P/O PL 11.1 Item 15)
3	-	Side Rear Guide (P/O PL 11.1 Item 15)
4	-	Side Front Guide (P/O PL 11.1 Item 15)
5	-	Knob (P/O PL 11.1 Item 15)
6	-	Knob Assembly (P/O PL 11.1 Item 15)
7	-	Spring (P/O PL 11.1 Item 15)
8	-	Bracket (P/O PL 11.1 Item 15)
9	-	Rack Gear (P/O PL 11.1 Item 15)
10	007E78190	Pinion (P/O PL 11.1 Item 15)
11	020E37360	Pulley (P/O PL 11.1 Item 15)
12	020E36560	Pulley (P/O PL 11.1 Item 15)
13	604K20730	Pulley (P/O PL 11.1 Item 15)
14	-	Gasket (P/O PL 11.1 Item 15)
15	-	Bottom Plate (P/O PL 11.1 Item 15)
16	019K93921	Brake
17	893E09490	Label (Max) Kit
18	019E71680	Pad
19	012E11112	Front Left Cable
20	012E11122	Front Right Cable
21	012E11101	Cable (Rear)
22	006K86350	Lift Shaft (P/O PL 11.1 Item 15)
23	032E20890	Cable Guide
24	032E27990	Cable Guide
25	059E05060	Side Roll
26	059E05040	Lower Roll

PL11.3

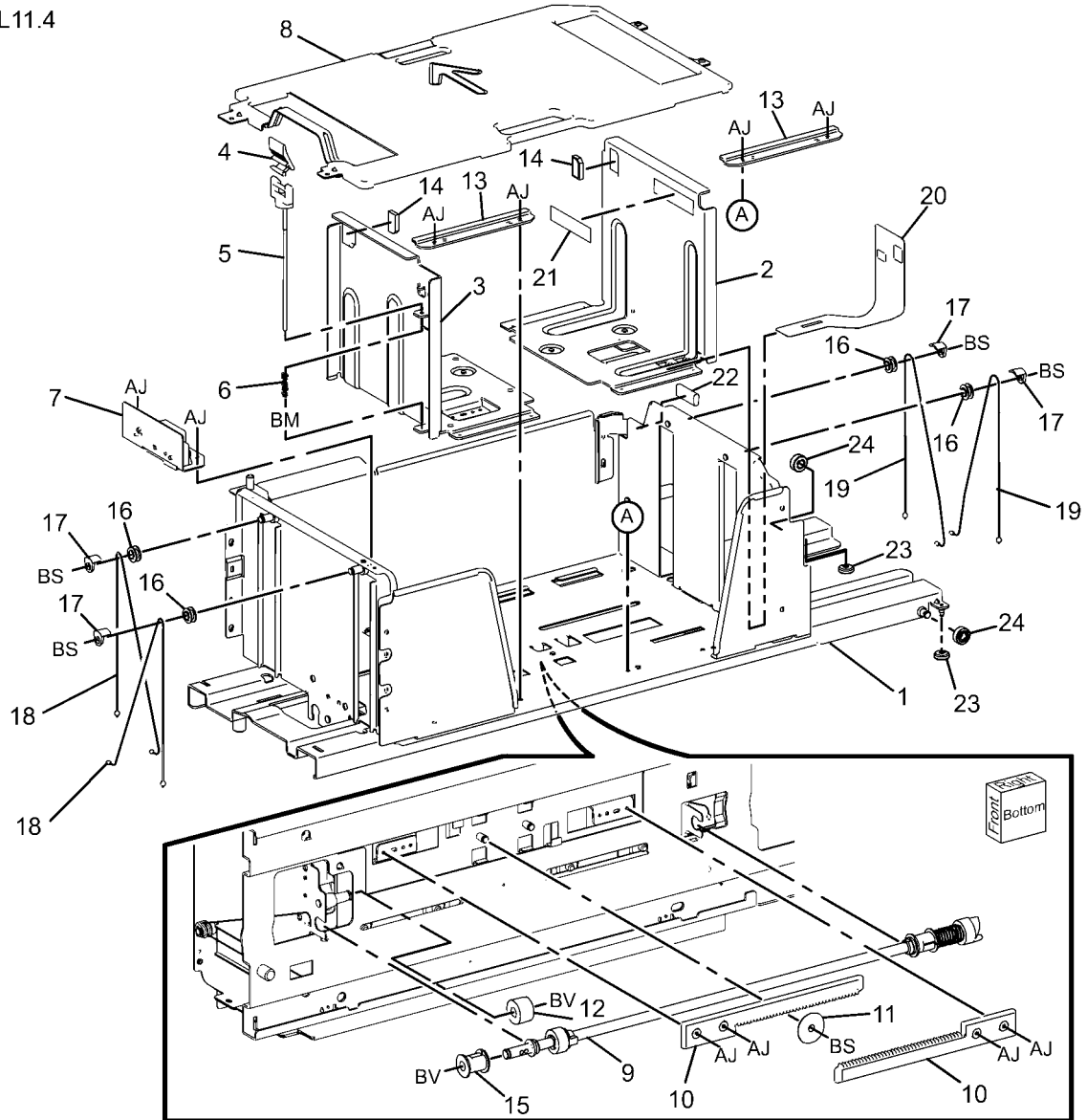


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# PL 11.4 Tray 4 (TTM)

Item	Part	Description
1	-	Base Tray (P/O PL 11.1 Item 1)
2	-	Side Rear Guide (P/O PL 11.1 Item 1)
3	-	Side Front Guide (P/O PL 11.1 Item 1)
4	-	Knob (P/O PL 11.1 Item 1)
5	003K87450	Knob Assembly
6	-	Spring (P/O PL 11.1 Item 1)
7	019K93921	Brake
8	-	Bottom Plate (P/O PL 11.1 Item 1)
9	006K86350	Lift Shaft
10	-	Rack Gear (P/O PL 11.1 Item 1)
11	007E78190	Pinion
12	007E78390	Gear
13	-	Bracket (P/O PL 11.1 Item 1)
14	019E71680	Pad (P/O PL 11.1 Item 1)
15	020E37360	Pulley (P/O PL 11.1 Item 1)
16	604K20730	Pulley (P/O PL 11.1 Item 1)
17	604K20740	Cable Guide
18	012E11141	Front Cable
19	012E11131	Rear Cable
20	-	Size Actuator (P/O PL 11.1 Item 1)
21	893E09490	Label (Max) Kit
22	-	Gasket (P/O PL 11.1 Item 1)
23	-	Lower Roll (P/O PL 11.1 Item 1)
24	-	Side Roll (P/O PL 11.1 Item 1)

PL11.4



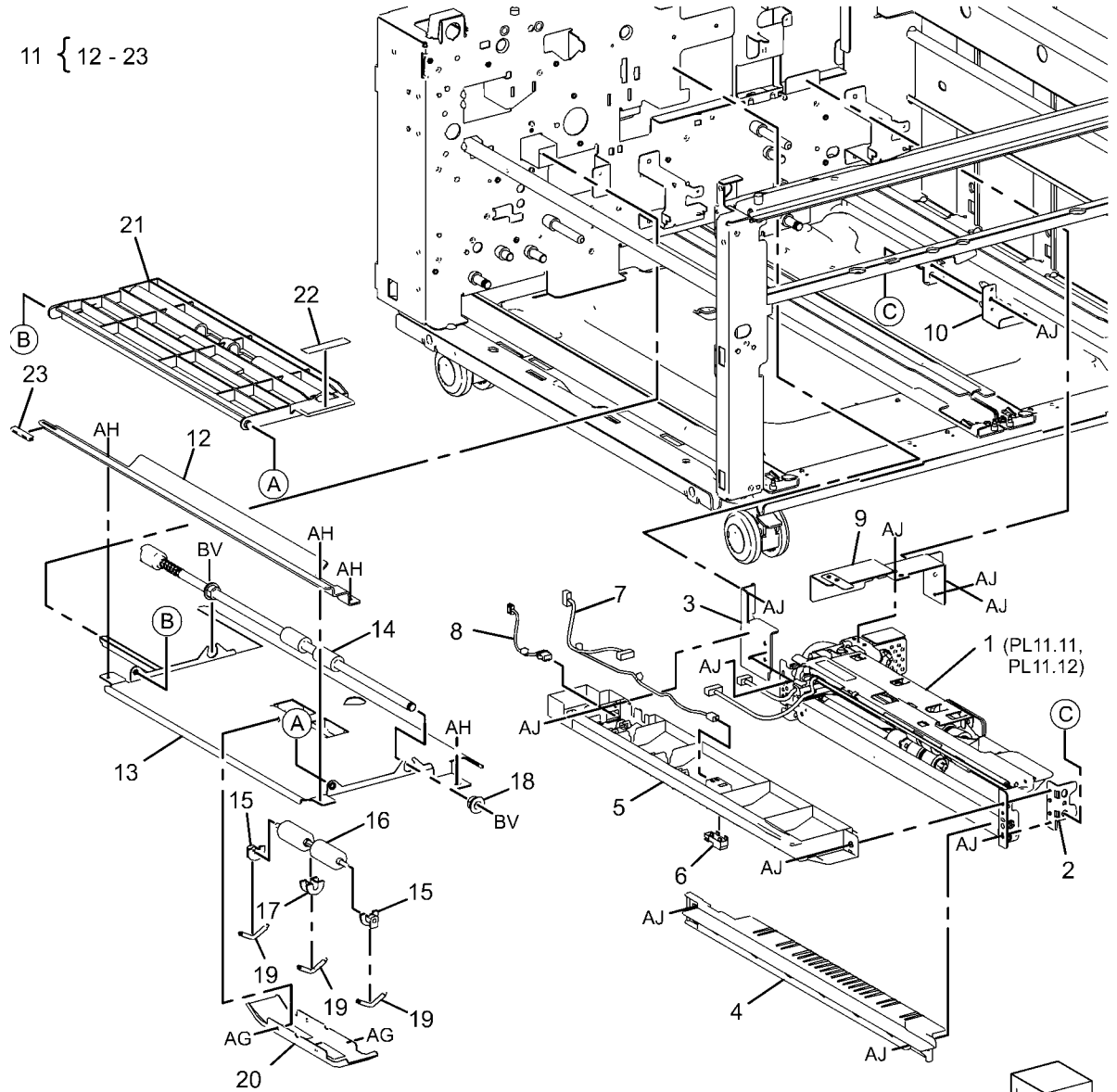
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# PL 11.5 Tray 4 Paper Feed (TTM)

Item	Part	Description
1	059K75360	Tray 4 Feeder (REP 7.13)
2	-	Bracket (Not Spared)
3	-	Bracket (Not Spared)
4	054E34200	Lower Chute
5	054E34210	Upper Chute
6	930W00212	Tray 4 Feed Out Sensor
7	-	Sensor Wire Harness (Not Spared)
8	-	Motor Wire Harness
9	-	Cover (Not Spared)
10	-	Stud Bracket (Not Spared)
11	059K54320	Tray 4 Transport Assembly
12	-	Transport Rail (P/O PL 11.5 Item 11)
13	-	Lower Chute (P/O PL 11.5 Item 11)
14	059K54330	Tray 4 Transport Roll
15	-	Bearing (P/O PL 11.5 Item 11)
16	059E98860	Pinch Roll
17	-	Bearing (P/O PL 11.5 Item 11)
18	-	Bearing (P/O PL 11.5 Item 11)
19	-	Spring (P/O PL 11.5 Item 11)
20	-	Cover (P/O PL 11.5 Item 11)
21	-	Upper Chute (Not Spared)
22	-	Label Kit (P/O PL 11.5 Item 11)
23	-	Spacer (P/O PL 11.5 Item 11)

PL11.5

11 { 12 - 23



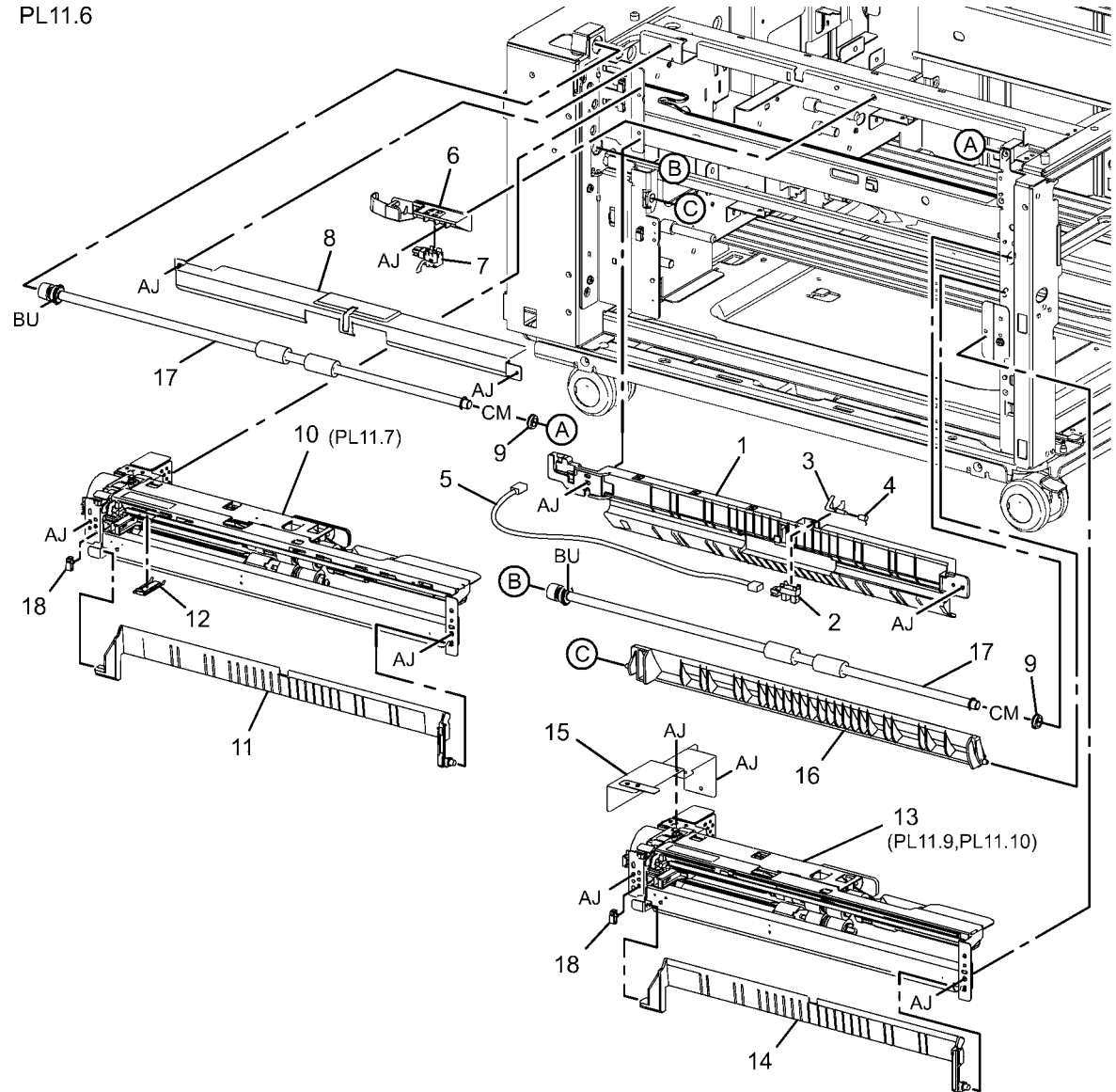
Left Front

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# PL 11.6 Tray 2/3 Paper Feed (TTM)

Item	Part	Description
1	-	Chute (Not Spared)
2	930W00111	Tray 3 Feed Out Sensor
3	-	Actuator (Not Spared)
4	809E82720	Spring
5	-	Wire Harness (Not Spared)
6	-	Sensor Guide
7	130K64121	Tray 2 Feed Out sensor
8	054E34301	Chute
9	-	Ball Bearing (Not Spared)
10	059K74830	Tray 2 Feeder
11	054E36441	Feed Out Chute
13	059K75360	Tray 3 Feeder
14	054E33802	Feed Out Chute (Not Spared)
15	-	Cover (Not Spared)
16	054E39560	Lower Chute
17	059K60191	Takeaway Roll Assembly
18	-	Clamp (Not Spared)
19	-	ESD Cover
20	-	Low ESD Cover

PL11.6

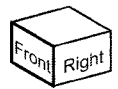
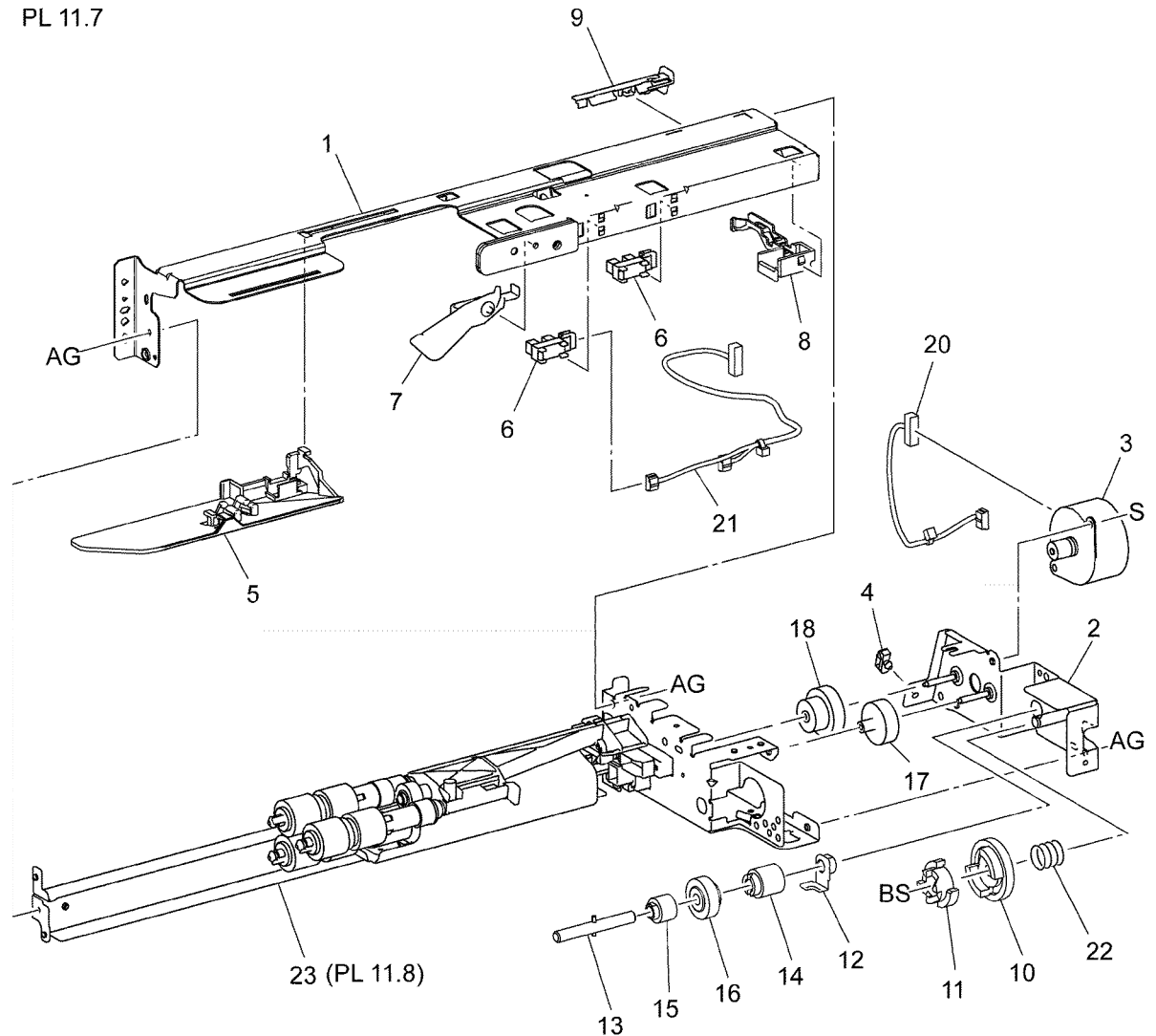


0511006A-NWD

# PL 11.7 Tray 2 Feeder (TTM) (1 of 2)

Item	Part	Description
1	-	Upper Frame Assembly (P/O PL 11.6 Item 10)
2	-	Drive Bracket Assembly (P/O PL 11.6 Item 10)
3	127K52790	Tray 2 Feed/Lift UP Motor
4	-	Clamp
5	-	Chute (P/O PL 11.6 Item 10)
6	930W00113	Tray 2 Nudge Level, Paper Sensor
-	930W00123	Sensor
7	120E22481	Actuator
8	-	Upper Harness Holder (P/O PL 11.6 Item 10)
9	-	Rear Harness Holder (Not Spared)
10	807E00390	Gear (31T)
11	014E44770	Spacer
12	-	Bearing (Not Spared)
13	006K23221	Drive Shaft
14	807E00800	Gear (13T)
15	005K10100	One Way Clutch
-	005K83081	One Way Clutch
16	007K16960	One Way Gear
17	807E20300	Helical Gear (25T)
18	807E20310	Helical Gear (29T/19T)
20	-	Harness Assembly (P/O PL 11.6 Item 10)
21	-	Sensor Harness Assembly (P/O PL 11.6 Item 10)
22	-	Spring (P/O PL 11.6 Item 10)
23	-	Roll Assembly (P/O PL 11.6 Item 10)

PL 11.7



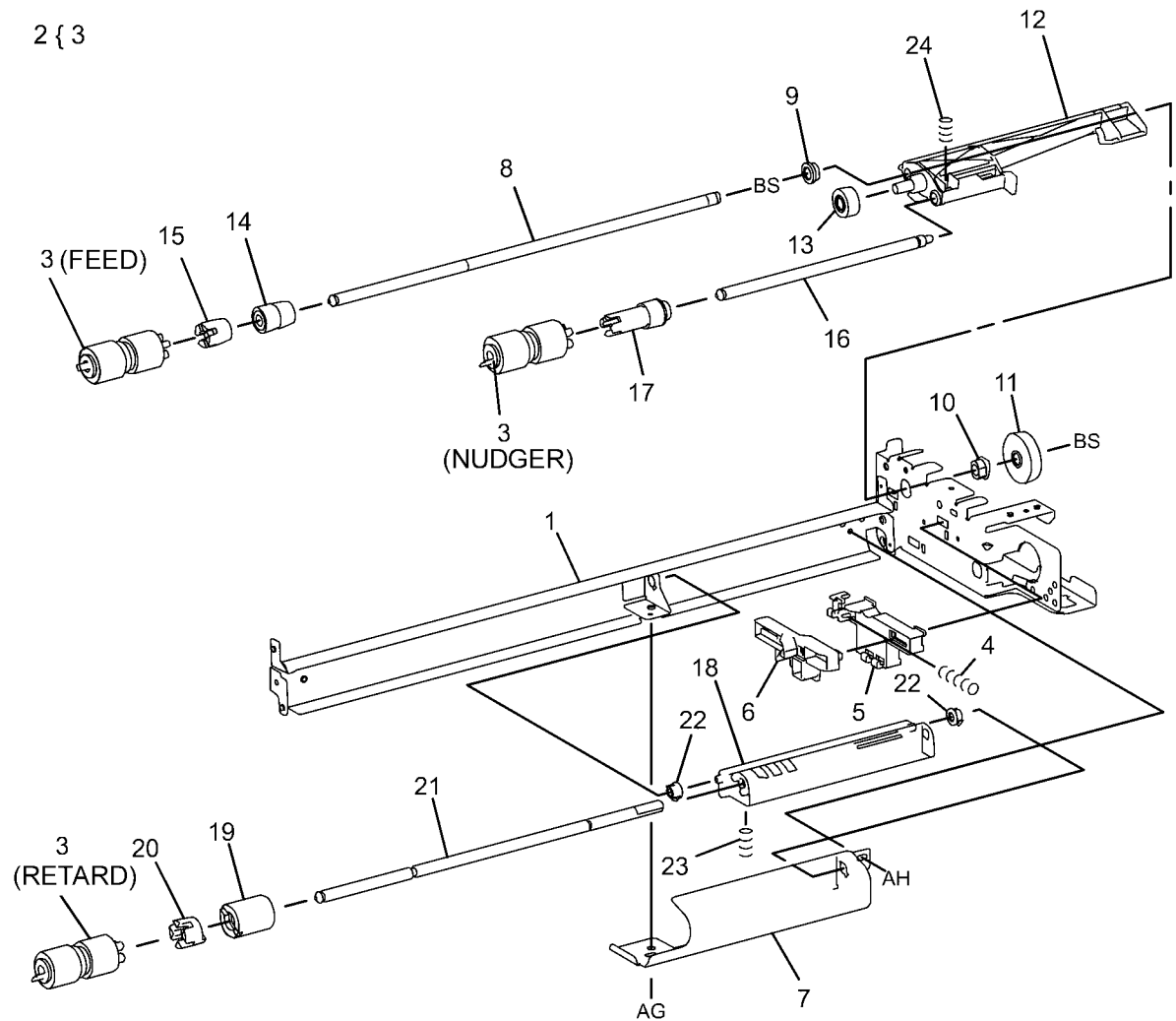
j0k51107

# PL 11.8 Tray 2 Feeder (TTM) (2 of 2)

Item	Part	Description
1	-	Frame Assembly (Not Spared)
2	604K56080	Feed Roll Kit
3	-	Nudger, Retard, Feed Roll (P/O PL 11.8 Item 2)
4	-	Spring (Not Spared)
5	-	Holder (Not Spared)
6	-	Level (Not Spared)
7	-	Feed In Chute (Not Spared)
8	-	Feed Shaft (Not Spared)
9	-	Bearing (Not Spared)
10	-	Sleeve Bearing (Not Spared)
11	-	Helical Gear (30T) (Not Spared)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (Not Spared)
14	005K10090	Clutch Assembly
-	005K08820	Clutch Assembly
15	005K05890	One Way Clutch
-	005K10080	One Way Clutch (Alternate)
16	-	Nudger Shaft (Not Spared)
17	-	Gear (25T) (Not Spared)
18	-	Retard Support (Not Spared)
19	005K09290	Friction Clutch
-	005K83300	Friction Clutch
20	014E45030	Spacer
21	-	Retard Shaft (Not Spared)
22	-	Retard Bearing (Not Spared)
23	-	Spring (Not Spared)
24	-	Spring (Not Spared)

PL11.8

2 { 3

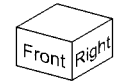
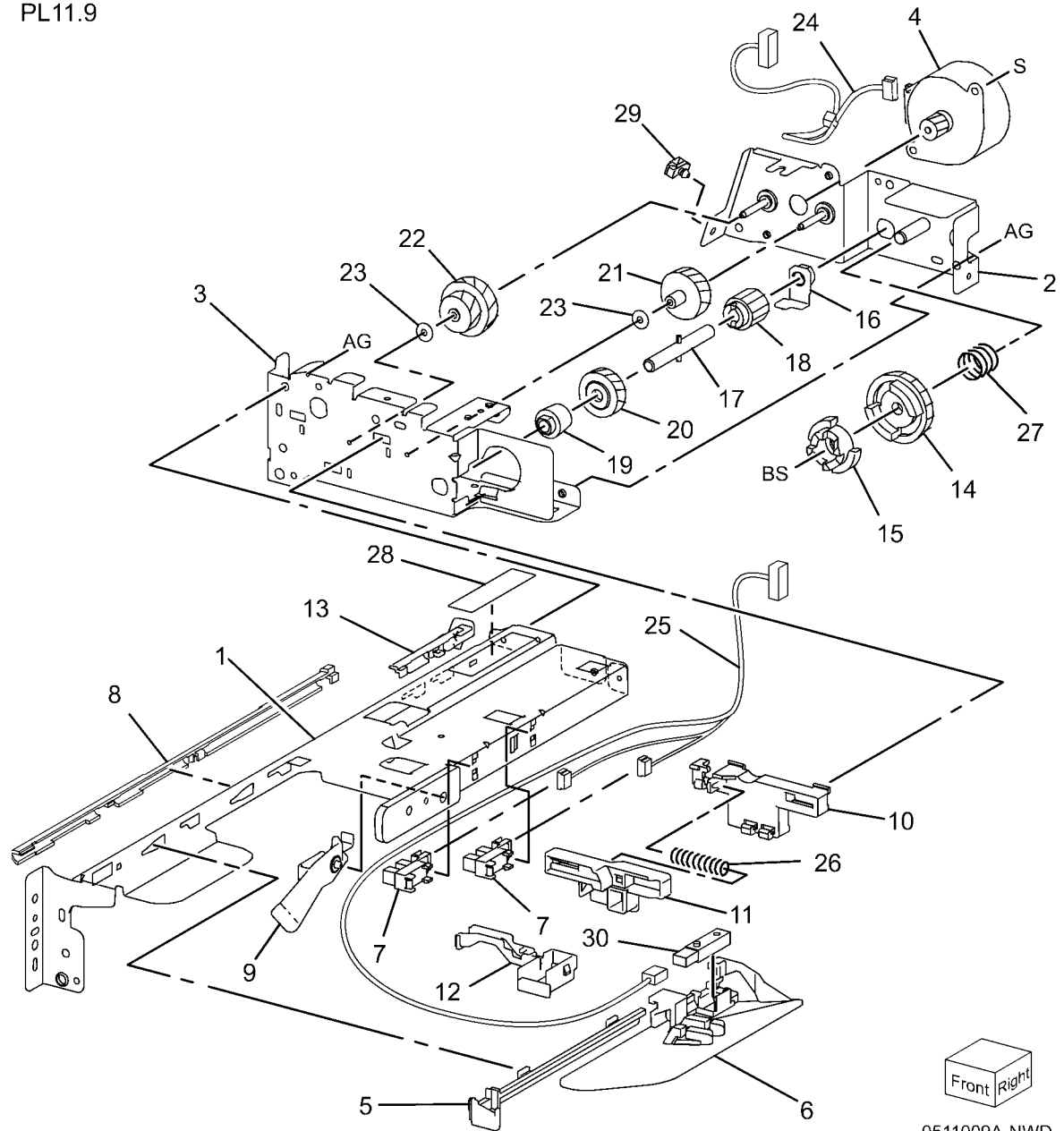


0511008A-NWD

# PL 11.9 Tray 3 Feeder (TTM) (1 of 2)

Item	Part	Description
1	-	Frame (P/O PL 11.6 Item 13)
2	-	Bracket (P/O PL 11.6 Item 13)
3	-	Frame (P/O PL 11.6 Item 13)
4	127K52790	Tray 3 Feed/Lift Up
5	801E03601	Rail
6	054E23461	Chute
7	930W00123	Tray 3 Nudger Level, No Paper Sensor (Alternate)
-	930W00113	Tray 3 Nudger Level, No Paper Sensor
8	-	Harness Holder (Not Spared)
9	120E22481	Actuator
10	-	Holder (P/O PL 11.6 Item 13)
11	-	Level (P/O PL 11.6 Item 13)
12	-	Upper Harness Holder (Not Spared)
13	-	Rear Harness Holder (Not Spared)
14	807E00390	Gear
15	014E44770	Spacer
16	013E26530	Bearing
17	006K23221	Drive Shaft
18	807E00800	Gear
19	005K83081	One Way Clutch
-	005K10100	One Way Clutch (Alternate)
20	007K16960	One Way Gear
-	007K98130	One Way Gear (Alternate)
21	807E20300	Gear (25T)
22	807E30640	Gear (29T/24T)
24	-	Harness Assembly (Motor) (Not Spared)
25	-	Harness Assembly Sensor (P/O PL 11.6 Item 13)
26	-	Spring (P/O PL 11.6 Item 13)
27	-	Spring (P/O PL 11.6 Item 13)
28	-	Label (Not Spared)
29	-	Clamp (Not Spared)
30	930W00211	Tray 3 Pre Feed Sensor

PL11.9



0511009A-NWD

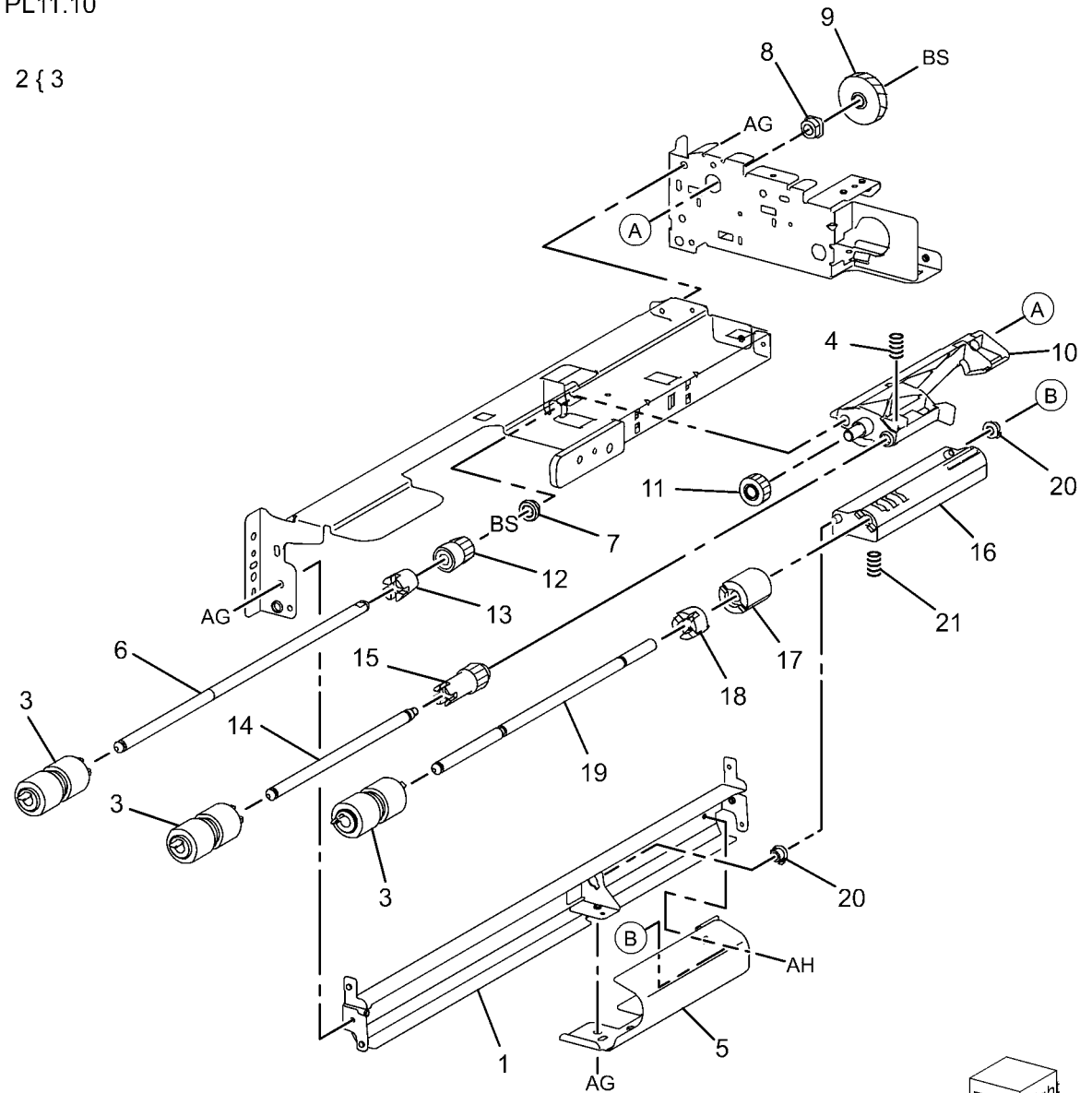


# PL 11.10 Tray 3 Feeder (TTM) (2 of 2)

Item	Part	Description
1	-	Frame (Not Spared)
2	604K56080	Reed Roll Kit
3	-	Nudger, Retard, Feed Roll (P/O PL 11.10 Item 2)
4	-	Spring (Not Spared)
5	-	Feed In Chute (Not Spared)
6	-	Feed Shaft (P/O PL 11.6 Item 13)
7	-	Bearing (Not Spared)
8	-	Sleeve Bearing (Not Spared)
9	-	Gear (25T) (Not Spared)
10	-	Support (Not Spared)
11	-	Gear (29T) (Not Spared)
12	005K10090	Clutch (25T) (Alternate)
-	005K08820	Clutch (25T) (Alternate)
13	005K05890	One Way Clutch (Alternate)
-	005K10080	One Way Clutch (Alternate)
14	-	Nudger Shaft (P/O PL 11.6 Item 13)
15	-	Gear (25T) (Not Spared)
16	-	Support (Not Spared)
17	005K09290	Friction Clutch
18	014E45030	Spacer
19	-	Retard Shaft (Not Spared)
20	-	Retard Bearing (Not Spared)
21	-	Spring (Not Spared)

PL11.10

2 { 3

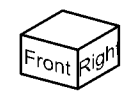
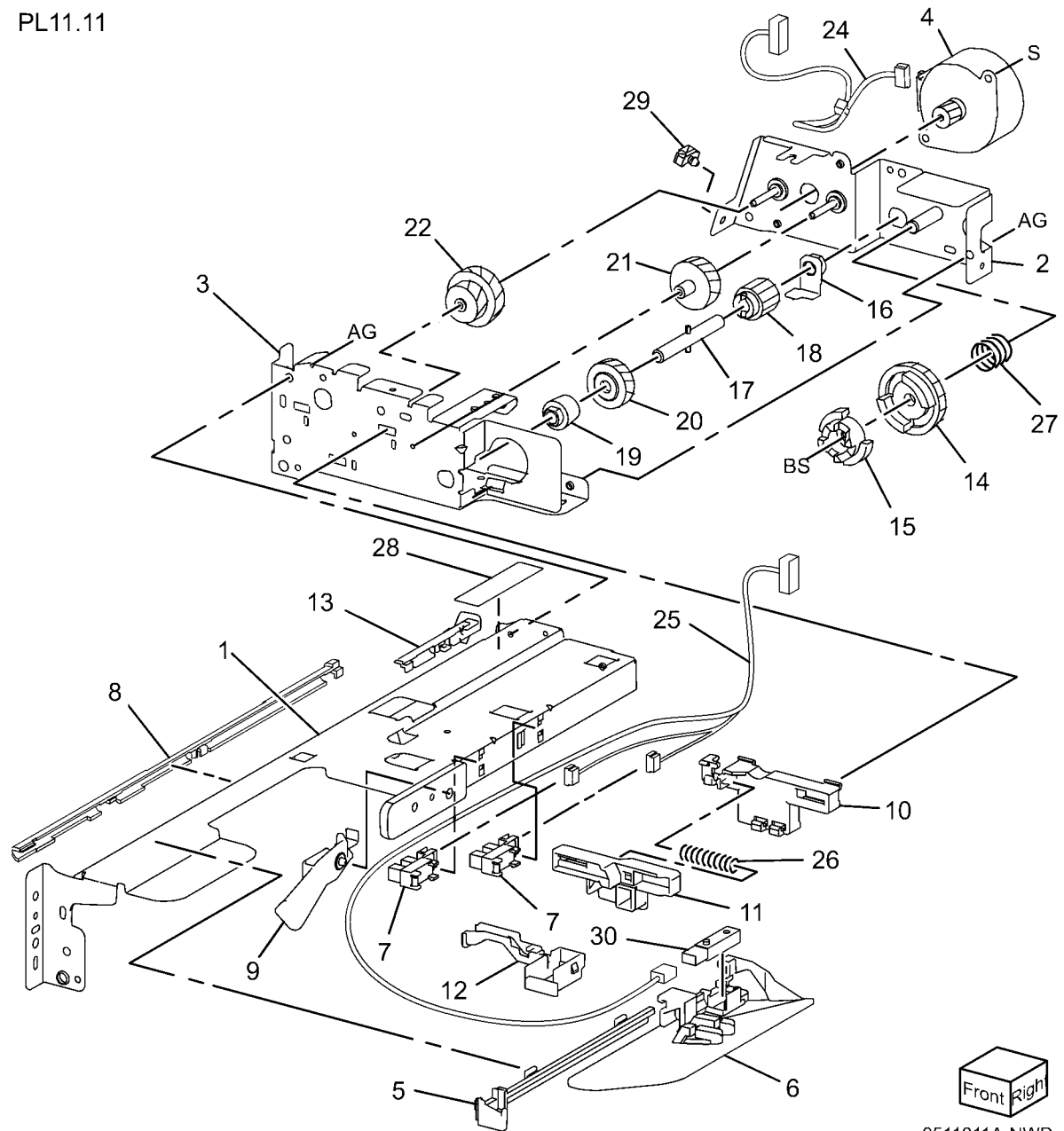


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# PL 11.11 Tray 4 Feeder (TTM) (1 of 2)

Item	Part	Description
1	-	Frame (P/O PL 11.6 Item 13)
2	-	Bracket (P/O PL 11.6 Item 13)
3	-	Frame (P/O PL 11.6 Item 13)
4	127K52790	Tray 4 Feed/Lift Up
5	801E03601	Rail
6	054E23461	Chute
7	930W00123	Tray 4 Nudger Level, No Paper Sensor (Alternate)
-	930W00113	Tray 4 Nudger Level, No Paper Sensor
8	-	Harness Holder (Not Spared)
9	120E22481	Actuator
10	-	Holder (P/O PL 11.6 Item 13)
11	-	Level (P/O PL 11.6 Item 13)
12	-	Upper Harness Holder (Not Spared)
13	-	Rear Harness Holder (Not Spared)
14	807E00390	Gear
15	014E44770	Spacer
16	013E26530	Bearing
17	006K23221	Drive Shaft
18	807E00800	Gear
19	005K10100	One Way Clutch (Alternate)
-	005K83081	One Way Clutch
20	007K16960	One Way Gear
-	007K98130	One Way Gear (Alternate)
21	807E20300	Gear (25T)
22	807E30640	Gear (29T/24T) High
-	807E20310	Gear (29T/19T) Low
24	-	Harness Assembly (Motor) (Not Spared)
25	-	Harness Assembly Sensor (P/O PL 11.6 Item 13)
26	-	Spring (P/O PL 11.6 Item 13)
27	-	Spring (P/O PL 11.6 Item 13)
28	-	Label (Not Spared)
29	-	Clamp (Not Spared)
30	930W00211	Tray 3 Pre Feed Sensor

PL11.11



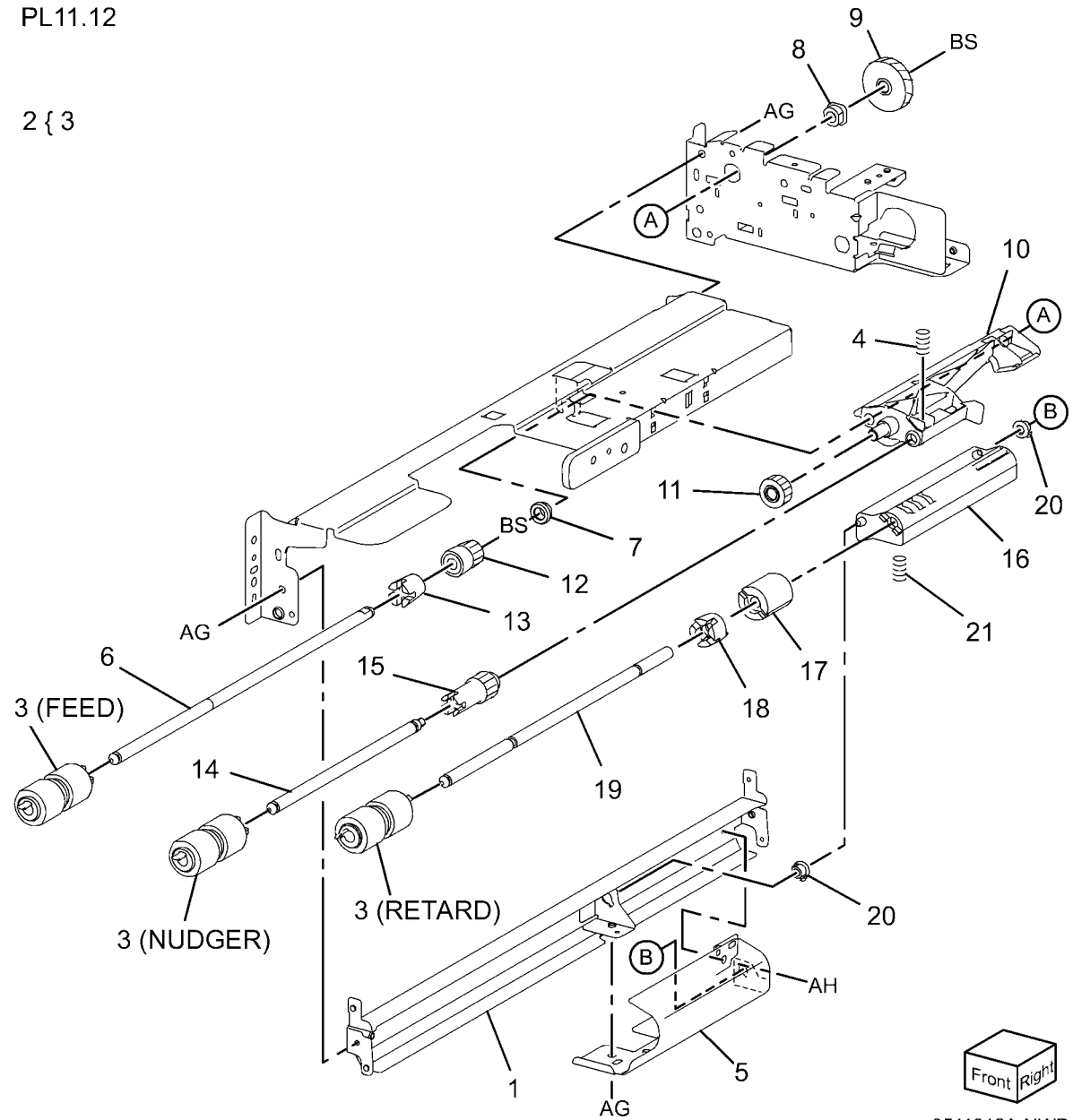
0511011A-NWD

# PL 11.12 Tray 4 Feeder (TTM) (2 of 2)

Item	Part	Description
1	-	Frame (Not Spared)
2	604K56080	Feed Roll Kit
3	-	Nudger, Retard, Feed Roll (P/O PL 11.12 Item 2)
4	-	Spring (Not Spared)
5	-	Feed In Chute (Not Spared)
6	-	Feed Shaft (Not Spared)
7	-	Bearing (Not Spared)
8	-	Sleeve Bearing (Not Spared)
9	-	Gear (25T) (Not Spared)
10	-	Support (Not Spared)
11	-	Gear (29T) (Not Spared)
12	005K10090	Clutch (25T) (Alternate)
-	005K08820	Clutch (25T) (Alternate)
13	005K05890	One Way Clutch
-	005K10080	One Way Clutch
14	-	Nudger Shaft
15	-	Gear (25T) (Not Spared)
16	-	Support (Not Spared)
17	005K09290	Friction Clutch
18	014E45030	Spacer
19	-	Retard Shaft (Not Spared)
20	-	Retard Bearing (Not Spared)
21	-	Spring (Not Spared)

PL11.12

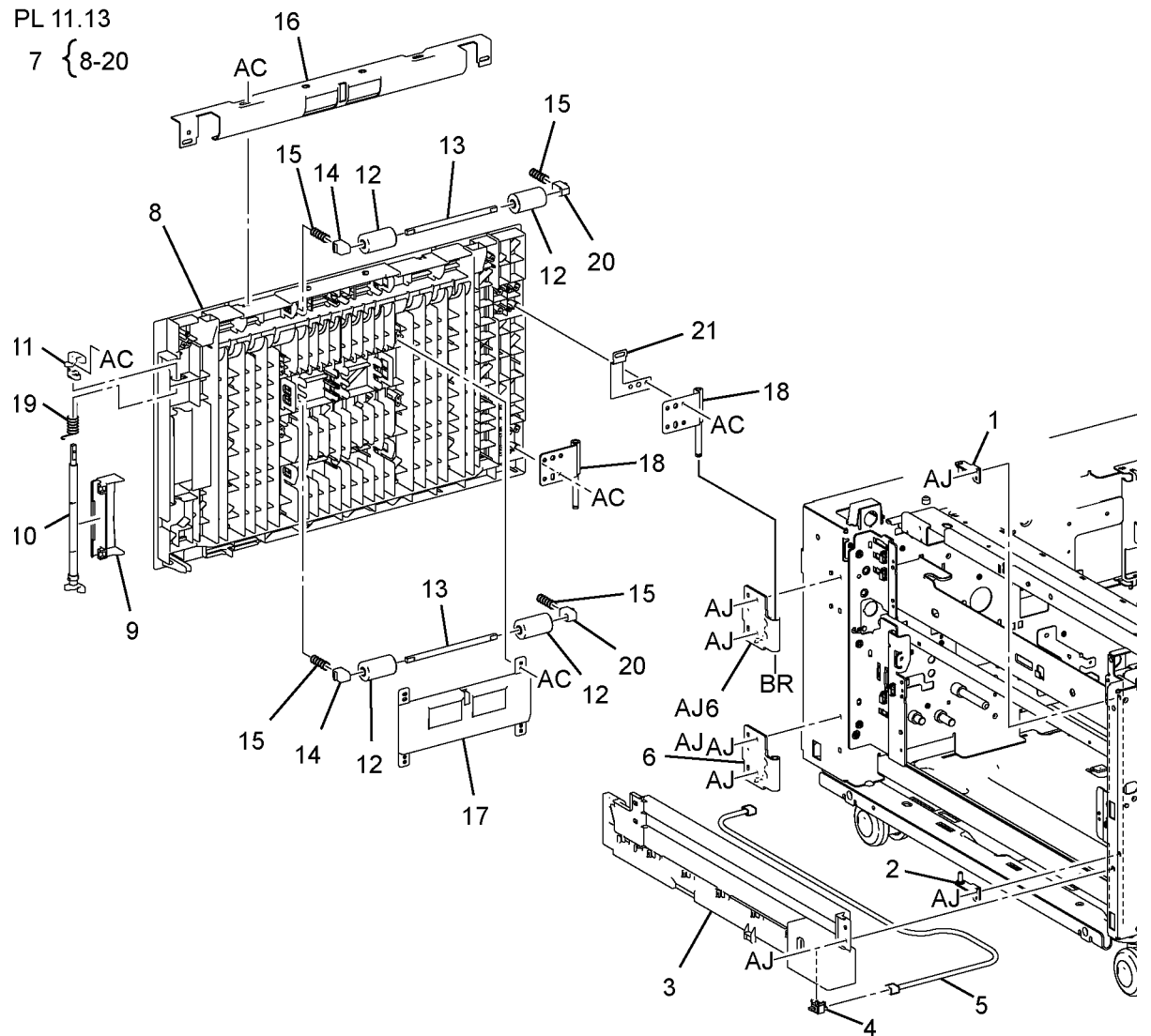
2 { 3



0511012A-NWD

## PL 11.13 Left Cover Assembly (TTM)

Item	Part	Description
1	–	Upper Bracket (Not Spared)
2	–	Lower Bracket (Not Spared)
3	–	Cover (Not Spared)
4	110E12220	Left Hand Cover Switch
5	–	Wire Harness (Not Spared)
6	068K55791	Hinge Bracket
7	848K17711	Left Cover Assembly
8	–	Left Cover (P/O PL 11.13 Item 7)
9	003E75571	Handle
10	803E08671	Latch
11	019E69600	Hook
12	059E99241	Pinch Roll
13	–	Pinch Shaft (P/O PL 11.13 Item 7)
14	–	Front Pinch Bearing (P/O PL 11.13 Item 7)
15	–	Pinch Spring (P/O PL 11.13 Item 7)
16	054E38240	Upper Chute (P/O PL 11.13 Item 7)
17	–	Chute Pinch
18	–	Hinge (P/O PL 11.13 Item 7)
19	–	Spring (P/O PL 11.13 Item 7)
20	–	Rear Pinch Bearing (P/O PL 11.13 Item 7)
21	–	Rear Pinch Bearing (P/O PL 11.13 Item 7)



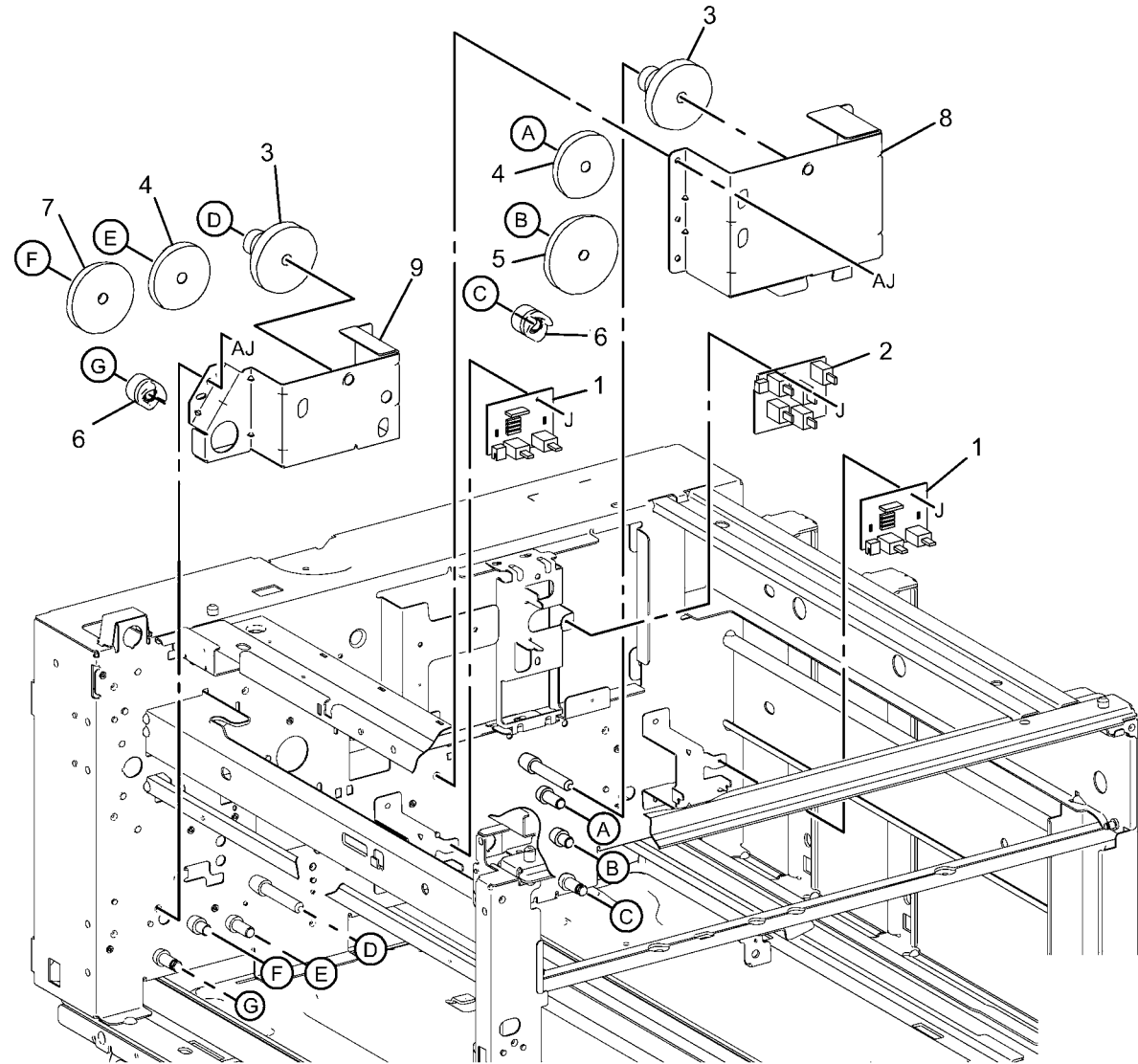
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# PL 11.15 Tray 2/3/4 Paper and Lift Sensors (TTM)

PL11.15

Item	Part	Description
1	110K11820	Tray 3, 4 Paper Size Sensor
2	110K11680	Tray 2 Paper Size Sensor
3	007E78320	Gear (17T/50T)
4	007E78330	Gear (16T/48T)
5	007E78340	Gear (57T)
6	807E16730	Gear (18T)
7	007E78350	Gear (51T)
8	-	Bracket (Not Spared)
9	-	Bracket (Not Spared)

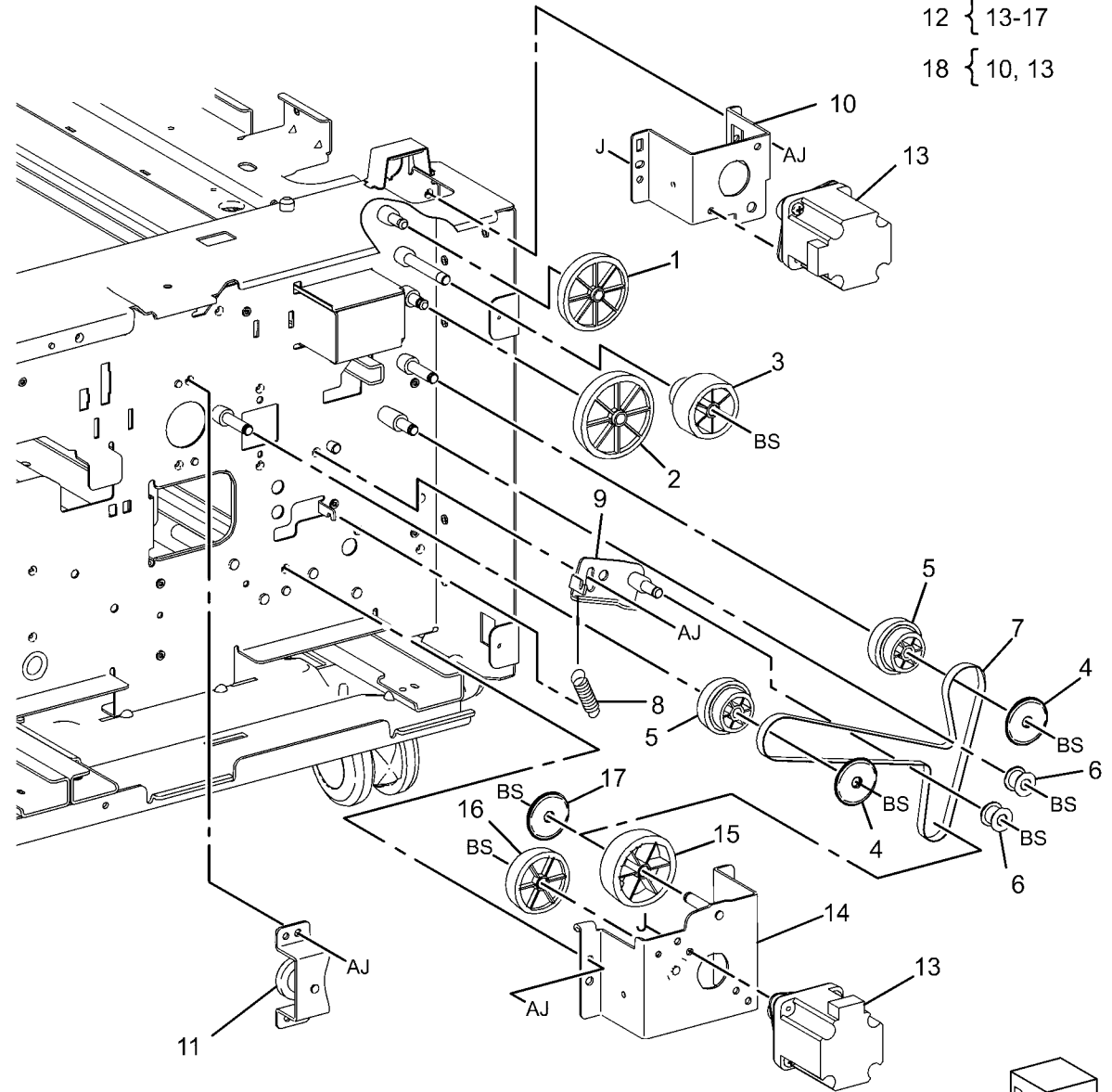


0511015A-NWD

# PL 11.16 Drive (TTM)

Item	Part	Description
1	-	Gear (52T) (Not Spared)
2	-	Gear (32T) (Not Spared)
3	-	Gear (20T/65T) (Not Spared)
4	-	Collar (Not Spared)
5	-	Pulley Gear (Not Spared)
6	-	Roll (Not Spared)
7	423W56254	Belt
8	-	Spring (Not Spared)
9	-	Tension Bracket (Not Spared)
10	-	Bracket (P/O PL 11.16 Item 18)
11	-	Gear Bracket (Not Spared)
12	-	Take Away Motor Assembly
13	127K52880	Take Away Motor (Alternative)
14	-	Bracket (P/O PL 11.16 Item 12)
15	-	Gear (81T) (P/O PL 11.16 Item 12)
16	-	Gear (70T) (P/O PL 11.16 Item 12)
17	-	Collar (High Speed) (P/O PL 11.16 Item 12)
18	127K61540	Take Away Motor Assembly

PL11.16



12 { 13-17  
18 { 10, 13

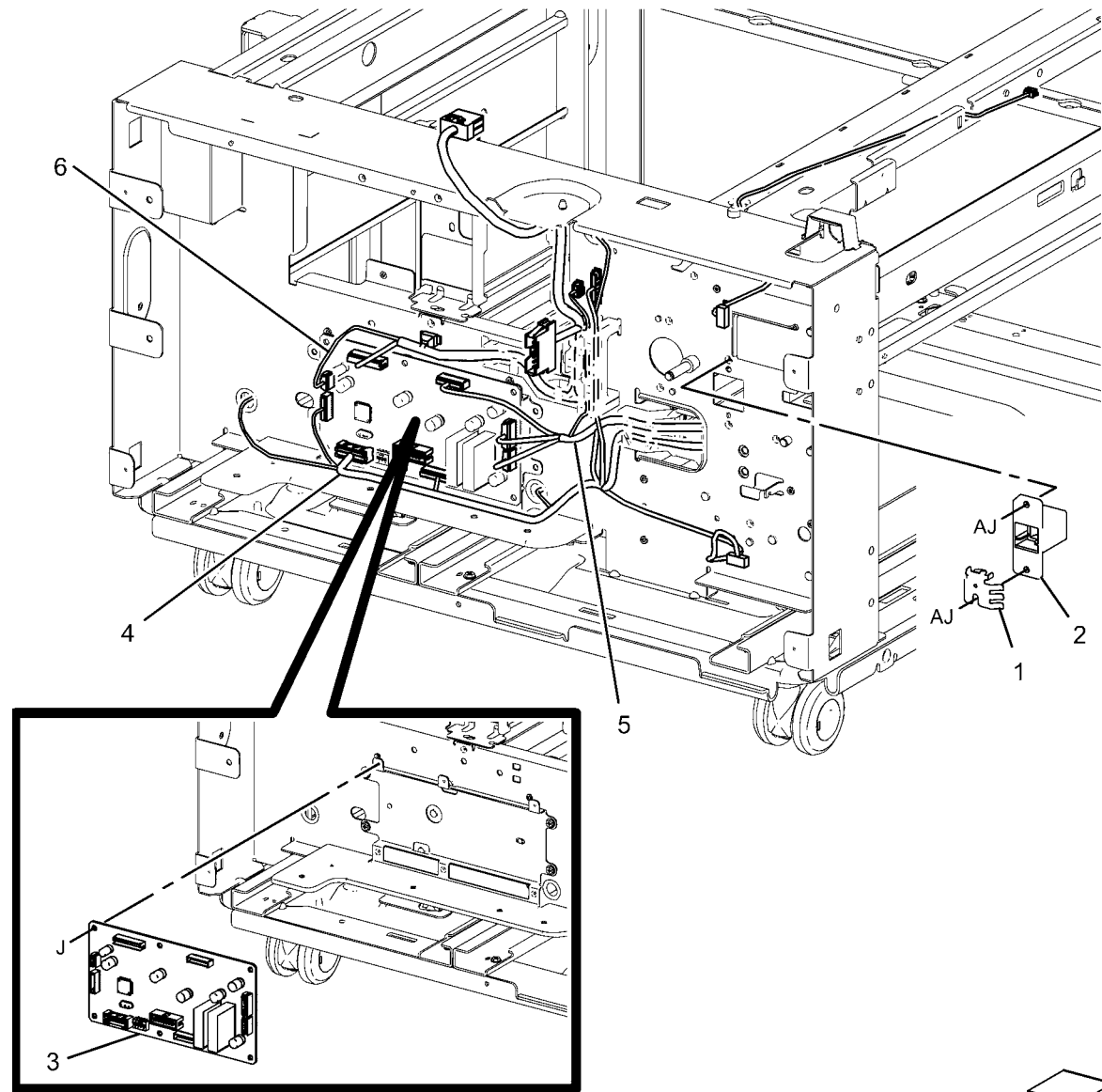


0511016A-NWD

## PL 11.17 Electrical (TTM)

Item	Part	Description
1	–	Ground Plate (Not Spared)
2	–	Transport Guide (Not Spared)
3	960K62150	Tray Module PWB
4	–	Harness Assembly Sensor (Not Spared)
5	–	Harness Assembly Motor (Not Spared)
6	–	Harness Assembly (I/F) (Not Spared)

PL11.17

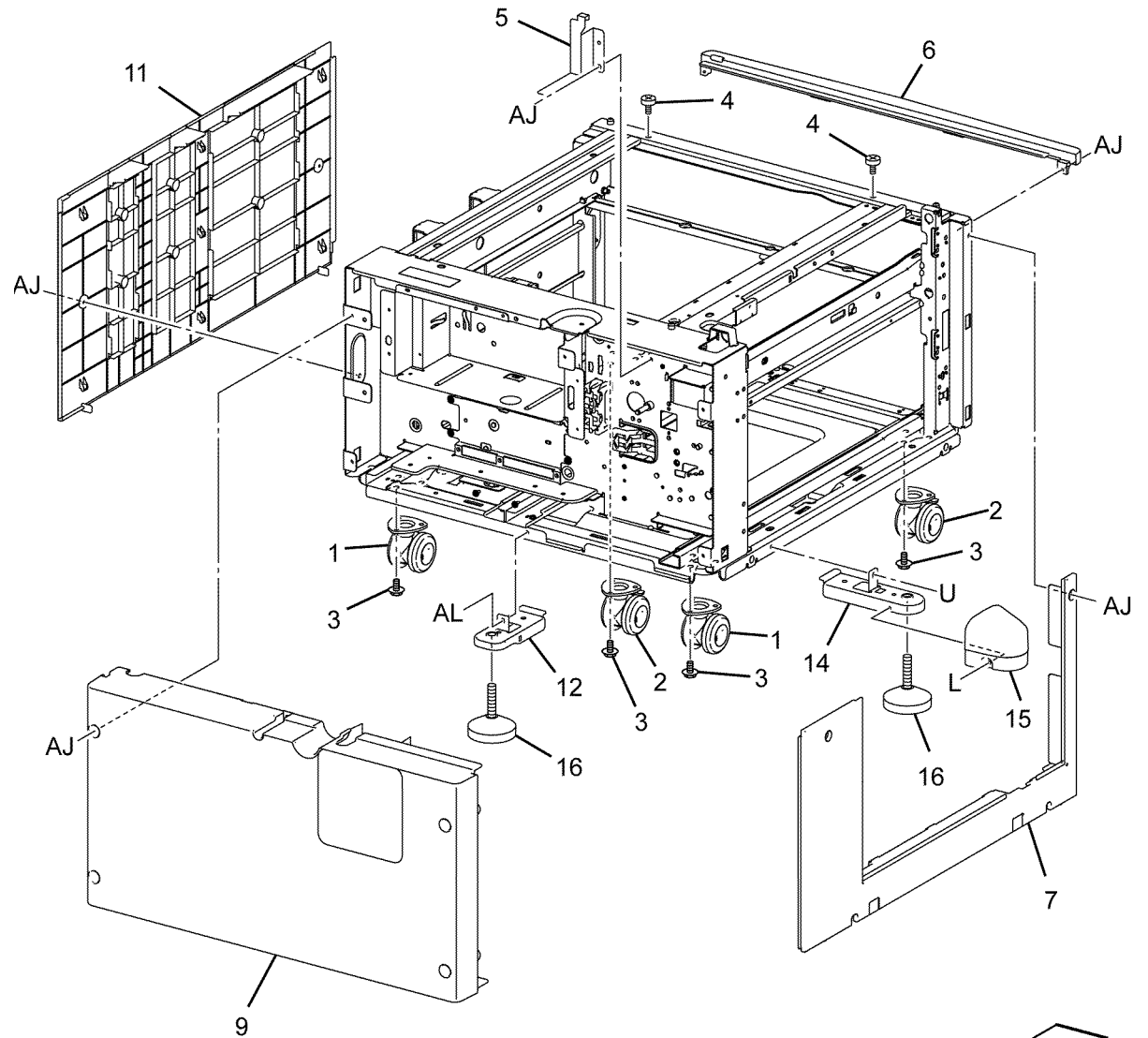


0511017A-NWD



## PL 11.18 Covers (TTM)

Item	Part	Description
1	417W41349	Caster Assembly
2	017K94580	Swizzle Caster
3	—	Screw
4	—	Docking Screw
5	—	Docking Bracket
6	—	Top Cover (Not Spared)
7	—	Left Cover (Not Spared)
9	848K56600	Rear Cover
11	—	Right Cover
12	868E15860	Foot Bracket
14	868E20860	Foot Bracket
15	848E45610	Foot Cover
16	017K94590	Adjuster Foot Assembly

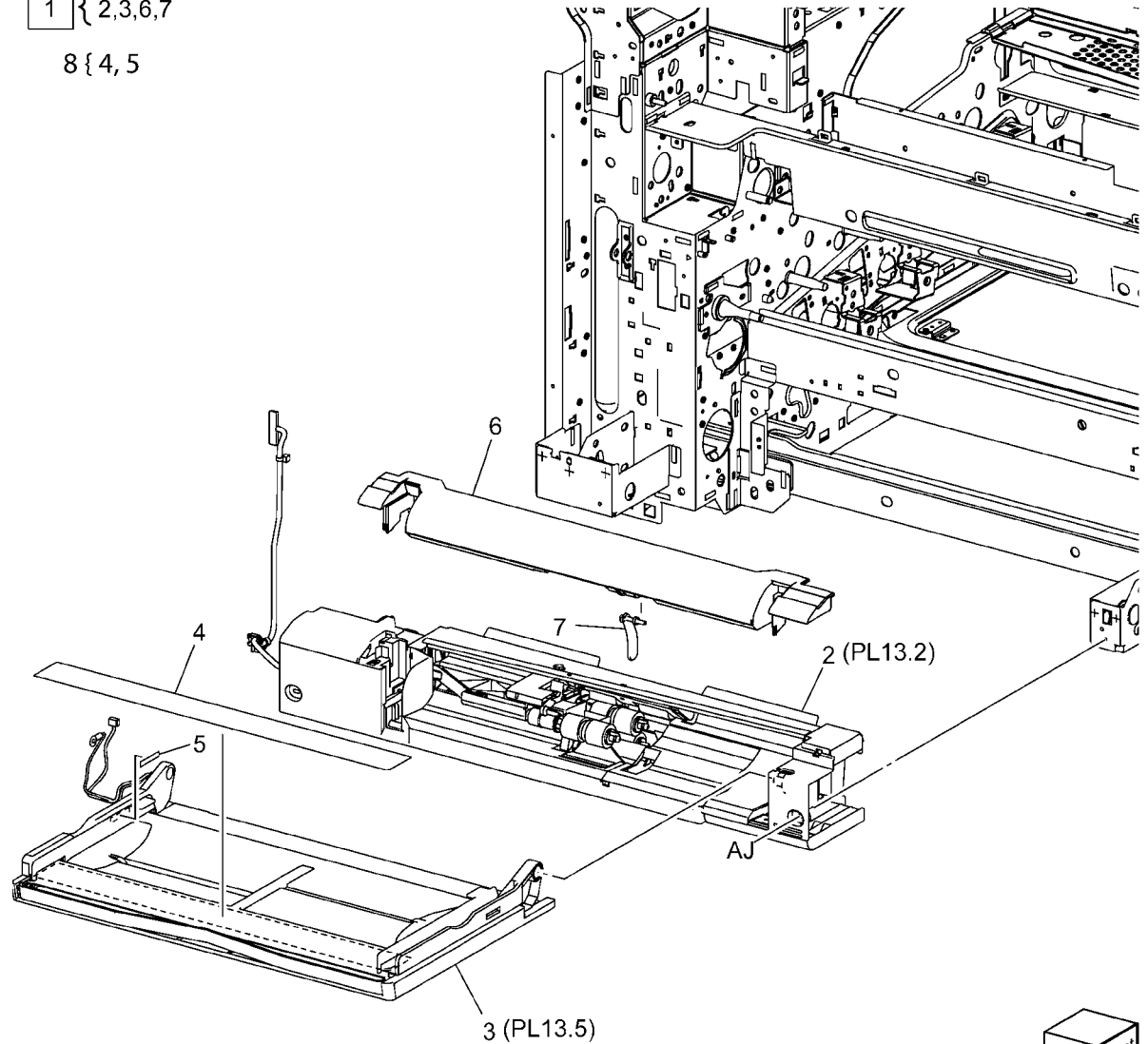


j0kt51118

# PL 13.1 Bypass Tray Assembly (1 of 5)

Item	Part	Description
1	059K75180	Bypass Tray Assembly
2	—	Feeder Assembly
3	050K64540	Tray Assembly
4	897E04930	Label (Instruction)
5	896E46040	Label (Max)
6	848E44583	Top Cover
7	120E29441	Actuator
8	—	Label Kit

PL 13.1  
1 { 2,3,6,7  
 8 { 4, 5

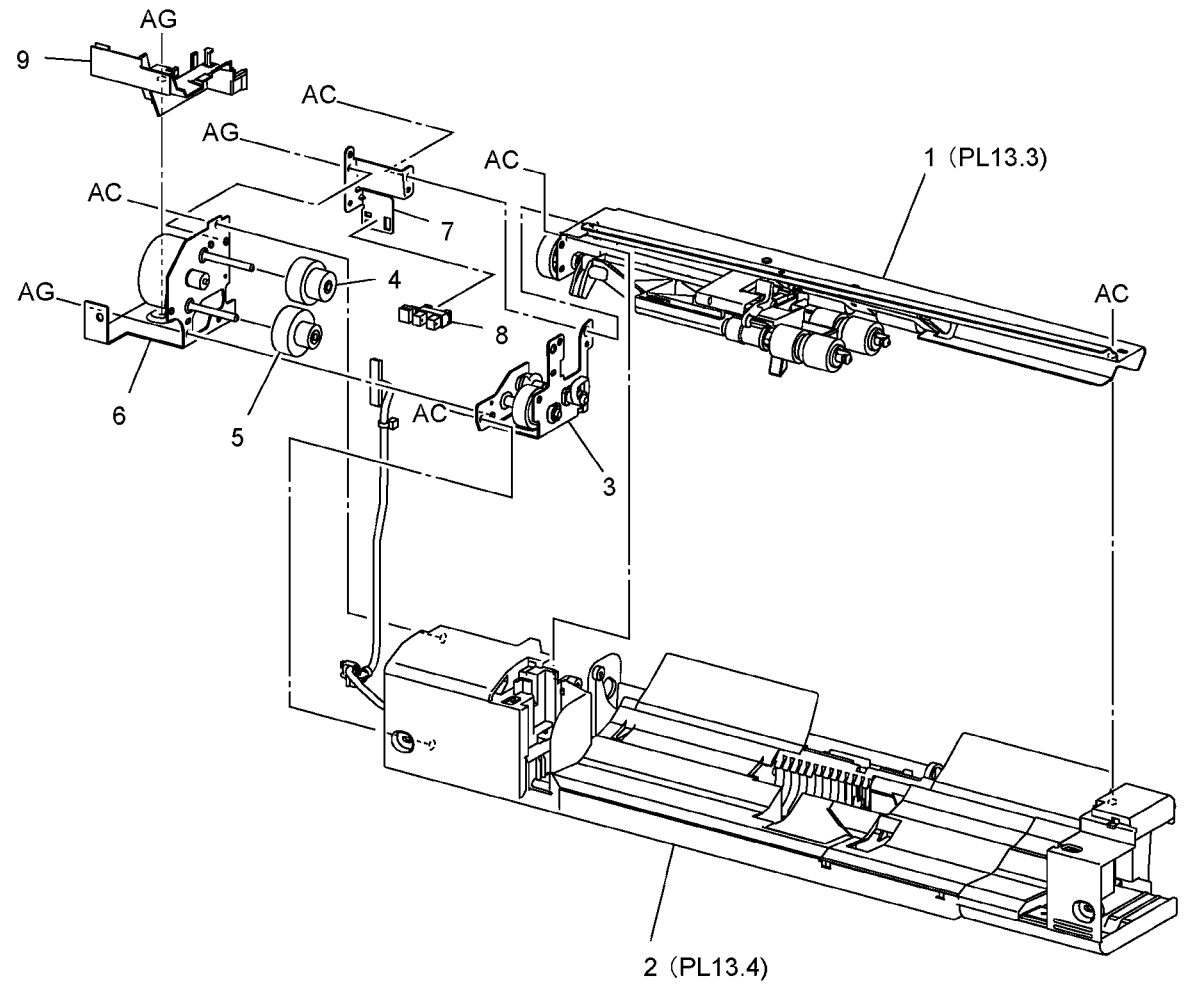


j0kt51301

## PL 13.2 Bypass Tray Assembly (2 of 5)

Item	Part	Description
1	-	Upper Frame Assembly
2	-	Lower Tray Assembly
3	-	Drive Bracket Assembly
4	-	Gear (29T/19T) (P/O PL 13.1 Item 1)
5	-	Gear (31T/15T) (P/O PL 13.1 Item 1)
6	127K52790	Feeder/Nudger Motor
7	-	Sensor Bracket
8	930W00113	Nudger Position Sensor
-	930W00123	Nudger Position Sensor (Alternate)
9	-	Harness Holder

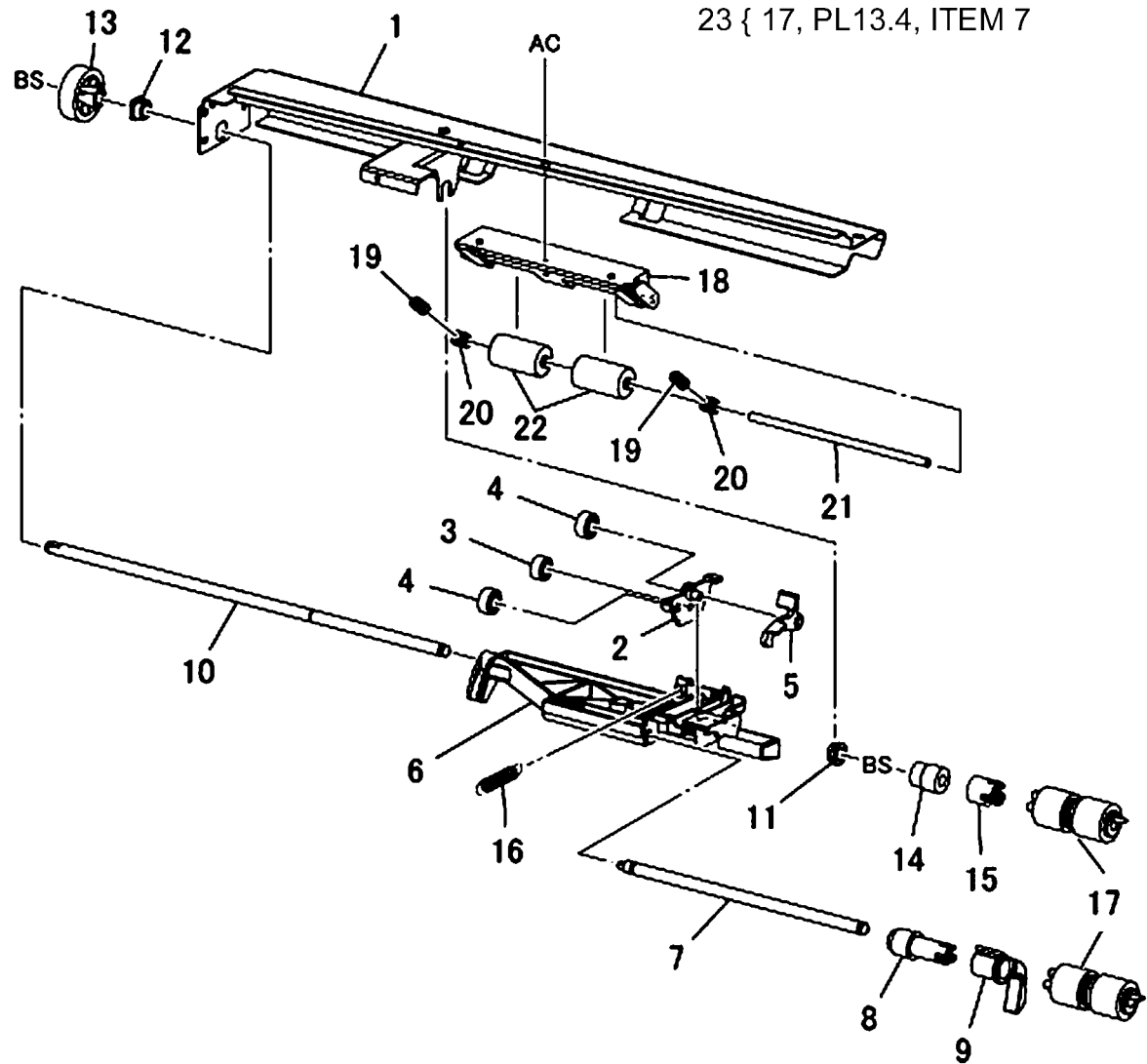
PL 13.2



j0kt51302

# PL 13.3 Bypass Tray Assembly (3 of 5)

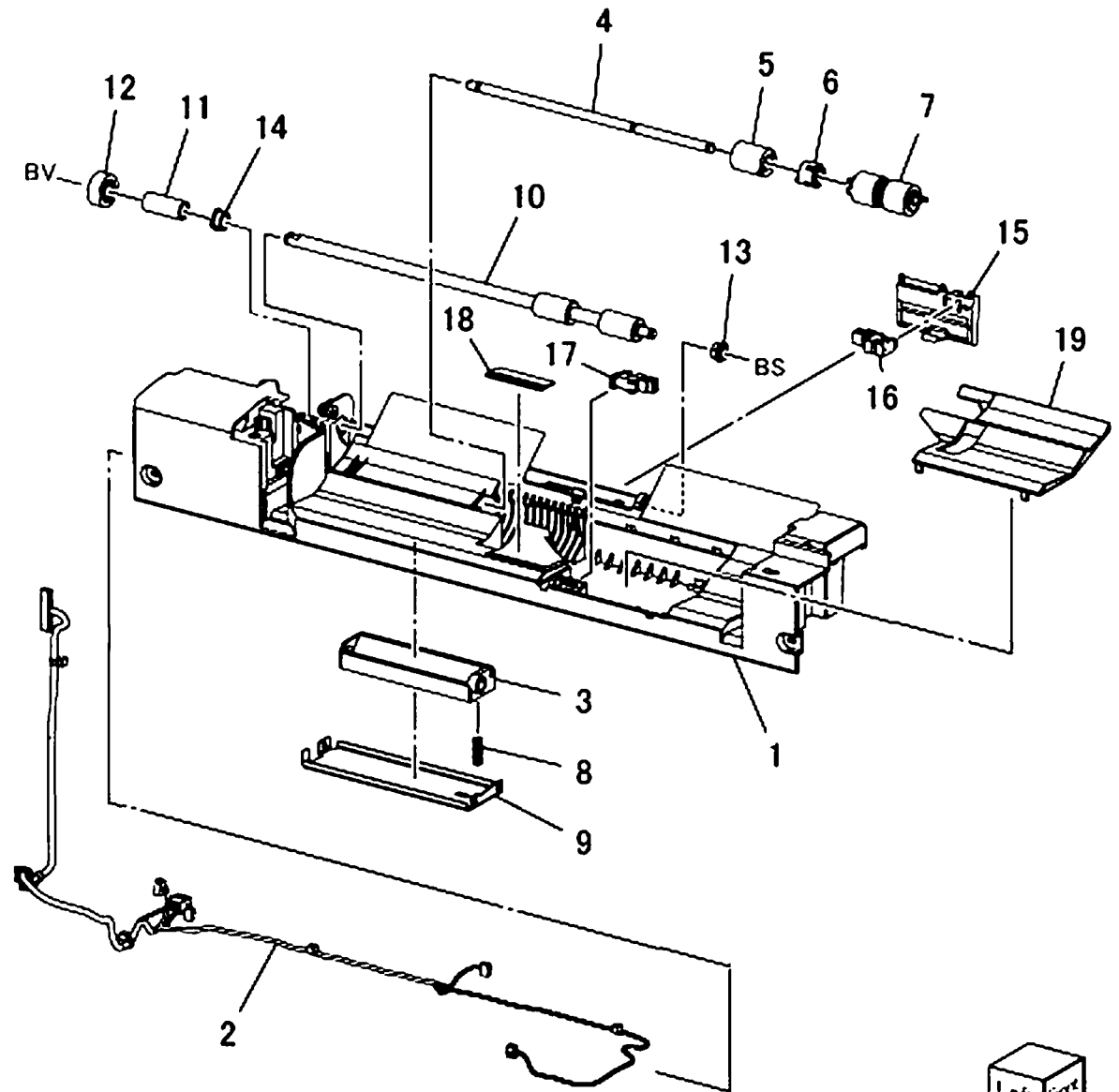
Item	Part	Description
1	-	Pinch Chute Assembly (P/O PL 13.1 Item 1)
2	-	Gear Support (P/O PL 13.1 Item 1)
3	-	Gear (21T) (P/O PL 13.1 Item 1)
4	-	Gear (23T) (P/O PL 13.1 Item 1)
5	-	Lock Stopper (P/O PL 13.1 Item 1)
6	-	Nudger Support (P/O PL 13.1 Item 1)
7	-	Nudger Shaft (P/O PL 13.1 Item 1)
8	-	Gear (25T) (P/O PL 13.1 Item 1)
9	-	Stopper (P/O PL 13.1 Item 1)
10	-	Feed Shaft (P/O PL 13.1 Item 1)
11	413W85459	Bearing
12	413W11660	Sleeve Bearing
13	-	Gear (30T) (P/O PL 13.1 Item 1)
14	005K08370	One Way Clutch (22T)
15	-	One Way Clutch (P/O PL 13.1 Item 1)
16	-	Spring (P/O PL 13.1 Item 1)
17	022K77220	Feed Roll, Nudger Roll (P/O PL 13.3 Item 23) (REP 7.22)
18	-	Guide (P/O PL 13.1 Item 1)
19	-	Pinch Chute Assembly (P/O PL 13.1 Item 1)
20	-	Spacer (P/O PL 13.1 Item 1)
21	-	Shaft (P/O PL 13.1 Item 1)
22	059E04040	Pinch Roll
23	604K66430	MSI Roll Kit (W/TAG P-002)



0513003B-NWD

## PL 13.4 Bypass Tray Assembly (4 of 5)

Item	Part	Description
1	–	Bypass Lower Frame (P/O PL 13.2 Item 2)
2	–	Tray Wire Harness
3	–	Retard Support (P/O PL 13.2 Item 2)
4	–	Shaft (P/O PL 13.2 Item 2)
5	005K08830	Friction Clutch
6	014E45030	Spacer
7	–	Retard Roll (P/O PL 13.2 Item 2)
8	–	Retard Spring (P/O PL 13.2 Item 2)
9	–	Plate (P/O PL 13.2 Item 2)
10	059K53691	Drive Roll Assembly
11	–	Collar (P/O PL 13.2 Item 2)
12	–	Gear (23T) (P/O PL 13.2 Item 2)
13	–	Sleeve Bearing (P/O PL 13.2 Item 2)
14	413W11860	Sleeve Bearing
15	–	Sensor Plate (P/O PL 13.2 Item 2)
16	130K72110	Bypass Feed Out Sensor
17	930W00123	Bypass No Paper Sensor
–	930W00113	Bypass No Paper Sensor
18	019E68980	Bottom Pad
19	054E33950	Front Chute

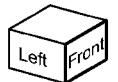
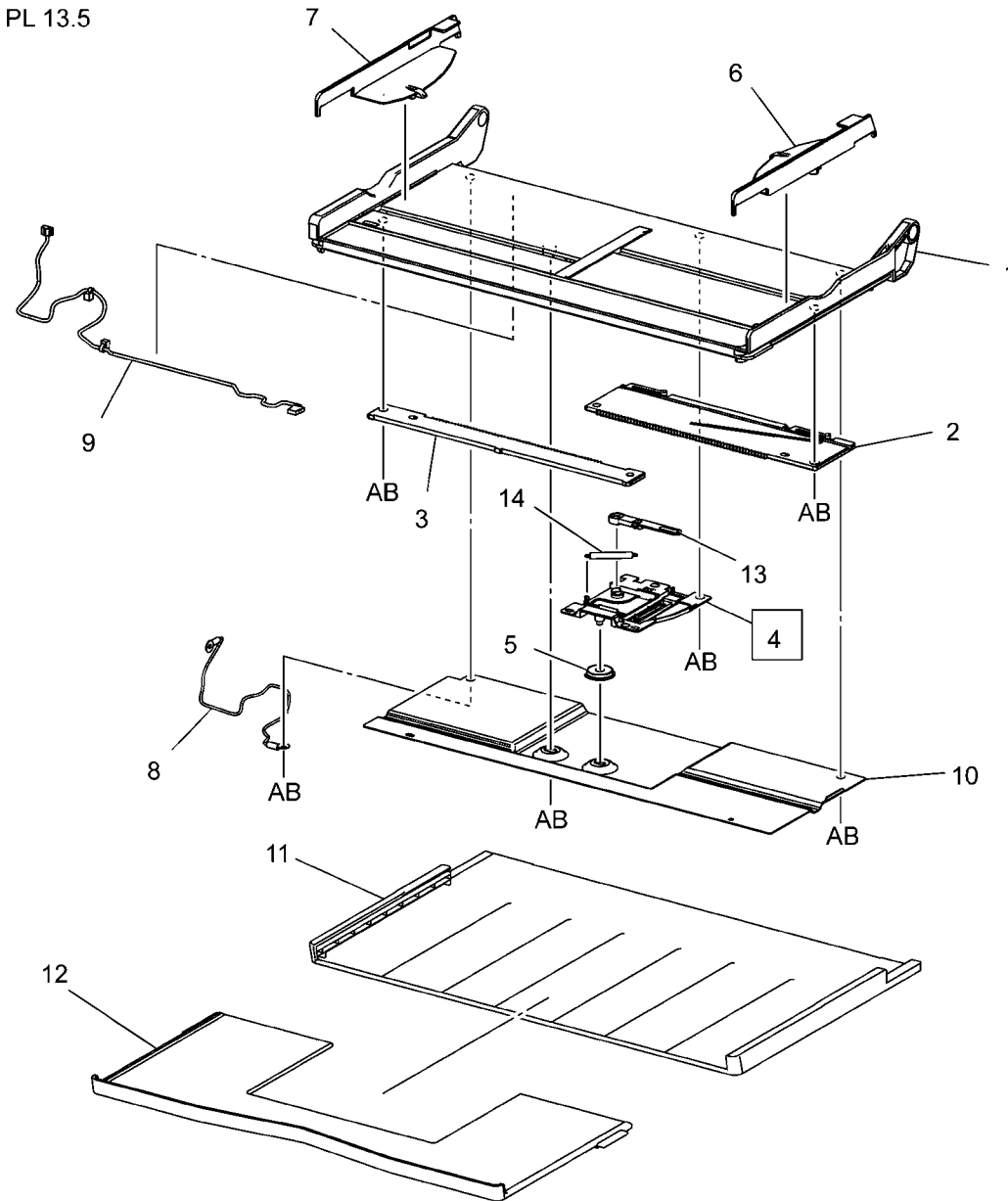


0513004A-NWD

## PL 13.5 Bypass Tray Assembly (5 of 5)

Item	Part	Description
1	-	Bypass Tray (P/O PL 13.1 Item 3)
2	-	Front Rack (P/O PL 13.1 Item 3)
3	-	Rear Rack (P/O PL 13.1 Item 3)
4	130K70660	Paper Size Sensor
5	007E79700	Pinion Gear
6	-	Front Side Guide (P/O PL 13.1 Item 3)
7	-	Rear Side Guide (P/O PL 13.1 Item 3)
8	-	Wire Harness (P/O PL 13.1 Item 3)
9	-	Wire Harness (P/O PL 13.1 Item 3)
10	-	Plate (P/O PL 13.1 Item 3)
11	-	Extension Tray (L1) (P/O PL 13.1 Item 3)
12	-	Extension Tray (L2) (P/O PL 13.1 Item 3)
13	012E11760	Sensor Link
14	809E49930	Sensor Spring

PL 13.5

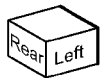
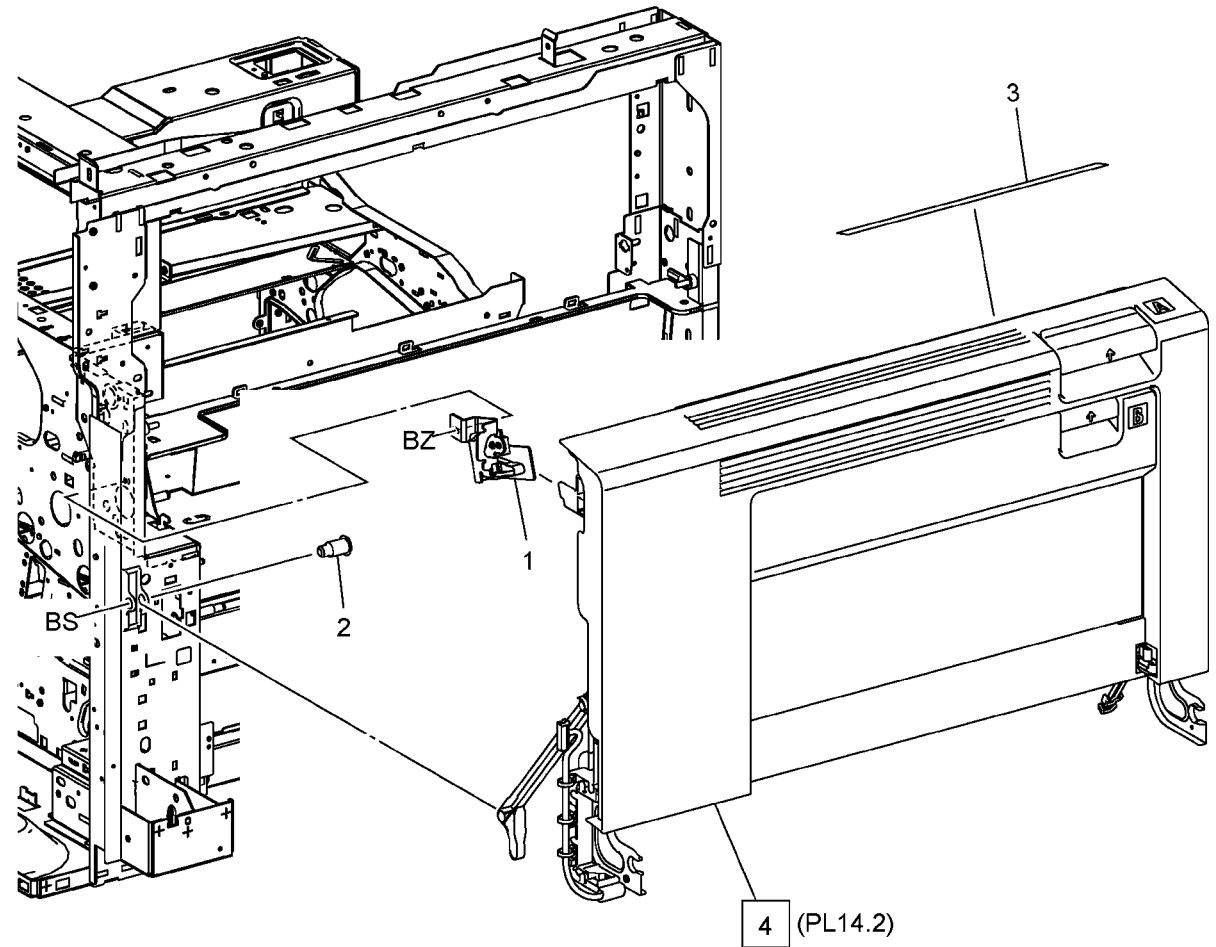


j0kt51305

## PL 14.1 Left Hand Cover (1 of 2)

Item	Part	Description
1	110K17101	L/H Cover Interlock Switch
2	806E21420	Shaft
3	896E89601	Label Kit
4	—	Left Hand Cover Unit

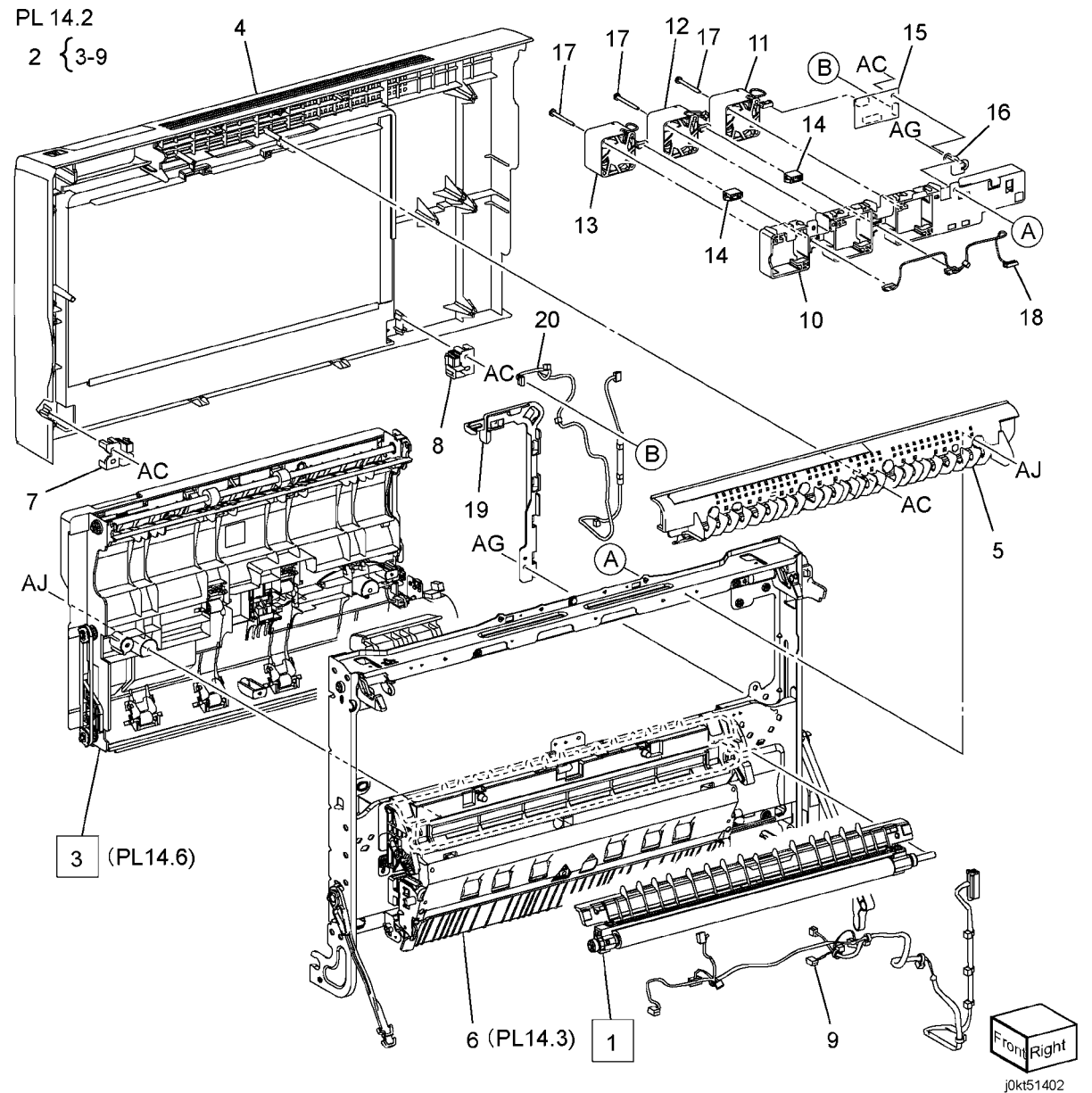
PL 14.1



j0k51401

## PL 14.2 Left Hand Cover (2 of 2)

Item	Part	Description
1	008R13064	2nd BTR Unit (REP 9.9)
2	848K70180	Left Hand Cover Assembly (7845/55)
-	848K70170	Left Hand Cover Assembly (7830/35)
3	059K74880	Duplex Assembly (7845/55) (REP 10.2)
-	059K66711	Duplex Assembly (7830/35) (REP 10.2)
4	-	Left Hand Cover (P/O PL 14.2 Item 2)
5	054E43022	Left Hand Cover Chute (7845/55)
-	054E41572	Left Hand Cover Chute (7830/35)
6	-	Left Hand Frame Assembly
7	-	Latch (Front) (P/O PL 14.2 Item 2)
8	-	Latch (Rear) (P/O PL 14.2 Item 2)
9	-	Harness Assembly
10	-	Fan Holder
11	-	Left Hand Fan1
12	-	Left Hand Fan2
13	-	Left Hand Fan3
14	-	Connector
15	-	Left Hand Fan PWB
16	-	Conductor
17	-	Screw
18	-	Wire Harness
19	-	Harness Guide
20	-	Wire Harness

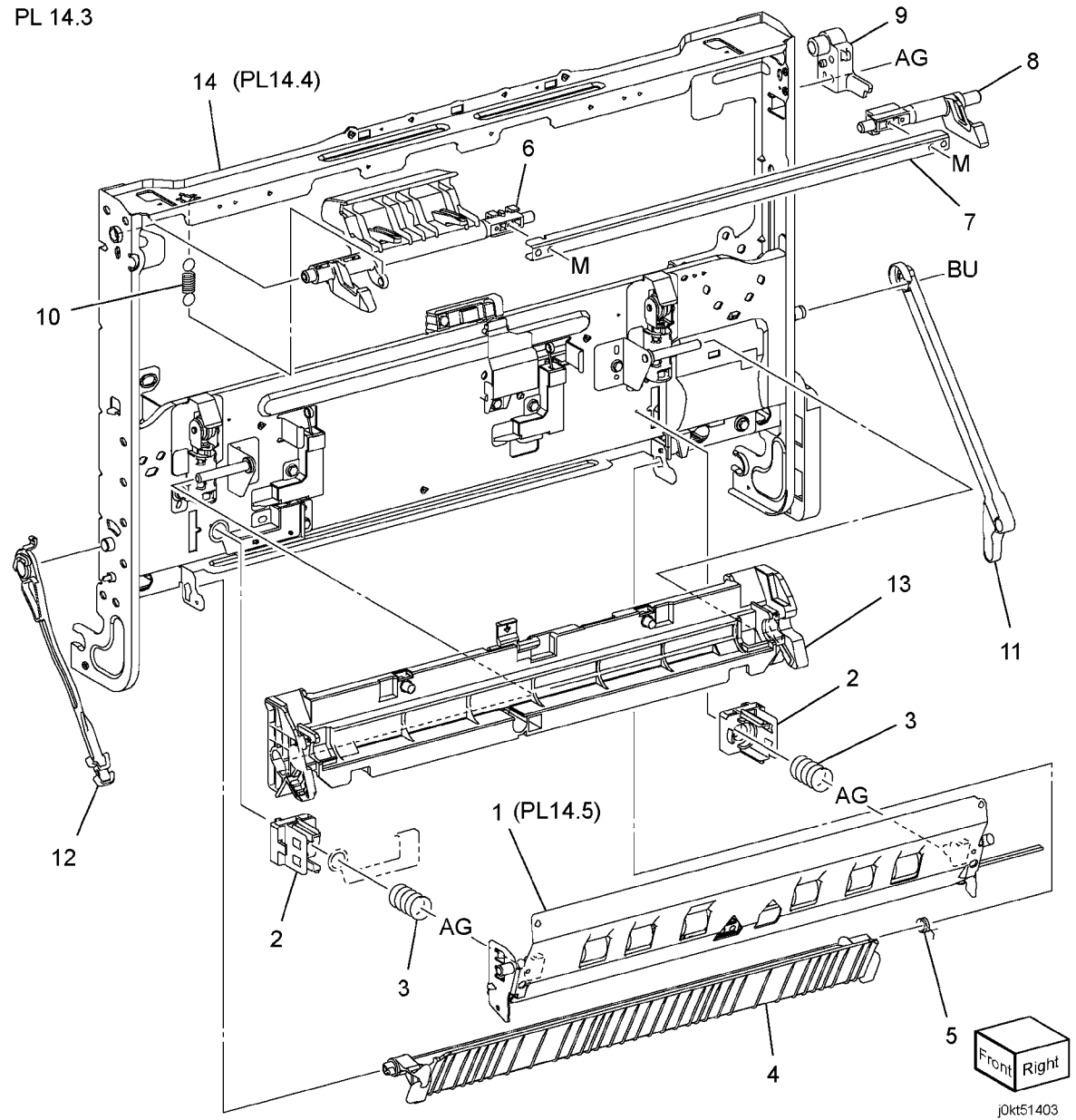




# PL 14.3 Left Hand Cover Assembly (1 of 2)

Item	Part	Description
1	054K48291	Chute Assembly
2	-	Chute Support
3	809E65260	Spring
4	054K35160	Duplex Chute Assembly
5	809E76900	Spring
6	011E23951	Front Latch Lever (7830/35)
-	011E24361	Front Latch Lever (7845/55)
7	-	Latch Plate
8	011E20740	Rear Latch Lever (7830/35)
-	011E24380	Rear Latch Lever (7845/55)
9	120E34041	Actuator
10	-	Spring
11	849E97370	Rear Support
12	868E05450	Front Support
13	848K61850	2nd Bias Housing
14	-	Left Hand Frame Assembly

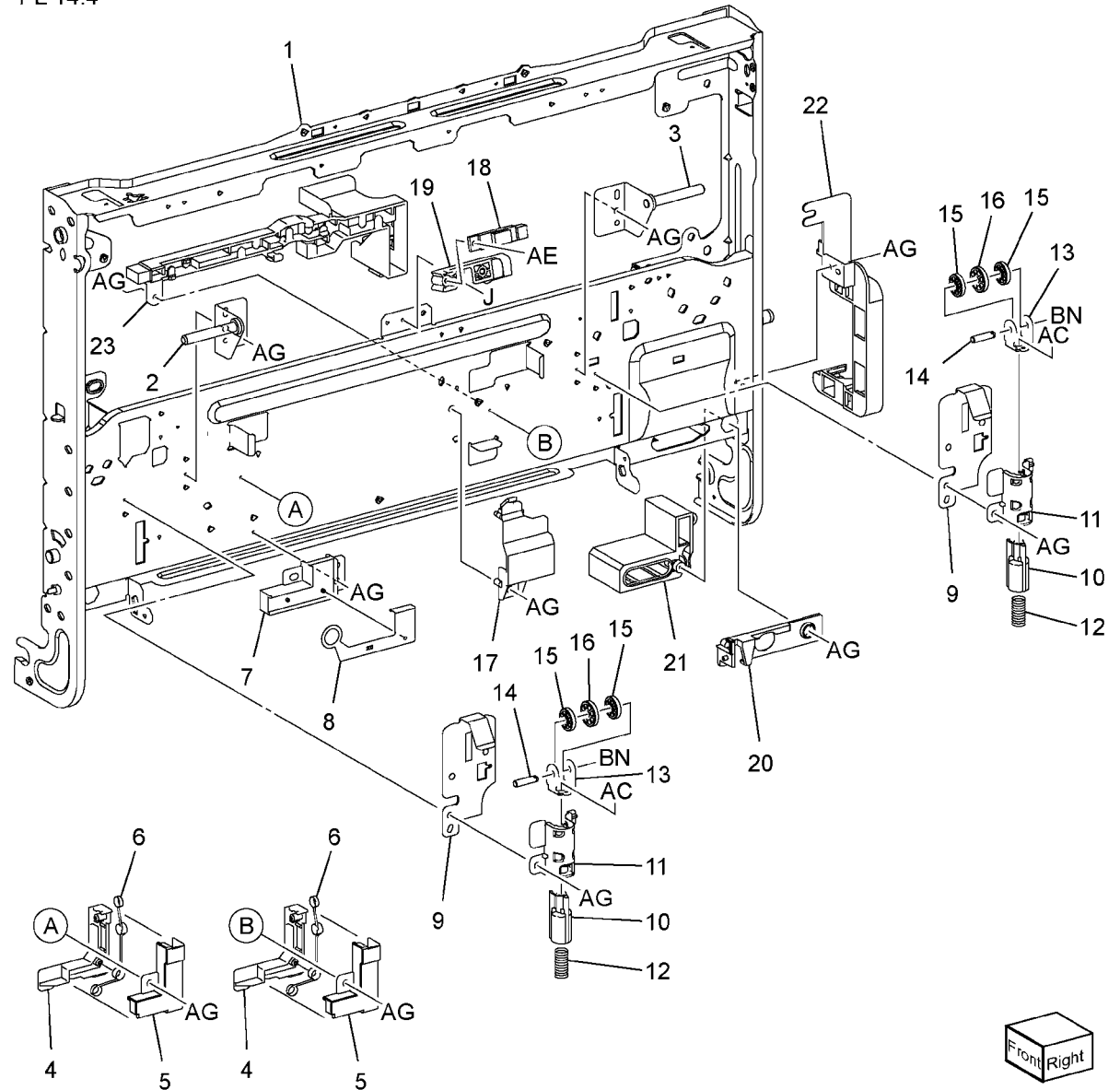
PL 14.3



# PL 14.4 Left Hand Cover Assembly (2 of 2)

PL 14.4

Item	Part	Description
1	-	Frame Assembly
2	-	Bracket
3	-	Bracket
4	-	Conductor Housing
5	-	Conductor Cover
6	-	Conductor
7	-	Conductor Housing
8	-	Conductor
9	-	Plate
10	-	Spring Holder
11	-	Holder
12	-	Spring
13	-	Roll Braket
14	-	Shaft
15	-	Roll (Side)
16	-	Roll (Center)
17	-	Retract Shaft
18	130E87410	POB Sensor
19	-	Sensor Holder
20	-	Harness Guide
21	-	Harness Guide
22	-	Harness Holder
23	-	Harness Holder (P/O PL 14.2 Item 2)

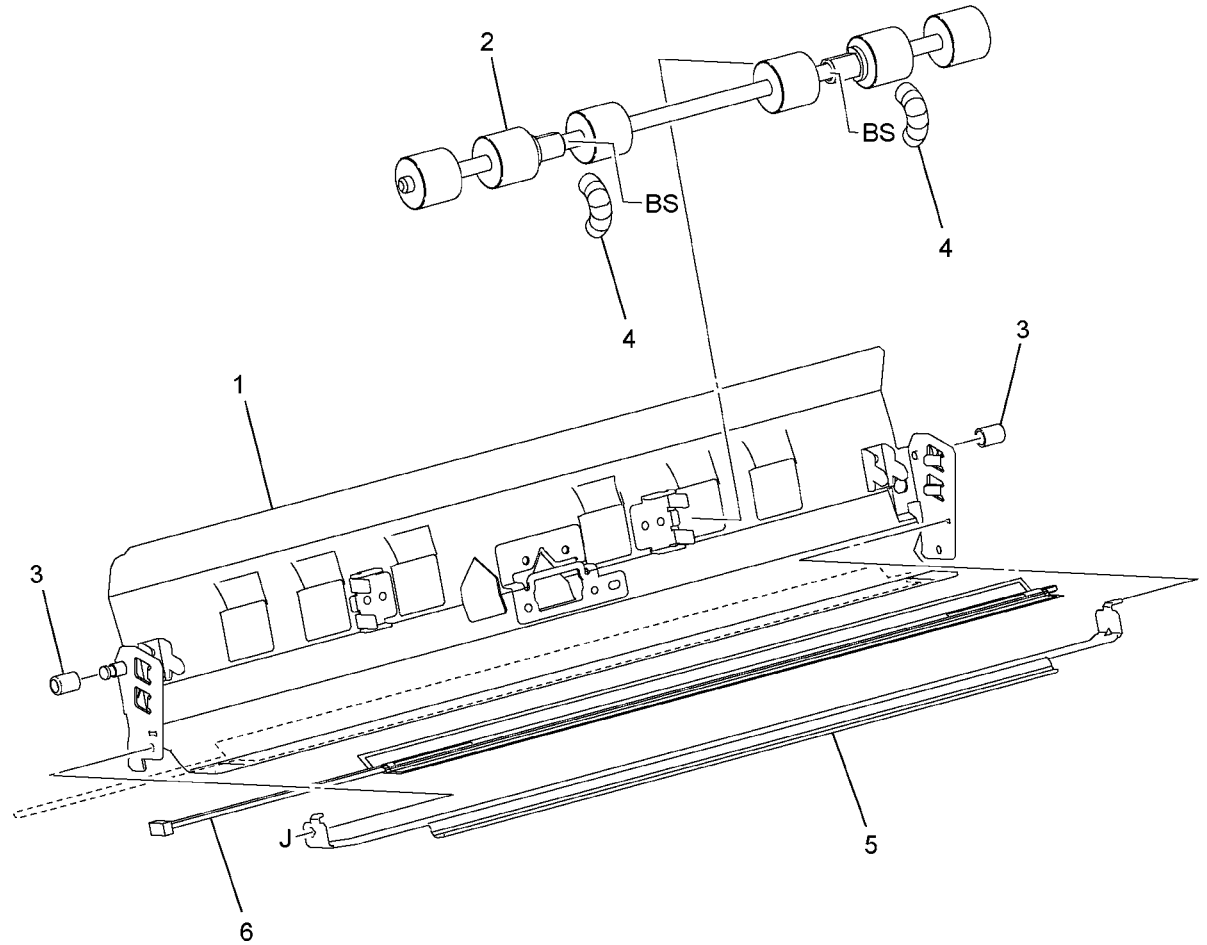


j0kt51404

# PL 14.5 Chute Assembly

Item	Part	Description
1	-	Chute Assembly
2	059K56660	Pinch Roller Assmby
3	-	Pulley
4	809E79750	Spring
5	-	Heater Bracket
6	-	DC Heater

PL 14.5

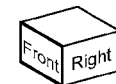
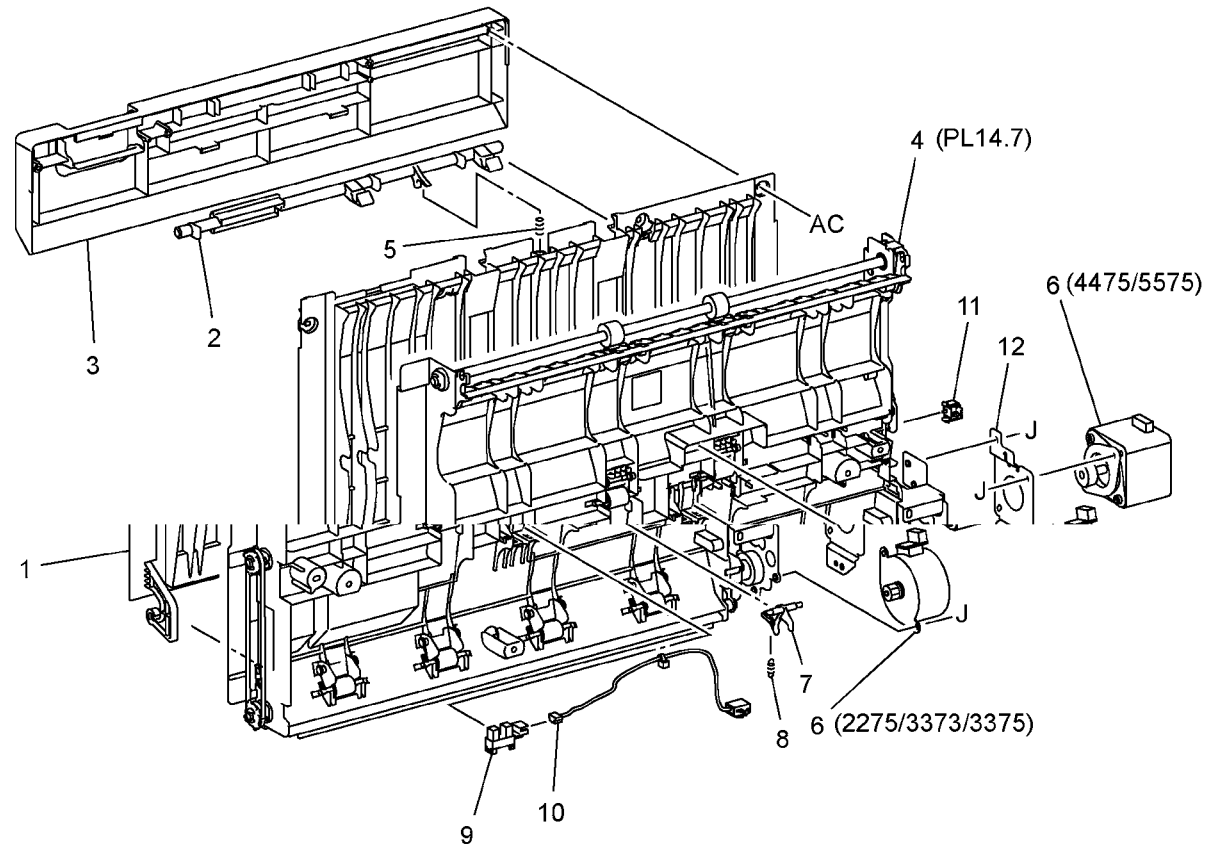


j0kt51405

# PL 14.6 Duplex Assembly (1 of 2)

Item	Part	Description
1	848E24142	Duplex Cover
2	011E23681	Duplex Lever
3	848E43860	Level Cover
4	-	Frame Assembly
5	-	Spring
6	127K65880	Duplex Motor (7845/55)
-	127K58390	Duplex Motor (7830/35)
7	120E32340	Actuator
8	-	Spring
9	930W00113	Duplex Wait Sensor
10	-	Wire Harness
11	110E11580	Dulpex Cover Switch
12	-	Motor Bracket

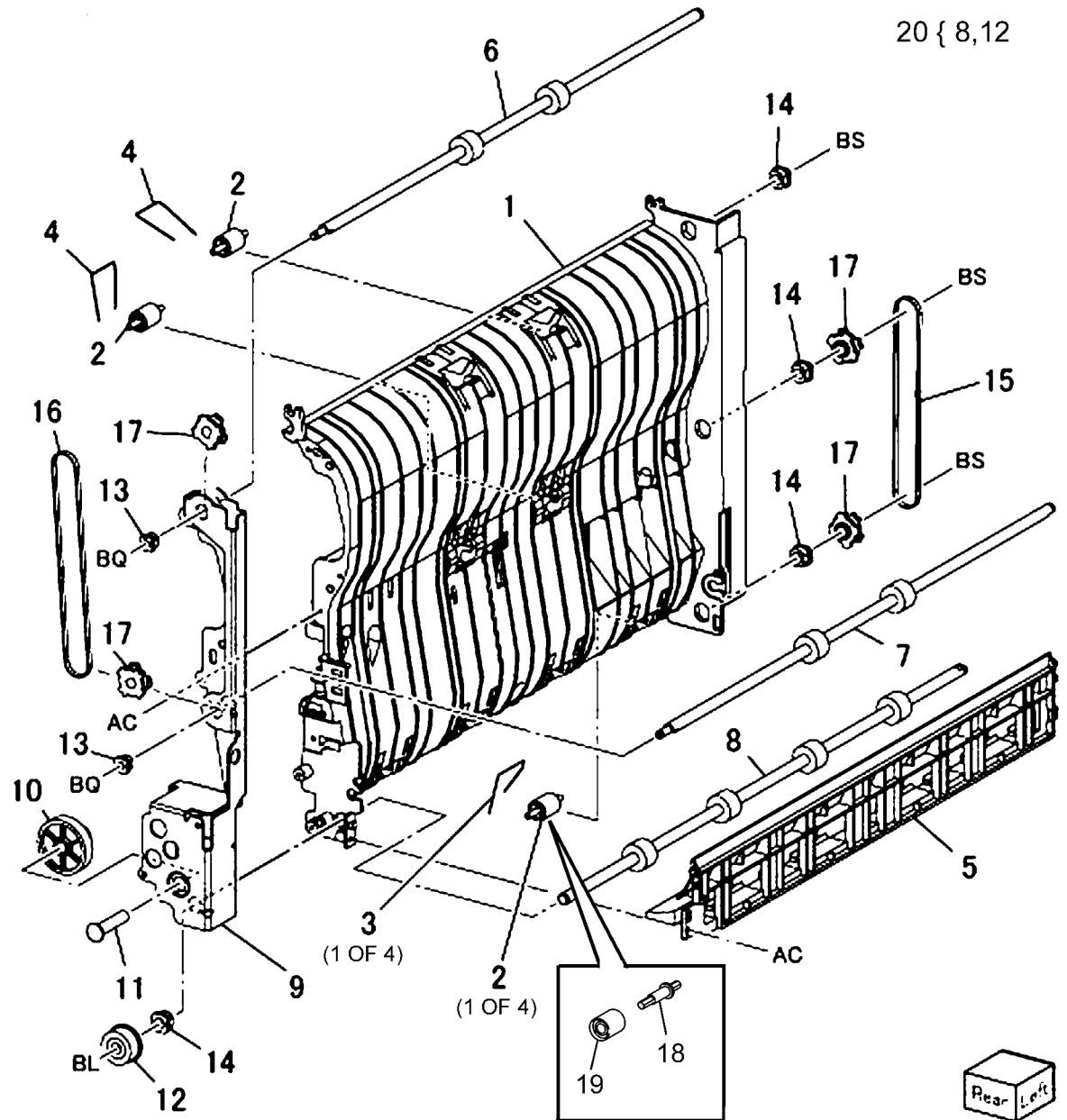
PL 14.6



j0kt51406

# PL 14.7 Duplex Assembly (2 of 2)

Item	Part	Description
1	-	Inner Chute (P/O PL 14.2 Item 3)
2	-	Duplex Pinch Roll (7525, 7530, 7535)
3	-	Pinch Spring 1
4	-	Pinch Spring 2
5	-	Lower Chute (P/O PL 14.2 Item 3)
6	-	Duplex Roller 1
7	-	Duplex Roller 2
8	-	Duplex Roller 3 (P/O PL 14.7 Item 20) (W/TAG P-001)
9	-	Duplex Rear Frame (P/O PL 14.2 Item 3)
10	-	Idle Gear (13T/46T) (7525, 7530, 7535)
11	-	Pin
12	-	Helical Gear (P/O PL 14.7 Item 20) (W/TAG P-001)
13	-	Sleeve Bearing (P/O PL 14.2 Item 3)
14	-	Sleeve Bearing (P/O PL 14.2 Item 3)
15	-	Belt
16	-	Belt
17	-	Pulley
18	-	Shaft (7545, 7556)
19	-	Duplex Pinch Roll (7545, 7556)
20	-	Duplex Roller Kit



20 { 8,12

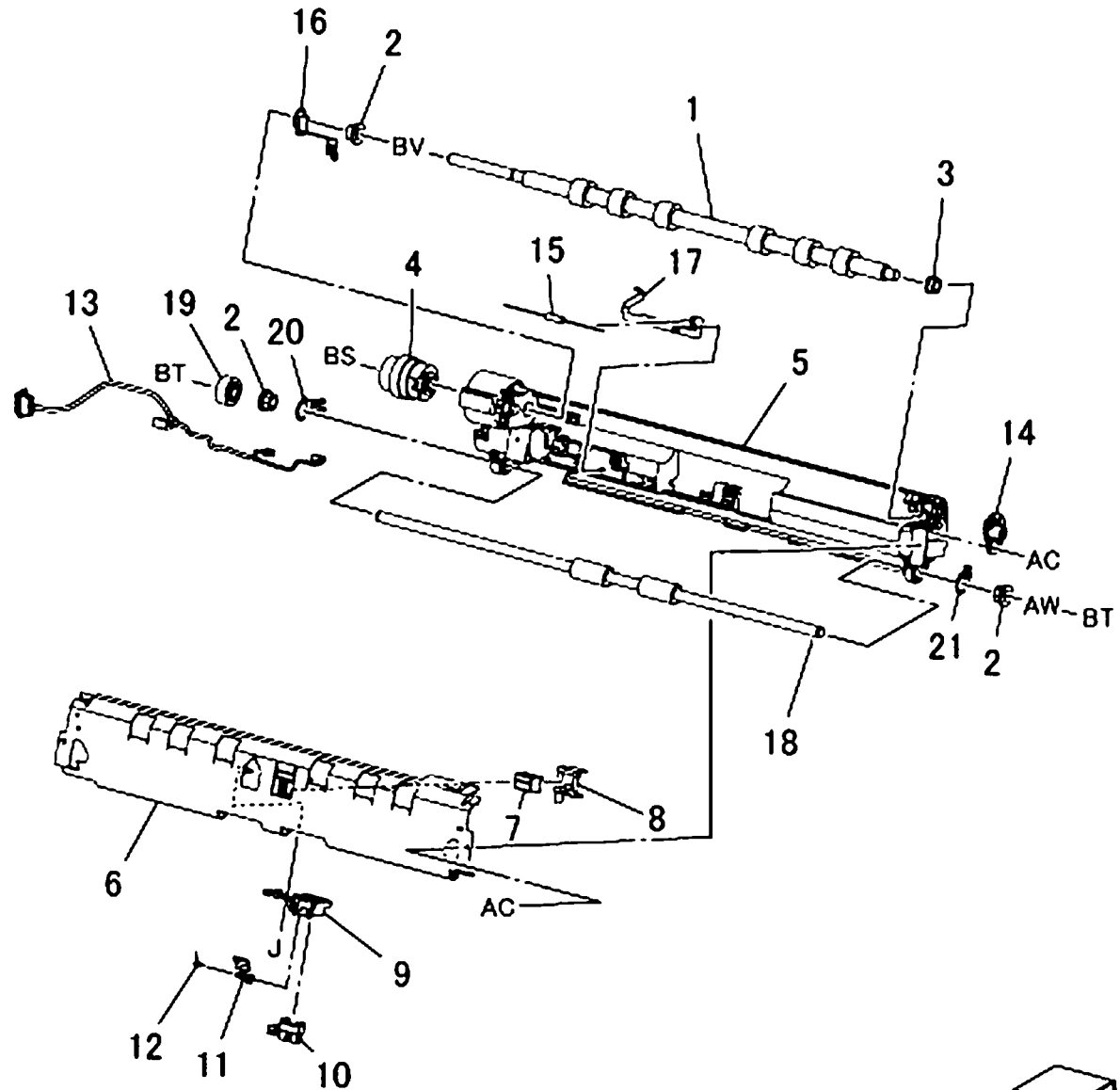


0512006B-NWD



## PL 15.2 Registration (2 of 2)

Item	Part	Description
1	059K75590	Registration Roll
2	013E40520	Bearing
3	013E36270	Sleeve Bearing
4	121K46000	Registration Clutch (High Speed)
-	121K41201	Registratikon Clutch (Low Speed)
5	054E33634	Registration Chute
6	054K33690	Inlet Chute Assembly
8	-	Safety Cover (P/O PL 15.1 Item 8)
9	019E70091	Sensor Holder
10	930W00111	Registration Sensor
-	930W00121	Registration Sensor (Alternate)
11	120E29700	Actuator
12	809E78760	Spring
13	-	Registration Wire Harness (P/O PL 15.1 Item 8)
14	-	Skew Adjust Block (P/O PL 15.1 Item 8)
15	103E45060	Inlet Resistor
16	-	Conductor (In) (P/O PL 15.1 Item 8)
17	-	Conductor (Out) (P/O PL 15.1 Item 8)
18	059K53370	Takeaway Roll
19	807E20190	Gear (23T)
20	-	Conductor (P/O PL 15.1 Item 8)
21	-	Conductor (P/O PL 15.1 Item 8)
22	-	Traceability Label (High Speed)

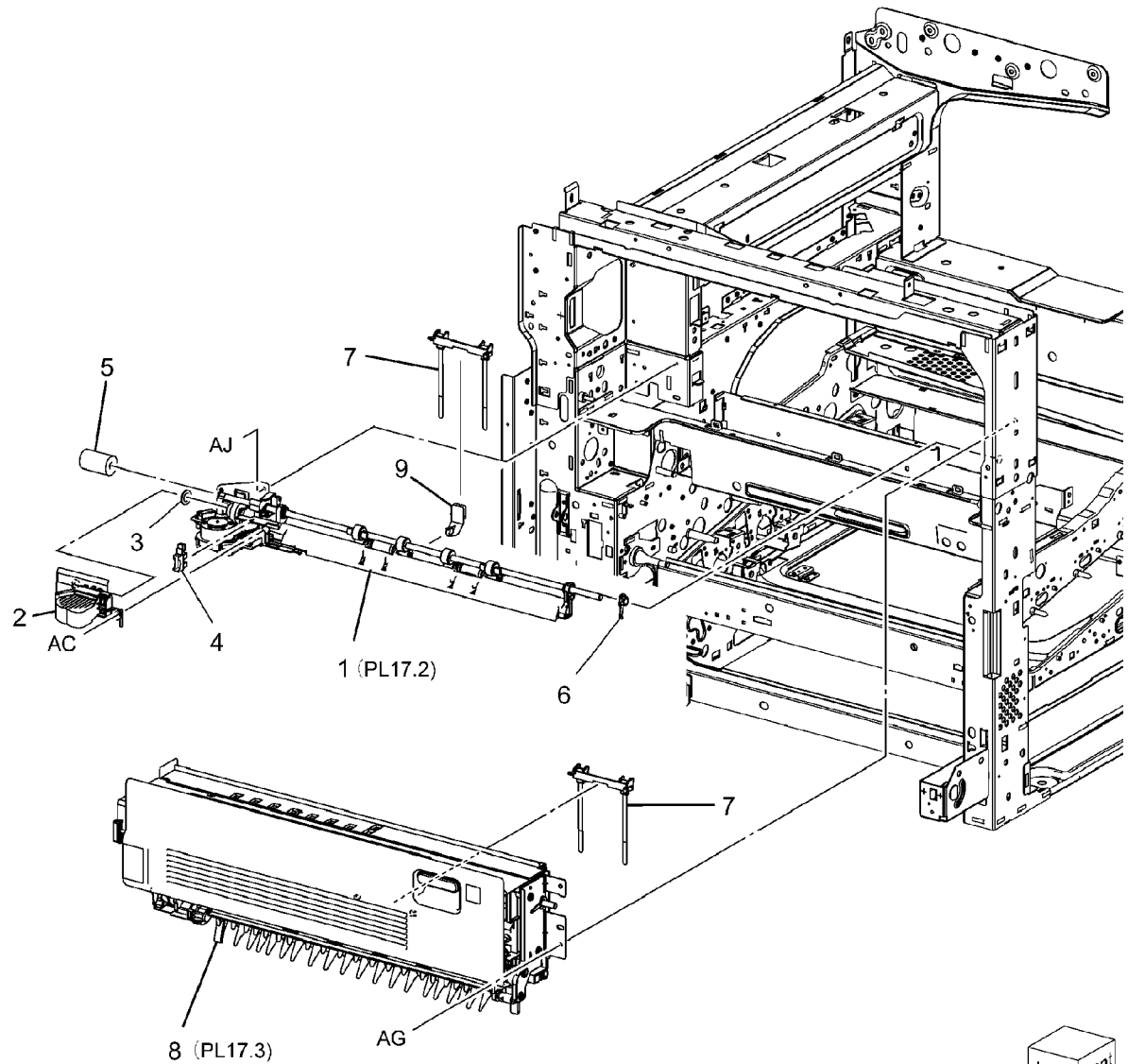


0524002A-OAK

# PL 17.1 Exit 1/OCT, Exit 2

PL 17.1

Item	Part	Description
1	–	Exit/OCT 1 Assembly (REF: PL 17.2) (REP 11.1)
2	–	Motor Cover
3	–	Washer (Not Spared)
4	930W00113	Exit 1 OCT Home Position Sensor
5	807E20620	Gear (19T)
6	013E33410	Bearing
7	036K91890	Paper Weight
8	059K78440	Exit 2 Assembly (7845/55)
–	059K68315	Exit 2 Assembly (7830/35)
9	055E58430	Exit 1 Guard



Left Front  
0517001A-NWD



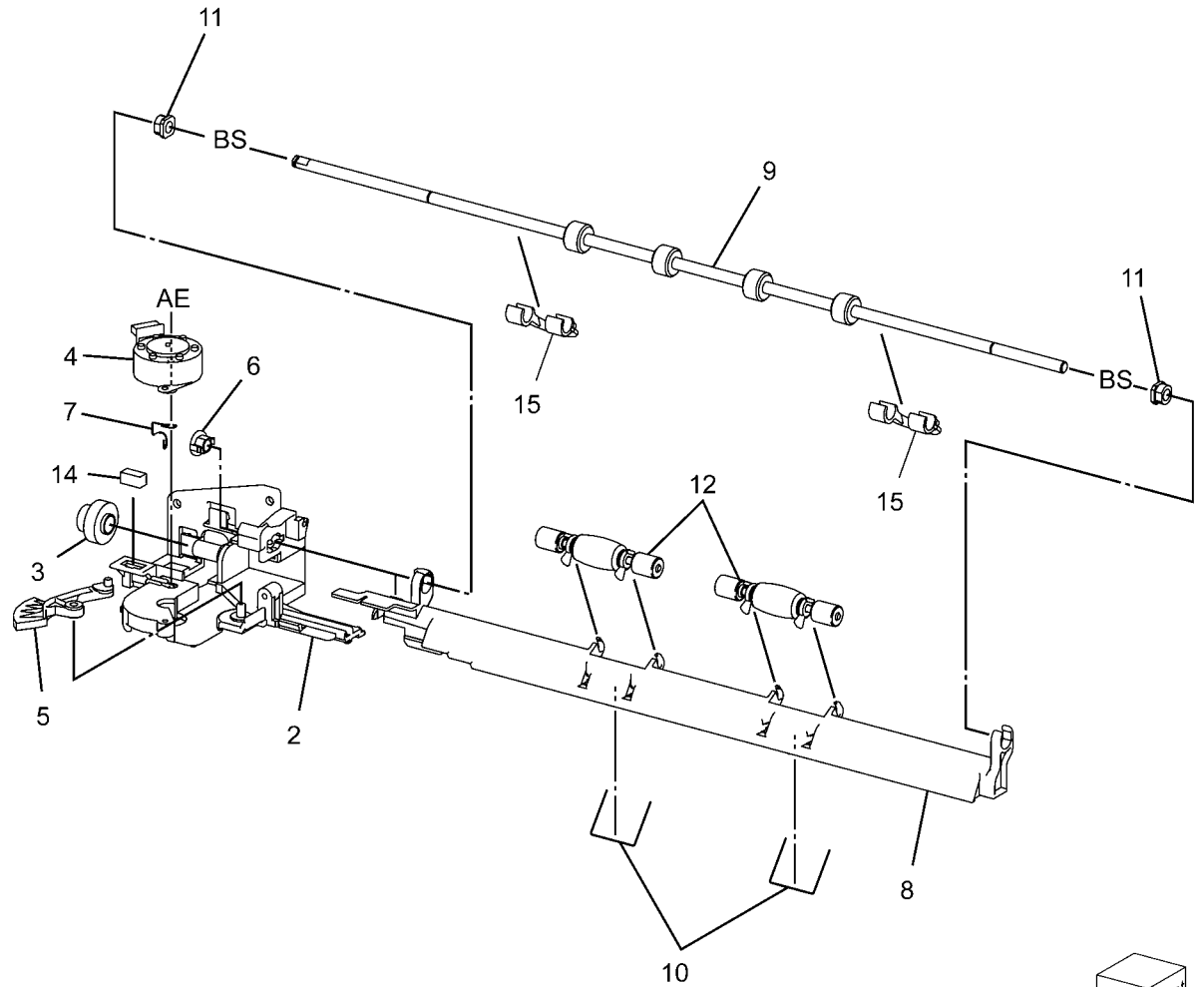
# PL 17.2 Exit 1/OCT

Item	Part	Description
1	-	Exit 1 Base Assembly (7830/35) (Not Spared)
2	-	Exit 1 Base Assembly (7845/55) (P/O PL 17.2 Item 1)
3	-	Exit 1 Gear (P/O PL 17.2 Item 1)
4	127K52280	Exit 1 OCT Motor (7830/35)
-	127K60880	Exit 1 OCT Motor (7845/55)
5	-	OCT Gear (P/O PL 17.2 Item 1)
6	013E30050	Bearing (P/O PL 17.2 Item 1)
7	-	Ground Plate (P/O PL 17.2 Item 1)
8	-	OCT Chute (P/O PL 17.2 Item 13)
9	-	OCT 1 Roller (P/O PL 17.2 Item 13)
10	-	Exit Pinch Spring (P/O PL 17.2 Item 13)
11	013E36390	Sleeve Bearing
12	059K65781	Exit Pinch Roller
13	054K44141	Oct 1 Assembly
14	-	Sensor (P/O PL 17.2 Item 1)
15	055E57522	Exit Guide (P/O PL 17.2 Item 13)
16	-	Clip

## PL 17.2

1 { 2-7,14

13 { 8-12,15

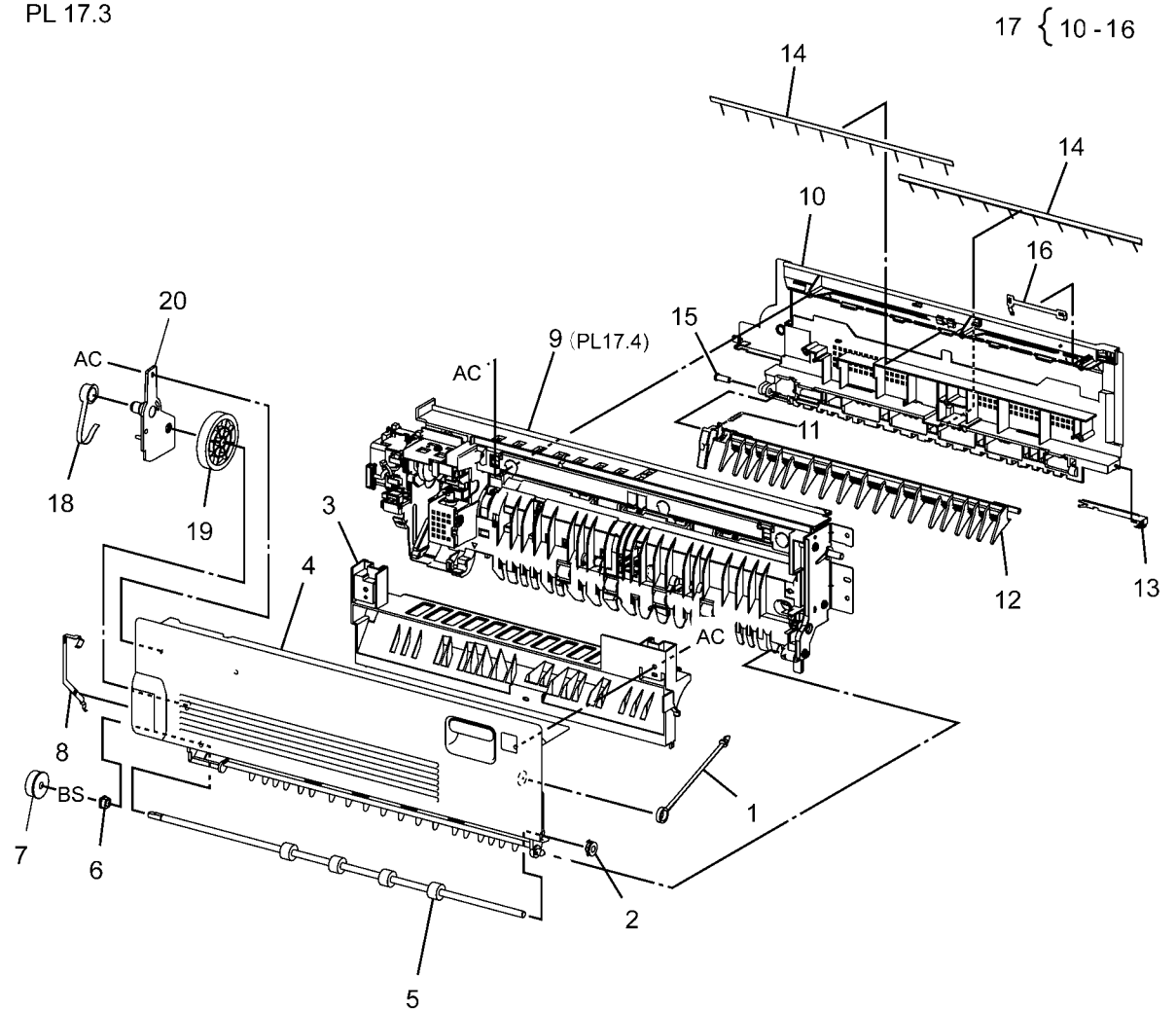


0517002A-NWD

# PL 17.3 Exit 2 (1 of 3)

Item	Part	Description
1	-	Exit 2 Front Stopper
2	-	Bearing (P/O PL 17.1 Item 8)
3	054E35673	Exit 2 Chute (Not Spared)
4	054E41602	Left Hand High Chute
5	059K53741	Inverter Roll
6	413W14760	Sleeve Bearing
7	-	Gear (22T) (P/O PL 17.1 Item 8)
8	-	Ground Plate (P/O PL 17.1 Item 8)
9	-	Exit 2 Drive Assembly
10	-	Tray 2 Guide (P/O PL 17.3 Item 21)
11	-	Gate 1 Spring (P/O PL 17.3 Item 21)
12	-	Exit Gate (P/O PL 17.3 Item 21)
13	-	Ground Plate (P/O PL 17.3 Item 21)
14	925W00001	Eliminator
15	-	Gate Stopper (P/O PL 17.3 Item 21)
16	-	Ground Plate (Not Spared)
17	-	Elimiator
18	003E75360	Exit 2 Stopper
19	-	Gear (52T) (Not Spared)
20	-	Gear Cover
21	-	Exit 2 Guide Assembly

PL 17.3

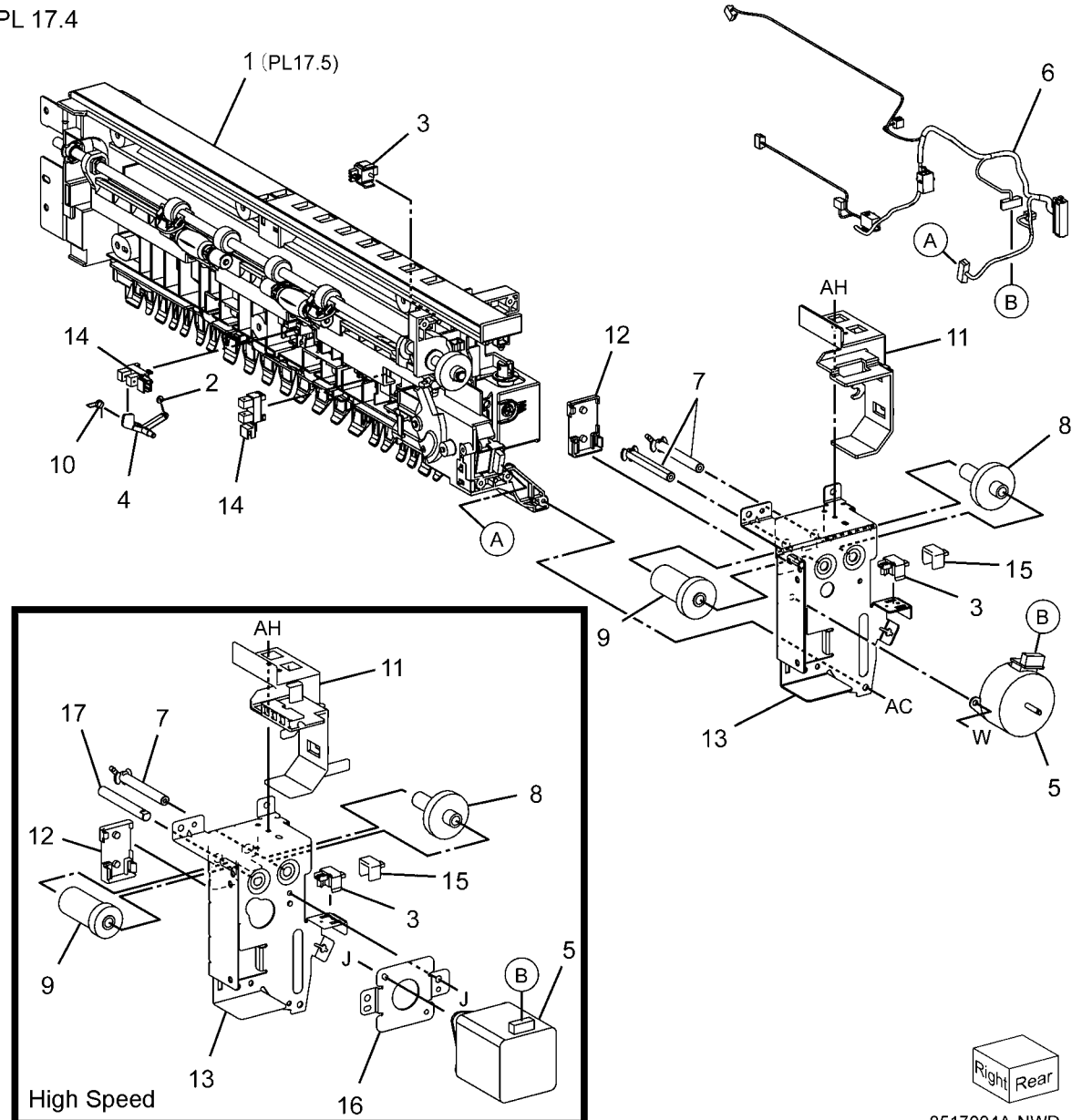


0517003A-NWD

# PL 17.4 Exit 2 (2 of 3)

Item	Part	Description
1	-	Exit 2 OCT Assembly (P/O PL 17.1 Item 8)
2	059E98780	Actuator Roller
3	110E11580	Face Up Tray Detect Switch; L/H High Cover Switch
4	-	Actuator (Not Spared)
5	127K65890	Exit 2 Drive Motor (High Speed)
-	127K58400	Exit 2 Drive Motor (Low Speed)
6	-	Wire Harness (Exit 2) (Not Spared)
7	-	Gear Shaft
8	-	Gear (28T) (Not Spared)
9	-	Gear (16T/48T) (Not Spared)
10	809E37332	Spring
11	-	Rear Cover (Not Spared)
12	-	Shaft Cover (Not Spared)
13	-	Rear Bracket (P/O PL 17.1 Item 8)
14	930W00123	Exit 2, OCT Home Position, Exit 2 Sensor
15	-	Switch Cover (Not Spared)
16	-	Motor Bracket (4475, 5575)
17	-	Gear Shaft (Not Spared) (7545, 7556)

PL 17.4

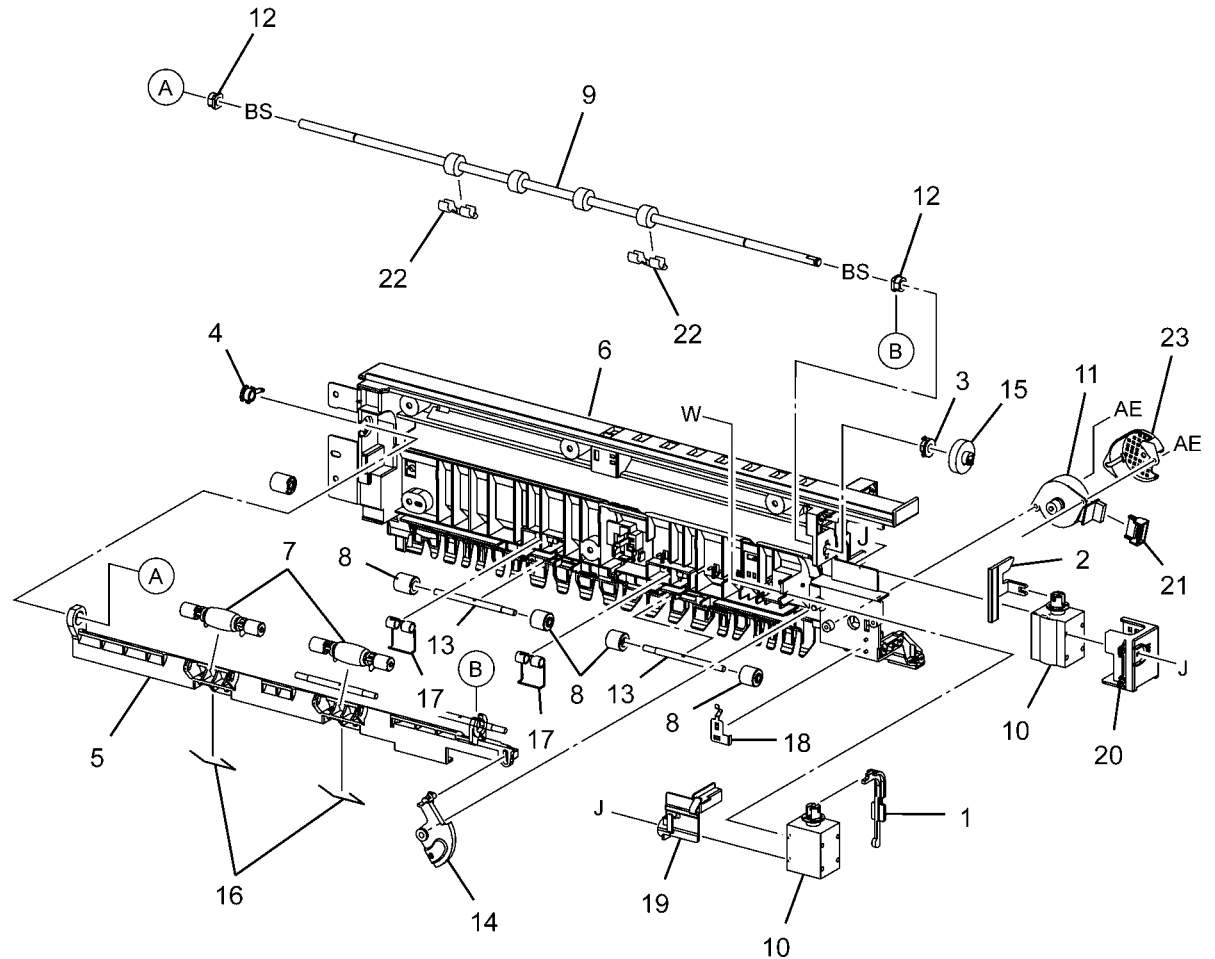


Right Rear  
0517004A-NWD

# PL 17.5 Exit 2 (3 of 3)

Item	Part	Description
1	-	Exit Gate Link (P/O PL 17.1 Item 8)
2	-	Face Up Gate Solenoid Link (P/O PL 17.1 Item 8)
3	-	Bearing (P/O PL 17.1 Item 8)
4	013E33410	Bearing
5	-	OCT 2 Chute (P/O PL 17.1 Item 8)
6	-	Low 2 Chute (P/O PL 17.1 Item 8)
7	059K65781	Exit Pinch Roller
8	059E03531	Inverter Pinch Roll
9	-	OCT Roller (P/O PL 17.1 Item 8)
10	921W11601	Exit 2 Gate Solenoid; Face Up Gate Solenoid
11	127K60880	Exit 2 OCT Motor (7845/55)
-	127K52280	Exit 2 OCT Motor (7830/35)
12	013E36390	Sleeve Bearing
13	-	Inverter Pinch Shaft (P/O PL 17.1 Item 8)
14	-	Offset 2 Gear (Not Spared)
15	-	Gear (22T) (P/O PL 17.1 Item 8)
16	809E99520	Exit Pinch Spring
17	809E75460	Inverter Pinch Spring
18	-	Ground Plate (P/O PL 17.1 Item 8)
19	-	Exit 2 Gate Solenoid Cover (P/O PL 11.1 Item 8)
20	-	Face Up Gate Solenoid Cover (P/O PL 17.1 Item 8)
21	-	Connector Cover (P/O PL 17.1 Item 8)
22	055E57521	Exit 2 Guard
23	-	Motor Cover (Not Spared)
24	-	Clip (Not Spared)

PL 17.5



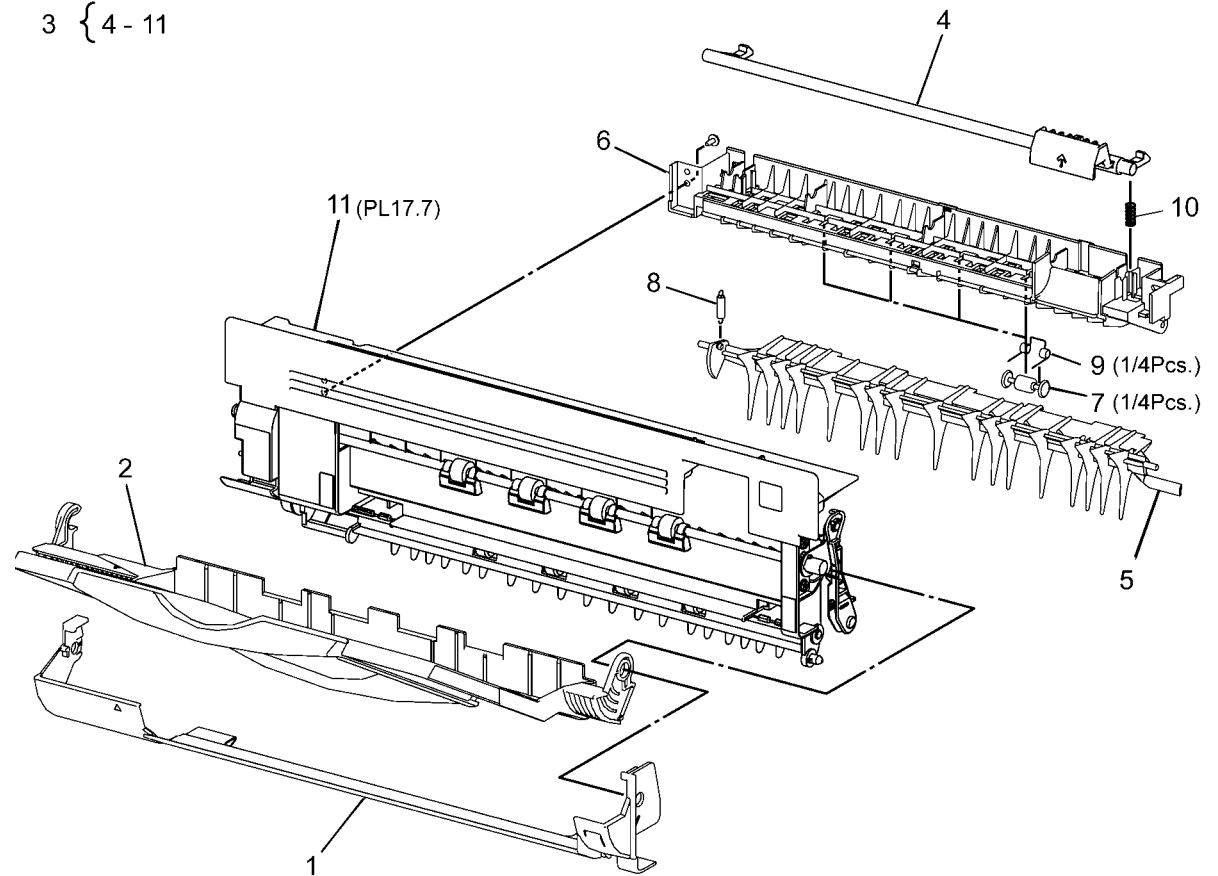
0517005A-NWD

## PL 17.6 Side Tray Unit (1 of 2)

Item	Part	Description
1	848E21532	Tray Cover
2	050K62502	Left Side Output Tray
3	-	Left Side Output Tray Transport Assembly (Not Spared)
4	803E04720	Latch Handle
5	-	Exit 2 Gate (P/O PL 17.6 Item 3)
6	-	Upper Chute (P/O PL 17.6 Item 3)
7	-	Pinch Roll (P/O PL 17.6 Item 3)
8	-	Spring (P/O PL 17.6 Item 3)
9	-	Pinch Spring (P/O PL 17.6 Item 3)
10	-	Spring (P/O PL 17.6 Item 3)
11	-	Transport Roll Assembly

PL 17.6

3 { 4 - 11

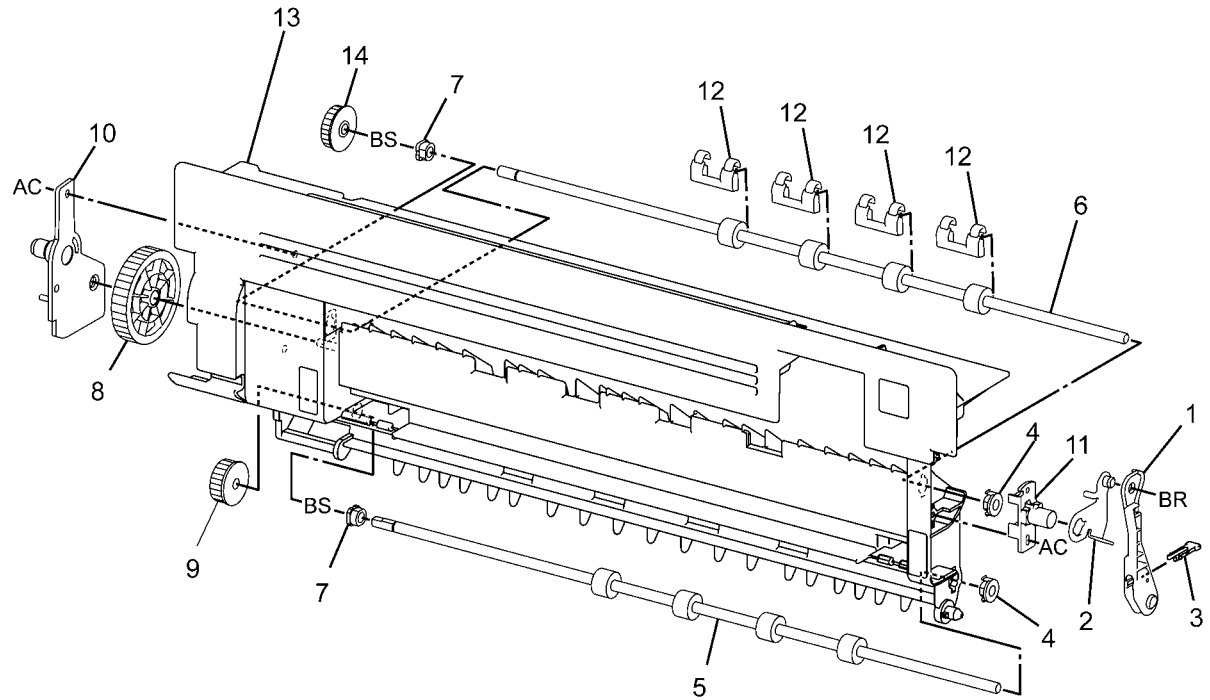


0517006A-NWD

## PL 17.7 Side Tray Unit (2 of 2)

Item	Part	Description
1	-	Link (P/O PL 17.6 Item 11)
2	-	Link Bracket (P/O PL 17.6 Item 11)
3	-	Spacer (P/O PL 17.6 Item 11)
4	-	Bearing (P/O PL 17.6 Item 11)
5	-	Inverter Roll (P/O PL 17.6 Item 11)
6	-	Roll (P/O PL 17.6 Item 11)
7	-	Bearing (P/O PL 17.6 Item 11)
8	-	Gear (52T) (P/O PL 17.6 Item 11)
9	-	Gear (22T)
10	-	Gear Cover (P/O PL 17.6 Item 11)
11	-	Tray Support (P/O PL 17.6 Item 11)
12	-	Exit Guard (P/O PL 17.6 Item 11)
13	-	Cover Assembly (P/O PL 17.6 Item 11)
14	-	Gear (P/O PL 17.6 Item 11)

PL 17.7

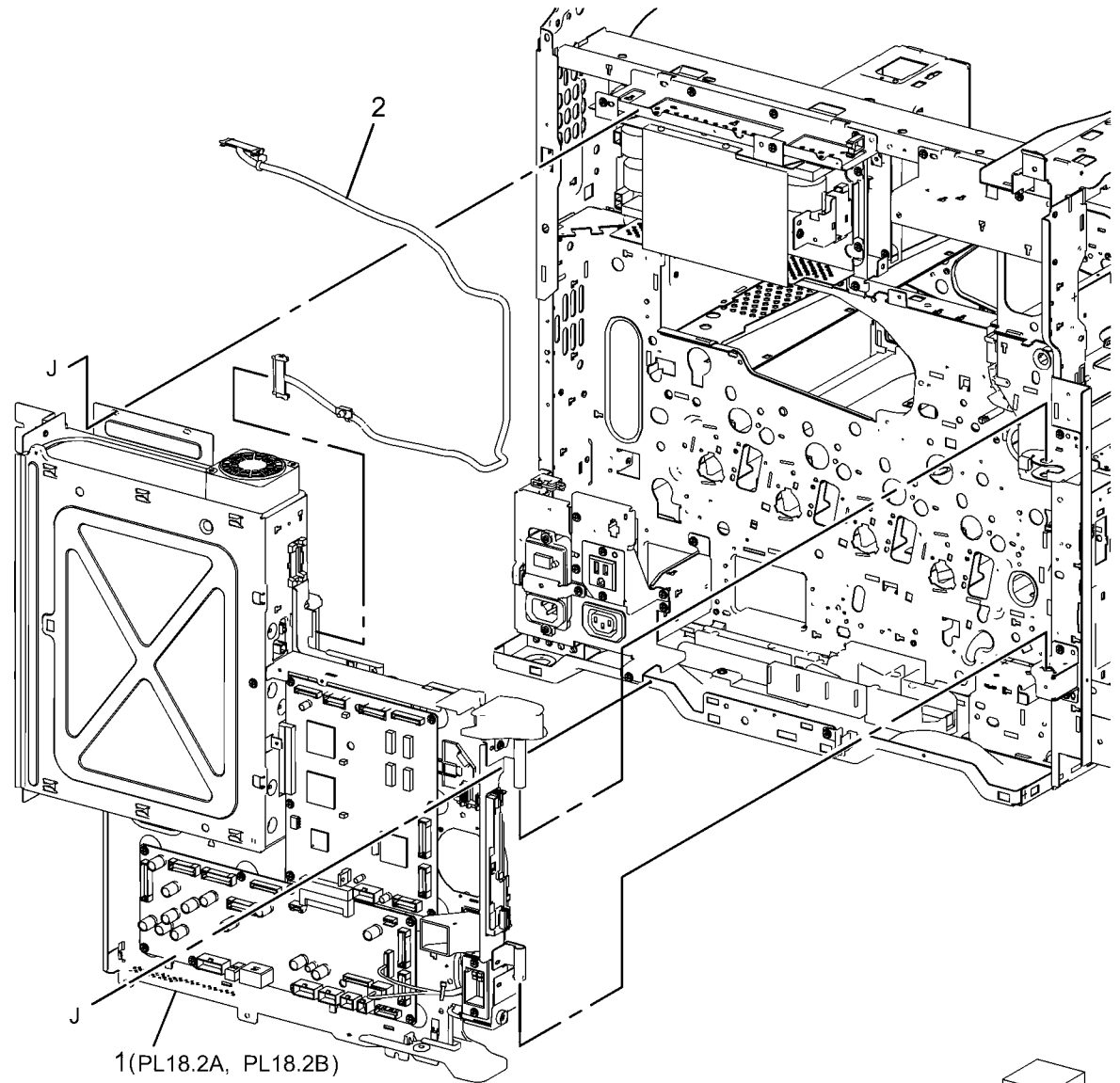


0517007A-NWD

# PL 18.1 PWB Chassis Unit (1 of 2)

Item	Part	Description
1	-	PWB Chassis Unit (Not Spared)
2	117K39082	IIT Control Cable

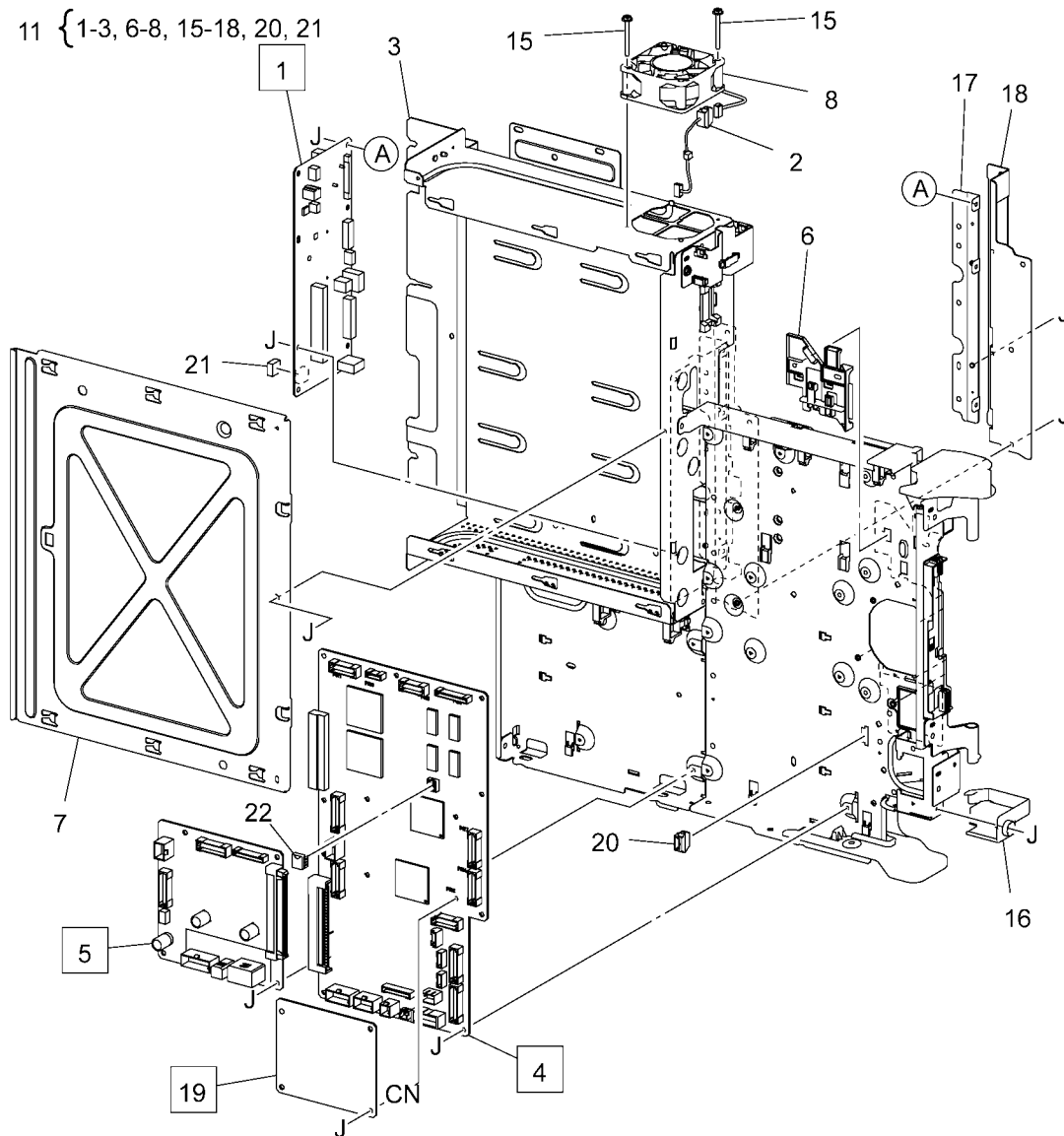
PL18.1



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# PL 18.2A PWB Chassis Unit (Low Speed)

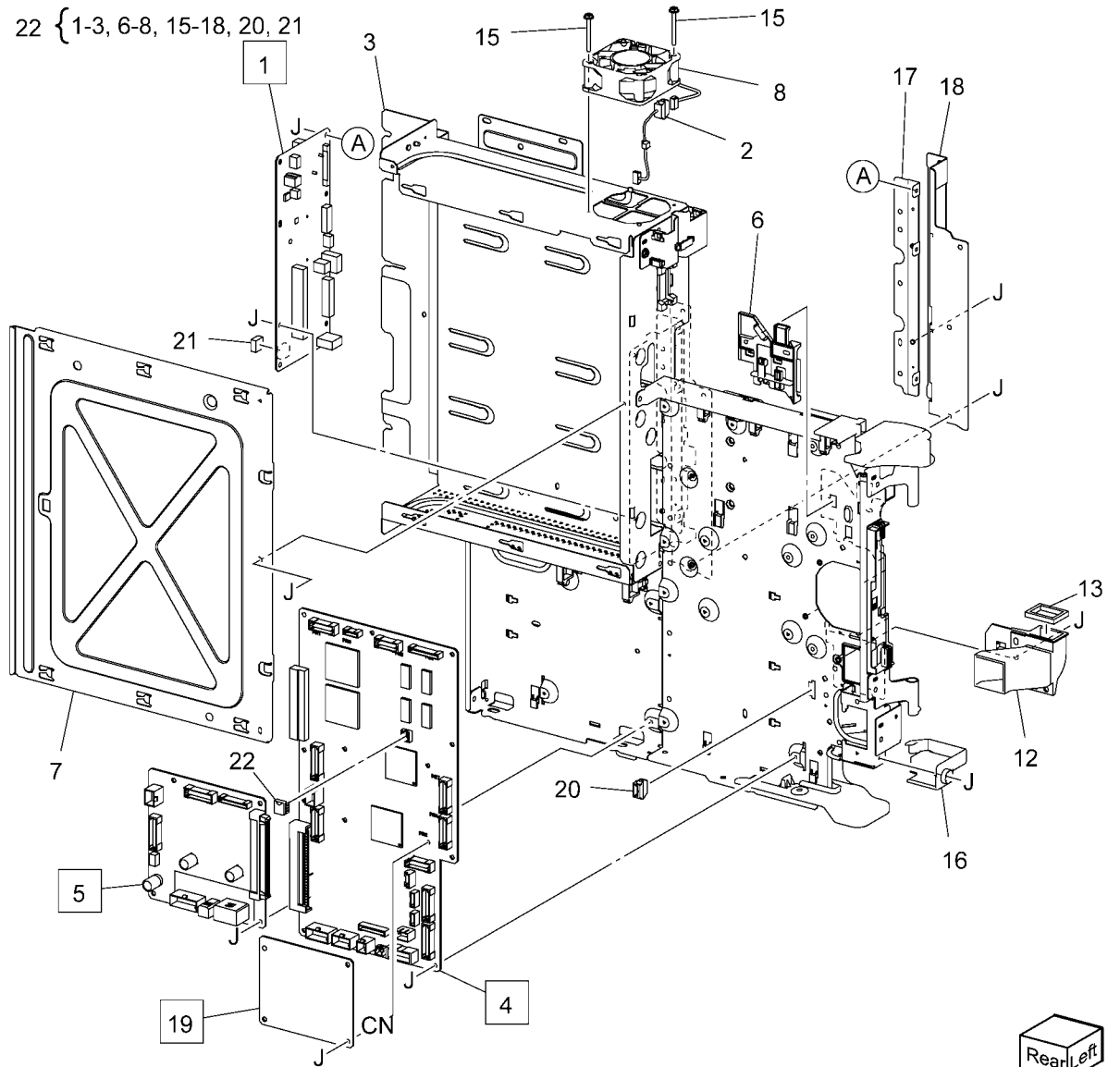
Item	Part	Description
1	960K61591	Backplane PWB (P/O PL 18.2A Item 11) (REP 1.3)
2	-	Fan Wire Harness (P/O PL 18.2A Item 11)
3	-	Chassis Assembly (P/O PL 18.2A Item 11)
4	960K61271	MDM PWB (P/O PL 18.2A Item 11) (REP 1.6)
5	960K61280	MDS PWB (REP 1.4)
6	-	Cable Holder
7	-	SBC Cover (P/O PL 18.2A Item 11)
8	-	SCB Fan (P/O PL 18.2A Item 11)
11	101K63301	PWB Chassis
15	-	Screw (P/O PL 18.2A Item 11)
16	-	Harness Guide (P/O PL 18.2A Item 11) (REP 1.5)
17	-	Bracket (P/O PL 18.2A Item 11)
18	-	Bracket (P/O PL 18.2A Item 11)
19	960K57361	MCU-PF PWB (REP 1.5)
20	-	Connector (P/O PL 18.2A Item 11)
21	-	EEPROM (P/O PL 18.2A Item 11)





# PL 18.2B PWB Chassis Unit (High Speed)

Item	Part	Description
1	960K60311	Backplane PWB (REP 1.3)
2	-	Fan Wire Harness (P/O PL 18.2B Item 22)
3	-	Chassis Assembly (P/O PL 18.2B Item 22)
4	960K60391	MDM PWB (REP 1.6)
5	960K60400	MDS PWB (REP 1.4)
6	-	Cable Holder
7	-	SCB Cover
8	-	SCB Fan (P/O PL 18.2B Item 22)
11	-	Duct Assembly
12	-	Duct (P/O PL 18.2B Item 11)
13	-	Duct (P/O PL 18.2B Item 11)
15	-	Screw (P/O PL 18.2B Item 22)
16	-	Harness Guide (P/O PL 18.2B Item 22)
17	-	Bracket (P/O PL 18.2B Item 22)
18	-	Bracket (P/O PL 18.2B Item 22)
19	960K57361	MCU-PF PWB (REP 1.5)
20	-	Connector (P/O PL 18.2B Item 22)
21	-	EEPROM (P/O PL 18.2B Item 22)
22	101K61721	PWB Chassis

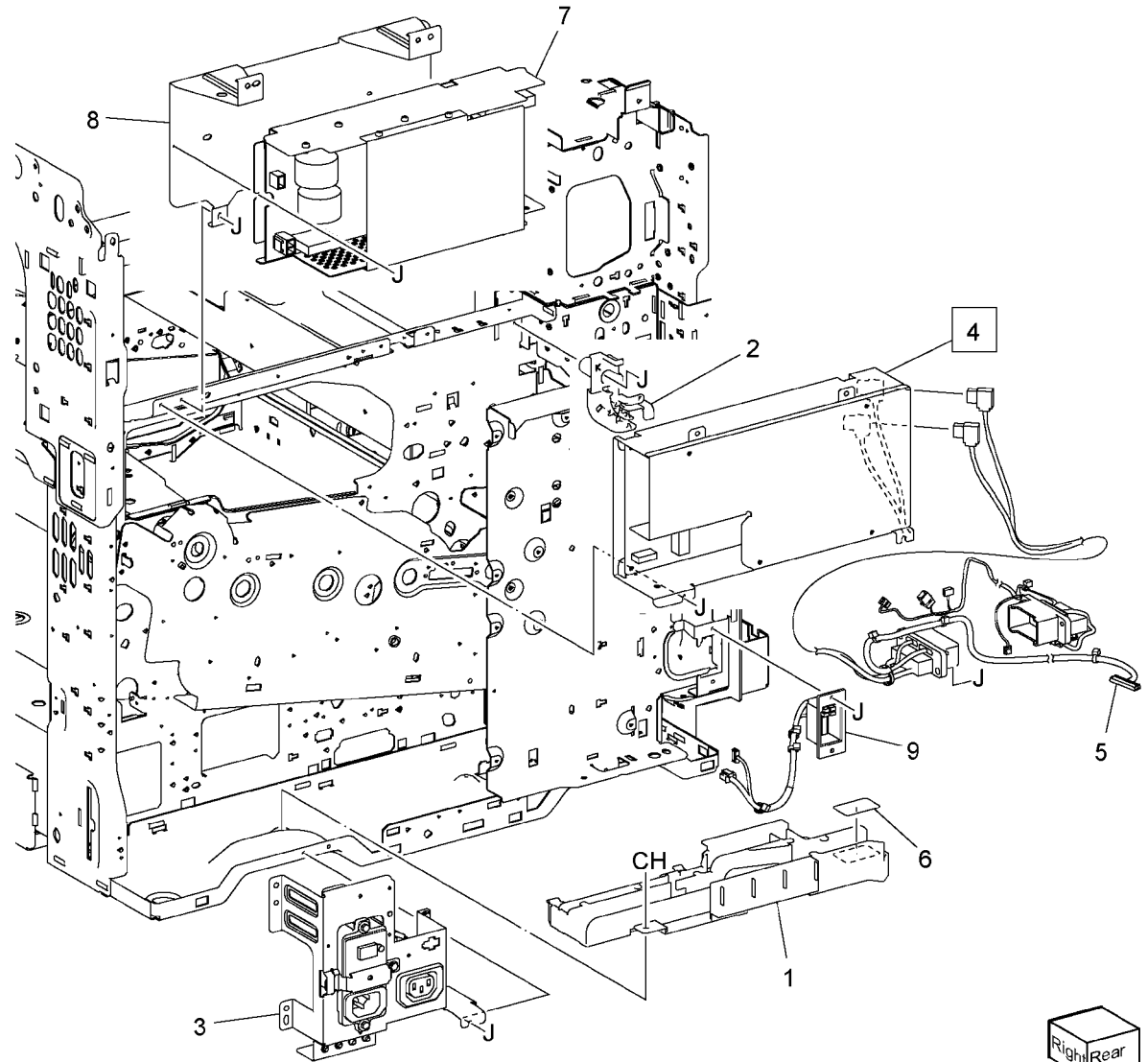


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## PL 18.3 IOT Rear

Item	Part	Description
1	-	Harness Guide (Not Spared)
2	-	Harness Guide (Not Spared)
3	-	GFI Chassis Assembly (Not Spared)
4	105E20561	IH PWB (120V)
-	105E20631	IH PWB (220V)
5	962K99240	Fuser Harness (120V)
-	952K01361	Fuser Drawer Harness (220V)
6	-	Shield (Not Spared)
7	105E20430	Sub LVPS
8	-	Bracket (Not Spared) (7545, 7556)
9	-	Harness Guide (FAX)

PL 18.3

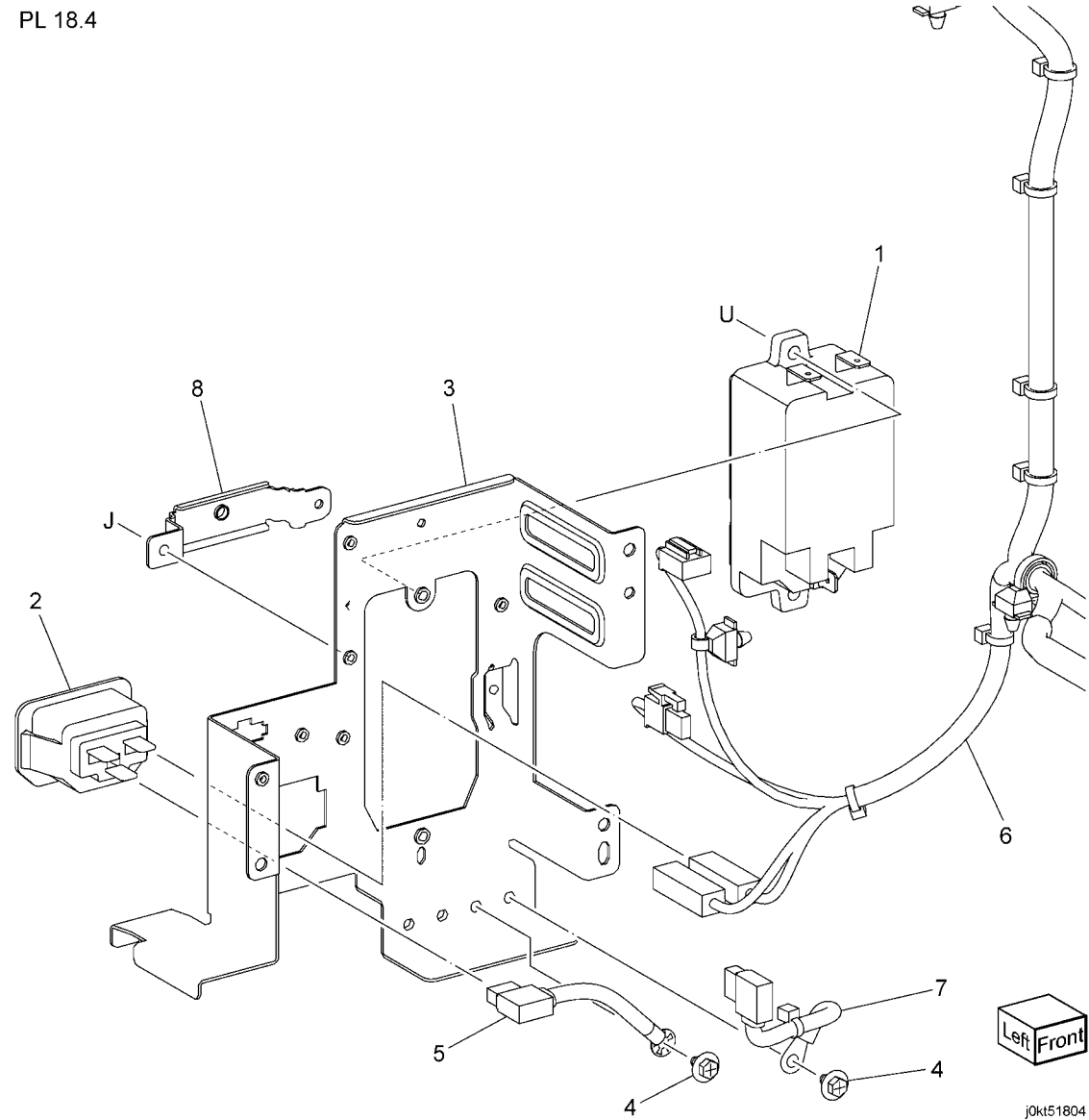


j0kt51803

## PL 18.4 GFI Chassis

Item	Part	Description
1	908W01201	GFI
2	113E23720	Finisher Outlet
3	-	GFI Chassis (Not Spared)
4	952K02851	Wire Harness (7845/55)
-	952K02841	Wire Harness (XC) (7830/35)
5	-	Bracket (Not Spared)
6	-	Wire Harness (Not Spared)
7	-	Wire Harness (Not Spared)
8	-	Wire Harness (Not Spared)

PL 18.4

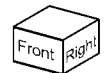
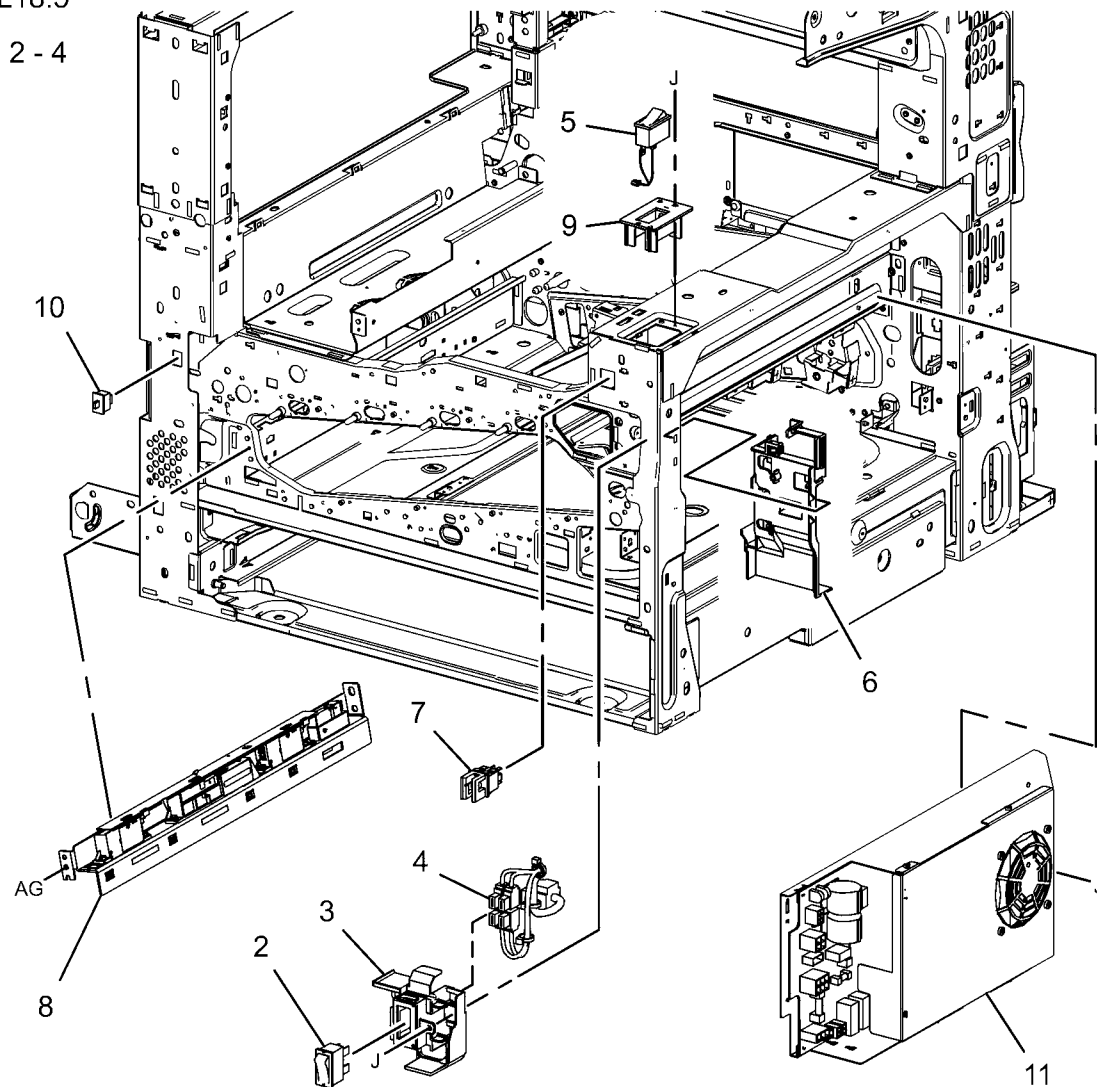


## PL 18.5 Front/Right

Item	Part	Description
1	101K65530	Main Power Switch And Harness
2	110E13090	Main Power Switch
3	-	Bracket (P/O PL 18.5 Item 1)
4	-	Wire Harness (P/O PL 18.5 Item 1)
5	110K15981	Power Switch
6	-	Harness Guide (Not Spared)
7	110E14800	Front Cover Interlock Switch
8	130K78581	MOB ADC Assembly (REP 9.16)
9	-	Bracket (Not Spared)
10	-	IBT Front Cover Switch (Not Spared)
11	105E20421	Main LVPS

PL18.5

1 { 2 - 4

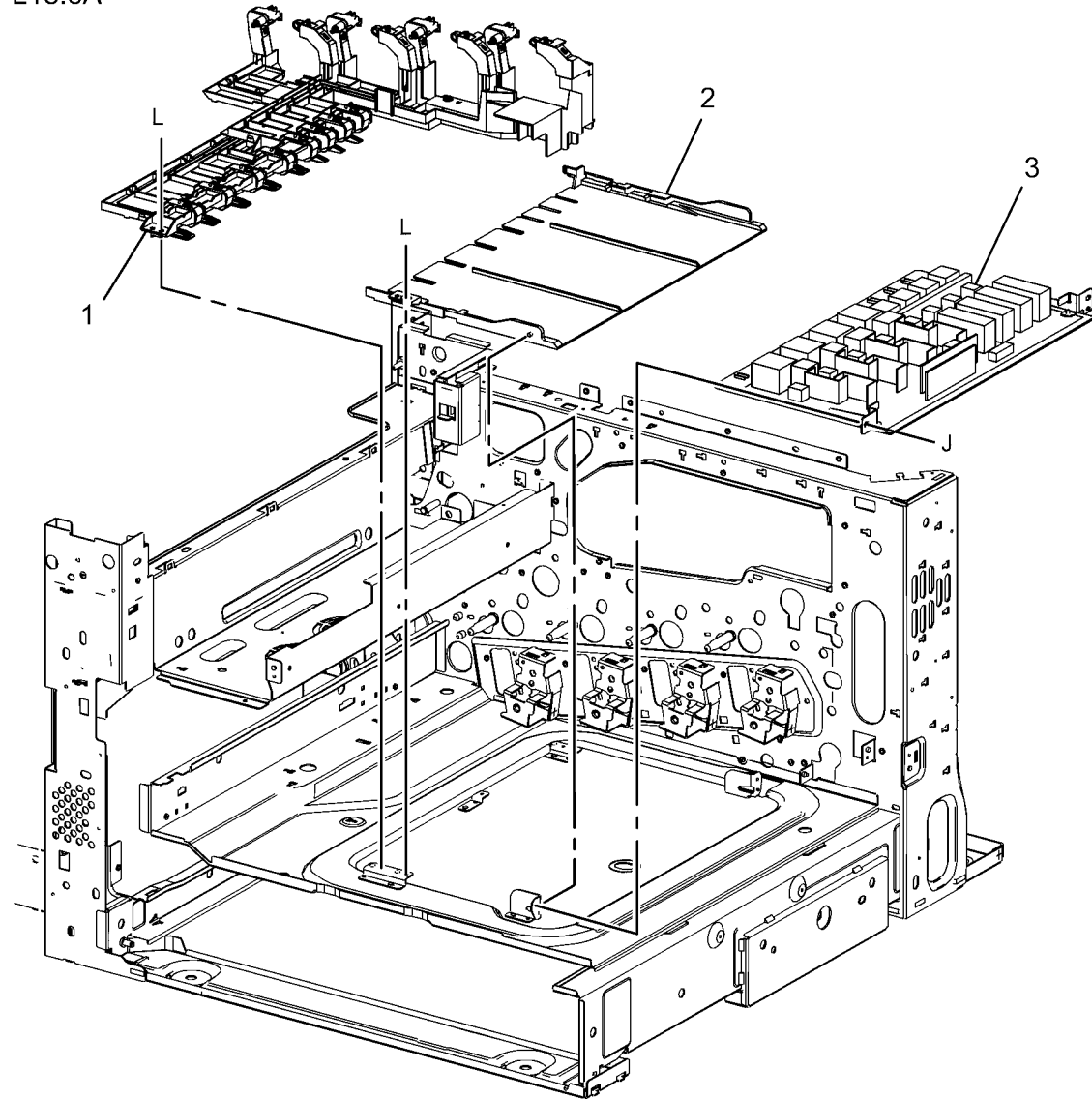


0518005A-NWD

## PL 18.6A Bottom (Low Speed)

Item	Part	Description
1	848K13850	HVPS Housing
2	—	HVPS Guide
3	105E20490	Developer/BCR HVPS (REP 1.7)

PL18.6A

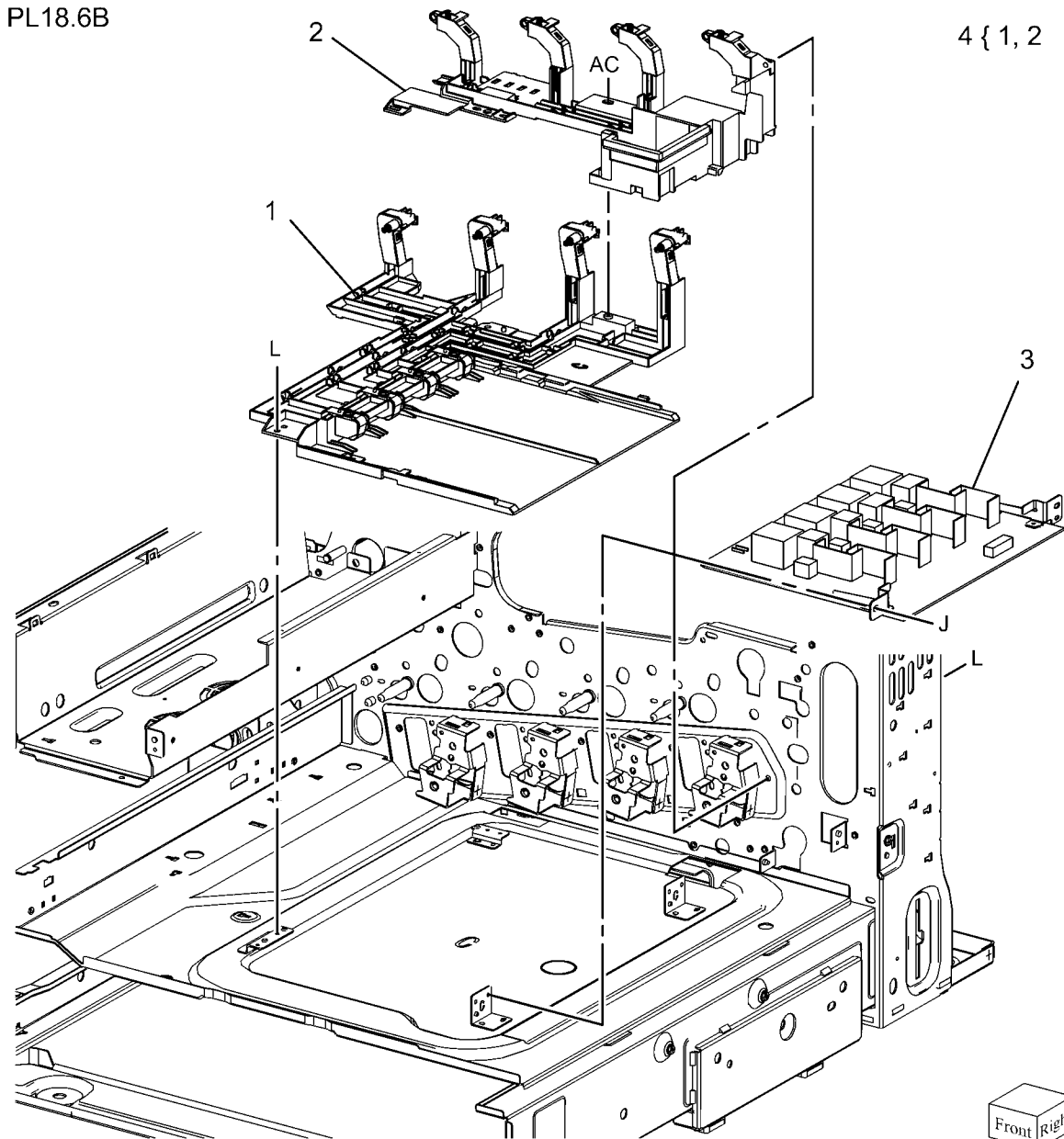


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# PL 18.6B Bottom (High Speed)

Item	Part	Description
1	-	HVPS Housing (P/O PL 18.6B Item 4)
2	-	HVPS Housing (P/O PL 18.6B Item 4)
3	105E19352	HVPS (BCR) (REP 1.7)
4	848K36390	HVPS Housing

PL18.6B

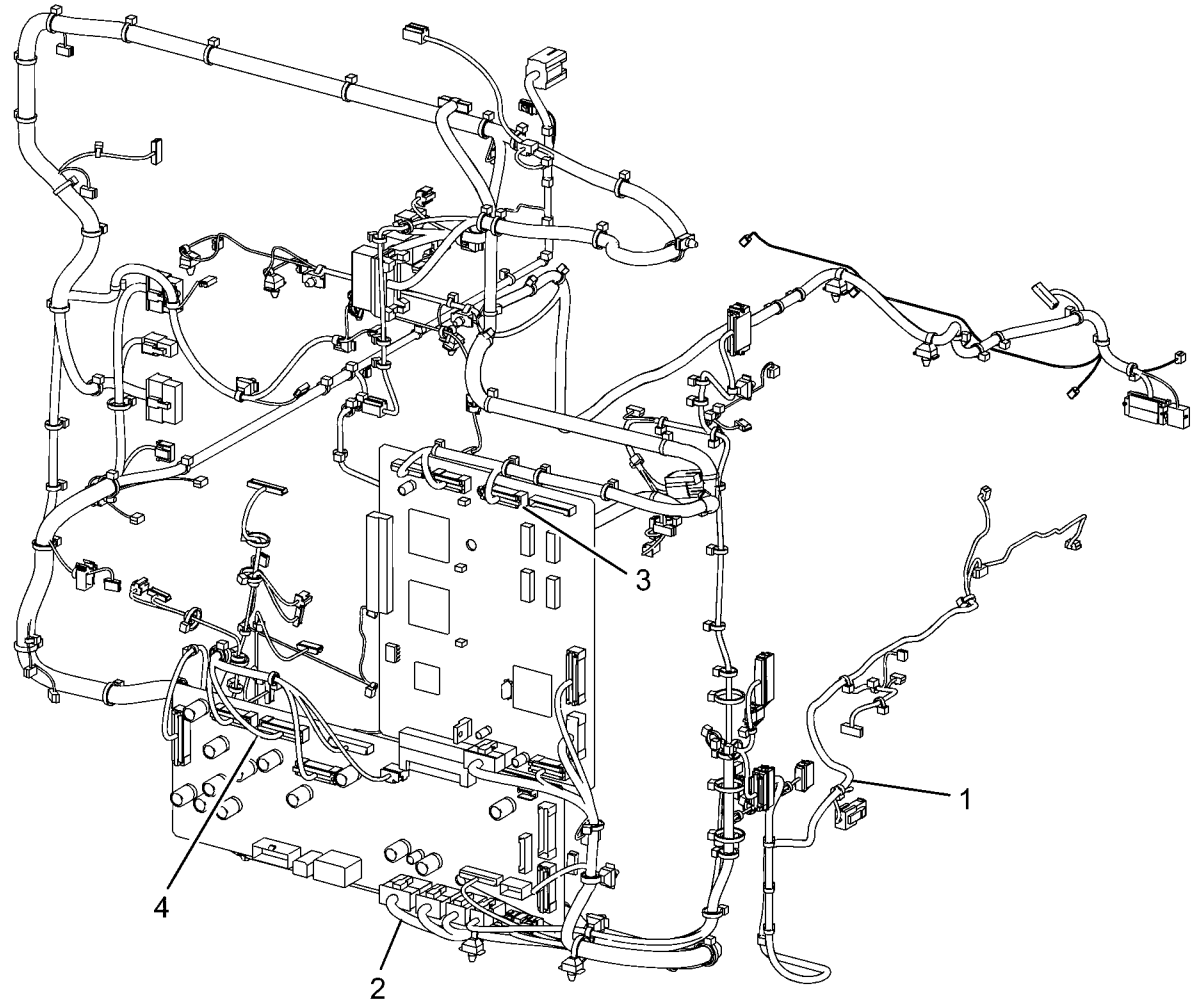


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## PL 18.7 Wire Harness

Item	Part	Description
1	-	Left Wire Harness (Not Spared)
2	-	Right Wire Harness (Not Spared)
3	-	Right Wire Harness (Not Spared)
4	-	Front Wire Harness (Not Spared)

PL18.7



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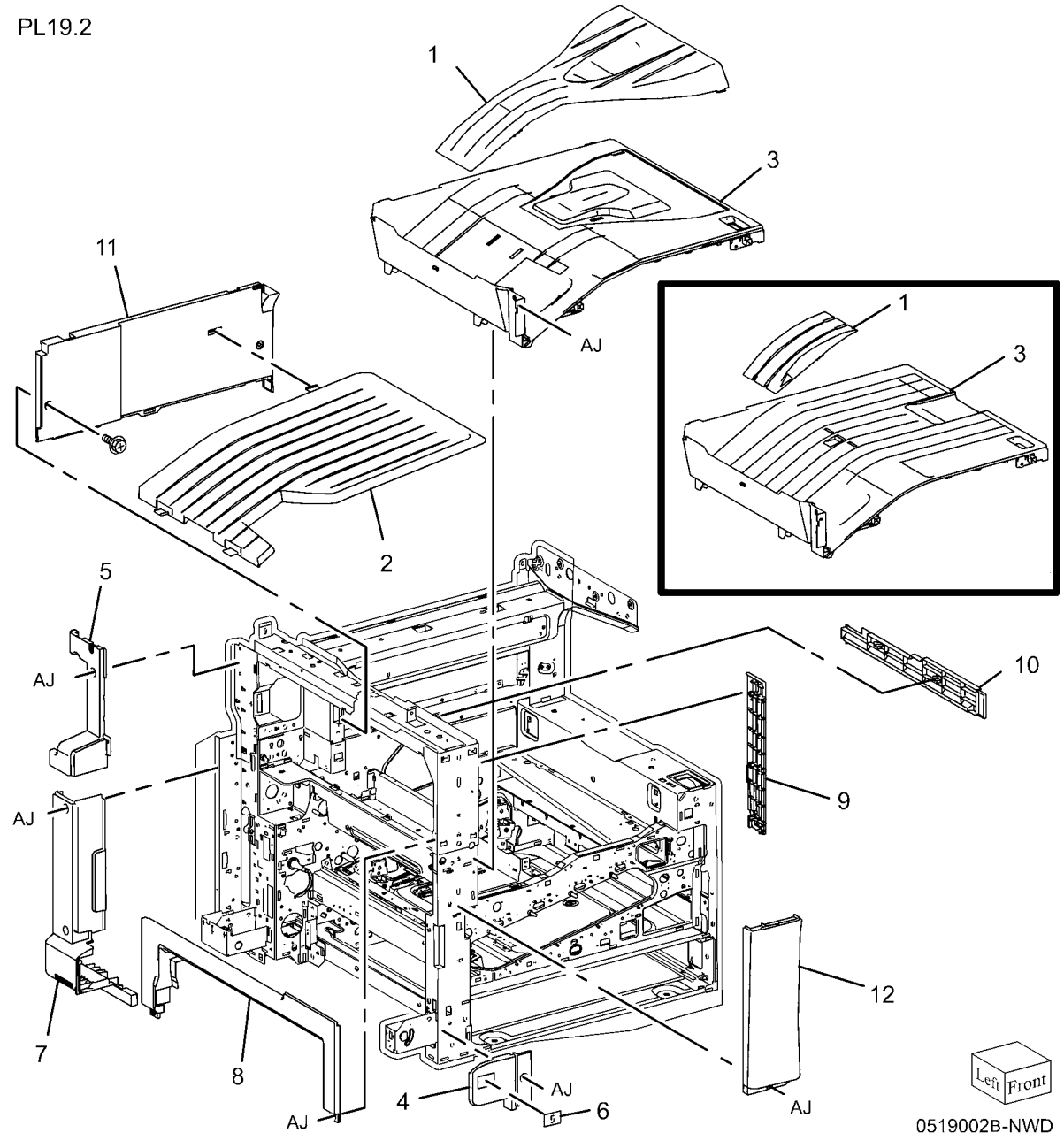




## PL 19.2 Covers (2 of 3)

Item	Part	Description
1	050E25450	Add Tray (High Speed)
-	050E25690	Add Tray (Low Speed)
2	050E25661	Exit 2 Tray
3	-	Top Cover (Not Spared)
4	-	MSI Front Cover
5	-	Left Rear Upper Cover (Not Spared)
6	-	Number Label (5) (Not Spared)
7	-	Left Rear Lower Cover
8	-	Left Upper Cover (Not Spared)
9	-	Exit Front Cover (Not Spared)
10	-	Exit Upper Cover (Not Spared)
11	-	Top Rear Cover (Not Spared)
12	848E45051	Front Left Cover

PL19.2

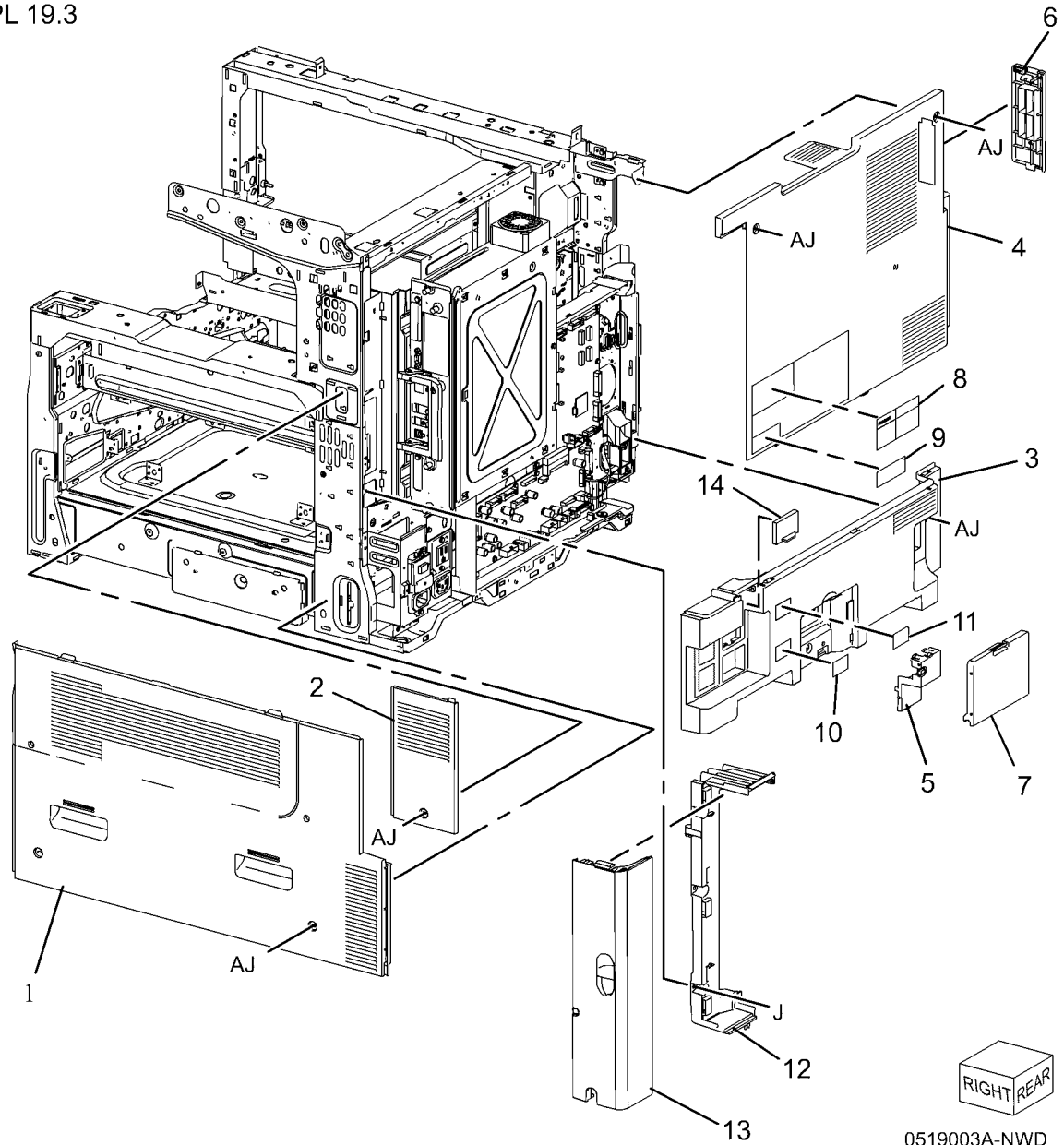


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## PL 19.3 Covers (3 of 3)

Item	Part	Description
1	—	Right Cover (Not Spared)
2	—	Right Rear Cover (Not Spared)
3	—	Rear Lower Cover (Not Spared)
4	—	Rear Upper Cover (Not Spared)
5	—	DFE Outlet Cover (Not Spared)
6	—	Filter Cover (Not Spared)
7	—	MCU Cover (Not Spared)
8	—	Data Plate (Not Spared)
10	—	Label (Outlet) (Not Spared)
11	—	GFI Label (Not Spared)
12	—	Rear Control Unit Cover (Not Spared)
13	—	Control Unit Connector Cover (Not Spared)
14	—	DFE Cover (Not Spared)

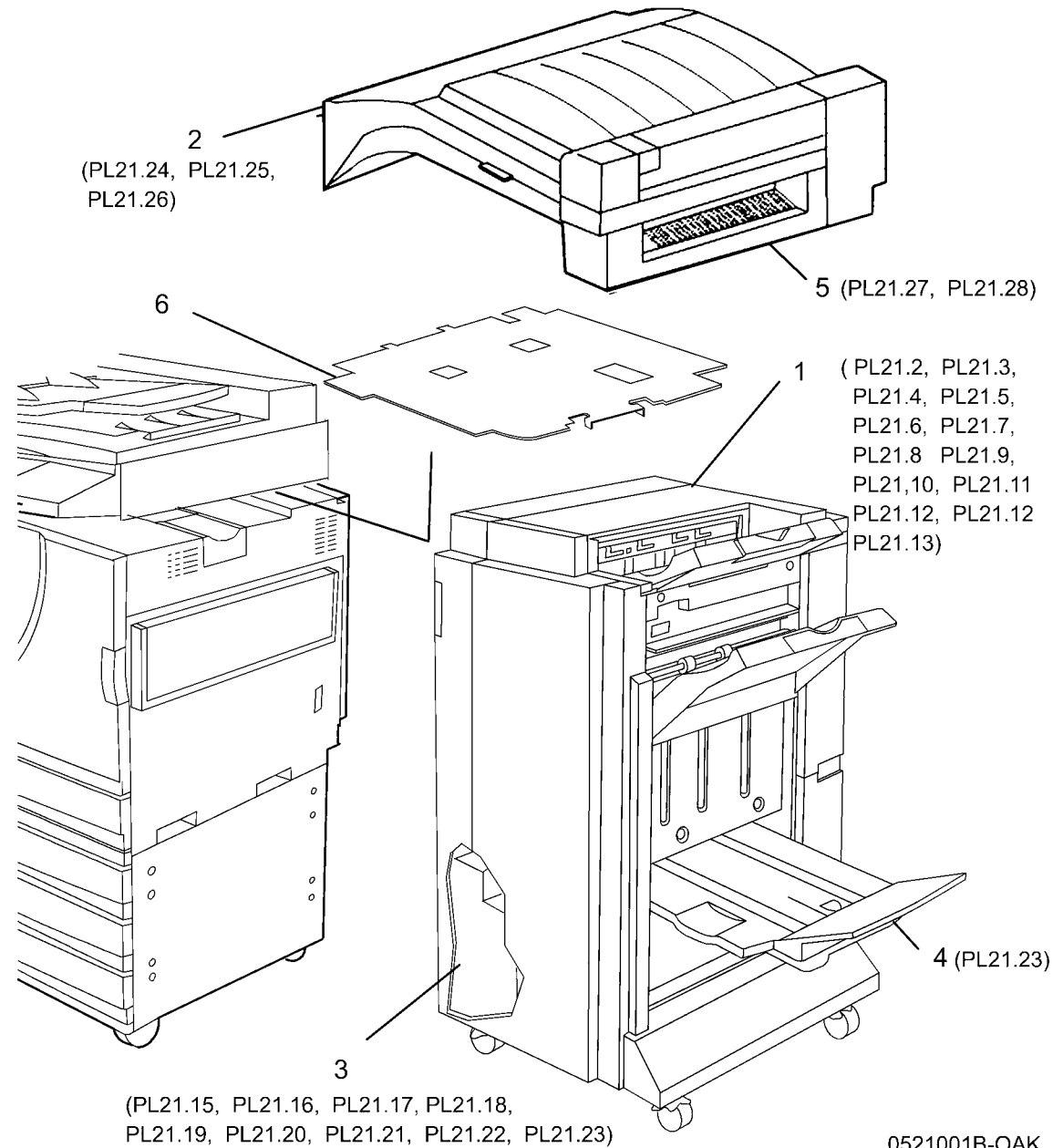
PL 19.3



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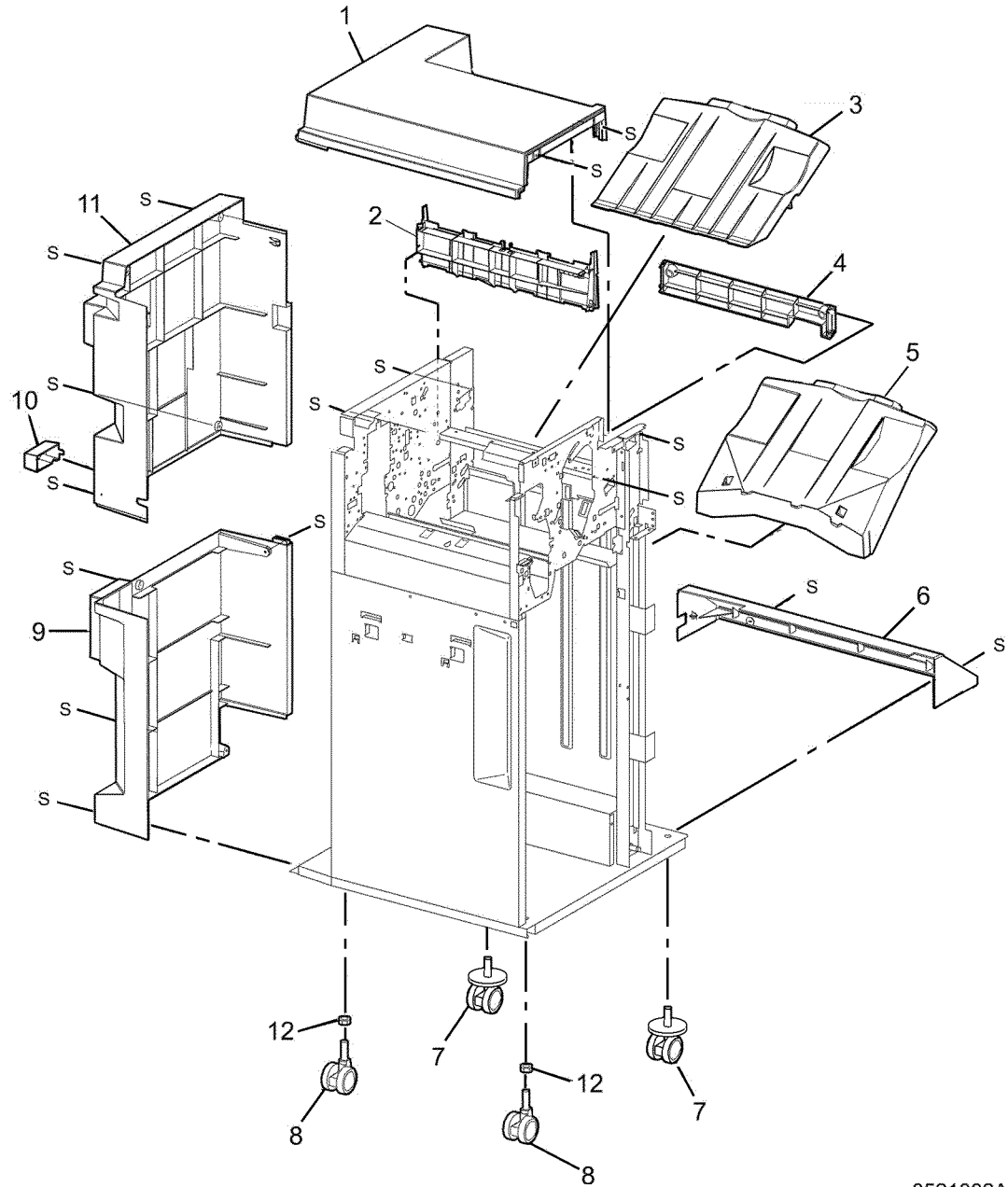
## PL 21.1 Professional Finisher

Item	Part	Description
1	-	A/P Finisher (Not Spared) (REP 21.11)
2	059K66485	H-Transport Assembly (REP 21.12)
3	-	Booklet Maker (Not Spared) (REP 21.16)
4	-	Booklet Tray (Not Spared)
5	-	Decurler Transport Assembly (Not Spared)
6	-	Finisher Plate (Not Spared)



## PL 21.2 Finisher Cover (1 of 2)

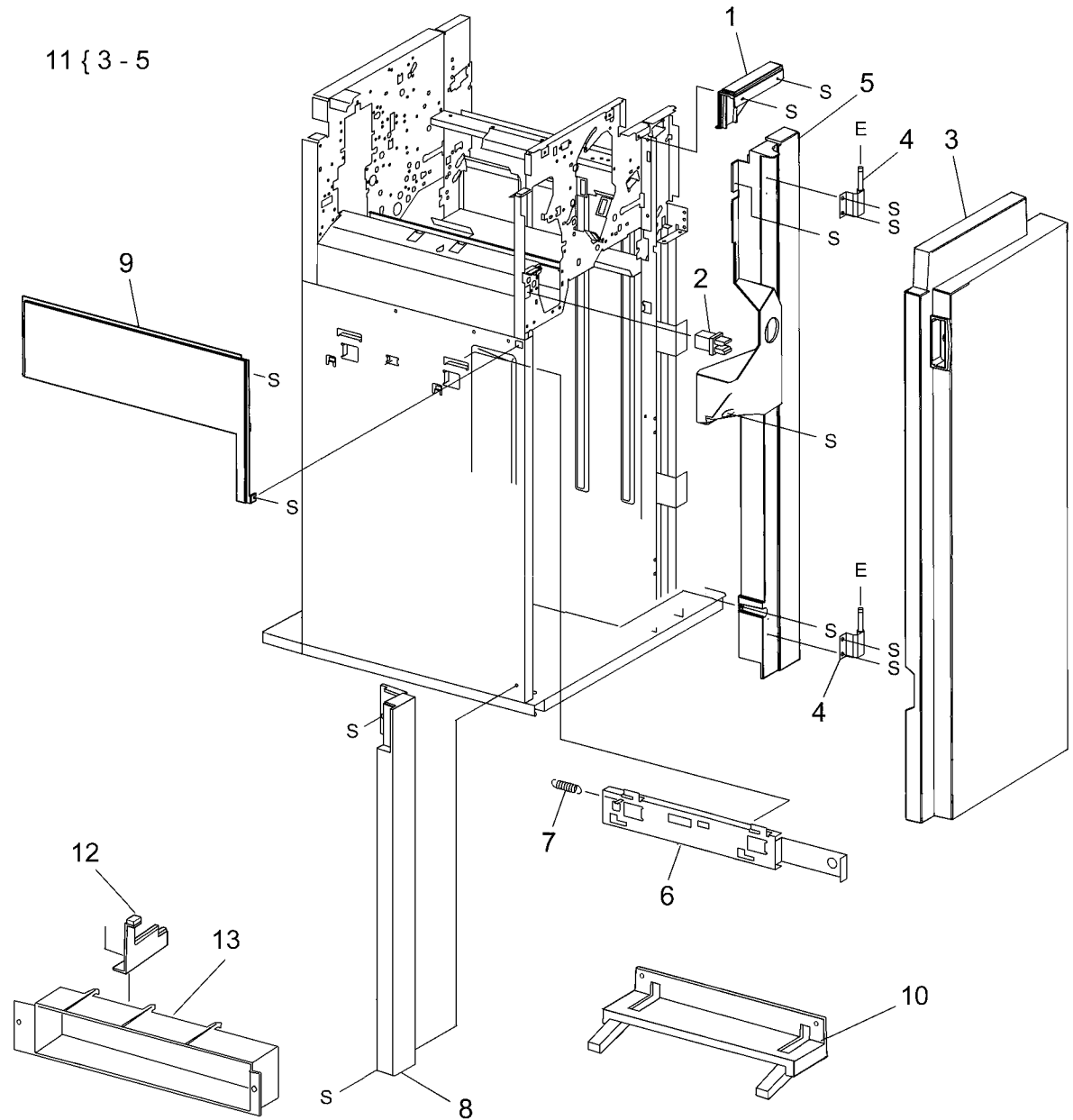
Item	Part	Description
1	802E78090	Top Cover (REP 21.4)
2	038E31290	Tray Spring Guide (Not Spared) (REP 21.8)
3	050K51270	Top Tray (REP 21.6)
4	-	Eject Cover (Not Spared) (REP 21.7)
5	050K51280	Stacker Tray (REP 21.19)
6	-	Bottom Cover (Not Spared)
7	017E98040	Caster
8	017E97230	Caster
9	-	Rear Lower Cover (Not Spared) (REP 21.3)
10	-	H-Transport Connector Cover (Not Spared)
11	-	Rear Upper Cover (Not Spared) (REP 21.2)
12	-	Nut M12X1.25 (Not Spared)



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## PL 21.3 Finisher Cover (2 of 2)

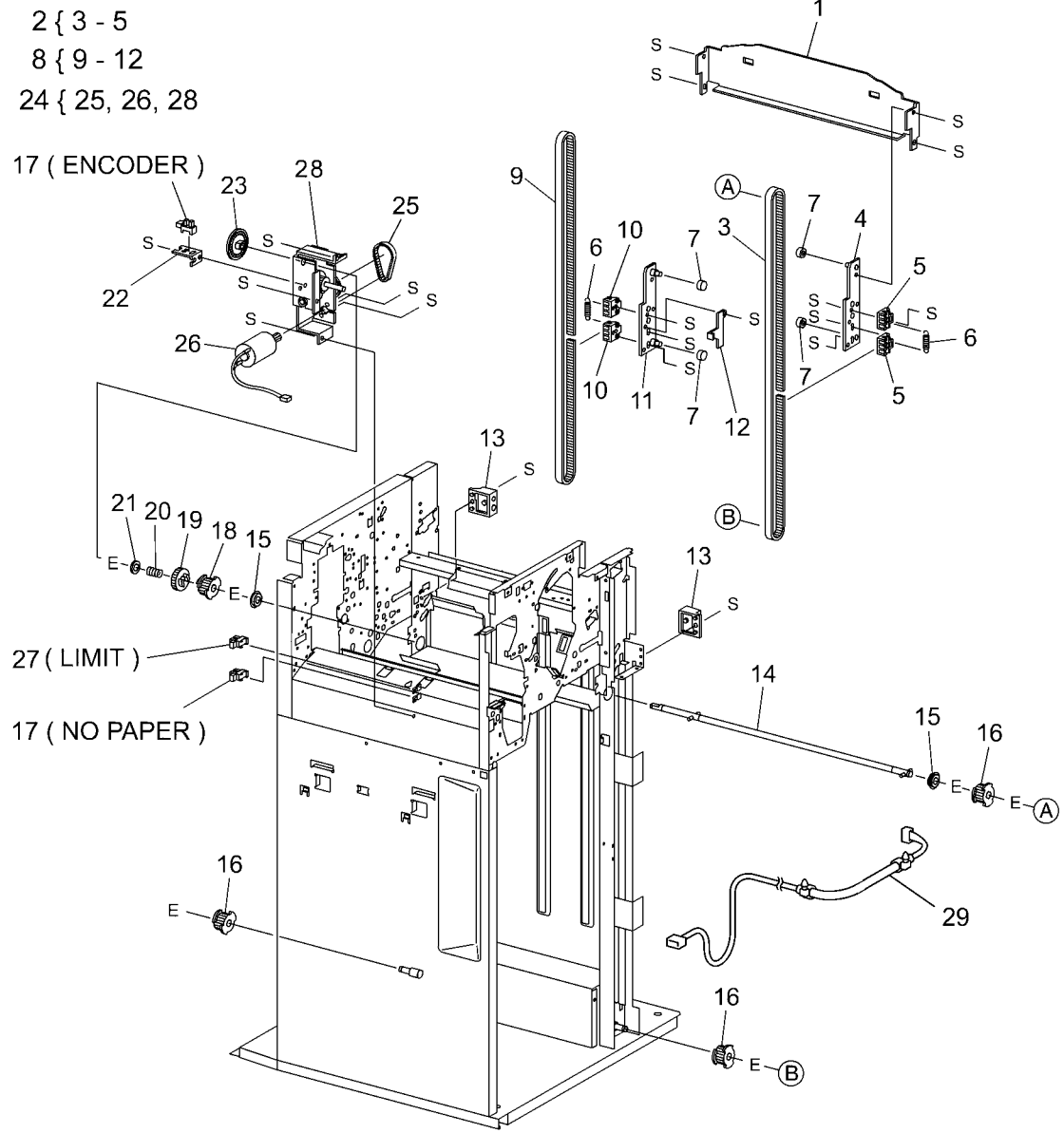
Item	Part	Description
1	-	Front Top Cover (Not Spared) (REP 21.5)
2	110E97990	Front Door Interlock Switch
3	-	Front Door (P/O PL 21.3 Item 11)
4	-	Hinge Bracket (P/O PL 21.3 Item 11)
5	-	Front Right Cover (P/O PL 21.3 Item 11)
6	815E09100	Docking Plate
7	-	Spring (Not Spared)
8	848E18470	Front Gap Cover
9	-	Left Top Cover (Not Spared) (REP 21.10)
10	015K78080	Bottom Plate
11	848K37492	Front Door Assembly (REP 21.1)
12	-	Shield Assembly
13	015K78071	IOT Docking Plate



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# PL 21.4 Finisher Stack

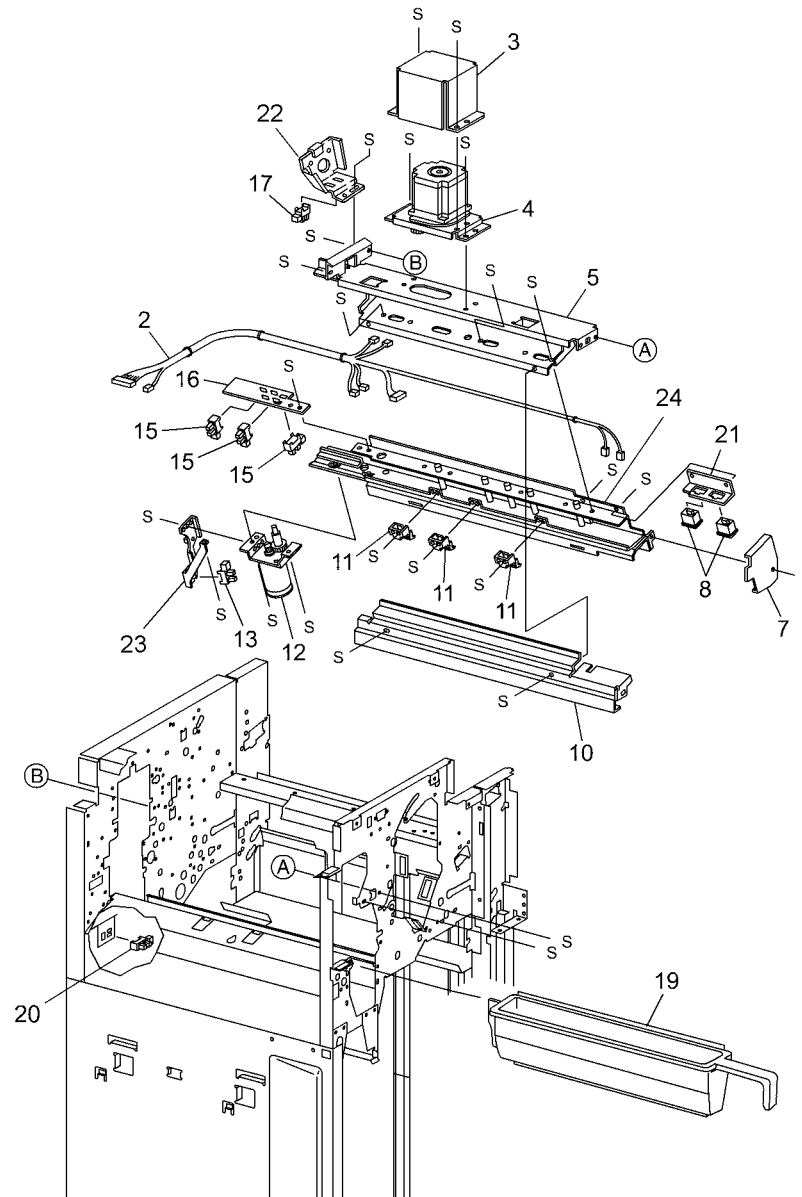
Item	Part	Description
1	-	Stacker Tray Bracket (Not Spared)
2	041K94721	Left Carriage Assembly
3	-	Stacker Drive Belt (P/O PL 21.4 Item 2) (REP 21.21)
4	-	Left Carriage Bracket (P/O PL 21.4 Item 2)
5	-	Belt Clamp (P/O PL 21.4 Item 2)
6	809E56850	Spring
7	013E27150	Carriage Bearing
8	041K94970	Right Carriage Assembly
9	-	Stacker Drive Belt (P/O PL 21.4 Item 8) (REP 21.21)
10	-	Belt Clamp (P/O PL 21.4 Item 8)
11	-	Right Carriage Bracket (P/O PL 21.4 Item 8)
12	-	Stacker Sensor Actuator (P/O PL 21.4 Item 8)
13	802K67140	Stack Height Sensor (Front, Rear)
14	-	Elevator Drive Shaft (Not Spared)
15	413W11860	Bearing
16	020E37720	Pulley (18T)
17	130K88770	Stacker Encoder Sensor, Stacker No Paper Sensor (No Paper)
18	020E37710	Clutch Pulley
19	807E04730	Clutch Gear
20	809E56860	Spring
21	-	Washer
22	-	Sensor Bracket (Not Spared)
23	146E01770	Stacker Encoder
24	015K69730	Elevator Motor Assembly
25	-	Elevator Motor Drive Belt (P/O PL 21.4 Item 24)
26	-	Elevator Motor (P/O PL 21.4 Item 24)
27	-	Upper Limit Sensor (Limit)
28	-	Bracket (P/O PL 21.4 Item 24)
29	962K61050	Stack Height Front Harness Assembly



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## PL 21.5 Finisher Punch

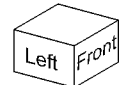
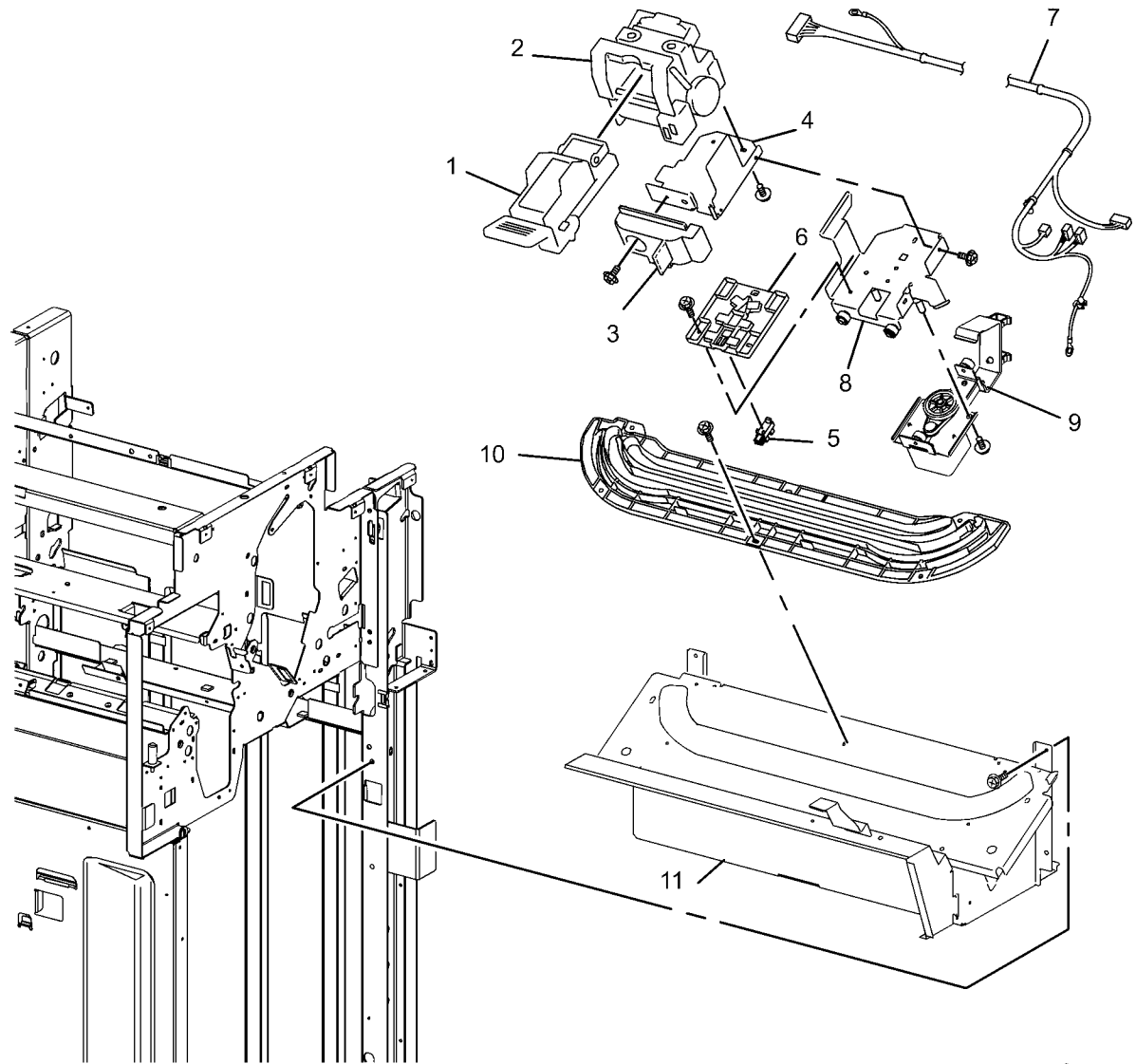
Item	Part	Description	
1	801K30940	2/4 Hole Punch Assembly (REP 21.13)	1{ 2 - 8 6{ 8, 21
2	-	Puncher Unit Harness (P/O PL 21.5 Item 9)	9{ 2, 6 - 16
3	-	Puncher Motor Cover (P/O PL 21.5 Item 1)	14{ 12, 13, 23 18{ 17, 22
4	015K65880	Puncher Move Motor	
5	-	Frame Assembly Holder (P/O PL 21.5 Item 1)	
6	-	Sensor Registration Bracket Assembly (P/O PL 21.5 Item 1)	
7	-	Front Punch Cover (P/O PL 21.5 Item 1)	
8	-	Side Registration Sensor 1 (Reg 1) and 2 (Reg 2) (P/O PL 21.5 Item 1)	
9	-	2/3 Hole Punch Bracket Assembly	
10	-	Left Punch Cover (P/O PL 21.5 Item 9)	
11	-	Guide Assembly (P/O PL 21.5 Item 9)	
12	127K40260	Punch Motor Assembly	
13	-	Punch Motor Sensor (P/O PL 21.5 Item 9)	
14	-	Punch Motor Bracket Assembly	
15	-	Front Punch Sensor (Front), Home Punch Sensor (Home), Hole Select Punch Sensor (Hole) (P/O PL 21.5 Item 9)	
16	-	Sensor Bracket (P/O PL 21.5 Item 9)	
17	-	Punch Move Home Sensor (P/O PL 21.5 Item 18)	
18	-	Punch Move Home Sensor Assembly	
19	060E91300	Puncher Waste Bin	
20	130K88770	Puncher Box Set Sensor Bracket (P/O PL 21.5 Item 1)	
21	-	Bracket (P/O PL 21.5 Item 18)	
22	-	Bracket (P/O PL 21.5 Item 18)	
23	-	Motor Bracket (P/O PL 21.5 Item 14)	
24	-	Bracket (Not Spared)	



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## PL 21.6 Finisher Stapler

Item	Part	Description
1	050K51250	Staple Cartridge
2	029K92350	Stapler Assembly (REP 21.14)
3	—	Stapler Cover (Not Spared)
4	—	Stapler Holder (Not Spared)
5	130K88770	Stapler Move Position Sensor
6	—	Stapler Harness Guide (Not Spared)
7	962K59060	Staple Harness
8	—	Upper Stapler Carriage (Not Spared)
9	041K94970	Stapler Move Motor
10	001E66640	Stapler Rail (REP 21.15)
11	—	Stapler Frame (Not Spared)

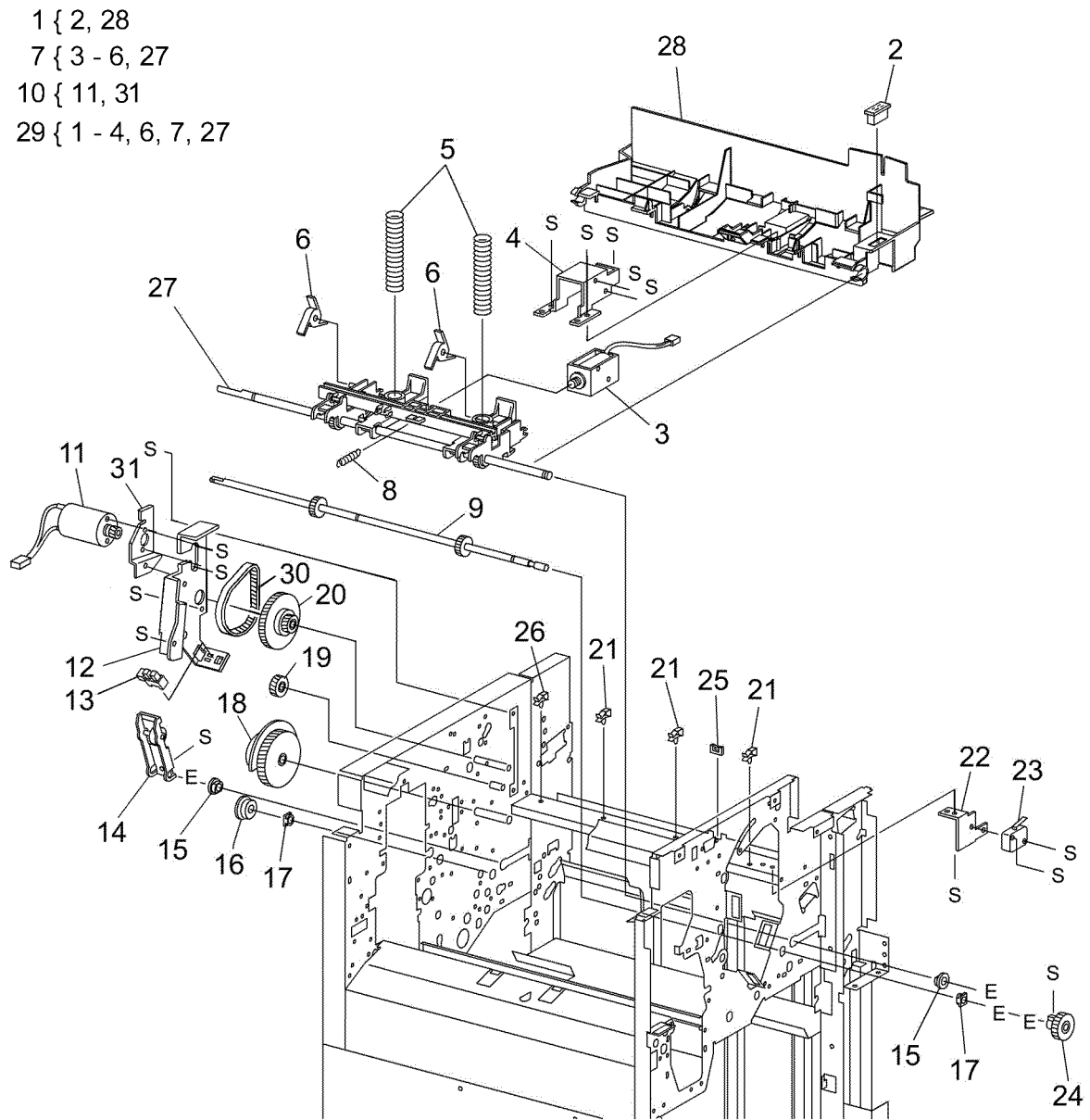


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## PL 21.7 Finisher Eject (1 of 3)

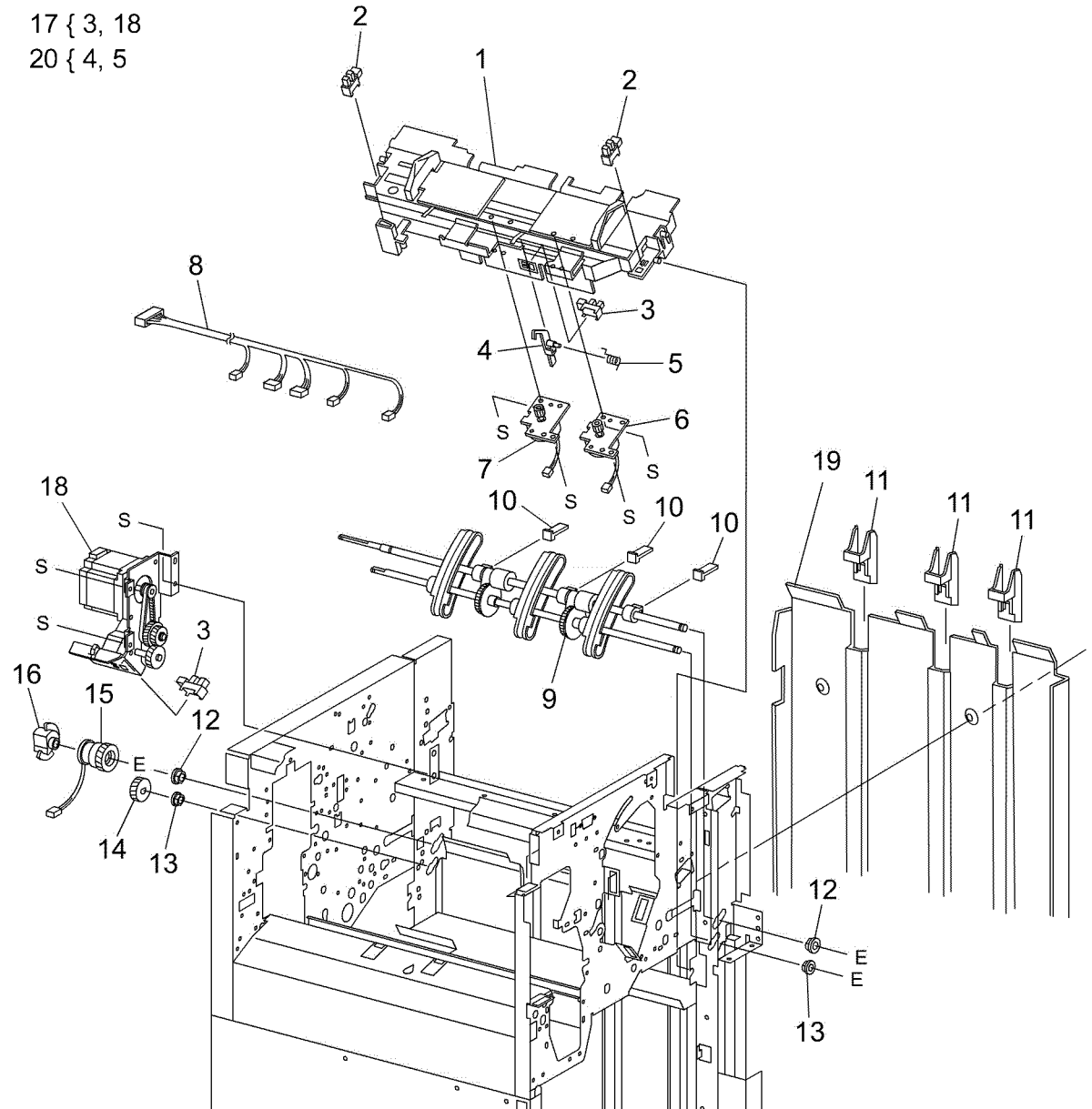
Item	Part	Description
1	-	Eject Chute Assembly
2	121E92720	Magnet
3	-	Sub Paddle Solenoid
4	-	Solenoid Bracket (P/O PL 21.7 Item 29)
5	809E56870	Pinch Spring
6	-	Cyclone Paddle (P/O PL 21.7 Item 29)
7	121K35710	Sub Paddle Solenoid Assembly
8	-	Solenoid Spring
9	006K23861	Paddle Shaft
10	-	Eject Clamp Motor Assembly
11	127K52690	Eject Clamp Motor
12	-	Eject Clamp Bracket (P/O PL 21.7 Item 10)
13	130K70160	Eject Clamp Home Sensor
14	011K97710	Eject Cam Follower
15	413W11860	Bushing
16	807E10800	Gear (23T)
17	-	Bushing
18	807E20810	Cam Gear (70T)
19	807E08990	Gear (23T)
20	807E20800	Gear (68T/20T)
21	-	Wire Clip (Not Spared)
22	-	Switch Bracket (Not Spared)
23	-	Eject Cover Switch
24	-	Entrance Knob (Not Spared)
25	-	Wire Clamp (Not Spared)
26	-	Wire Clip (Not Spared)
27	-	Eject Pinch Shaft (P/O PL 21.7 Item 7, PL 21.7 Item 29)
28	-	Eject Chute (P/O PL 21.7 Item 1)
29	-	Eject Chute Unit Assembly (REP 21.28)
30	423W29454	Belt
31	-	Motor Bracket (P/O PL 21.7 Item 10)



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## PL 21.8 Finisher Eject (2 of 3)

Item	Part	Description
1	050K65131	Compiler Tray Assembly (REP 21.18)
2	130K88770	Tamper Home Sensor (Front, Rear)
3	130K70160	Compiler Tray No Paper Sensor, Set Clamp Home Sensor
4	120E24290	Sensor Actuator
5	—	Torsion Spring (P/O PL 21.8 Item 20)
6	—	Front Tamper Motor (Not Spared)
7	—	Rear Tamper Motor (Not Spared)
8	962K59070	Compiler Harness
9	006K86372	Eject Roll Shaft Assembly
10	033E93751	Set Paddle Clamp
11	—	Paddle Guide (Not Spared)
12	—	Bushing (Not Spared)
13	—	Bushing (Not Spared)
14	807E04760	Gear (39T)
15	121K34631	Set Clamp Clutch (34T)
16	120E29570	Set Clamp Actuator
17	049K02710	Eject Motor Bracket Assembly
18	—	Motor (P/O PL 21.8 Item 17)
19	—	Inner Cover (Not Spared) (REP 21.9)
20	—	Actuator Kit

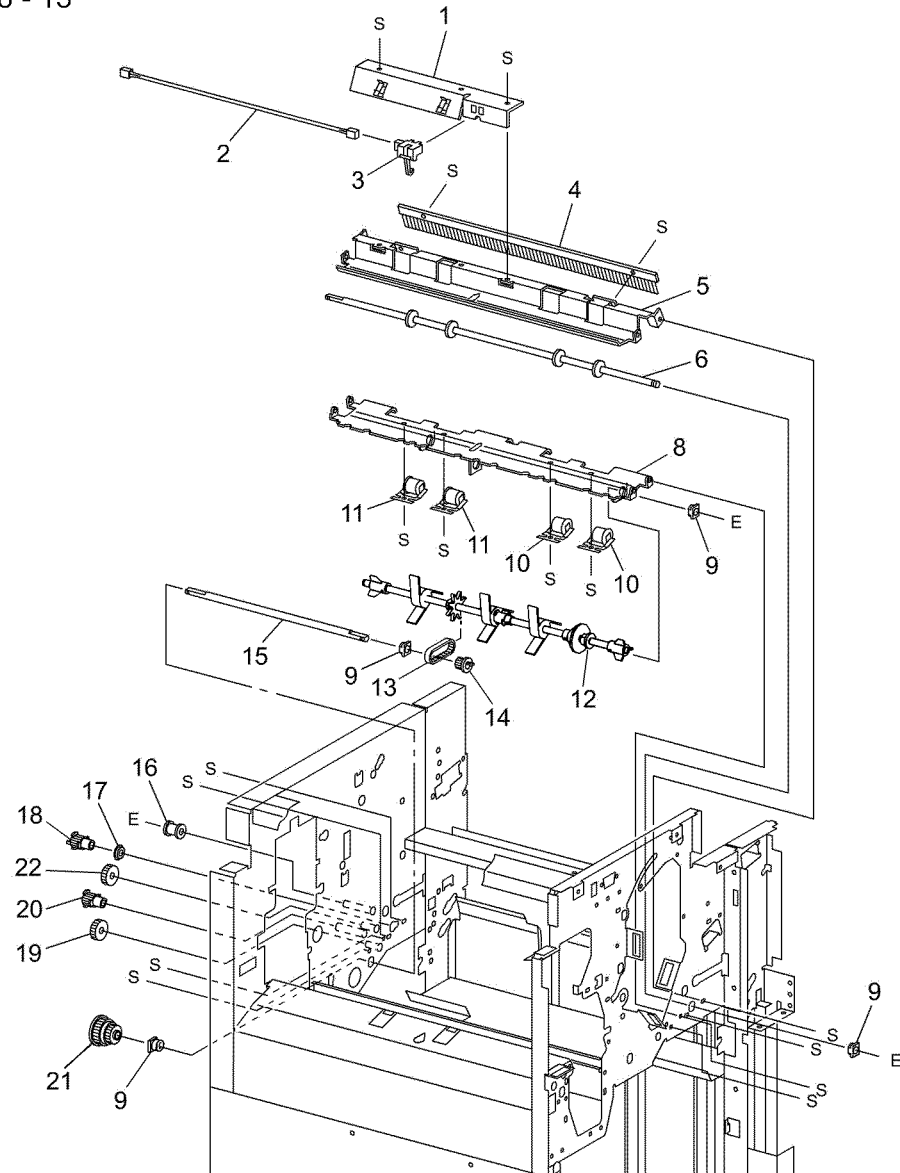


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## PL 21.9 Finisher Eject (3 of 3)

Item	Part	Description
1	–	Sensor Bracket Assembly (Not Spared)
2	–	Compiler Sensor Harness (P/O PL 21.9 Item 1)
3	130K88190	Compiler Exit Sensor
4	105E13100	Static Eliminator
5	–	Upper Exit Chute (Not Spared)
6	–	Lower Exit Roll (Not Spared)
7	–	Lower Exit Roll Chute Assembly
8	–	Lower Exit Roll Chute (P/O PL 21.9 Item 7)
9	–	Bushing (P/O PL 21.9 Item 7)
10	022K67870	Exit Pinch Roller 1
11	022K67880	Exit Pinch Roller 2
12	006K87430	Paddle Shaft (REP 21.20)
13	–	Synchronous Belt (55T)
14	–	Pulley (17T) (Not Spared)
15	–	Paddle Drive Shaft (Not Spared)
16	–	Pulley (Not Spared)
17	–	Bearing (Not Spared)
18	020E37690	Pulley (20T)
19	807E10820	Gear (23T)
20	020E37660	Pulley (20T)
21	020E37670	Pulley (44T/20T)
22	807E04780	Gear (23T)

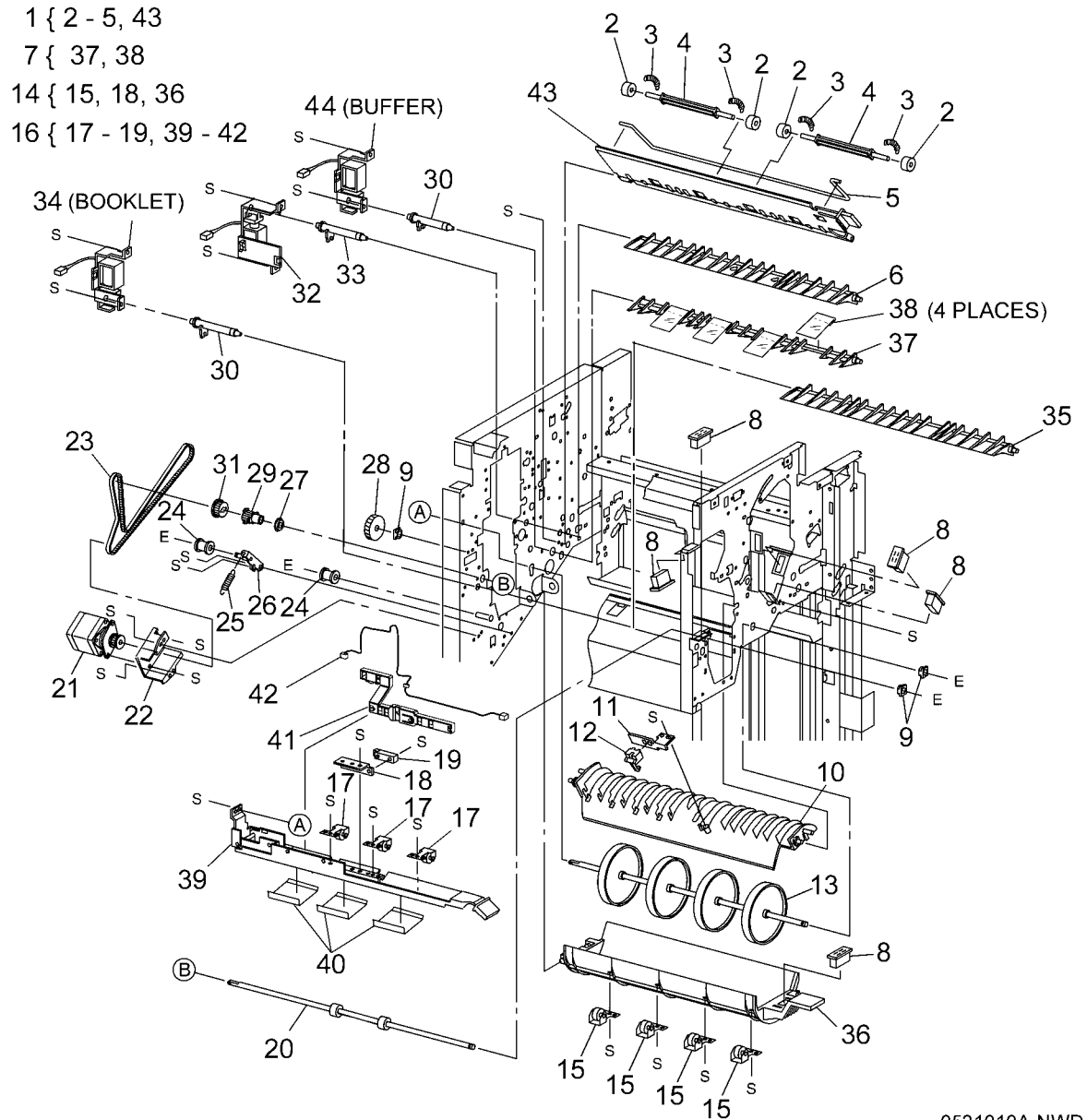
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# PL 21.10 Finisher Transport (1 of 2)

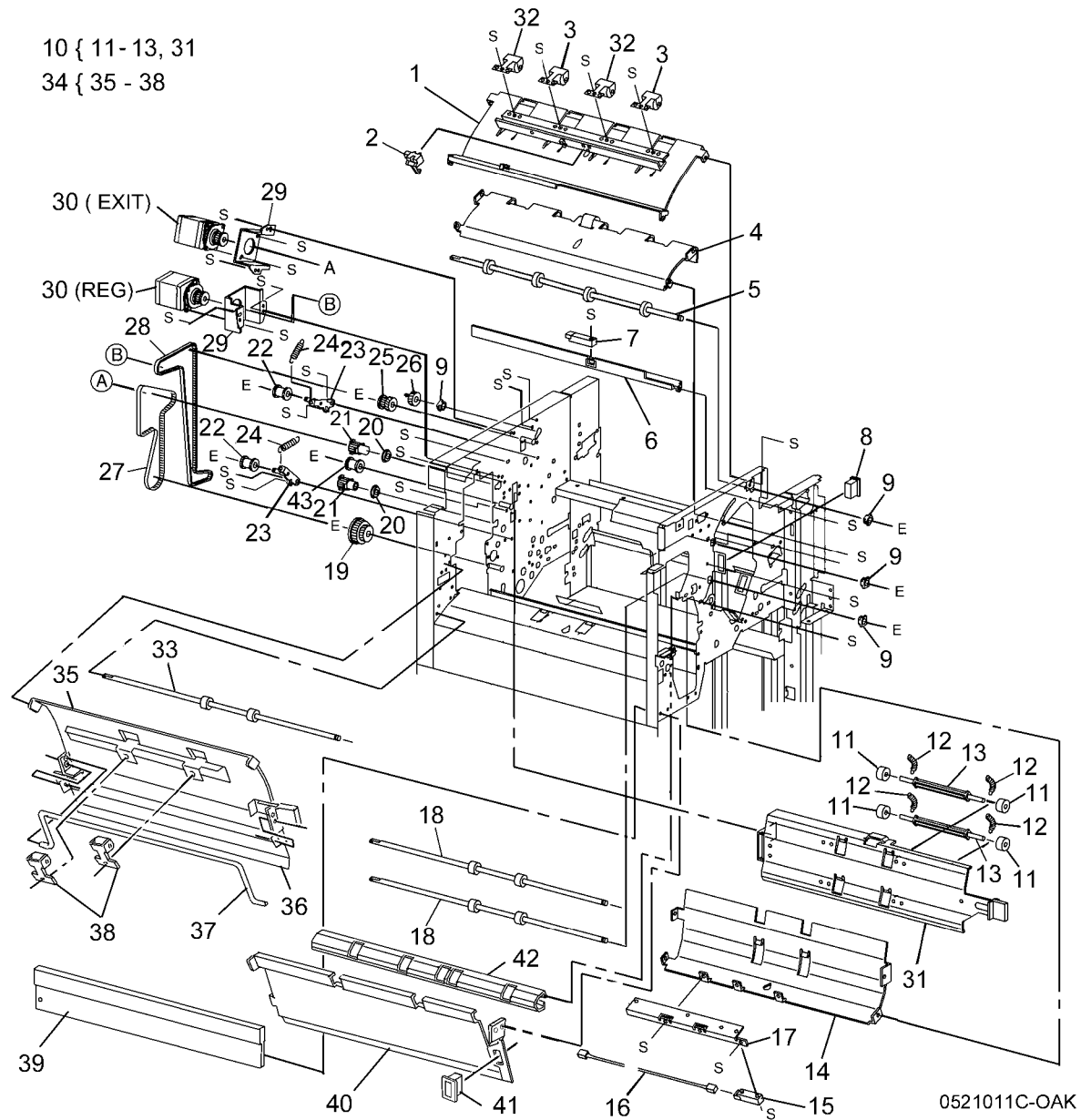
Item	Part	Description
1	-	Lower Exit Chute Assembly (Not Spared)
2	-	Pinch Roller (P/O PL 21.10 Item 1)
3	-	Spring (P/O PL 21.10 Item 1)
4	-	Shaft (P/O PL 21.10 Item 1)
5	-	Torsion Spring (P/O PL 21.10 Item 1)
6	809E56910	Transport Gate
7	050K65450	Buffer Gate Assembly
8	121E92720	Magnet
9	-	Bushing
10	-	Top Buffer Chute Assembly (Not Spared)
11	-	Sensor Bracket (Not Spared)
12	130K88190	Buffer Path Sensor (REP 21.22)
13	022K67891	Buffer Roll (REP 21.25)
14	054K27160	Bottom Buffer Chute Assembly (REP 21.26)
15	-	Exit Pinch roller (P/O PL 21.10 Item 14)
16	054K38821	Upper Entrance Chute Assembly (XE)
17	-	Entrance Pinch Roller
18	-	Sensor Bracket (P/O PL 21.10 Item 14, PL 21.10 Item 16)
19	130E87370	Transport Entrance Sensor
20	022K67811	Entrance Roll
21	127K40282	Finisher Transport Motor
22	-	Motor Bracket (Not Spared)
23	423W87054	Finisher Transport Motor Belt
24	020E43210	Pulley
25	-	Tension Spring (Not Spared)
26	-	Tension Bracket (Not Spared)
27	413W66250	Bearing
28	-	Gear (46T)
29	020E37660	Pulley (20T)
30	012E11991	Buffer Link
31	-	Gear (23T)
32	068K55250	Transport Gate Solenoid
33	012E11980	Transport Link
34	015K65821	Booklet Gate Solenoid
35	050K66810	Booklet Gate
36	-	Chute (P/O PL 21.10 Item 14)
37	-	Buffer Gate
38	-	Guide (P/O PL 21.10 Item 7)
39	-	Upper Entrance Chute (P/O PL 21.10 Item 16)
40	-	Guide (P/O PL 21.10 Item 16)
41	-	Harness Guide
42	-	Wire Harness (P/O PL 21.10 Item 16)
43	-	Lower Exit Chute (P/O PL 21.10 Item 1)
44	068K55840	Buffer Gate Solenoid



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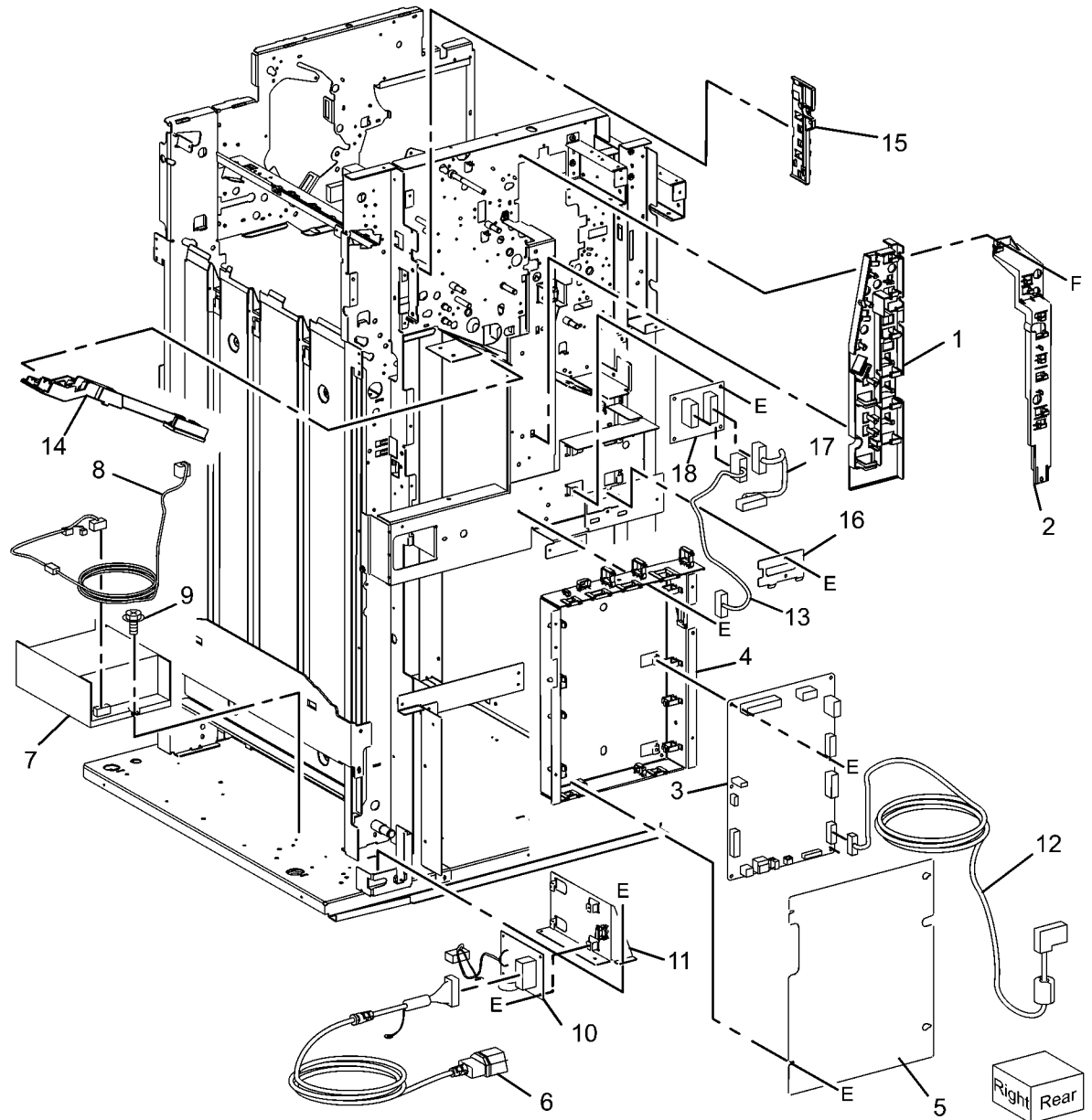
# PL 21.11 Finisher Transport (2 of 2)

Item	Part	Description
1	054K38200	Top Tray Exit Baffle Assembly (Not Spared)
2	130K88190	Top Tray Exit Sensor
3	022K74720	Left Exit Pinch Roller
4	-	Top Tray Lower Exit Baffle (Not Spared)
5	022K75720	Exit Drive Shaft
6	-	Sensor Bracket (Not Spared)
7	130E87370	Top Tray Full Sensor (REP 21.24)
8	-	Magnet (Not Spared)
9	-	Bushing
10	054K28220	Upper Exit Chute Assembly
11	-	Pinch Roller (P/O PL 21.11 Item 10)
12	-	Spring (P/O PL 21.11 Item 10)
13	-	Shaft (P/O PL 21.11 Item 10)
14	-	Chute Assembly
15	130E87410	Gate Sensor (REP 21.23)
16	-	Sensor Harness (Not Spared)
17	-	Sensor Bracket (Not Spared)
18	022K71431	Transport Roll
19	-	Pulley (53T/23T)
20	413W66150	Bearing
21	020E37690	Pulley (20T)
22	-	Pulley (Not Spared)
23	-	Tension Bracket (Not Spared)
24	-	Tension Spring (Not Spared)
25	020E37700	Pulley (20T/20T)
26	807E04720	Gear (20T)
27	423W40054	Registration Motor Drive Belt
28	423W86454	Exit Motor Drive Belt
29	-	Motor Bracket (Not Spared)
30	127K40282	Registration Motor (Reg) and Exit Motor (Exit)
31	-	Upper Exit Chute (P/O PL 21.11 Item 10)
32	022K74730	Right Exit Pinch Roll
33	-	Booklet Entrance Roll (Not Spared)
34	054K27641	Booklet Chute Assembly
35	-	Chute Assembly (P/O PL 21.11 Item 34)
36	-	Booklet Chute (P/O PL 21.11 Item 34)
37	-	Torsion Spring (P/O PL 21.11 Item 34)
38	-	Pinch Roll Assembly
39	-	Plate (Not Spared)
40	054K27650	Booklet Upper Chute
41	121E92720	Magnet
42	054E27390	Lower Entrance Chute
43	020E44920	Ball Pulley



## PL 21.12 Finisher Electrical

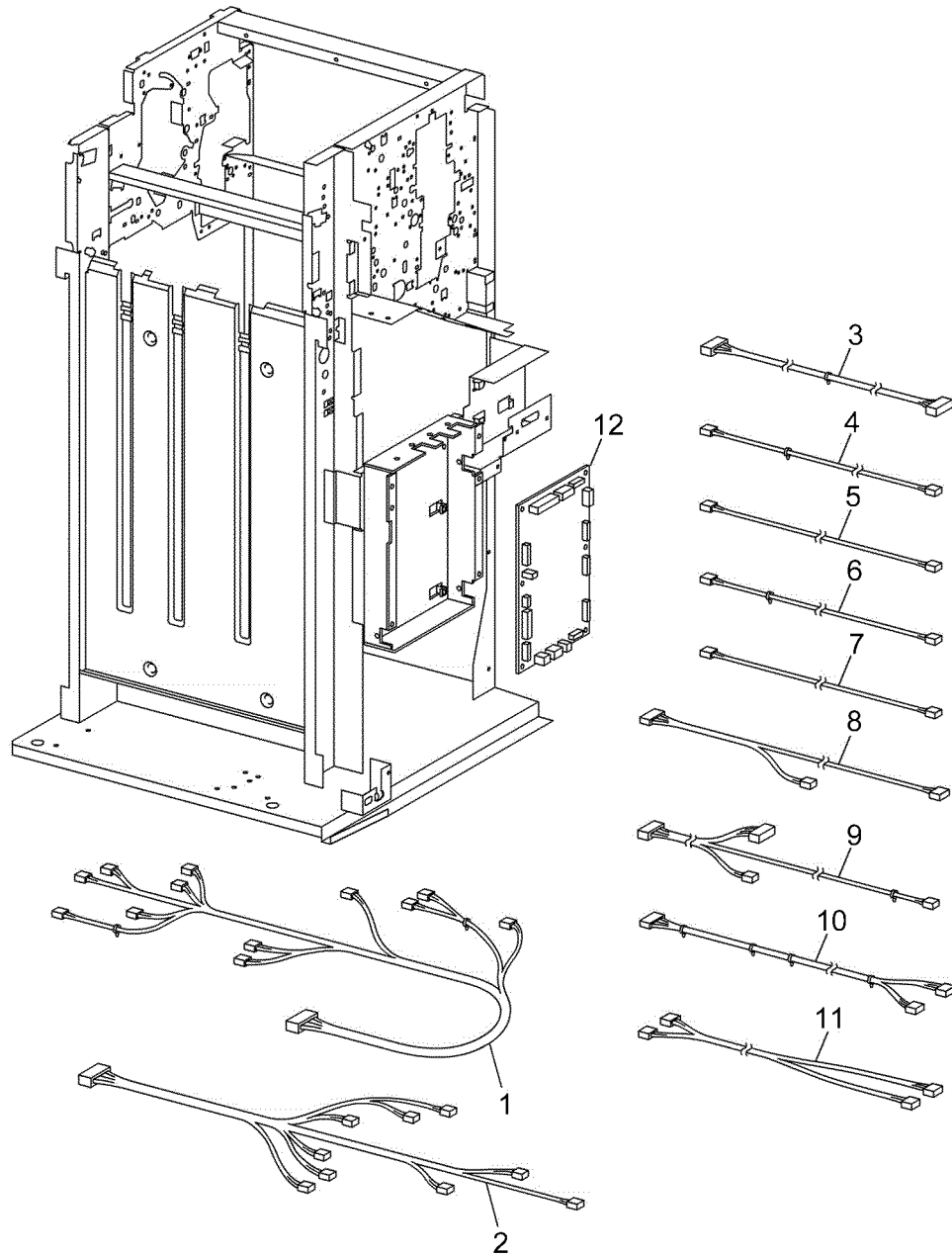
Item	Part	Description
1	-	Left Harness Guide (Not Spared)
2	-	Right Harness Guide (Not Spared)
3	960K51453	Finisher PWB (REP 21.29)
4	-	Finisher PWB Cover (Not Spared)
5	-	Finisher PWB Cover (Not Spared)
6	962K38740	AC Inlet Harness
7	105E15200	Finisher LVPS
8	-	LVPS Wire Harness (Not Spared)
9	-	Screw (Not Spared)
10	960K31130	AC Filter
11	-	Bracket (Not Spared)
12	962K67080	I/F Finisher Cable
13	-	Harness Assembly (Not Spared)
14	-	Harness Guide (Not Spared)
15	-	Harness Guide (Not Spared)
16	-	Connector Plate (Not Spared)
17	962K29160	Harness
18	960K04681	H-Transport PWB



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## PL 21.13 Finisher Harness

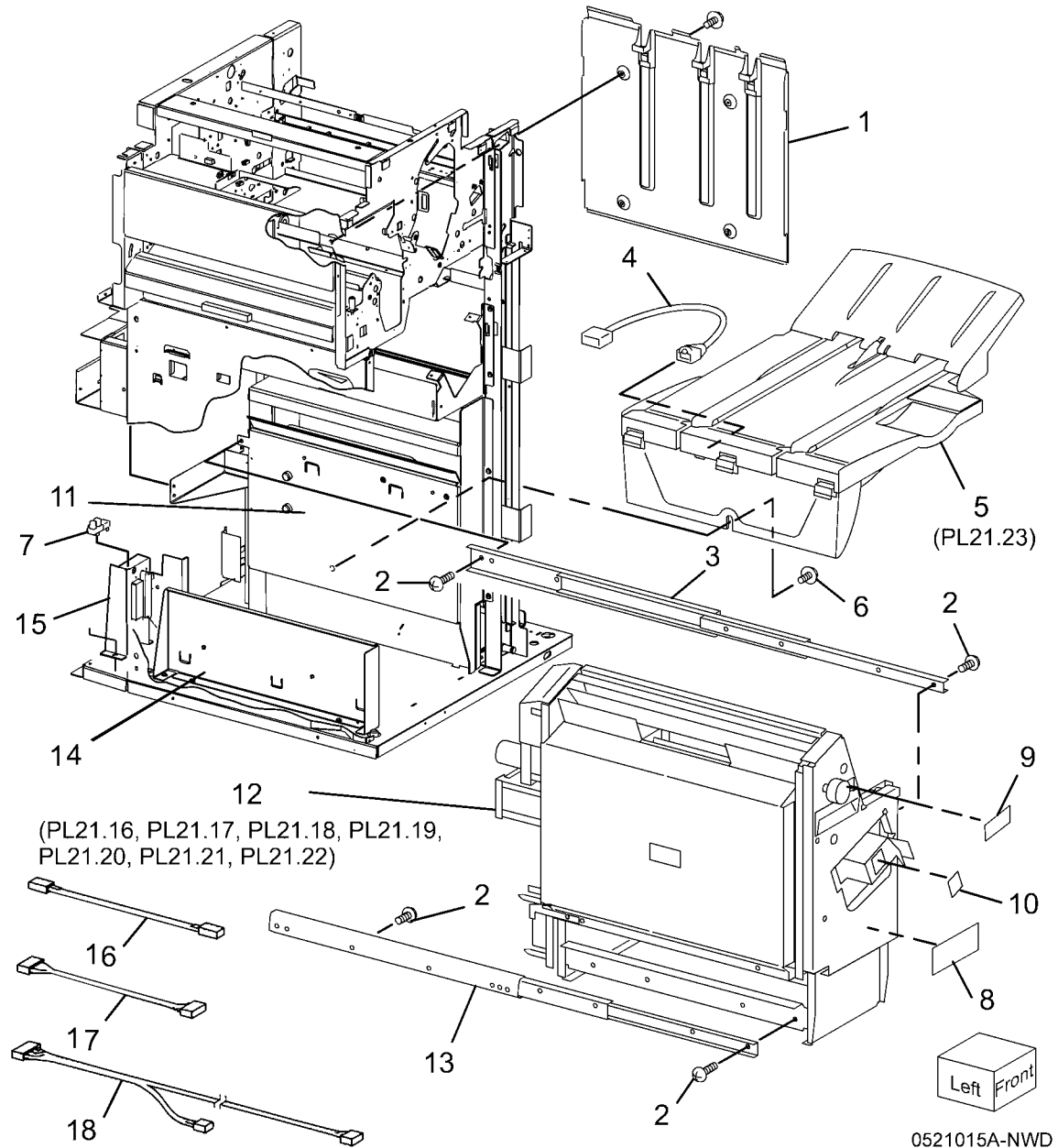
Item	Part	Description
1	—	Main Sensor Harness (Not Spared)
2	—	Main Drive Harness (Not Spared)
3	—	Interface Harness (Not Spared)
4	—	Transport Entrance Sensor Harness (Not Spared)
5	—	Buffer Sensor Harness (Not Spared)
6	—	Top Exit Sensor Harness (Not Spared)
7	—	Top Sensor Harness (Not Spared)
8	—	Punch Drive Harness (Not Spared)
9	—	Punch Sensor Harness (Not Spared)
10	—	LVPS Harness (Not Spared)
11	962K58950	Interlock Harness
12	960K54831	Booklet PWB



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## PL 21.15 Booklet Accessory

Item	Part	Description
1	–	Tray Guide Assembly (Not Spared)
2	–	Screw (Not Spared)
3	–	Right Rail
4	–	Wire Harness
5	050K62855	Booklet Tray Assembly
6	–	Knob Screw (Not Spared)
7	130K88770	Booklet Drawer Set Sensor
8	–	Label (Not Spared)
9	–	Label (Not Spared)
10	–	Label (Not Spared)
11	015K79780	Right Side Assembly
12	801K29032	Booklet Drawer Assembly
13	–	Left Rail
14	015K67980	Left Rail Assembly
15	068K55260	Connector Assembly
16	962K59080	Wire Harness
17	962K59090	Wire Harness
18	962K59100	Wire Harness

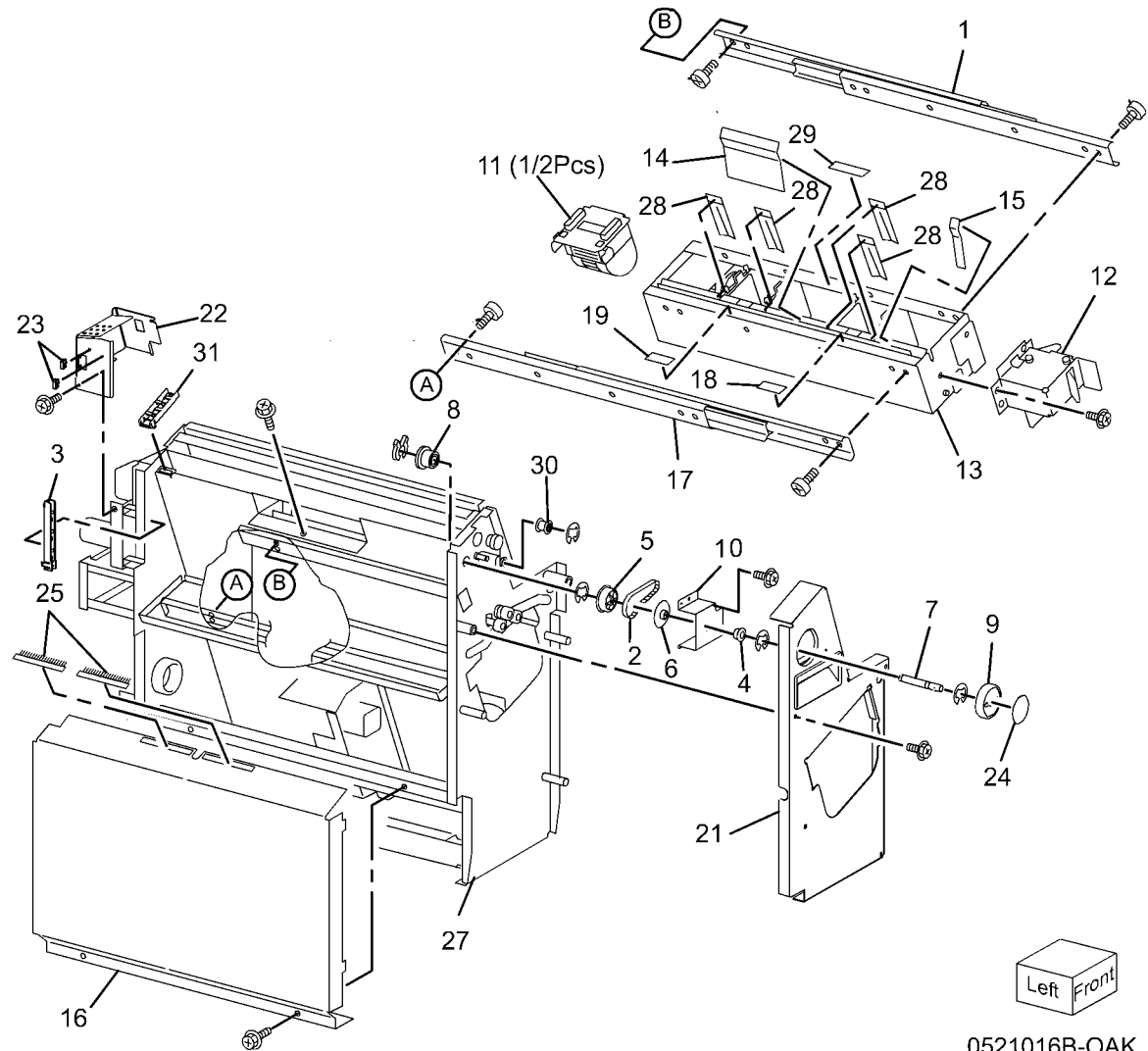




# PL 21.16 Booklet Component (1 of 7)

Item	Part	Description
1	-	Right Stapler Rail
2	423W45954	Belt
3	-	Harness Cover (P/O PL 21.15 Item 12)
4	-	Bearing (P/O PL 21.15 Item 12)
5	499W14432	Gear (31T)
6	005E24900	Collar
7	-	Shaft (P/O PL 21.15 Item 12)
8	-	Ball Bearing (P/O PL 21.15 Item 12)
9	003E63390	Knob
10	-	Bracket (P/O PL 21.15 Item 12)
11	-	Staple (REP 21.17)
12	-	Latch
13	-	Stapler Base (P/O PL 21.15 Item 12)
14	-	Front Cover
15	-	Paper Guide
16	-	Left Cover (P/O PL 21.15 Item 12)
17	-	Left Stapler Rail (P/O PL 21.15 Item 12)
18	-	Label (P/O PL 21.15 Item 12)
19	-	Label (P/O PL 21.15 Item 12)
20	029K92175	Booklet Stapler Unit
21	-	Front Cover (P/O PL 21.15 Item 12)
22	-	Cover (P/O PL 21.15 Item 12)
23	-	Paper Guide (Clinch)
24	-	Label (4a) (P/O 21.15 Item 12)
25	105E15120	Eliminator
26	-	Booklet Assembly (P/O PL 21.15 Item 12)
27	-	Frame Assembly (P/O PL 21.15 Item 12)
28	-	Paper Guide (P/O PL 21.16 Item 20)
29	-	Label (Not Spared)
30	020E45160	Pulley
31	-	Guide

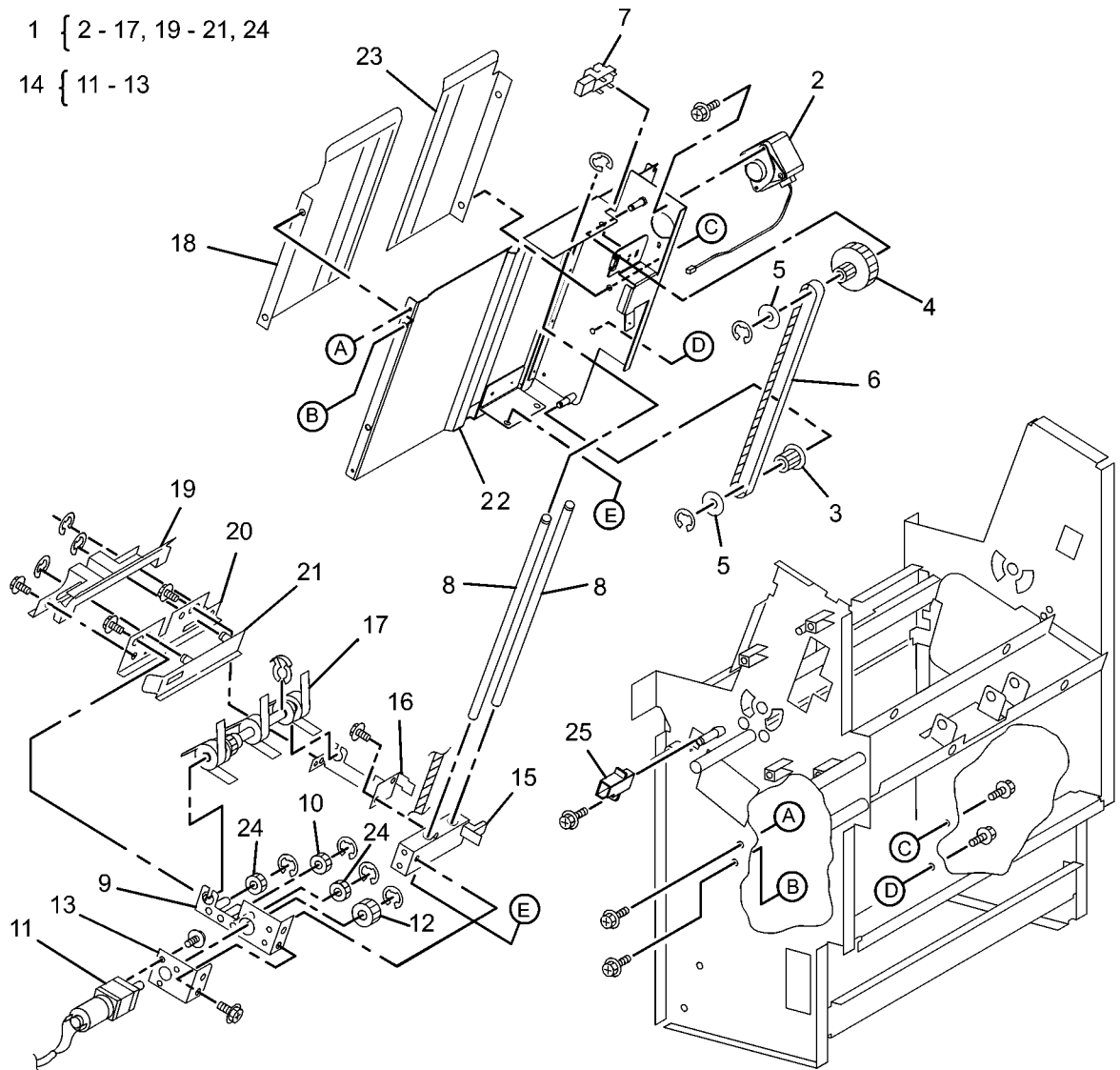
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# PL 21.17 Booklet Component (2 of 7) (End Guide)

Item	Part	Description
1	054K39250	Compile Chute Assembly
2	127K51990	Booklet End Guide Motor
3	-	Pulley (P/O PL 21.17 Item 1)
4	-	Gear Pulley (40T/20T) (P/O PL 21.17 Item 1)
5	-	Washer (P/O PL 21.17 Item 1)
6	-	Belt (P/O PL 21.17 Item 1)
7	130K70160	Booklet End Guide Home Sensor
8	-	Shaft (P/O PL 21.17 Item 1)
9	-	Bracket (P/O PL 21.17 Item 1)
10	-	Gear (14T) (P/O PL 21.17 Item 1)
11	-	Booklet Paddle Motor (P/O PL 21.17 Item 1, PL 21.17 Item 14)
12	-	Gear (14T) (P/O PL 21.17 Item 1, PL 21.17 Item 14)
13	-	Bracket (P/O PL 21.17 Item 1, PL 21.17 Item 14)
14	-	Booklet Paddle Motor Assembly (P/O PL 21.17 Item 1)
15	-	Belt Clamp (P/O PL 21.17 Item 1)
16	-	Paddle Bracket (P/O PL 21.17 Item 1)
17	-	Paddle Shaft Assembly (P/O PL 21.17 Item 1)
18	-	Chute (Rear) (P/O PL 21.17 Item 1)
19	-	End Guide (P/O PL 21.17 Item 1)
20	-	Support Bracket (P/O PL 21.17 Item 1)
21	-	Adjust Bracket (P/O PL 21.17 Item 1)
22	-	Compile Chute (P/O PL 21.17 Item 1)
23	-	Chute (Front) (P/O PL 21.17 Item 1)
24	-	Gear (14T) (P/O PL 21.17 Item 1)
25	-	Guide (Not Spared)

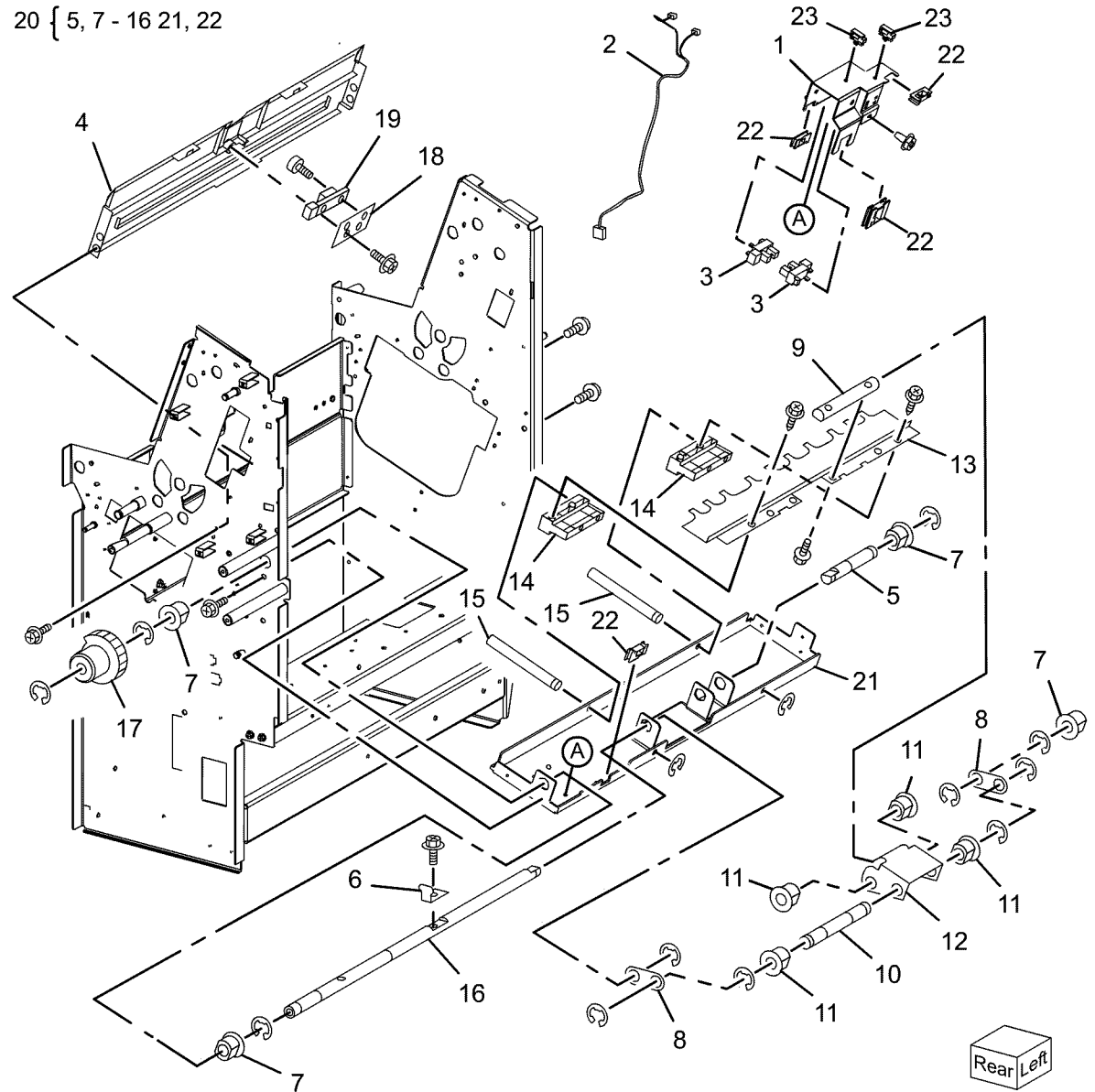


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# PL 21.18 Booklet Component (3 of 7)

Item	Part	Description
1	-	Bracket (P/O PL 21.15 Item 12)
2	-	Wire Harness (Not Spared)
3	130K70160	Knife Home Sensor, Knife Folder Sensor
4	-	Chute (P/O PL 21.15 Item 12)
5	-	Shaft (P/O PL 21.18 Item 20)
6	-	Actuator (Not Spared)
7	413W11860	Bearing
8	-	Joint (P/O PL 21.18 Item 20)
9	-	Shaft (P/O PL 21.18 Item 20)
10	-	Shaft (P/O PL 21.18 Item 20)
11	-	Bearing (P/O PL 21.18 Item 20)
12	-	Bracket (P/O PL 21.18 Item 20)
13	-	Knife Bracket Assembly (P/O PL 21.18 Item 20)
14	-	Guide (P/O PL 21.18 Item 20)
15	-	Shaft (P/O PL 21.18 Item 20)
16	-	Shaft (P/O PL 21.18 Item 20)
17	807E02061	Gear (42T)
18	-	Bracket (P/O PL 21.15 Item 12)
19	130E87410	Booklet Compile No Paper Sensor
20	015K75682	Knife Assembly
21	-	Tie Plate (P/O PL 21.18 Item 20)
22	-	Edge Saddle (P/O PL 21.18 Item 20)
23	-	Clamp (Not Spared)

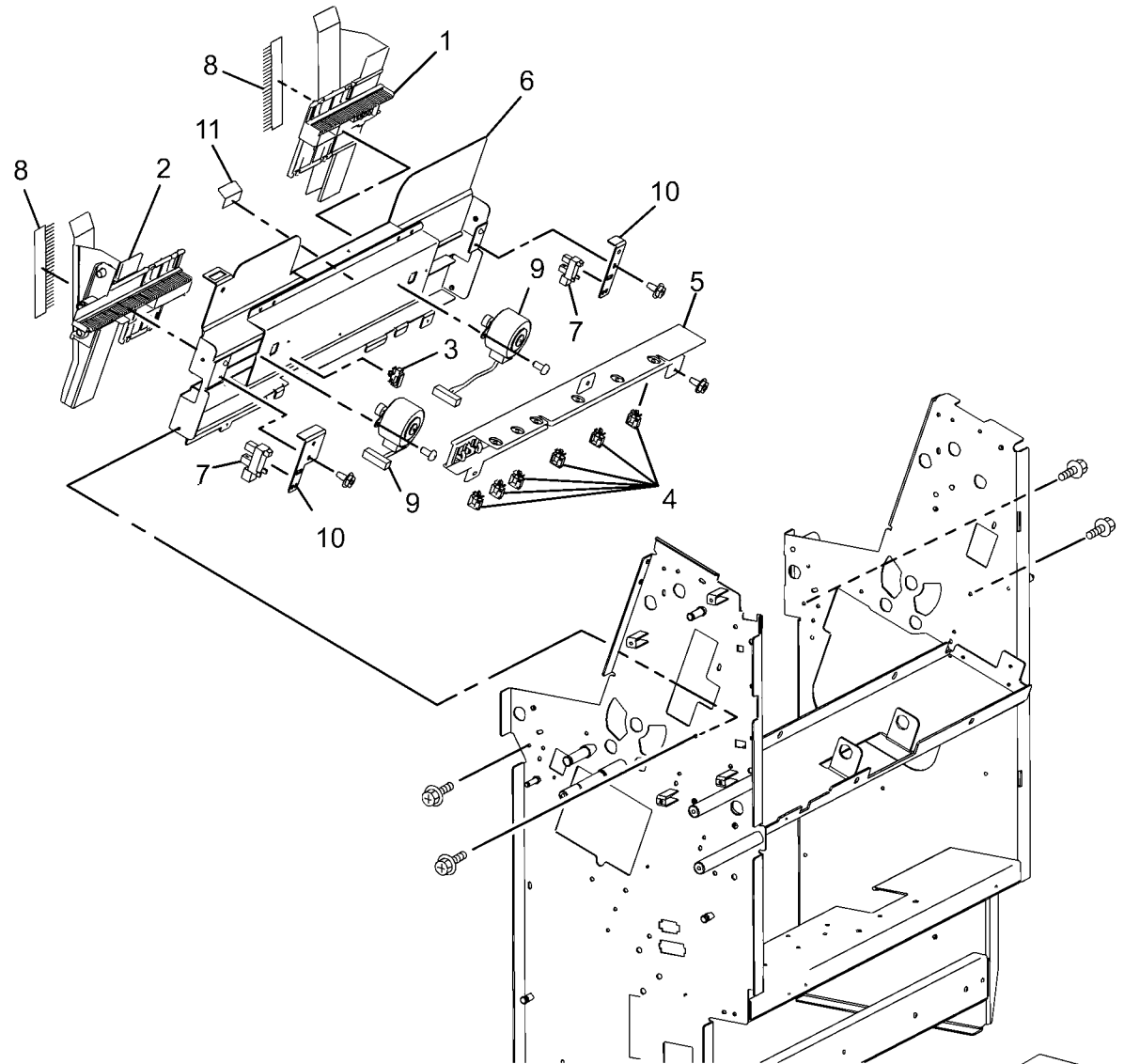
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## PL 21.19 Booklet Component (4 of 7)

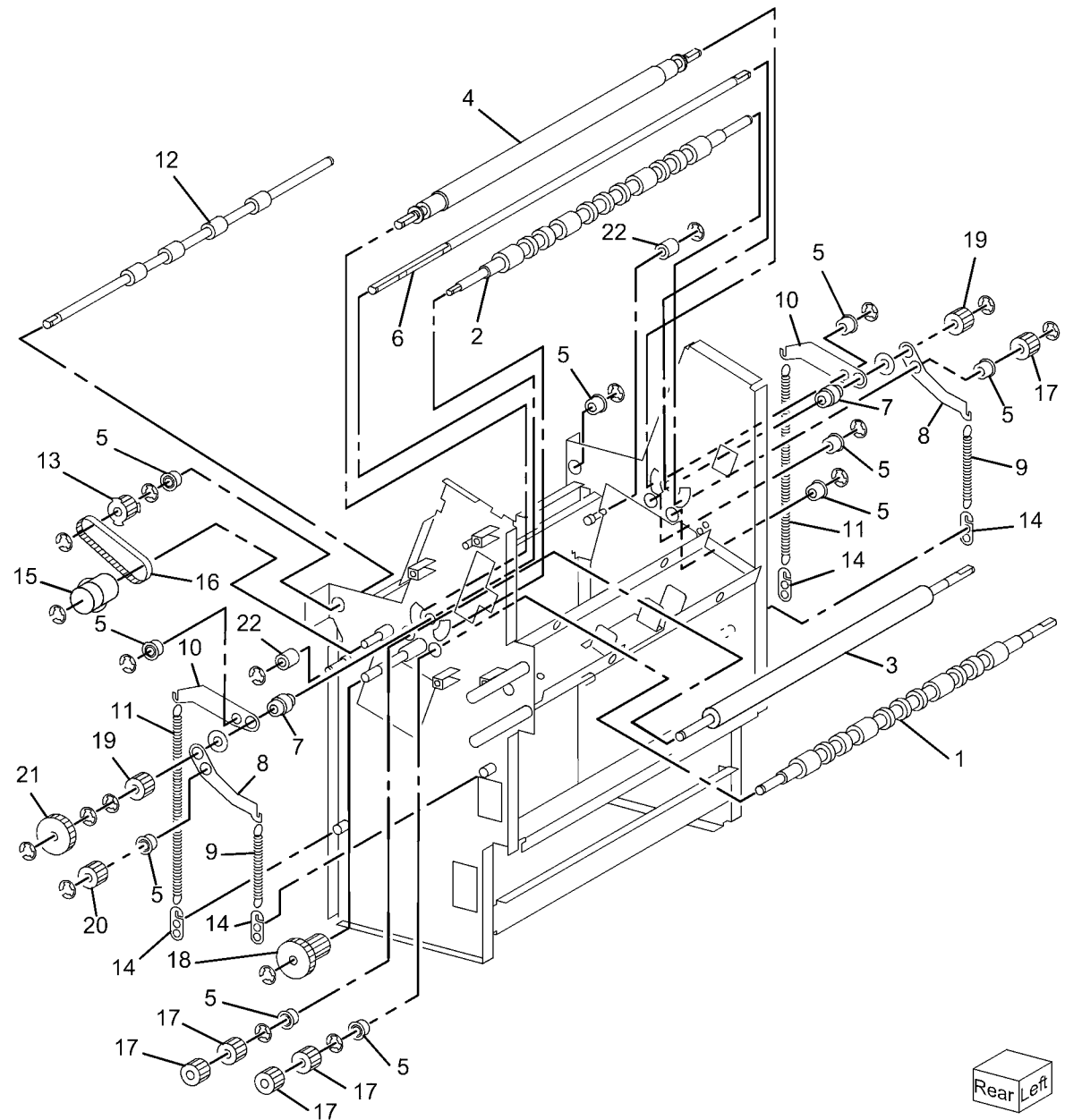
Item	Part	Description
1	–	Front Tamper Guide
2	–	Rear Tamper Guide (P/O PL 21.15 Item 12)
3	–	Clamp (P/O PL 21.15 Item 12)
4	–	Clamp (P/O PL 21.15 Item 12)
5	032E27380	Guide
6	–	Frame (P/O PL 21.15 Item 12)
7	130K88770	Booklet Tamper Home Sensor
8	–	Static Eliminator (P/O PL 21.15 Item 12)
9	127K58040	Booklet Tamper Motor
10	–	Bracket (P/O PL 21.15 Item 12)
11	038K18720	Compile Guide



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# PL 21.20 Booklet Component (5 of 7)

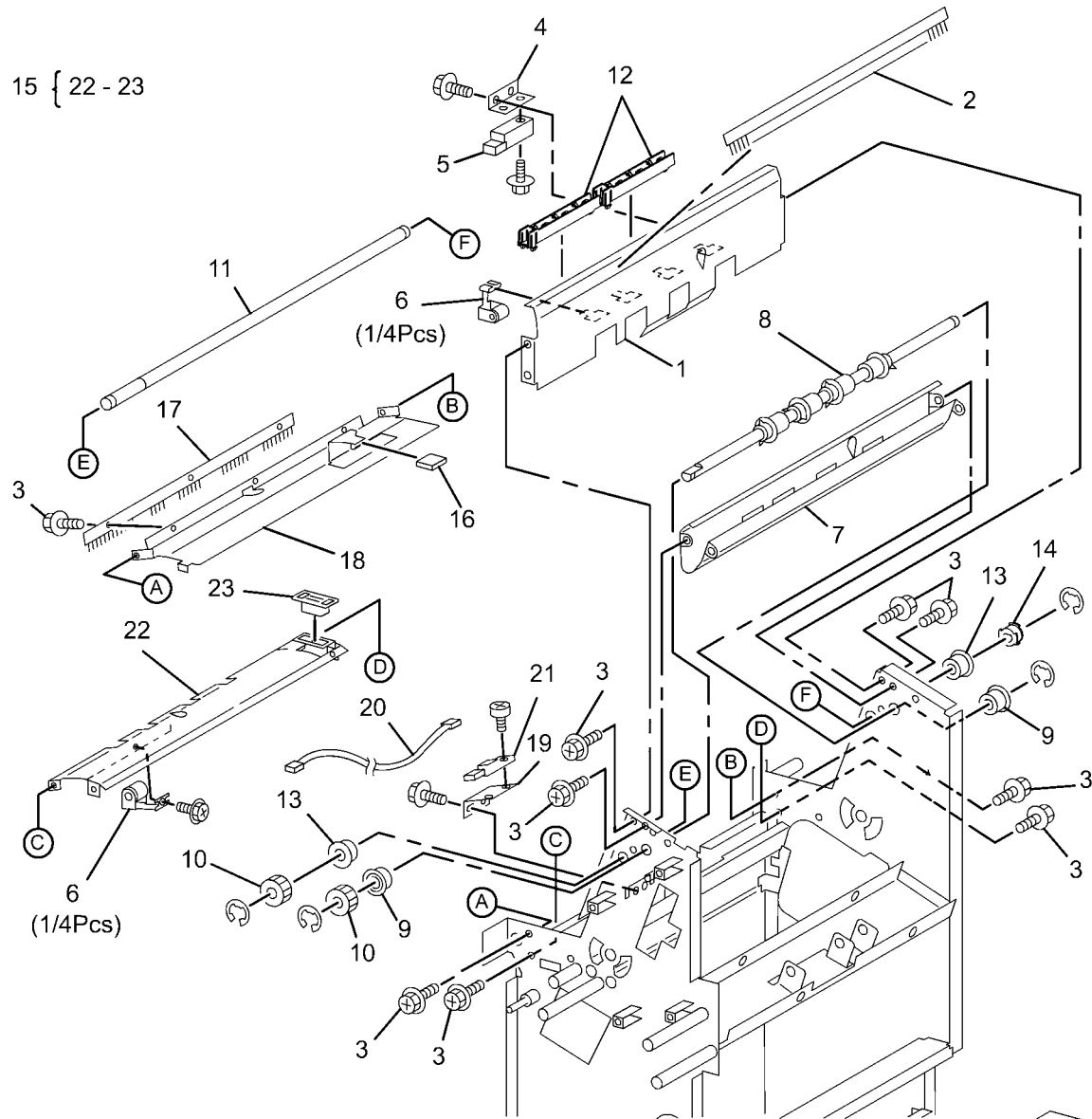
Item	Part	Description
1	022K71020	Booklet Pre-Folding Roll
2	022K71040	Booklet Pre-Folding Nip Roll
3	022K66870	Booklet Folding Roll
4	022K66880	Booklet Folding Nip Roll
5	-	Ball Bearing (P/O PL 21.15 Item 12)
6	-	Shaft (P/O PL 21.15 Item 12)
7	-	Bearing (P/O PL 21.15 Item 12)
8	815E44910	Tension Plate 1
9	-	Spring (P/O PL 21.15 Item 12)
10	815E44920	Tension Plate 2
11	-	Spring (Not Spared)
12	-	Booklet Eject Roll (P/O PL 21.15 Item 12)
13	020E37140	Pulley (16T)
14	815E36110	Spring Plate
15	807E02040	Gear Pulley (20T/25T)
16	-	Belt (P/O PL 21.15 Item 12)
17	007E89980	Gear (16T)
18	007E89990	Gear (38T/18T)
19	007E89970	Gear (18T)
20	807E09510	Gear (16T)
21	007E77770	Gear (38T)
22	022E96060	Roll



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# PL 21.21 Booklet Component (6 of 7) (Chute)

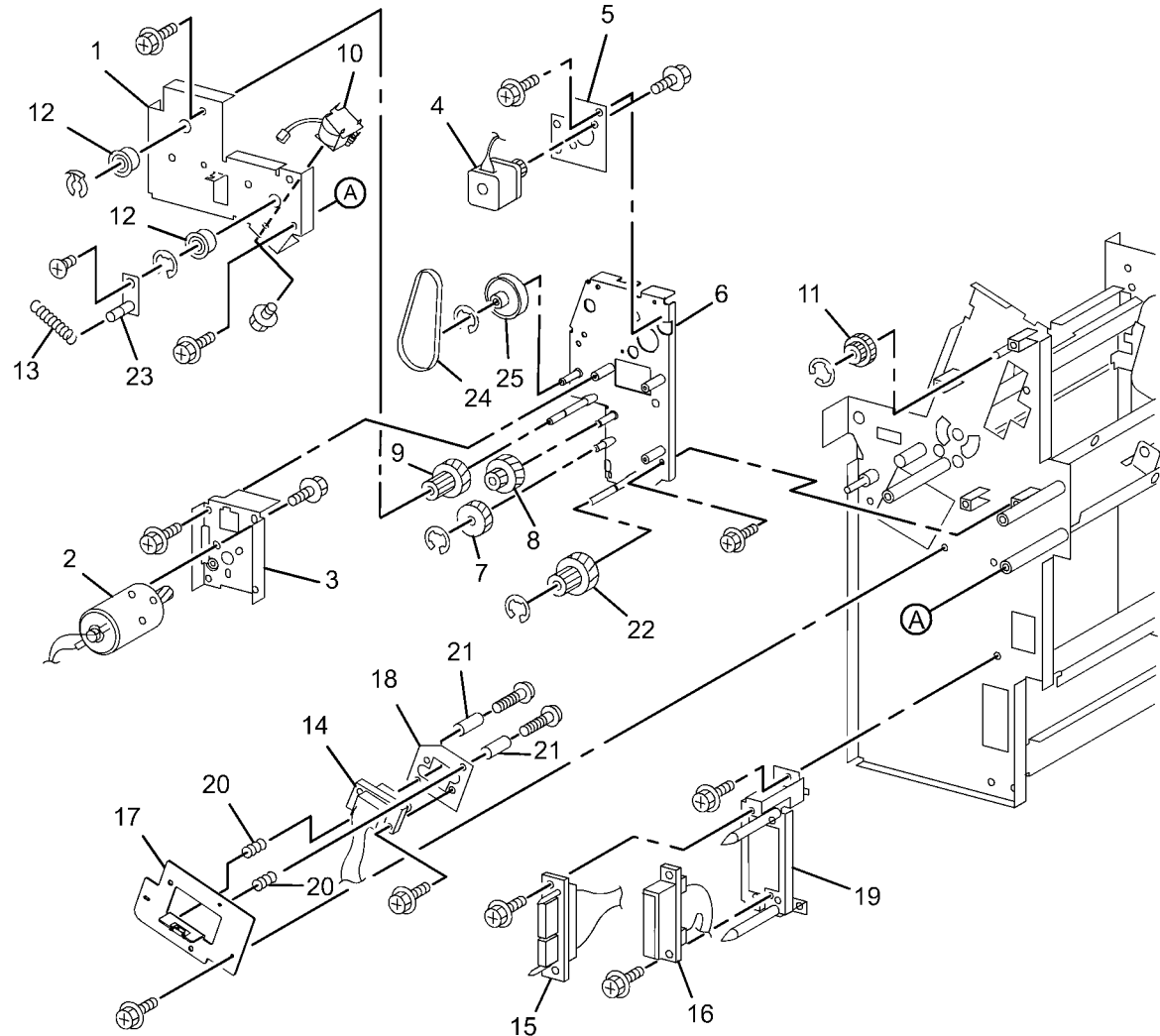
Item	Part	Description
1	-	Chute (P/O PL 21.15 Item 12)
2	-	Static Eliminator (P/O PL 21.15 Item 12)
3	-	Screw (P/O PL 21.21 Item 15)
4	-	Bracket (P/O PL 21.15 Item 12)
5	130E87370	Booklet In Sensor
6	-	Pinch Roll (P/O PL 21.15 Item 12)
7	-	Chute (P/O PL 21.15 Item 12)
8	-	Booklet In Roll (P/O PL 21.15 Item 12)
9	-	Ball Bearing (P/O PL 21.15 Item 12)
10	-	Gear (16T) (P/O PL 21.15 Item 12)
11	-	Shaft (P/O PL 21.15 Item 12)
12	-	Harness Cover (P/O PL 21.15 Item 12)
13	-	Bearing (P/O PL 21.15 Item 12)
14	-	Gear (17T) (P/O PL 21.15 Item 12)
15	054K33910	Upper Exit Chute Assembly
16	003E63380	Knob
17	-	Static Eliminator (P/O PL 21.15 Item 12)
18	-	Upper Exit Chute (P/O PL 21.21 Item 15)
19	-	Bracket (P/O PL 21.15 Item 12)
20	-	Wire Harness (P/O PL 21.15 Item 12)
21	130E87410	Booklet Folder Roll Exit Sensor
22	-	Lower Exit Chute (P/O PL 21.21 Item 15)
23	121E92720	Magnet



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## PL 21.22 Booklet Component (7 of 7)

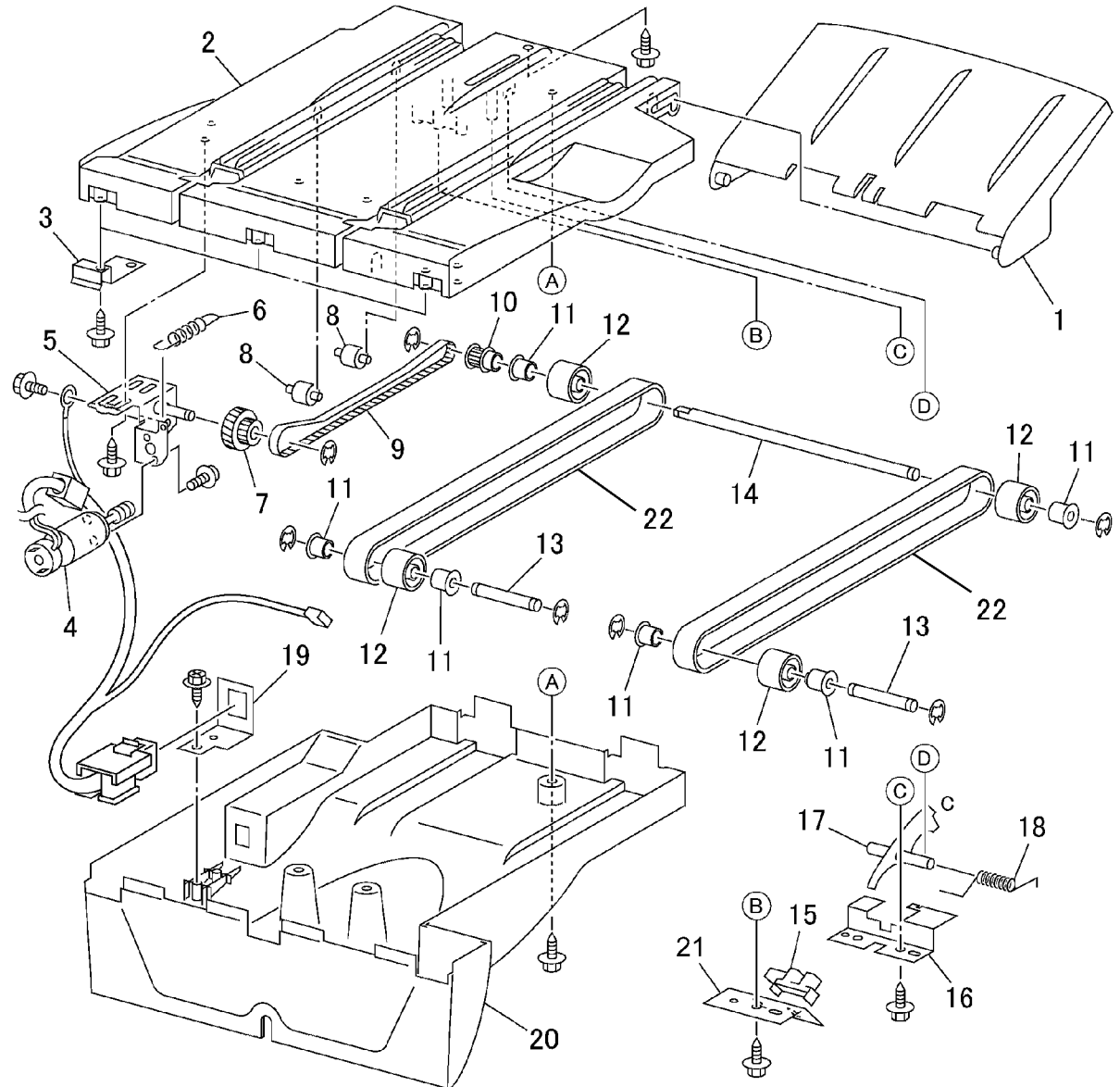
Item	Part	Description
1	-	Bracket (P/O PL 21.15 Item 12)
2	127K52400	Booklet Fold Motor
3	-	Bracket (P/O PL 21.15 Item 12)
4	127K51990	Booklet Paper Path Motor
5	-	Bracket (P/O PL 21.15 Item 12)
6	-	Bracket (P/O PL 21.15 Item 12)
7	007E77620	Gear (45T)
8	807E20000	Gear (43T/14T)
9	007E77600	Gear (44T/16T)
10	120E28080	Knife Solenoid
11	807E01750	Gear (27T/34T)
12	-	Ball Bearing (P/O PL 21.15 Item 12)
13	809E41620	Spring
14	962K57710	Wire Harness
15	962K57680	Wire Harness
16	962K57690	Wire Harness
17	-	Bracket (P/O PL 21.15 Item 12)
18	-	Bracket (P/O PL 21.15 Item 12)
19	-	Bracket (P/O PL 21.15 Item 12)
20	-	Spring (P/O PL 21.15 Item 12)
21	-	Spacer (P/O PL 21.15 Item 12)
22	807E02080	Gear (48T/18T)
23	049K00770	Link
24	-	Belt (P/O PL 21.15 Item 12)
25	807E19210	Gear Pulley (41T/14T)



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## PL 21.23 Booklet Tray Component

Item	Part	Description
1	–	Tray
2	–	Upper Tray (P/O PL 21.15 Item 5)
3	–	Bracket (P/O PL 21.15 Item 5)
4	127K58932	Tray Belt Drive Motor
5	–	Bracket (P/O PL 21.15 Item 5)
6	–	Spring (P/O PL 21.15 Item 5)
7	–	Gear Pulley (P/O PL 21.15 Item 5)
8	–	Roll (P/O PL 21.15 Item 5)
9	–	Belt (P/O PL 21.15 Item 5)
10	–	Pulley (P/O PL 21.15 Item 5)
11	–	Bearing (P/O PL 21.15 Item 5)
12	–	Roll (P/O PL 21.15 Item 5)
13	–	Shaft (P/O PL 21.15 Item 5)
14	–	Shaft (P/O PL 21.15 Item 5)
15	930W00112	Booklet No Paper Sensor
16	–	Bracket (P/O PL 21.15 Item 5)
17	–	Actuator (P/O PL 21.23 Item 21)
18	–	Spring (P/O PL 21.23 Item 21)
19	–	Bracket (P/O PL 21.15 Item 5)
20	–	Lower Tray (P/O PL 21.15 Item 5)
21	–	Bracket (P/O PL 21.15 Item 5)
22	023E27160	Belt

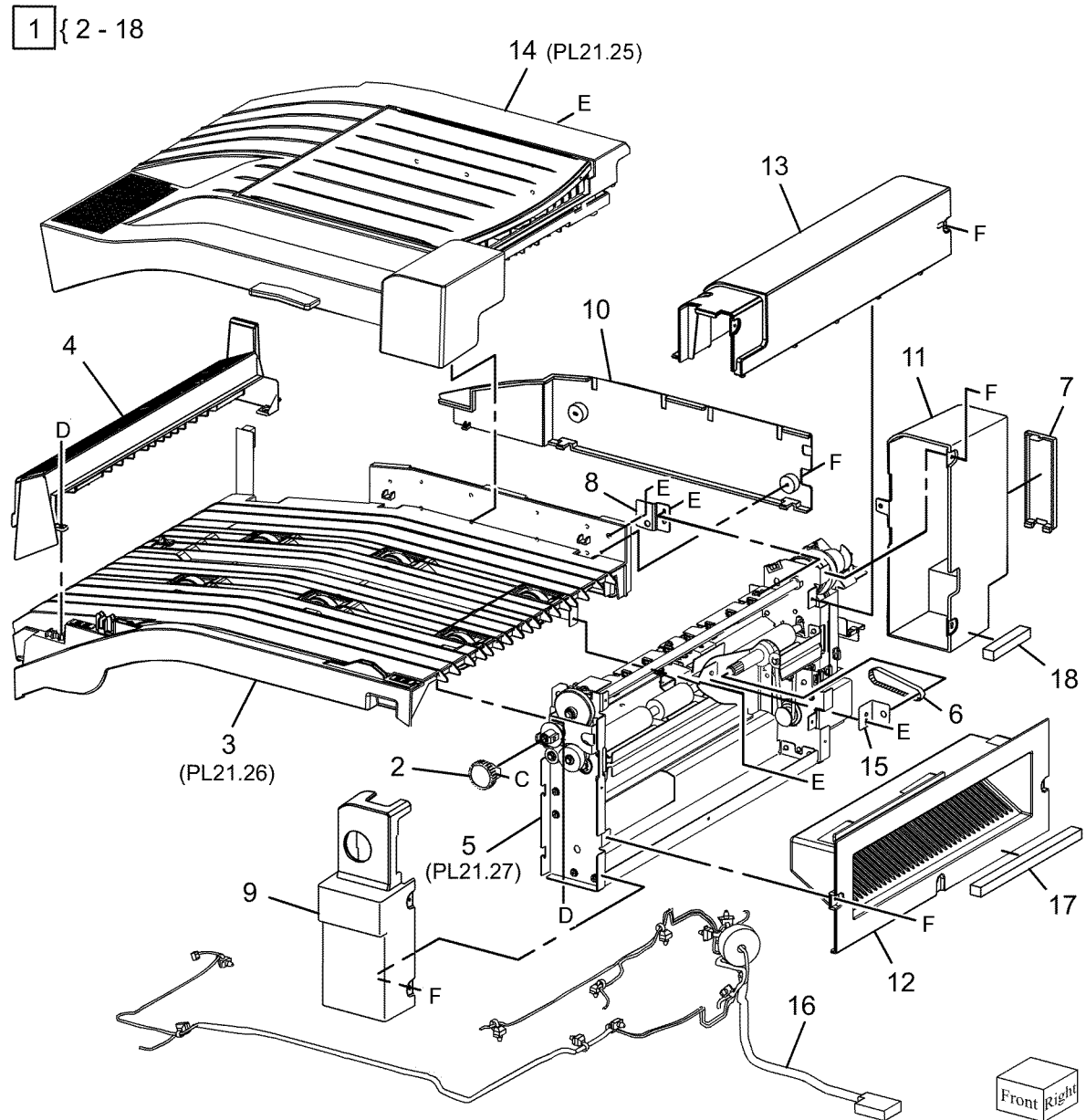


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# PL 21.24 H-Transport (1 of 5)

Item	Part	Description
1	-	H-Transport Assembly (REF: PL 21.1 Item 2) (REP 21.12)
2	003K17251	Knob
3	-	Lower Chute Assembly (P/O PL 21.24 Item 1)
4	-	Left Upper Chute Assembly
5	059K55857	Decurler Transport Assembly
6	423W27054	Belt
7	-	Connector Cover (P/O PL 21.24 Item 1)
8	-	Bracket (P/O PL 21.24 Item 1)
9	-	Decurler Front Cover (P/O PL 21.24 Item 1)
10	848E18480	Rear Cover
11	848E18490	Decurler Rear Cover
12	848E18501	Decurler Right Hand Cover
13	848E18522	Decurler Top Cover
14	-	Top Cover Assembly (P/O PL 21.24 Item 1)
15	-	Stud Bracket (P/O PL 21.24 Item 1)
16	962K61011	Wire Harness
17	-	Shield (P/O PL 21.24 Item 1)
18	-	Shield (P/O PL 21.24 Item 1)



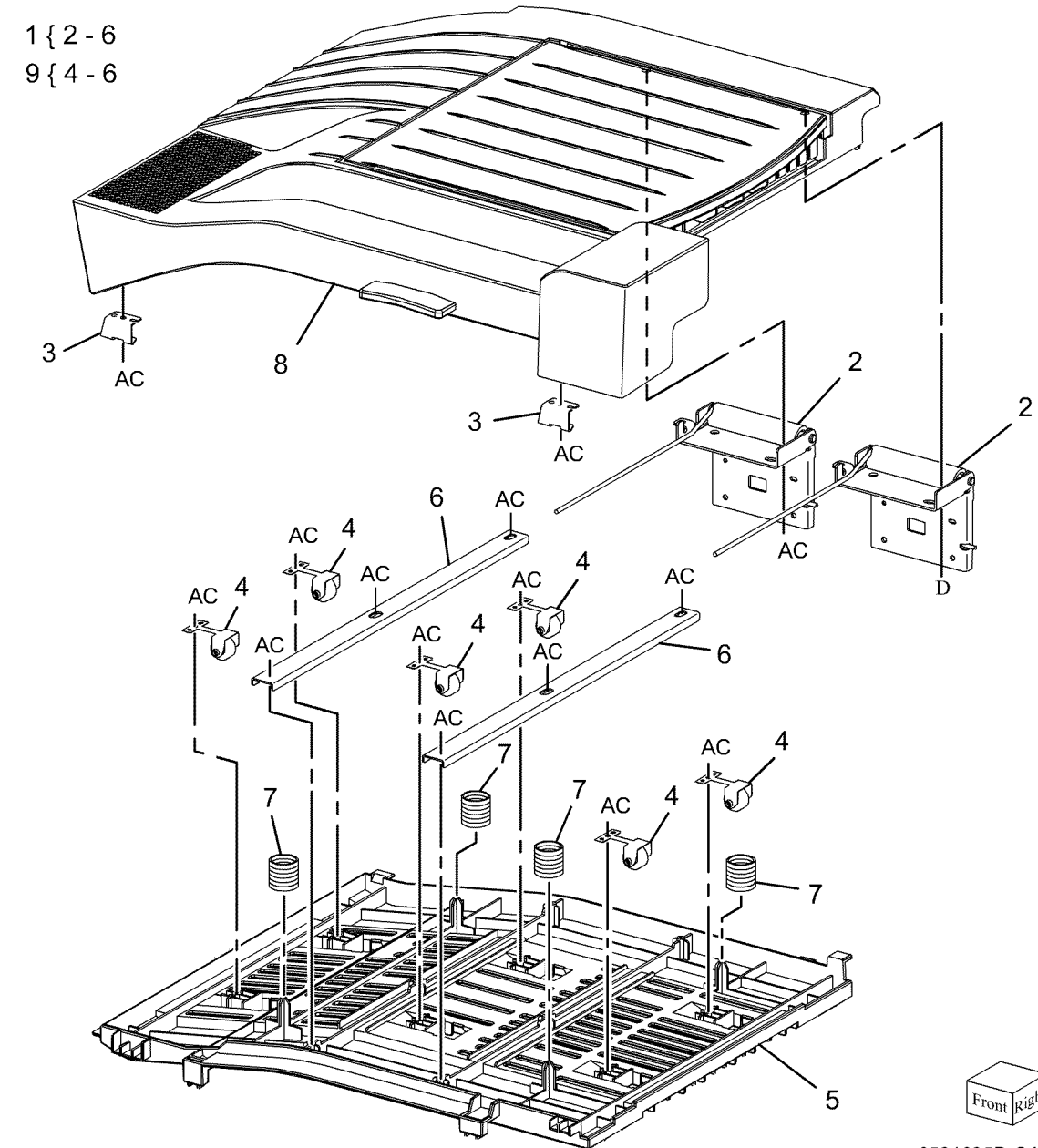
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## PL 21.25 H-Transport (2 of 5)

Item	Part	Description
1	-	Top Cover Assembly (Not Spared)
2	-	Hinge Assembly (P/O PL 21.25 Item 1)
3	-	Bracket (P/O PL 21.25 Item 1)
4	-	Pinch Roll Assembly (P/O PL 21.25 Item 1, PL 21.25 Item 9)
5	-	Upper Chute (P/O PL 21.25 Item 1, PL 21.25 Item 9)
6	-	Upper Plate Chute (P/O PL 21.25 Item 1, PL 21.25 Item 9)
7	-	Upper Chute Spring (Not Spared)
8	848K37393	Top Cover Assembly
9	054K35352	Upper Chute Assembly

1 { 2 - 6

9 { 4 - 6

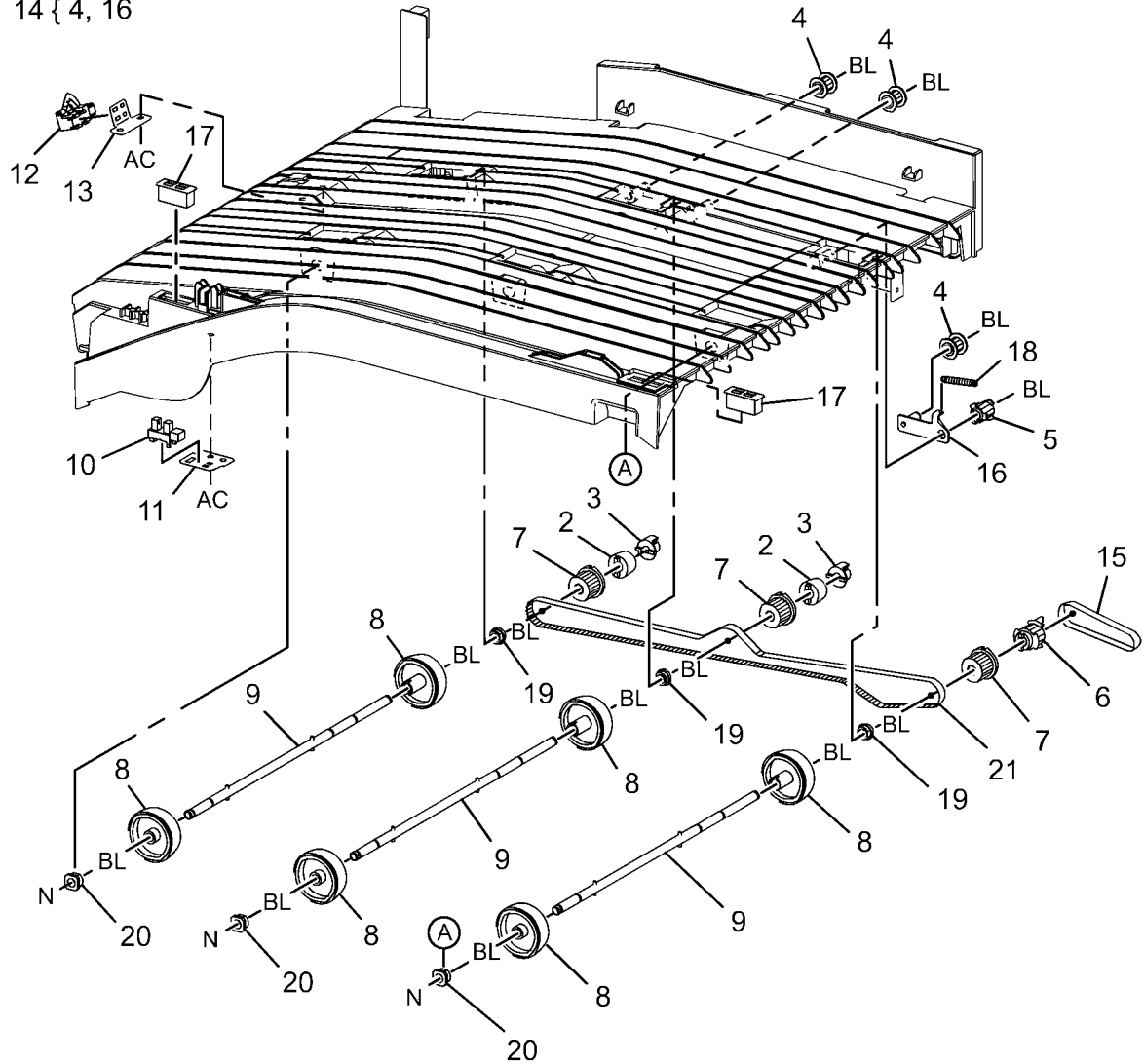


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# PL 21.26 H-Transport (3 of 5)

Item	Part	Description
1	-	Lower Chute Assembly
2	005E19650	Clutch
3	011E16881	Joint
4	020E37740	Pulley
5	020E45620	Pulley
6	020E45630	Pulley
7	020E45640	Pulley
8	059K55790	Roll Assembly
9	-	Roll Shaft Assembly (P/O PL 21.26 Item 1)
10	130K70160	H-Transport Interlock Sensor
11	-	Sensor Bracket (P/O PL 21.26 Item 1)
12	-	H-Transport Entrance Sensor (P/O PL 21.26 Item 1)
13	-	Sensor Bracket (P/O PL 21.26 Item 1)
14	068K58521	Tension Bracket Assembly
15	-	Belt (P/O PL 21.24 Item 6)
16	-	Bracket Assembly Tension (P/O PL 21.26 Item 14)
17	121E92720	Magnet
18	-	Spring (Not Spared)
19	-	Bearing (Not Spared)
20	-	Sleeve Bearing (Not Spared)
21	-	H-Transport Drive Belt (Not Spared) (REP 21.27)

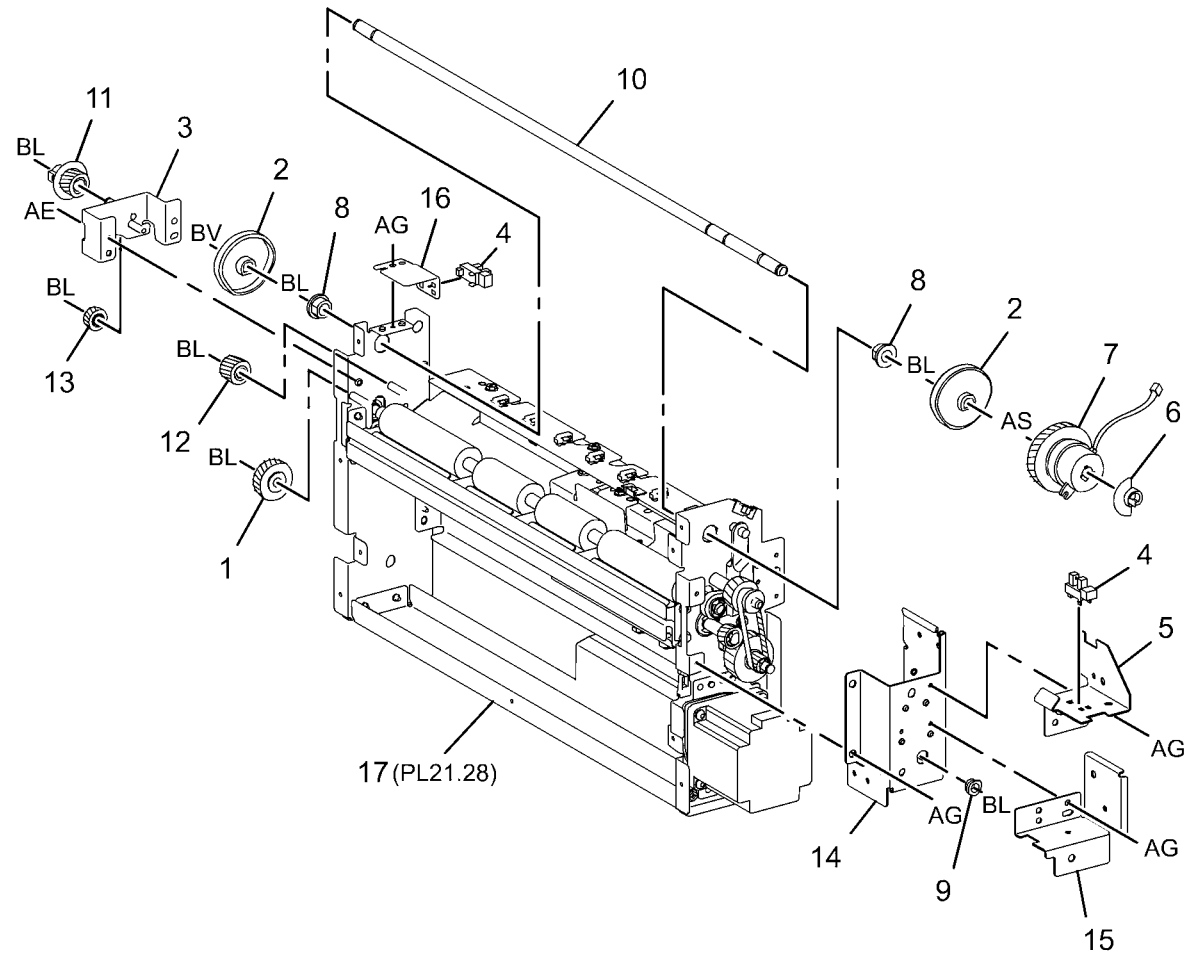
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## PL 21.27 H-Transport (4 of 5)

Item	Part	Description
1	007K14910	One Way Gear Assembly
2	008E96860	Decurler Cam
3	-	Bracket (P/O PL 21.24 Item 5)
4	130K70160	H-Transport Interlock Sensor-R, Decurler Cam Home Sensor
5	-	Sensor Bracket (P/O PL 21.24 Item 5)
6	-	Actuator (P/O PL 21.24 Item 5)
7	121K41980	Decurler Cam Clutch
8	-	Bearing (P/O PL 21.24 Item 5)
9	-	Bearing (P/O PL 21.24 Item 5)
10	-	Shaft (P/O PL 21.24 Item 5)
11	807E24170	Knob Gear (18T)
12	807E24180	Gear (18T)
13	807E24190	Gear (16T)
14	-	Bracket (P/O PL 21.24 Item 5)
15	-	Harness Bracket (P/O PL 21.24 Item 5)
16	-	Sensor Bracket (P/O PL 21.24 Item 5)
17	801K30761	Decurler Frame Assembly

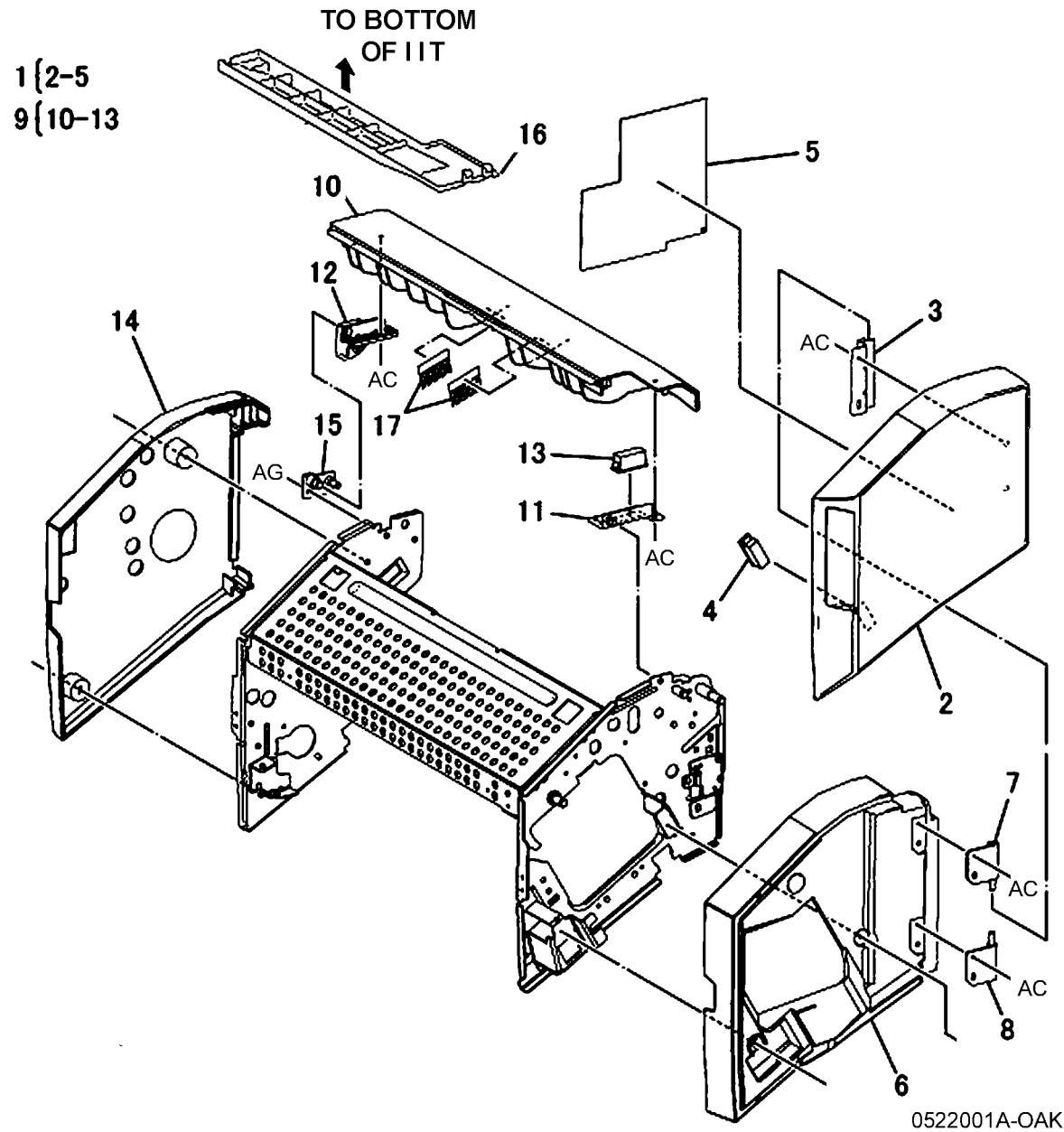


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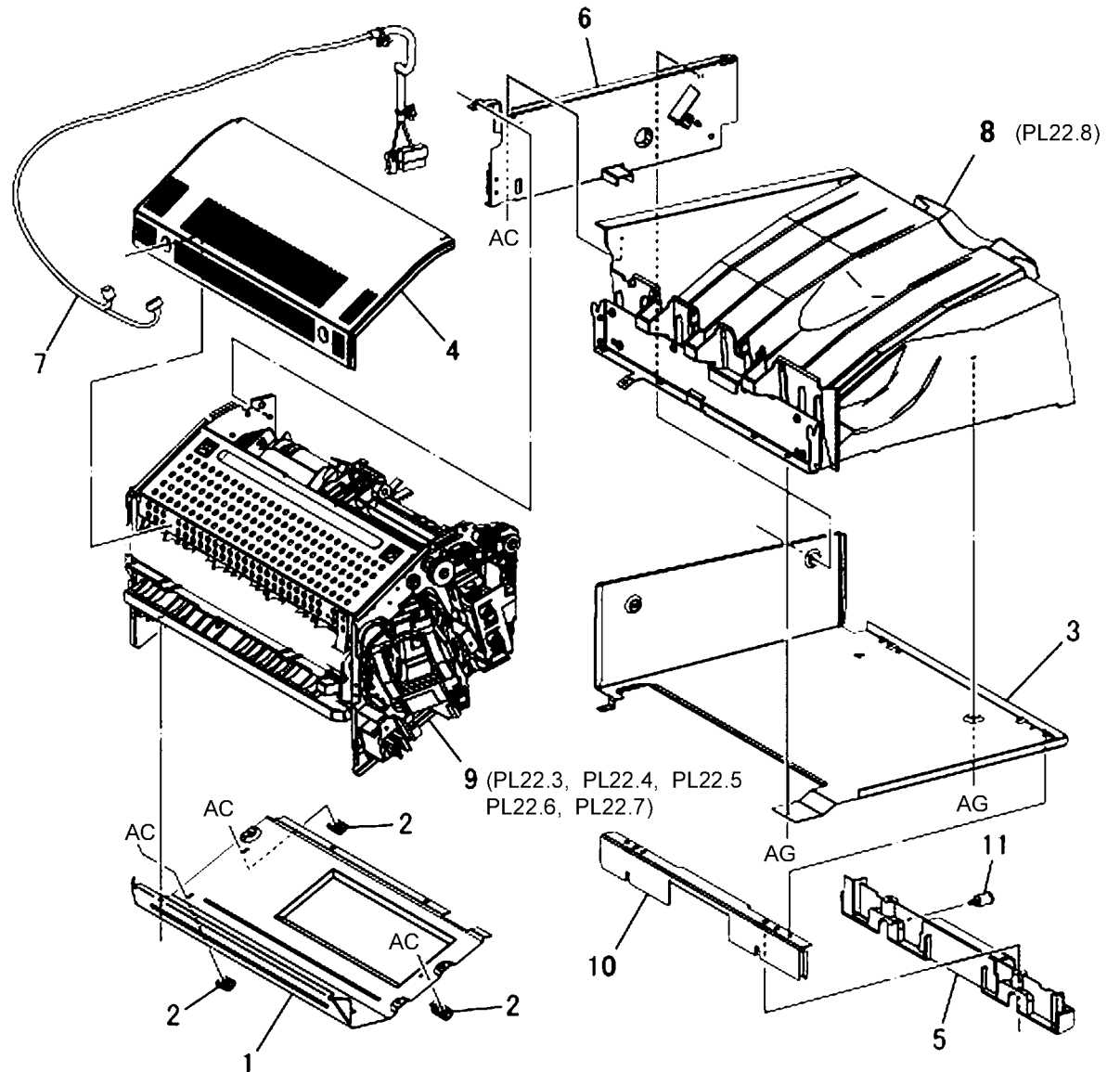
## PL 22.1 Finisher Assembly (Part 1 of 2) (Integrated Office Finisher)

Item	Part	Description
1	848K36702	Front Cover Assembly
2	-	Front Cover (P/O PL 22.1 Item 1)
3	-	Bracket (P/O PL 22.1 Item 1)
4	-	Magnet (P/O PL 22.1 Item 1)
5	-	Label (P/O PL 22.1 Item 1)
6	848E50760	Front Inner Cover
7	068K29871	Hinge
8	068K29880	Hinge
9	848K38630	Top Cover Assembly
10	-	Top Cover (P/O PL 22.1 Item 9)
11	-	Bracket (P/O PL 22.1 Item 9)
12	-	Stopper (P/O PL 22.1 Item 9)
13	-	Magnet (P/O PL 22.1 Item 9)
14	848E50790	Rear Cover
15	-	Hinge (Not Spared)
16	815E60280	IIT Cover
17	042E92330	Eliminator



## PL 22.2 Finisher Assembly (Part 2 of 2) (Integrated Office Finisher)

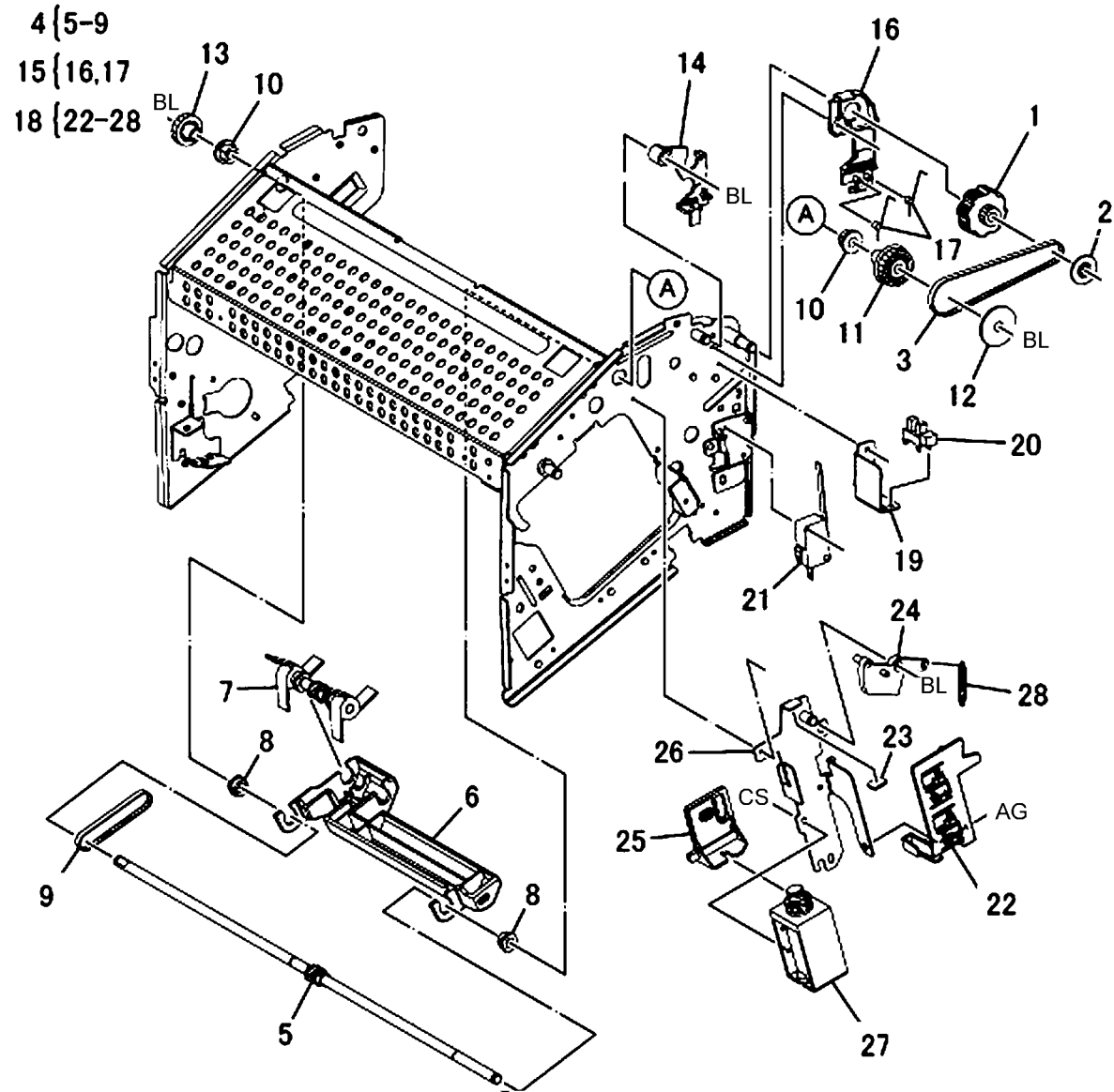
Item	Part	Description
1	–	Bottom Cover (Not Spared)
2	–	Spacer (Not Spared)
3	–	Tray Cover (Not Spared)
4	848E50770	Left Cover
5	068K69530	Tray Support
6	–	Rear Bracket (Not Spared)
7	962K42291	Wire Harness
8	050K64830	Stacker Tray Assembly (REP 22.16)
9	–	Stacker Base Assembly (Not Spared)
10	–	Extended Tray Assembly (Not Spared)
11	–	Screw (Not Spared)



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# PL 22.3 Stacker Base Assembly (Part 1 of 5) (Integrated Office Finisher)

Item	Part	Description
1	003E65500	Knob
2	005E89470	Collar
3	423W10454	Belt
4	012K96370	Link Shaft Assembly
5	-	Link Shaft (P/O PL 22.3 Item 4)
6	012E16150	Support
7	-	Sub Paddle Shaft Assembly (P/O PL 22.3 Item 4)
8	-	Bearing (P/O PL 22.3 Item 4)
9	423W06054	Paddle Belt (REP 22.2)
10	413W75959	Bearing
11	020K13900	Pulley
12	005E89490	Collar
13	807E13260	Gear (21T)
14	120E27240	Actuator
15	802K85560	Knob Cover Assembly
16	-	Knob Cover (P/O PL 22.3 Item 15)
17	-	Spring (P/O PL 22.3 Item 15)
18	012K94990	Sub Paddle Solenoid Assembly
19	-	Bracket (Not Spared)
20	130K70160	Finisher Top Cover Interlock Sensor
21	110K12980	Finisher Top Cover Interlock (+24V)
22	-	Support (P/O PL 22.3 Item 18)
23	-	Cushion (P/O PL 22.3 Item 18)
24	-	Link (P/O PL 22.3 Item 18)
25	-	Arm (P/O PL 22.3 Item 18)
26	-	Bracket (P/O PL 22.3 Item 18)
27	121K34620	Sub Paddle Solenoid (REP 22.3)
28	-	Spring (P/O PL 22.3 Item 18)

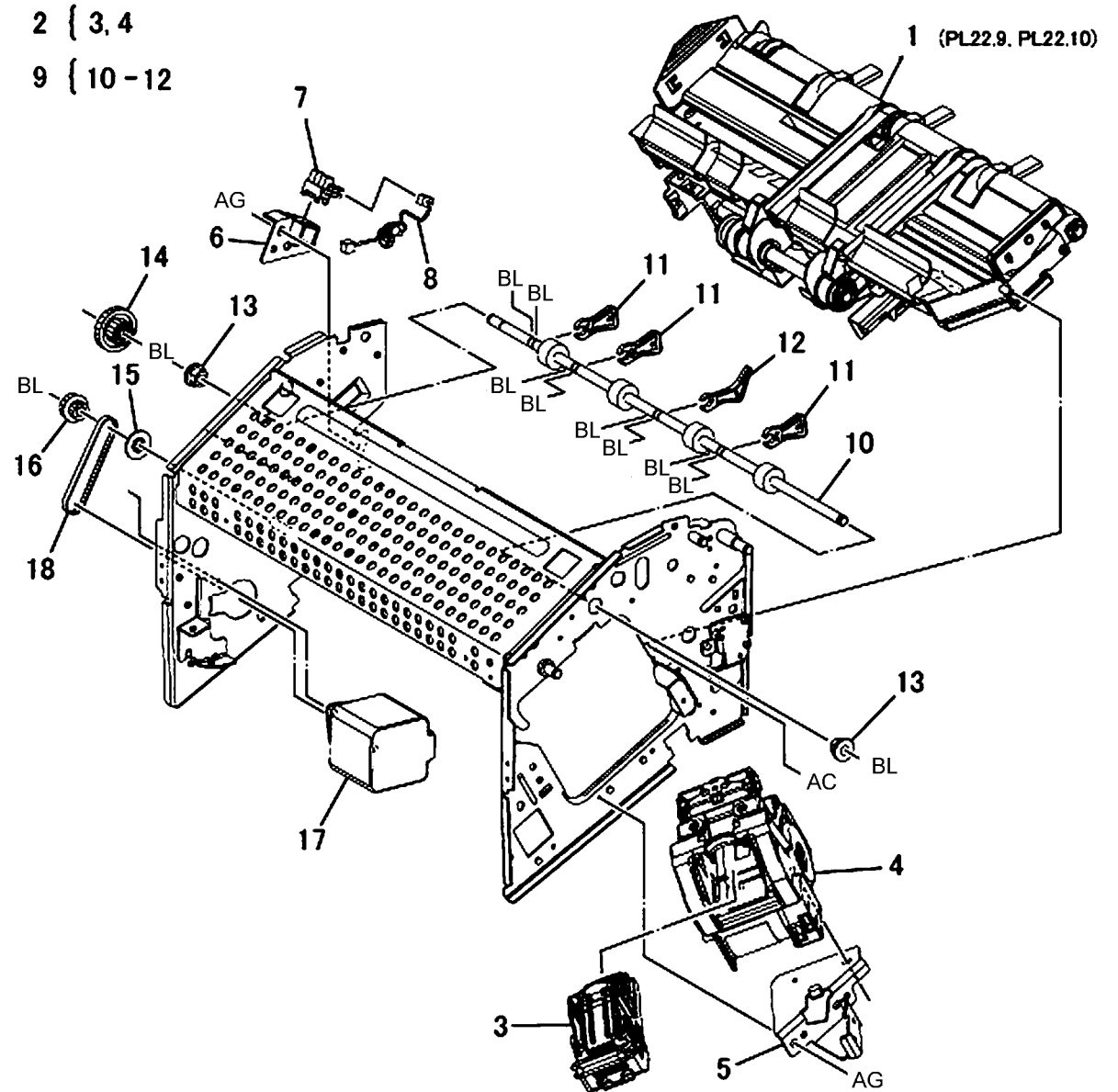


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## PL 22.4 Stacker Base Assembly (Part 2 of 5) (Integrated Office Finisher)

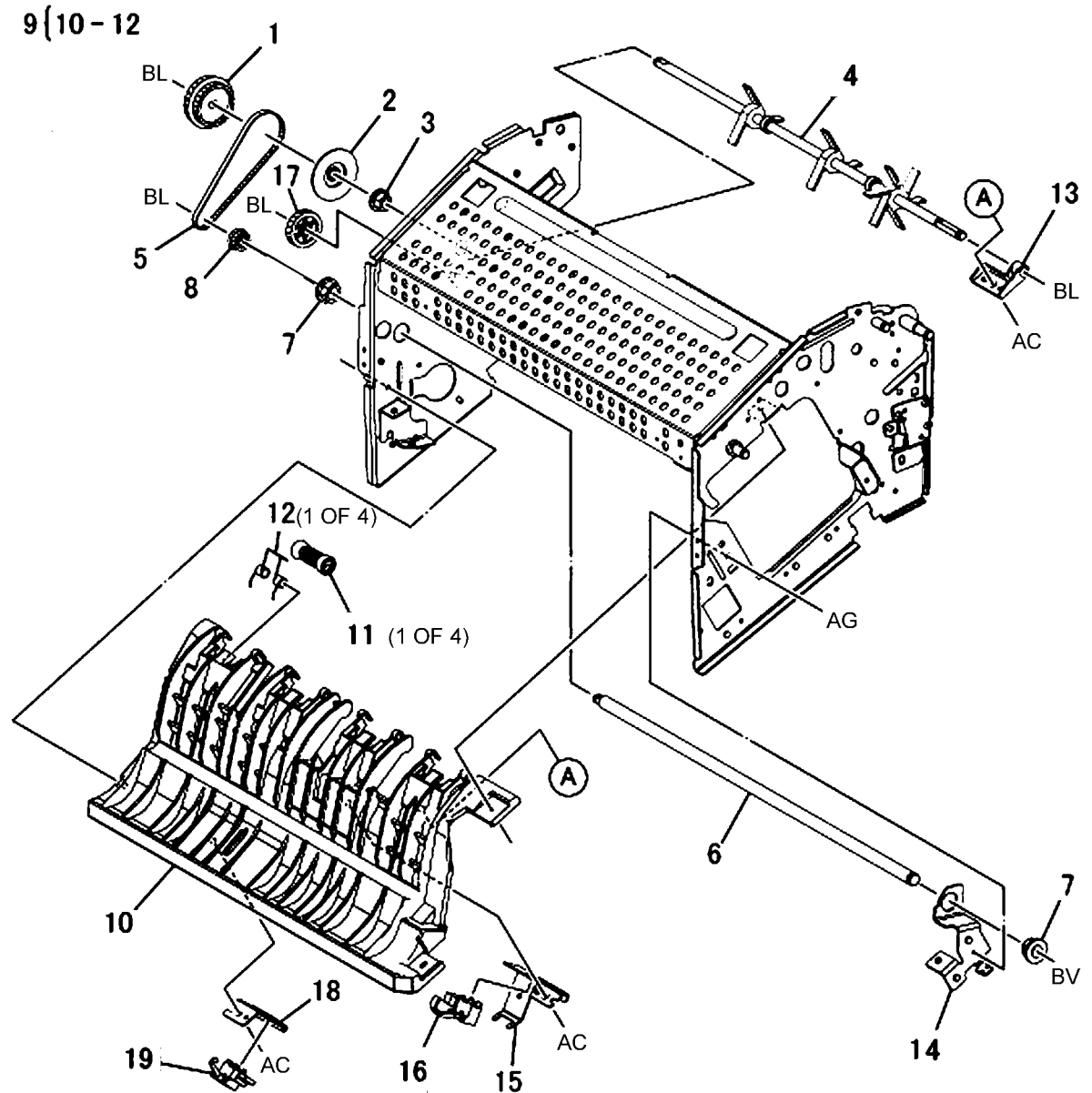
Item	Part	Description
1	–	Compile Assembly (REP 22.20)
2	029K92350	Staple Assembly (REP 22.5)
3	–	Cartridge (P/O PL 22.4 Item 2)
4	–	Stapler (P/O PL 22.4 Item 2)
5	–	Bracket (Not Spared)
6	–	Support (Not Spared)
7	930W00111	Set Clamp Home Sensor (REP 22.6)
8	962K44980	Wire Harness
9	022K72790	Exit Roll Assembly (REP 22.7)
10	–	Exit Roll (P/O PL 22.4 Item 9)
11	004E15340	Damper
12	004E15330	Center Damper
13	–	Bearing (Not Spared)
14	007K94220	One Way Gear
15	005E89470	Collar
16	807E13230	Gear Pulley (16T/18T)
17	127K49800	Finisher Transport Motor
18	423W06954	Belt



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## PL 22.5 Stacker Base Assembly (Part 3 of 5) (Integrated Office Finisher)

Item	Part	Description
1	807E13250	Gear Pulley (37T/45T)
2	005E89480	Collar
3	413W75959	Bearing
4	006K25001	Main Paddle Shaft Assembly (REP 22.11)
5	423W09854	Belt
6	-	Shaft (Not Spared)
7	413W11860	Bearing
8	020E43500	Pulley (19T)
9	054K30361	Lower Chute Assembly (REP 22.12)
10	-	Lower Chute (P/O PL 22.5 Item 9)
11	022K73190	Pinch Roll (REP 22.8)
12	809E65931	Spring
13	-	Support (Not Spared)
14	-	Bracket (Not Spared)
15	-	Bracket (Not Spared)
16	130K93251	Compile Exit Sensor (REP 22.10)
17	807E13240	Gear (27T)
18	-	Bracket (Not Spared)
19	130K88190	Finisher Entrance Sensor (REP 22.9)

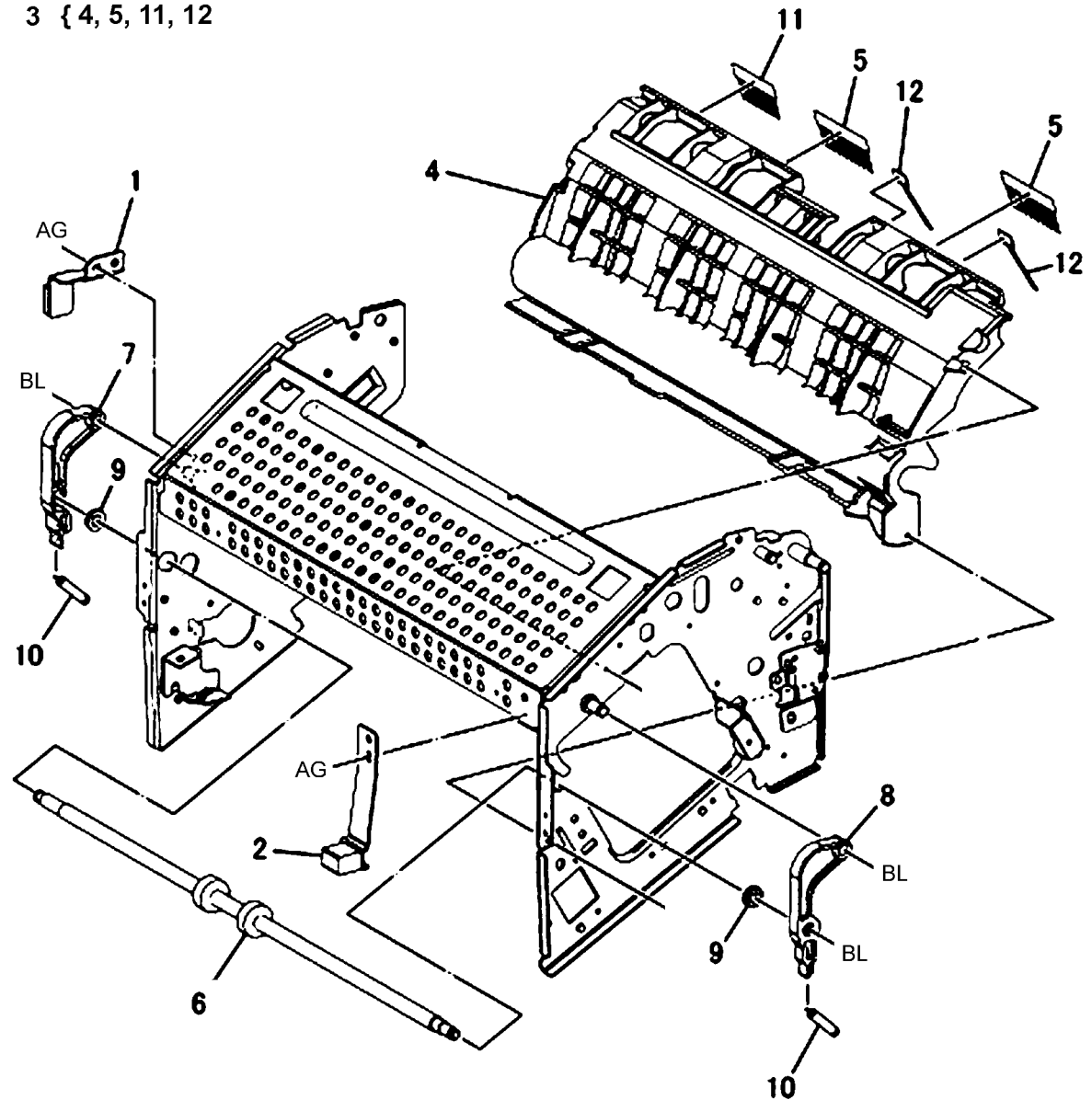


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# PL 22.6 Stacker Base Assembly (Part 4 of 5) (Integrated Office Finisher)

Item	Part	Description
1	068K29931	Bracket
2	068K29941	Bracket
3	054K42690	Upper Chute Assembly (REP 22.14)
4	-	Upper Chute (P/O PL 22.6 Item 3)
5	042E92241	Eliminator
6	022K72782	Entrance Roll Assembly (REP 22.13)
7	031E97041	Arm
8	031E97020	Arm
9	413W66250	Ball Bearing
10	-	Spring (Not Spared)
11	042E92330	Eliminator
12	-	Guide Paper (P/O PL 22.6 Item 3)

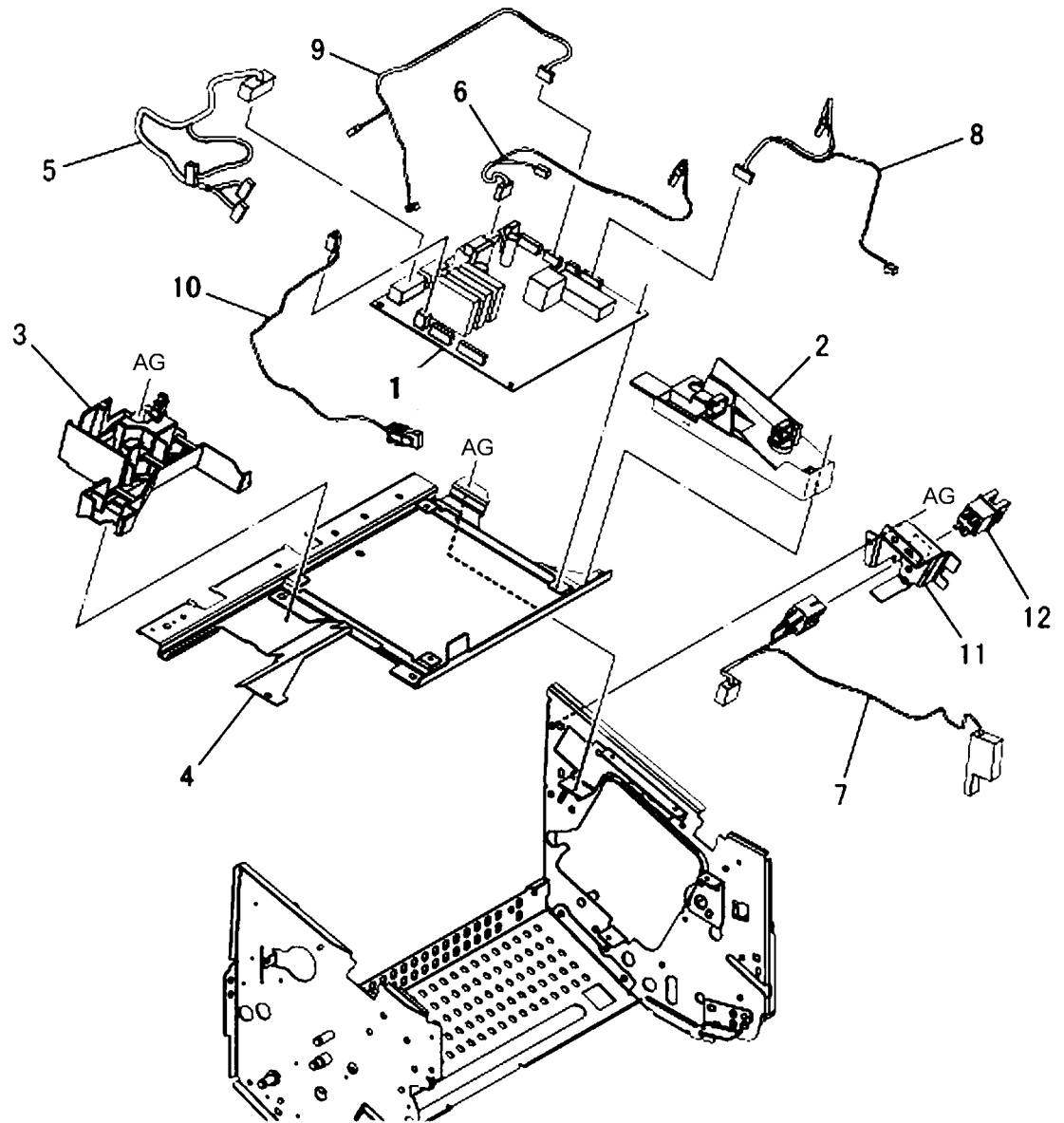
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## PL 22.7 Stacker Base Assembly (Part 5 of 5) (Integrated Office Finisher)

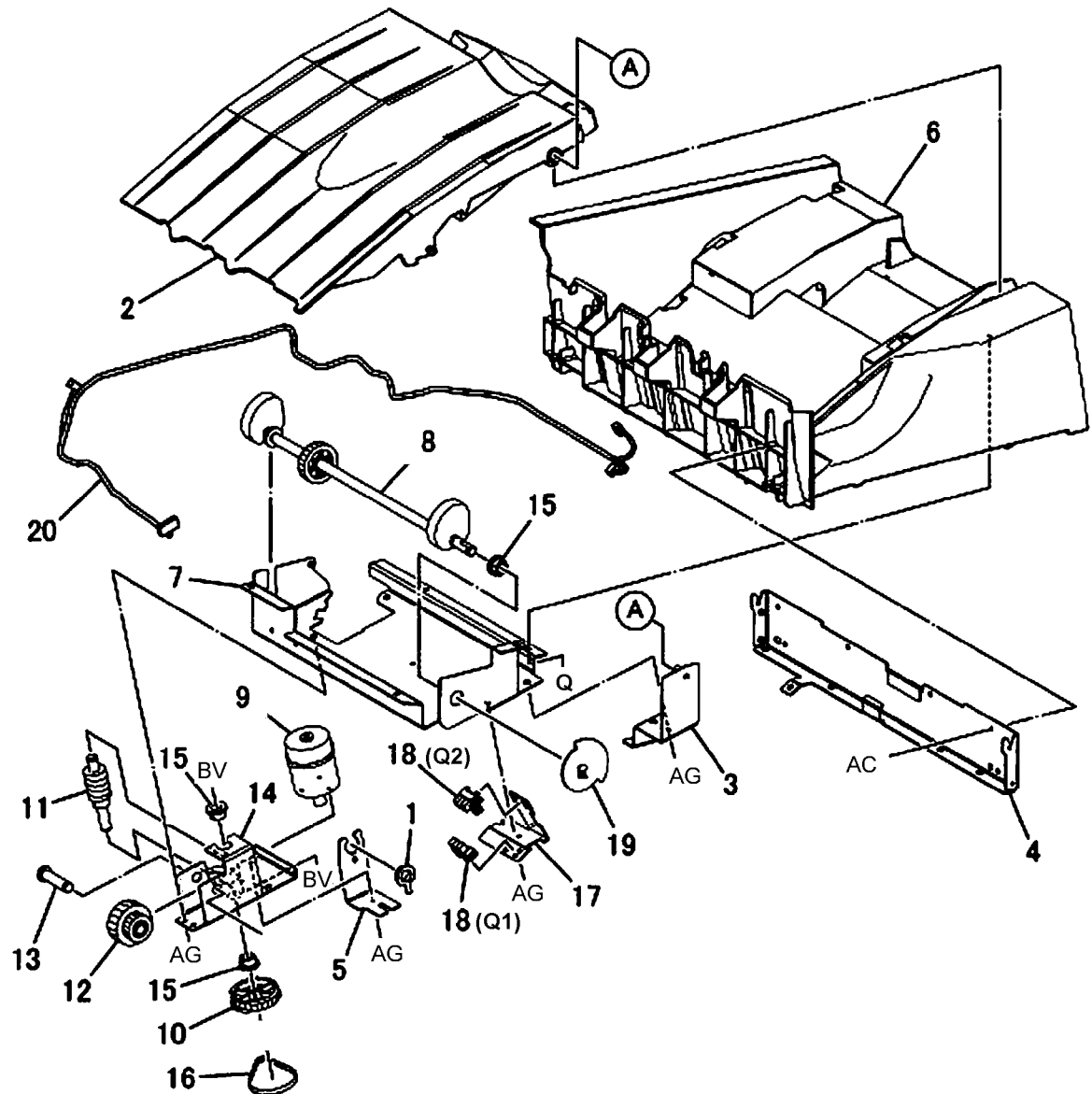
Item	Part	Description
1	960K50450	Finisher PWB (REP 22.15)
2	055K30850	Connector Bracket
3	-	Harness Guide (Not Spared)
4	-	PWB Bracket (Not Spared)
5	-	Wire Harness (Drive) (Not Spared)
6	-	Wire Harness (Stapler) (Not Spared)
7	-	Wire Harness (Interlock) (Not Spared)
8	-	Wire Harness (Front Sensor) (Not Spared)
9	-	Wire Harness (Compile) (Not Spared)
10	-	Wire Harness (Stacker) (Not Spared)
11	-	Bracket (Not Spared)
12	110E97990	Finisher Front Interlock Switch



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## PL 22.8 Stacker Tray Assembly (Integrated Office Finisher)

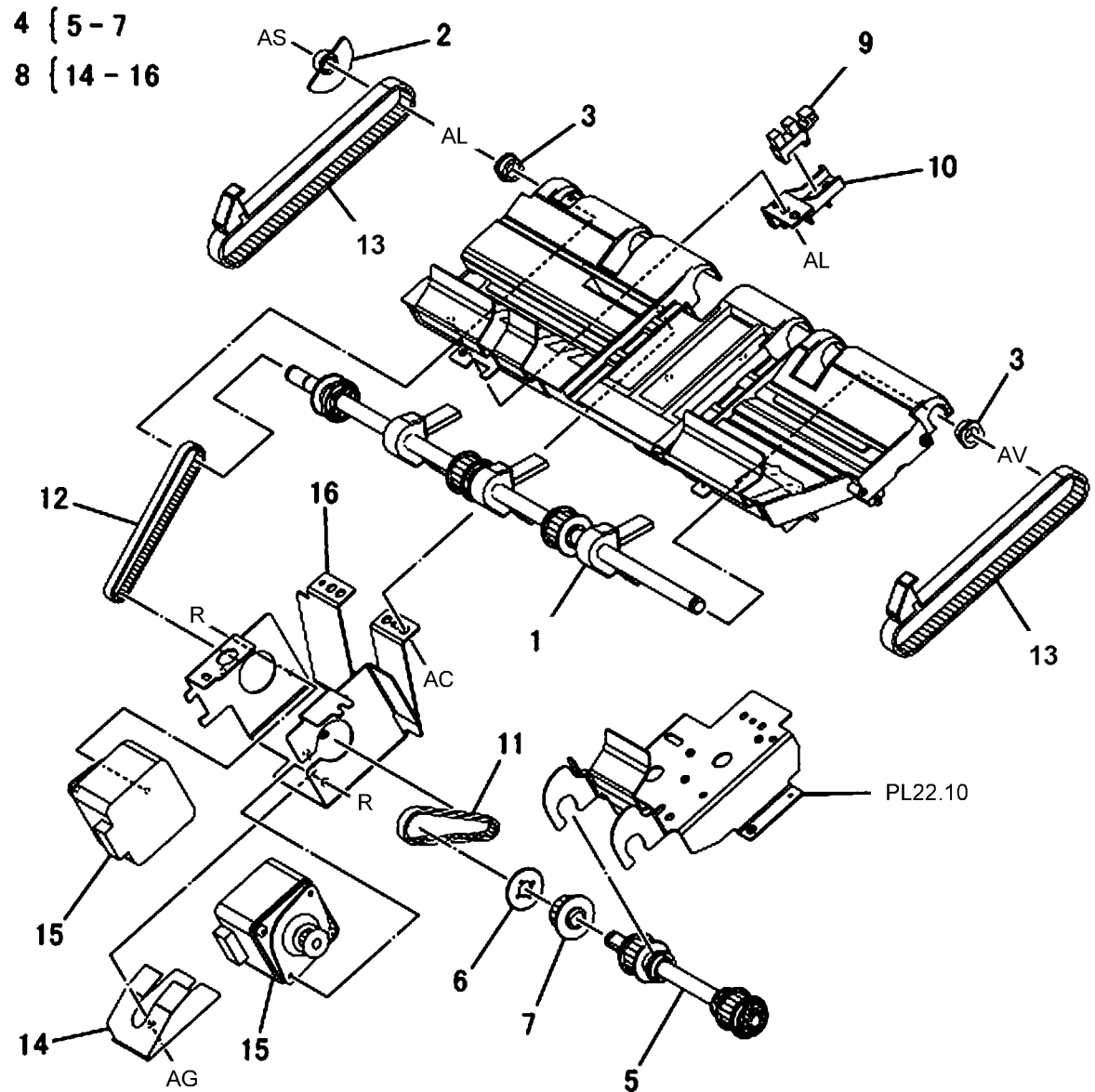
Item	Part	Description
1	–	Bearing (P/O PL 22.2 Item 8)
2	–	Top Tray (P/O PL 22.2 Item 8)
3	–	Bracket (P/O PL 22.2 Item 8)
4	–	Plate (P/O PL 22.2 Item 8)
5	–	Bracket (P/O PL 22.2 Item 8)
6	–	Base Tray (P/O PL 22.2 Item 8)
7	–	Base Bracket (P/O PL 22.2 Item 8)
8	006K25031	Stacker Shaft Assembly (REP 22.17)
9	127K49420	Stacker Motor (REP 22.18)
10	–	Pulley (60T) (P/O PL 22.2 Item 8)
11	–	Worm Gear (P/O PL 22.2 Item 8)
12	–	Gear (16T/32T) (P/O PL 22.2 Item 8)
13	–	Stud (P/O PL 22.2 Item 8)
14	–	Bracket (P/O PL 22.2 Item 8)
15	–	Bearing (P/O PL 22.2 Item 8)
16	423W07354	Belt (P/O PL 22.2 Item 8)
17	–	Bracket (P/O PL 22.2 Item 8)
18	930W00111	Stacker Sensor 1 (Q1), Sensor 2 (Q2) (REP 22.19)
19	–	Actuator (P/O PL 22.2 Item 8)
20	–	Wire Harness (P/O PL 22.2 Item 8)



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## PL 22.9 Compile Assembly (Part 1 of 2) (Integrated Office Finisher)

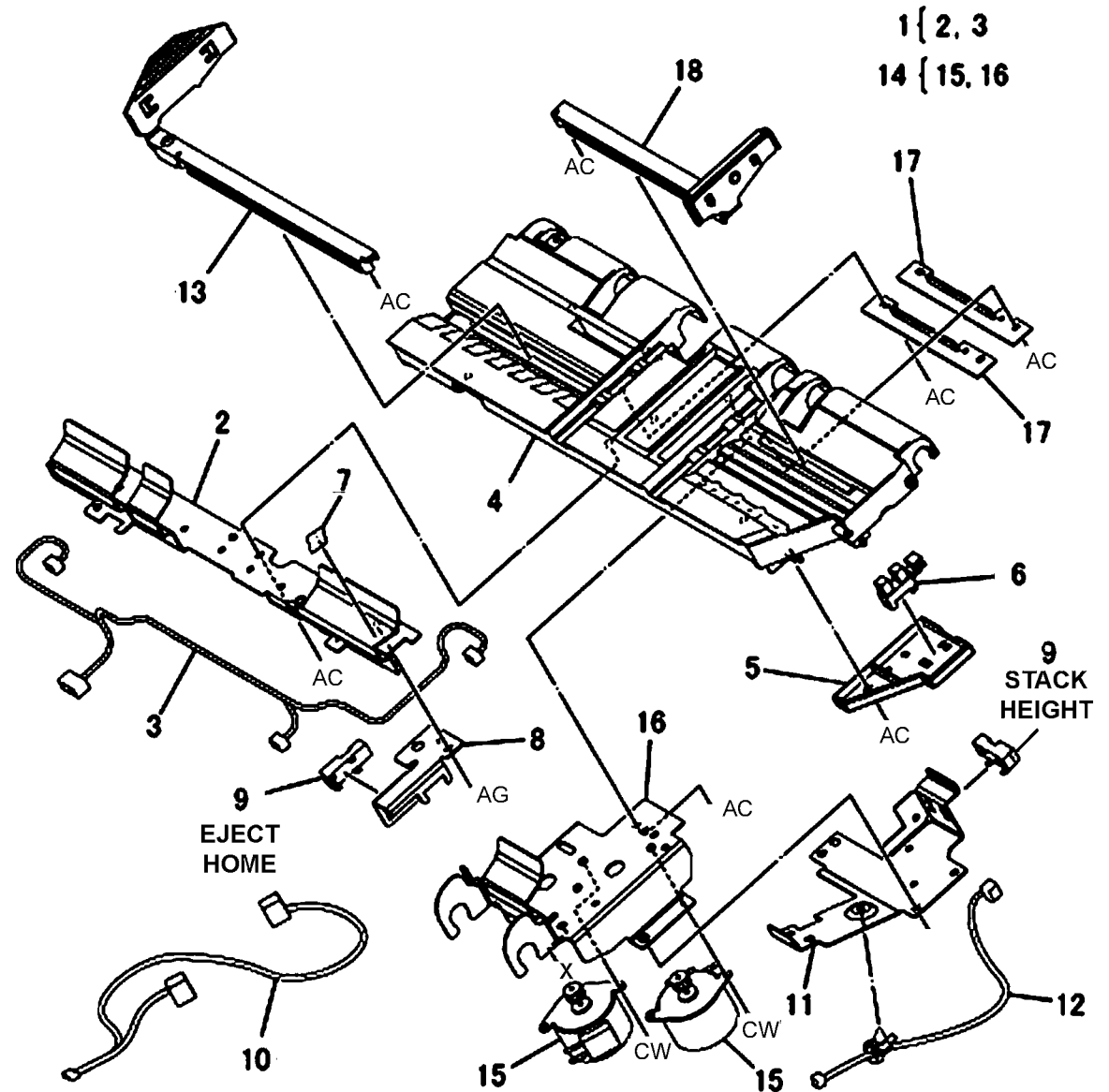
Item	Part	Description
1	006K25010	Set Clamp Shaft (REP 22.21)
2	120E27220	Actuator
3	413W11860	Bearing
4	006K25020	Eject Shaft Assembly (REP 22.25)
5	-	Eject Shaft (P/O PL 22.9 Item 4)
6	-	Spacer (P/O PL 22.9 Item 4)
7	-	Pulley (P/O PL 22.9 Item 4)
8	068K29830	Eject/Set Clamp Motor Assembly (REP 22.23)
9	930W00111	Rear Tamper Home Sensor (REP 22.24)
10	-	Support (Not Spared)
11	423W26754	Belt
12	-	Belt (Not Spared)
13	023K91530	Eject Belt (REP 22.22)
14	-	Spring (P/O PL 22.9 Item 8)
15	-	Eject Motor, Set Clamp Motor (P/O PL 22.9 Item 8)
16	-	Bracket (P/O PL 22.9 Item 8)



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## PL 22.10 Compile Assembly (Part 2 of 2) (Integrated Office Finisher)

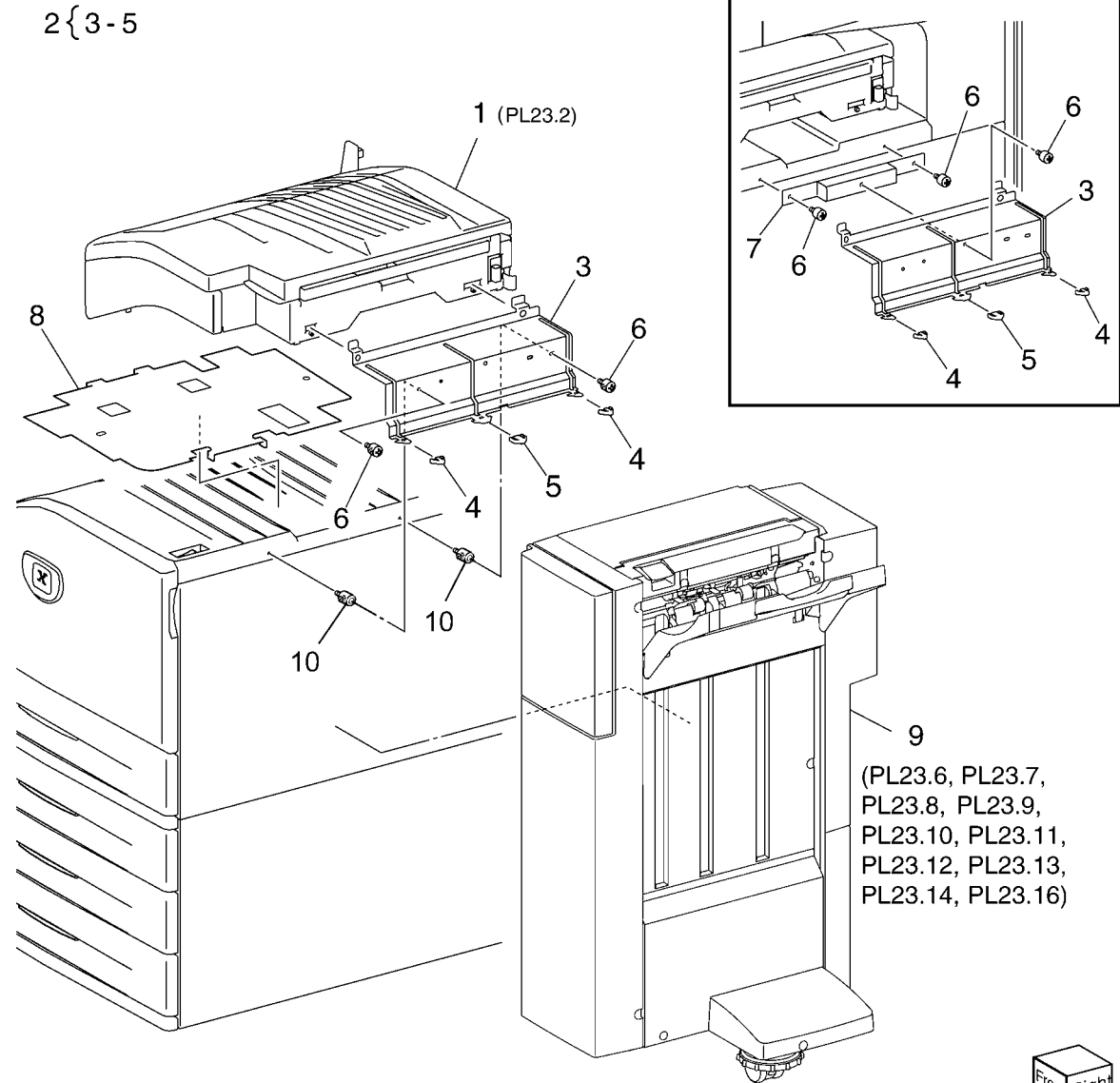
Item	Part	Description
1	068K30510	Bracket Assembly
2	-	Bracket (P/O PL 22.10 Item 1)
3	-	Wire Harness (P/O PL 22.10 Item 1)
4	050E25900	Compile Tray
5	-	Support (Not Spared)
6	930W00111	Front Tamper Home Sensor (REP 22.27)
7	038E34860	Paper Guide
8	-	Bracket (Not Spared)
9	-	Stack Height Sensor (REP 22.29)
-	930W00212	Eject Clamp Home Sensor (REP 22.28)
10	962K42270	Wire Harness
11	-	Bracket (Not Spared)
12	-	Wire Harness (Not Spared)
13	038K88990	Tamper Guide, Rear
14	068K30740	Front/Rear Tamper Motor Assembly (REP 22.26)
15	-	Front/Rear Tamper Motor (P/O PL 22.10 Item 14)
16	-	Bracket (P/O PL 22.10 Item 14)
17	001E70981	Rail
18	038K89260	Tamper Guide, Front



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# PL 23.1 H-Transport Assembly (1 of 5) (Office Finisher LX)

Item	Part	Description
1	059K65560	H-Transport Assembly (REP 23.1)
2	068K59494	Docking Plate Assembly
3	-	Docking Plate (P/O PL 23.1 Item 2)
4	-	Side Guide (P/O PL 23.1 Item 2)
5	-	Center Guide (P/O PL 23.1 Item 2)
6	826E07210	Thumb Screw
7	868E51550	Bracket
8	-	Finisher Plate
9	-	Finisher LX Assembly (Not Spared)
10	-	HTU Spacer (Not Spared)

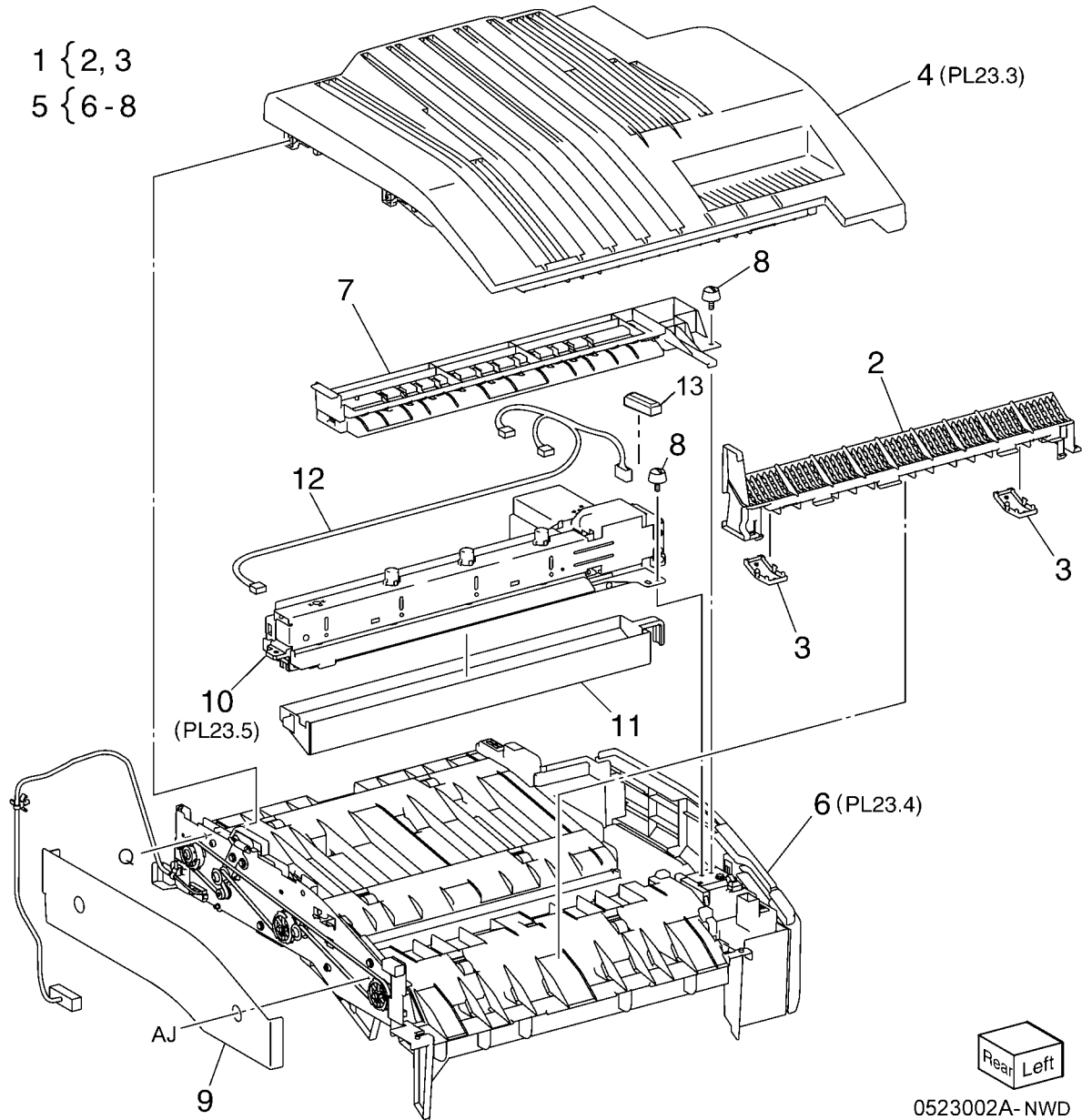


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# PL 23.2 H - Transport Assembly (2 of 5) (Office Finisher LX)

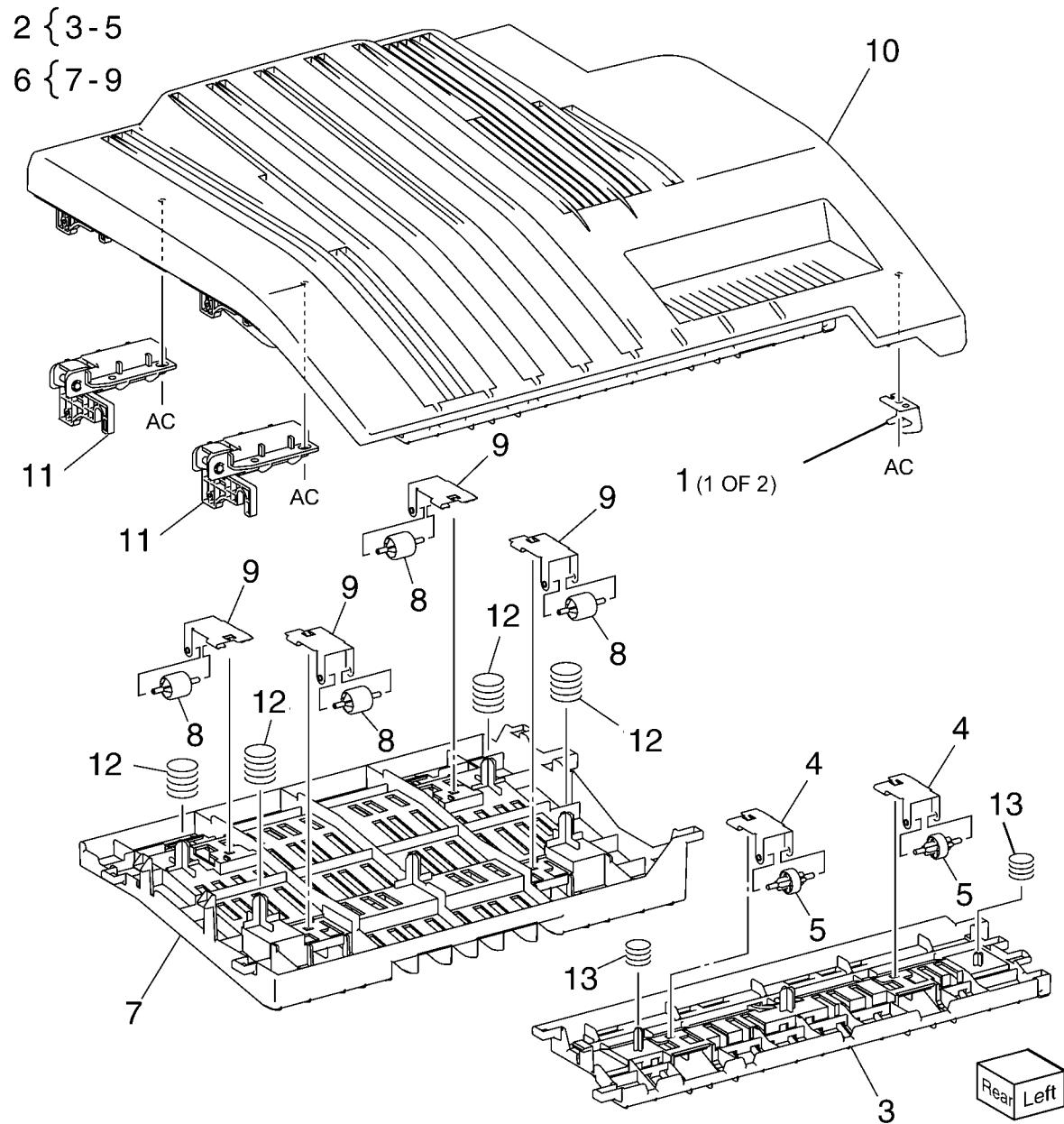
Item	Part	Description
1	848K34182	Left Cover Assembly
2	848E43672	Left Cover
3	-	Paper Guide (P/O PL 23.2 Item 1)
4	848K34170	Top Cover Assembly
5	-	Lower Chute Assembly (P/O PL 23.1 Item 1)
6	-	Lower Chute Assembly (P/O PL 23.2 Item 5)
7	054K35264	Chute Assembly
8	026K81200	Thumb Screw
9	-	Rear Cover (Not Spared)
10	180K00391	Punch Assembly (2/3 Hole) (REP 23.2)
-	180K00401	Punch Assembly (2/4 Hole) (REP 23.2)
11	-	Punch Box (Not Spared)
12	-	Wire Harness (Not Spared)
13	848E28010	Connector Cover



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# PL 23.3 H - Transport Assembly (3 of 5) (Office Finisher LX)

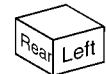
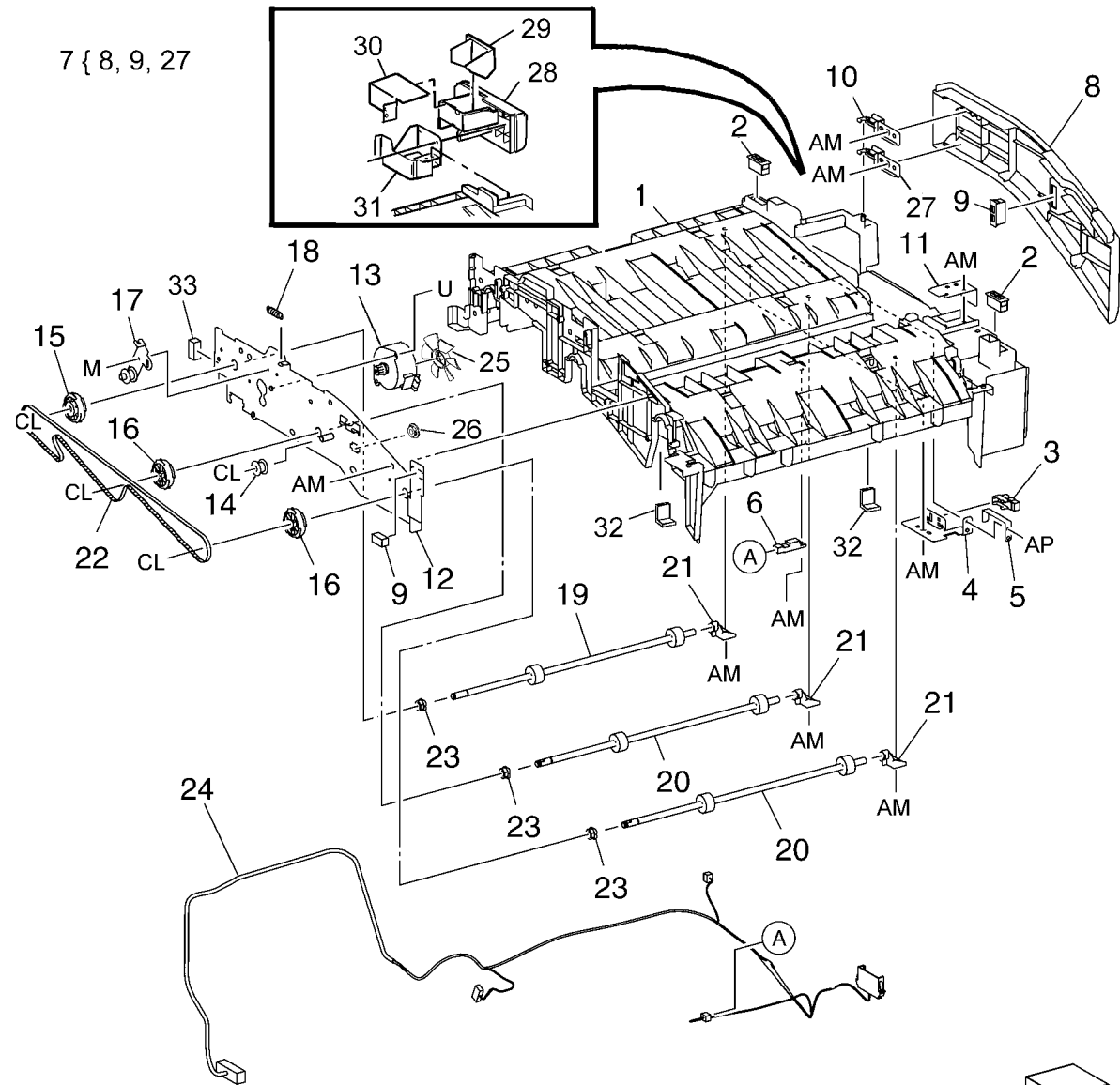
Item	Part	Description
1	-	Bracket (P/O PL 23.2 Item 4)
2	054K35239	Left Chute Assembly
3	-	Left Chute (P/O PL 23.3 Item 2)
4	-	Pinch Spring (P/O PL 23.3 Item 2)
5	-	Pinch Roller (P/O PL 23.3 Item 2)
6	054K35245	Right Chute Assembly
7	-	Right Chute (P/O PL 23.3 Item 6)
8	022E27660	Pinch Roller
9	809E76211	Pinch Spring
10	848E43662	Top Cover
11	003K15985	H - Transport Counter Balance (Left)
12	-	H - Transport Counter Balance (Right) (P/O PL 23.2 Item 4)
13	809E76240	Spring
14	809E78940	Spring



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# PL 23.4 H - Transport Assembly (4 of 5) (Office Finisher LX)

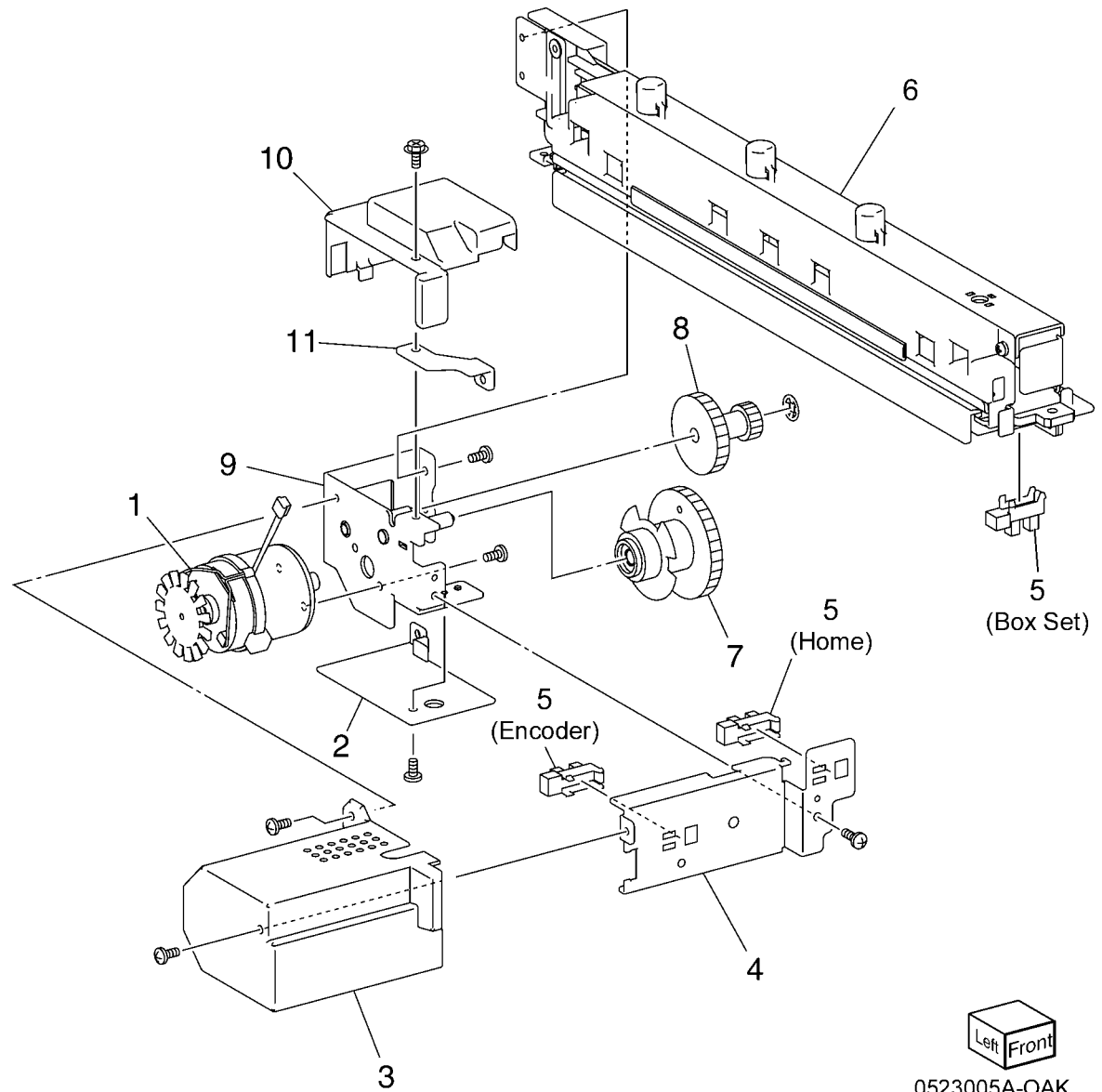
Item	Part	Description
1	-	Lower Chute (P/O PL 23.2 Item 6)
2	-	Magnet (P/O PL 23.2 Item 6)
3	130E81600	H - Transport Open Sensor
4	868E15540	Sensor Bracket
5	809E81720	Actuator
6	930W00211	H - Transport Entrance Sensor
7	848K34192	H - Transport Front Cover Assembly
8	848E43641	H - Transport Front Cover
9	921W41142	Gasket
10	803E04690	Hinge
11	-	Bracket (P/O PL 23.2 Item 6)
12	-	Rear Frame Assembly (P/O PL 23.2 Item 6)
13	127K57622	H - Transport Motor (REP 23.4)
14	020E45330	Tension Pulley
15	020K15720	Pulley (43T)
16	020E45210	Pulley (43T)
17	-	Tension Bracket (P/O PL 23.2 Item 6)
18	809E78950	Spring Tension
19	059K54480	Drive Roll
20	059K55070	Drive Roll
21	013E33140	Bearing
22	423W01154	H - Transport Belt (REP 23.3)
23	413W14660	Sleeve Bearing
24	962K60422	Wire Harness
25	127E85570	Fan Blade
26	016E97311	Pinch Bushing
27	-	Lower Hinge (P/O PL 23.4 Item 7)
28	848E43630	Front Cover
29	848E43651	Switch Cover
30	-	Cover (Not Spared)
31	-	Bracket (Not Spared)
32	004E18112	Pinch Cushion
33	921W41162	Gasket



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## PL 23.5 H - Transport Assembly (5 of 5) (Office Finisher LX)

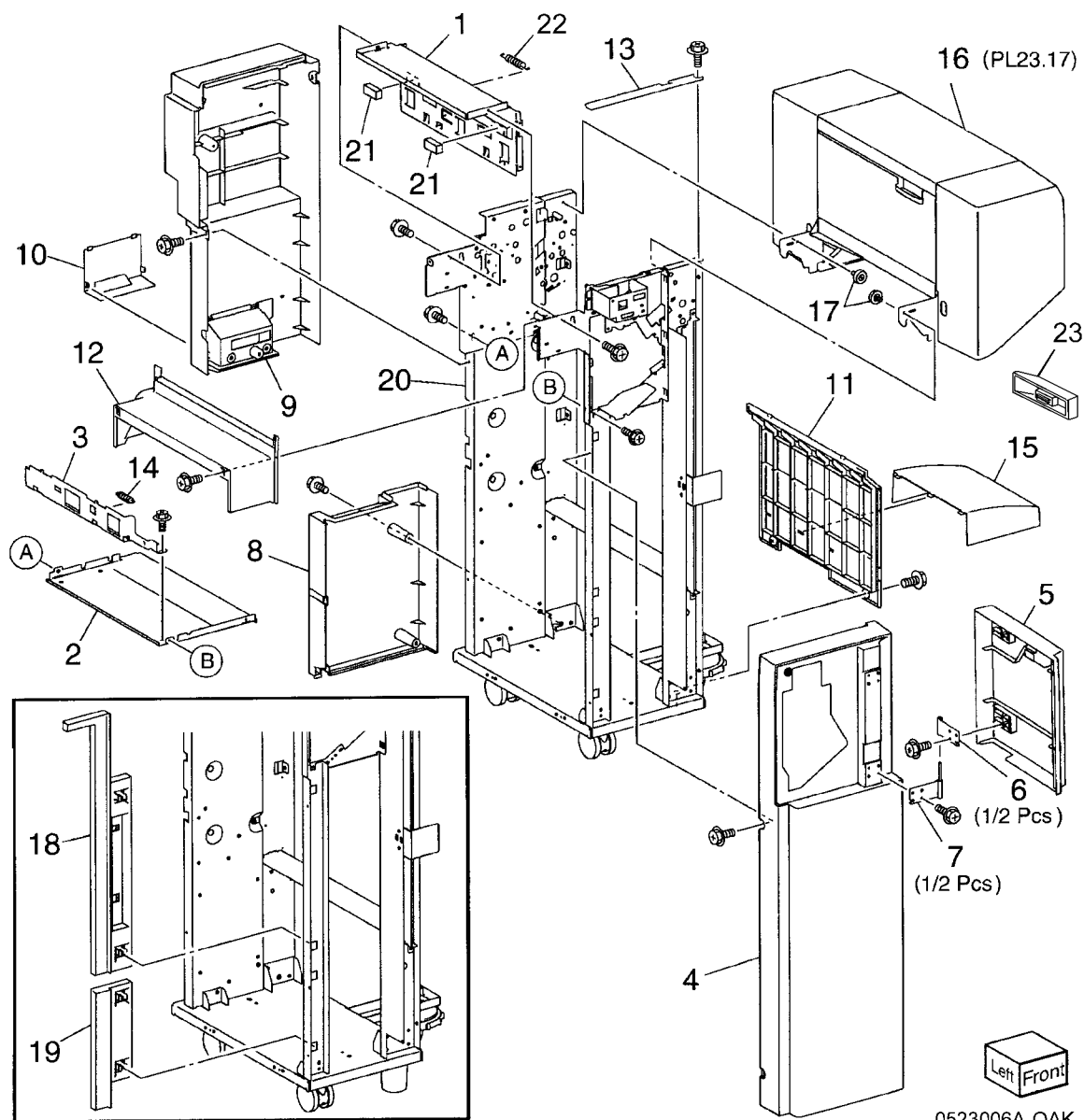
Item	Part	Description
1	–	Punch Motor (P/O PL 23.2 Item 10)
2	–	Punch Lower Cover (P/O PL 23.2 Item 10)
3	–	Punch Motor Cover (P/O PL 23.2 Item 10)
4	–	Sensor Bracket (P/O PL 23.2 Item 10)
5	930W00111	Punch Encoder Sensor, Punch Home Sensor, Punch Box Set Sensor
6	–	Punch Frame Assembly (P/O PL 23.2 Item 10)
7	–	Encoder/Gear Assembly (P/O PL 23.2 Item 10)
8	–	Gear (P/O PL 23.2 Item 10)
9	–	Motor Bracket (P/O PL 23.2 Item 10)
10	–	Punch Top Cover (P/O PL 23.2 Item 10)
11	–	Bracket (P/O PL 23.2 Item 10)



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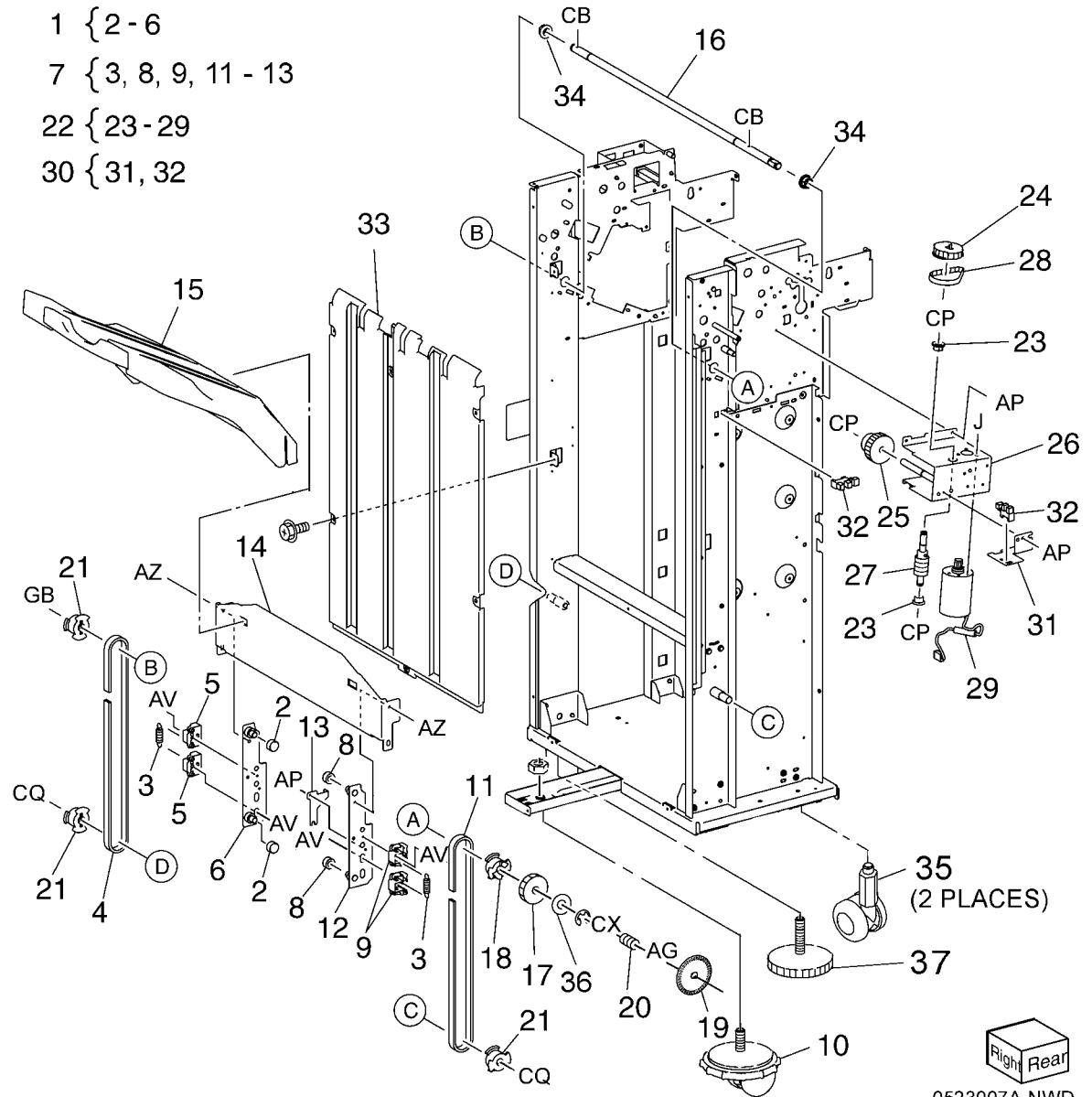
# PL 23.6 Finisher Covers (Office Finisher LX)

Item	Part	Description
1	-	Plate (Not Spared)
2	-	Lower Plate (Not Spared)
3	-	Docking Lever (Not Spared)
4	-	Front Cover (REP 23.6)
5	-	Front Door (Not Spared)
6	-	Bracket (Not Spared)
7	068K59531	Hinge
8	848E15210	Rear Lower Cover (REP 23.8)
9	848E15221	Rear Upper Cover (REP 23.7)
10	848E15231	Connector Cover
11	848E15241	Stacker Lower Cover (REP 23.11)
12	848E48791	LH Cover
13	-	Cover (Not Spared)
14	-	Spring (Not Spared)
15	848E22450	Foot Cover (REP 23.10)
16	801K30701	Booklet Assembly (REP 23.31)
17	826E31870	Thumb Screw
18	-	Upper Adjust Cover (Not Spared)
19	-	Lower Adjust Cover (Not Spared)
20	-	Base Frame Assembly (Not Spared)
21	921W41162	Gasket
22	-	Extension Spring (Not Spared)
23	-	Paper Guide



# PL 23.7 Finisher Stacker (Office Finisher LX)

Item	Part	Description
1	041K95980	Front Carriage Assembly (REP 23.29)
2	-	Bearing (P/O PL 23.7 Item 1)
3	809E56850	Spring
4	-	Front Stacker Belt (P/O PL 23.7 Item 1)
5	-	Clamp (P/O PL 23.7 Item 1)
6	-	Front Carriage Assembly (P/O PL 23.7 Item 1)
7	041K95990	Rear Carriage Assembly (REP 23.29)
8	-	Bearing (P/O PL 23.7 Item 7)
9	-	Clamp (P/O PL 23.7 Item 7)
10	017K94890	Knob Caster Assembly
11	-	Rear Stacker Belt (P/O PL 23.7 Item 7)
12	-	Rear Carriage (P/O PL 23.7 Item 7)
13	-	Actuator (P/O PL 23.7 Item 7)
14	-	Carriage Tray (Not Spared)
15	050K61106	Stacker Tray (REP 23.20)
16	-	Shaft (Not Spared)
17	807E08990	Gear
18	020E37710	Pulley
19	146E90650	Encoder
20	809E56860	Spring
21	020E37720	Pulley (18T)
22	068K58304	Stacker Elevator Motor Assembly (REP 23.19)
23	-	Bearing (P/O PL 23.7 Item 22)
24	020E44181	Pulley (60T)
25	-	Gear (15T/37T) (P/O PL 23.7 Item 22)
26	-	Motor Bracket (P/O PL 23.7 Item 22)
27	-	Worm Shaft (P/O PL 23.7 Item 22)
28	423W27654	Belt
29	-	Stacker Elevator Motor (P/O PL 23.7 Item 22)
30	-	Stacker Encoder Sensor Assembly (Not Spared)
31	-	Bracket (P/O PL 23.7 Item 30)
32	930W00111	Stacker Encoder Sensor, Stacker No Paper Sensor
33	-	Stacker Upper Cover (Not Spared) (REP 23.12)
34	413W79359	Bearing
35	017K94880	Caster Assembly
36	251W31178	Washer
37	017K94900	Adjustable Foot Assembly

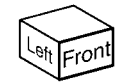
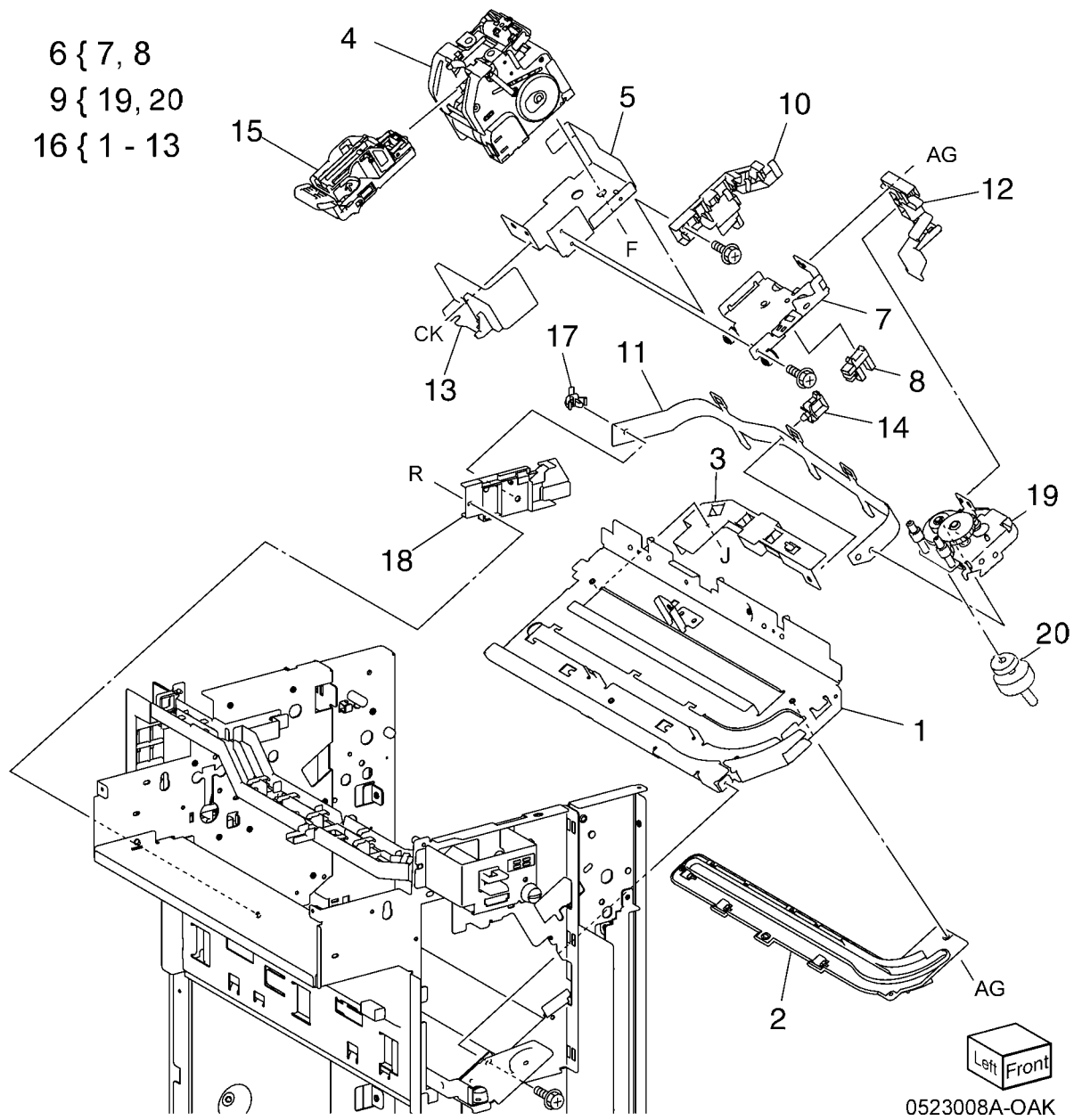


Right Rear  
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# PL 23.8 Finisher Stapler (Office Finisher LX)

Item	Part	Description
1	-	Base Frame (P/O PL 23.8 Item 16)
2	-	Rail (P/O PL 23.8 Item 16)
3	-	Harness Guide
4	029K92350	Stapler Assembly (REP 23.16)
5	-	Holder (Not Spared)
6	-	Stapler Move Position Sensor Assembly (Not Spared)
7	-	Bracket (P/O PL 23.8 Item 6)
8	130E94940	Stapler Move Position Sensor
9	-	Stapler Move Motor Assembly (Not Spared)
10	-	Harness Guide (P/O PL 23.8 Item 16)
11	-	Harness Support Guide (P/O PL 23.8 Item 16)
12	-	Harness Guide (P/O PL 23.8 Item 16)
13	-	Stapler Cover (Not Spared)
14	-	Clamp (Not Spared)
15	-	Stapler Cartridge (Not Spared)
16	-	Stapler Unit (Not Spared)
17	-	Cable Band (Not Spared)
18	-	Harness Guide (Not Spared)
19	-	Stapler Motor Assembly (P/O PL 23.8 Item 9) (REP 23.15)
20	127K57622	Motor Assembly

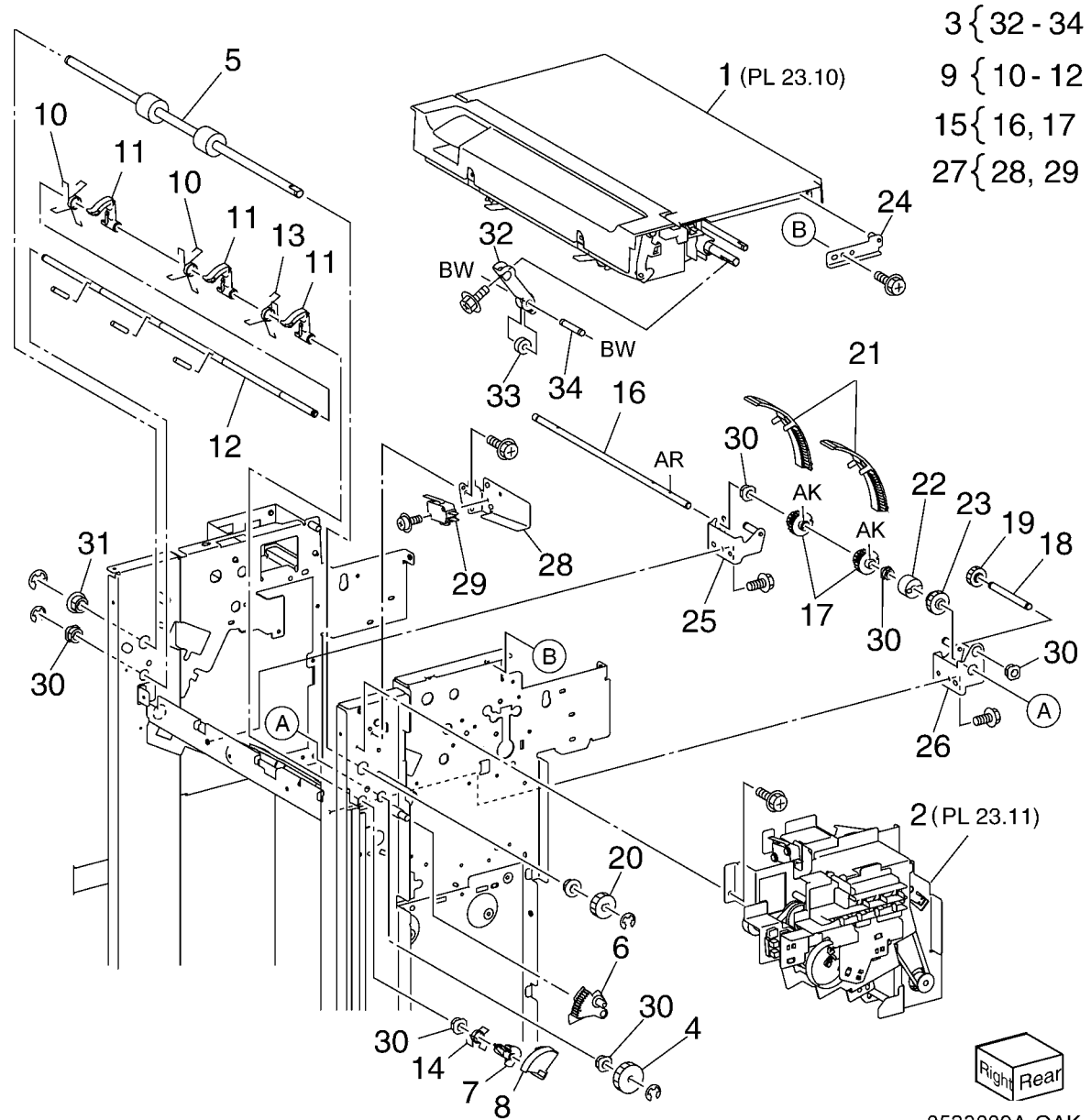
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# PL 23.9 Finisher Eject (1 of 5) (Office Finisher LX)

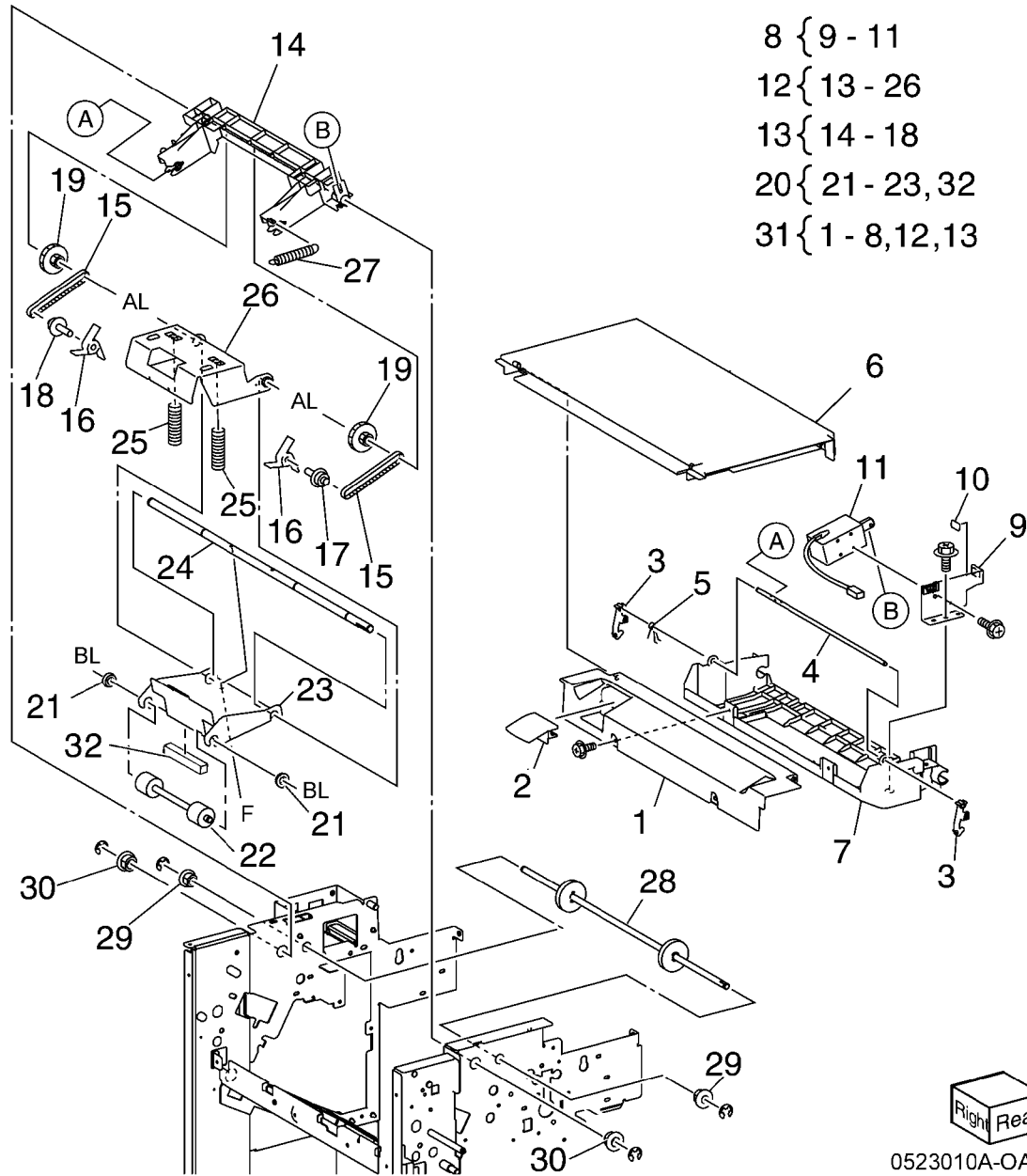
Item	Part	Description
1	-	Eject Cover Assembly (Not Spared)
2	-	Eject Assembly (Not Spared)
3	031K93790	Clamp Arm Assembly
4	807E21370	Gear (25T)
5	059K55111	Eject Roller
6	807E21380	Gear (72T)
7	807E21391	Gear (18T)
8	120E29772	Actuator
9	006K86731	Set Clamp Shaft Assembly
10	-	Spring (P/O PL 23.9 Item 9)
11	019K09391	Set Clamp Holder
12	-	Shaft (Not Spared)
13	809E79060	Spring
14	809E79080	Spring
15	006K86741	Guide Paper Shaft Assembly
16	-	Guide Paper Shaft (P/O PL 23.9 Item 15)
17	-	Gear (20T) (P/O PL 23.9 Item 15)
18	-	Shaft (Not Spared)
19	807E21420	Gear (19T)
20	807E21400	Gear (31T)
21	038E36490	Guide Paper (Left/Right)
22	005E25820	Clutch
23	807E21970	Gear (23T)
24	-	Stopper (Not Spared)
25	-	Bracket (Front) (Not Spared)
26	-	Bracket (Rear) (Not Spared)
27	-	Option Switch Assembly (Not Spared)
28	-	Bracket (Not Spared)
29	-	Option Switch (Not Spared)
30	413W11860	Sleeve Bearing
31	-	Bearing (Not Spared)
32	-	Clamp Arm (P/O PL 23.9 Item 3)
33	-	Roll (P/O PL 23.9 Item 3)
34	-	Shaft (P/O PL 23.9 Item 3)





# PL 23.10 Finisher Eject (2 of 5) (Office Finisher LX)

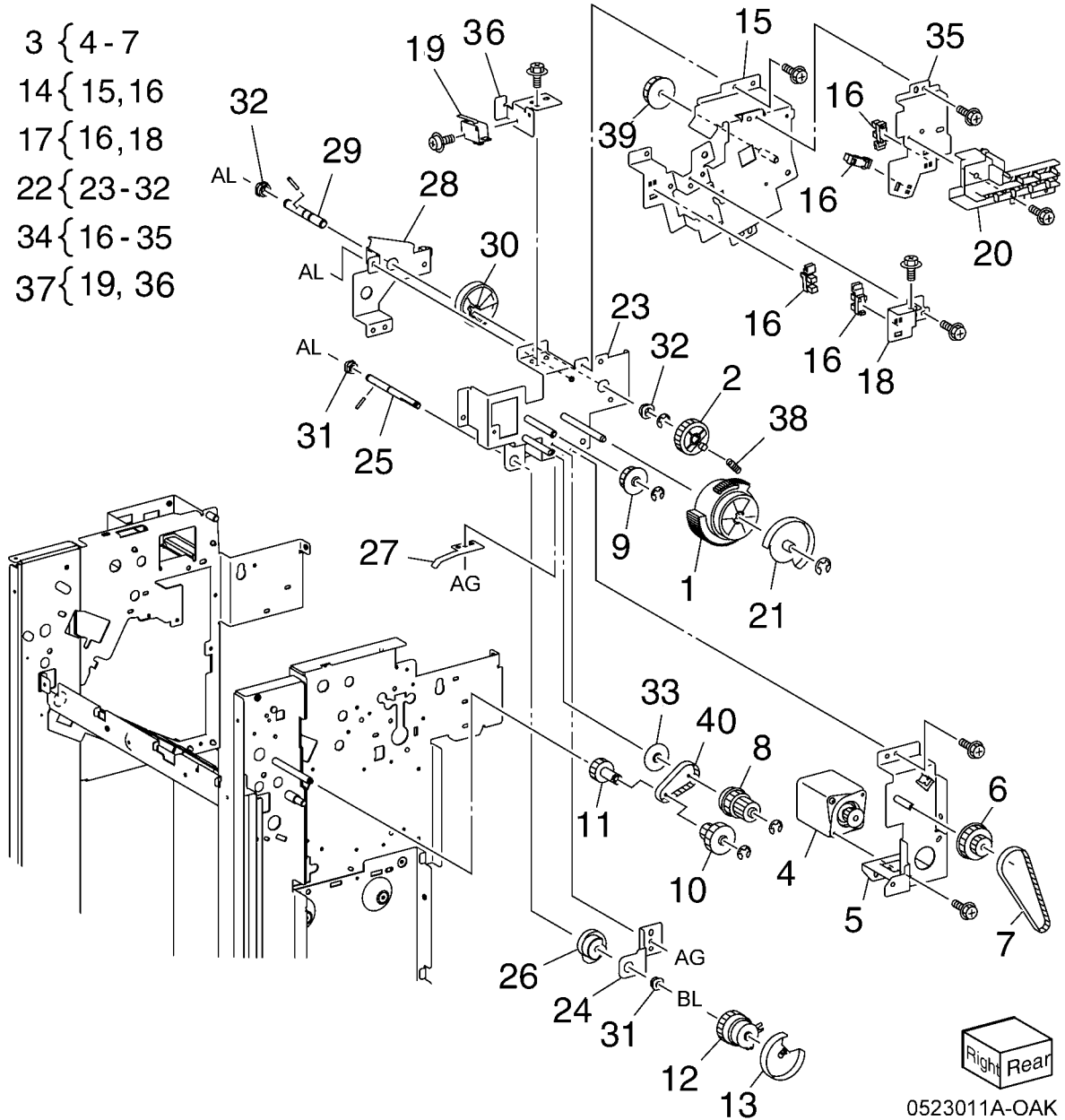
Item	Part	Description
1	848E15291	Top Right Hand Cover
2	011E20781	Top Cover Lever
3	003E76111	Top Cover Latch
4	-	Shaft (Not Spared)
5	809E79031	Spring
6	848E15301	Eject Cover (REP 23.9)
7	054K35302	Eject Chute
8	121K41632	Sub Paddle Solenoid Assembly (REP 23.14)
9	-	Bracket (P/O PL 23.10 Item 8)
10	-	Damper (P/O PL 23.10 Item 8)
11	-	Sub Paddle Solenoid (P/O PL 23.10 Item 8)
12	-	Eject Roller Assembly (Not Spared)
13	031K93770	Paddle Arm Assembly
14	-	Sub Paddle Arm (Not Spared)
15	423W08655	Belt
16	-	Sub Paddle (P/O PL 23.10 Item 13)
17	-	Pulley (P/O PL 23.10 Item 13)
18	-	Pulley (P/O PL 23.10 Item 13)
19	-	Gear/Pulley (31T/20T) (Not Spared)
20	-	Eject Pinch Roller Assembly (Not Spared)
21	-	Bearing (P/O PL 23.10 Item 20)
22	059K55102	Eject Pinch Roller
23	-	Bracket (P/O PL 23.10 Item 20)
24	-	Shaft (P/O PL 23.10 Item 12)
25	-	Spring (Not Spared)
26	-	Bracket (P/O PL 23.10 Item 12)
27	809E79050	Spring
28	006K86690	Eject Drive Shaft
29	-	Bearing (Not Spared)
30	-	Bearing (Not Spared)
31	-	Eject Chute Assembly (Not Spared)
32	-	Eject Eliminator (P/O PL 23.10 Item 20)



- 8 { 9 - 11
- 12 { 13 - 26
- 13 { 14 - 18
- 20 { 21 - 23, 32
- 31 { 1 - 8, 12, 13

# PL 23.11 Finisher Eject (3 of 5) (Office Finisher LX)

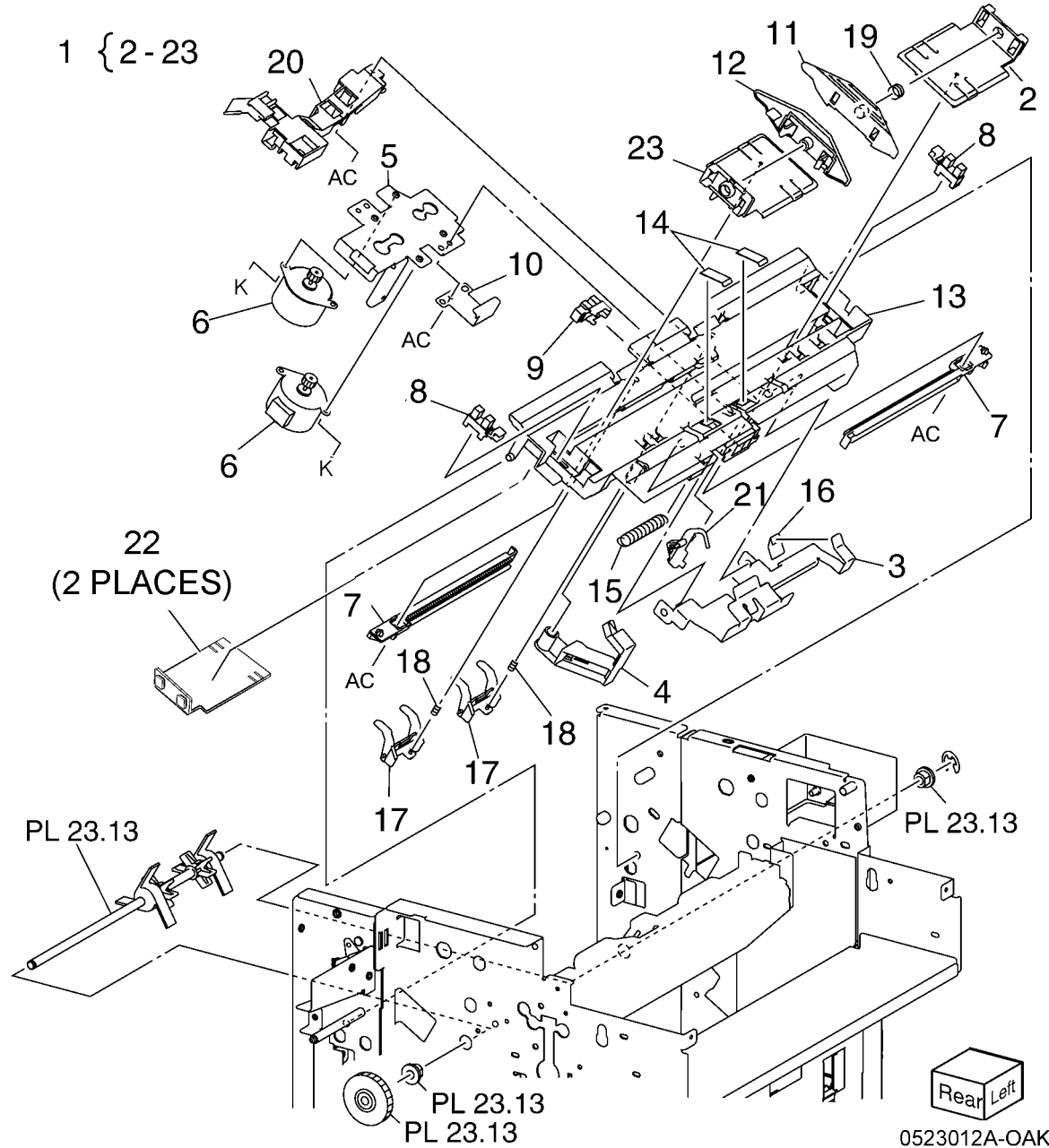
Item	Part	Description
1	807E20931	Gear (82T/77T/51T)
2	807E20940	Gear (38T)
3	-	Eject Motor Assembly (Not Spared) (REP 23.22)
4	127K53140	Eject Motor (REP 23.25)
5	-	Bracket (P/O PL 23.11 Item 3)
6	807E22030	Gear/Pulley (20T/49T)
7	423W31054	Belt
8	807E21330	Gear (28T/22T/38T)
9	807E21340	Gear (25T)
10	807E21350	Gear/Pulley (32T/25T)
11	807E21360	Gear (23T)
12	121K34631	Set Clamp Clutch (34T)
13	120E29591	Set Clamp Cam Actuator
14	130K72170	Stacker Height Sensor 1 Assembly
15	-	Bracket (P/O PL 23.11 Item 14)
16	930W00111	Stacker Height Sensor 1, Stacker Height Sensor 2, Eject Clamp Home Sensor, Set Clamp Home Sensor (REP 23.13)
17	130K72180	Stacker Height Sensor 2 Assembly
18	-	Bracket (P/O PL 23.11 Item 17)
19	-	Eject Cover Switch (P/O PL 23.11 Item 37)
20	-	Harness Guide (Not Spared)
21	120E29851	Gear Select Actuator
22	-	Eject Drive Bracket Assembly (Not Spared)
23	-	Bracket (P/O PL 23.11 Item 22)
24	-	Bracket (P/O PL 23.11 Item 22)
25	-	Shaft (P/O PL 23.11 Item 22)
26	008E96770	Clamp Set Cam
27	809E79070	Spring
28	-	Bracket (P/O PL 23.11 Item 22)
29	-	Shaft (P/O PL 23.11 Item 22)
30	008E96691	Eject Clamp Cam
31	413W11660	Sleeve Bearing
32	-	Sleeve Bearing (P/O PL 23.11 Item 22)
33	005E25810	Drive Eject Flange
34	130K72190	Eject Clamp Home Sensor Assembly
35	-	Bracket (P/O PL 23.11 Item 34)
36	-	Bracket (P/O PL 23.11 Item 37)
37	-	Eject Cover Switch Assembly (Not Spared)
38	809E79820	Spring
39	807E22040	Gear (30T)
40	423W25954	Belt



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# PL 23.12 Finisher Eject (4 of 5) (Office Finisher LX)

Item	Part	Description
1	050K61091	Compiler Tray Assembly (REP 23.17)
2	038E36462	Tamper Guide, Rear
3	-	Compiler Center Paper Guide (P/O PL 23.12 Item 1)
4	-	Compiler Rear Paper Guide (P/O PL 23.12 Item 1)
5	-	Bracket (P/O PL 23.12 Item 1)
6	127K48210	Tamper Motor
7	-	Rack (Front) (P/O PL 23.12 Item 1)
8	930W00111	Front Tamper Home Sensor, Rear Tamper Home Sensor (REP 23.27)
9	130E81600	Compiler Tray No Paper Sensor (REP 23.28)
10	-	Spring (P/O PL 23.12 Item 1)
11	-	Tamper Front Guide (P/O PL 23.12 Item 1)
12	-	Tamper Rear Guide (P/O PL 23.12 Item 1)
13	-	Compiler Tray (P/O PL 23.12 Item 1)
14	-	Paper Paddle Guide (P/O PL 23.12 Item 1)
15	809E79000	Spring
16	-	Paper End Guide (P/O PL 23.12 Item 1)
17	-	Paper Tray Guide (P/O PL 23.12 Item 1)
18	-	Spring (P/O PL 23.12 Item 1)
19	-	Spring (P/O PL 23.12 Item 1)
20	-	Harness Guide (P/O PL 23.12 Item 1)
21	120E29760	Actuator
22	801E04903	Tamper Base
23	038E36452	Tamper Guide, Front

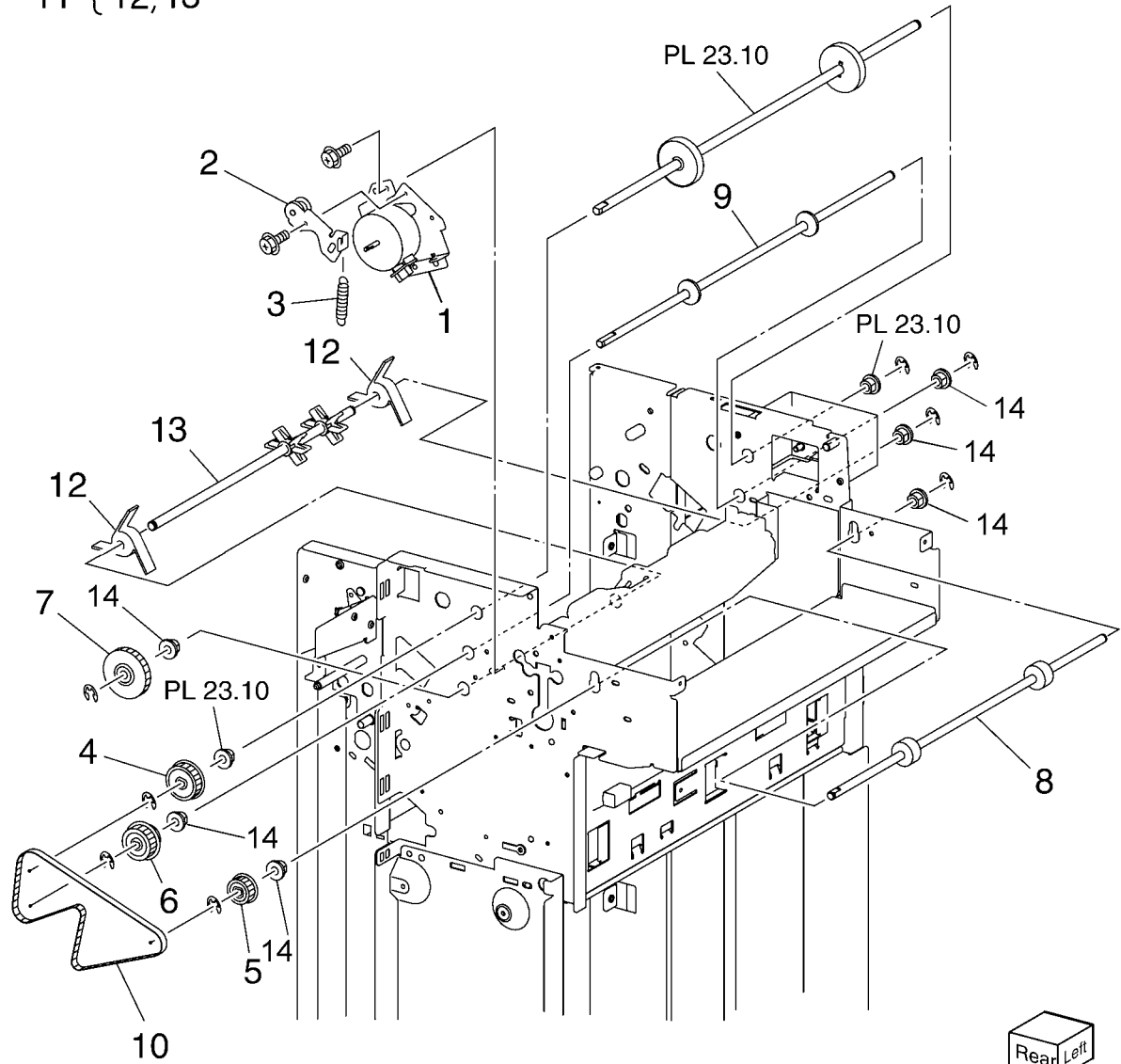


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# PL 23.13 Finisher Eject (5 of 5) (Office Finisher LX)

Item	Part	Description
1	068K58823	Transport Motor
2	068K58832	Tension Roller Assembly
3	809E78980	Spring
4	020E45341	Pulley (30T)
5	020E45571	Pulley (41T)
6	-	Gear/Pulley (27T/30T) (Not Spared)
7	007K98300	Gear
8	059K55080	Entrance Roller
9	059K55090	Exit Roller
10	423W18754	Eject Belt (REP 23.21)
11	006K86813	Paddle Shaft Assembly
12	033E92850	Cyclone Paddle
13	-	Paddle Shaft (P/O PL 23.13 Item 11)
14	413W75959	Bearing

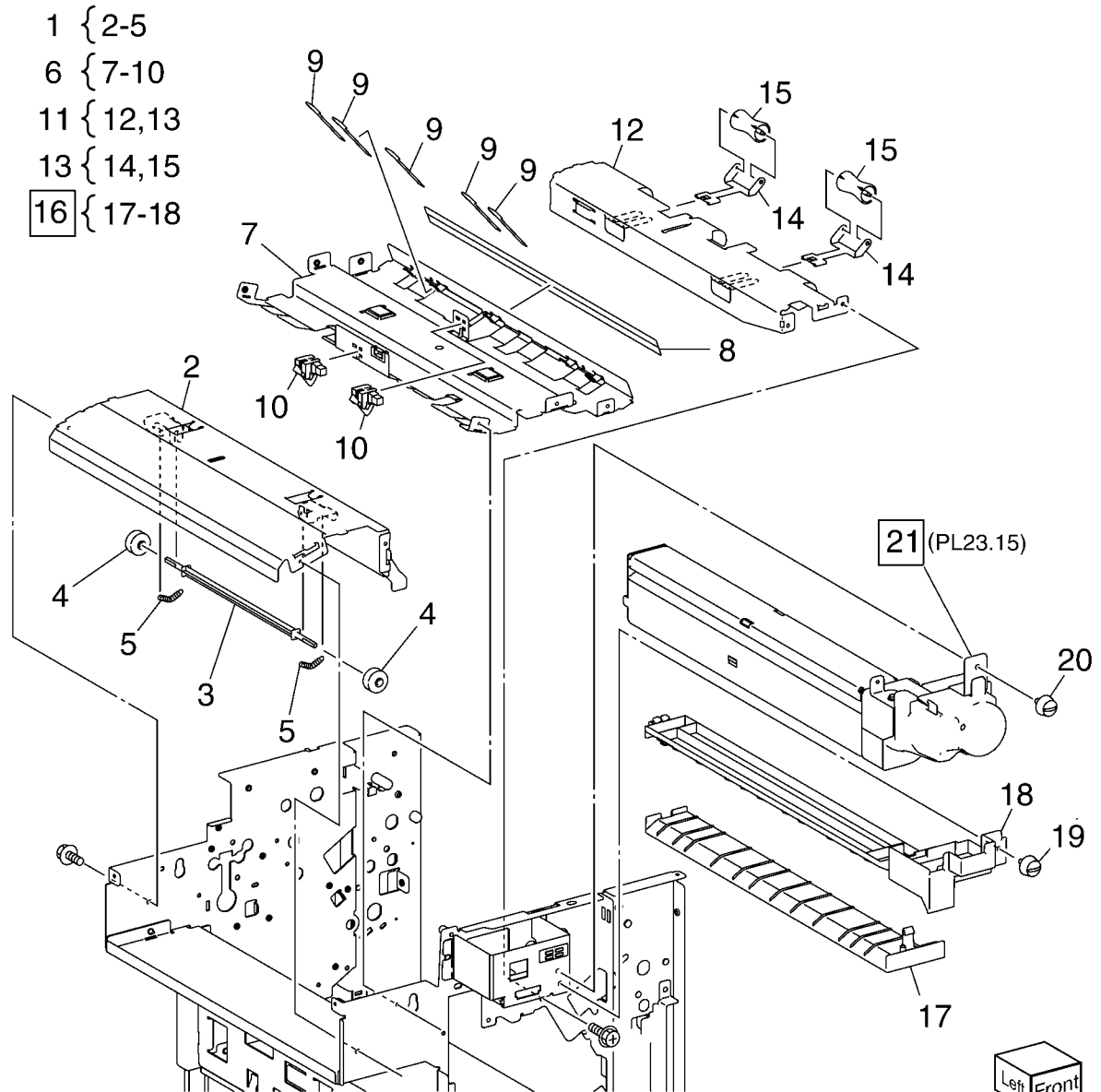
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Rear Left  
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# PL 23.14 Finisher Exit/Folder Assembly (Office Finisher LX)

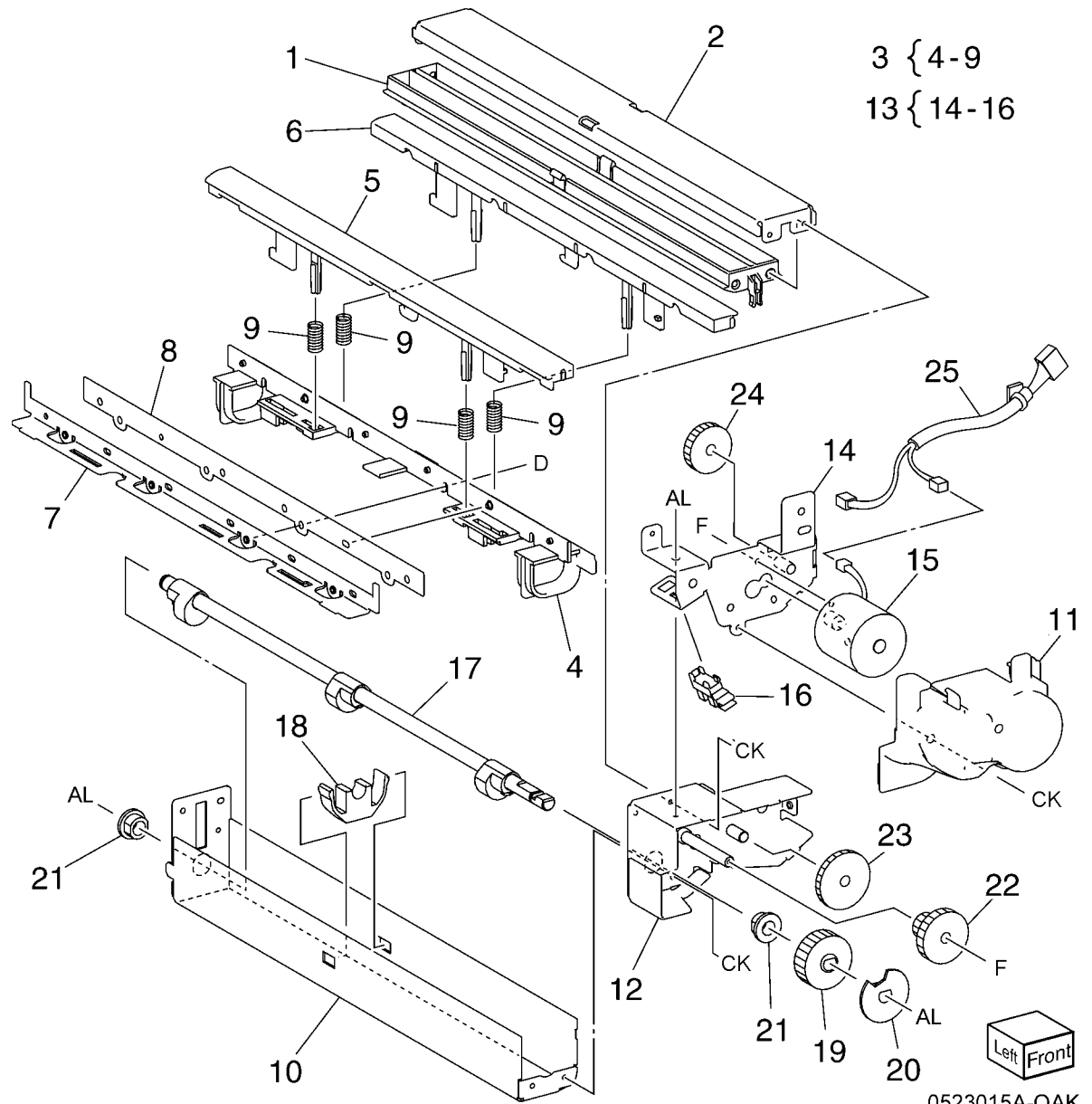
Item	Part	Description
1	-	Lower Chute Assembly (Not Spared)
2	-	Lower Chute (P/O PL 23.14 Item 1)
3	806E22121	Shaft
4	059E03710	Pinch Roll
5	809E78960	Spring
6	054K35540	Exit Upper Chute Assembly
7	-	Exit Upper Chute (P/O PL 23.14 Item 6)
8	105E18000	Static Eliminator
9	038E36420	Paper Guide
10	130K88311	Compiler Exit Sensor, Finisher Entrance Sensor
11	054K48530	Exit Lower Chute Assembly
12	-	Exit Lower Chute (P/O PL 23.14 Item 11)
13	-	Pinch Roll Assembly (P/O PL 23.14 Item 11)
14	-	Spring (P/O PL 23.14 Item 13)
15	059K56321	Pinch Roll
16	054K35264	Chute Assembly
17	-	Lower Chute (P/O PL 23.14 Item 16)
18	-	Upper Chute (P/O PL 23.14 Item 16)
19	026K81200	Thumb Screw
20	-	Chute Assembly (Not Spared)
21	695K18691	Crease Assembly (Option) (REP 23.18)



Left Front  
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# PL 23.15 Folder Assembly (Office Finisher LX)

Item	Part	Description
1	-	Upper Chute (P/O PL 23.14 Item 21)
2	-	Upper Plate (P/O PL 23.14 Item 21)
3	-	Knife Assembly (P/O PL 23.14 Item 21)
4	-	Blade Holder (P/O PL 23.15 Item 3)
5	-	Lower Holder 1 (P/O PL 23.15 Item 3)
6	-	Lower Holder 2 (P/O PL 23.15 Item 3)
7	-	Bracket (P/O PL 23.15 Item 3)
8	-	Blade (P/O PL 23.15 Item 3)
9	-	Spring (P/O PL 23.14 Item 2)
10	-	Frame (P/O PL 23.14 Item 21)
11	-	Front Cover (P/O PL 23.14 Item 21)
12	-	Bracket (P/O PL 23.14 Item 21)
13	-	Folder Knife Motor Assembly (P/O PL 23.14 Item 21)
14	-	Motor Bracket (P/O PL 23.15 Item 13)
15	-	Folder Knife Motor (P/O PL 23.15 Item 13)
16	-	Folder Home Sensor (P/O PL 23.15 Item 13)
17	-	Cam Shaft Assembly (P/O PL 23.14 Item 21)
18	-	Guide (P/O PL 23.14 Item 21)
19	-	Gear (28T/8T) (P/O PL 23.14 Item 21)
20	-	Encoder (P/O PL 23.14 Item 21)
21	-	Bearing (P/O PL 23.14 Item 21)
22	-	Gear (12T/27T) (P/O PL 23.14 Item 21)
23	-	Gear (12T/30T) (P/O PL 23.14 Item 21)
24	-	Gear (12T/51T) (P/O PL 23.14 Item 21)
25	-	Wire Harness (P/O PL 23.14 Item 21)

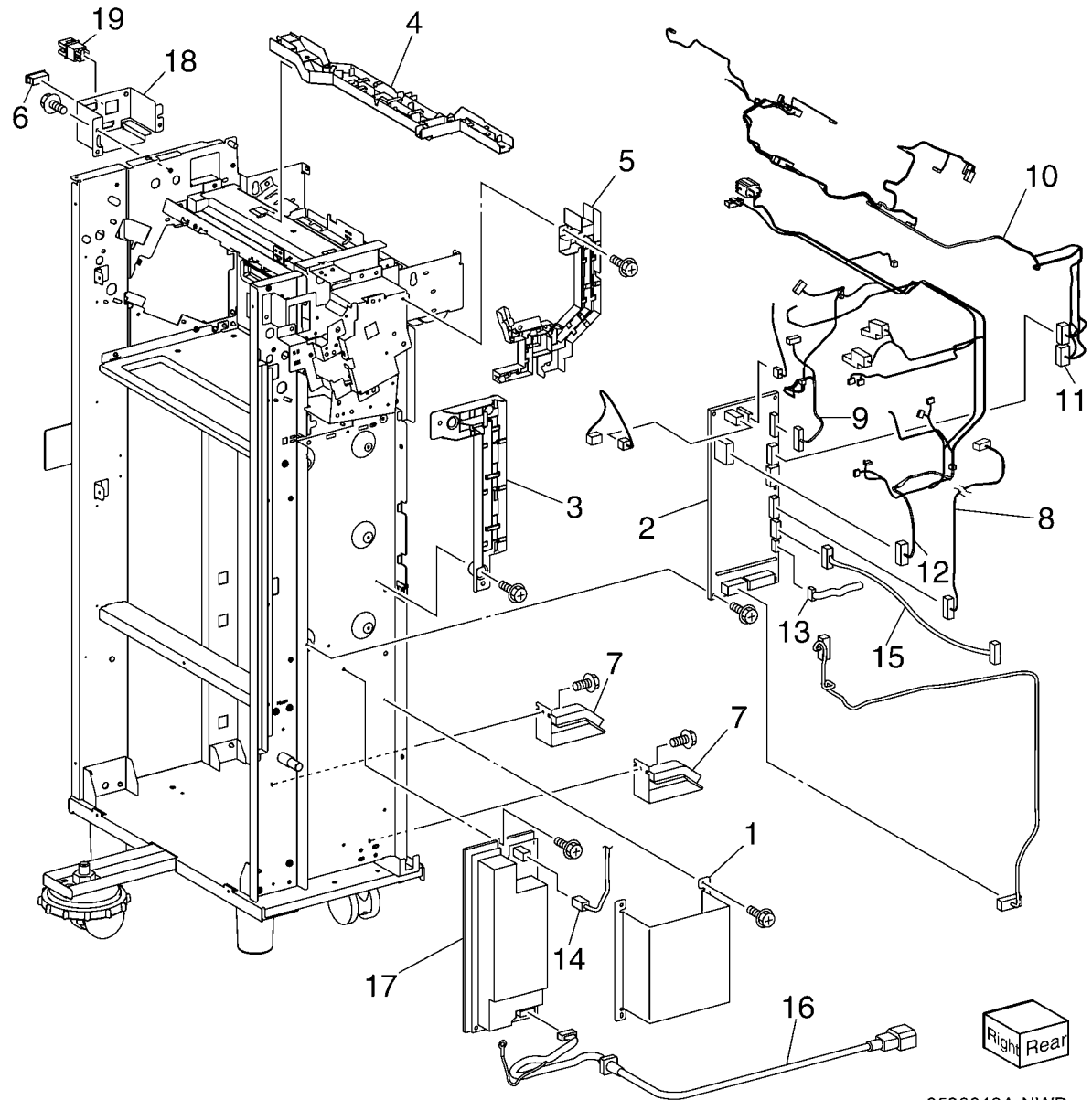


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# PL 23.16 Finisher Electrical (Office Finisher LX)

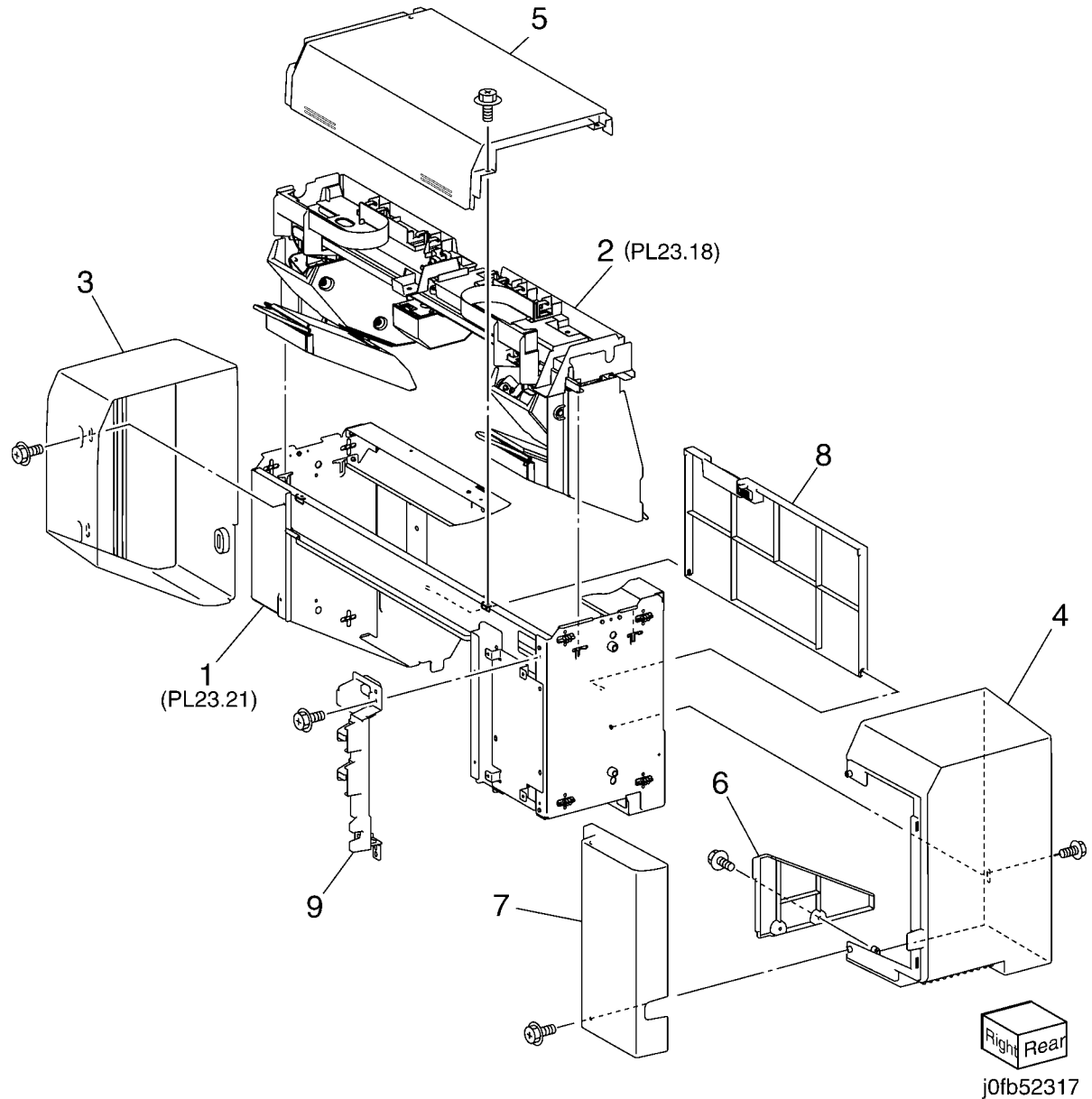
Item	Part	Description
1	-	LVPS Cover (Not Spared)
2	960K51447	Finisher PWB (REP 23.23)
-	960K50992	Finisher PWB
3	-	Harness Guide (Not Spared)
4	-	Harness Guide (Not Spared)
5	-	Harness Guide (Not Spared)
6	-	Magnet (Not Spared)
7	815K04920	Gasket Plate Assembly
8	962K60592	Wire Harness
9	-	Wire Harness (Not Spared)
10	-	Wire Harness (Not Spared)
11	-	Wire Harness (Not Spared)
12	-	Wire Harness (Not Spared)
13	962K60481	Wire Harness
14	-	Wire Harness (Not Spared)
15	-	Wire Harness (Not Spared)
16	962K74540	Power Cable
17	105E17550	Finisher LVPS (REP 23.24)
18	-	Bracket (Not Spared)
19	110E97990	Finisher Front Door Interlock Switch



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# PL 23.17 Booklet Cover (Office Finisher LX)

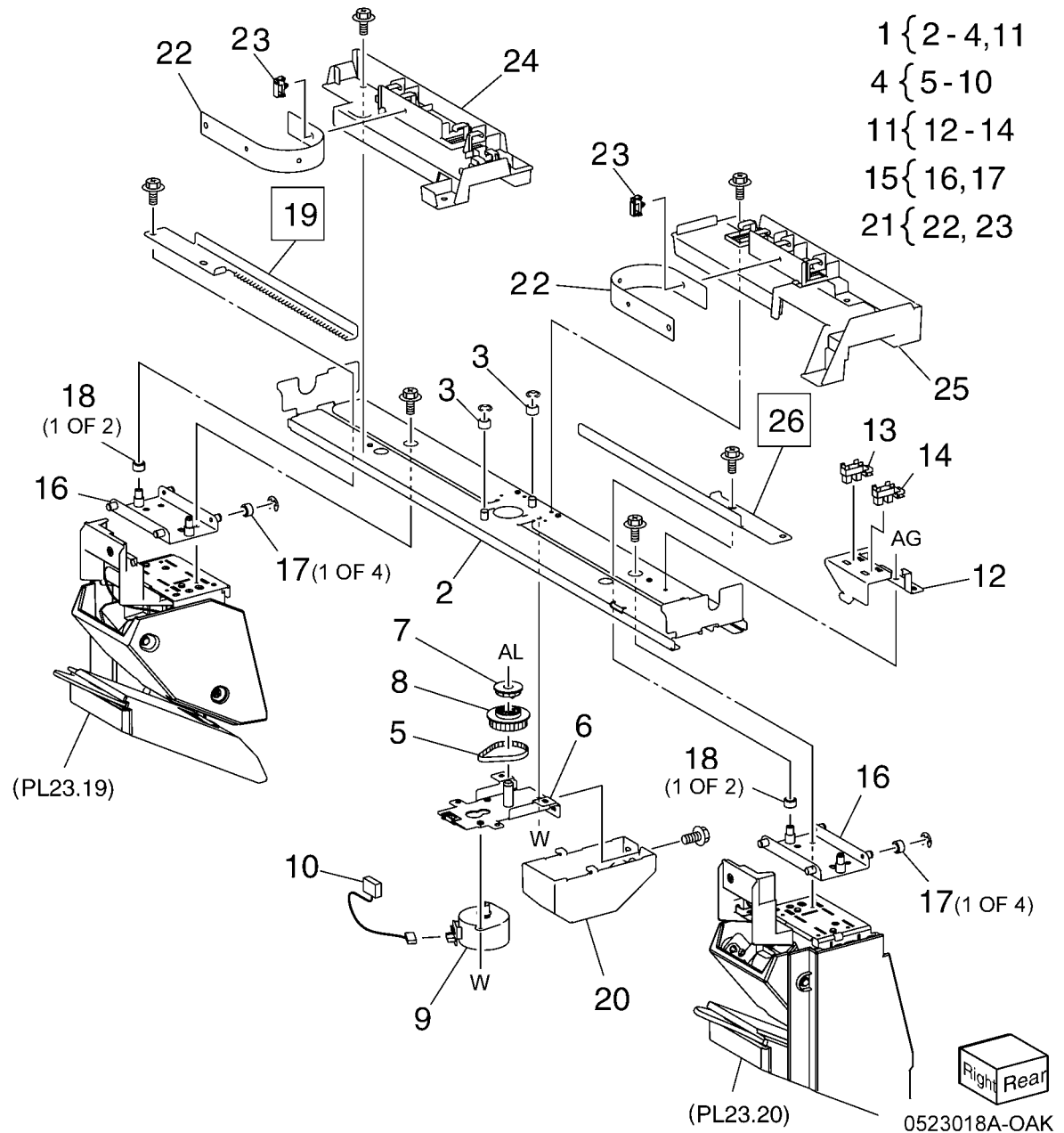
Item	Part	Description
1	-	Frame Assembly (Not Spared)
2	-	Booklet Stapler Assembly (Not Spared)
3	848E15333	Rear Cover (REP 23.33)
4	-	Front Cover (Not Spared) (REP 23.32)
5	-	Top Cover (REP 23.34)
6	848E15350	Side Cover
7	848E15361	PWB Cover (REP 23.35)
8	-	Left Cover (Not Spared) (REP 23.36)
9	-	Harness Guide (Not Spared)





# PL 23.18 Booklet Stapler Assembly (Office Finisher LX)

Item	Part	Description
1	-	Front Carriage Rail (Not Spared)
2	-	Frame (P/O PL 23.18 Item 1)
3	-	Core (P/O PL 23.18 Item 1)
4	127K57051	Booklet Stapler Move Motor Assembly (REP 23.38)
5	-	Belt (P/O PL 23.18 Item 4)
6	-	Bracket (P/O PL 23.18 Item 4)
7	-	Gear (12T) (P/O PL 23.18 Item 4)
8	-	Pulley (50T) (P/O PL 23.18 Item 4)
9	127K57622	Booklet Stapler Move Motor
10	-	Wire Harness (P/O PL 23.18 Item 4)
11	-	Sensor Bracket Assembly (P/O PL 23.18 Item 1)
12	-	Sensor Bracket (P/O PL 23.18 Item 11)
13	930W00111	Booklet Stapler Move Home Sensor, Booklet Stapler Move Position Sensor
14	-	Rear Rack Gear (Not Spared)
15	-	Carriage Assembly (Not Spared)
16	-	Carriage (P/O PL 23.18 Item 15)
17	-	Core (P/O PL 23.18 Item 15)
18	-	Core (Not Spared)
19	-	Front Rack Gear (Not Spared)
20	848E15400	Motor Cover
21	032K05222	Harness Guide Assembly
22	-	Harness Strap (P/O PL 23.18 Item 21)
23	920W01210	Locking Clamp
24	-	Harness Guide (Front) (Not Spared)
25	-	Harness Guide (Rear) (Not Spared)
26	-	Rear Rack Guide (Not Spared)



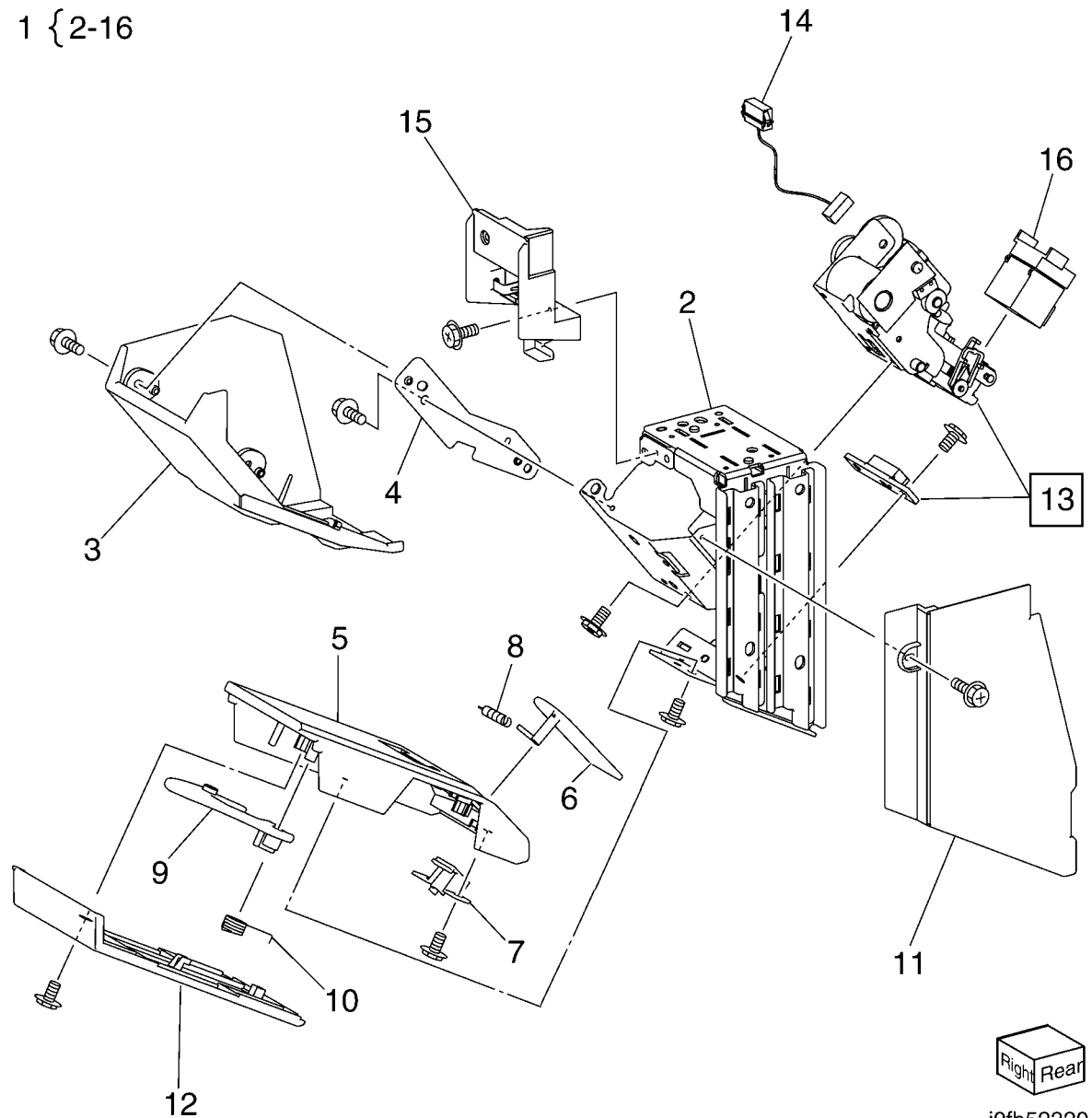
- 1 { 2-4, 11
- 4 { 5-10
- 11 { 12-14
- 15 { 16, 17
- 21 { 22, 23



# PL 23.20 Booklet Rear Stapler Assembly (Office Finisher LX)

Item	Part	Description
1	029K92500	Booklet Rear Stapler Assembly
2	-	Bracket (P/O PL 23.20 Item 1)
3	-	Rear Cover (P/O PL 23.20 Item 1)
4	-	Bracket (P/O PL 23.20 Item 1)
5	054K35282	Chute
6	-	Sub Chute (P/O PL 23.20 Item 1)
7	-	Support (P/O PL 23.20 Item 1)
8	-	Spring (P/O PL 23.20 Item 1)
9	-	Sub Chute (P/O PL 23.20 Item 1)
10	-	Spring (P/O PL 23.20 Item 1)
11	-	Front Cover (P/O PL 23.20 Item 1)
12	848E15421	Lower Cover
13	-	Booklet Stapler Assembly (P/O PL 23.20 Item 1) (REP 23.37)
14	-	Wire Harness (P/O PL 23.20 Item 1)
15	-	Guide (P/O PL 23.20 Item 1)
16	-	Booklet Staple Cassette Assembly (P/O PL 23.20 Item 1)

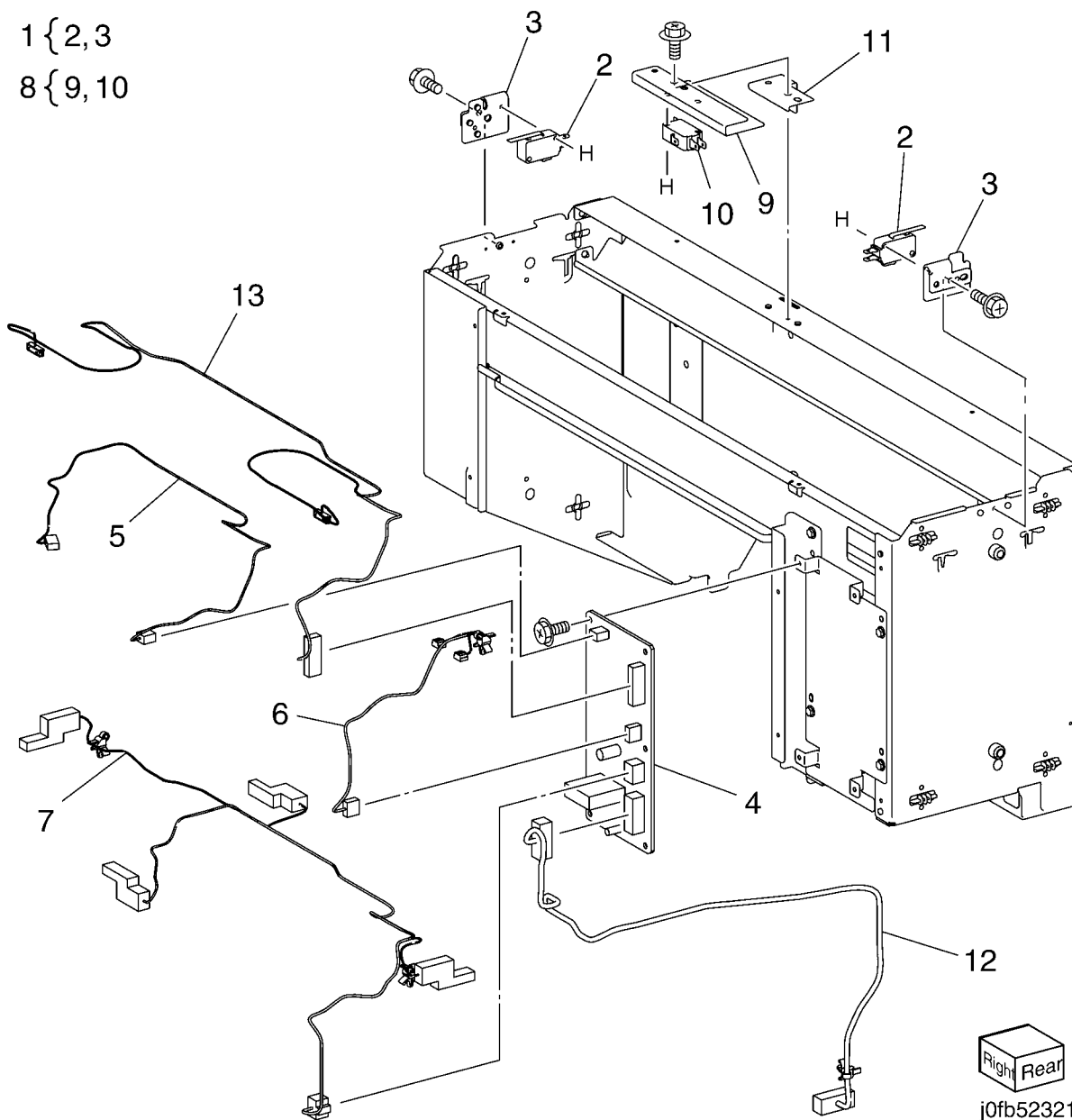
1 {2-16



Right Rear  
j0fb52320

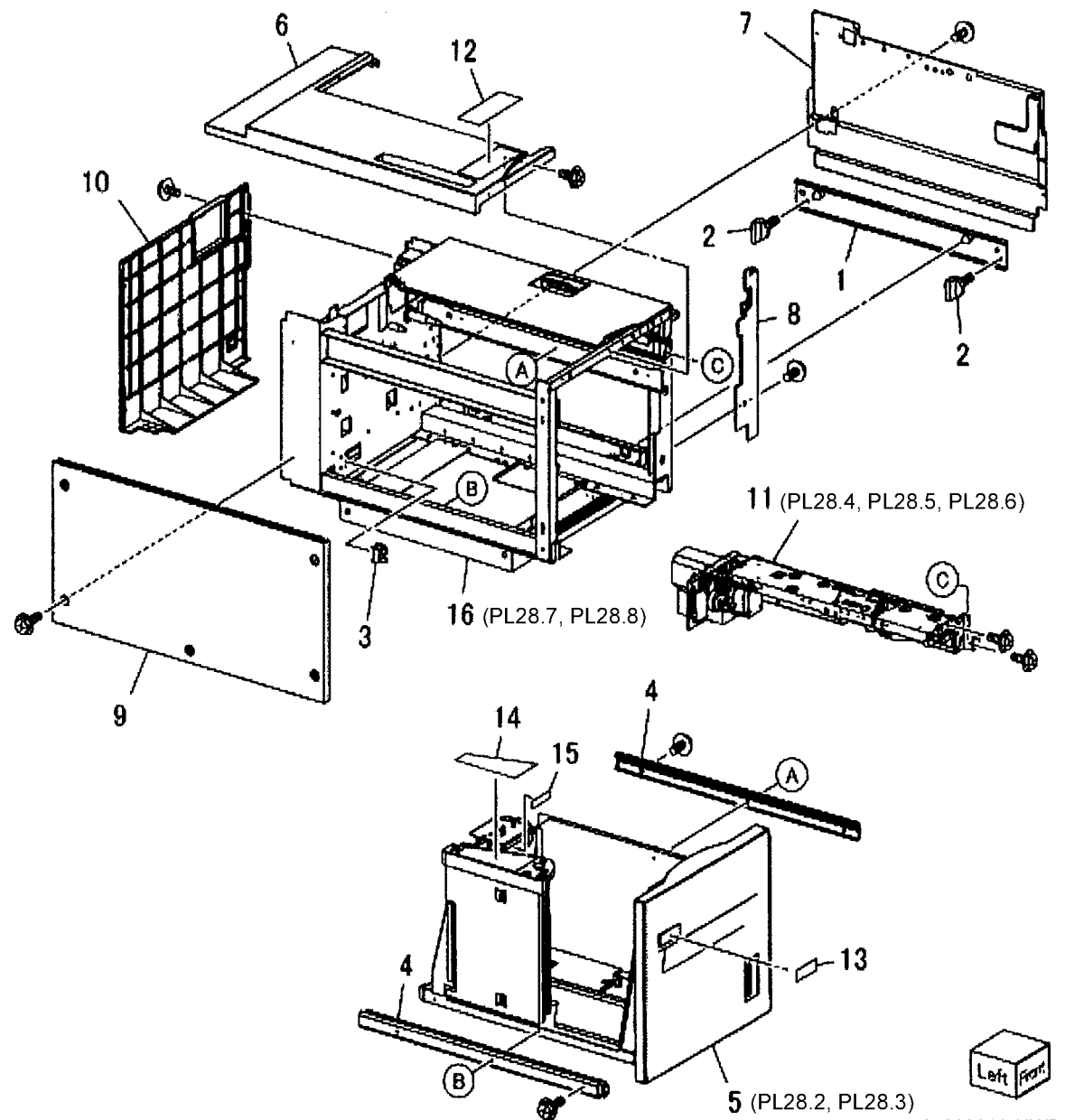
# PL 23.21 Booklet Electrical (Office Finisher LX)

Item	Part	Description
1	068K58350	Booklet Stapler Safety Switch Assembly
2	110E12970	Booklet Stapler Safety Switch
3	-	Bracket (P/O PL 23.21 Item 1)
4	960K32543	Booklet PWB (REP 23.30)
5	-	Wire Harness (Not Spared)
6	-	Wire Harness (Not Spared)
7	-	Wire Harness (Not Spared)
8	-	Booklet Stapler Cover Switch Assembly (Not Spared)
9	-	Bracket (P/O PL 23.21 Item 8)
10	-	Booklet Stapler Cover Switch (P/O PL 23.21 Item 8)
11	-	Plate (Not Spared)
12	962K60533	Wire Harness
13	962K60540	Wire Harness



## PL 28.1 HCF Unit

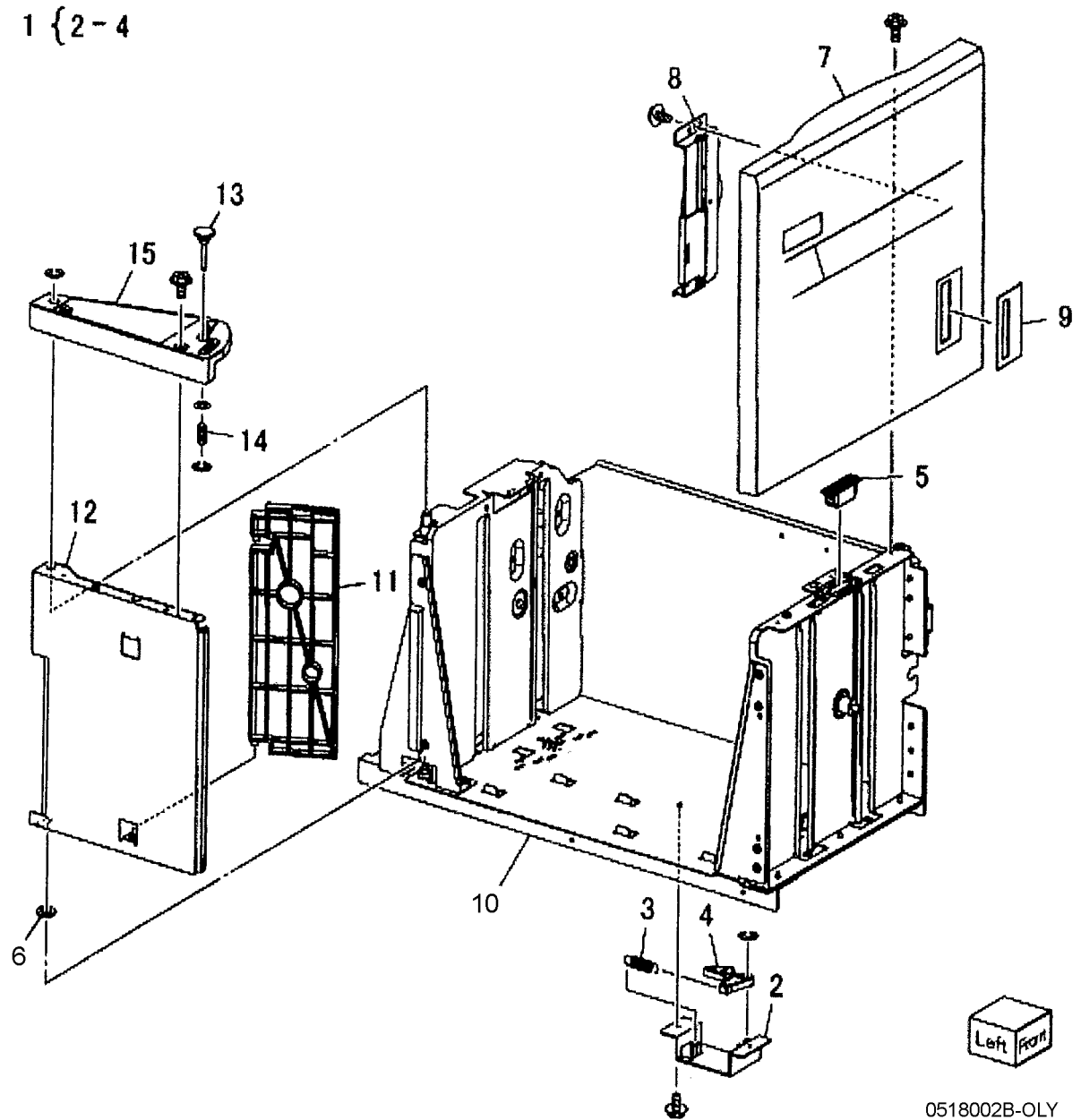
Item	Part	Description
1	604K23535	Joint Plate
-	604K23830	HCF Docking Plate
2	003K91881	Knob
3	130K55590	HCF Tray Set Sensor
4	801K15700	Tray Rail
5	-	HCF Tray 6 (REF: PL 28.2, PL 28.3) (REP 19.1)
6	-	Left Top Cover (Not Spared)
7	-	Right Cover (Not Spared)
8	-	Front Right Cover (Not Spared)
9	-	Left Cover (Not Spared)
10	-	Rear Cover
11	-	HCF Feeder (REP 19.2)
12	-	Label (Top)
13	-	Label (Tray Number) (Not Spared)
14	-	Label (Size) (Not Spared)
15	-	Label (End) (Not Spared)
16	-	Frame Assembly (Not Spared)



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## PL 28.2 HCF Tray 6 (1 of 2)

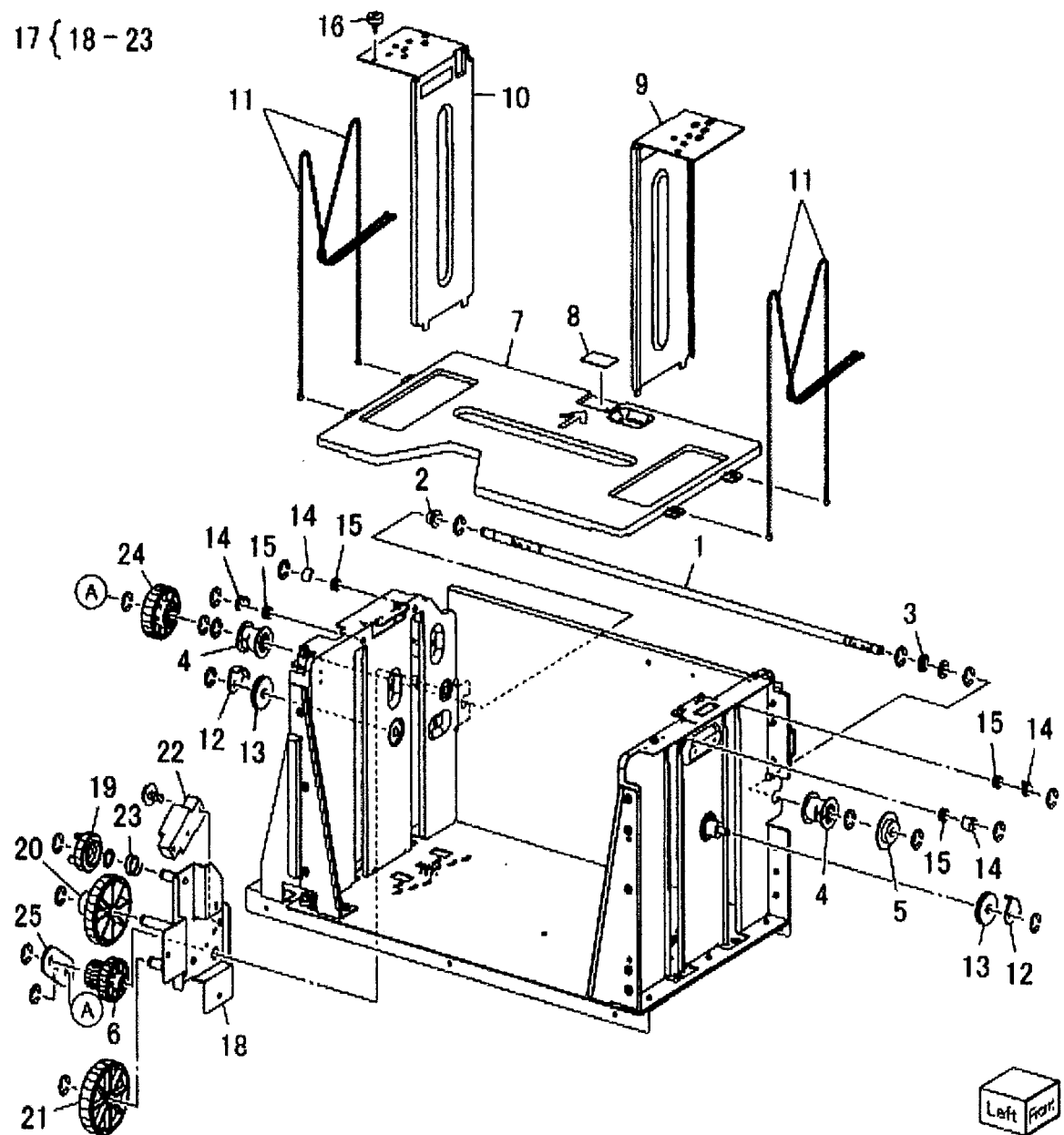
Item	Part	Description
1	-	Tray Latch Assembly (Not Spared)
2	003K13592	Tray Latch
3	-	Spring (P/O PL 28.2 Item 1)
4	-	Latch Lever (P/O PL 28.2 Item 1)
5	-	Magnet (P/O PL 28.1 Item 5)
6	-	Wave Washer (P/O PL 28.1 Item 5)
7	-	Front Cover (P/O PL 28.1 Item 5)
8	-	Gear Bracket (P/O PL 28.1 Item 5)
9	-	Label (Gauge) (P/O PL 28.1 Item 5)
10	-	Frame (P/O PL 28.1 Item 5)
11	-	Plate (P/O PL 28.1 Item 5)
12	-	Bracket (P/O PL 28.1 Item 5)
13	-	Pin (P/O PL 28.1 Item 5)
14	-	Spring (P/O PL 28.1 Item 5)
15	-	Top Plate (P/O PL 28.1 Item 5)



# PL 28.3 HCF Tray 6 (2 of 2)

Item	Part	Description
1	-	Lift Shaft (P/O PL 28.1 Item 5)
2	-	Bearing (P/O PL 28.1 Item 5)
3	-	Bearing (P/O PL 28.1 Item 5)
4	020E37620	Tray Cable Pulley
5	-	Gear (P/O PL 28.1 Item 5)
6	-	Gear (P/O PL 28.1 Item 5)
7	-	Bottom Plate (P/O PL 28.1 Item 5)
8	019E58620	Pad
9	-	Front Side Guide (P/O PL 28.1 Item 5)
10	-	Rear Side Guide (P/O PL 28.1 Item 5)
11	604K19981	Cable And Pulley Kit (REP 19.4)
12	032E22410	Wire Guide (L)
13	-	Pulley (P/O PL 28.1 Item 5)
14	-	Wire Guide (S) (P/O PL 28.1 Item 5)
15	-	Pulley (P/O PL 28.1 Item 5)
16	-	Screw (P/O PL 28.1 Item 5)
17	015K65532	Gear Bracket Assembly
18	-	Gear Bracket (P/O PL 28.3 Item 17)
19	-	Contact Gear (P/O PL 28.3 Item 17)
20	-	Gear (P/O PL 28.3 Item 17)
21	-	Gear (P/O PL 28.3 Item 17)
22	-	Brake (P/O PL 28.3 Item 17)
23	-	Spring (P/O PL 28.3 Item 17)
24	807E04500	Lift Gear
25	-	Plate (P/O PL 28.1 Item 5)

17 { 18 - 23

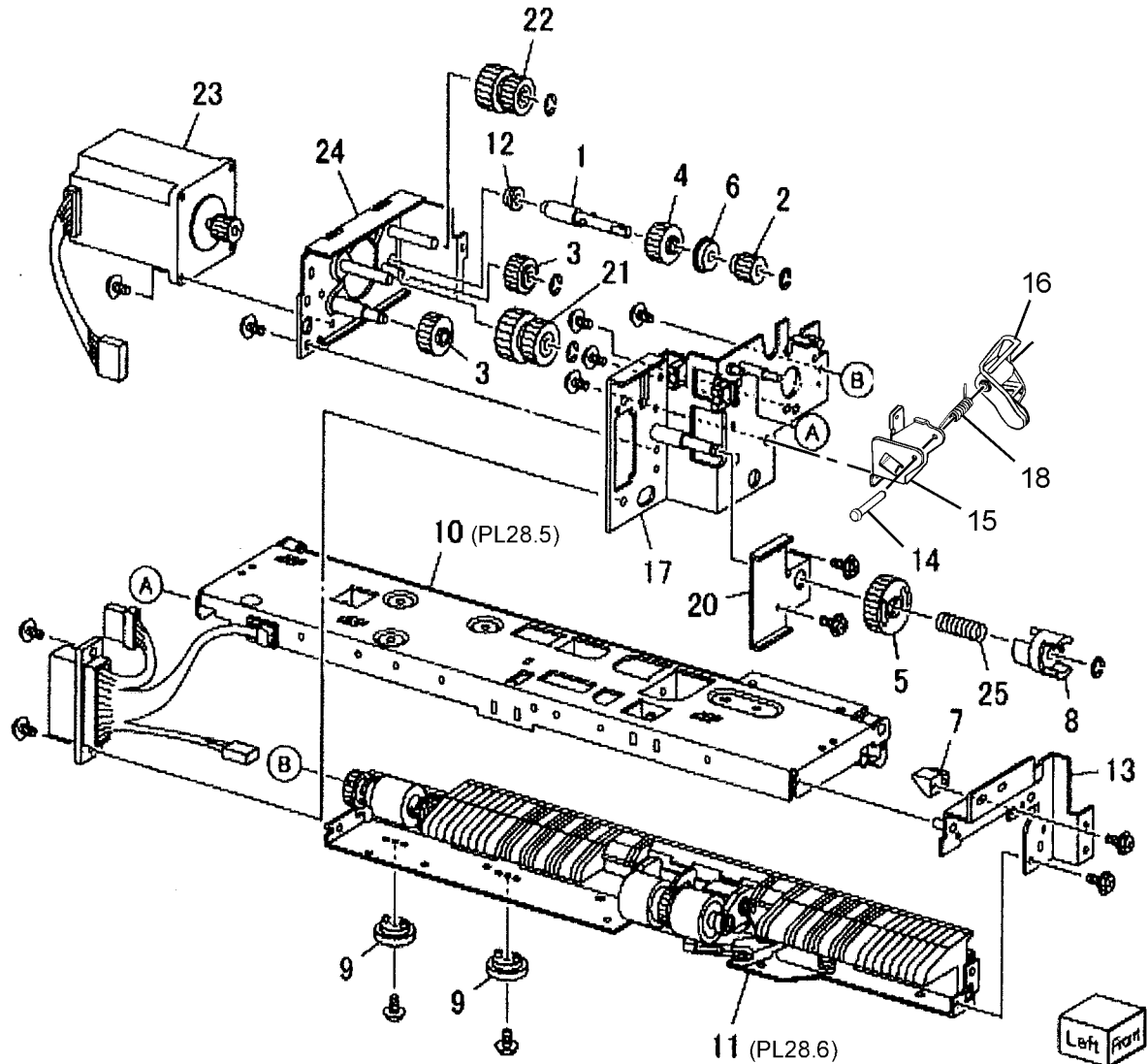


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# PL 28.4 HCF Feeder (1 of 3)

Item	Part	Description
1	-	Shaft (P/O PL 28.1 Item 11)
2	007E78760	Gear (19T)
3	-	Gear (25T) (P/O PL 28.1 Item 11)
4	007E78780	Gear (25T)
5	007E78790	Gear (40T)
6	013E25530	Bearing
7	-	Block (P/O PL 28.1 Item 11)
8	-	Spacer (P/O PL 28.1 Item 11)
9	019E56470	Holder
10	-	Upper Feeder Assembly (P/O PL 28.1 Item 11)
11	-	Lower Feeder Assembly (P/O PL 28.1 Item 11)
12	-	Ball Bearing (P/O PL 28.1 Item 11)
13	-	Front Frame (P/O PL 28.1 Item 11)
14	-	Pin (P/O PL 28.1 Item 11)
15	-	Down Bracket (P/O PL 28.1 Item 11)
16	-	Link Bracket (P/O PL 28.1 Item 11)
17	-	Rear Frame (P/O PL 28.1 Item 11)
18	-	Tension Spring (P/O PL 28.1 Item 11)
19	-	Lift/Motor Frame (P/O PL 28.1 Item 11)
20	-	Bracket (P/O PL 28.4 Item 19)
21	007K88520	Gear (23T/27T)
22	007K88530	Gear (31T/36T)
23	127K37901	Lift/Feed Motor (REP 19.12)
24	-	Plate (P/O PL 28.4 Item 19)
25	-	Spring (P/O PL 28.1 Item 11)

19 { 20 - 24

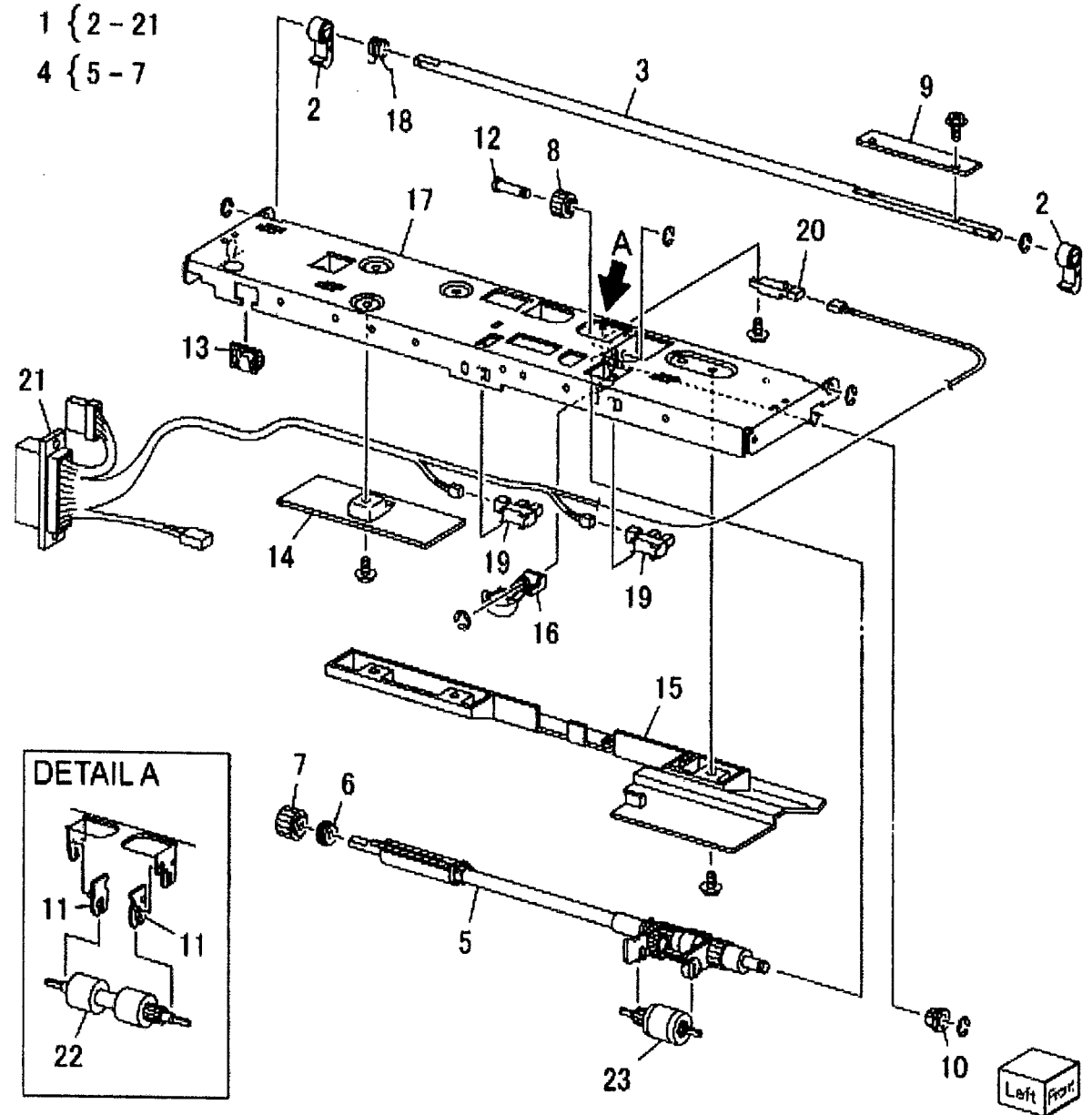


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## PL 28.5 HCF Feeder (2 of 3)

Item	Part	Description
1	–	Upper Feeder Assembly (P/O PL 28.1 Item 11)
2	003E59570	Latch
3	–	Shaft Latch (P/O PL 28.5 Item 1)
4	006K23124	Feed Shaft Assembly
5	–	Feed Shaft (P/O PL 28.5 Item 4)
6	413W66250	Ball Bearing
7	–	Gear (20T) (P/O PL 28.5 Item 4)
8	007E78180	Feed Gear (25T)
9	–	Lever (P/O PL 28.5 Item 1)
10	–	Bearing (P/O PL 28.5 Item 1)
11	–	Spacer (P/O PL 28.5 Item 1)
12	–	Pin Drive (P/O PL 28.5 Item 1)
13	–	Guide (P/O PL 28.5 Item 1)
14	–	Rear Upper Chute (P/O PL 28.5 Item 1)
15	–	Upper Chute (P/O PL 28.5 Item 1)
16	120E21900	Actuator
17	–	Upper Frame (P/O PL 28.5 Item 1)
18	–	Spring (P/O PL 28.5 Item 1)
19	930W00112	HCF Stack Height Sensor, HCF Paper Sensor
20	930W00211	HCF Pre Feed Sensor
21	–	Wire Harness (P/O PL 28.5 Item 1)
22	059K26691	Feed Roll (REP 19.5)
23	059K26702	Nudger Roll (REP 19.5)

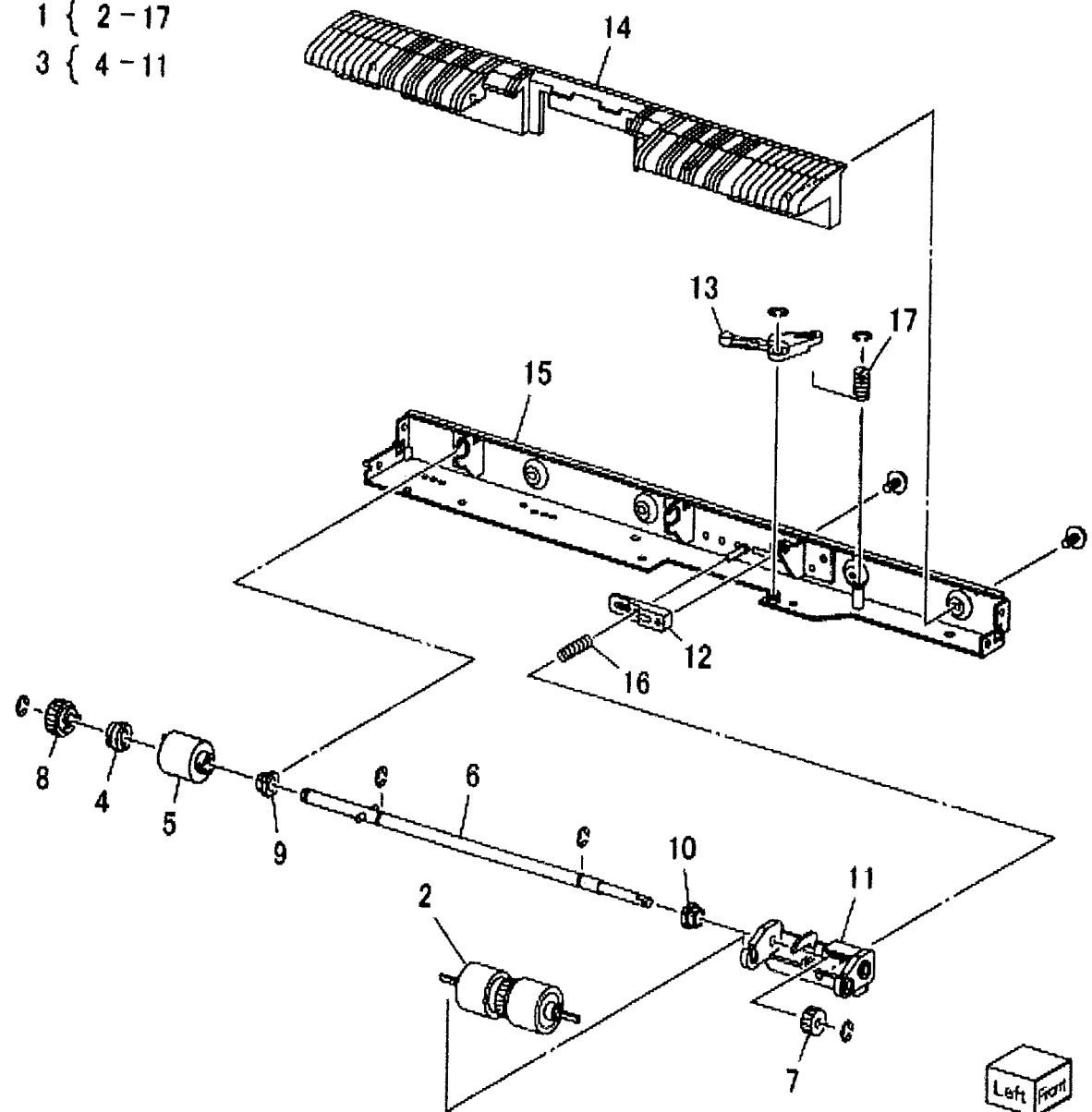


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## PL 28.6 HCF Feeder (3 of 3)

Item	Part	Description
1	059K26591	Lower Feed Assembly
2	-	Retard Roll Assembly (P/O PL 28.6 Item 1) (REP 19.5)
3	-	Retard Shaft Assembly (P/O PL 28.6 Item 1)
4	-	Collar (P/O PL 28.6 Item 3)
5	005K06701	Friction Clutch
6	-	Shaft (P/O PL 28.6 Item 3)
7	007E78170	Gear (15T)
8	007E89760	Gear (22T)
9	013E23600	Bearing
10	013E23610	Bearing
11	-	Retard Bracket (P/O PL 28.6 Item 1)
12	-	Slide (P/O PL 28.6 Item 1)
13	-	Lever (P/O PL 28.6 Item 1)
14	-	Lower Chute (P/O PL 28.6 Item 1)
15	-	Lower Frame (P/O PL 28.6 Item 1)
16	-	Spring (P/O PL 28.6 Item 1)
17	-	Spring (P/O PL 28.6 Item 1)

1 { 2-17  
3 { 4-11

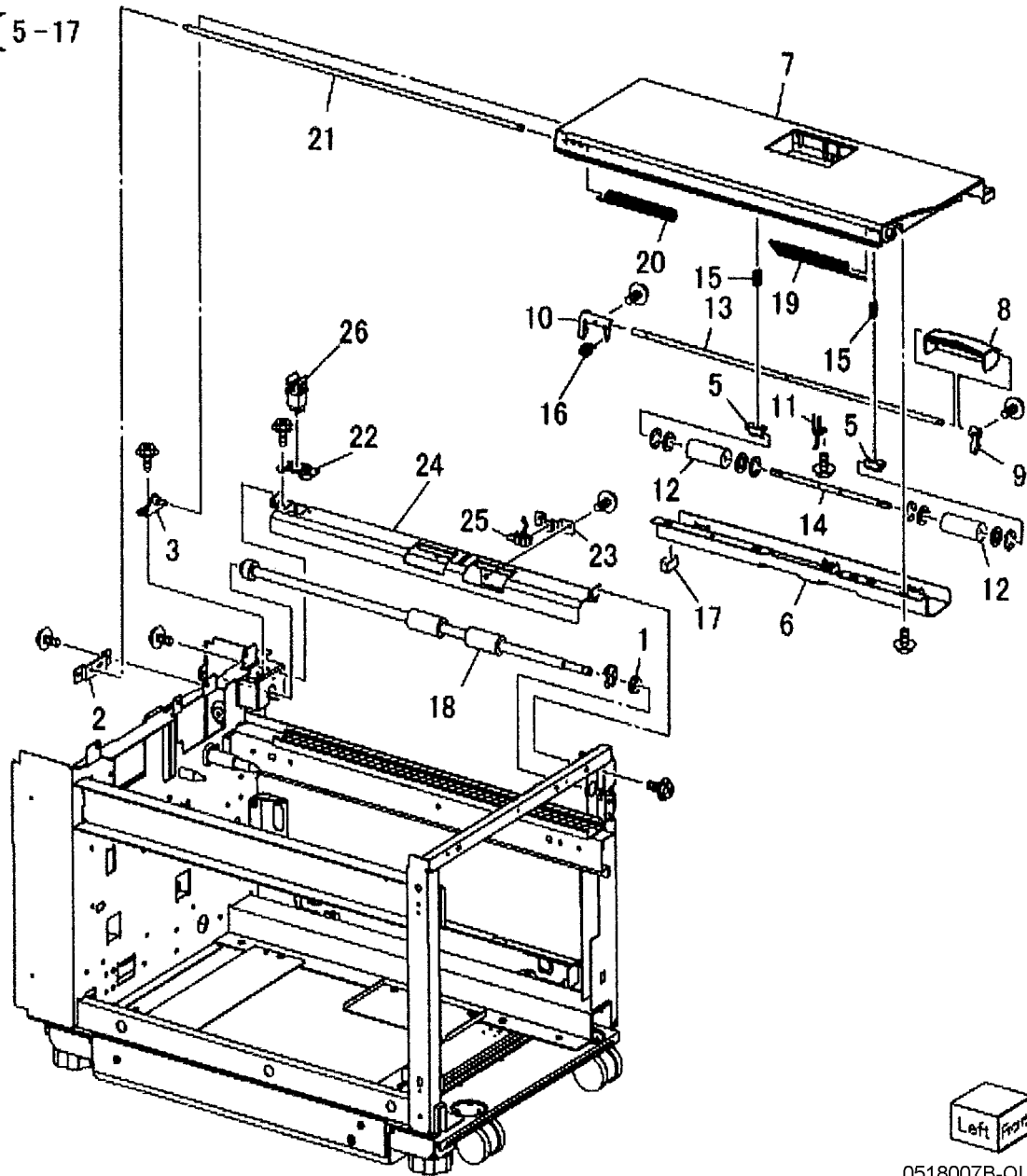


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## PL 28.7 HCF Top Cover Unit

Item	Part	Description
1	013E17100	Bearing
2	-	Bracket (Not Spared)
3	-	Pivot Bracket (Not Spared)
4	-	Top Cover Assembly (Not Spared)
5	-	Bearing (P/O PL 28.7 Item 4)
6	-	Upper Chute (P/O PL 28.7 Item 4)
7	-	Top Cover (P/O PL 28.7 Item 4)
8	-	Knob (P/O PL 28.7 Item 4)
9	-	Latch (P/O PL 28.7 Item 4)
10	-	Latch (P/O PL 28.7 Item 4)
11	-	Spring (P/O PL 28.7 Item 4)
12	059E01430	Pinch Roller
13	-	Shaft (P/O PL 28.7 Item 4)
14	-	Shaft (P/O PL 28.7 Item 4)
15	-	Spring (P/O PL 28.7 Item 4)
16	-	Spring (P/O PL 28.7 Item 4)
17	-	Gasket (P/O PL 28.7 Item 4)
18	059K36260	Takeaway Roll (REP 19.10)
19	-	Spring (Left) (P/O PL 28.1 Item 16)
20	-	Spring (Right) (P/O PL 28.1 Item 16)
21	-	Pivot Shaft (P/O PL 28.1 Item 16)
22	-	Bracket (P/O PL 28.1 Item 16)
23	-	Bracket (P/O PL 28.1 Item 16)
24	-	Lower Chute (P/O PL 28.1 Item 16)
25	130K88150	Takeaway Sensor
26	110E94770	Top Cover Interlock Switch

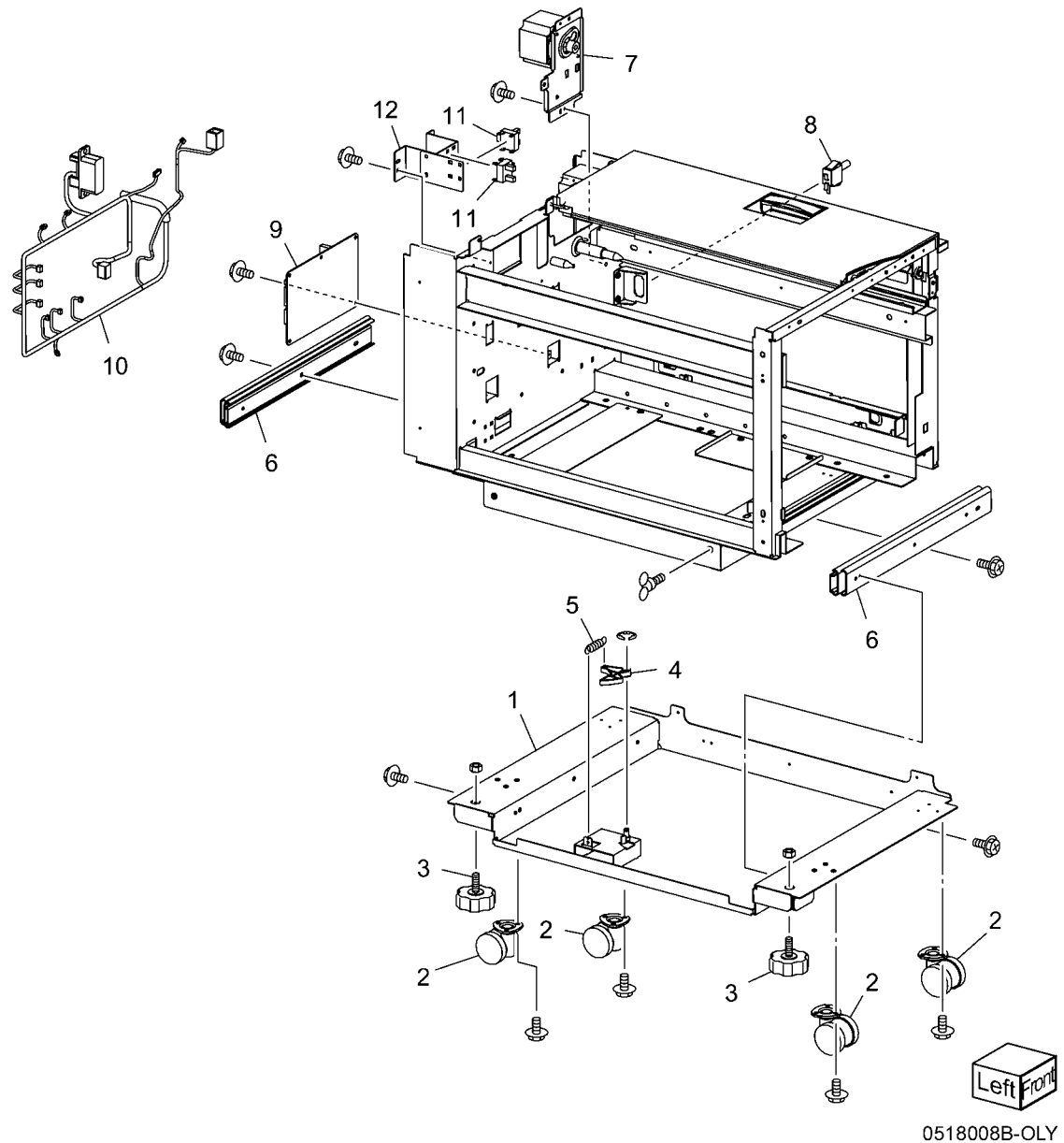
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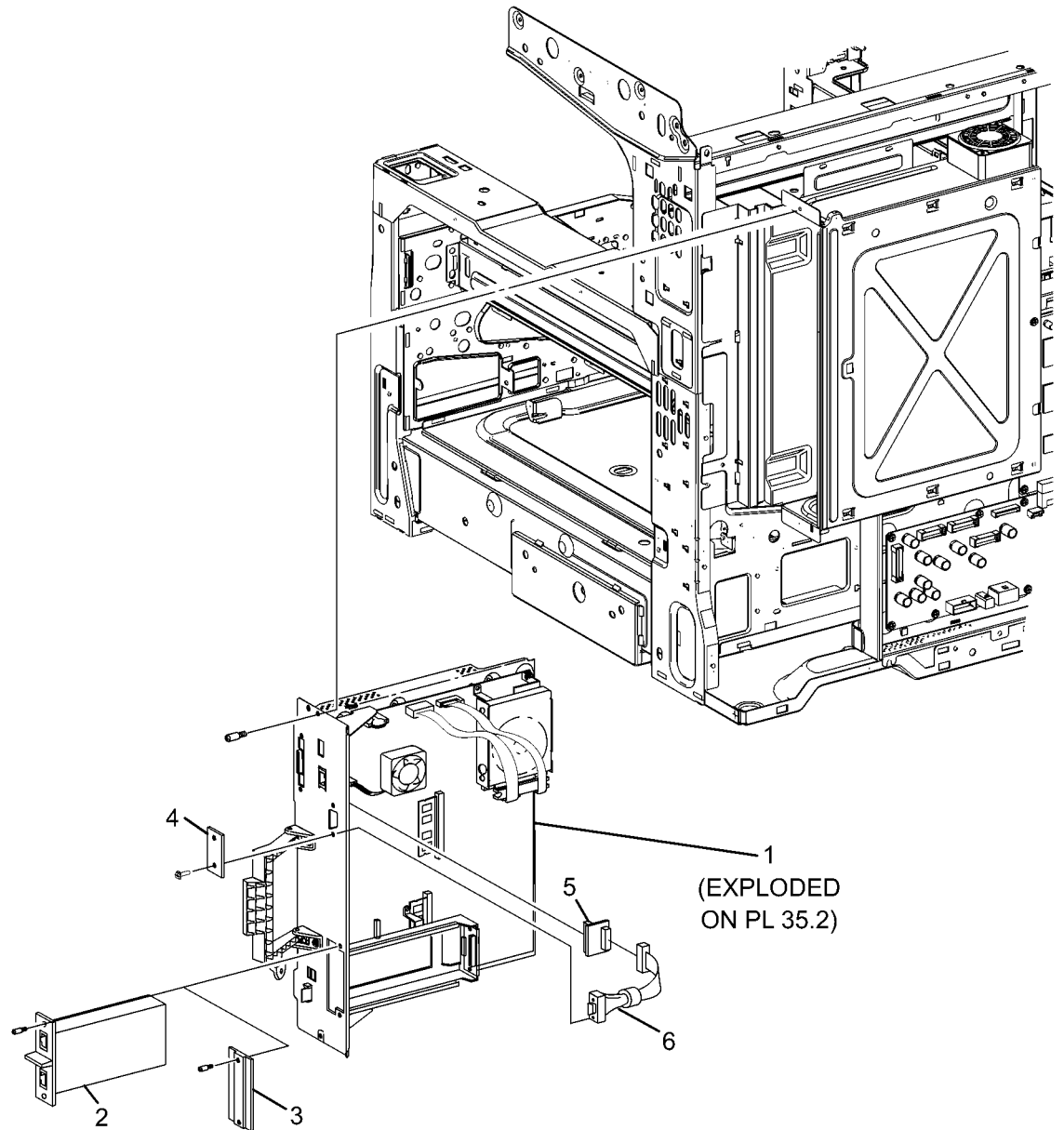
## PL 28.8 HCF Electrical and Rail

Item	Part	Description
1	–	Plate (Not Spared)
2	017E92820	Rack Caster (REP 19.9)
3	017E97191	Foot (Not Spared)
4	–	Latch Lever (Not Spared)
5	–	Spring (Not Spared)
6	801K15690	Rail
7	127K47150	Takeaway Motor
8	–	Docking Interlock Switch (Not Spared)
9	960K31492	HCF PWB (REP 19.11)
10	–	Wire Harness (P/O PL 28.1 Item 16)
11	130K55590	HCF Size Sensor R and L
12	–	Bracket (P/O PL 28.1 Item 16)



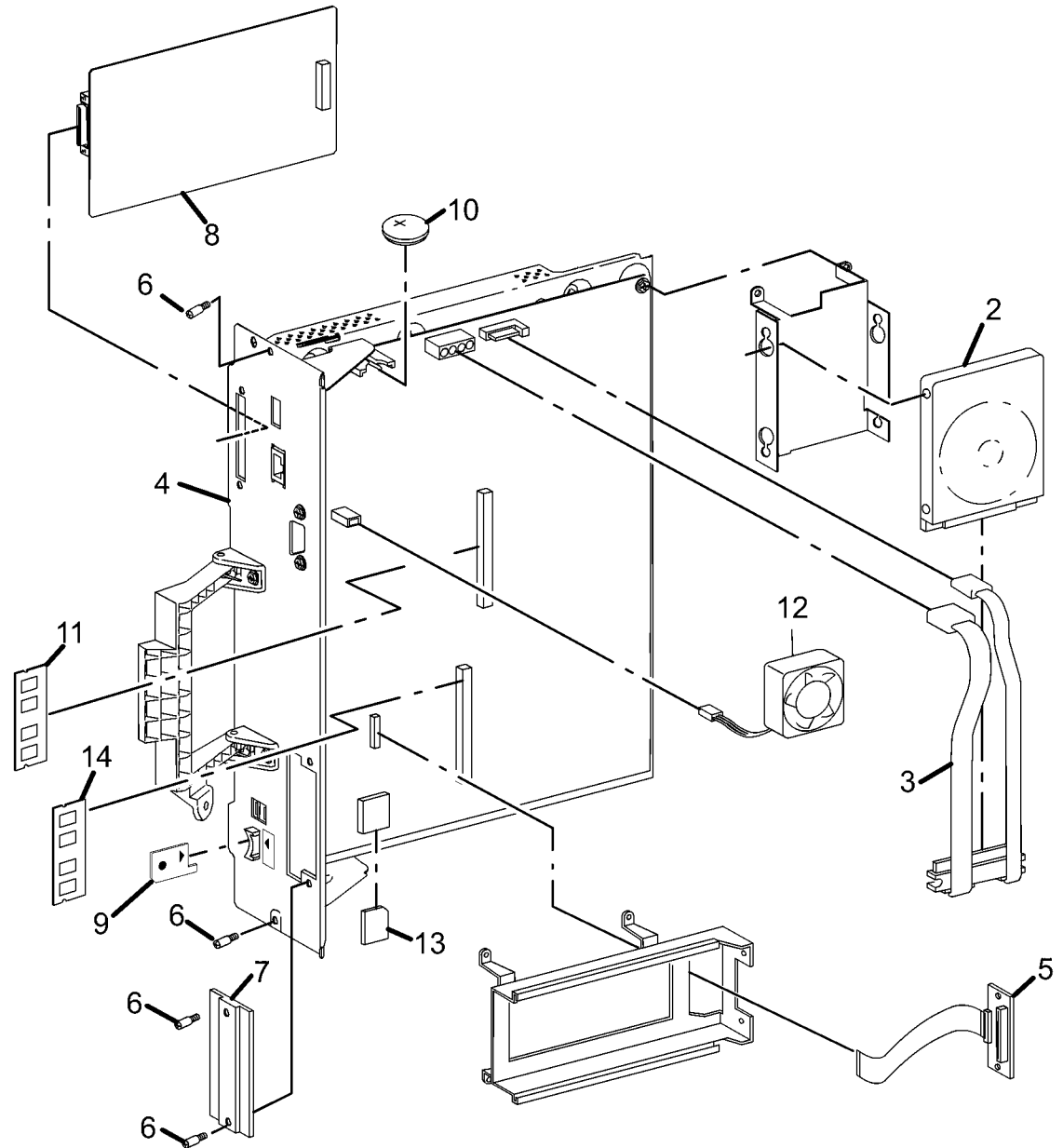
## PL 35.1 Single Board Controller (1 of 2)

Item	Part	Description
1	—	SBC Unit (REF: PL 35.2)
2	960K65970	Two Line Fax Assembly
—	960K65960	One Line Fax Assembly
3	—	Fax Filler Panel
4	—	FDI Filler Panel
5	—	FDI Interface Board
6	962K41361	FDI Internal Cable



## PL 35.2 Single Board Controller (2 of 2)

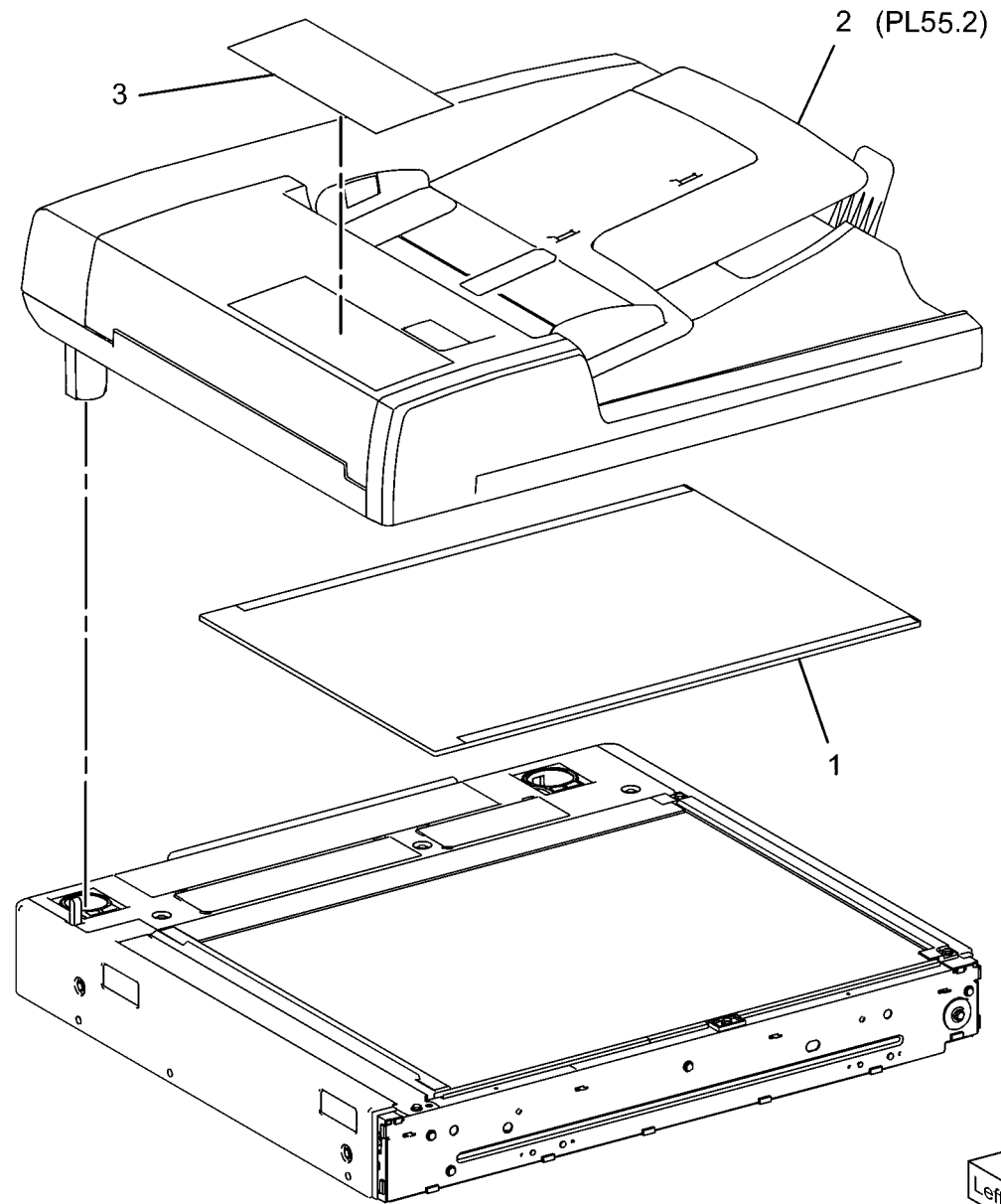
Item	Part	Description
2	121K56430	Hard Drive
3	962K40460	SATA/Power Cable Assembly
4	604K84731	SBC PWB Assembly
5	112K01140	Fax Riser PWBA
6	826E39370	Thumb Screw (M4)
7	-	Fax Filler Panel (P/O PL 35.1 Item 3)
8	604K89991	PYXIS Board 7845/55
9	-	SIM Card (REP 1.15)
10	207E22290	Battery/RTC
11	833W39041	DDR3 Memory (2GB)
12	107K02810	Heat Sink Fan
13	237E27080	SD Card (7830/35)
-	237E27210	SD Card (7845/55)
14	137E30390	EPC Memory (1GB) DDR2



0535002A

## PL 51.1 DADF Accessory

Item	Part	Description
1	004K02962	DADF Platen Cushion ( )
2	059K74373	DADF Assembly
3	-	Label (Not Spared)



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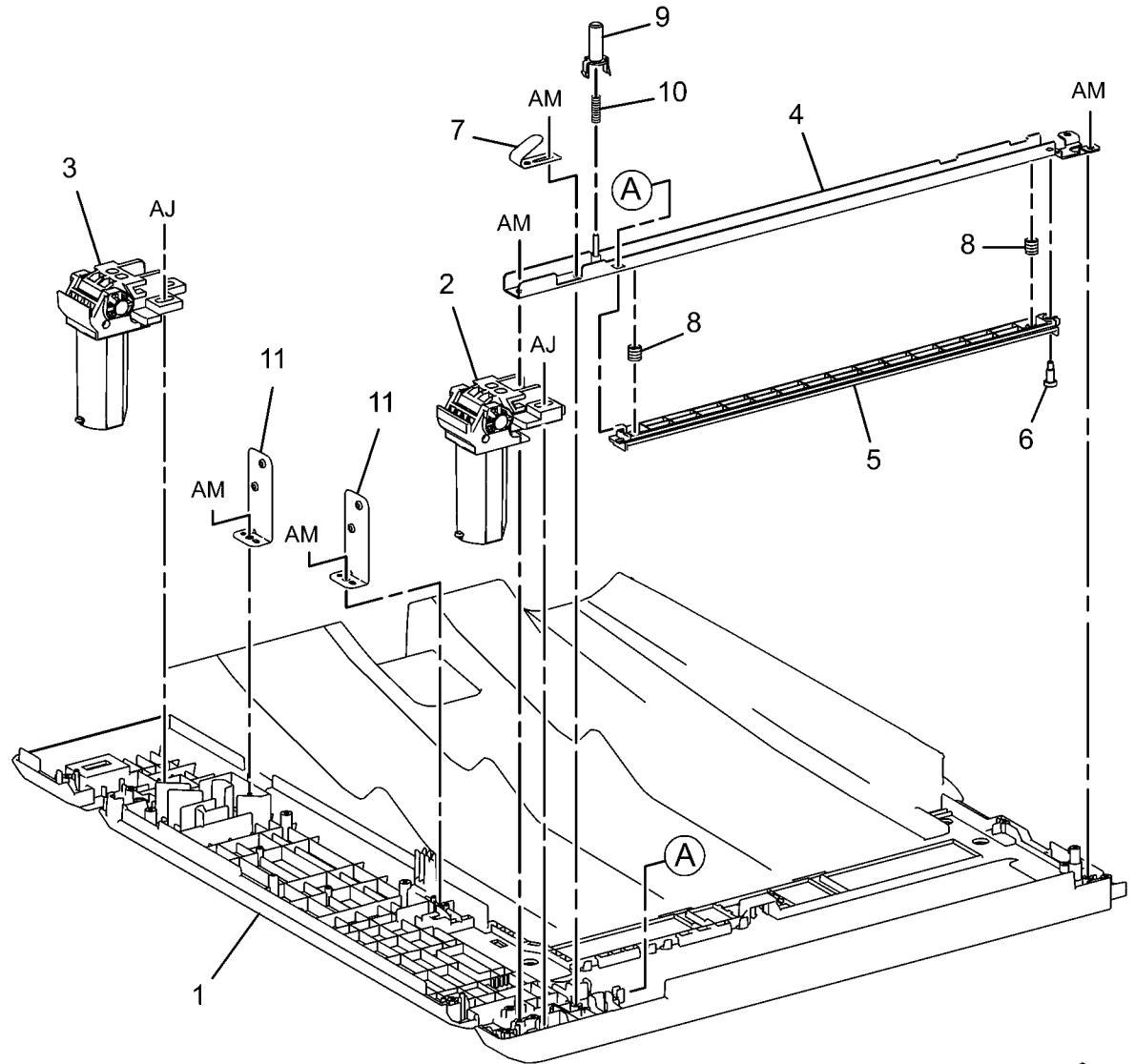




# PL 51.3 Base Frame

Item	Part	Description
1	-	DADF Base Frame (P/O PL 51.1 Item 1)
2	036K91874	Left Counter Balance (REP 5.7)
3	036K91883	Right Counter Balance (REP 5.8)
4	-	Tie Plate (P/O PL 51.1 Item 2)
5	054K41230	CVT Chute
6	-	Stud Screw
7	-	Ground Plate (P/O PL 51.1 Item 2)
8	-	CVT Spring (Not Spared)
9	-	Floating Holder
10	-	Floating Spring
11	-	Bracket (P/O PL 51.1 Item 2)

PL51.3

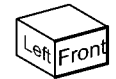
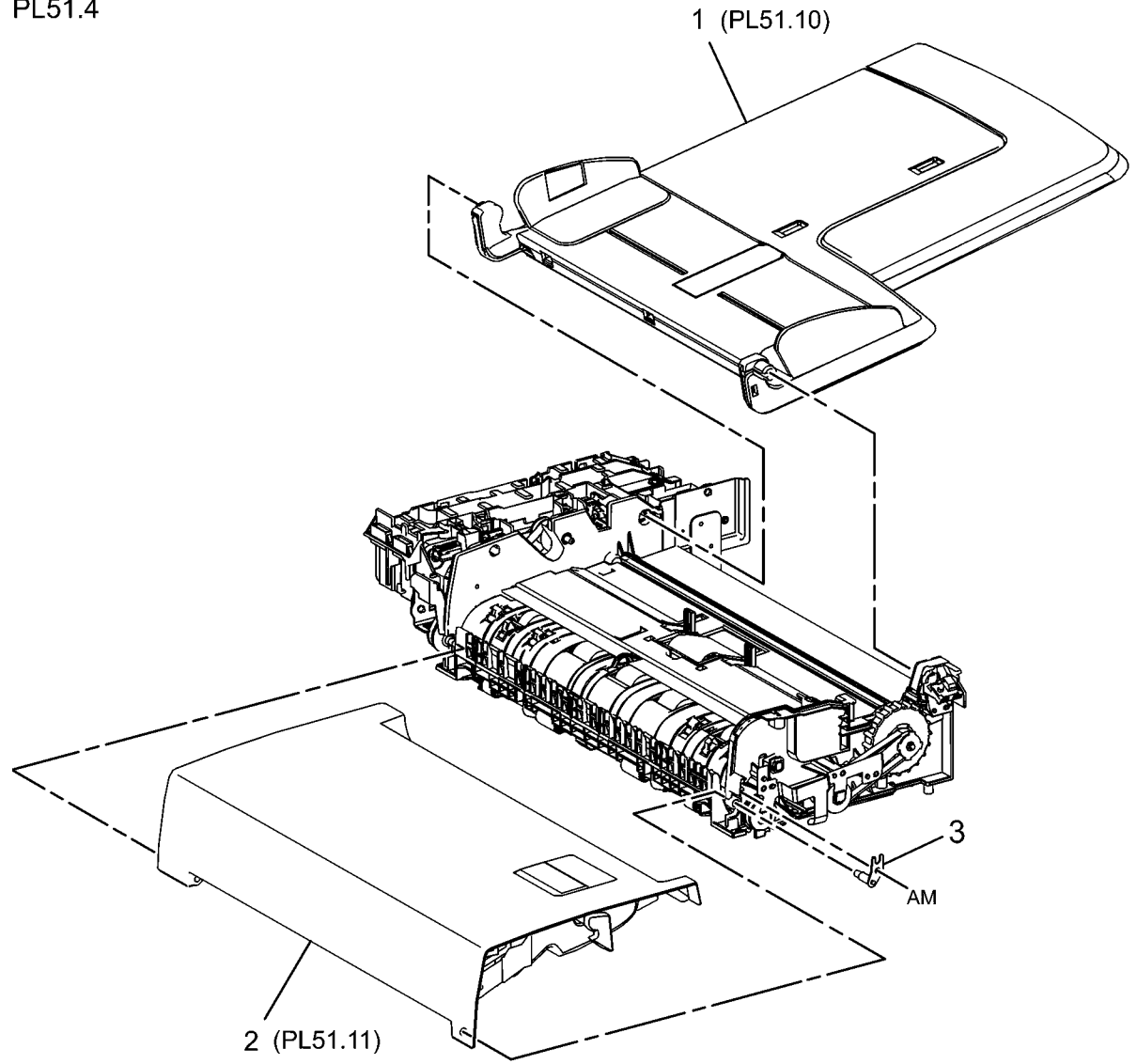


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# PL 51.4 Document Tray

Item	Part	Description
1	050K64253	Document Tray Assembly (REP 5.9)
2	059K65064	Top Cover (REP 5.10)
3	-	Stud Bracket (P/O PL 51.1 Item 2)

PL51.4



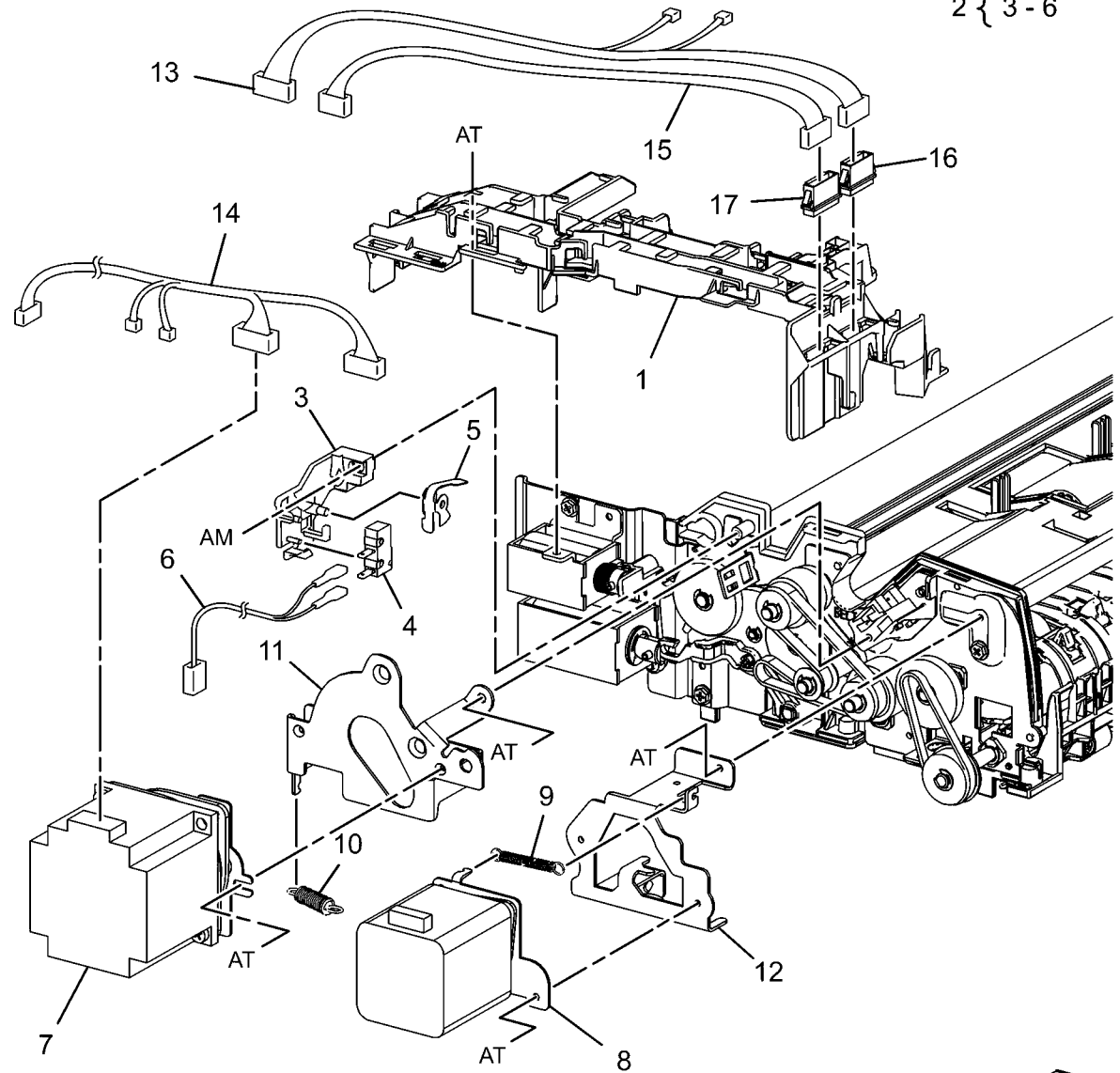
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# PL 51.5 DADF Drives (1 of 2)

Item	Part	Description
1	-	Harness Guide (REP 5.11)
2	110K15933	Interlock Switch and Harness Assembly
3	-	Bracket (P/O PL 51.5 Item 2)
4	-	Interlock Switch (P/O PL 51.5 Item 2)
5	-	Spring (P/O PL 51.5 Item 2)
6	-	Switch Wire Harness (P/O PL 51.5 Item 2)
7	127K60530	Feed Motor (REP 5.13)
8	127K60550	Registration Motor (REP 5.12)
9	-	Spring
10	-	Spring
11	-	Bracket (P/O PL 51.1 Item 2)
12	-	Bracket (P/O PL 51.1 Item 2)
13	-	Feeder Wire Harness (P/O PL 51.1 Item 2)
14	-	Motor Wire Harness (P/O PL 51.1 Item 2)
15	-	APS Wire Harness (Not Spared)
16	-	Connector (Not Spared)
17	-	Connector (Not Spared)

PL51.5

2 { 3 - 6

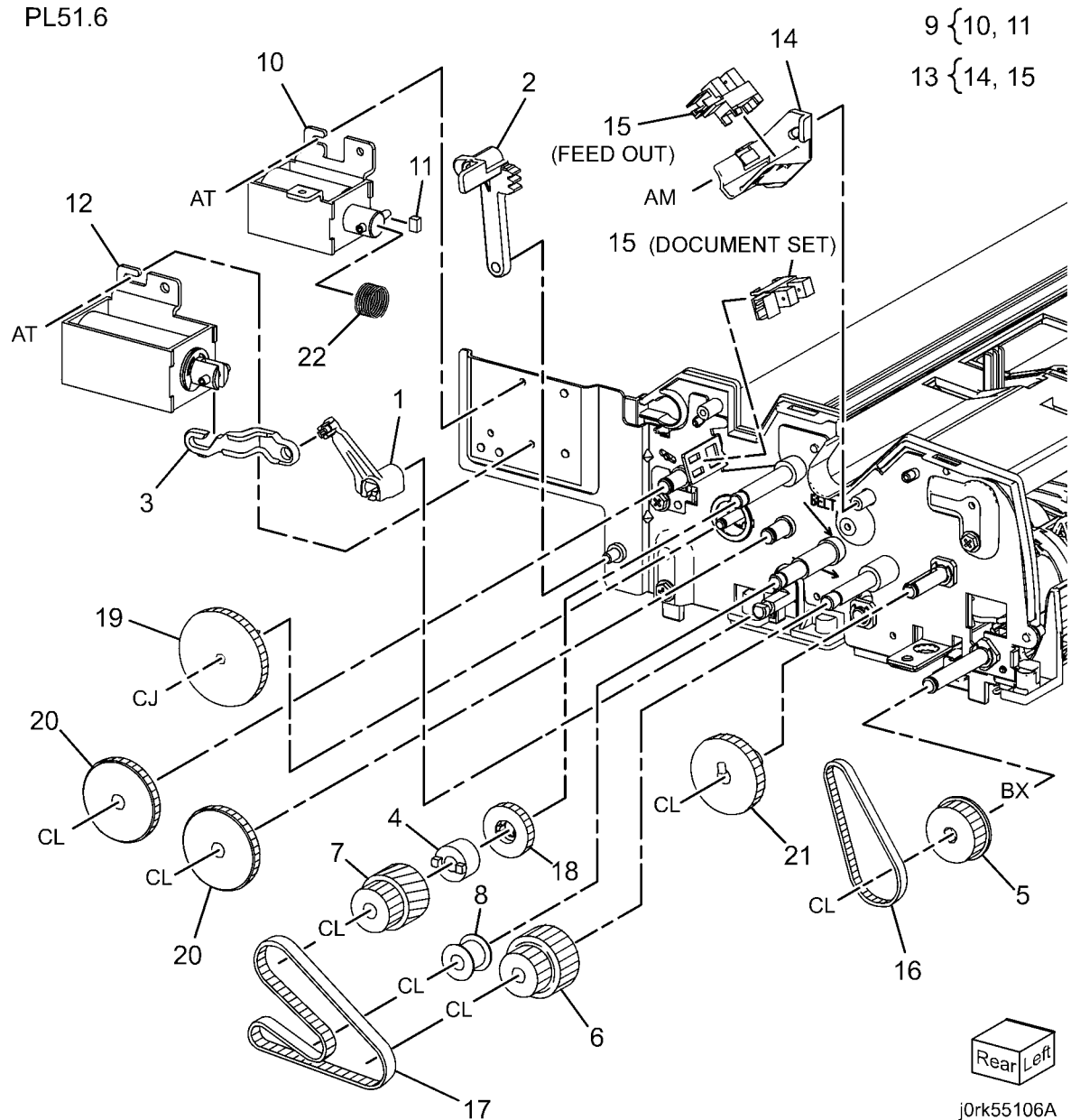


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# PL 51.6 DADF Drives (2 of 2)

Item	Part	Description
1	011E22861	Nip Lever
2	-	Stopper Link (Not Spared)
3	012E17161	Release Link
4	019K10320	Brake
5	020E46551	Registration Roll Pulley
6	020E46561	Pulley Gear
7	020E46571	Pulley Gear
8	059E98620	Roll
9	121K46620	Gate Solenoid
10	-	Gate Solenoid (P/O PL 51.6 Item 9)
11	-	Cushion (P/O PL 51.6 Item 9)
12	121K43660	Exit Nip Release Solenoid
13	130K73000	Feed Out Sensor Assembly
14	-	Sensor Bracket (P/O PL 51.6 Item 13)
15	930W00121	Feed Out Sensor, Document Set Sensor
16	423W06555	Belt
17	423W31554	Belt
18	807E26971	Gear
19	807E26981	Exit Roll Gear
20	807E26991	Gear
21	807E27011	Take Away Roll Gear
22	809E86320	Spring

PL51.6



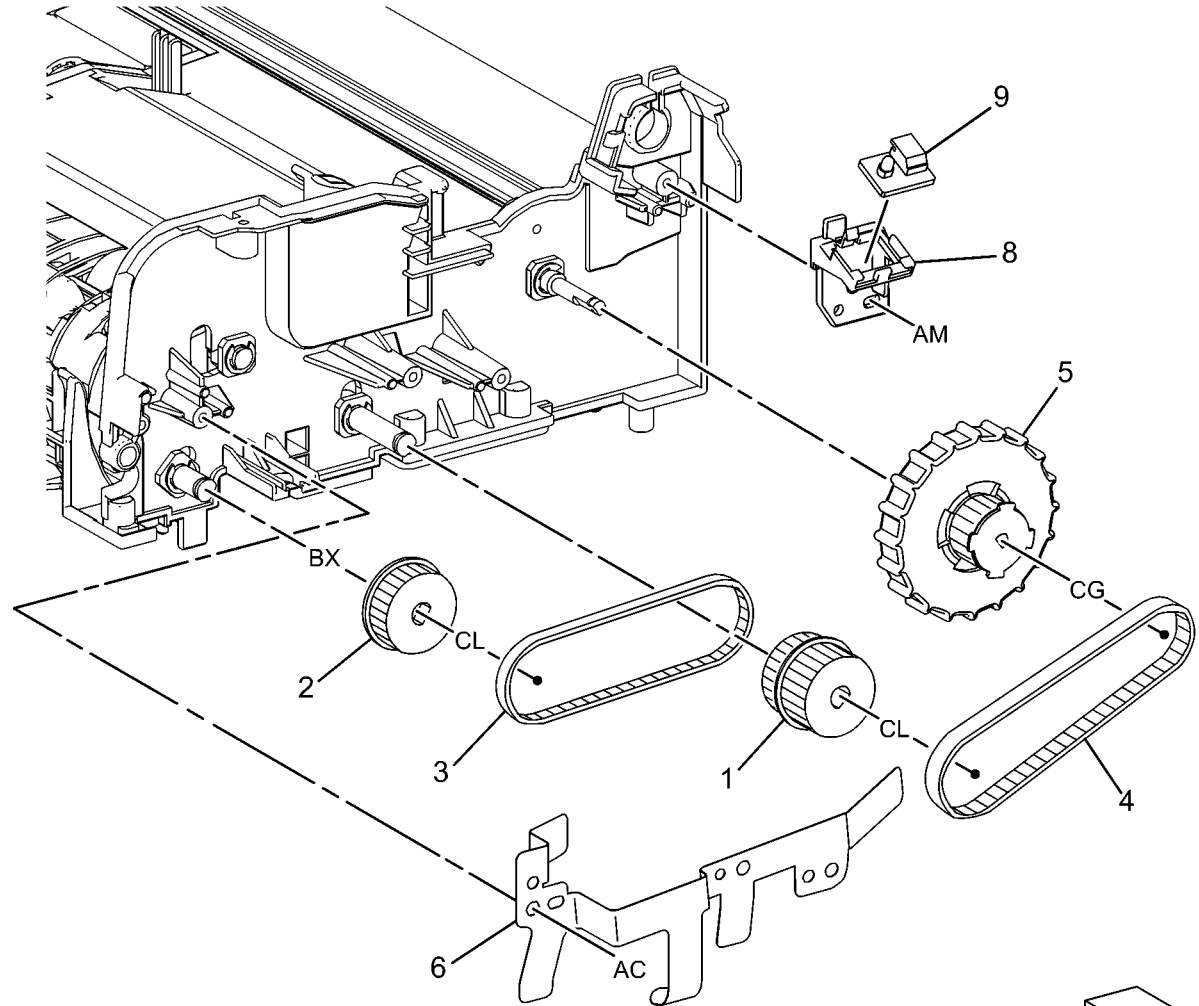
9 { 10, 11  
13 { 14, 15

# PL 51.7 Front Belt

PL51.7

7 { 8, 9

Item	Part	Description
1	020E46540	Out Roll Pulley
2	020E46551	Registration Roll Pulley
3	423W08855	Belt
-	423W08854	Belt (Alternate)
4	423W06554	Belt (Not Spared)
5	803E02200	Knob Handle
6	-	Ground Plate (Not Spared)
7	960K48840	Document LED Set
8	-	LED Bracket (P/O PL 51.7 Item 7)
9	-	Document Set LED (P/O PL 51.7 Item 7)

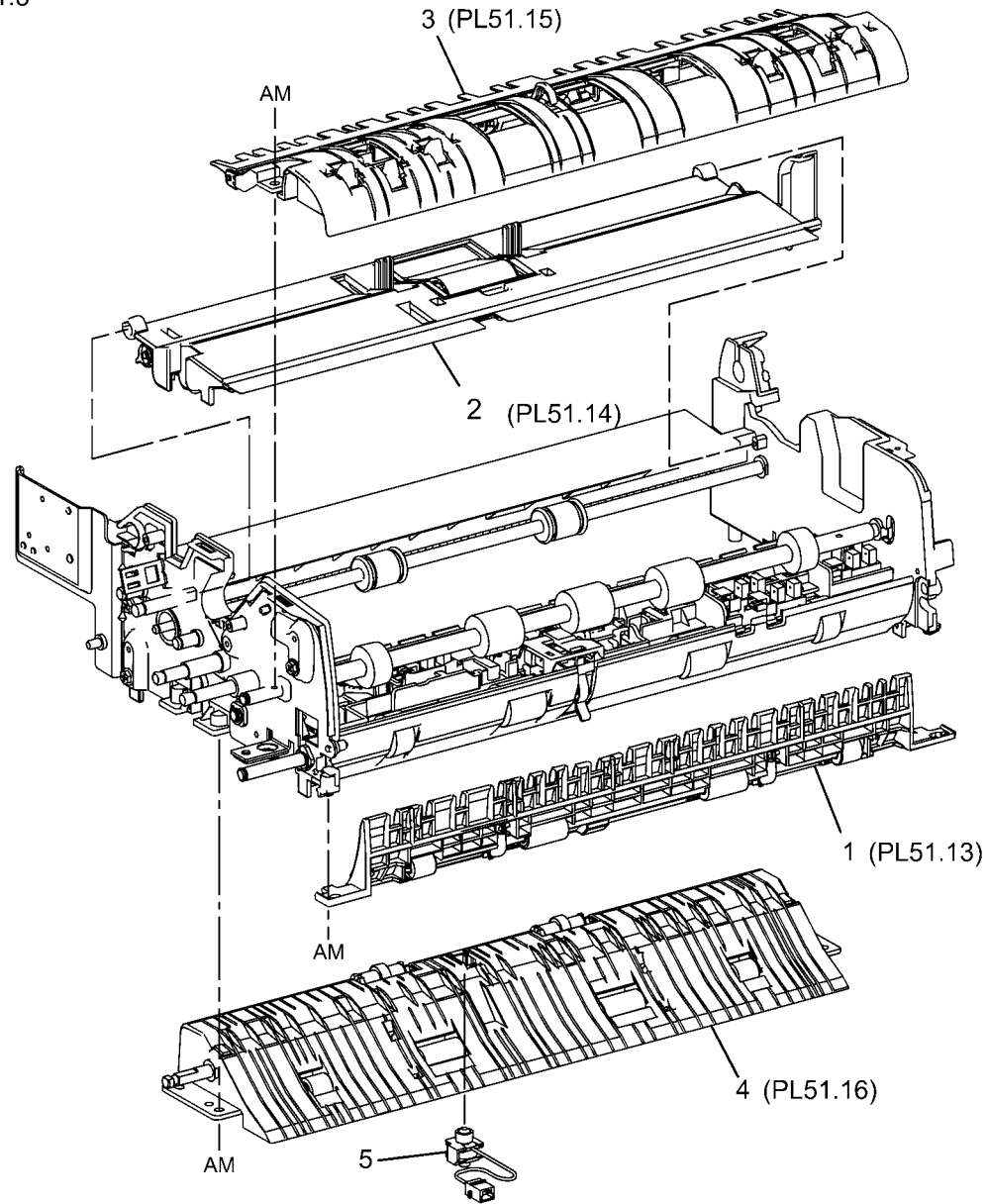


Left Front  
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# PL 51.8 Registration, Retard, Invert, Output Chutes

PL51.8

Item	Part	Description
1	054K39700	Registration Chute (REP 5.14)
2	054K44171	Retard Chute (REP 5.15)
3	054K41044	Invert Chute
4	054K41050	Output Chute
5	—	Stamp Solenoid (Not Spared)

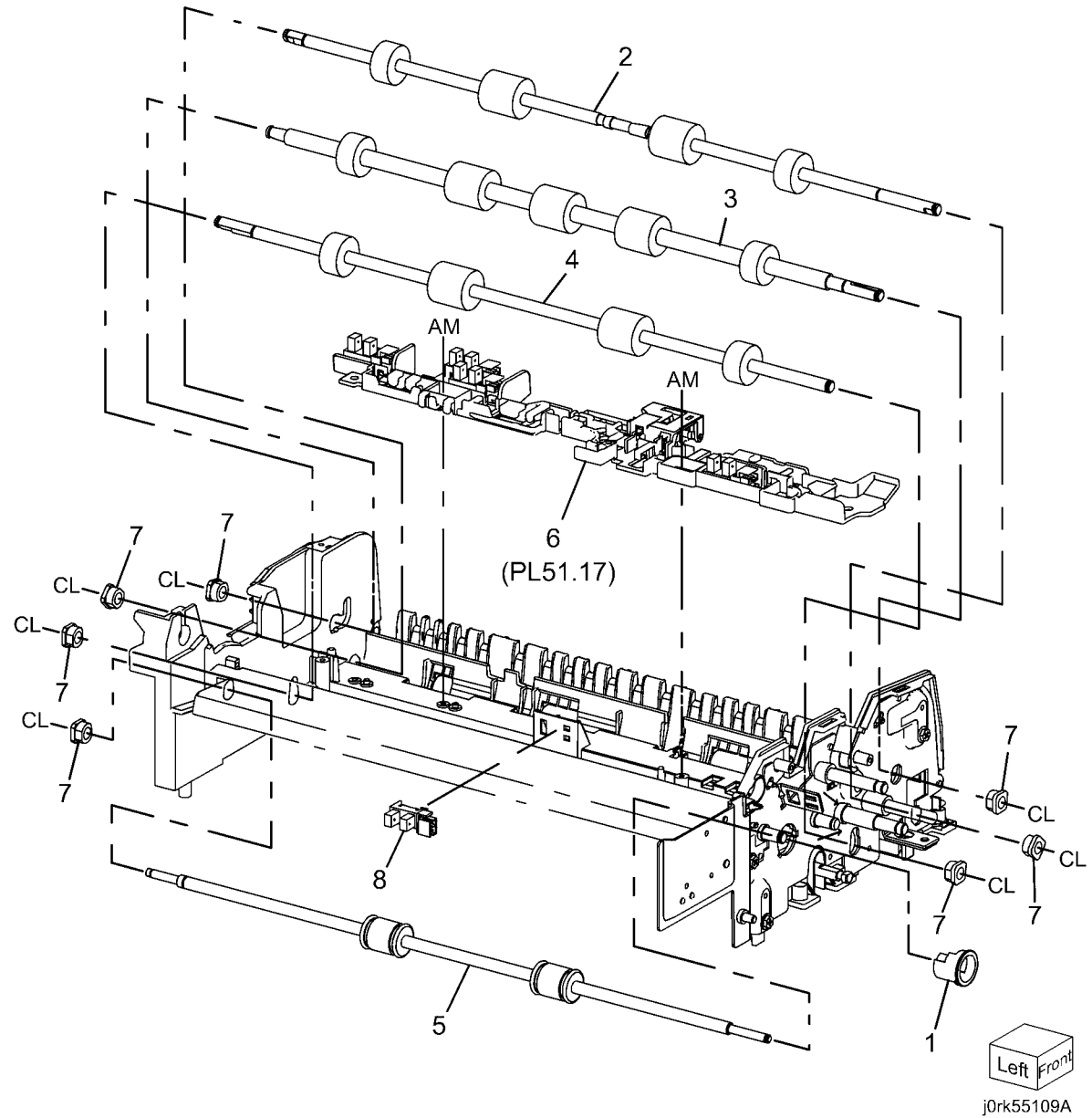


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# PL 51.9 Roll, Sensor Bracket

Item	Part	Description
1	—	Bearing (Not Spared)
2	059K65081	Registration Roll
3	059K65090	Take Away Roll (REP 5.16)
4	059K65100	Output Roll
5	059K65111	Exit Roll
6	068K69460	Sensor Bracket Assembly (REP 5.17)
7	—	Bearing (Not Spared)
8	930W00121	Invert Sensor

PL51.9

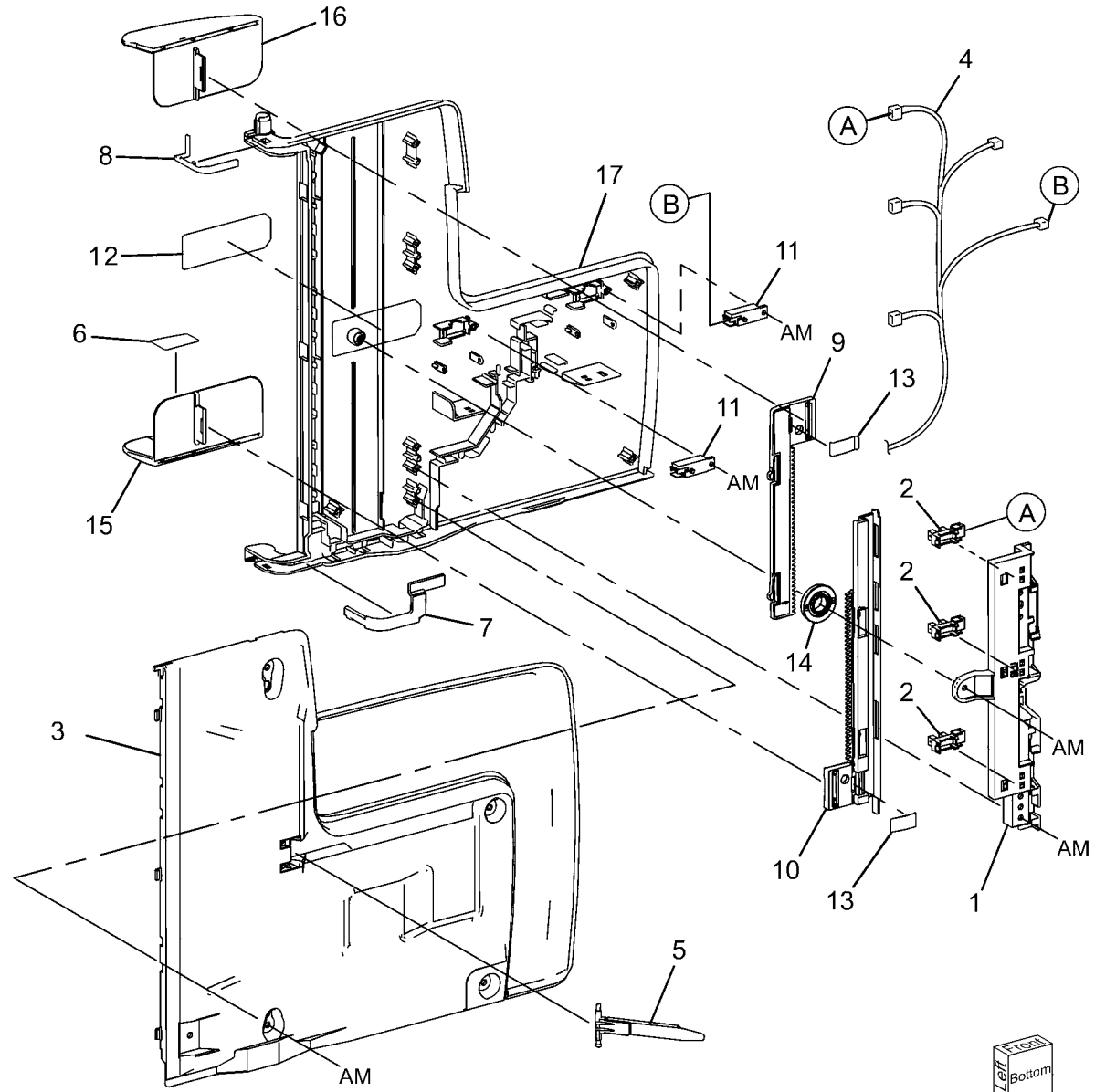


Left Front

j0rk55109A

# PL 51.10 Document Tray

Item	Part	Description
1	-	Sensor Bracket (P/O PL 51.4 Item 1)
2	930W00121	Tray Guide Set Sensor 1, Sensor 2, Sensor 3
3	-	Tray Cover (P/O PL 51.4 Item 1)
4	-	Tray Wire Harness (P/O PL 51.4 Item 1)
5	032K05861	Guide
6	-	Max Label (Not Spared)
7	-	Harness Cover (P/O PL 51.4 Item 1)
8	-	Harness Cover (P/O PL 51.4 Item 1)
9	-	Front Gear Rack (P/O PL 51.4 Item 1)
10	-	Rear Gear Rack (P/O PL 51.4 Item 1)
11	930W00241	Size Sensor 1, Size Sensor 2
12	897E26270	Instruction Label
13	-	Rack Spring (P/O PL 51.4 Item 1)
14	-	Pinion Gear (P/O PL 51.4 Item 1)
15	-	Rear Side Guide (P/O PL 51.4 Item 1)
16	-	Front Side Guide (P/O PL 51.4 Item 1)
17	-	Upper Tray (P/O PL 51.4 Item 1)



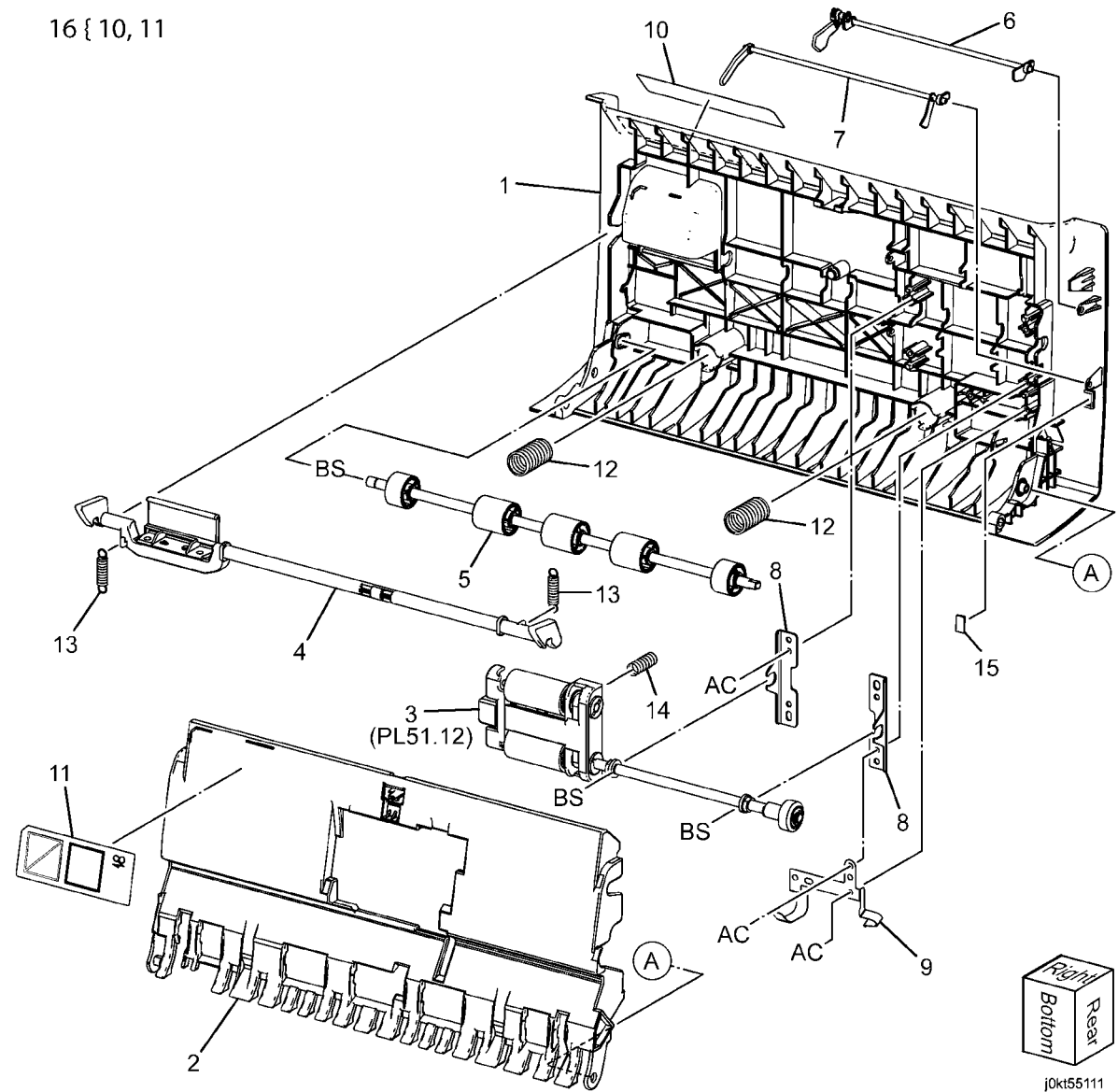
jOrk55110A



# PL 51.11 Top Cover

Item	Part	Description
1	-	Top Cover (P/O PL 51.4 Item 2)
2	-	Upper Feed Chute (P/O PL 51.4 Item 2)
3	059K65070	Upper Feeder (REP 5.5)
4	011K03520	Lever Latch
5	059K61230	Take Away Pinch Roll
6	120K92500	Document Set Actuator
7	120E32200	Feed Out Actuator
8	-	Bracket (P/O PL 51.4 Item 2)
9	-	Ground Plate (P/O PL 51.4 Item 2)
10	897E24011	Size Label
11	897E24000	Jam Label
12	-	Spring (Not Spared)
13	-	Spring (Not Spared)
14	-	Spring (Not Spared)
15	-	Holder Shaft Latch
16	-	Label Kit

PL 51.11  
16 { 10, 11

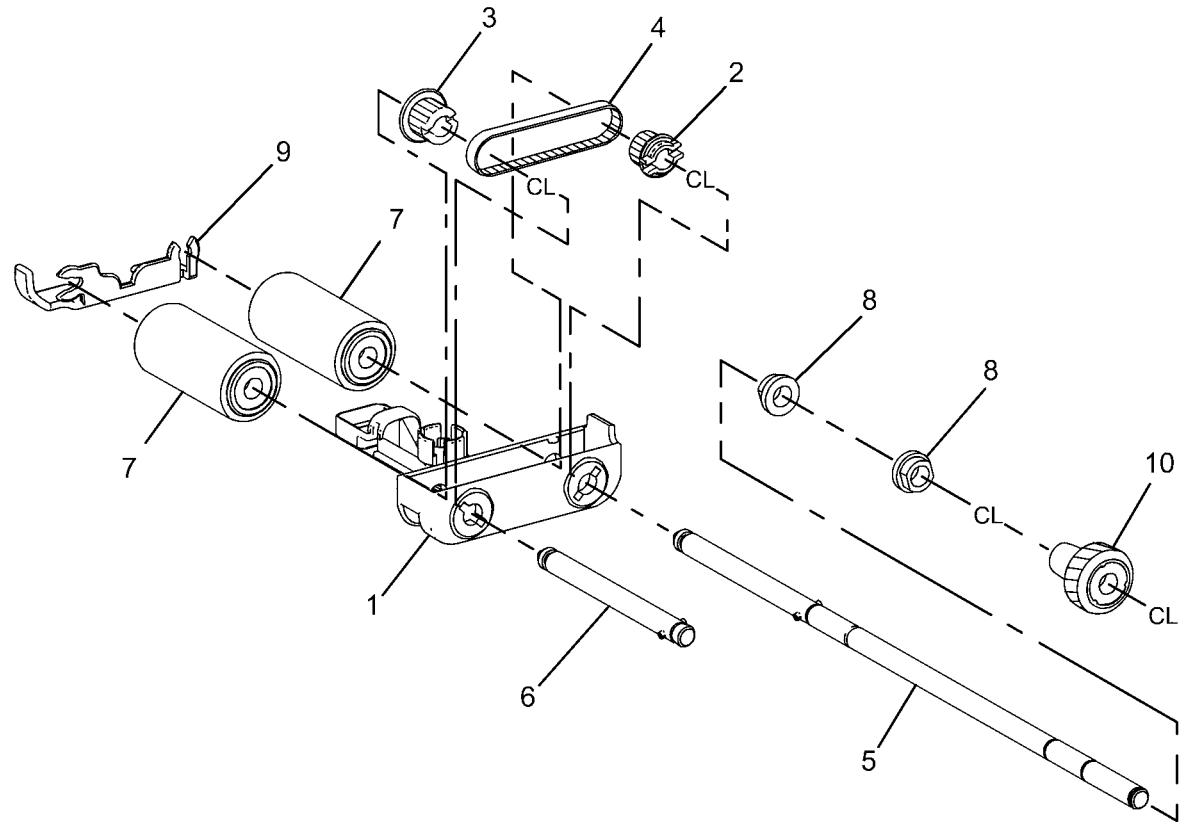


# PL 51.12 Upper Feeder

Item	Part	Description
1	-	Housing (P/O PL 51.11 Item 3)
2	-	Feeder Pulley (P/O PL 51.12 Item 3)
3	-	Nudger Pulley (P/O PL 51.11 Item 3)
4	-	Belt (P/O PL 51.11 Item 3)
5	-	Feed Shaft (P/O PL 51.11 Item 3)
6	-	Nudger Shaft (P/O PL 51.11 Item 3)
7	-	Feed Roll, Nudger Roll (P/O PL 51.12 Item 11) (REP 5.18)
8	-	Bearing (P/O PL 51.11 Item 3)
9	-	Housing (P/O PL 51.12 Item 11)
10	-	Gear (P/O PL 51.11 Item 3)
11	604K58410	DADF Feed Roll Kit

PL51.12

11 { 7, 9, PL51.14 Items 5, 10

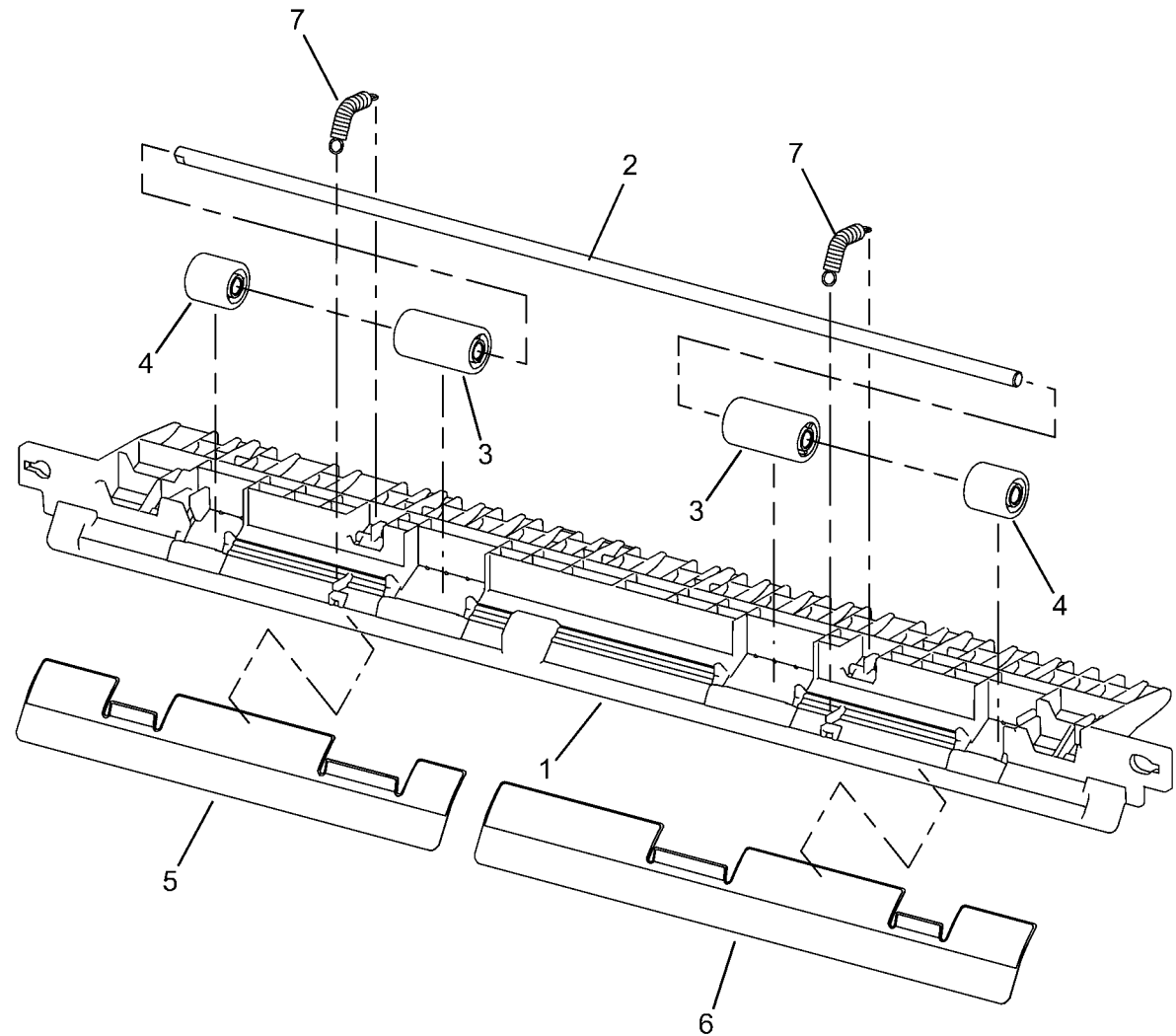


j0rk55112A

# PL 51.13 Registration Chute

Item	Part	Description
1	-	Registration Chute (P/O PL 51.8 Item 1)
2	-	Pinch Shaft (P/O PL 51.8 Item 1)
3	-	Registration Wide Pinch Roll (P/O PL 51.8 Item 1)
4	-	Registration Short Pinch Roll (P/O PL 51.8 Item 1)
5	-	Seal (P/O PL 51.8 Item 1)
6	-	Seal (P/O PL 51.8 Item 1)
7	-	Spring (P/O PL 51.8 Item 1)

PL51.13

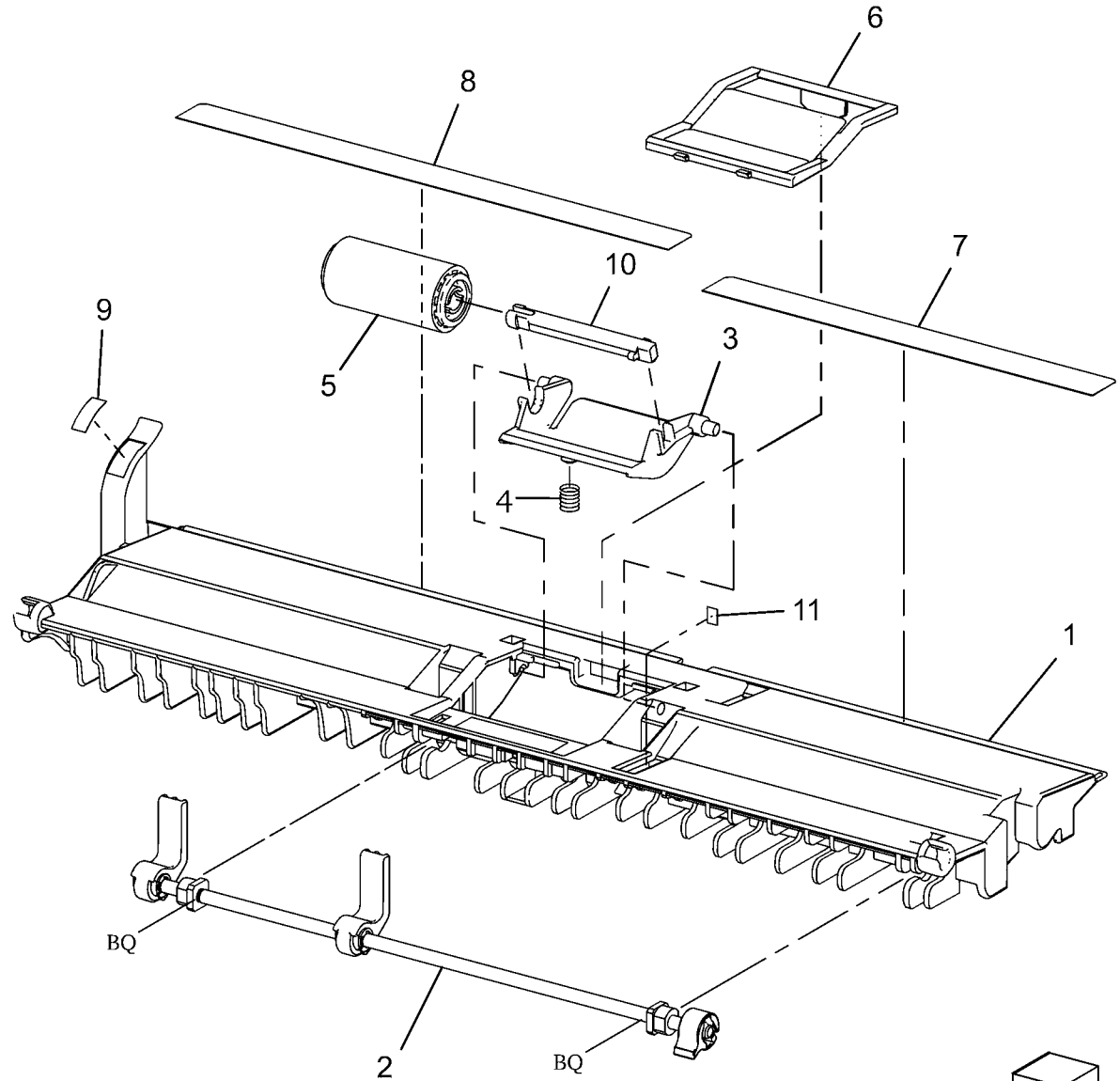


j0rk55113A

# PL 51.14 Retard Chute

Item	Part	Description
1	-	Chute (P/O PL 51.8 Item 2)
2	-	Set Gate (P/O PL 51.8 Item 2)
3	-	Housing (P/O PL 51.8 Item 2)
4	-	Spring (P/O PL 51.8 Item 2)
5	-	Retard Roll (P/O 51.12.11) ( )
6	848K43600	Retard Roll Cover (P/O PL 51.12 Item 11)
7	-	Seal (P/O PL 51.8 Item 2)
8	-	Seal (P/O PL 51.8 Item 2)
9	-	Label (P/O PL 51.8 Item 2)
10	-	Shaft (P/O PL 51.12 Item 11)
11	-	Pad (P/O PL 51.8 Item 2)

PL51.14

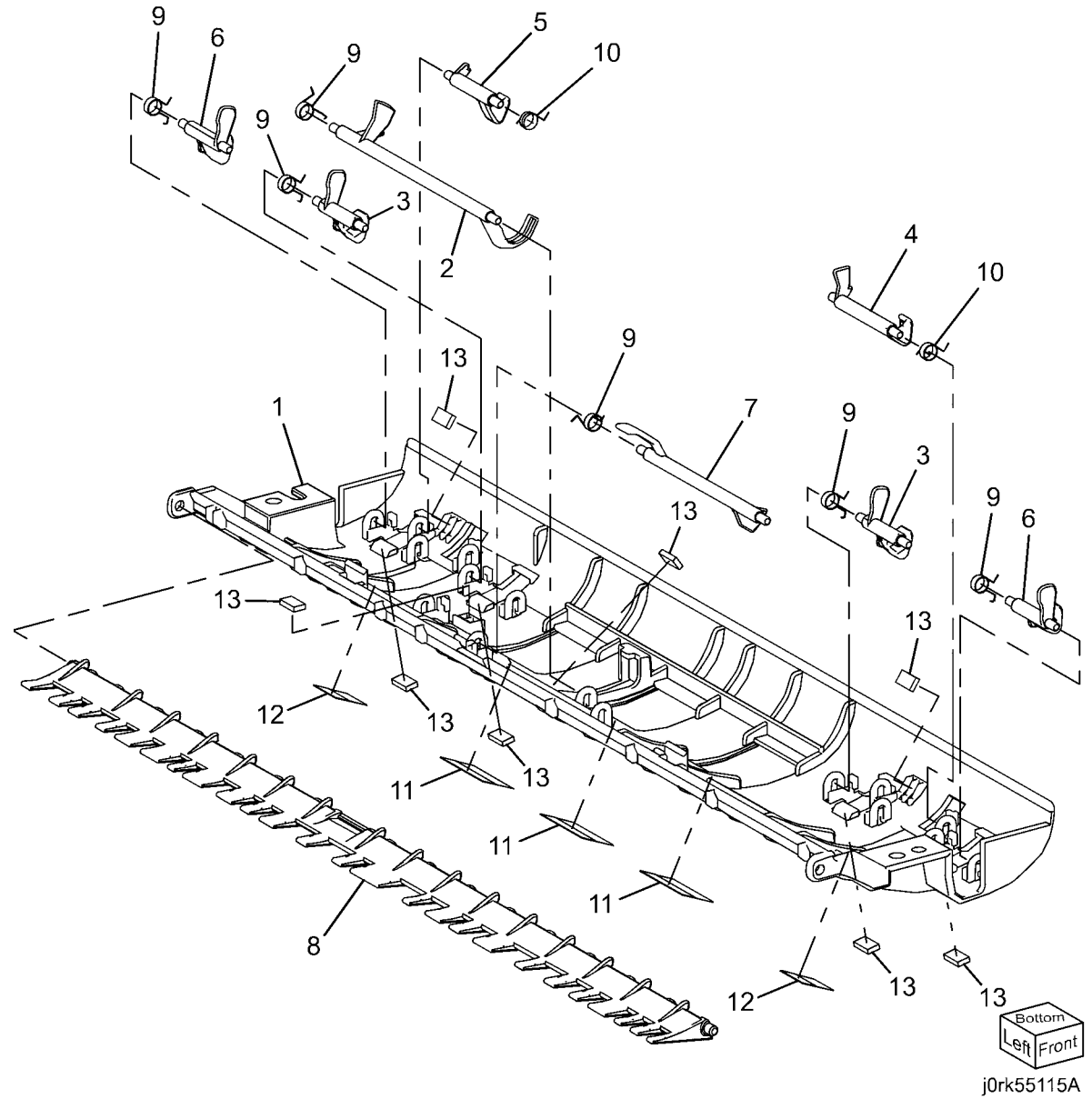


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j0rk55114A

# PL 51.15 Invert Chute

Item	Part	Description
1	-	Invert Chute (P/O PL 51.8 Item 3)
2	-	Pre Registration Actuator (P/O PL 51.8 Item 3)
3	-	Actuator (Aps 1) (P/O PL 51.8 Item 3)
4	-	Actuator (Aps 2) (P/O PL 51.8 Item 3)
5	-	Actuator (Aps 2) (P/O PL 51.8 Item 3)
6	-	Actuator (Aps 3) (P/O PL 51.8 Item 3)
7	-	Invert Actuator (P/O PL 51.8 Item 3)
8	-	Invert Gate (P/O PL 51.8 Item 3)
9	-	Spring (P/O PL 51.8 Item 3)
10	-	Spring (P/O PL 51.8 Item 3)
11	-	Seal (P/O PL 51.8 Item 3)
12	-	Seal (P/O PL 51.8 Item 3)
13	-	Pad (P/O PL 51.8 Item 3)

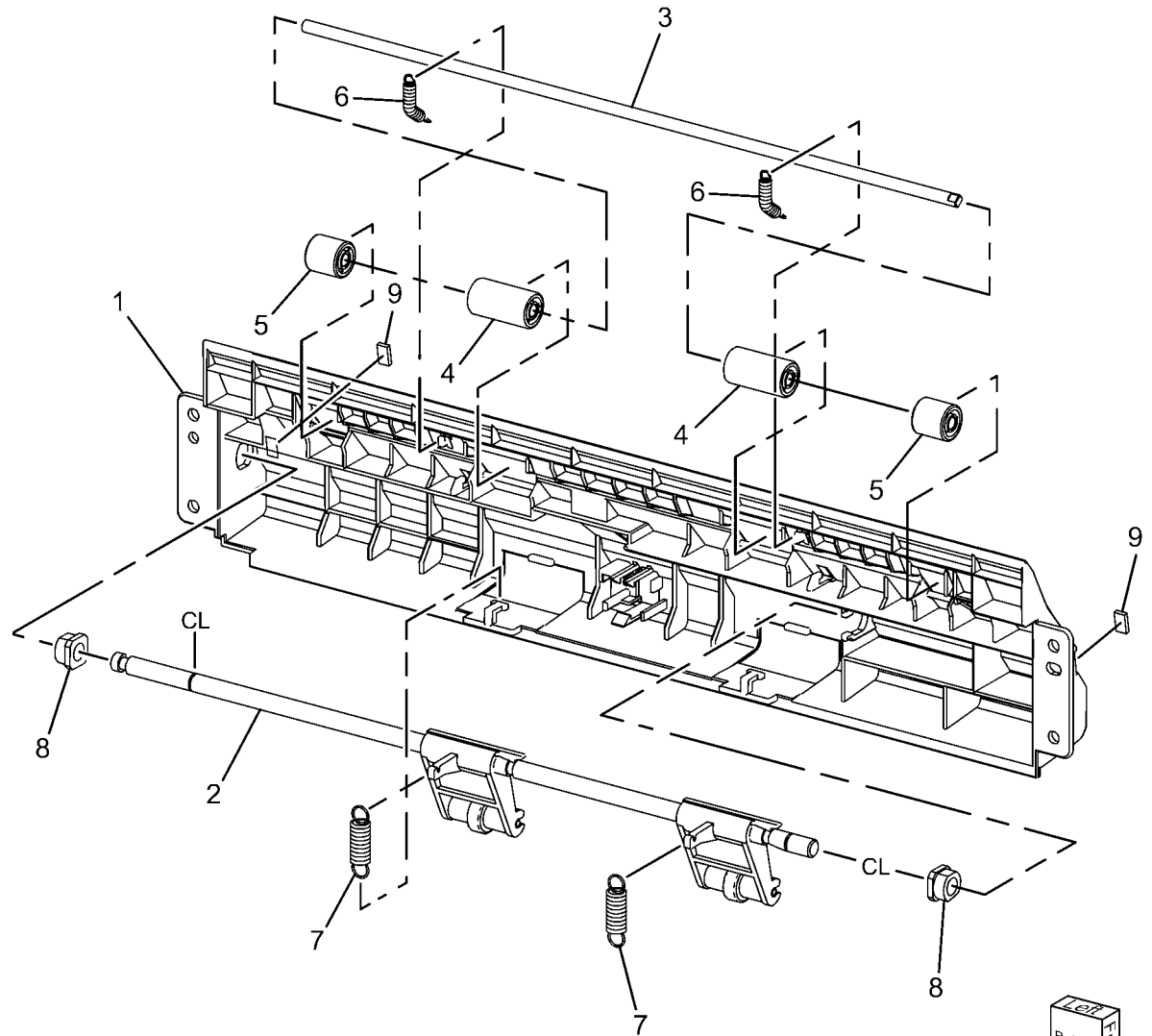
PL 51.15



# PL 51.16 Output Chute

Item	Part	Description
1	-	Chute (P/O PL 51.8 Item 4)
2	-	Exit Pinch Roll (P/O PL 51.8 Item 4)
3	-	Pinch Shaft (P/O PL 51.8 Item 4)
4	-	Wide Registration Pinch Roll (P/O PL 51.8 Item 4)
5	-	Short Registration Pinch Roll (P/O PL 51.8 Item 4)
6	-	Spring (P/O PL 51.8 Item 4)
7	-	Spring (P/O PL 51.8 Item 4)
8	-	Bearing (P/O PL 51.8 Item 4)
9	-	Pad (P/O PL 51.8 Item 4)

PL51.16

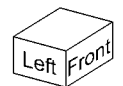
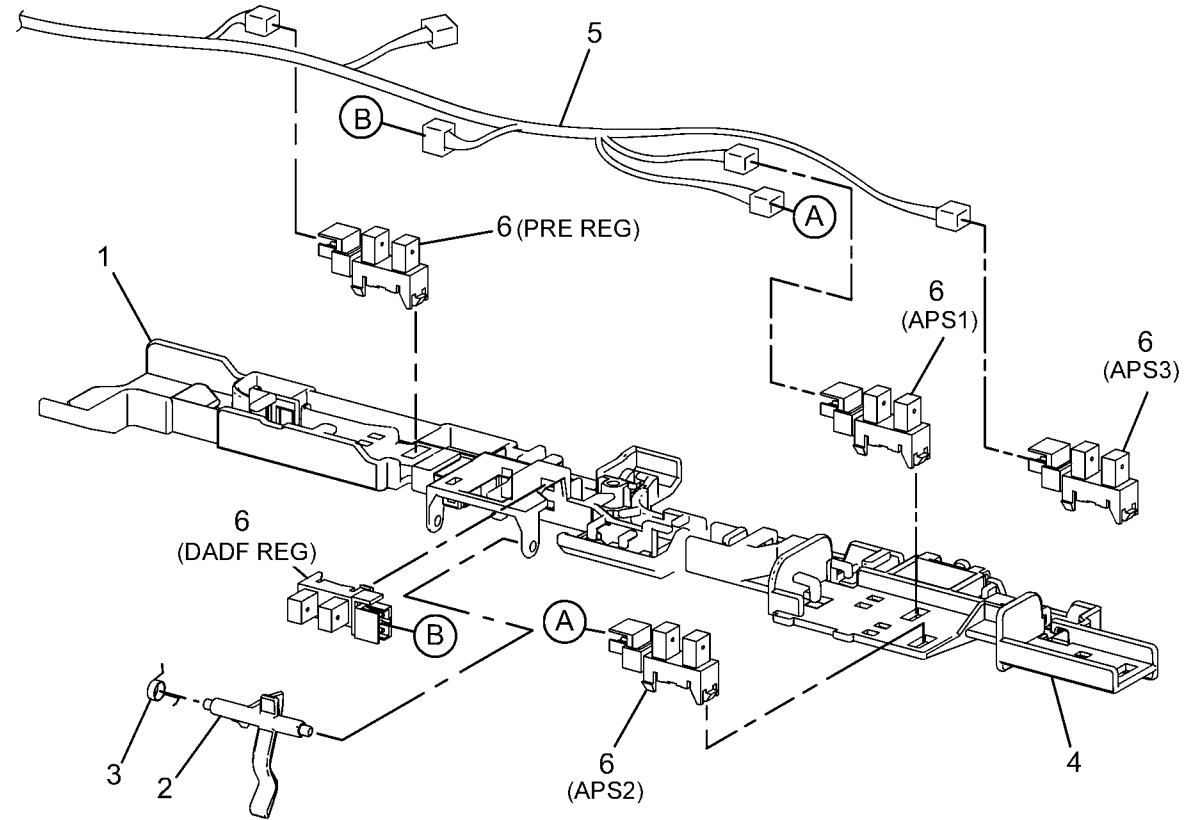


j0rk55116A

# PL 51.17 Sensor Bracket

Item	Part	Description
1	-	Sensor Housing (P/O PL 51.4 Item 1)
2	120E31741	Registration Actuator
3	-	Spring (P/O PL 51.4 Item 1)
4	-	Sensor Guide (P/O PL 51.4 Item 1)
5	-	Wire Harness (Not Spared)
6	930W00121	APS Sensor 1, APS Sensor 2, APS Sensor 3, Registration Sensor, Pre Registration Sensor

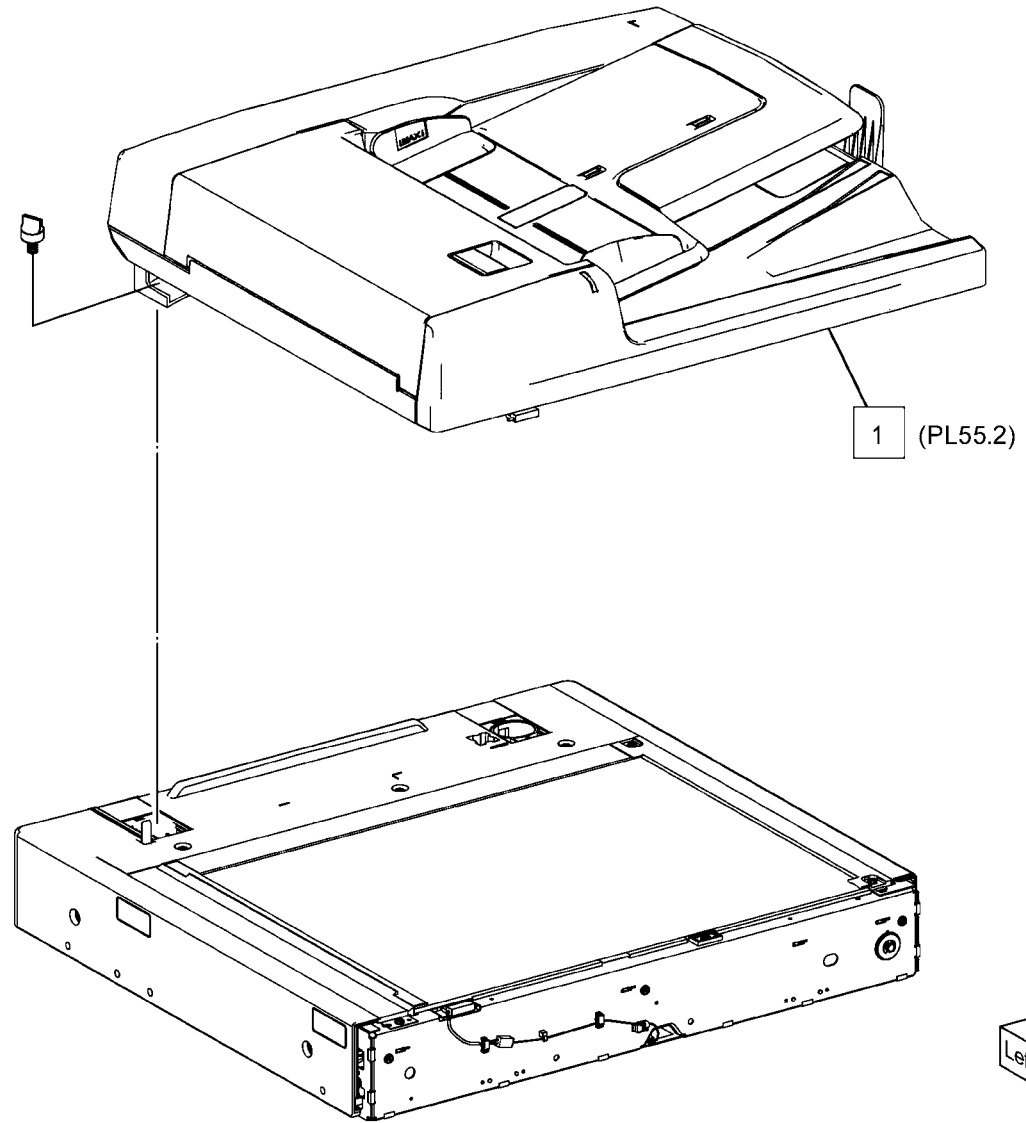
PL51.17



j0rk55117B

# PL 55.1 DADF Accessory

Item	Part	Description
1	059K74373	DADF

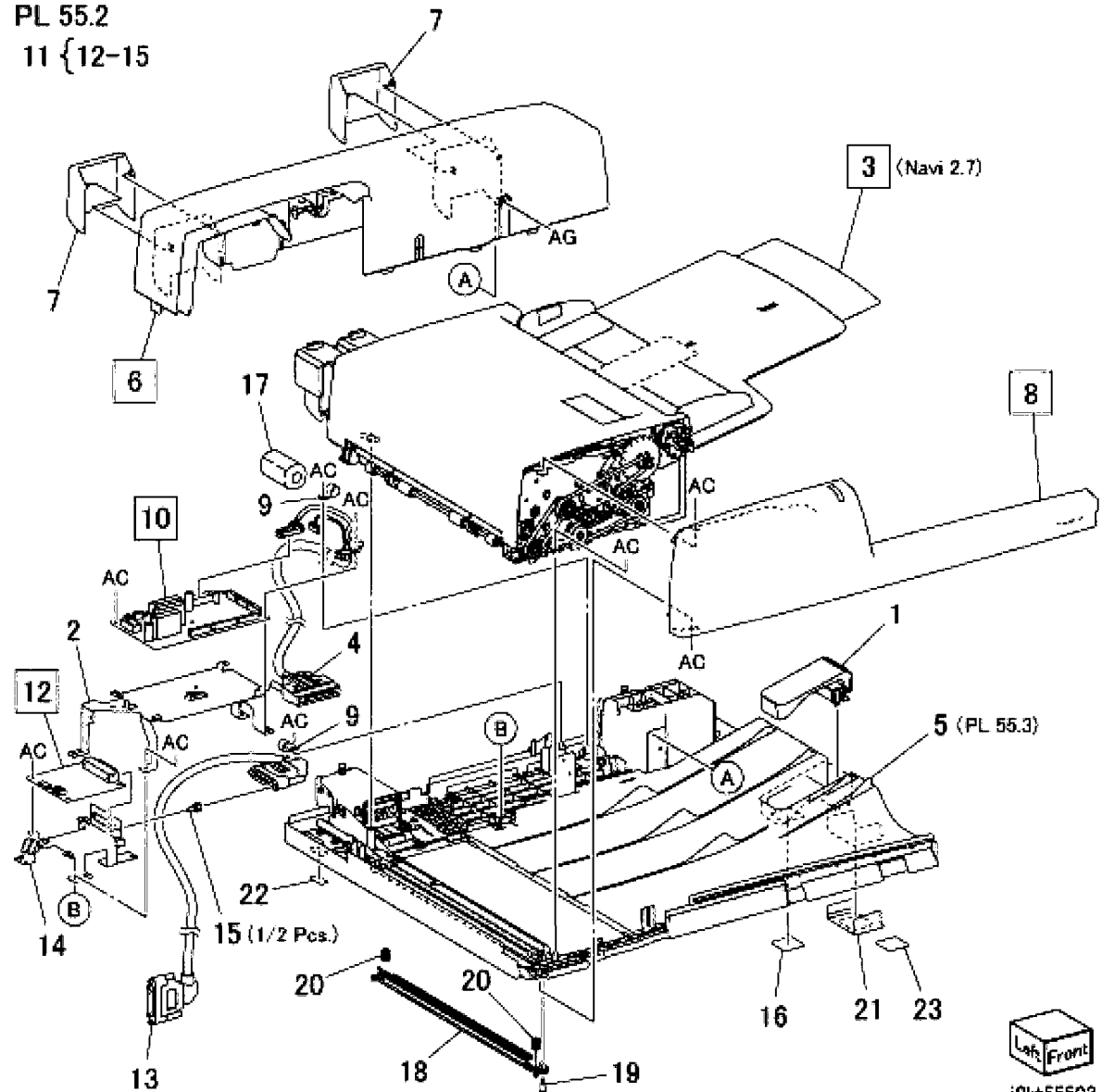




## PL 55.2 DADF Cover, PWB

Item	Part	Description
1	003K88740	Stopper
2	-	PWB Bracket (Not Spared)
3	-	DADF Feeder Assembly (Not Spared)
4	117E27450	DADF-IIT Cable
5	-	DADF Base Frame (Not Spared)
6	-	Rear Cover (Not Spared)
7	848E80010	Counter Balance Cover
8	-	Front Cover (Not Spared)
9	-	Clamp (Not Spared)
10	960K57793	DADF PWB
11	-	CIS PWB And Cable (Not Spared)
12	960K57971	CIS PWB
13	117E33270	DADF-ESS Cable
14	-	PWB Bracket (P/O PL 55.2 Item 11)
15	237W00178	Special Nut
16	-	Fastener Tape (Not Spared)
17	-	Core (Not Spared)
18	-	CVT Chute
19	-	Stud Screw (Not Spared)
20	-	CVT Spring (Not Spared)
21	-	Cloth Holder (Not Spared)
22	-	Angle Pad (Not Spared)
23	-	Cleaner Cloth (Not Spared)

PL 55.2  
11 {12-15}

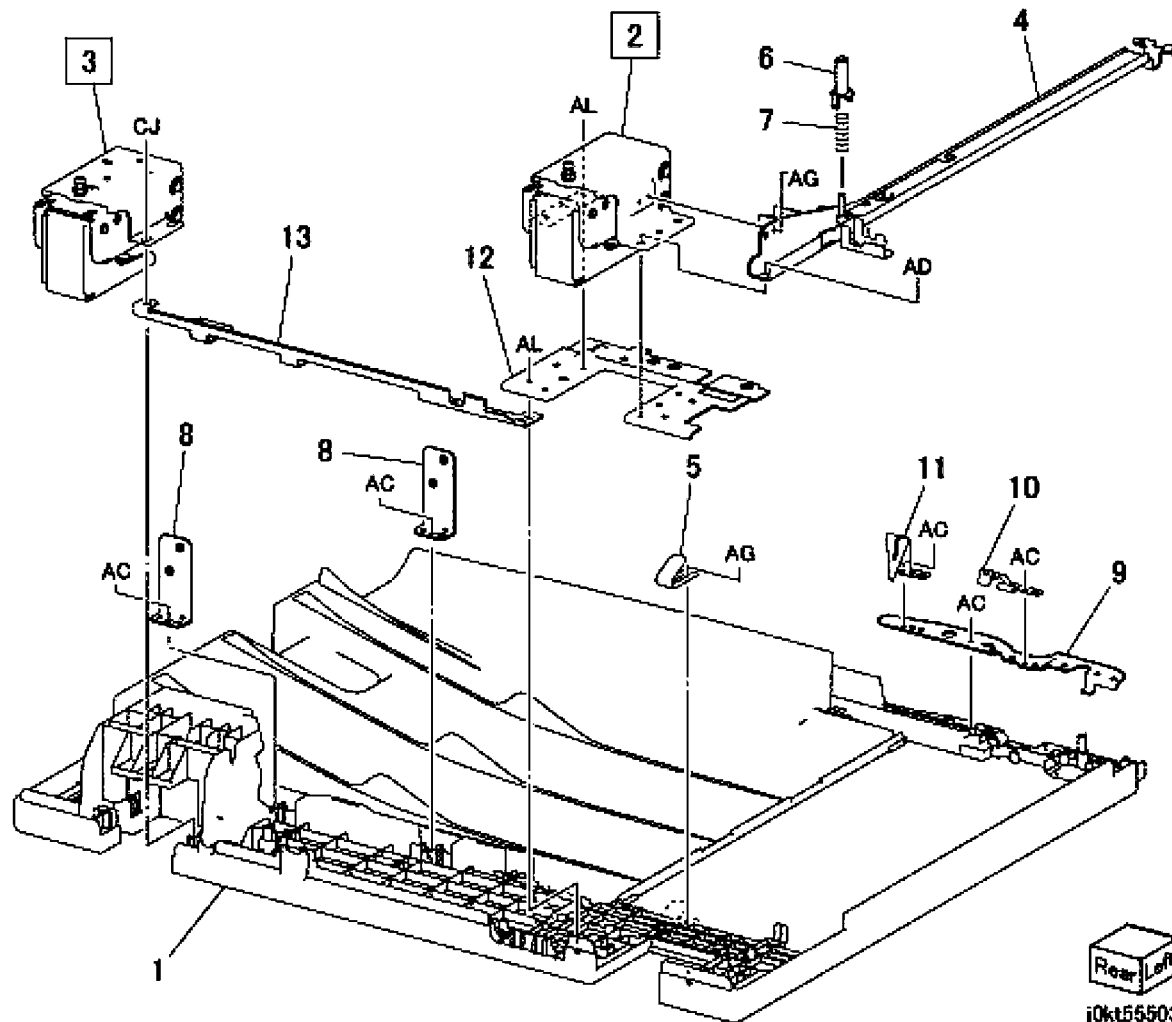


Left Front  
j0kt55502

# PL 55.3 DADF Base Frame

Item	Part	Description
1	-	DADF Base Frame (Not Spared)
2	036K92080	Left Counter Balance
3	036K92090	Right Counter Balance
4	-	Tie Plate (Not Spared)
5	-	Ground Plate (Not Spared)
6	-	Floating Holder (Not Spared)
7	-	Floating Spring (Not Spared)
8	-	Bracket (Not Spared)
9	-	Bracket (Not Spared)
10	-	Ground Plate (Not Spared)
11	-	Ground Plate (Not Spared)
12	-	Bracket
13	-	Ground Plate (Not Spared)

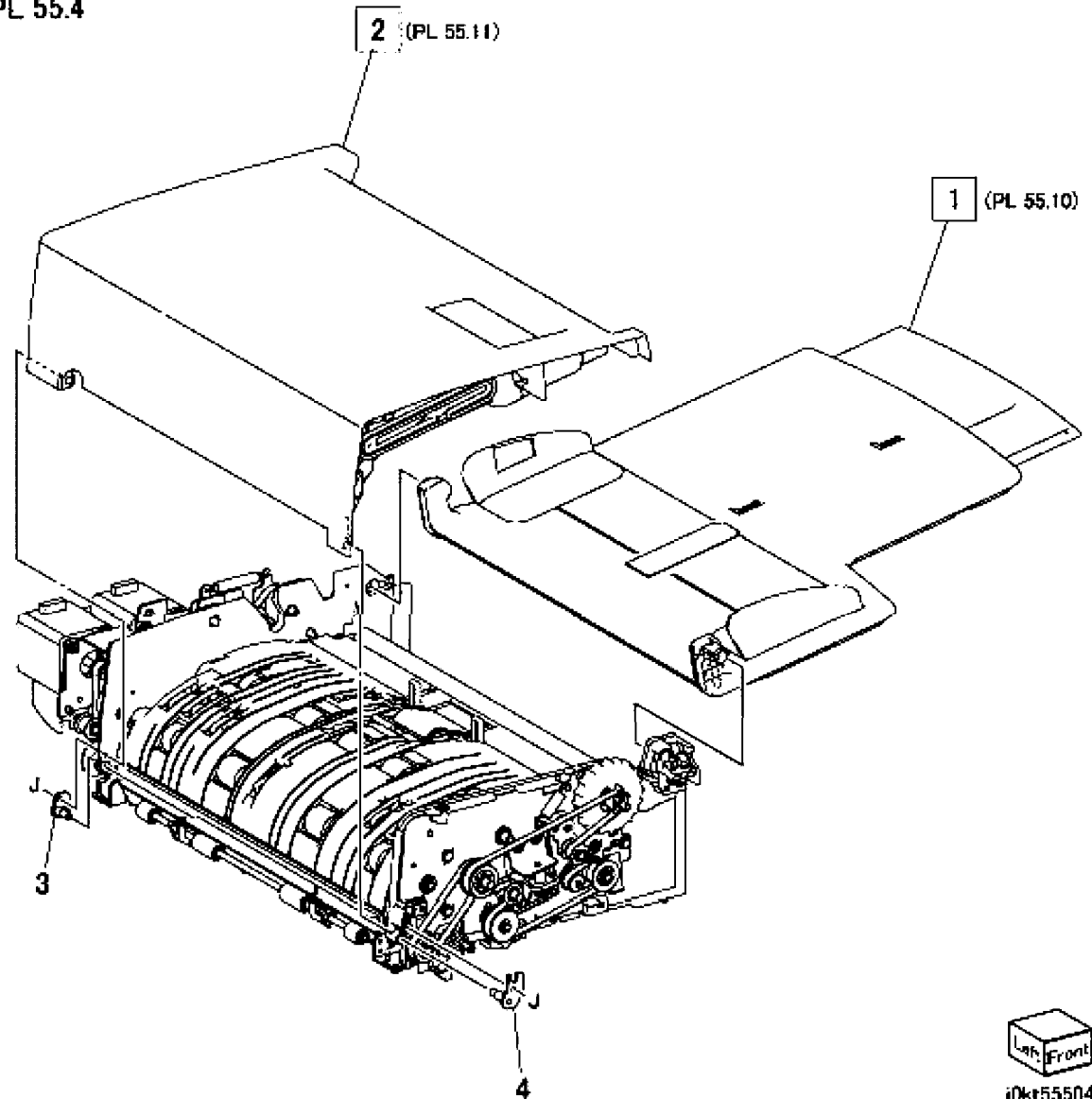
PL 55.3



## PL 55.4 DADF Document Tray, Top Cover

Item	Part	Description
1	050K68820	DADF Document Tray
2	059K74400	Top Cover
3	—	Rear Stud Bracket (Not Spared)
4	—	Front Stud Bracket (Not Spared)

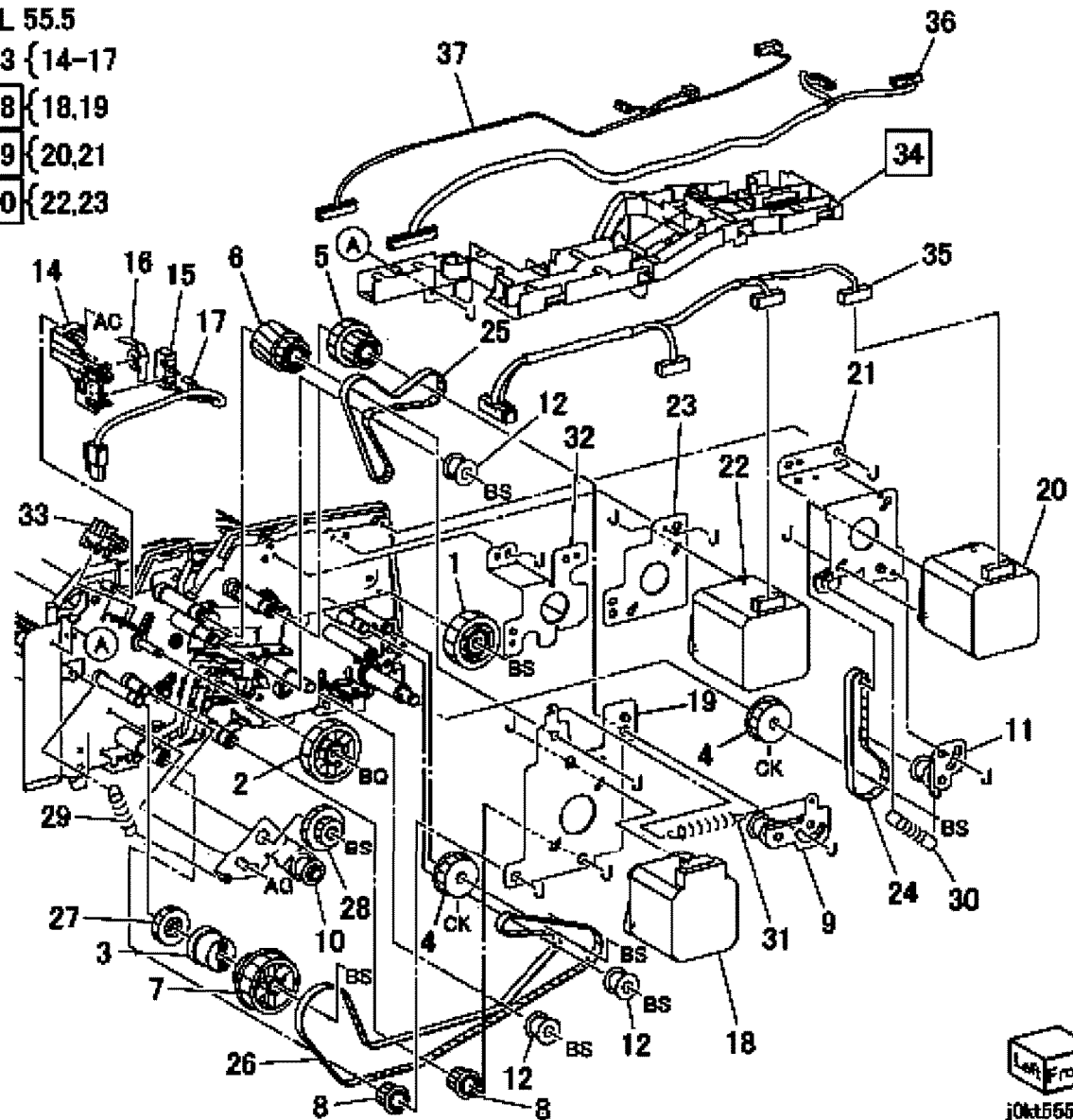
PL 55.4



# PL 55.5 DADF Motor, Wire Harness

Item	Part	Description
1	007K18200	Gear (35T)
2	007K18210	Gear (39T)
3	019K12410	Brake
4	020E46551	Pulley
5	020E49060	Gear Pulley
6	020E49070	Gear Pulley
7	020E49110	Pulley (50T)
8	020E49370	Pulley (20T)
9	-	Tension Pully Bracket (Not Spared)
10	-	Tension Pully Bracket (Not Spared)
11	-	Tension Pully Bracket (Not Spared)
12	-	Roller (Not Spared)
13	110K17110	DADF Interlock Switch and Harness
14	-	Bracket (P/O PL 55.5 Item 13)
15	-	DADF Interlock Switch
16	-	Spring (P/O PL 55.5 Item 13)
17	-	Switch Wire Harness (P/O PL 55.5 Item 13)
18	127K66070	Feed Motor
19	-	Motor Bracket (Not Spared)
20	127K60562	Regi Motor
21	-	Motor Bracket (Not Spared)
22	-	Pre-Regi Motor (Same as Item 20)
23	-	Motor Bracket (Not Spared)
24	-	Belt (Alternate)
-	423W28655	Belt (Alternate)
25	423W87655	Belt (Alternate)
-	423W32255	Belt (Alternate)
26	423W86454	Belt (Alternate)
-	423W32254	Belt (Alternate)
27	807E37950	Gear (18T)
28	807E37960	Gear (16T/32T)
29	809E98250	Spring
30	809E98260	Spring
31	809E98271	Spring
32	-	Motor Bracket (Not Spared)
33	930W00121	Sensor
34	-	Harness Guide (Not Spared)
35	-	Wire Harness (Motor) (Not Spared)
36	-	Wire Harness (Regi) (Not Spared)
37	-	Wire Harness (Feed) (Not Spared)
38	-	DAdfFeed Motor and Bracket
39	-	DADF Regi Motor and Bracket
40	-	DADF Pre-Regi Motor and Bracket

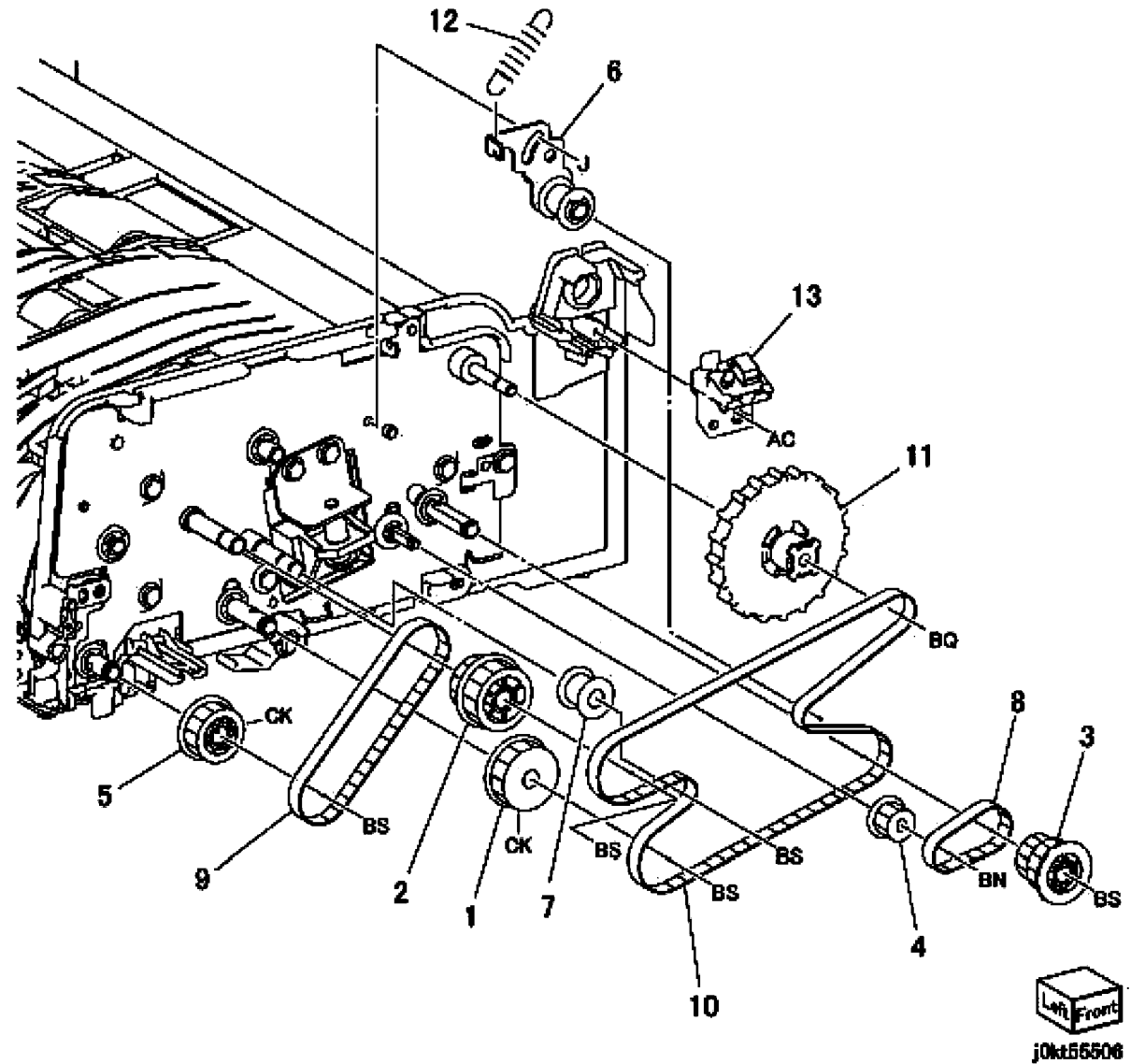
PL 55.5  
 13 { 14-17  
 38 { 18,19  
 39 { 20,21  
 40 { 22,23



## PL 55.6 DADF Front Belt

Item	Part	Description
1	020E46551	Pulley (Out Roller)
2	020E49050	Pulley
3	020E49080	Pulley (Exit Roll)
4	020E49090	Pulley (CIS)
5	020E49380	Pulley (Regi Roll)
6	-	Tension Roll Bracket
7	-	Roller (Not Spared)
8	423W23855	Belt (Alternate)
9	423W85254	Belt (Alternate)
10	423W86255	Belt (Alternate)
11	803E11160	Knob Handle
12	809E98250	Spring
13	960K48840	DADF Document Set LED

### PL 55.6



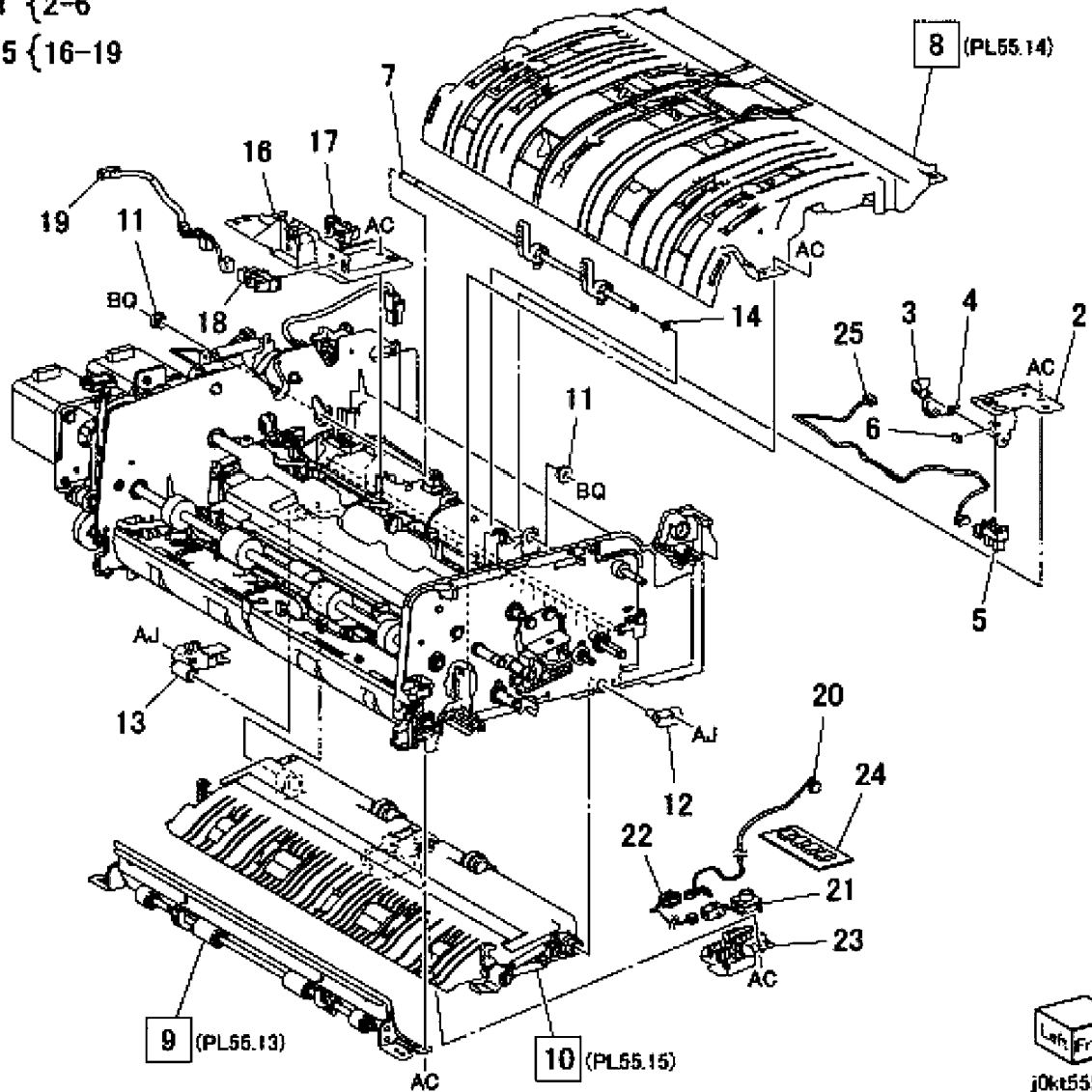
# PL 55.7 DADF Regi/Retard/Out Chute

Item	Part	Description
1	049K10080	Exit Sensor and Bracket
2	-	Bracket (P/O PL 55.7 Item 1)
3	-	Actuator (P/O PL 55.7 Item 1)
4	-	Spring (P/O PL 55.7 Item 1)
5	-	Exit Sensor (P/O PL 55.7 Item 1)
6	-	Pad (P/O PL 55.7 Item 1)
7	050K68830	Set Gate
8	054K47690	Retard Chute
9	-	Regi Chute (Not Spared)
10	-	Out Chute (Not Spared)
11	-	Bearing (Not Spared)
12	-	Front Hinge (Not Spared)
13	-	Rear Hinge (Not Spared)
14	809E98140	Spring
15	-	Sensor Housing Assembly
16	-	Housing (P/O PL 55.7 Item 15)
17	-	Feed In Sensor (P/O PL 55.7 Item 15)
18	-	Feed Out Sensor (P/O PL 55.7 Item 15)
19	-	Senor Wire Harness (P/O PL 55.7 Item 15)
20	-	Stamp Wire Harness (Not Spared)
21	-	Stamp Solenoid (Option) (Not Spared)
22	-	Stamp Wire Harness (Option) (Not Spared)
23	-	Stamp Bracket (Option) (Not Spared)
24	-	Stamp Plunger (Not Spared)
25	-	SCC Harness Wire (Not Spared)

PL 55.7

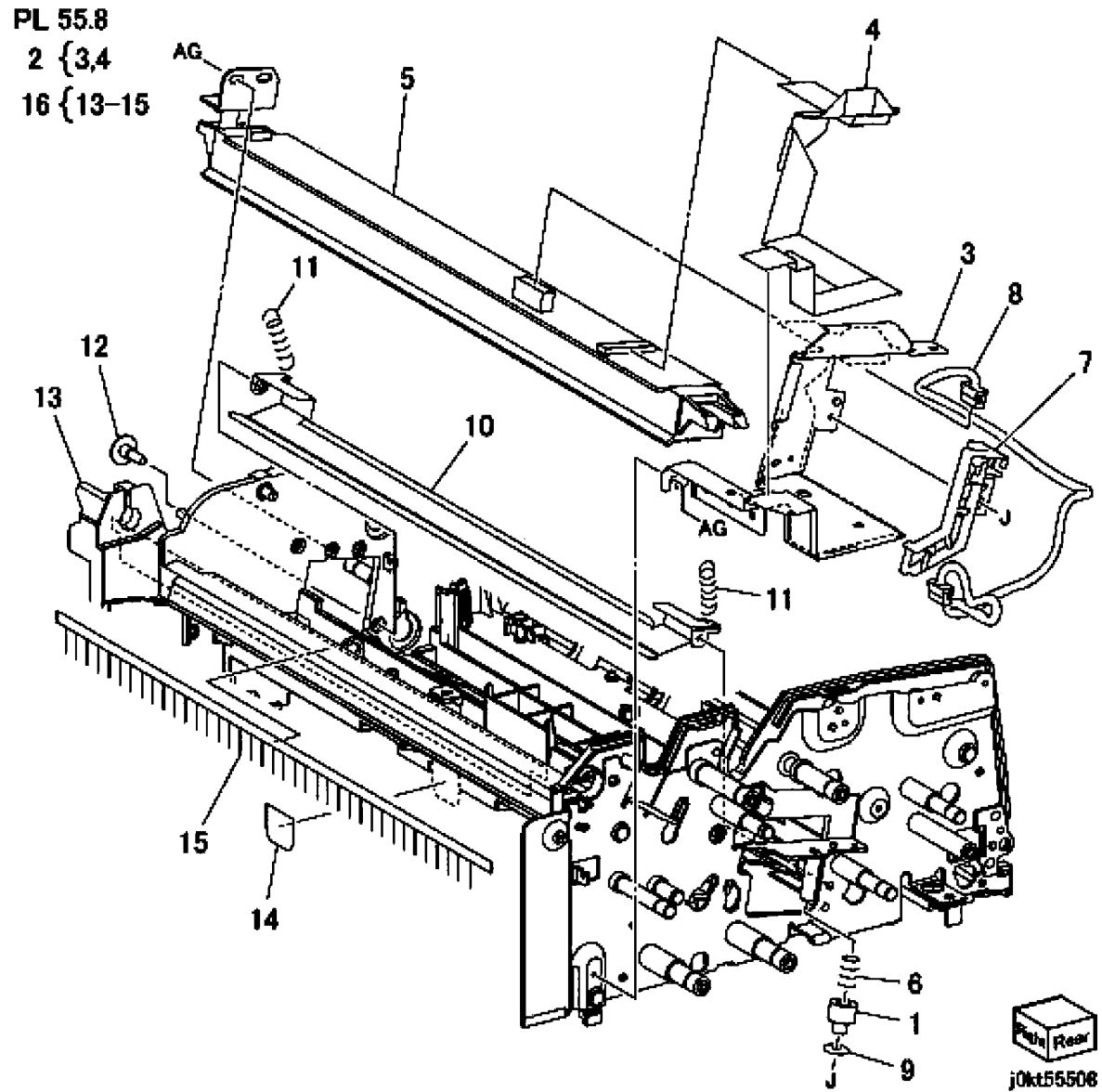
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# PL 55.8 DADF CIS

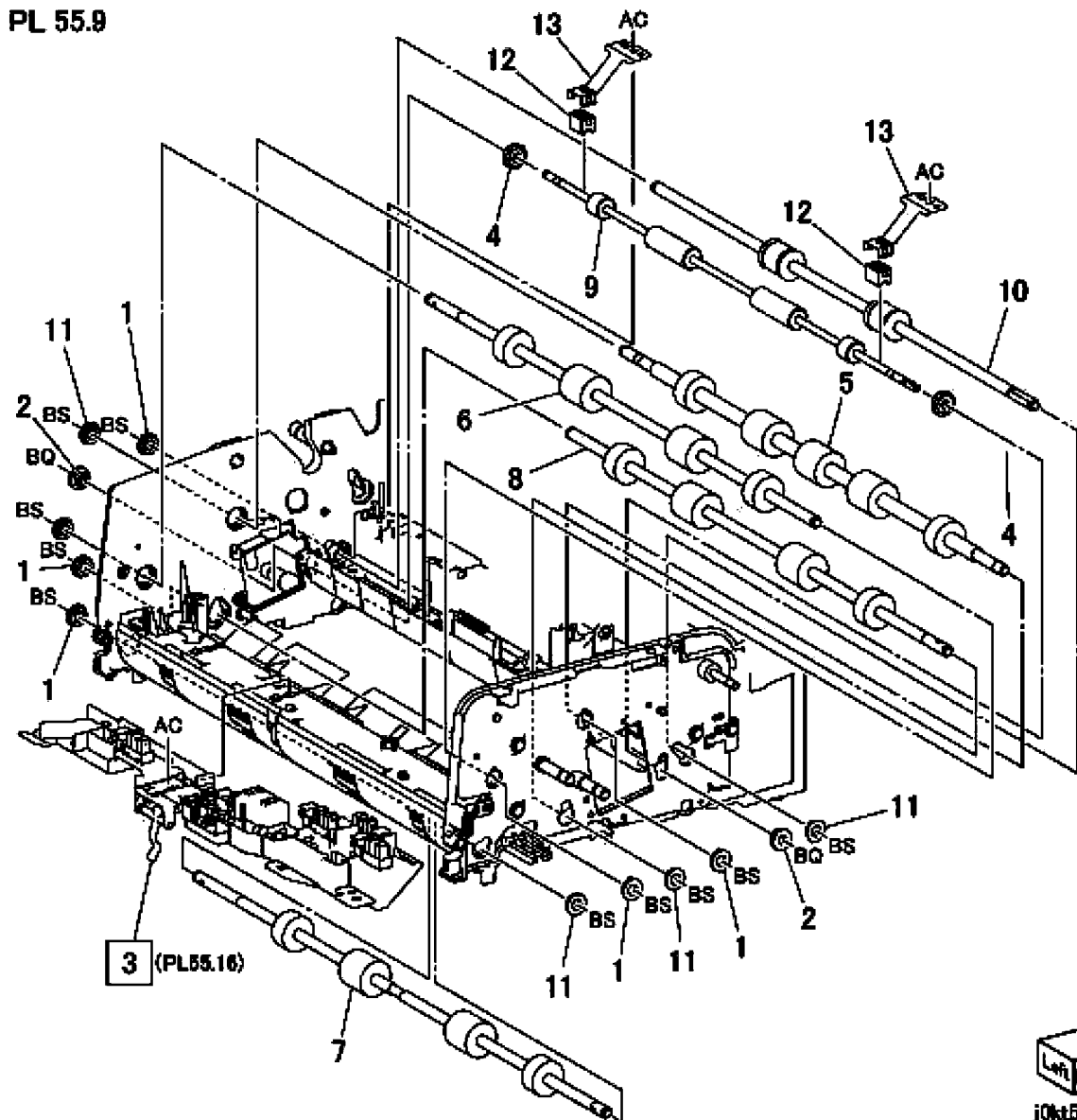
Item	Part	Description
1	-	CIS Bushing (Not Spared)
2	049K17400	CIS Cable and Bracket
3	-	Bracket (Not Spared)
4	-	CIS Cable
5	130K78710	CIS Sensor
6	-	Spring (Not Spared)
7	-	Harness Guide (Not Spared)
8	-	Wire Harness (Not Spared)
9	-	Washer (Not Spared)
10	-	CIS Plate
11	-	Spring
12	-	Sholder Screw
13	-	Frame (P/O PL 55.8 Item 16)
14	-	Seal
15	-	Eliminator
16	-	(SCC) Frame Assembly



## PL 55.9 DADF Roll, Sensor Bracket

Item	Part	Description
1	413W93450	Bearing
2	413W11460	Bearing
3	-	Sensor Bracket Assembly (PL 55.16)
4	-	Slide Roll
5	059K73240	Take Away Roll
6	059K73250	Pre Registration Roll
7	059K73261	Registration Roll
8	059K73270	Out Roll
9	059K73280	CIS Roll
10	059K73291	Exit Roll
11	-	Bearing
12	-	Block Bearing
13	-	Plate Spring

PL 55.9

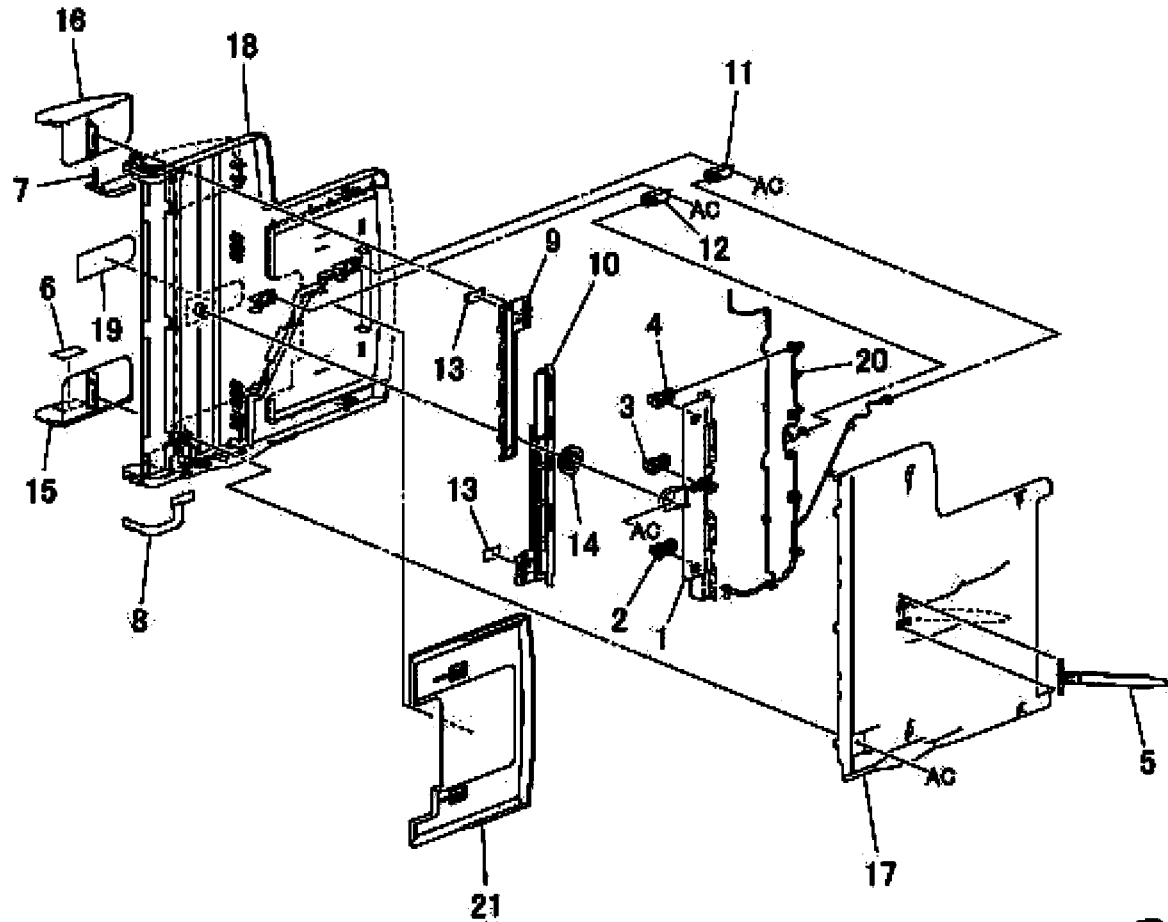




# PL 55.10 DADF Document Tray

Item	Part	Description
1	-	Sensor Bracket
2	930W00121	Document Tray Set Guide Sensor 123J2
3	-	Document Tray Set Guide Sensor223J3
4	-	Document Tray Set Guide Sensor 323J4
5	-	Guide
6	-	Label (Max)
7	-	Harness Cover
8	-	Harness Cover
9	-	Rack Rear (Front)
10	-	Rack Rear (Rear)
11	930W00241	Document Tray Size Sensor 123JC
12	-	Document Tray Size Sensor 223JD
13	-	Rack Spring
14	-	Pinion
15	-	Side Guide
16	-	Side Guide
17	-	Upper Tray
18	-	Tray Cover
19	897E26270	Label Kit
20	-	Tray Wire Harness
21	-	End Tray

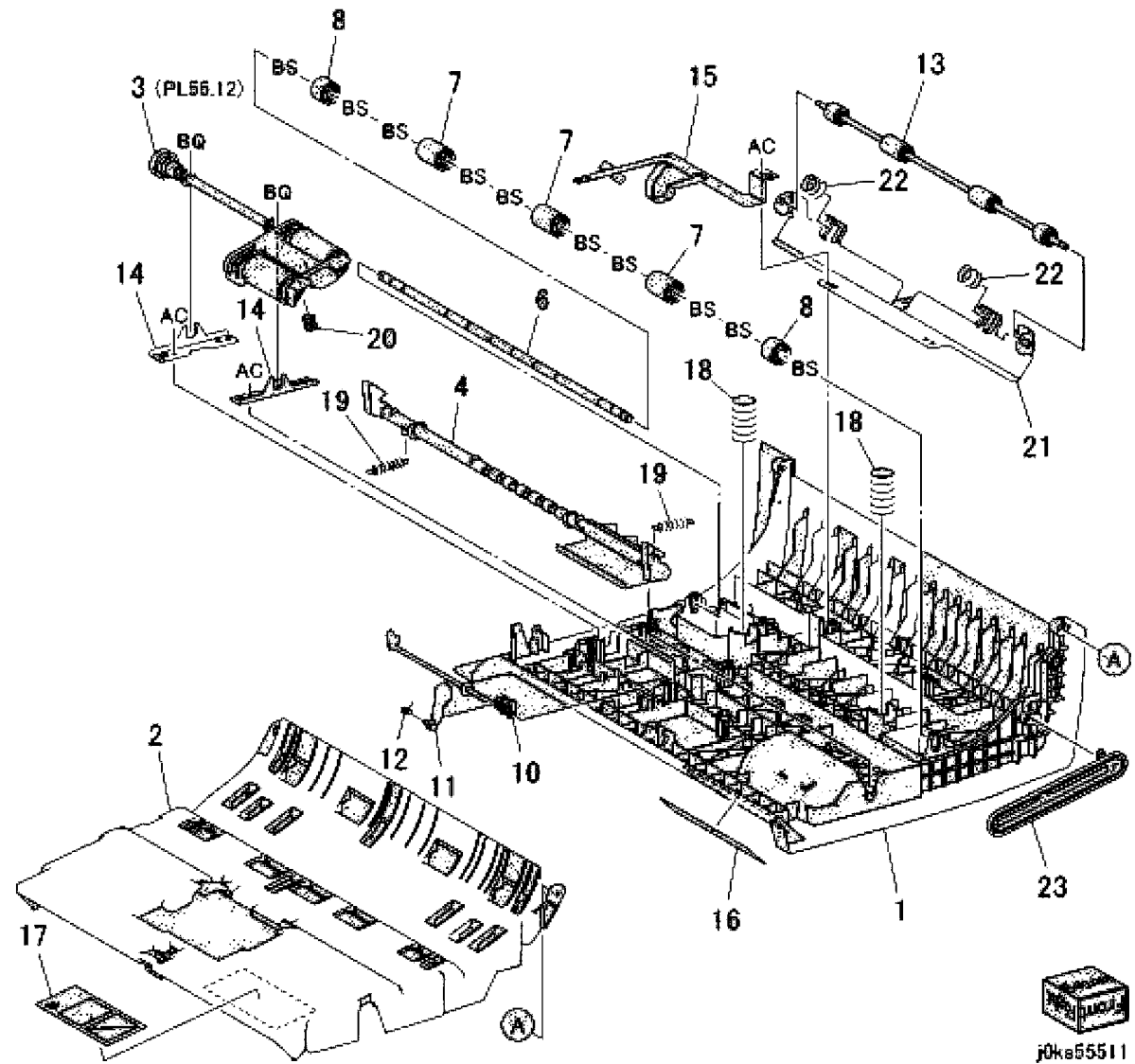
## PL 55.10



# PL 55.11 DADF Top Cover

Item	Part	Description
1	-	Top Cover
2	-	Feed Upper Chute
3	059K73510	Upper Feed
4	011K04040	(SCC) Latch Lever
5	059K74420	Take Away Pinch Roll
6	-	Shaft
7	-	Pinch Roll
8	-	Pinch Roll (Side)
9	120K92810	Actuator
10	-	Actuator (Base)
11	-	Actuator (Arm)
12	-	Spring
13	-	Regi. Pinch Roll
14	-	Bracket
15	-	Ground Plate
16	897E24011	Label (Size)
17	-	Label (Jam)
18	-	Spring
19	-	Spring (Lever)
20	-	Spring (Nudger)
21	-	Bracket
22	-	Spring
23	-	Link
24	-	Label Kit

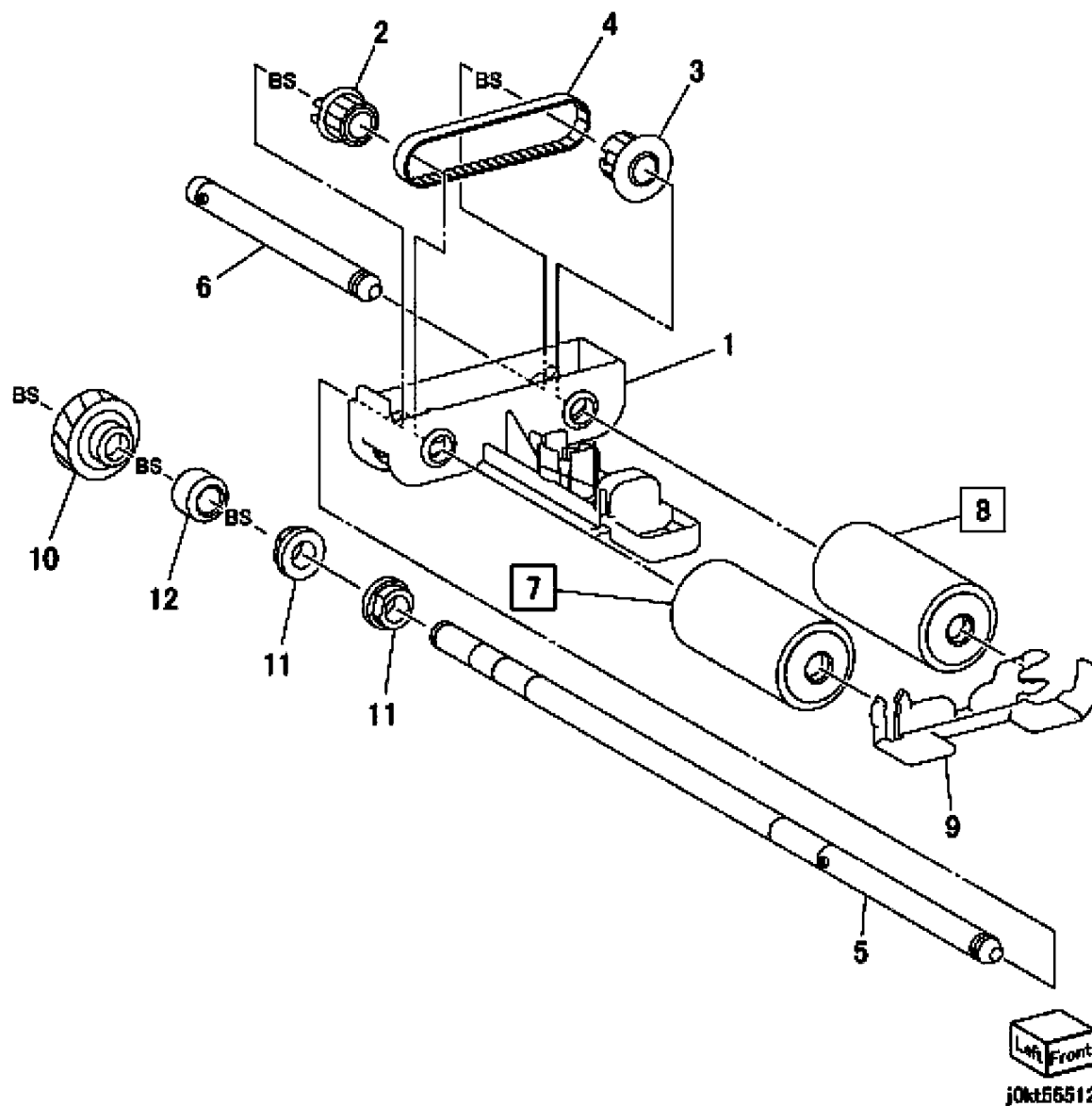
5 { 6 - 8  
 9 { 10 - 12  
 24 { 16, 17



# PL 55.12 DADF Upper Feeder

Item	Part	Description
1	-	Nudger Housing
2	-	Pulley (Feeder)
3	-	Pulley (Nudger)
4	-	Belt (Alternate)
5	-	Feed Shaft
6	-	Nudger Shaft
7	-	Feed Roll
8	-	Nudger Roll
9	-	Housing
10	-	Gear
11	-	Bearing
12	-	Collar
13	604K77810	Kit

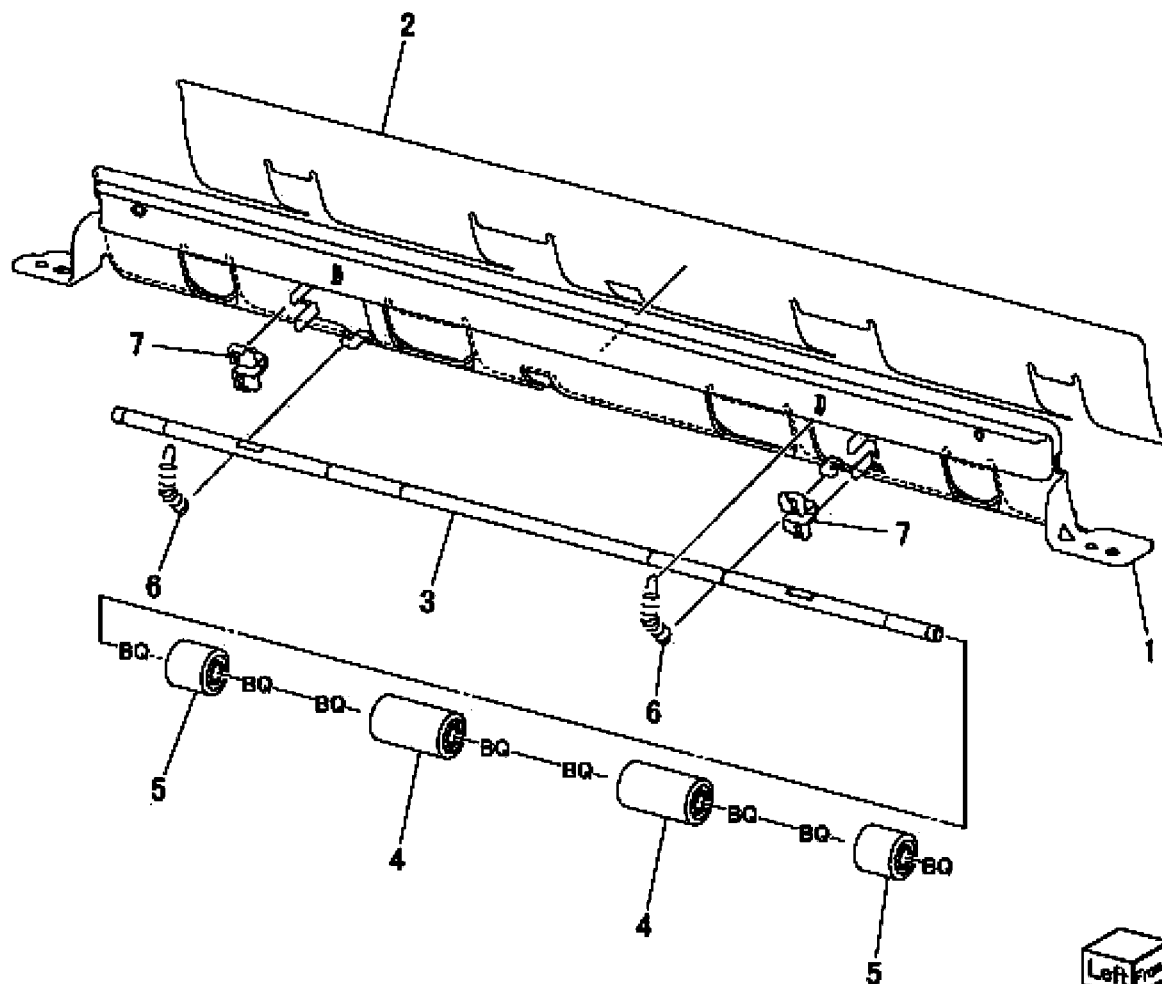
13 { 7, 8



## PL 55.13 DADF Regi Chute

Item	Part	Description
1	-	Regi. chute
2	-	SeaCa
3	-	Pinch Shaft
4	-	Regi. Pinch Roll (W)
5	-	Regi. Pinch Roll (S)
6	-	Spring
7	-	Bearing

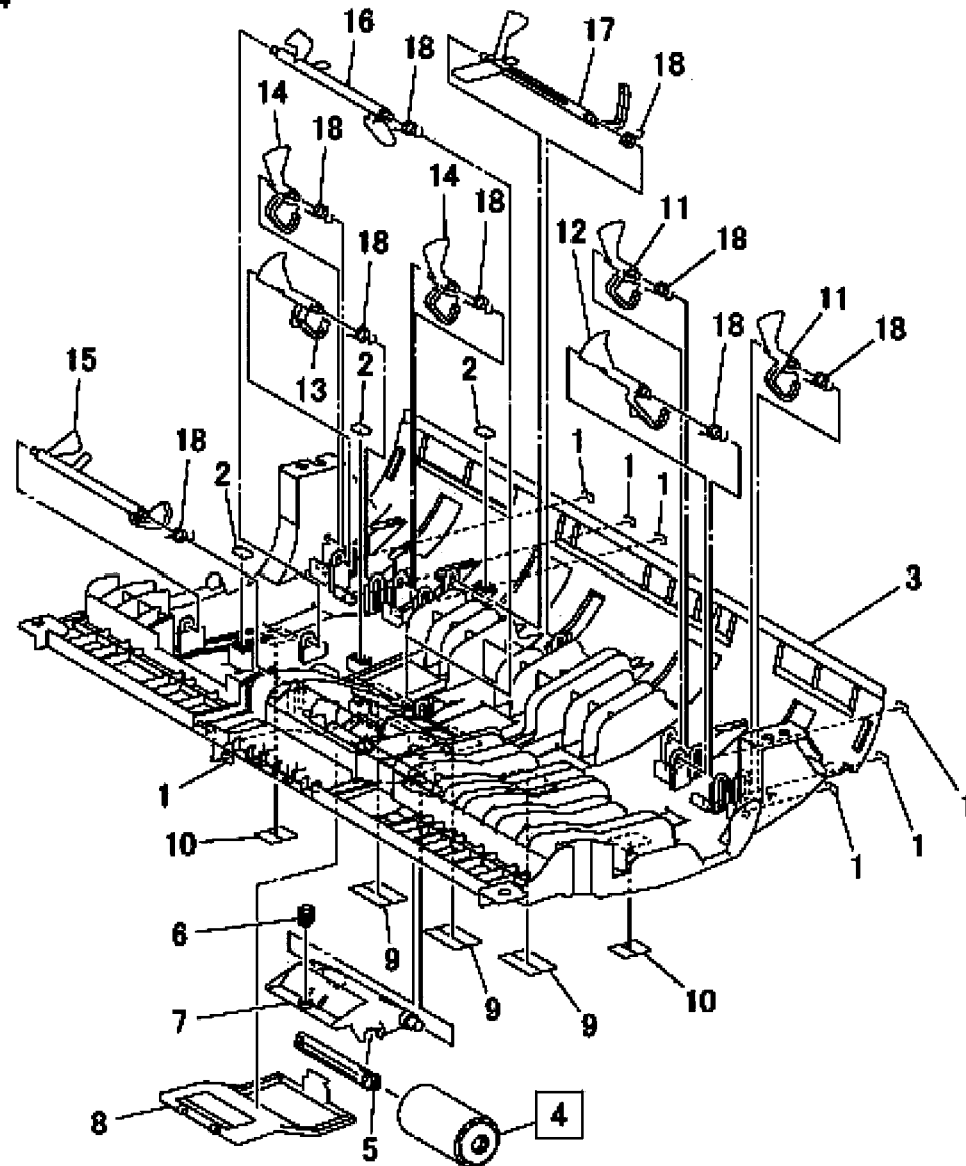
### PL 55.13



# PL 55.14 DADF Retard Chute

Item	Part	Description
1	-	Pad
2	-	Pad (Gate)
3	-	Retard Chute
4	-	Retard Roll
5	-	Retard Shaft
6	-	Spring Retard
7	-	Retard Housing
8	848K43600	Retard Roll Cover
9	-	Seal (W)
10	-	Seal (S)
11	-	Actuator (APS1)
12	-	Actuator (APS2)
13	-	Actuator (APS dummy 1)
14	-	Actuator (APS Dummy 2)
15	-	Actuator (Feed In)
16	-	Actuator (Feed Out)
17	-	Actuator (Regi.)
18	-	Torsion Spring

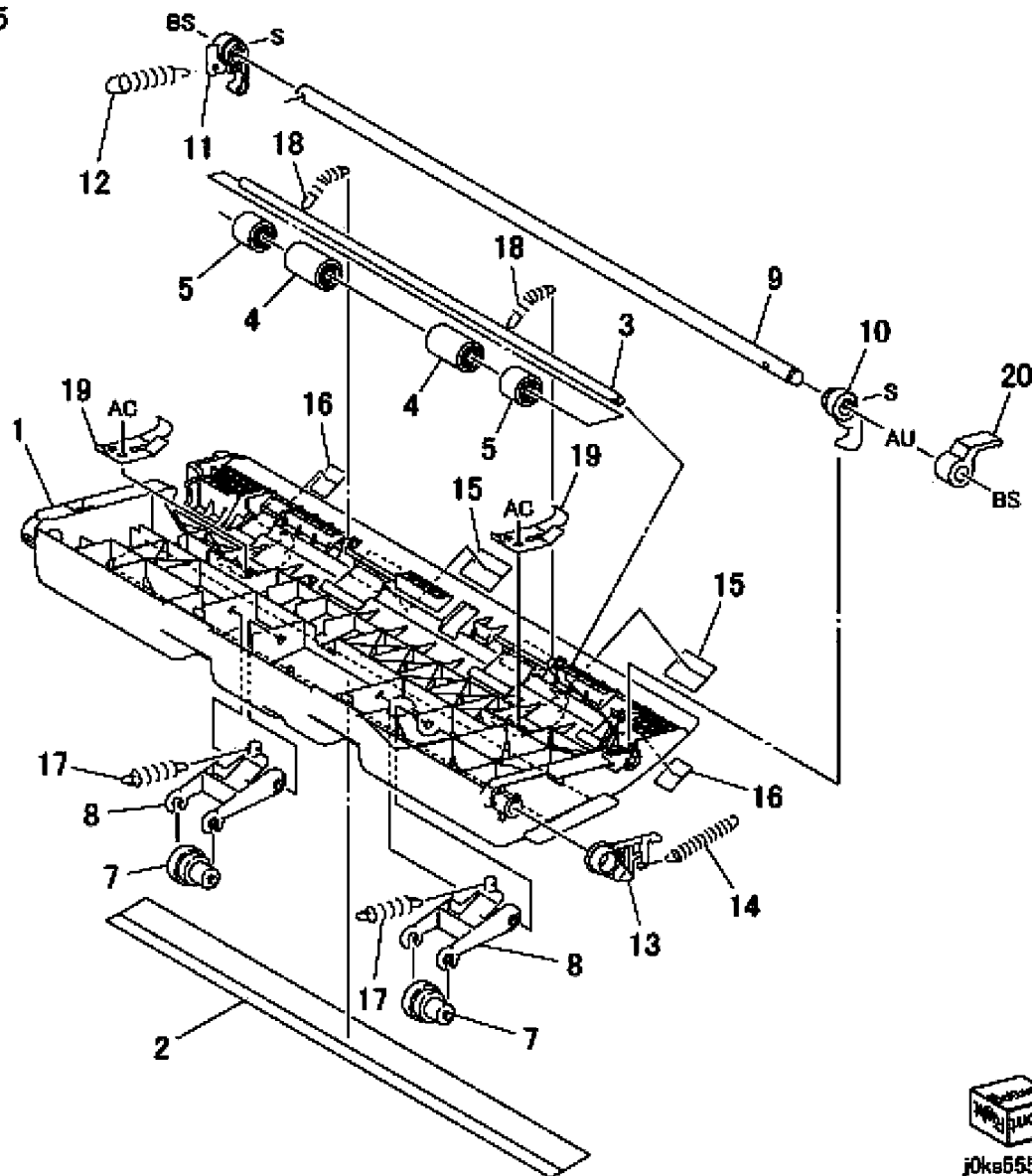
**PL 55.14**



## PL 55.15 DADF Out Chute

Item	Part	Description
1	-	Out Chute
2	-	Seal
3	-	Pinch Shaft
4	-	Regi. Pinch Roll (W)
5	-	Regi. Pinch Roll (S)
6	-	Exit Pinch Roll
7	-	Pinch Roll
8	-	Exit Holder
9	-	Latch Shaft
10	-	Latch (Front)
11	-	Latch (Rear)
12	-	Spring
13	-	Link
14	-	Spring
15	-	Seal (W)
16	-	Seal (S)
17	-	Spring
18	-	Spring
19	-	Ground Plate
20	-	Handle

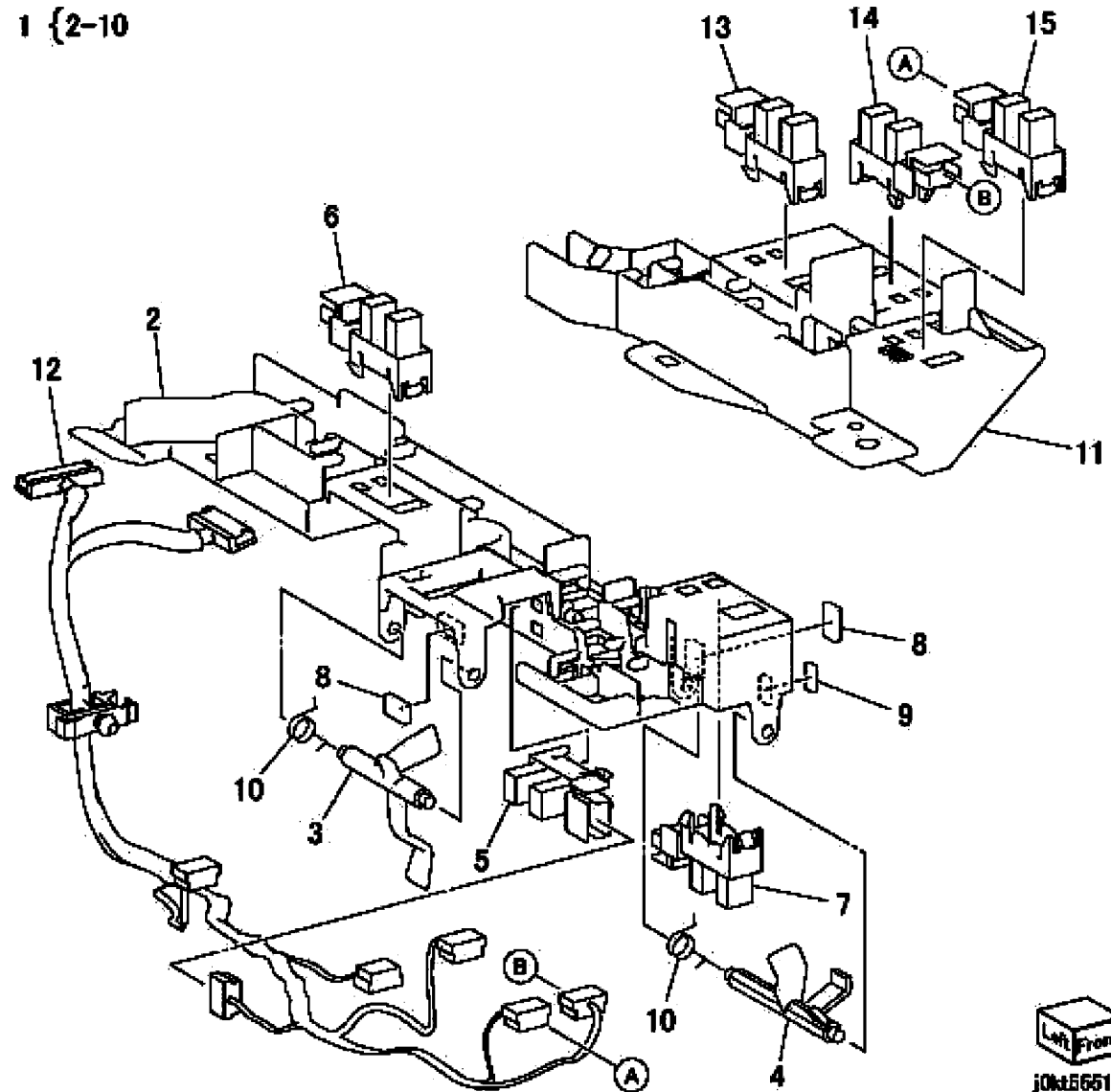
PL 55.15  
6 {7,8



# PL 55.16 DADF Sensor Bracket

Item	Part	Description
1	-	Sensor Bracket 23Q1
2	-	Sensor Guide 23Q2
3	120E31741	Actuator (Regi.)
4	120E33740	Actuator (Out)
5	930W00121	DADF Regi Sensor
6	-	DADF Pre Regi. Sensor
7	-	DADF Out Sensor
8	-	Pad (Gate)
9	-	Pad
10	-	Torsion Spring 23Qb
11	-	Sensor Guide
12	-	Wire Harness
13	-	DADF APS Sensor
14	-	DADF APS Sensor 2
15	-	DADF APS Sensor 3

**PL 55.16**  
**1 {2-10}**



## Common Hardware

Item	Part	Description	Item	Part	Description
A	112W27677	Sems Screw (M3x6)	BB	271W16250	Dowel Pin (2x12)
B	112W27678	Sems Screw (M3x6)	BC	271W28250	Dowel Pin (3x12)
C	112W27898	Screw (M3x8)	BD	271W28450	Dowel Pin (3x14)
D	112W28098	Sems Screw (M3x10)	BE	271W28650	Dowel Pin (3x16)
E	113W15588	Pan Head Screw (M2x5)	BF	271W36650	Dowel Pin (4x16)
F	113W16088	Screw (M2x10)	BG	285W16251	Pin Spring (2x12)
G	113W20478	Tapping Screw (M3x4)	BH	285W28051	Spring Pin (3x10)
H	113W20677	Screw (M3x6)	BJ	285W28651	Spring Pin (3x16)
J	113W20678	Screw (M3x6)	BK	351W29250	C-Clip (8)
K	113W20688	Pan Head Screw (M2.5x6)	BL	354W13278	E-Clip (1.5)
L	113W20878	Screw (M3x8)	BM	354W15278	E-Ring (2)
M	113W21078	Screw (M3x10)	BN	354W19278	E-Ring (2.5)
N	113W21278	Screw (M3x12)	BP	354W21254	Ring KL (4)
P	113W21478	Screw	BQ	354W21278	E-Ring (3)
Q	113W27488	Pan Head Screw (M3x4)	BR	354W24254	KL Ring (6)
R	113W27588	Pan Head Screw (M3x5)	BS	354W24278	E-Clip (4)
S	113W27688	Pan Head Screw (M3x6)	BT	354W26278	E-Clip (5)
T	113W27888	Pan Head Screw (M3x8)	BU	354W27254	KL-Clip (8)
U	113W35878	Screw (M4x8)	BV	354W27278	E-Ring (6)
V	113W35888	Pan Head Screw (M4x8)	BW	354W29278	E-Ring (8)
W	114W27678	Bind Head Screw (M3x6)	BX	180W16878	Wing Screw
X	141W27451	Set Screw (M3x4)	BY	113W35678	Screw (M4x6)
Y	141W35651	Set Screw (M4x6)	BZ	153W27678	Screw (M6x6)
Z	153W15888	Tapping Screw (M4x8)	CA	271W16050	Dowel Pin (2x10)
AA	153W16288	Tapping Screw (M4x12)	CB	112W27659	Sems Screw (M3x6)
AB	153W17688	Tapping Screw (M3x6)	CC	158W27663	Screw (M3x6)
AC	153W17888	Tapping Screw (M3x8)	CD	113W27551	Screw (M3x5)
AD	153W18088	Tapping Screw (M3x10)	CE	113W16051	Screw (M2x10)
AE	153W27878	Tapping Screw (M3x8)	CF	114W27878	Bind Head Screw (M3x8)
AF	153W28078	Tapping Screw (M3x10)	CG	113W21778	Screw (M3x18)
AG	158W27678	Screw	CH	113W20698	Round Screw (M3x6)
AH	158W27688	Round Screw (M3x7)	CJ	153W16088	Tapping Screw (M4x8)
AJ	158W27878	Screw (M3x8)	CK	271W21050	Dowel Pin (3x10)
AK	158W28078	Screw (M3x10)	CL	158W27888	Round Screw (M3x9)
AL	158W35878	Tapping Screw (M4x8)	CM	252W29450	Nylon Washer (8) (11)
AM	220W21278	Flange Nut (3)	CP	-	E-Ring
AN	251W19278	Washer (2.5) (10.5)	CS	285W16051	Dowel Pin (2x10)
AP	251W21278	Washer (3) (10.5)	CT	285W15851	Pin Spring (2x8)
AQ	251W24278	Washer (4) (10.8)	CV	113W35578	Tapping Screw (M4x5)
AR	251W26278	Washer (5)	CW	113W27651	Screw (M3x6)
AS	252W24350	Nylon Washer (4)	CX	251W21178	Washer (3) (10.5)
AT	252W26450	Nylon Washer (5)	CY	354W31278	E-Clip (10)
AU	252W27350	Nylon Washer (6) (10.5)	CZ	112W27851	Screw (M3x8)
AV	252W27450	Nylon Washer (6) (11)	DA	113W15488	Screw (M2x4)
AW	252W29350	Nylon Washer (8) (10.5)	DB	113W20857	Screw (M3x8)
AX	252W31250	Nylon Washer (10) (10.25)	DC	237W00178	Nut Screw
AY	252W31350	Nylon Washer (10) (10.5)	DD	826E08490	Screw
AZ	256W15278	Spring Washer (2) (10.5)	DE	826E06490	Screw
BA	271W10850	Dowel Pin (1.6x8)			



# 6 General Procedures

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## Processor (IOT) Tags

## UI Diagnostic (CSE) Mode

### Procedure

1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button. Release both buttons after a few seconds.
2. On the Service Diagnostics Login screen, enter **6789**, then select **Enter**.
3. The UI Diagnostic menu opens and Diagnostics appears in the upper right corner of the display.

### UI Diagnostic tabs

When the UI Diagnostic menu screen is displayed, you will see the following tab choices: **Service Info**, **Diagnostics**, **Adjustments**, **Maintenance**, and **Call Closeout**. Touch a tab to see the routines available within that group. Touch a dC routine to launch it.

- **Service Info**

This is the default tab for UI Diagnostics. It contains the following:

General information (serial #, product code, image count, s/w version, IP address).

dC104, dC108, dC120, dC122, and dC135

- **Diagnostics**

This tab contains:

dC140, dC304, dC312, dC330, dC612, and dC640.

- **Adjustments**

This tab contains:

dC128, dC129, dC131, dC301, dC361, dC603, dC608, dC609, dC671, dC673, dC675, dC740, dC909 dC919, dC924, dC937, dC945, dC949 , dC950, dC991, dC1202 and dC2006.

- **Maintenance**

This tab contains:

dC120, dC122, dC132, dC135, and dC710.

- **Call Closeout**

The selections within this tab allow you to choose whether the machine is rebooted when you exit UI diagnostic mode, and whether the fault counters are cleared. Touch the **Reset Counters?** square to clear fault history

## Service Copy (Tools) Mode

The CSE Service Copy (Tools) mode provides access to the machine that is greater than that of a user but less than that of the System Administrator. This mode allows you to perform a number of checks and run copies without compromising the customer's security settings. This mode can be used if the Administrator user name and passcode are not at the default, and the Administrator is not available to enter the admin passcode. (GP 2)

### Entering CSE Service Copy mode

1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button on the UI. Release both buttons after a few seconds.
2. On the Service Diagnostics Login screen, enter **2732**, then select **Enter**.
3. The CSE Service Copy mode menu opens and CSE appears in the upper right corner of the display.
4. The Tools available in this mode are a subset of those available in Administrator mode.

**NOTE:** CSE Service Copy mode remains active until the **Log In/Out** button is pressed again or the session times out. When finished with Tools, always log out by pressing the **Log In/Out** button and confirming logout.

## UI Panel Testing

This utility is used to test UI operation. Access the UI tests by simultaneously pressing the \*, #, and C buttons. The utility consists of six (6) tests which are detailed in [ADJ 4.1](#).

## dC104 System Usage Counters

### Purpose

Displays a history of system usage.

### Procedure

1. Enter the [UI Diagnostic \(CSE\) Mode](#).
2. Select the **Service Info** tab.
3. Select **dC104 System Usage**. The System Usage screen will be displayed.
4. Touch the **Impression Counters** button to filter the results:
  - **Impressions** - lists all impressions, categorized by B/W, Color, Large, Small. Print, Copy
  - **Sheet Counters** - Color, B/W, Large, Small
  - **Images Sent Counters** - Fax and Scan
  - **Fax Impressions Counters** - If Fax is enabled, lists the number of received Faxes that were printed
  - **All Usage Counters**

Press the **Update** button for the most current count.

## dC108 Software Versions

### Purpose

Displays the installed software versions for the various modules installed in the system.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Service Info** tab.
3. Select **dC108 SW Version**. The versions of the following software modules will be displayed (dependent on installed options):
  - Software Upgrade
  - Copy Controller
  - Copy Controller OS
  - DUI H8
  - Fax
  - Imaging Output Terminal
  - Finisher
  - Network Controller
  - Image Input Terminal
  - Document Feeder
  - User Interface
  - XUI Language Version

## dC120 Fault Counter

### Purpose

Displays the number of occurrences of each IOT fault since the last Service Exit with the **Clear Counters** option selected.

### NOTE:

1. *Faults detected while in Service Mode are not counted.*
2. *An Interlock open while the machine is stopped is not counted.*

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Service Info** tab.
3. Select **dC120 Fault Counters**.
4. Selecting **Include Zero Occurrences** list all faults in the database; deselecting list only those faults with a recorded occurrence.
5. The screen displays all fault codes in the machine database by **Chain-Link, Description, and Occurrences** of the fault that have occurred since the last time the **Clear Counters** option was selected when exiting Diagnostic Mode.
6. Select the **Sort On Occurrences** button to list the most frequent faults first.
7. To jump to the start of the listing for a particular chain, press the **Chain** button, enter the chain number and press **Find**.

## dC122 Fault History

### Purpose

To display the Last 40 faults.

### NOTE:

1. *Faults detected while in Service Mode are not counted.*
2. *An Interlock open while the machine is stopped is not counted.*
3. *If multiple faults occurred in the machine, the primary fault is recorded.*

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Service Info** tab.
3. Select **dC122 Fault History**.
4. A three column table appears, listing the **Chain Link**, **Description**, and **Date and Time** of the last 40 machine faults.
5. To clear the shutdown history, select **Clear Counters** in the Call Closeout screen.

## dC128 Fold Position Adjustment

### Purpose

This procedure allows access to the NVM locations affecting the Finisher folding and staple position setup. There are several different adjustments, depending on the Finisher:

- **ADJ 12.3** - Professional Finisher Booklet Fold Position
- **ADJ 12.4** - Professional Finisher Booklet Staple Position (Staple on Fold)
- **ADJ 12.5** - Professional Finisher Booklet Staple Alignment
- **ADJ 12.7** - Professional Finisher Booklet Fold Position (Fine Adjustment)
- **ADJ 12.8** - Professional Finisher Booklet Staple Position (Staple on Fold Fine Adjustment)
- **ADJ 12.10** - Finisher LX Booklet Crease/Staple Position

## dC129 System Registration Setup

### Purpose

This procedure is used to align the Lead Edge and Side Edge of the developed image with media fed from the various paper trays. Refer to [ADJ 9.1](#) for instructions

## dC131 NVM Read/Write

**NOTE:** NVM values are listed in the procedures where they are called out.

**NOTE:** For location of Professional Finisher NVM list see [Figure 1](#)

### Procedure

1. Enter the [UI Diagnostic \(CSE\) Mode](#).
2. Select the **Adjustments** tab.
3. Select **dc131 NVM Read/Write**.
4. Enter the NVM Chain/Link (as listed in the procedure that called [dC131](#)) in the **NVM ID** window.
5. Select **Read**.

**NOTE:** When an NVM is displayed in the table it will remain displayed until **Clear** is selected. The **Clear** button only clears the table display, not an NVM value.

6. In **Value** window enter new NVM Value. Use the **+/-** key to enter negative numbers.
7. Select **Write** to load the new value.



Figure 1 NVM List Location

## dC132 Serial Number Synchronize

### Purpose

Serial number data is stored at three locations:

- MCU NVM PWB
- SBC NVM PWB
- IIT/IPS PWB.

This procedure is used to restore serial number data integrity if these PWBs were replaced incorrectly, or if multiple failures occurred.

It is not necessary to run this procedure if a single PWB is replaced; if these boards are replaced one-at-a-time, the machine automatically synchronizes data on the new PWB to match the other two. It is only required to perform the procedure if the removal/replacement procedure is not followed correctly.

### Initial Action

Check dC122 for Communications faults (Chain 303). These can prevent serial number synchronization and must be addressed before proceeding

### Procedure

#### Part 1 - Notify service support.

**NOTE:** It may take up to 24 hours to receive a password from ACAST

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Maintenance Routines** tab.
3. Select **dC132 Machine Serial Number**.

#### CAUTION

*After the Unique Machine Identifier is generated, **DO NOT** touch the **Generate Id** button again, as this will invalidate the Password that will be provided.*

4. Select **Generate New Identifier Code**. Record the Unique Machine Identifier

**NOTE:** Follow all instructions included in the form. You must complete the form, print it, obtain required signatures and data, then scan it.

5. Contact service support to obtain the form and instruction on how to complete it.
6. Follow form instructions and warnings carefully.
7. Note that there is a cost for this service.
8. Fill all the information. Print the completed form. Have your budget center manager sign the form. If **any** information is missing, we cannot perform the service.
9. Have National Technical Specialist (NTS, RSE or FE) forward a copy of service log and proof of the location of the machine to **acst01@xerox.com**. This information must indicate machine location, customer name and address.  
  
The proof may be screen capture of NTS customer support database (account management database), FWSS, ICSS, DFM BT, VQMS, VALE, STPR, etc. The information on the proof must match with the information on the form.
10. Scan the completed form and email to **acast01@xerox.com**.

#### Part 2 - Re-serialize machine

1. Enter the **UI Diagnostic (CSE) Mode**.

2. Select the **Maintenance Routines** tab.

#### CAUTION

***DO NOT** touch the **Generate Id** button, as this will invalidate the Password that will be provided.*

3. Enter the Password received from ACAST in the space for **Submit Password**.
4. Select **Submit Password**.
5. Exit Diagnostic mode
6. Switch the machine power off, then on.

Serial numbers are now synchronized.

## dC135 HFSI Counters

### Purpose

This routine displays the percentage of service life remaining for the periodic replacement parts.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Service Info** or **Maintenance** tab.
3. Select **dC135 CRU/HFSI Counters**.
4. The CRU/HFSI screen lists the serviceable items and displays Estimated Pages Remaining.
5. Refer to Detailed Maintenance Activities **Detailed Maintenance Activities (HFSI)** in Section 1. Perform the listed Service Action for all HFSI counters that are at or near end of life.
6. To reset the count after replacing the parts, select the appropriate HFSI item, then select the **Reset HFSI** button.

## dC140 Analog Monitor

### Purpose

This routine allows you to monitor the status of certain analog machine sensors (Fuser temperature sensors and paper tray size sensors). Temporary change of output values is possible.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Diagnostics** tab.
3. Select **dC140 Analog Monitor**.  
The system displays the **Analog Monitor** screen.
  - a. The system displays the **Component** names with the **ID**, **Status**, **Range** and **Value**.
  - b. The status of all output components show **Inactive**. The **Value** columns are blank.
4. To run an output component check:
  - a. Select a component to check.
  - b. Select **Start** on the menu screen displayed.
  - c. The output component in the machine is switched on.
  - d. The output component status changes to **Active**.
  - e. The bit count is displayed in the **Value** column.
  - f. You can switch on an input component to monitor an output component.

**NOTE:** If the component has a runtime restriction, the component is switched on for that period and automatically switched off.

**NOTE:** Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off.

**NOTE:** If the component cannot be automatically turned off, the following message appears: **Cannot check the component. Stop another output component.**

### Checking multiple components

1. To check multiple components simultaneously, repeat Step 4a through 4f.
2. To stop the check, select **Stop** while the component is selected, or select **Stop All**, which switches off all output components.

Table 1 dC140 Analog Monitor Codes List

ID	Component	Description
010.200	Heat Belt STS Center	Heat Belt Center STS temperature AD value
010.201	Heat Belt STS Rear	Heat Belt Rear STS temperature AD value
042.200	Environment Temp Sensor	Environmental Sensor value
071.200	Tray1 Size Sensor	Displays AD value for Tray1 Paper Size.
072.200	Tray2 Size Sensor	Displays AD value for Tray2 Paper Size.
073.200	Tray3 Size Sensor	Displays AD value for Tray3 Paper Size.
074.200	Tray4 Size Sensor	Displays AD value for Tray4 Paper Size.
075.200	MSI Size Sensor	Displays AD value for MSI Paper Size.
091.200	BCR DC I MONI Y	Y-color BCR DC Current Monitor



Table 1 dC140 Analog Monitor Codes List

ID	Component	Description
091.201	BCR DC I MONI M	M-color BCR DC Current Monitor
091.202	BCR DC I MONI C	C-color BCR DC Current Monitor
091.203	BCR DC I MONI K	K-color BCR DC Current Monitor
092.200	ADC_SNR	ADC Sensor input value
092.201	EMV_TEMP_SNR	Temp Sensor input value
092.202	EMV_HUM_SNR	Humidity Sensor input value
092.203	ATC_SNR_Y	Detection of TC in Y-color Developer Housing
092.204	ATC_SNR_M	Detection of TC in M-color Developer Housing
092.205	ATC_SNR_C	Detection of TC in C-color Developer Housing
092.206	ATC_SNR_K	Detection of TC in K-color Developer Housing

## dC301 NVM Initialization

### Purpose

This procedure may be needed when the machine cannot recover for some unknown reasons, including problems such as producing blank copies/prints, continuously declaring system faults, etc. It is also required as part of the software upgrade process.

### Initial Actions

- Disconnect any Foreign Interface devices.
- Obtain all of the following information:
  - Saved Machine Settings, if possible.
  - NVM value factory setting report (typically it is located in the Tray 1 pocket)
  - Any customer setting Auditron account from the system administrator
  - Any setting changes (specifically NVM settings) shown on the machine's service log.
  - Any customer settings in the Tools mode.
- If possible, save Critical NVM (dC361).

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select the **dC301 NVM Initialization** tab.
4. Select the **Domain, Sub Domain, and NVM Data** location using the radio buttons on the UI screen.
5. Select **Initialize** to run the routine. (Select **Close** to exit the routine without running it.)
6. When prompted by the software **Are you sure you want to initialize?** select **Initialize**.
7. After the initialization is complete, use the data accumulated in **Initial Actions** to restore the machine to its previous configuration.

## dC304 LPH EEPROM Self test

### Purpose

To check the integrity of data in the control logic of the LED Print Heads.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Diagnostics** tab.
3. Select **dC304 LPH EEPROM Self Test**
4. Press **Start**.
5. If the data are correct and communication is possible, OK will appear.
6. If any color reports NG, check the display and fault history for any Chain 061 faults.

## dC312 Network Echo Tests

### Purpose

Tests the machine's capability to communicate on the network.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Diagnostics** tab.
3. Select **dC312 Network Echo Test**. The Network Echo Test screen will then appear.

**NOTE:** *Protocols that are not enabled will not be selectable (they will be grayed out).*

4. Select the **Protocol** to be tested
5. Select the **Start Test** button. The test will run. A message will be displayed on the UI indicating if the test was successful

# dC330 Component Control

## Purpose

The purpose of dC330 Component Control is to actuate or monitor the operation of individual or multiple related components.

## Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Diagnostics** tab.
3. Select **dC330 Component Control**.
4. The **dC330** screen is displayed. There are two tables. the upper table is a listing of all component control codes, selectable by Chain. The lower table contains codes to be activated.

The display indicates the following:

- Chain/Link
- I/O (whether component is Input (I) or Output (O))
- Description

## Finding a code

Locate a specific code by scrolling through the UI or select from the following tables:

1. DADF Chain 005 Component Control Codes - [Table 1](#)  
 Fuser Chain 10 Component Control Codes - [Table 2](#)  
 A-Finisher (Integrated) Chain 12 Component Control Codes - [Table 3](#)  
 SB-Finisher (LX) Chain 12 Component Control Codes - [Table 4](#)  
 C-Finisher (Professional) Chain 12 Component Control Codes - [Table 5](#)  
 C-Finisher (Professional) Booklet Maker Chain 13 Component Control Codes - [Table 6](#)  
 SB-Finisher (LX) Booklet Maker Chain 13 Component Control Codes - [Table 7](#)  
 FAX Chain 20 Component Control Codes - [Table 8](#)  
 Drives/Fans Chain 42 Component Control Codes - [Table 9](#)  
 LED Print Head Chain 61 Component Control Codes - [Table 10](#)  
 Scanner Chain 62 Component Control Codes - [Table 11](#)  
 Tray 1 Chain 71 Component Control Codes - [Table 12](#)  
 Tray 2 Chain 72 Component Control Codes - [Table 13](#)  
 Tray 3 Chain 73 Component Control Codes - [Table 14](#)  
 Tray 4 Chain 74 Component Control Codes - [Table 15](#)  
 Tray 5 Bypass Chain 75 Component Control Codes - [Table 16](#)  
 IOT Media Path Chain 77 Component Control Codes - [Table 17](#)

- HCF Chain 78 Component Control Codes - [Table 18](#)
- MOB Chain 89 Component Control Codes - [Table 19](#)
- IOT Xerographics Chain 91 Component Control Codes - [Table 20](#)
- IOT ADC Chain 92 Component Control Codes - [Table 21](#)
- IOT Developer Drive Chain 93 Component Control Codes - [Table 22](#)
- IOT Transfer Belt Component Control Codes - [Table 23](#)

2. Component control codes in the tables are arranged by Chain. Touch the **Chain** button and select a chain. The codes within that chain are listed.
3. Select the desired code. A popup menu gives you the choice to either **Close Menu** or **Add** the code to the lower table.

## Activating a code

### CAUTION

*Some components have special machine safety requirements, such as removing the IBT assembly before running the IBT Drive, etc. Read the code description in tables 1 - 17 in order to avoid machine damage.*

1. To add a code directly to the lower table, touch the **Chain-link** icon on the UI. Use the keypad to enter the complete 6-digit component control code, then touch the **Add** button.
2. Codes are activated by touching the entry in the lower table. Select the desired action from the popup table that occurs.

**NOTE:** *If the component has a runtime restriction, the component is switched on for that period and automatically switched off.*

3. Press the **Stop** or **Stop All** button, or double click the active component in the Active Stack box to end the test. The ID and Active Stack components are removed from the Active Stack box.

## Stacking Component Codes

**NOTE:** *Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off. If the component cannot be automatically turned off, the following message appears: **Cannot check the component. Stop another output component***

1. To stack several codes, select the first code and press **Start**, then select the next code and press **Start**. Continue to enter up to eleven codes.
2. The state changes to Run; H or L as applicable.
3. Stop a highlighted component by pressing **Stop** or
4. To switch off all components, press **Stop All**.

**Table 1 DADF Chain 005 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
005.001	CVT-DADF feed motor _ speed 1	IIT	DADF	Output	005.002 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 1
005.002	CVT-ADF feed motor _ speed 2	IIT	DADF	Output	005.001, 005.003 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 2
005.003	CVT-DADF feed motor _ speed 3	IIT	DADF	Output	005.001, 005.002, 005.004 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 3

**Table 1 DADF Chain 005 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
005.004	CVT-DADF feed motor _ speed 4	IIT	DADF	Output	005.001 thru 005.003,005.005 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 4
005.005	CVT-DADF feed motor _ speed 5	IIT	DADF	Output	005.001 thru 005.004, 005.006 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 5
005.007	CVT-DADF Feed Motor_speed 7	IIT	DADF	Output	005.001 thru 005.006, 005.008 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 7
005.008	CVT-DADF feed motor _ speed 8	IIT	DADF	Output	005.001 thru 005.007, 005.009, 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 8
005.010	CVT-DADF feed motor _ speed 10	IIT	DADF	Output	005.001 thru 005.009, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 10
005.014	CVT-DADF feed motor _ Reverse	IIT	DADF	Output	005.001 thru 005.010, 005.013, 005.074	50 sec	On	Run Feed Motor in reverse
005.015	CVT-DADF pre reg motor _ speed 1	IIT	DADF	Output	005.016 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 1
005.017	CVT-DADF pre reg motor _ speed 3	IIT	DADF	Output	005.015, 005.016, 005.018 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 3
005.019	CVT-DADF pre reg motor _ speed 5	IIT	DADF	Output	005.015 thru 005.018, 005.020 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 5
005.020	CVT-DADF pre reg motor _ speed 6	IIT	DADF	Output	005.015 thru 005.019, 005.021 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 6
005.021	CVT-DADF pre reg motor _ speed 7	IIT	DADF	Output	005.015 thru 020, 005.022 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 7
005.026	CVT-DADF reg motor _ speed 1	IIT	DADF	Output	005.027 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 1
005.027	CVT-DADF reg motor _ speed 2	IIT	DADF	Output	005.026, 005.028 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 2
005.028	CVT-DADF reg motor _ speed 3	IIT	DADF	Output	005.026, 005.027, 005.029 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 3
005.029	CVT-DADF reg motor _ speed 4	IIT	DADF	Output	005.026 thru 005.028, 005.030 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 4
005.030	CVT-DADF reg motor _ speed 5	IIT	DADF	Output	005.026 thru 005.029, 005.031 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 5
005.032	CVT-DADF reg motor _ speed 7	IIT	DADF	Output	005.026 thru 005.031, 005.033 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 7
005.033	CVT-DADF reg motor _ speed 8	IIT	DADF	Output	005.026 thru 005.032, 005.034 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 8
005.035	CVT-DADF reg motor _ speed 10	IIT	DADF	Output	005.026 thru 005.034, 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor speed 10 Note: Not in SM but on DADF K15.
005.038	CVT-DADF platen motor _ speed 2	IIT	DADF	Output	005.037, 005.039, 005.041 thru 005.047, 005.085	50 sec	On	Run Platen Motor at speed 2
005.041	CVT-DADF platen motor _ speed 4	IIT	DADF	Output	005.037 thru 005.039, 005.042 thru 005.047, 005.085	50 sec	On	Run Platen Motor at speed 4
005.067	Gate solenoid duplex open	IIT	DADF	Output	005.068, 005.070	100 msec	On	Move gate to duplex
005.068	Gate solenoid simplex open	IIT	DADF	Output	005.067, 005.070	100 msec	On	Move gate to simplex
005.069	Exit Gate solenoid	IIT	DADF	Output	005.062	2 sec	On	Actuate gate solenoid
005.070	Nip release solenoid_PF1	IIT	DADF	Output	005.067, 005.068	2 sec	On	Actuate nip release solenoid 1
005.072	Nip release solenoid_PF2	IIT	DADF	Output		3 sec	On	Actuate nip release solenoid 2

Table 1 DADF Chain 005 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
005.073	CVT stamp solenoid	IIT	DADF	Output		10 msec	On	Actuate CVT stamp solenoid
005.083	Doc ready	IIT	DADF	Output		None	On	Turn doc ready signal on
005.084	Doc SetLED	IIT	DADF	Output		5 sec	On	Turn SetLED on CVT mode.
005.088	Image area	IIT	DADF	Output		5 sec	On	Not in BSD but listed elsewhere
005.090	Nudger initialize	IIT	DADF	Output		None	On	Initialization of Nudger roll
005.093	Nudger Motor CW (PF2)	IIT	DADF	Output	005.09, 005.094	5 sec	On	Not in BSD but listed elsewhere
005.102	DADF Document Set Sensor	IIT	DADF	Input		None	High/Low	Low if document present
005.110	DADF Regi Sensor	IIT	DADF	Input		None	High/Low	Low if document present
005.205	CVT-DADF feed out sensor	IIT	DADF	Input		None	High/Low	Paper at Feed Out Sensor
005.206	CVT-DADF pre-reg sensor	IIT	DADF	Input		None	High/Low	Paper at Pre-Reg Sensor
005.211	CVT-DADF invert sensor	IIT	DADF	Input		None	High/Low	Paper at DADF invert sensor
005.212	CVT-DADF feeder interlock switch	IIT	DADF	Input		None	High/Low	DADF Top cover interlock open
005.213	CVT-DADF Platen interlock switch	IIT	DADF	Input		None	High/Low	DADF Platen interlock open
005.215	CVT-DADF #1 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Automatic Paper Selection (APS) sensor #1.
005.216	CVT-DADF #2 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Automatic Paper Selection (APS) sensor #2.
005.217	CVT-DADF #3 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Automatic Paper Selection (APS) sensor #3.
005.218	CVT-DADF #1 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Automatic Paper Selection (APS) sensor #1
005.219	CVT-DADF #2 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Automatic Paper Selection (APS) sensor #2
005.220	CVT-DADF #3 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Automatic Paper Selection (APS) sensor #3
005.221	CV -DADF Tray size sensor #1	IIT	DADF	Input		None	High/Low	DADF Tray size sensor #1
005.222	CVT-DADF Tray size sensor #2	IIT	DADF	Input		None	High/Low	DADF Tray size sensor #2
005.224	Scan start	IIT	DADF	Input		None	High/Low	Scan Start
005.226	CVT-DADF #2 invert sensor	IIT	DADF	Input		None	High/Low	DADF invert sensor #2. Not in BSD but listed elsewhere
005.227	A3 Exist	IIT	DADH	Input		None	High/Low	L:A3, H:A4
005.228	APS Sensor exist	IIT	DADH	Input		None	High/Low	L: No Sensor; H: Sensor

**Table 2 Fuser Chain 10 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
010.001	Fuser Motor 255mm/s	IOT	Fuser	Output	010.002 thru 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed.
010.002	Fuser Motor 225mm/s	IOT	Fuser	Output	010.001, 010.003 thru 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.003	Fuser Motor 200mm/s	IOT	Fuser	Output	010.001 thru 010.002, 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.004	Fuser Motor 175mm/s High Speed	IOT	Fuser	Output	010.001 thru 010.003, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.005	Fuser Motor 121mm High Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.006	Fuser Motor 175mm/s Low Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.007	Fuser Motor 121mm Low Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.008	Fuser Motor 79mm/s	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.009	P/Roll Latch On	IOT	Fuser	Output		None	On/Off	Pressure roller latch On
010.010	P/Roll Latch Off	IOT	Fuser	Output		None	On/Off	Pressure roller latch Off
010.011	P/Roll Half Latch	IOT	Fuser	Output		None	On/Off	Pressure roller latch On
010.201	Fuser Thermostat Status	IOT	Fuser	Input		None	High/Low	Fuser Thermostat operational status
010.202	P/Roll Latch Sensor	IOT	Fuser	Input		None	High/Low	Pressure roller latch Sensor status
010.203	Belt Speed Sensor	IOT	Fuser	Input		None	High/Low	Fuser belt sensor status

**Table 3 A-Finisher (Integrated) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.013	Sub Paddle Solenoid	IOT	A-Finisher	Output	012.014	660ms	On/Off	Rotation of the sub paddle
012.014	Sub Paddle rotation	IOT	A-Finisher	Output	012.013, 012.095 thru 012.097	Mot: 3262 pulses and sol: 660ms	On/Off	A 360 degree roll of the sub paddle (move the transport motor forward on at the same time when the sub paddle.)
012.017	Set Clamp Motor On	IOT	A-Finisher	Output		250 pulse	On/Off	Normal rotation of the Set Clamp Motor
012.020	Front Tamper Motor Low Speed - Front	IOT	A-Finisher	Output	012.021 thru 012.025	100 pulse	On/Off	Move front tamper to front at low speed.
012.021	Front Tamper Motor Medium Speed - Front	IOT	A-Finisher	Output	012.020, 012.022 thru 012.025	100 pulse	On/Off	Move front tamper to front at middle speed.
012.022	Front Tamper Motor High Speed - Front	IOT	A-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	100 pulse	On/Off	Move front tamper to front at high speed.
012.023	Front Tamper Motor Low Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.022, 012.024, 012.025	100 pulse	On/Off	Move front tamper to rear at low speed.
012.024	Front Tamper Motor Medium Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.023, 012.025	100 pulse	On/Off	Move front tamper to rear at medium speed
012.025	Front Tamper Motor High Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.024	100 pulse	On/Off	Move front tamper to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	A-Finisher	Output	012.027 thru 012.031	100 pulse	On/Off	Move rear tamper to front at low speed.
012.027	Rear Tamper Motor Middle Speed - Front	IOT	A-Finisher	Output	012.026, 012.028 thru 012.031	100 pulse	On/Off	Move rear tamper to front at middle speed.
012.028	Rear Tamper Motor High Speed - Front	IOT	A-Finisher	Output	012.026, 012.027, 012.029 thru 012.031	100 pulse	On/Off	Move rear tamper to front at high speed.
012.029	Rear Tamper Motor Low Speed - Rear	IOT	A-Finisher	Output	012.026, 012.028, 012.031	100 pulse	On/Off	Move rear tamper to rear at low speed.
012.030	Rear Tamper Motor Middle Speed - Rear	IOT	A-Finisher	Output	012.026 thru 012.029, 012.031	100 pulse	On/Off	Move rear tamper to rear at medium speed
012.031	Rear Tamper Motor High Speed - Rear	IOT	A-Finisher	Output	012.026 thru 012.030	100 pulse	On/Off	Move rear tamper to rear at high speed
012.046	Staple Motor Forward On	IOT	A-Finisher	Output	012.047	None	On/Off	Normal rotation of the Staple Motor

**Table 3 A-Finisher (Integrated) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.047	Staple Motor Reverse On	IOT	A-Finisher	Output	012.046	180ms	On/Off	Reverse rotation of the Staple Motor
012.054	Eject Motor Low Forward On	IOT	A-Finisher	Output	012.055 thru 012.057	2000 pulse	On/Off	Rotate Eject Motor at low speed
012.055	Eject Motor High Forward On	IOT	A-Finisher	Output	012.054, 012.056, 012.057	2000 pulse	On/Off	Rotate Eject Motor at high speed
012.056	Eject Motor Low Reverse On	IOT	A-Finisher	Output	012.054, 012.055, 012.057	2000 pulse	On/Off	Reverse the Eject Motor at low speed
012.057	Eject Motor High Reverse On	IOT	A-Finisher	Output	012.054 thru 012.056	2000 pulse	On/Off	Reverse the Eject Motor at High speed
012.060	Stacker Motor Up On	IOT	A-Finisher	Output	012.061	80ms	On/Off	Lift Stacker Tray
012.061	Stacker Motor Down On	IOT	A-Finisher	Output	012.060	80ms	On/Off	Move down the stack tray
012.095	Transport Motor Low	IOT	A-Finisher	Output	012.014, 012.096, 012.097	None	On/Off	Rotate transport motor at low speed - equivalent to IOT at full process speed.
012.097	Transport Motor Half Forward	IOT	A-Finisher	Output	012.014, 012.096, 012.097	None	On/Off	marked as not available in ABC spreadsheet. see BSD
012.110	Regi Clutch ON	IOT	A-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = Low
012.140	Entrance Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = High
012.150	Compile Exit Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = High
012.220	Front Tamper Home Sensor	IOT	A-Finisher	Input		None	High/Low	Not home = High
012.242	Low Staple Sensor	IOT	A-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	A-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	A-Finisher	Input		None	High/Low	High= not home
012.251	Set Clamp Home Sensor	IOT	A-Finisher	Input		None	High/Low	Not home = High
012.252	Eject Home Sensor	IOT	A-Finisher	Input		None	High/Low	High= Not home
012.267	Stack Height Sensor	IOT	A-Finisher	Input		None	High/Low	Low = Stack height
012.278	Stack Height 1	IOT	A-Finisher	Input		None	High/Low	Light shield exits
012.279	Stack Height 2	IOT	A-Finisher	Input		None	High/Low	Light shield exits
012.300	Top Cover Interlock	IOT	A-Finisher	Input		None	High/Low	High = Open
012.302	Finisher Front Door switch	IOT	A-Finisher	Input		None	High/Low	High = Open

**Table 4 SB-Finisher (LX) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.013	Sub Paddle Solenoid	IOT	SB-Finisher	Output		250ms	On/Off	Activate Sub paddle Solenoid
012.018	Transport Motor Reverse	IOT	SB-Finisher	Output	012.036 thru 012.038	None	On/Off	Revers Transport Motor rotation
012.020	Front Tamper Motor Low Speed - Front	IOT	SB-Finisher	Output	012.022, 012.023, 012.025	82 pulses	On/Off	Front Tamper Motor to front at low speed
012.022	Front Tamper Motor High Speed - Front	IOT	SB-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	82 pulses	On/Off	Front Tamper Motor to front at high speed
012.023	Front Tamper Motor Low Speed - Rear	IOT	SB-Finisher	Output	012.020 thru 012.022, 012.025	100 pulses	On/Off	Front Tamper Motor to rear at low speed
012.025	Front Tamper Motor High Speed - Rear	IOT	SB-Finisher	Output	012.020, 012.022, 012.023	82 pulses	On/Off	Front Tamper Motor to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	SB-Finisher	Output	012.028, 012.029, 012.031	82 pulses	On/Off	Rear Tamper Motor to front at low speed

**Table 4 SB-Finisher (LX) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.028	Rear Tamper Motor High Speed - Front	IOT	SB-Finisher	Output	012.026, 012.029, 012.031	82 pulses	On/Off	Rear Tamper Motor to front at high speed
012.029	Rear Tamper Motor Low Speed - Rear	IOT	SB-Finisher	Output	012.026, 012.028, 012.031	82 pulses	On/Off	Rear Tamper Motor to rear at low speed
012.031	Rear Tamper Motor High Speed - Rear	IOT	SB-Finisher	Output	012.026, 012.028, 012.029	82 pulses	On/Off	Rear Tamper Motor to rear at high speed
012.032	Xport Motor 1	IOT	SB-Finisher	Output	012.033, 012.034, 012.035, 012.039	None	On/Off	Xport Motor at speed 1
012.033	Xport Motor 2	IOT	SB-Finisher	Output	012.032, 012.034, 012.035, 012.039	None	On/Off	Xport Motor at speed 2
012.034	Xport Motor 3	IOT	SB-Finisher	Output	012.032, 012.033, 012.035, 012.039	None	On/Off	Xport Motor at speed 3
012.035	Xport Motor 4	IOT	SB-Finisher	Output	012.032 thru 012.034, 012.039	None	On/Off	Xport Motor at speed 4
012.036	Transport Motor 1	IOT	SB-Finisher	Output	012.037, 012.038, 012.018	None	On/Off	Transport Motor at speed 1
012.037	Transport Motor 2	IOT	SB-Finisher	Output	012.036, 012.038, 012.018	None	On/Off	Transport Motor at speed 1
012.038	Transport Motor 3	IOT	SB-Finisher	Output	012.037, 012.038, 012.018	None	On/Off	Transport Motor at speed 1
012.039	Xport Motor Reverse	IOT	SB-Finisher	Output	012.032 thru 012.035	None	On/Off	Reverse Xport Motor rotation
012.040	Stapler Move Front Move - Low speed	IOT	SB-Finisher	Output	012.042, 012.043, 012.035	400 pulses	On/Off	Stapler Move Motor to front at low speed
012.042	Stapler Move Motor High Front On	IOT	SB-Finisher	Output	012.040, 012.043, 012.045	400 pulses	On/Off	Stapler Move Motor to front at high speed
012.043	Stapler Move Motor Low Rear On	IOT	SB-Finisher	Output	012.040, 012.042, 012.045	400 pulses	On/Off	Stapler Move Motor to rear at low speed
012.045	Stapler Move Motor High Rear On	IOT	SB-Finisher	Output	012.040, 012.042, 012.043	400 pulses	On/Off	Stapler Move Motor to rear at high speed
012.046	Staple Motor Forward On	IOT	SB-Finisher	Output	012.047	None	On/Off	Stapler Motor forward rotation
012.047	Staple Motor Reverse On	IOT	SB-Finisher	Output	012.046	None	On/Off	Stapler Motor reverse rotation
012.050	Set Clamp Clutch On	IOT	SB-Finisher	Output		200msec	On/Off	Actuate Set Clamp Clutch
012.052	Eject Clamp Up	IOT	SB-Finisher	Output	012.053 thru 012.055	None	On/Off	Raise Eject Clamp
012.053	Eject Clamp Down	IOT	SB-Finisher	Output	012.052, 012.054, 012.055	None	On/Off	Lower Eject Clamp
012.054	Eject Motor Low Forward On	IOT	SB-Finisher	Output	012.052, 012.053, 012.055	1136 pulse	On/Off	Eject Motor forward at low speed
012.055	Eject Motor High Forward On	IOT	SB-Finisher	Output	012.052 thru 012.054	1136 pulse	On/Off	Eject Motor forward at high speed
012.060	Stacker Motor Up On	IOT	SB-Finisher	Output	012.061	500msec	On/Off	Move Stacker Tray up with Stacker Motor
012.061	Stacker Motor Down On	IOT	SB-Finisher	Output	012.060	500msec	On/Off	Move Stacker Tray down with Stacker Motor
012.074	Punch Motor Home Move	IOT	SB-Finisher	Output	012.074, 012.078, 012.079	None	On/Off	Move Punch motor to home position
012.077	Punch - 2 hole	IOT	SB-Finisher	Input	012.074, 012.078, 012.079	None	On/Off	Actuate 2-hole punch
012.078	Punch - 3 hole	IOT	SB-Finisher	Input	012.074, 012.077, 012.079	None	On/Off	Actuate 3-hole punch
012.079	Punch - 4 hole	IOT	SB-Finisher	Input		None	On/Off	Actuate 4-hole punch
012.100	Transport Entrance Sensor	IOT	SB-Finisher	Input		None	High/Low	high with paper
012.110	Regi Clutch ON	IOT	SB-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	SB-Finisher	Input		None	High/Low	Paper exits = Low
012.150	Compile Exit Sensor	IOT	SB-Finisher	Input		None	High/Low	Paper exits = High
012.151	Compile Tray NO Paper Sensor	IOT	SB-Finisher	input		None	High/Low	
012.190	H-Xport Entrance Sensor	IOT	SB-Finisher	Input		None	High/Low	High with paper
012.241	Stapler Move Position Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.250	Eject Clamp Home Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.262	Stacker NO Paper Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.263	Stack Encoder Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.264	Stack Height Sensor 1	IOT	SB-Finisher	Input		None	High/Low	



**Table 4 SB-Finisher (LX) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.265	Stack Height Sensor 2	IOT	SB-Finisher	Input		None	High/Low	
012.271	Puncher Home Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.274	Puncher Encoder Sensor	IOT	SB-Finisher	input		None	High/Low	
012.275	Punch BOX Set Sensor	IOT	SB-Finisher	input		None	High/Low	
012.277	Puncher Detect	IOT	SB-Finisher	input		None	High/Low	
012.300	Eject Cover Switch	IOT	SB-Finisher	input		None	High/Low	
012.303	H-Xport Open Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.220	Front Tamper Home Sensor	IOT	SB-Finisher	Input		None	High/Low	Not home = High
012.242	Low Staple Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	SB-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	SB-Finisher	Input		None	High/Low	High= not home
012.251	Set Clamp Home Sensor	IOT	SB-Finisher	Input		None	High/Low	Not home = High
012.302	Finisher Front Door switch	IOT	SB-Finisher	Input		None	High/Low	High = Open

**Table 5 C-Finisher (Professional) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.001	Fin Transport Motor 350 On	IOT	C-Finisher	Output		None	On/Off	
012.002	Fin Transport Motor 600 On	IOT	C-Finisher	Output		None	On/Off	
012.003	Regi Motor 285 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.004	Regi Motor 350 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.005	Regi Motor 600 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.006	Regi Motor 285 Reverse On	IOT	C-Finisher	Output		None	On/Off	
012.007	Exit Motor 285 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.008	Exit Motor 350 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.009	Exit Motor 600 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.010	Exit Motor 285 Reverse On	IOT	C-Finisher	Output		None	On/Off	
012.011	Transport Gate Solenoid TOP	IOT	C-Finisher	Output		None	On/Off	
012.012	Transport Gate Solenoid Stacker	IOT	C-Finisher	Output		None	On/Off	
012.013	Sub Paddle Solenoid	IOT	C-Finisher	Output		100msec	On/Off	
012.015	Paper to Stacker Solenoid	IOT	C-Finisher	Output		None	On/Off	marked not available in ABC spreadsheet. see BSD
012.016	Buffer Gate Solenoid BUF	IOT	C-Finisher	Output		None	On/Off	
012.020	Front Tamper Motor Low Speed - Front	IOT	C-Finisher	Output	012.021 thru 012.025	100 pulse	On/Off	Move front tamper to front at low speed.
012.021	Front Tamper Motor Medium Speed - Front	IOT	C-Finisher	Output	012.020, 012.022 thru 012.025	100 pulse	On/Off	Move front tamper to front at middle speed.
012.022	Front Tamper Motor High Speed - Front	IOT	C-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	100 pulse	On/Off	Move front tamper to front at high speed.
012.023	Front Tamper Motor Low Speed - Rear	IOT	C-Finisher	Output	012.020 thru 012.022, 012.024, 012.025	100 pulse	On/Off	Move front tamper to rear at low speed.

**Table 5 C-Finisher (Professional) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.024	Front Tamper Motor Medium Speed - Rear	IOT	C-Finisher	Output	012.020 thru 012.023, 012.025	100 pulse	On/Off	Move front tamper to rear at medium speed
012.025	Front Tamper Motor High Speed - Rear	IOT	C-Finisher	Output	012.020 thru 012.024	100 pulse	On/Off	Move front tamper to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	C-Finisher	Output	012.027 thru 012.031	100 pulse	On/Off	Move rear tamper to front at low speed.
012.027	Rear Tamper Motor Middle Speed - Front	IOT	C-Finisher	Output	012.026, 012.028 thru 012.031	100 pulse	On/Off	Move rear tamper to front at middle speed.
012.028	Rear Tamper Motor High Speed - Front	IOT	C-Finisher	Output	012.026, 012.027, 012.029 thru 012.031	100 pulse	On/Off	Move rear tamper to front at high speed.
012.029	Rear Tamper Motor Low Speed - Rear	IOT	C-Finisher	Output	012.026, 012.028, 012.031	100 pulse	On/Off	Move rear tamper to rear at low speed.
012.030	Rear Tamper Motor Middle Speed - Rear	IOT	C-Finisher	Output	012.026 thru 012.029, 012.031	100 pulse	On/Off	Move rear tamper to rear at medium speed
012.031	Rear Tamper Motor High Speed - Rear	IOT	C-Finisher	Output	012.026 thru 012.030	100 pulse	On/Off	Move rear tamper to rear at high speed
012.041	Stapler Move Motor Middle Front On	IOT	C-Finisher	Output		400 pulse	On/Off	
012.042	Stapler Move Motor High Front On	IOT	C-Finisher	Output	012.040, 012.043, 012.045	400 pulse	On/Off	
012.044	Stapler Move Motor Middle Rear On	IOT	C-Finisher	Output		None	On/Off	
012.045	Stapler Move Motor High Rear On	IOT	C-Finisher	Output	012.040, 012.042, 012.043	400 pulse	On/Off	
012.046	Staple Motor Forward On	IOT	C-Finisher	Output	012.047	None	On/Off	Normal rotation of the Staple Motor
012.047	Staple Motor Reverse On	IOT	C-Finisher	Output	012.046	180ms	On/Off	Reverse rotation of the Staple Motor
012.050	Set Clamp Clutch On	IOT	C-Finisher	Output		200msec	On/Off	
012.051	Sub Paddle Solenoid	IOT	C-Finisher	Output		None	On/Off	
012.052	Eject Clamp Up	IOT	C-Finisher	Output	012.053 thru 012.055	None	On/Off	
012.053	Eject Clamp Down	IOT	C-Finisher	Output	012.052, 012.054, 012.055	None	On/Off	
012.054	Eject Motor Low Forward On	IOT	C-Finisher	Output	012.055 thru 012.057	2000 pulse	On/Off	Rotate the Eject Motor at low speed
012.055	Eject Motor High Forward On	IOT	C-Finisher	Output	012.054, 012.056, 012.057	2000 pulse	On/Off	Rotate the Eject Motor at high speed
012.056	Eject Motor Low Reverse On	IOT	C-Finisher	Output	012.054, 012.055, 012.057	2000 pulse	On/Off	Reverse the Eject Motor at low speed
012.057	Eject Motor High Reverse On	IOT	C-Finisher	Output	012.054 thru 012.056	2000 pulse	On/Off	Reverse the Eject Motor at High speed
012.060	Stacker Motor Up On	IOT	C-Finisher	Output	012.061	500msec	On/Off	Move Stacker Tray up
012.061	Stacker Motor Down On	IOT	C-Finisher	Output	012.060	500msec	On/Off	Move Stacker Tray down
012.070	Puncher Move Motor Low Front On	IOT	C-Finisher	Output		None	On/Off	
012.071	Puncher Move Motor High Front On	IOT	C-Finisher	Output		None	On/Off	
012.072	Puncher Move Motor Low Rear On	IOT	C-Finisher	Output		None	On/Off	
012.073	Puncher Move Motor High Rear On	IOT	C-Finisher	Output		None	On/Off	
012.074	Puncher Motor 2 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.075	Puncher Motor 3 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.076	Puncher Motor 4 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.077	Punch - 2 hole	IOT	C-Finisher	Input	012.074, 012.078, 012.079	None	On/Off	
012.078	Punch - 3 hole	IOT	C-Finisher	Input	012.074, 012.077, 012.079	None	On/Off	
012.079	Punch - 4 hole	IOT	C-Finisher	Input		None	On/Off	

**Table 5 C-Finisher (Professional) Chain 12 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
012.091	H Xport Motor 242 On	IOT	C-Finisher	Output		None	On/Off	
012.099	Decurler Cam Clutch	IOT	C-Finisher	Output		None	On/Off	
012.100	Xport Entrance Sensor	IOT	C-Finisher	Input		None	High/Low	high with paper
012.101	Buffer Path Sensor	IOT	C-Finisher	Input		None	High/Low	
012.102	Gate Sensor	IOT	C-Finisher	Input		None	High/Low	
012.110	Regi Clutch ON	IOT	C-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	C-Finisher	Input		None	High/Low	Paper exits = Low
012.115	Top Tray Exit Sensor	IOT	C-Finisher	Input		None	High/Low	
012.150	Compile Exit Sensor	IOT	C-Finisher	Input		None	High/Low	Paper exits = High
012.151	Compile Tray NO Paper Sensor	IOT	C-Finisher	input		None	High/Low	
012.190	H-Xport Entrance Sensor	IOT	C-Finisher	Input		None	High/Low	High with paper
012.191	H-Xport Exit Sensor	IOT	C-Finisher	Input		None	High/Low	High with paper
012.200	Side Regi Sensor 1	IOT	C-Finisher	Input		None	High/Low	
012.201	Side Regi Sensor 2	IOT	C-Finisher	Input		None	High/Low	
012.215	Top Tray Full Sensor	IOT	C-Finisher	Input		None	High/Low	
012.220	Front Tamper Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.221	Rear Tamper Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.241	Stapler Move Position Sensor	IOT	C-Finisher	Input		None	High/Low	
012.242	Low Staple Sensor	IOT	C-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	C-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	C-Finisher	Input		None	High/Low	High= not home
012.250	Eject Clamp Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.251	Set Clamp Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.260	Upper Limit Sensor	IOT	C-Finisher	Input		None	High/Low	
012.262	Stacker NO Paper Sensor	IOT	C-Finisher	Input		None	High/Low	
012.263	Stack Encoder Sensor	IOT	C-Finisher	Input		None	High/Low	
012.264	Stack Height Sensor 1	IOT	C-Finisher	Input		None	High/Low	
012.265	Stack Height Sensor 2	IOT	C-Finisher	Input		None	High/Low	
012.270	Puncher Move Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.271	Puncher Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.272	Puncher Front Sensor	IOT	C-Finisher	Input		None	High/Low	
012.273	Punch Hole Select Sensor	IOT	C-Finisher	Input		None	High/Low	
012.274	Puncher Motor Sensor	IOT	C-Finisher	Input		None	High/Low	
012.275	Punch BOX Set Sensor	IOT	C-Finisher	input		None	High/Low	
012.276	Punch Full Sensor	IOT	C-Finisher	Input		None	High/Low	
012.282	Decurler Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.300	Eject Cover Switch	IOT	C-Finisher	input		None	High/Low	
012.302	Finisher Front Door switch	IOT	C-Finisher	Input		None	High/Low	High = Open
012.303	H-Xport Interlock Sensor	IOT	C-Finisher	Input		None	High/Low	

**Table 6 C-Finisher (Professional) with Booklet Maker Chain 13 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
013.008	Booklet Folder Roll Motor Forward	PRO	C-Finisher	Output		None	On/Off	
013.009	Booklet Folder Roll Motor Reverse	PRO	C-Finisher	Output		None	On/Off	
013.010	Booklet Knife Flapper Solenoid	PRO	C-Finisher	Output		None	On/Off	
013.011	Booklet End guide Motor Low Down	PRO	C-Finisher	Output		None	On/Off	
013.013	Booklet End guide Motor Hi Down	PRO	C-Finisher	Output		None	On/Off	
013.014	Booklet End guide Motor Low Up	PRO	C-Finisher	Output		None	On/Off	
013.016	Booklet End guide Motor Hi Up	PRO	C-Finisher	Output		None	On/Off	
013.017	Booklet Staple On	PRO	C-Finisher	Output		None	On/Off	
013.020	Tray Belt Drive Motor On	PRO	C-Finisher	Output		None	On/Off	
013.021	Booklet Paddle Motor On	PRO	C-Finisher	Output		None	On/Off	
013.048	Booklet Tamper Motor F Rear 1	PRO	C-Finisher	Output		None	On/Off	
013.049	Booklet Tamper Motor F Rear 2	PRO	C-Finisher	Output		None	On/Off	
013.050	Booklet Tamper Motor F Rear 3	PRO	C-Finisher	Output		None	On/Off	
013.051	Booklet Tamper Motor F Rear 4	PRO	C-Finisher	Output		None	On/Off	
013.052	Booklet Tamper Motor F Front 1	PRO	C-Finisher	Output		None	On/Off	
013.053	Booklet Tamper Motor F Front 2	PRO	C-Finisher	Output		None	On/Off	
013.054	Booklet Tamper Motor F Front 3	PRO	C-Finisher	Output		None	On/Off	
013.055	Booklet Tamper Motor F Front 4	PRO	C-Finisher	Output		None	On/Off	
013.056	Booklet Tamper Motor R Front 1	PRO	C-Finisher	Output		None	On/Off	
013.057	Booklet Tamper Motor R Front 2	PRO	C-Finisher	Output		None	On/Off	
013.058	Booklet Tamper Motor R Front 3	PRO	C-Finisher	Output		None	On/Off	
013.059	Booklet Tamper Motor R Front 4	PRO	C-Finisher	Output		None	On/Off	
013.060	Booklet Tamper Motor R Rear 1	PRO	C-Finisher	Output		None	On/Off	
013.061	Booklet Tamper Motor R Rear 2	PRO	C-Finisher	Output		None	On/Off	
013.062	Booklet Tamper Motor R Rear 3	PRO	C-Finisher	Output		None	On/Off	
013.063	Booklet Tamper Motor R Rear 4	PRO	C-Finisher	Output		None	On/Off	
013.064	Booklet Paper Path Motor 1	PRO	C-Finisher	Output		None	On/Off	
013.065	Booklet Paper Path Motor 2	PRO	C-Finisher	Output		None	On/Off	
013.066	Booklet Paper Path Motor 3	PRO	C-Finisher	Output		None	On/Off	
013.067	Booklet Paper Path Motor 4	PRO	C-Finisher	Output		None	On/Off	
013.068	Booklet Gate Solenoid Stacker	PRO	C-Finisher	Output		None	On/Off	
013.069	Booklet Gate Solenoid Booklet	PRO	C-Finisher	Output		None	On/Off	
013.101	Booklet Knife Home Sensor	PRO	C-Finisher	Input		None	High/Low	
013.102	Booklet Compile No Paper Sensor	PRO	C-Finisher	Input		None	High/Low	
013.103	Booklet Folder Roll Exit Sensor	PRO	C-Finisher	Input		None	High/Low	
013.104	Booklet Drawer Set Sensor	PRO	C-Finisher	Input		None	High/Low	
013.105	Booklet Stapler Ready	PRO	C-Finisher	Input		None	High/Low	
013.106	Booklet Staple Error Signal	PRO	C-Finisher	Input		None	High/Low	
013.107	Booklet Low Staple F Switch	PRO	C-Finisher	Input		None	High/Low	
013.108	Booklet Low Staple R Switch	PRO	C-Finisher	Input		None	High/Low	

**Table 6 C-Finisher (Professional) with Booklet Maker Chain 13 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
013.134	Booklet Tamper Home Sensor Front	PRO	C-Finisher	Input		None	High/Low	
013.135	Booklet In Sensor	PRO	C-Finisher	Input		None	High/Low	detects of paper in by Booklet In sensor
013.136	Booklet Tamper Home Sensor Rear	PRO	C-Finisher	Input		None	High/Low	
013.137	Booklet End Guide Home Sensor	PRO	C-Finisher	Input		None	High/Low	
013.139	Booklet No Paper Sensor	PRO	C-Finisher	Input		None	High/Low	
013.140	Booklet Knife Folding Sensor	PRO	C-Finisher	Input		None	High/Low	

**Table 7 SB-Finisher (LX) with Booklet Maker Chain 13 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
013.022	Knife Motor Forward On	PRO	SB-Finisher	Output	013.023	None	On/Off	
013.023	Knife Motor Reverse On	PRO	SB-Finisher	Output	013.022	None	On/Off	
013.024	Booklet Staple Motor F Forward	PRO	SB-Finisher	Output	013.025	None	On/Off	
013.025	Booklet Staple Motor F Reverse	PRO	SB-Finisher	Output	013.024	None	On/Off	
013.026	Booklet Staple Motor R Forward	PRO	SB-Finisher	Output	013.027	None	On/Off	
013.027	Booklet Staple Motor R Reverse	PRO	SB-Finisher	Output	013.026	None	On/Off	
013.028	Booklet Staple Move Motor In	PRO	SB-Finisher	Output	013.029	350 pulse	On/Off	
013.029	Booklet Staple Move Motor Out	PRO	SB-Finisher	Output	013.028	350 pulse	On/Off	
013.101	Knife Home Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.107	Booklet Low Staple F Switch	PRO	SB-Finisher	Input		None	High/Low	
013.108	Booklet Low Staple R Switch	PRO	SB-Finisher	Input		None	High/Low	
013.141	Booklet Staple Cam Front Switch	PRO	SB-Finisher	Input		None	High/Low	
013.142	Booklet Staple Cam Rear Switch	PRO	SB-Finisher	Input		None	High/Low	
013.143	Booklet Staple Move Home Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.144	Booklet Staple Move Position Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.160	Folder Detect	PRO	SB-Finisher	Input		None	High/Low	
013.161	Booklet Detect	PRO	SB-Finisher	Input		None	High/Low	
013.300	Booklet Cover Open Switch	PRO	SB-Finisher	Input		None	High/Low	
013.301	Booklet Safety Switch	PRO	SB-Finisher	Input		None	High/Low	

**Table 8 IOT FAX Chain 20 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
020.010	Single Tone 0Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 0Hz on line 1
020.011	Single Tone 400Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 400Hz on line 1
020.012	Single Tone 1100Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1100Hz on line 1
020.013	Single Tone 1300Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1300Hz on line 1
020.014	Single Tone 1650Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1650Hz on line 1
020.015	Single Tone 1850Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1850Hz on line 1
020.016	Single Tone 2100Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 2100Hz on line 1

**Table 8 IOT FAX Chain 20 Component Control Codes**

<b>Chain Link</b>	<b>Component</b>	<b>Device</b>	<b>Module</b>	<b>Type</b>	<b>Conflicts</b>	<b>Timeout</b>	<b>Display</b>	<b>Description</b>
020.017	ANSAM Ln1	FAX	FAX	Output			On/Off	
020.018	CI Ln1	FAX	FAX	Output			On/Off	
020.020	DTMF # Line1	FAX	FAX	Output			On/Off	Emits DTMF # on line 1
020.021	DTMF * Line1	FAX	FAX	Output			On/Off	Emits DTMF * on line 1
020.022	DTMF 0 Line1	FAX	FAX	Output			On/Off	Emits DTMF 0 on line 1
020.023	DTMF 1 Line1	FAX	FAX	Output			On/Off	Emits DTMF 1 on line 1
020.024	DTMF 2 Line1	FAX	FAX	Output			On/Off	Emits DTMF 2 on line 1
020.025	DTMF 3 Line1	FAX	FAX	Output			On/Off	Emits DTMF 3 on line 1
020.026	DTMF 4 Line1	FAX	FAX	Output			On/Off	Emits DTMF 4 on line 1
020.027	DTMF 5 Line1	FAX	FAX	Output			On/Off	Emits DTMF 5 on line 1
020.028	DTMF 6 Line1	FAX	FAX	Output			On/Off	Emits DTMF 6 on line 1
020.029	DTMF 7 Line1	FAX	FAX	Output			On/Off	Emits DTMF 7 on line 1
020.030	DTMF 8 Line1	FAX	FAX	Output			On/Off	Emits DTMF 8 on line 1
020.031	DTMF 9 Line1	FAX	FAX	Output			On/Off	Emits DTMF 9 on line 1
020.032	DTMF A Line1	FAX	FAX	Output			On/Off	Emits DTMF A on line 1
020.033	DTMF B Line1	FAX	FAX	Output			On/Off	Emits DTMF B on line 1
020.034	DTMF C Line1	FAX	FAX	Output			On/Off	Emits DTMF C on line 1
020.035	DTMF D Line1	FAX	FAX	Output			On/Off	Emits DTMF D on line 1
020.040	V.21 300 bps Line1	FAX	FAX	Output			On/Off	Emits V.21 300 bps Line1
020.041	V.27ter 2400 bps Line1	FAX	FAX	Output			On/Off	Emits V.27ter 2400 bps Line1
020.042	V.27ter 4800 bps Line1	FAX	FAX	Output			On/Off	Emits V.27ter 4800 bps Line1
020.043	V.29 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.29 7200 bps Line1
020.044	V.29 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.29 9600 bps Line1
020.045	V.17 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 7200 bps Line1
020.046	V.17 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 9600 bps Line1
020.047	V.17 12000 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 12000 bps Line1
020.048	V.17 14400 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 14400 bps Line1
020.049	V.34 2400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 2400 bps Line1
020.050	V.34 4800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 4800 bps Line1
020.051	V.34 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 7200 bps Line1
020.052	V.34 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 9600 bps Line1
020.053	V.34 12000 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 12000 bps Line1
020.054	V.34 14400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 14400 bps Line1
020.055	V.34 16800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 16800 bps Line1
020.056	V.34 19200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 19200 bps Line1
020.057	V.34 21600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 21600 bps Line1
020.058	V.34 24000 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 24000 bps Line1
020.059	V.34 26400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 26400 bps Line1
020.060	V.34 28800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 28800 bps Line1
020.061	V.34 31200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 31200 bps Line1

**Table 8 IOT FAX Chain 20 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
020.062	V.34 33600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 33600 bps Line1
020.080	Single Tone 0Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 0Hz on line 2
020.081	Single Tone 400Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 400Hz on line 2
020.082	Single Tone 1100Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1100Hz on line 2
020.083	Single Tone 1300Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1300Hz on line 2
020.084	Single Tone 1650Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1650Hz on line 2
020.085	Single Tone 1850Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1850Hz on line 2
020.086	Single Tone 2100Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 2100Hz on line 2
020.087	ANSAM Ln2	FAX	FAX	Output			On/Off	
020.088	CI Ln2	FAX	FAX	Output			On/Off	
020.090	DTMF # Line2	FAX	FAX	Output			On/Off	Emits DTMF # on line 2
020.091	DTMF * Line2	FAX	FAX	Output			On/Off	Emits DTMF * on line 2
020.092	DTMF 0 Line2	FAX	FAX	Output			On/Off	Emits DTMF 0 on line 2
020.093	DTMF 1 Line2	FAX	FAX	Output			On/Off	Emits DTMF 1 on line 2
020.094	DTMF 2 Line2	FAX	FAX	Output			On/Off	Emits DTMF 2 on line 2
020.095	DTMF 3 Line2	FAX	FAX	Output			On/Off	Emits DTMF 3 on line 2
020.096	DTMF 4 Line2	FAX	FAX	Output			On/Off	Emits DTMF 4 on line 2
020.097	DTMF 5 Line2	FAX	FAX	Output			On/Off	Emits DTMF 5 on line 2
020.098	DTMF 6 Line2	FAX	FAX	Output			On/Off	Emits DTMF 6 on line 2
020.099	DTMF 7 Line2	FAX	FAX	Output			On/Off	Emits DTMF 7 on line 2
020-100	DTMF 8 Line2	FAX	FAX	Output			On/Off	Emits DTMF 8 on line 2
020-101	DTMF 9 Line2	FAX	FAX	Output			On/Off	Emits DTMF 9 on line 2
020-102	DTMF A Line2	FAX	FAX	Output			On/Off	Emits DTMF A on line 2
020-103	DTMF B Line2	FAX	FAX	Output			On/Off	Emits DTMF B on line 2
020-104	DTMF C Line2	FAX	FAX	Output			On/Off	Emits DTMF C on line 2
020-105	DTMF D Line2	FAX	FAX	Output			On/Off	Emits DTMF D on line 2
020-110	V.21 300 bps Line2	FAX	FAX	Output			On/Off	Emits V.21 300 bps Line2
020-111	V.27ter 2400 bps Line2	FAX	FAX	Output			On/Off	Emits V.27ter 2400 bps Line2
020-112	V.27ter 4800 bps Line2	FAX	FAX	Output			On/Off	Emits V.27ter 4800 bps Line2
020-113	V.29 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.29 7200 bps Line2
020-114	V.29 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.29 9600 bps Line2
020-115	V.17 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 7200 bps Line2
020-116	V.17 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 9600 bps Line2
020-117	V.17 12000 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 12000 bps Line2
020-118	V.17 14400 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 14400 bps Line2
020-119	V.34 2400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 2400 bps Line2
020-120	V.34 4800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 4800 bps Line2
020-121	V.34 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 7200 bps Line2
020-122	V.34 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 9600 bps Line2
020-123	V.34 12000 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 12000 bps Line2

**Table 8 IOT FAX Chain 20 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
020-124	V.34 14400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 14400 bps Line2
020-125	V.34 16800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 16800 bps Line2
020-126	V.34 19200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 19200 bps Line2
020-127	V.34 21600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 21600 bps Line2
020-128	V.34 24000 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 24000 bps Line2
020-129	V.34 26400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 26400 bps Line2
020-130	V.34 28800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 28800 bps Line2
020-131	V.34 31200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 31200 bps Line2
020-132	V.34 33600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 33600 bps Line2

**Table 9 IOT Drives/Fans Chain 42 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
042.001	Main motor 79mm/s	IOT	Drives	Output	042.002, 042.003		On/Off	Low Speed mach 7830/35only
042.002	Main motor _121mm/s	IOT	Drives	Output	042.001, 042.003		On/Off	Both High and Low speed machines.
042.003	Main motor 175mm/s	IOT	Drives	Output	042.001, 042.002		On/Off	
042.004	Main motor 220mm/s	IOT	NOHAD	Output			On/Off	Rotates at high speed on Start and returns to low speed at Stop
042.005	Main motor 228mm/s	IOT	NOHAD	Output			On/Off	
042.006	Main motor 255mm/s	IOT	NOHAD	Output			On/Off	
042.011	Fuser Fan	IOT	NOHAD	Output			On/Off	
042.012	MHVPS Fan	IOT	NOHAD	Output			On/Off	
042.013	Process 2 Fan	IOT	NOHAD	Output			On/Off	
042.014	LVPS Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.015	Rear Bottom Fan	IOT	NOHAD	Output			On/Off	
042.016	IH Intake Fan	IOT	NOHAD	Output			On/Off	
042.017	IH Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.018	LVPS Fan	IOT	NOHAD	Output			On/Off	
042.019	IBT Fan	IOT	NOHAD	Output			On/Off	
042.020	Suction Drive Fan	IOT	NOHAD	Output			On/Off	
042.021	Cartridge Fan	IOT	NOHAD	Output			On/Off	
042.022	Process 1 Fan	IOT	NOHAD	Output			On/Off	
042.024	C Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.025	NOHAD Fan Failure Detection	IOT	NOHAD	Output			On/Off	
042.026	LH Fan	IOT	NOHAD	Output			On/Off	
042.201	IBT Belt Home Sensor	IOT	Drives	Input			High/Low	IBT belt home sensor.
042.202	Fuser Fan Fail	IOT	NOHAD	Input			High/Low	Fuser Fan rotation state detection
042.203	Drive Fan Fail	IOT	NOHAD	Input			High/Low	Drive Fan rotation state detection. Low speed.only
042.204	Rear Bottom Fan Fail	IOT	NOHAD	Input			High/Low	Rear Bottom Fan rotation state detection
042.205	IBT Fan Fail	IOT	NOHAD	Input			High/Low	IBT Fan rotation state detection. Low speed only.



**Table 9 IOT Drives/Fans Chain 42 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
042.206	MHVPS Fan Fail	IOT	NOHAD	Input			High/Low	HV Fan rotation state detection
042.207	Process 2 Fan Fail	IOT	NOHAD	Input			High/Low	Process 2 Fan rotation state detection
042.208	LVPS Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	LVPS Exhaust Fan rotation state detection.
042.209	Cartridge Fan Fail	IOT	NOHAD	Input			High/Low	
042.210	Process 1 Fan Fail	IOT	NOHAD	Input			High/Low	
042.211	Suction Fan Fail	IOT	NOHAD	Input			High/Low	
042.213	C Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	
042.214	IH Intake Fan Fail	IOT	NOHAD	Input			High/Low	
042.215	IH Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	
042.216	LH Fan Fail	IOT	NOHAD	Input			High/Low	

**Table 10 IOT LED Print Head Chain 61 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
061-001	LPH Forced On C in 100%	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern of C in set to 100%
061-002	LPH Forced On Light Cin 50%	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern of C in 50%.
061-003	LPH Forced Light Line Evaluation	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern for streaks evaluation
061-004	LPH Forced Light Thyristor only	IOT	IOT	Output		None	On/Off	Thyristor transfer only performed.

**Table 11 IIT Scanner Chain 62 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
062-002	Exposure Lamp	IIT	Scanner	Output		300 sec	On/Off	Can stop before time out time.
062-018	Carriage Home Sensor	IIT	Scanner	Input		None	High/Low	High = Carriage Home
062-019	Platen Down Sensor	IIT	Scanner	Input		None	High/Low	High =Platen Down
062-022	DADH Hotline Detect	IIT	Scanner	Input	Can stack with DADH Active Hotline	None	High/Low	High = Hotline Active
062-023	Carriage Move Home	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves carriage to the home position
062-024	Carriage Move Doc Size	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to Document Size sensing position
062-025	Carriage Move CVT	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to CVT position
062-026	Carriage Move A Pos	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position A
062-027	Carriage Move B Pos	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position B
062-028	Carriage Move C Pos	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position C
062-251	Document Size Sensor 1	IIT	Scanner	Input		None	High/Low	High = Paper
062-253	Document Size Sensor 2	IIT	Scanner	Input		None	High/Low	High = Paper

**Table 11 IIT Scanner Chain 62 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
062-301	Angle sensor	IIT	Scanner	Input		None	High/Low	Angle sensor

**Table 12 Tray 1 Chain 71 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
071.001	#1 Feed Motor (CW2) feed direction	IOT	Media	Output	071.002 thru 071.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
071.002	#1 Feed Motor (CCW2) lift up direction	IOT	Media	Output	071.001, 071.003, 071.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
071.003	#1 Feed Motor (CW1-2) feed direction	IOT	Media	Output	071.001, 071.002, 071.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
071.004	#1 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	071.002 thru 071.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
071.101	#1 No Paper Sensor	IOT	Media	Input		None	High/Low	
071.102	#1 Level Sensor	IOT	Media	Input		None	High/Low	
071.104	#1 Tray Paper Size Switch	IOT	Media	Input		None	High/Low	T Size digit
071.105	#1 Pre Feed Sensor	IOT	Media	Input		None	High/Low	

**Table 13 Tray 2 Chain 72 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
072.001	#2 Feed Motor (CW2) feed direction	IOT	Media	Output	072.002, 072.003, 072.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
072.002	#2 Feed Motor (CCW2) lift up direction	IOT	Media	Output	072.001, 072.003, 072.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
072.003	#2 Feed Motor (CW1-2) feed direction	IOT	Media	Output	072.001, 072.002, 072.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.

**Table 13 Tray 2 Chain 72 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
072.004	#2 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	072.001, 072.002, 072.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
072.101	#2 No Paper Sensor	IOT	Media	Input	072-102 thru 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.102	#2 Level Sensor	IOT	Media	Input	072.101, 072.103 thru 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.103	#2 Feed Out Sensor	IOT	Media	Input	072-101, 072.102, 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.104	#2 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.103, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	T size digit

**Table 14 Tray 3 Chain 73 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
073.001	#3 Feed Motor (CW2) feed direction	IOT	Media	Output	073.002 thru 073.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
073.002	#3 Feed Motor (CCW2) lift up direction	IOT	Media	Output	073.001, 073.003, 073.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0 pps and stops.
073.003	#3 Feed Motor (CW1-2) feed direction	IOT	Media	Output	073.001, 073.002, 073.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
073.004	#3 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	073.001, 073.002, 073.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
073.101	#3 No Paper Sensor	IOT	Media	Input	072.101 thru 072.104, 073.102 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	

**Table 14 Tray 3 Chain 73 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
073.102	#3 Level Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101, 073.103 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.103	#3 Feed Out Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101, 073.102, 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.104	#3 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.105	#3 Pre Feed Sensor (TTM Only)	IOT	Media	Input		None	High/Low	In SM but in BSD

**Table 15 Tray 4 Chain 74 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
074.001	#4 Feed Motor (CW2) feed direction	IOT	Media	Output	074.002 thru 074.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
074.002	#4 Feed Motor (CCW2) lift up direction	IOT	Media	Output	074.001, 074.003, 074.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
074.003	#4 Feed Motor (CW1-2) feed direction	IOT	Media	Output	074.001, 074.002, 074.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
074.004	#4 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	074.001 thru 074.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
074.101	#4 No Paper Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.102 thru 073.104, 077.036	None	High/Low	
074.102	#4 Level Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.103, 073.104, 077.036	None	High/Low	
074.103	#4 Feed Out Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.102, 073.104, 077.036	None	High/Low	
074.104	#4 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.102, 073.103, 077.036	None	High/Low	

**Table 15 Tray 4 Chain 74 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
074.105	#4 Pre Feed Sensor (TTM Only)	IOT	Media	Input		None	High/Low	In SM but in BSD

**Table 16 Tray 5 Bypass Chain 75 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
075.001	MSI Feed Motor 2 phase CW2 Feed	IOT	Media	Input		None	High/Low	
075.002	MSI Feed Motor 2 phase CCW2 Nudger	IOT	Media	Input		None	High/Low	
075.003	MSI Feed Motor CW1-2	IOT	Media	Output	075.001, 075.002, 075.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
075.004	MSI Feed Motor CCW1-2	IOT	Media	Output	075.001 thru 075.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to Opps and stops.
075-101	MSI No Paper Sensor	IOT	Media	Input		None	High/Low	
075-102	MSI Nudger Position Sensor	IOT	Media	Input		None	High/Low	

**Table 17 IOT Media Path Chain 77 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
077.001	Take away Clutch	IOT	Media	Output		None	On/Off	Turn on Take Away Clutch I/OTA Clutch (Doubled as TA Clutch for MSI). Component Able to drive with #1 Take Away Roll or MSI Take Away Roll by combining with Main Drive Motor 042-XXX.
077.002	Regi Clutch	IOT	Media	Output		None	On/Off	Turn on Regi Clutch I/OTA Clutch (Doubled as TA Clutch for MSI), Component able to drive with Regi Roll by combining with Main Drive Motor 042-XXX.
077.003	Exit Gate Solenoid	IOT	Media	Output		None	On/Off	Exit Gate Switching Heavy current for 110mm/sec after paper pulling start, then change to low current Off: output to Exit 1 On: output to Exit 2 I/O Exit Gate Solenoid.
077.004	Face Up Gate Solenoid	IOT	Media	Output		None	On/Off	Exit Up Gate Switching Heavy current for 110mm/sec after paper pulling start, then change to low current Off: output to Exit 2 On: output to Face Up Tray I/O Face Up Gate Solenoid.
077.030	TM T/A Clutch	IOT	Media	Output		None	On/Off	In SM, but not in BSDs
077.031	TM T/A Motor - Low	IOT	Media	Output		None	On/Off	Low Speed Only
077.032	TM Feed Ready Signal	IOT	Media	Output		None	On/Off	
077.033	IOT Regi Stop Signal	IOT	Media	Output		None	On/Off	

**Table 17 IOT Media Path Chain 77 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
077.034	IOT Feed On Signal	IOT	Media	Output		None	On/Off	
077.035	TM T/A Motor1 Full Speed High	IOT	Media	Output		None	On/Off	High Speed Only
077.036	TM T/A Motor1 Half Speed High	IOT	Media	Output		None	On/Off	High Speed Only
077.037	TM T/A Motor2 Full Speed High TTM only	IOT	Media	Output		None	On/Off	High Speed Only
077.038	TM T/A Motor2 Half Speed High TTM only	IOT	Media	Output		None	On/Off	High Speed Only
077.040	#2 OCT Motor CW1-2 Mode	IOT	Media	Output	077.041	None	On/Off	
077.041	#2 OCT Motor CCW1-2 Mode	IOT	Media	Output	077.040	None	On/Off	
077.042	#1 OCT Motor CW1-2 Mode	IOT	Media	Output	077.043	None	On/Off	
077.043	#1 OCT Motor CCW1-2 Mode	IOT	Media	Output	077.042	None	On/Off	
077.045	#2 OCT Motor CW 1-2 phase excitation	IOT	Media	Output		None	On/Off	
077.046	#2 OCT Motor CCW 1-2 phase excitation	IOT	Media	Output		None	On/Off	
077.047	#2 OCT Motor CW 2 phase excitation	IOT	Media	Output		None	On/Off	In SM but not BSDs
077.048	#2 OCT Motor CCW 2 phase excitation	IOT	Media	Output		None	On/Off	
077.050	Take away motor 1-2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.060	Exit2 Drive Motor 1-2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.061	Exit2 Drive Motor 1-2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.062	Exit2 Drive Motor 2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.063	Exit2 Drive Motor 2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.071	Duplex Drive Motor 1-2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.073	Duplex Drive Motor 2 phase CW2 reverse.	IOT	Media	Output		None	On/Off	
077.100	#2 Exit Sensor	IOT	Media	Input		None	High/Low	
077.101	#1 Exit Sensor	IOT	Media	Input		None	High/Low	
077.102	POB Sensor	IOT	Media	Input		None	High/Low	
077.103	Regi sensor	IOT	Media	Input		None	High/Low	
077.104	MSI Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.105	#2 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.106	#3 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.107	#4 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.108	Duplex Path sensor	IOT	Media	Input		None	High/Low	
077.109	#1 OCT Home Position Sensor	IOT	Media	Input		None	High/Low	
077.110	#2 OCT Home Position Sensor	IOT	Media	Input		None	High/Low	
077.120	IOT Feed Ready Signal	IOT	Media	Input		None	High/Low	Feed Ready Signal OFF/On Detection
077.121	TM Regi Stop Signal	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104	None	High/Low	Regi Stop Signal OFF/On Detection
077.123	TM Feed On Signal	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	Feed On Signal OFF/On Detection
077.124	Full Stack Sensor 1	IOT	Media	Input		None	High/Low	In SM but not BSDs
077.125	Full Stack Sensor 2	IOT	Media	Input		None	High/Low	In SM but not BSDs

**Table 17 IOT Media Path Chain 77 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
077-201	Face Up Tray Detect Switch	IOT	Media	Input		None	High/Low	
077-300	Left Hand Cover Interlock switch	IOT	Media	Input		None	High/Low	
077-302	Left Hand High Cover Switch	IOT	Media	Input		None	High/Low	
077-303	Front Interlock Switch	IOT	Media	Input		None	High/Low	
077-305	Duplex Cover Switch	IOT	Media	Input		None	High/Low	
077-306	TM Left Hand Interlock switch	IOT	Media	Input		None	High/Low	
077-307	IBT Cover Switch	IOT	Media	Input		None	High/Low	

**Table 18 HCF Chain 78 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
078-003	HCF1 Feed Motor - Feed direction	IOT	HCF1	Output		None	On/Off	Rotate motor at frequency of 2320PPS(307.5mm/s) in feed direction. I/O HCF1 Feed Motor I/O HCF1 Feed Motor Direction I/O HCF1 Feed Motor Low I/O HCF1 Feed Motor Clock
078-004	HCF1 Feed Motor - Lift Up	IOT	HCF1	Output		None	On/Off	Rotates motor at 450mm/s in lift direction. Rotates only when HCF1 Tray Level Sensor is OF does not rotate when HCF1 Tray Level Sensor is ON or when HCF1 Tray In Sensor is OFF I/O HCF1 Feed Motor I/O HCF1 Feed Motor Direction I/O HCF1 Feed Motor Low I/O HCF1 Feed Motor Clock I/O HCF1 Level Sensor I/O HCF1 Tray In Sensor.
078-096	HCF1 T/A Motor On 400mm/sec	IOT	HCF1	Output		None	On/Off	Drive HCF1 T/A Roll at 400mm/s I/O HCF1 T/A Motor I/O HCF1 T/A Motor Low I/O HCF1 T/A Motor Clock
078.100	HCF1 Pre Feed Sensor	IOT	HCF1	Input		None	High/Low	
078.101	HCF1 Feed Out Sensor	IOT	HCF1	Input		None	High/Low	
078.200	HCF1 No Paper Sensor	IOT	HCF1	Input		None	High/Low	
078.201	HCF1 Level Sensor	IOT	HCF1	Input		None	High/Low	
078.202	HCF1 Size Sensor A	IOT	HCF1	Input		None	High/Low	
078.203	HCF1 Size Sensor B	IOT	HCF1	Input		None	High/Low	
078.204	HCF1 Tray in Sensor	IOT	HCF1	Input		None	High/Low	
078.300	HCF1 Transport Interlock	IOT	HCF1	Input		None	High/Low	
078.301	HCF1 Side Out Switch	IOT	HCF1	Input		None	High/Low	

**Table 19 MOB Chain 89 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
089.001	MOB LED: Low power	IOT	Xerographic	Output	089.002	None	On/Off	MOB LED On Low Power. Control all LED's used as diffuse light for MOB In/Out
089.002	MOB LED: High power	IOT	Xerographic	Output	089.001	None	On/Off	MOB LED On High Power. Control all LED's used as diffuse light for MOB In/Out

**Table 20 IOT Xerographics Chain 91 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
091.001	BCR DC Y	IOT	Xerographic	Output	091.009, 091.010, 091.044, 091.045	None	On/Off	Output value set at top speed: NVM BCR_DC_OUT Y 752-xxx
091.002	BCR DC M	IOT	Xerographic	Output	091.009, 091.011, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM 752-xxx
091.003	BCR DC C	IOT	Xerographic	Output	091.009, 091.012, 091.047, 091.048	None	On/Off	Output value set at top speed. NVM 752-xxx
091.004	BCR DC K	IOT	Xerographic	Output	091.009, 091.013, 091.047, 091.048	None	On/Off	Output value set at top speed NVM 752-xxx
091.005	BCR AC Y	IOT	Xerographic	Output	091.009, 091.010, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #Y_BCR AC 121 Out 751-xxx Frequency: NVM PWM 121/79 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/79 Clock Ratio 751-xxx
091.006	BCR AC M	IOT	Xerographic	Output	091.009, 091.011, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #M_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/175 Clock Ratio 751-xxx
091.007	BCR AC C	IOT	Xerographic	Output	091.009, 091.012, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #C_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: [NVM]BCR AC 121/175 Clock Ratio 751-xxx
091.008	BCR AC K	IOT	Xerographic	Output	091.009, 091.013, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #K_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/175 Clock Ratio 751-xxx
091.009	BCR DC/AC YMCK	IOT	Xerographic	Output	091.001 thru 091.013, 091.047	None	On/Off	Output value set at top speed Perform the following complex component. Component BCR DC Y/M/C/K 091.001 to 004 Component BCR AC Y/M/C/K 091.005 to 008
091.010	BCR DC/AC Y	IOT	Xerographic	Output	091.001, 091.005, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC Y 091.001 Component BCR AC Y 091.005



**Table 20 IOT Xerographics Chain 91 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
091.011	BCR DC/AC M	IOT	Xerographic	Output	091.002, 091.006, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC M 091.002 Component BCR AC M 091.006.
091.012	BCR DC/AC C	IOT	Xerographic	Output	091.003, 091.007, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC C 091.003 Component BCR AC C 091.007
091.013	BCR DC/AC K	IOT	Xerographic	Output	091.004, 091.008, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component] BCR DC K (091.004 Component] BCR AC K 091.008
091.014	Drum YMC Drum K IBT Motor 79 speed	IOT	Xerographic	Output	091.015 thru 091.048	None	On/Off	Low Speed Only 7830/35. Set to 175mm/sec according to combination of I/O Clock: NVM 741.001:IBT Motor seed fine-tuning for 175mm/sec. NVM 741-005:Drum YMC Motor seed fine-tuning for 175mm/sec. NVM 741-0012:Drum K Motor seed fine-tuning for 175mm/sec
091.015	Drum YMC Drum K IBT Motor 121 speed	IOT	Xerographic	Output	091.014, 091.016 thru 091.048	None	On/Off	Set to 121mm/sec according to combination of I/O Clock: NVM 741-002:IBT Motor seed fine-tuning for 121mm/sec NVM 741-007:Drum YMC Motor seed fine-tuning for 121mm/sec NVM 741-0014:Drum K Motor seed fine tuning for 121mm/sec
091.016	Drum YMC Drum K IBT Motor 175 speed	IOT	Xerographic	Output	091.014, 091.015, 091.017 thru 091.048	None	On/Off	Set to 79mm/sec according to combination of I/O Clock: NVM 741-003:IBT Motor seed fine-tuning for 79mm/sec NVM 741-009:Drum YMC Motor seed fine-tuning for 79mm/sec NVM 741-0016:Drum K Motor seed fine-tuning for 79mm/sec
091.017	Drum YMC K IBT Motor 200 speed	IOT	Xerographic	Output	091.014 thru 091.016, 091.018 thru 091.048	None	On/Off	
091.018	Drum YMC Drum K IBT Motor 225 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.019 thru 091.048	None	On/Off	Set to 175mm/sec according to combination of I/O Clock: NVM 741-001:IBT Motor seed fine-tuning for 175mm/sec NVM 741-0012:Drum K Motor seed fine-tuning for 175mm/sec
091.019	Drum Motor IBT Motor YMC 121 Reverse speed	IOT	Xerographic	Output	091.014 thru 091.018, 091.020 thru 091.048	None	On/Off	Set to 121mm/sec according to combination of I/O Clock: NVM 741-002:IBT Motor seed fine-tuning for 121mm/sec NVM 741-0014:Drum K Motor seed fine-tuning for 121mm/sec
091.020	Drum Motor IBT Motor K 79 speed	IOT	Xerographic	Output	091.014 thru 091.019, 091.021 thru 091.048	None	On/Off	Set to 79mm/sec according to combination of I/O Clock NVM 741-003: IBT Motor seed fine-tuning for 79mm/sec NVM 741-016:Drum K Motor seed fine-tuning for 79mm/sec. Low Speed mach 7830/35 only.
091.021	Drum Motor IBT K 121 speed	IOT	Xerographic	Output	091.014 thru 091.020, 091.029 thru 091.048	None	On/Off	

**Table 20 IOT Xerographics Chain 91 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
091.022	Drum YMC Motor K 175 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.023 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 175_1 according to combination of I/O Clock NVM 741-005:Drum YMC Motor speed fine tuning for 175_2
091.023	Drum YMC Motor K 200 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022, 091.024 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 175_2 according to combination of I/O Clock NVM 741-006:Drum YMC Motor speed fine tuning for 175_2
091.024	Drum Motor IBT K 225 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022, 091.023, 091.025 thru 091.028, 091.042 thru 091.048	None	On/Off	NVM 741-007:Drum YMC Motor speed fine tuning for 121_1
091.025	Drum Motor IBT K 121 speed reverse	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.024, 091.026 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 121_2 according to combination of I/O Clock NVM 741-008:Drum YMC Motor speed fine tuning for 121_2
091.026	Drum YMC Motor 79_1 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.025, 091.027 thru 091.028, 091.042 thru 091.048	None	On/Off	Low Speed Only. Set to 79_1 according to combination of I/O Clock NVM 741-009:Drum YMC Motor speed fine tuning for 79_1
091.027	Drum YMC Motor 121_1 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.026, 091.028, 091.042 thru 091.048	None	On/Off	Low Speed Only. Set to 79_2 according to combination of I/O Clock NVM 741-010:Drum YMC Motor speed fine tuning for 79_2
091.028	Drum YMC Mot 175_1 speed	IOT	Xerographic	Output		None	On/Off	Low Speed Only 7830/35.
091.029	Drum YMC Motor 200_1 speed	IOT	Xerographic	Output		None	On/Off	
091.030	Drum YMC motor 225_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029, 091.031 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 175_2 according to combination of I/O Clock NVM 741-013:Drum K Motor speed fine tuning for 175_2
091.031	Drum YMC motor reverse on	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.030, 091.032 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 121_1 according to combination of I/O Clock NVM 741-014:Drum K Motor speed fine tuning for 121_1
091.032	K Drum motor 79_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.030, 091.032 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 121_2 according to combination of I/O Clock NVM 741-015:Drum K Motor speed fine tuning for 121_2 Low Speed only.
091.033	K Drum motor 121_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.032, 091.034 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 79_1 according to combination of I/O Clock NVM 741-016:Drum K Motor speed fine tuning for 79_1
091.034	K Drum motor 175_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.033, 091.035, 091.042 thru 091.048	None	On/Off	Set to 79_2 according to combination of I/O Clock NVM 741-017:Drum K Motor speed fine tuning for 79_2
091.035	Drum K motor 200_1 speed	IOT	Xerographic	Output		None	On/Off	
091.036	Drum K motor 255_1 speed	IOT	Xerographic	Output		None	On/Off	
091.037	K Drum motor reverse on	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	
091.038	Erase Lamp Y	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	
091.039	Erase Lamp M	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	

**Table 20 IOT Xerographics Chain 91 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
091.040	Erase Lamp C	IOT	Xerographic	Output	091.036 thru 091.039, 091.042 thru 091.048	None	On/Off	Perform following complex component. Component ERASE LAMP Y 091-xxx Component ERASE LAMP M 091-xxx Component ERASE LAMP C 091-xxx Component ERASE LAMP K 091-xxx
091.041	Erase Lamp K	IOT	Xerographic	Output	091.047, 091.048	None	On/Off	
091.042	Erase Lamp YMCK	IOT	Xerographic	Output	091.014 thru 091.040, 091.043 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-008: Drum YMC Motor speed fine tuning for 121_3,and by NVM 741 015: Drum K Motor speed fine tuning for 121_3, and IBT motor operates at process speed of 121mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.043	Agitator Motor	IOT	Xerographic	Output	091.014 thru 091.040, 091.042, 091.044 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-008: Drum YMC Motor speed fine tuning for 121_3,and by NVM 741 015: Drum K Motor speed fine tuning for 121_3, and IBT motor operates at process speed of 79mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.044	CF Leak Recovery	IOT	Xerographic	Output	091.014 thru 091.040, 091.042, 091.043, 091.045 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-010: Drum YMC Motor speed fine tuning for 79_3,and by NVM 741 017: Drum K Motor speed fine tuning for 79_3, and IBT motor operates at process speed of 121mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.045	CRU CHG Agitator	IOT	Xerographic	Output	091.014 thru 091.040, 091.042 thru 091.044, 091.046 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-010: Drum YMC Motor speed fine tuning for 79_3,and by NVM 741 017: Drum K Motor speed fine tuning for 79_3, and IBT motor operates at process speed of 79mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and then turn off at the same time in NVM sec (drum refresh time)
091.200	Bottle Position SNR	IOT	Xerographic	Input		None	High/ Low	
091.201	Bottle Full SNR	IOT	Xerographic	Input		None	High/ Low	

Table 20 IOT Xerographics Chain 91 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
091.202	SNR Photo	IOT	Xerographic	Input		None	High/ Low	

Table 21 IOT ADC Chain 92 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
092.001	ADC specular	IOT	Develop	Output		None	On/Off	Turn On the ADC Mirror LED.
092.002	ADC Diffuse	IOT	Develop	Output		None	On/Off	Turn On the ADC Diffusion LED.
092.003	ADC shutter open	IOT	Xerographic	Output		100 msec	On/Off	<b>CAUTION</b> After executing this test, close the ADC Shutter with 092.004. Otherwise, the ADC Sensor may be contaminated. ADC shutter is automatically closed when printing.
092.004	ADC shutter close	IOT	Xerographic	Output		100 msec	On/Off	Use this code to close the ADC Shutter.

Table 22 IOT Developer Drive Chain 93 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
093.001	Toner motor Y at 79mm/sec	IOT	Develop	Output	093.002, 93.003	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.002	Toner motor Y at 121mm/sec	IOT	Develop	Output	093.001, 93.003	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.003	Toner motor Y at 175mm/sec	IOT	Develop	Output	093.001, 93.002	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.004	Toner motor Y at 200mm/sec	IOT	Develop	Output	093.005, 93.006	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.005	Toner motor Y at 225mm/sec	IOT	Develop	Output	093.004, 93.006	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.006	Toner motor M at 79mm/sec	IOT	Develop	Output	093.004, 93.005	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.007	Toner motor M at 121mm/sec	IOT	Develop	Output	093.008, 93.009	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.008	Toner motor M at 175mm/sec	IOT	Develop	Output	093.007, 93.009	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.009	Toner motor M at 200mm/sec	IOT	Develop	Output	093.007, 93.008	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.010	Toner motor M at 225mm/sec	IOT	Develop	Output	093.011, 93.012	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.011	Toner motor C at 79mm/sec	IOT	Develop	Output	093.010, 93.012	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.012	Toner motor C at 121mm/sec	IOT	Develop	Output	093.010, 93.011	10 sec	On/Off	
093.013	Toner motor C at 175mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT Y 752-XXX
093.014	Toner motor C at 200mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT M 752-XXX
093.015	Toner motor C at 225mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT C 752-XXX
093.016	Toner motor K at 79mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT K 752-XXX
093.017	Toner motor K at 121mm/sec	IOT	Develop	Output			On/Off	Output value NVM YMC DEVE AC 121 Duty 752-XXX
093.018	Toner motor K at 175mm/sec	IOT	Develop	Output			On/Off	Output value NVM K DEVE AC 121 Duty 752-XXX
093.019	Toner cartridge motor _ K at 200mm/sec	IOT	Develop	Output			On/Off	
093.020	Toner cartridge motor _ K at 225mm/sec	IOT	Develop	Output			On/Off	
093.021	Toner cartridge motor _ K at 255mm/sec	IOT	Develop	Output			On/Off	
093.022	Developer YMC Motor 121mm/s	IOT	Develop	Output			On/Off	

**Table 22 IOT Developer Drive Chain 93 Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
093.023	Developer YMC Motor 175mm/s	IOT	Develop	Output			On/Off	
093.024	Developer YMC Motor 200mm/s	IOT	Develop	Output			On/Off	
093.025	Developer YMC Motor 225mm/s	IOT	Develop	Output			On/Off	
093.026	Developer YMC Motor 255mm/s	IOT	Develop	Output			On/Off	
093.027	Developer Bias DC Minus Y	IOT	Develop	Output			On/Off	
093.028	Developer Bias DC Minus M	IOT	Develop	Output			On/Off	
093.029	Developer Bias DC Minus C	IOT	Develop	Output			On/Off	
093.030	Developer Bias DC Minus K	IOT	Develop	Output			On/Off	
093.031	Developer Bias AC-YMC	IOT	Develop	Output			On/Off	
093.032	Developer Bias AC-K	IOT	Develop	Output			On/Off	

**Table 23 IOT Transfer Belt Component Control Codes**

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
094.001	2nd BTR (-)	IOT	Develop	Output	094.002	None	On/Off	2nd BTR negative Bias Output.
094.002	2nd BTR (+)	IOT	Develop	Output	094.001	None	On/Off	2nd BTR positive Bias Output.
094.003	2nd BTR contact	IOT	Develop	Output	094.004	None	On/Off	Automatically stops at contact position detected by 2nd BTR retract sensor.
094.004	2nd BTR retract	IOT	Develop	Output	094.003	None	On/Off	Automatically stops at contact position detected by 2nd BTR retract sensor.
094.005	IBT Motor On 79mm/s	IOT	Develop	Output	094.006 thru 094.008	None	On/Off	IBT motor rotation at process speed of 79mm/s Low Speed mach 7830/35only
094.006	IBT Motor On 121mm/s	IOT	Develop	Output	094.005, 094.007, 094.008	None	On/Off	IBT motor rotation at process speed of 121mm/s
094.007	IBT Motor On 175mm/s	IOT	Develop	Output	094.005, 094.006, 094.008	None	On/Off	IBT motor rotation at process speed of 175mm/s
094.008	IBT Motor On 200mm/s	IOT	Develop	Output	094.005 thru 094.007	None	On/Off	IBT motor rotation at process speed of 200mm/s
094.009	IBT Motor On 225mm/s	IOT	Develop	Output	094.010, 010.001 thru 010.004	None	On/Off	Turn on fuser motor at 60.5 mm/s and retract 1st BTR. 1st BTR stops at contact position detected by 1st BTR retract sensor, and fuser motor stops.
094.010	IBT Motor On 255mm/s	IOT	Develop	Output	094.009, 010.001 thru 010.004	None	On/Off	Turn on fuser motor at 60.5 mm/s and contact 1st BTR. 1st BTR stops at retract position detected by 1st BTR retract sensor, and fuser motor stops.
094.011	IBT Motor Reverse On	IOT	Develop	Output		None	On/Off	
094.012	1st BTR Contact	IOT	Develop	Output		None	On/Off	
094.013	1st BTR Retract	IOT	Develop	Output		None	On/Off	
094.200	1st BTR retract sensor	IOT	Develop	Input		None	High/Low	
094.201	2nd BTR retract sensor	IOT	Develop	input		None	High/Low	
094.202	POB Jam Sensor	IOT	Develop	Input		None	High/Low	

## dc361 NVM Save and Restore

### Purpose

Provides a method to capture the state of NVM to a file and write NVM file back to the NVM device when desired.

### Procedure

#### CAUTION

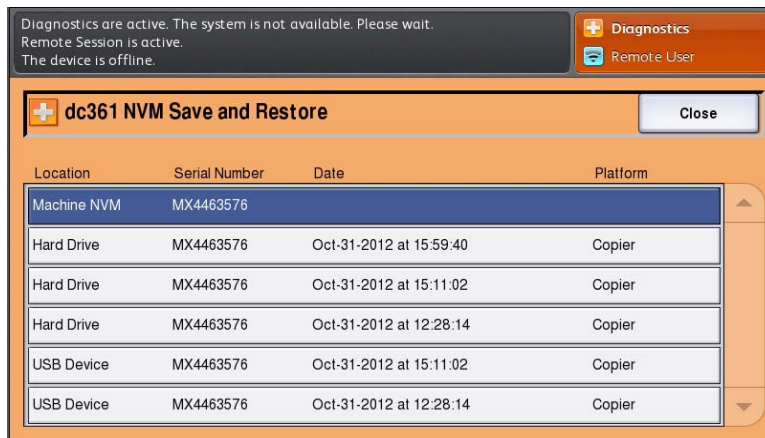
*In this procedure it is important to follow the steps in order, read and understand all notes, and perform all actions correctly for each step. Failure to do so may result in saving an old and/or incorrect NVM file and then inadvertently reloading it when NVM is restored.*

**NOTE:** The NVM Save and Restore process does not write or read directly from a USB drive to the NVM in the machine. Instead, for NVM save, the NVM data files are first saved to the hard drive, then, if necessary, transferred to the USB drive. For NVM restore when an AltBoot or Forced AltBoot has been performed, the files are first copied to the hard drive from the USB drive, then written to the various NVM locations in the machine.

**NOTE:** Always save NVM data to a USB drive if you are going to perform an AltBoot or Forced AltBoot. Performing AltBoot or Forced AltBoot will delete all data from the Hard Drive

#### To Save NVM

1. Enter the **UI Diagnostic (CSE) Mode**.
2. If you are saving to a USB drive, connect your USB drive to one of the USB ports on the machine.
3. Select the **Adjustments tab**.
4. Select **dc361 NVM Save and Restore**. The dc361 NVM Save and Restore window opens (Figure 1)



Location	Serial Number	Date	Platform
Machine NVM	MX4463576		
Hard Drive	MX4463576	Oct-31-2012 at 15:59:40	Copier
Hard Drive	MX4463576	Oct-31-2012 at 15:11:02	Copier
Hard Drive	MX4463576	Oct-31-2012 at 12:28:14	Copier
USB Device	MX4463576	Oct-31-2012 at 15:11:02	Copier
USB Device	MX4463576	Oct-31-2012 at 12:28:14	Copier

Figure 1 dc361 NVM Save and Restore

**NOTE:** The top line represent the data stored in the various NVM PWBs and chips in the machine. Subsequent lines represent the data stored on the hard drive and USB drive. Each time NVM is saved to the hard drive a new file is created on the hard drive. Each file shows up as a separate line in the window and each has a unique date and time. Unless the hard drive is replaced, or an AltBoot or Forced AltBoot is done, these files will remain and be listed each time dc361 is accessed. The USB Device lines are always listed at the bottom.

5. Touch the **Machine NVM** line. A popup menu will open.
6. Select **Save to Hard Drive** from the popup menu.
7. New line(s) will be added to the screen in date and time order.
8. If it is necessary to copy the NVM files to a USB drive, touch the **Hard Drive** line from the save you just made. A popup menu will open.
9. Select **Copy to USB Device** from the popup menu.

#### To Restore NVM

1. Enter the **UI Diagnostic (CSE) Mode**.
2. If you are restoring from a USB drive, connect your USB Drive to one of the USB ports on the machine.
3. Select the **Adjustments tab**.
4. Select **dc361 NVM Save and Restore**. The dc361 NVM Save and Restore window opens (Figure 1)

**NOTE:** The top line represent the data stored in the various NVM PWBs and chips in the machine. Subsequent lines represent the data stored on the hard drive and USB drive. Each time NVM is saved to the hard drive a new file is created on the hard drive. Each file shows up as a separate line in the window and each has a unique date and time. Unless the hard drive is replaced, or an AltBoot or Forced AltBoot is done, these files will remain and be listed each time dc361 is accessed. The USB Device lines are always listed at the bottom.

5. If you are restoring from the hard drive only, skip to step 9.
6. Touch the **USB Device** line. A popup menu will open.
7. Select **Copy to Hard Drive** from the popup menu.
8. New line(s) may be added to the screen in date and time order.
9. Touch the **Hard Drive** line corresponding to either the save made previously, or to the copy just made from the USB drive. A popup menu will open.
10. Select **Restore Machine NVM** from the popup menu.

**NOTE:** You must switch power off and on before the restored data will be available to the machine.

# dC603 Image Size Adjustment

## Purpose

The purpose of the dc603 Image Size Adjustment Routine is to compensate for minor variations in machine speed which result in process direction elongation or compression of the image placed on the media. Compensation of process direction image size offset shall be approximately +/- 1.0mm over a 200mm length on the test pattern image.

## Initial Actions

### Check

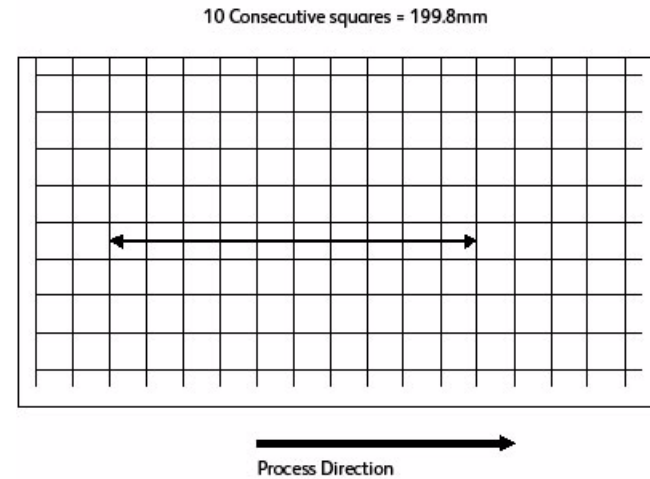
1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dc603 Image Size Adjustment**. The Image Size Adjustment screen will be displayed.
4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
5. Select output color. (Default Color)
6. Select Print Sample.
7. Check the measured value in process direction of 10 grid squares. The results should be 199.8 mm as in **Figure 1**. If the desired result is not achieved continue with this procedure.

### Procedure

**NOTE:** • Total range of adjustment (-1.0mm to +1.0mm). The actual range of adjustment is limited by the current setting or default value of NVM. Refer to **Table 1**.

- Successful adjustment is indicated with a message.
- Failure to adjust the Image Size (% Offset) is indicated by a message informing of the failure. Failure messages require a user response to close the message.
- A typical reason that the image size% offset fails to adjust is because the value being written exceeds the narrow NVM range.

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dc603 Image Size Adjustment**. The Image Size Adjustment screen will be displayed.
4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
5. Select output color. (Default Color)
6. Select Print Sample.
7. Follow the directions at the UI.



**Figure 1 Image Size Adjustment Check**

**Table 1 Size Adj.**

dC603 Image Size Adjustments (Slow Scan%)							
Chain	Link	Description	Model Speed	Speed	Media	Range	Default
760	070	79mm/sec Slow Scan direction Enlargement Offset	Low	79	Extra Heavyweight	-10 to +10	Low 2
760	071	121mm/sec Slow Scan direction Enlargement Offset	Both	121	Extra Heavyweight for high, Heavyweight for Low, SEF plain for Low	-10 to +10	High 3 Low 0
760	072	175mm/sec Slow Scan direction Enlargement Offset	Both	175	Heavyweight for High, Plain for Low	-10 to +10	High 2 Low -2
760	073	200mm/sec Slow Scan direction Enlargement Offset	High	200		-10 to +10	High -2
760	074	225mm/sec Slow Scan direction Enlargement Offset	High	225		-10 to +10	High -3
760	075	255mm/sec Slow Scan direction Enlargement Offset	High	255	Plain for High	-10 to +10	High -3
760	076	Special Paper Slow Scan direction Enlargement Offset				-10 to +10	High 0 Low 0

## dC608 Document Feeder Registration

### Purpose

This feature checks the registration of the document feeder and corrects any misalignments. The process runs automatically and does not require any user intervention other than inserting three blank sheets in the document feeder.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dC608 Document Feeder Registration**.  
The screen displays the current registration values
4. Insert 3 blank A4 (or 8.5 x 11 inch) white sheets, SEF, into the document feeder.
5. Ensure the document feeder guides are correctly adjusted.
6. Select **Start**.  
The document feeder feeds the documents.  
The screen displays the values for before and after registration.
7. Select **Close** to exit the routine.
8. Select **Call Closeout** to exit service mode

## dC609 Document Glass Registration

### Purpose

This feature checks the registration of the document glass and corrects any misalignments. The process runs automatically and does not require any user intervention other than keeping the document feeder open during the operation.

**NOTE:** High levels of ambient light illuminating the platen during this procedure can affect the accuracy of the result. Lower the DADF to 45 degrees to limit ambient light and block direct light from windows or other sources.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dC609 Document Glass Registration**.  
The screen displays the current registration values.
4. Open the document feeder and remove any paper from the document glass.  
**NOTE:** The document feeder should remain open until this procedure is complete.
5. Select **Start** to run the routine.  
The screen displays the values for before and after registration.
6. Select **Close** to exit the routine.
7. Select **Call Closeout** to exit service mode



## dC612 Test Pattern Print

### Purpose

Outputs the built-in test patterns, to help identify Image Quality problems.

### Procedure

1. Enter **UI Diagnostic (CSE) Mode**.
2. Select the **Diagnostics** tab > **dC 612 Print Test Pattern**.
3. Select a pattern from the **Test Patterns** menu.

**NOTE:** Not all of the following parameters are applicable to all test patterns; and some test patterns require a specific set of parameters. Refer to [Table 1](#).

4. Select the **Color Mode**.
5. Select the paper **Tray** to be used.

**NOTE:** If you open the paper tray to change size, but do not get a "Confirm paper tray status" screen on the UI, you must exit diagnostics in order to confirm the change. Reenter diagnostics and continue with the procedure.

6. From the **Plex Mode** drop-down menu, select simplex or duplex.
7. Select the number of **Copies** (prints) to be made.
8. Select **Start**.

### CAUTION

*Test Pattern 8 (16 Tones) will cause print deletions if run in 4 color mode. Test Pattern 9 (All Half Tone) will cause print jams if run in 3 or 4 color mode. These patterns should be run in a single color only.*

Table 1 Test Patterns

#	Description	Paper Size	Color Mode
1	90 Degree Print (90 Degree Grid)	11x17/A3	4C
2	Diagonal Print (45 Degree Grid)	11x17/A3	4C, red, blue
3	A1 Patch Pattern	11x17/A3	4C
4	B Patch Pattern	11x17/A3	4C
5	C Patch Pattern	LTR/A4 SEF	4C
6	C-TRACS Check PG	LTR/A4 SEF	4C
7	ProCon PG	LTR/A4 LEF	4C
8	16 Tone PG	LTR/A4 LEF	K, cyan, magenta, yellow, 3C
9	Full Halftone	LTR/A4 LEF	K, cyan, magenta, yellow
10	Single K Full Halftone	11x17/A3	K
11	Drum Pitch Halftone	11x17/A3	4C
12	LPH Streak Adj. chart (IOT Mounted)	11x17/A3	4C
13	LPH Streak Adj. chart (LPH Mounted)	11x17/A3	4C
14	Xtalk Test Chart (Failure Analysis)	LTR/A4 SEF	4C
15	Grid (Fold Position Adjustment)	LTR/A4 SEF	4C
16	Ladder	LTR/A4 SEF	4C

## dC640 Video Path Tests

### Purpose

Provides a method to test EPC memory, video path integrity, and SBC <-> CCs communication on the SBC PWB.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select **Diagnostics** tab.
3. Select the **POST** tab.
4. Select **dc640 Video Path Integrity...**
5. Select **Start**. For any failure, replace the SBC PWB ([PL 35.2](#)).

## dC671 RegiCon Measurement Cycle Control

### Purpose

This procedure checks and adjusts color registration.

- Performs measurement to determine the condition of the registration control.
- Checks that the Belt control etc. are operating normally.
- Measures/displays the amount of color shift relative to Black in the Fast Scan/Slow Scan direction.
- Displays the results as either **OK** or **NG**

For instructions, refer to [ADJ 9.10](#).

## dC673 RegiCon Control Sensor Check Cycle

### Purpose

This is a self-diagnostic cycle for checking that the registration detection system is operating normally. Color shift is detected using a Cyan patch. Any misregistration detected in the MOB sensor is displayed on the UI screen. This result is compared with the target value to determine the **OK** or **NG** status. Correction is not performed.

For instructions, refer to [ADJ 9.11](#).

## dC675 RegiCon Setup Cycle Control

### Purpose

This is a setup procedure to be used after replacement of the ROS, the Transfer Belt, or the IBT Assembly

For instructions, refer to [ADJ 9.10](#).

## dC710 No Paper Run

### Purpose

This routine operates all of the media feed and transport functions without actually feeding media, to enable examination of the subsystem operation.

**NOTE:** *Even though no paper is fed, Tray 1 must be loaded with 8.5 x 11 or A4 paper in order to run this routine.*

*If you open the paper tray to change size, but do not get a "Confirm paper tray status" screen on the UI, you must exit diagnostics in order to confirm the change. Reenter diagnostics and continue with the procedure.*

### Procedure

1. Enter the **Diagnostic Mode**. Refer to [UI Diagnostic \(CSE\) Mode](#).
2. Select the **Maintenance** tab.
3. Select the **Paper Path** tab (not in UI Diagnostics).
4. Select **No Paper Run (dC710)**.
5. Select Color Mode (Color or Fast Black).
6. Enter the number (1 - 99) of simulated print cycles you wish to run. Select **Start** to activate.
7. Select Stop to immediately halt the Routine.

## dC740 Tray 5 (MSI) Guide Adjustment

### Purpose

This procedure calibrates the paper size detection circuits for Tray 5.

Refer to [ADJ 7.1](#) for instructions

## dC909 Calibrate for Paper

### Purpose

Calibrate for Paper Type provides adjusts the 2nd Image Transfer Power output (ATVC) to compensate for thick or specialty media. Use [dC909](#) to correct these types of defects on simplex and duplex prints:

- Low density
- Foggy background
- Voids
- White spots

**Table 1 Relationship Between UI Classification and Paper Type (Factory Settings)**

UI Classification	Paper Type
Plain	Plain B
Hole Punched	
Transparency	
Precut Tab	
Light Card	
Light Card RL (reload)	
Card stock	
Card Reload	
Recycled	
Labels	
LW (light weight) Glossy Card	
LW Glossy Card R (reload)	
Glossy Card	
Glossy Card RL (reload)	
Letterhead	
Pre-Printed	
Bond	Plain
Heavy Labels	
Envelope	
Custom 1~7	User Defined
Other Type	
HW (heavy weight) Gloss Card	
HW Gloss Card R (reload)	
X-HW (extra heavy weight) Labels	
Heavy Card	
HW Card R (reload)	
Postcard	

## Procedure

1. Load the paper to be adjusted into the paper tray (11x17 is recommended) and change the **Paper Type Settings** to match the paper.
2. Enter the **UI Diagnostic (CSE) Mode**.
3. Select the **Adjustments** tab.
4. Select **dc909 Calibrate for Paper**. The Calibrate for Paper Adjustment screen will be displayed.
5. Select **[Paper Supply]** and select the tray containing the paper to be adjusted.
6. Select **[Paper Type]** and select the paper type that was set in Step 1.
7. Select **Test Print** to output the Test Pattern (**Figure 1**).

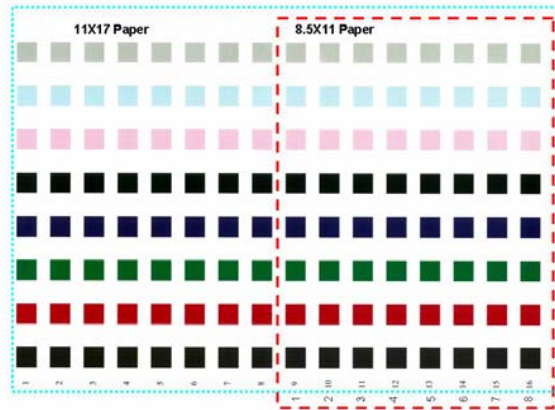


Figure 1 Test Pattern

**NOTE:** The Test Pattern is meant to be printed on 11x17"/A3 paper; portions of the pattern may be missing when printed on other sizes. LTR/ A4 LEF only shows the latter half of the pattern; although the patch number at the paper lead edge is 9, the transfer output will be printed as 1.

8. Select what you would consider as the best value from the columns (1~16) on the Test Pattern. The selection criteria are:
  - a. Whether there are any white spots in the K color patch (if there are, it indicates excessive voltage)
  - b. Whether the mixed K looks bluish (if it is, it indicates insufficient voltage)
  - c. Whether the halftone granularity is good (if it is bad, it indicates excessive voltage)
9. Select **[Type Offset]**, **Up** or **Down** buttons to raise or lower 2nd Transfer Voltage.
10. Select **Write NVM**.
11. Select **Test Print**. Verify that the desired outcome is achieved. If desired outcome is not achieved, repeat this procedure. If desired outcome is achieved, continue to step 12.
12. Select **Close** to end.

## dc919 Color Balance Adjustment

### Purpose

This procedure enables fine adjustment of the center value of the low density/medium density/high density output balance for each color for copy images.

**NOTE:** This procedure has no effect on printing output.

### CAUTION

*Do not run this procedure unless strongly requested to by the customer.*

*Ensure that the customer understands that when this procedure is completed, color balance for the Copy function will be permanently altered and can only be reset back to defaults or to previous settings by a CSE.*

Refer to [ADJ 9.12](#) for instructions.

## dC924 TRC Adjustment

### Purpose

This procedure allows you to perform a manual density adjustment. It sets an offset amount of the ADC-LUT created by the ADC patch to finely adjust the gradation.

**NOTE:** *This procedure affects both copy and print output.*

### CAUTION

*Do not run this procedure unless strongly requested to by the customer.*

*Ensure that the customer understands that when this procedure is completed, color balance for both the Copy and the Print functions will be permanently altered and can only be reset back to defaults or to previous settings by a CSE.*

Refer to [ADJ 9.13](#) for instructions.

## dC937 ProCon On/Off Print

### Purpose

This procedure prints out the Process Control Test Pattern in two different modes. The comparison between the two prints can help isolate process control-related image quality problems.

Refer to [ADJ 9.3](#) for instructions.

## dC945 IIT Calibration

### Purpose

This procedure sets the following:

- White Reference Correction Coefficient.
- IIT sensitivity dispersion (CCD Calibration).
- Platen-to-Lens-to-CCD alignment (Optical Axis)

Refer to [ADJ 6.5](#) and [ADJ 6.6](#) for instructions.

## dC949 ATC Default Developer Setup

### Purpose

*NOTE: For details, see adjustment [ADJ 9.8](#) Default Developer ATC Setup.*

## **dC950 ATC Sensor Setup**

### **Purpose**

To set the calibration values [ATC Correction Coefficient], [ATC Correction Offset] in NVM to calibrate the new ATC Sensor

Refer to [ADJ 9.7](#) for instructions.

## **dC991 Tone Up/Tone Down**

### **Purpose**

This procedure compares measured toner concentration against a target, and allows manual adjustment of TC.

Refer to [ADJ 9.14](#) for instructions.



## dC1202 Hole Position Adjustment

### Purpose

dc1202 Punch Position Adjust is used to align the hole punch position. After installation of the Punch Assembly into the LX finisher and subsequent power On, a configuration prompt appears on the UI for hole punch adjustment. This routine is typically performed by the customer in administrator mode.

**NOTE:** The distance between each hole punch in the cross process direction, on the same page, is not adjustable.

Refer to [ADJ 12.9](#) for instructions.

## dC2006 Side 1 to Side 2 Color Matching

### Purpose

The purpose of Side 1 to Side 2 Color matching is to compensate for minor variations in output color. This routine is available to users. Compensation of process direction image size offset shall be approximately +/- 1.0mm over a 200mm length on the test pattern image.

### Procedure

1. Enter the **UI Diagnostic (CSE) Mode**.
2. Select the **Adjustments** tab.
3. Select **dc2006 Color Matching**. The Color Matching screen will be displayed.
4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
5. Select output color. (Default Color)
6. Select **Print Sample**.
7. Follow the directions at the UI.

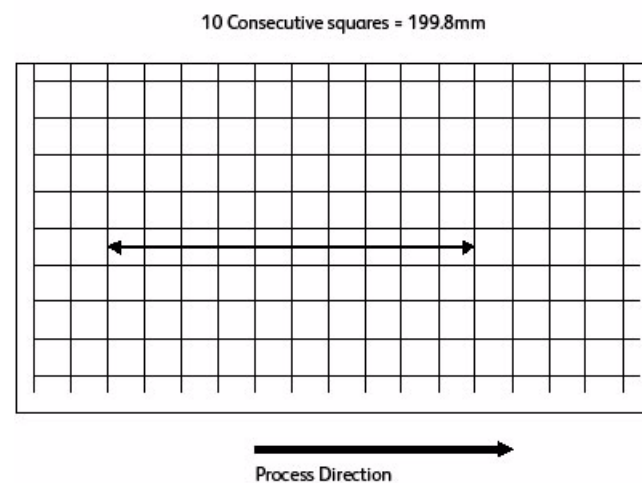


Figure 1 Color Matching Test Print

## GP 1 FAX PWB Internal Selftest

### Procedure

1. Insert a document in the DADF or place on the glass
2. Select the **Fax** feature from the **All Features** screen on the UI.
3. Enter 0000 as the phone number
4. Select **Start**. The machine will scan the document.
5. The scanned image(s) will be received by the Fax PWB from the SBC PWB. The Fax PWB sends it back to the SBC PWB which sends it to the IOT to print the scanned image.

This is a closed loop test. It does not check the phone line. It does prove that the image path in the machine is working correctly. You should end up with a copy of the scanned document with a fax header on the top of the page. It also will print a transmission report if this feature is enabled in Tools.

## GP 2 Accessing Tools

The Tools menu has four levels of access: User (walk-up), Administrator, CSE, and Diagnostics. User mode offers copy and print color calibration adjustments; Administrator mode offers a more comprehensive suite of options and CSE mode offers a subset of Administrator options. CSE mode is available if the Administrator user name and passcode are not at the default, and the Administrator is not available to enter the code. Diagnostics mode provides the CSE with access to onboard diagnostic tools.

### Accessing Tools as Administrator

1. Press the **Log in/out** button on the UI.
2. Enter the administrator User Name (default is **admin**) and select **Next**.
3. Enter the Administrator passcode (default is **1111**) and select Done. The Log In/Out button is illuminated and Admin appears in the upper right corner of the screen.

**NOTE:** Administrator mode remains active until the **Log in/out** button is pressed or the session times out. When finished, always log out of Administrator mode by pressing the **Log in/out** button and confirming logout.

4. Press the **Machine Status** button on the UI.
5. Select the **Tools** tab. The Tools menu appears.  
On the left side of the screen are several buttons for the categories of features. Within each category are **Groups** of features. Each **Group** contains one or more **Features**.
6. Select the category, then the group, then the feature.

### Accessing Tools as CSE

If administrator credentials are unknown, log in as a CSE.

1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button on the UI. Release both buttons after a few seconds.
2. On the Service Diagnostics Login screen, enter **2732**, then select **Enter**. The Log in/out button is illuminated and CSE appears in the upper right corner of the screen.

**NOTE:** CSE mode remains active until the **Log in/out** button is pressed or the session times out. When finished, always log out of CSE mode by pressing the **Log in/out** button and confirming logout.

3. Press the **Machine Status** button on the UI.
4. Select the **Tools** tab. The Tools menu appears.  
On the left side of the screen are several buttons for the categories of features. Within each category are **Groups** of features. Each **Group** contains one or more **Features**.
5. Select the category, then the group, then the feature.

**NOTE:** The Tools available in CSE mode are a subset of those available in Administrator mode.

## GP 3 Controller Boot Sequence

### Sequence

The on-screen indications of a normal bootup are:

- Switch on the power. The Flash screen appears within 10 seconds
- At approximately 45 seconds you should see the XUI start up screen
- At approximately 55 seconds, you will hear the trays initialize.
- At approximately 75 seconds, the Model Information screen appears.
- At approximately 120 seconds, the Configuration Report will print (if enabled).
- Approximate total boot time = 140 seconds for basic services. (2 min. 20 seconds)

**NOTE:** Additional installed services (like EFAX, E-mail) require additional pre-loading time (approximately 30 seconds)

## GP 5 Image Quality Calibration

This procedure details the method by which customers can calibrate the Image Quality in either Print or Copy mode.

### Procedure

**NOTE:** It is not necessary to enter SA mode (log in) in order to perform this procedure.

1. Press the **Machine Status** button on the UI.
2. Select the **Tools** tab.
3. Select **Troubleshooting**.
4. In the **Troubleshooting** Group, select **Calibration**.
5. Select either **Copy Calibration** or **Print Calibration**.
6. The steps to perform the procedure will be displayed on the UI; take care to follow the instructions exactly.

## GP 6 Printing Configuration Reports

### Purpose

This procedure describes the procedure for accessing Configuration Reports.

### Procedure

A Configuration Report can be produced in three ways:

1. Switching power off then on (if configured)
2. Through use of Centroware® Internet Services.
3. From the local UI:

**NOTE:** *It is not necessary to enter SA mode (log in) in order to perform this procedure.*

- Press the **Machine Status** button on the UI.
- Select **Machine Information** tab.
- Select **Information Pages...**
- Select **Configuration Report** and press the **Print** button.

## GP 7 Network Printing Simulation

### Purpose

This procedure details a method of troubleshooting network printing problems using a PC connected to the printer with a network crossover cable.

Depending on your operating system, follow one of the two network connection procedures provided:

- Windows XP Connection
- Windows 7 Connection

### Prerequisites

- Crossover cable and a PWS equipped with a network interface card.
- Clear Internet Explorer proxy settings.
- User software CD or driver files downloaded and extracted to a folder on the PWS.

### Clear IE Proxy Settings

The following steps will ensure that the Proxy Server Settings are correct.

1. Open **Internet Explorer**.
2. Select **Tools - Internet Options**.
3. Select the **Connections** Tab.
4. Select the **LAN Settings** box.
5. Ensure that the "Use a proxy server for your LAN" box is **un-checked**.
6. Select **OK** to close the **Local Area Network Settings** window.
7. Select **OK** to close the **Internet Options** window.
8. Close **Windows Internet Explorer**.

### Windows XP Connection Procedure

1. Print a Configuration Report. Refer to [GP 6](#).
2. Configure the PWS IP Address:
  - a. Right click on the **My Network Places** icon.
  - b. Select **Properties** to bring up the Network and Dial-up Connections window.
  - c. Right click on **Local Area Connection** and select **Properties**.
  - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/IP** and select **Properties**.
  - e. Select the **Use the following IP address** radio button.
  - f. Enter an **IP address** one digit different than the printer's IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - g. Enter **255.255.255.0** for Subnet mask.
3. Connect the PWS to the printer with the crossover cable.
4. Click the Windows **Start** button.
5. Select **Settings**, then **Printers and Faxes**.
6. Select **Add Printer**.
7. On the **Add Printer Wizard** screen, click **Next**.

8. On the next screen, select **Local printer**, then click **Next**.
9. When the **Add Printer Wizard** asks you to select the printer port, select **Create a new port**. In the Type: menu, select **Standard TCP/IP Port**, then click **Next**. This opens the **Add Standard TCP/IP Printer Port Wizard**. Click **Next**.
10. Enter the printer's IP address. Click **Next**.
11. Select **Custom**, then click on **Settings**.
12. In the **Protocol** box, select **LPR**. In the **LPR Settings** box, type **print** for **Queue Name:**, then click **OK**.
13. Click **Next**. Click **Finish** to return to the **Add Printer Wizard**.
14. If the printer driver was previously loaded on the PWS, select the printer from the list and click **Next**. Otherwise, click **Have Disk**. Print Drivers can be found on the customer's User Software CD, downloaded from the UI via Web Tools or Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click **OK**.
15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
16. Select **Do not share...**
17. Select **Yes** when prompted to print a test page. Printing indicates a functioning network connection.

## Windows 7 Connection Procedure

**NOTE:** Clear Internet Explorer proxy settings.

1. Print a Configuration Report. Refer to [GP 6](#).
2. Configure the PWS IP Address:
  - a. Click on the Windows **Start** button.
  - b. Select **Control Panel**.
  - c. Select **Network and Sharing Center**.
  - d. On the left Windows pane, Select **Change Adaptor Settings**.
  - e. Right click on **Local Area Connection** and select **Properties**.
  - f. Select the **Networking** tab and scroll down to Internet Protocol Version 4 (TCP/IPv4). Highlight TCP/ IP and select **Properties**.
  - g. Select the **Use the following IP address** radio button.
  - h. Enter an IP address one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - i. Enter **255.255.255.0** for Subnet mask.
3. Connect the PWS to the printer with the Crossover Cable.
4. Click the Windows **Start** button.
5. Select **Control Panel**, then **Devices and Printers**.
6. Select **Add Printer**.
7. On the **Add Printer Wizard** screen, click **Next**.
8. On the next screen, select **Local printer**, then click **Next**.
9. When the Add Printer Wizard asks you to select a printer port, select **Create a New Port**. In the Type menu, select **Standard TCP/IP Port**, then click **Next**. This opens the **Add Standard TCP/IP Printer Port Wizard**. Click **Next**.

10. Enter the printer's IP address. Click **Next**.
11. Select **Custom**, then click on **Settings**.
12. In the **Protocol** box, select **LPR**. In the **LPR Settings** box, type **print** for **Queue Name:**, then click **Next**.
13. Click **Next**. Click **Finish** to return to the **Add Printer Wizard**.
14. If the printer driver was previously loaded on the PWS, select the printer from the list and click **Next**. Otherwise, click **Have Disk**. Print Drivers can be found on the customer's User Software CD or download from the UI via Web Tools or Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click **OK**.
15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
16. Select **Do not share...**
17. Select **Yes** when prompted to print a test page. Printing indicates a functioning network connection.

## Using Print Simulation

To use this network printing simulation on different machines, modify the Setup as follows:

1. Print a new Configuration Report for the printer being tested. Refer to [GP 6](#).
2. Reconfigure the PWS IP Address per step 2 in **Setup**.
3. Click the Windows **Start** button.
4. Select **Settings**, then **Printers and Faxes**.
5. Right-click on the name of the test printer you created, and select **Properties**
6. Select the **Ports** tab, then click on **Configure Port...**
7. Enter the printer's IP address then click on **OK**.

## GP 9 Installing System Software

### Purpose

Provide installation instructions to upgrade, downgrade, or restore system software. Four methods of software installation are described in this procedure:

- USB Upgrade using a USB Flash drive
- CWIS Upgrade using the network
- AltBoot or Forced AltBoot using a USB Flash drive
- PWS AltBoot using PWS AltBoot tools

Additional software installation options are available using CWIS when software updates are enabled. Customers can upload system software using CWIS or configure CWIS to monitor an FTP site for system software and automatically upgrade when a newer version is detected.

Table 1 lists available software installation procedures and effects to each module.

**Table 1 Software Loading Options**

Process	Network Controller	UI, Copy Controller, Fax	IIT	DADH	IOT	Finisher
USB Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
CWIS Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
Auto FTP Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
Power On SW Upgrade (POSU)	N/A	Upgrade, Downgrade	Upgrade, Downgrade	N/A	Upgrade	Upgrade
AltBoot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	After Alt-Boot POSU may occur	N/A	After Alt-Boot POSU may occur	After Alt-Boot POSU may occur
Forced Alt-Boot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload. May need NVM changes	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload
PWS Alt-Boot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	After Alt-Boot POSU may occur	N/A	After Alt-Boot POSU may occur	After Alt-Boot POSU may occur

**NOTE:** If a component is installed that has a later version of software than the software set on the SBC PWB, at system startup the software on the new component is downgraded.

**NOTE:** Some hardware modules can only be upgraded by installing a newer version of the relevant PWB on the affected hardware module.

### Description

System software sets are compilations of software modules and a software compatibility database (SCD). The SCD lists software versions suitable for the system and installed options. System software is supplied as a .dlm file. Names for .dlm files follow this format:

Product Type\_Product Number\_system-sw#version number#optional text.dlm

- Product Type is WorkCentre
- Product Number is 7200
- Version number is a numeric series to identify product, version and release date
- Optional Text may or may not appear in the file name.

As an example: WorkCentre\_7200\_system-sw#071.030.002.33000#.dlm

**NOTE:** Software version information appears under Machine Details and on the Service Info screen in service mode.

At power On, the system checks version information for each installed module and compares it to SCDs stored locally. If a mismatch is detected, an automatic power On software upgrade (POSU) or downgrade of the affected module is initiated to correct the mismatch.

### Software Installation Procedures

**NOTE:** Depending on the procedures used, software installation could require up to 60 minutes. If the software installation procedure fails, go to Boot Failure RAP.

Installing system software requires:

- If possible, the system must be fully operational. Correct any active faults or jams.
- Obtain a USB Flash drive with a minimum capacity of 1GB.
- Download the latest dlm file from GSN or xerox.com.

### Software Upgrade Installation

Two software upgrade procedures are described:

- [Software Loading Using a USB Flash drive](#)
- [Software Loading Using a Network Connection](#)

**NOTE:** Use AltBoot for downgrading and reloading. If the upgrade procedure fails, go to Boot Failure RAP.

### Software Loading Using a USB Flash drive

Perform these steps:

1. Create a top level folder on the USB Flash drive named upgrade (not case sensitive).
2. Copy the WorkCentre\_7200-system-sw#ppppmmmyyddrr#.dlm file into the upgrade folder on the USB Flash drive.

**NOTE:** Make sure there is only one file in the upgrade folder.

3. If possible, complete or delete all pending print jobs. If the prints jobs cannot be deleted, warn the customer that all pending jobs will be lost.
4. Check Release Notes and currently loaded software. Ensure upgrades can be applied.
5. Connect the USB Flash drive into any of the USB ports.

**NOTE:** It is not necessary to switch Off the system to perform a software upgrade. Occasionally the USB Flash drive is incompatible with the system. Replace the USB Flash drive with a Xerox approved model. Restart the process.

6. The UI power on light will Intermittently light.
7. The Software Upgrade start screen appears, [Figure 2](#).
8. The upgrade begins and the progress screen opens, [Figure 3](#).
9. The system upgrade process should complete in about 5 minutes and the system return to a ready state.
10. If the process fails, the hard drive is corrupt. Use an AltBoot procedure to recover.
11. The system reboots several times before returning to a ready state. The system may also display the upgrade progress screen, [Figure 3](#). If the power on failure screen is displayed, [Figure 7](#), switch off, then switch on the machine.
12. After the software has upgraded a software upgrade report prints, [Figure 1](#).



**Figure 1 Software Upgrade Report**

### Software Loading Using a Network Connection

1. Connect to the system web page either from a PC connected to the network or using the PWS and an ethernet crossover cable.
2. Open a web browser. Enter the system IP address in the web browser Address field, then press the enter key. The system CWIS web page will open.
3. Enter the Administrator User ID and Password.
4. Click on Properties.
5. Select General Setup.
6. Select machine software.
7. Select upgrades. Then check the Enabled check box.
8. Select manual upgrade, then browse. Select the .dlm file from the Upgrade directory.
9. Select install software.

**NOTE:** All network connectivity is lost. Progress can be monitored from the UI.

10. The system reboots before returning to a ready state.

### AltBoot Software Loading

#### CAUTION

*The AltBoot Software Loading procedure erases customers unique network configuration settings. NVM data must be saved and restored during this procedure.*

#### CAUTION

*It may take several minutes for the upgrade to start. There is **no** indication until the UI displays the **Software Upgrade** screen. Do not remove the Flash drive or switch Off power until the system reboots.*

**NOTE:** To restore the XSA data, use the customers XSA data backup (clone) file on the customers PC. Refer to the Customer Administrators Guide CD.

AltBoot reloads system software. It is used to upgrade, downgrade or reload software on systems that will not come to a ready state. It can also be used to upgrade or downgrade the software on system options.

AltBoot should be only be used under these circumstances:

- To attempt to recover a corrupt:
  - Hard drive
  - SBC PWB
- After installing a new hard disk drive
- To upgrade system software without running multiple software upgrades.
- To downgrade machine software.

A Forced Altboot uses the available .dlm file to upgrade or downgrade every component in the system regardless of installed software. A Forced Altboot is required to recover from corrupt application code on devices such as Fax, IOT, IIT. Use Forced AltBoot:

- If the Finisher software requires upgrade or reloading. After performing a Finisher SW upgrade only, reinitialize Finisher NVM.
- To downgrade the IOT/IIT software.

## AltBoot Procedure

### CAUTION

If the system appears to hang during the AltBoot process (stay on one screen without apparent progress), wait 10 minutes before switching the system off. The system may still be loading software in the background and switching the system off during this phase will corrupt the hard drive. A new hard drive is required to recover.

### CAUTION

Use Forced AltBoot with extreme caution as it replaces boot and application code. Power failure during a Forced Altboot may result in certain PWBs (DUI, Finisher) being unrecoverable.

Perform the following:

1. Create a top level folder on the USB Flash drive named AltBoot (not case sensitive).  
Forced AltBoot only: Create a file named **FORCED\_UPGRADE** inside the altboot folder. This is an empty file and must not have an extension; the AltBoot routine only checks to see that a file with this name is present. To create the empty file:
  - Open the AltBoot folder
  - In a blank area of the screen, right click and select "New".
  - Select "Text Document".
  - The name "New Text Document.txt" will be highlighted.
  - Type "FORCED\_UPGRADE" and hit "Enter".
  - A pop-up with the message "If you change a file name extension, the file might become unusable. Are you sure you want to change it?" will appear.
  - Click on **Yes**.To eliminate carryover of corrupt data, also create a file called **DISABLE\_DATA\_BACKUP** (case sensitive with no file extension). This prevents the NC from keeping data normally retained through an AltBoot.
2. Copy the unzipped WorkCentre\_7200-system-sw#pppmmmyyyddrr#.dlm file into the AltBoot folder on the USB Flash drive. Make sure that there is only one .dlm file in the Altboot folder.  
**NOTE:** Ensure the Microsoft Windows Safely remove hardware procedure is followed before the USB Flash drive is removed.
3. Insert the USB Flash drive into the system.
4. Use dC361 to save NVM settings. Verify NVM data was saved to the USB Flash drive.  
**NOTE:** The same USB Flash drive that has the .dlm file can be used to store NVM data.
5. Perform GP 13 Network Clone Procedure.
6. If possible, complete or delete all pending print jobs. If the prints jobs cannot be deleted, warn the customer that all pending jobs will be lost.
7. Switch the system Off using both power switches.
8. Switch On the system. The Altboot process starts automatically. No button presses are required to initiate the Altboot.
9. The upgrade start screen is displayed, Figure 2.

**NOTE:** Occasionally a USB Flash drive is incompatible with the system and the upgrade start screen, Figure 2 is continually displayed. If after 10 minutes the screen has not changed, replace the USB flash drive with a Xerox approved model. Restart the process.

10. The upgrade begins and the progress screen opens in approximately 2 minutes, Figure 3.  
**NOTE:** If the upgrade process screen is not displayed after 4 minutes, restart the process.
11. The AltBoot process should complete after approximately 5 minutes and the AltBoot complete screen opens, Figure 4. Follow the on screen instructions.
12. If the AltBoot process fails, the AltBoot failed screen opens, Figure 5. Follow the on screen instructions. Restart the procedure and troubleshoot as necessary.  
**NOTE:** Do not switch the system Off unless directed to on the UI. During the next 2 reboots, the hard drive is encrypted. Switching the system off can result in partial encryption of the hard drive. The AltBoot process may need to be re-run if power is removed at this step.
13. The system reboots several times before returning to a ready state. In some instances, a second upgrade progress screen may appear, Figure 3 or the Data Encryption/Decryption in progress screen, Figure 6. If a power On failure screen appears, Figure 7, switch off, then switch on the machine.
14. Check that the software set has installed. Refer to the printed software upgrade report, Figure 7 or by pressing the **Status** button.
15. Use dC361 to restore saved NVM settings.
16. Perform a Network Clone Restore, refer to GP 13.

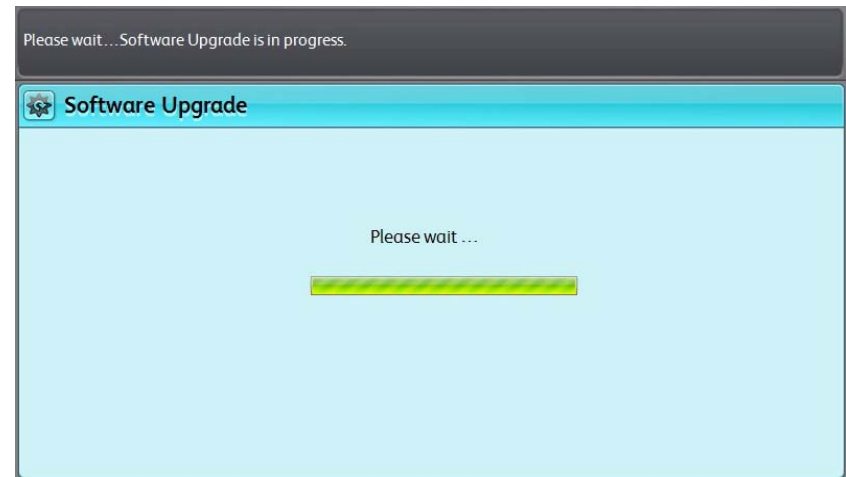


Figure 2 Upgrade start screen



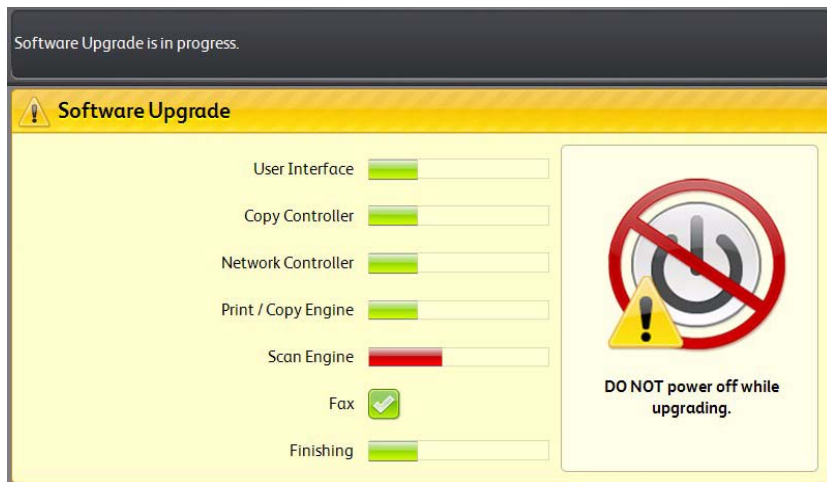


Figure 3 Upgrade progress

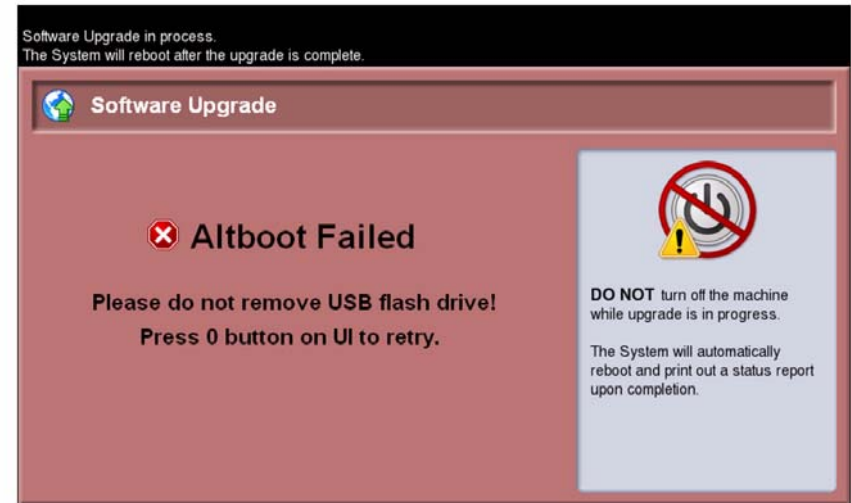


Figure 5 AltBoot failed



Figure 4 AltBoot complete

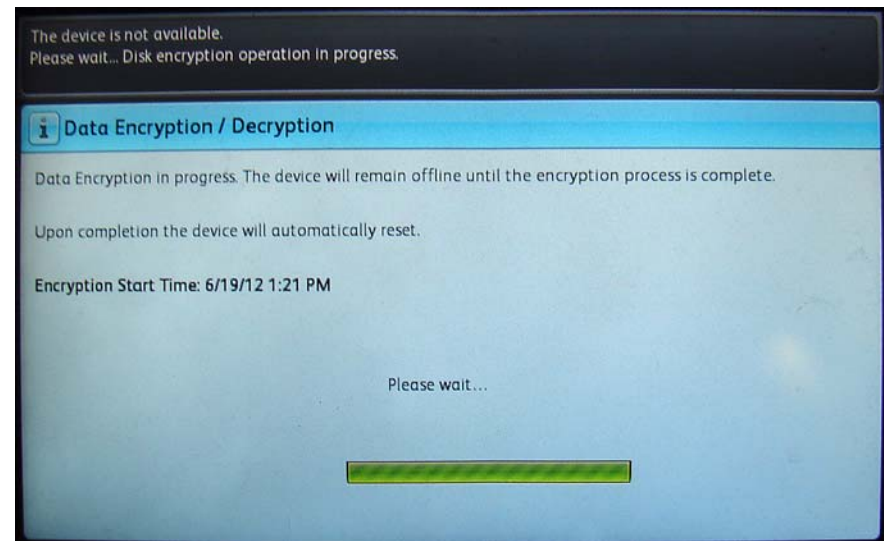


Figure 6 Encryption progress

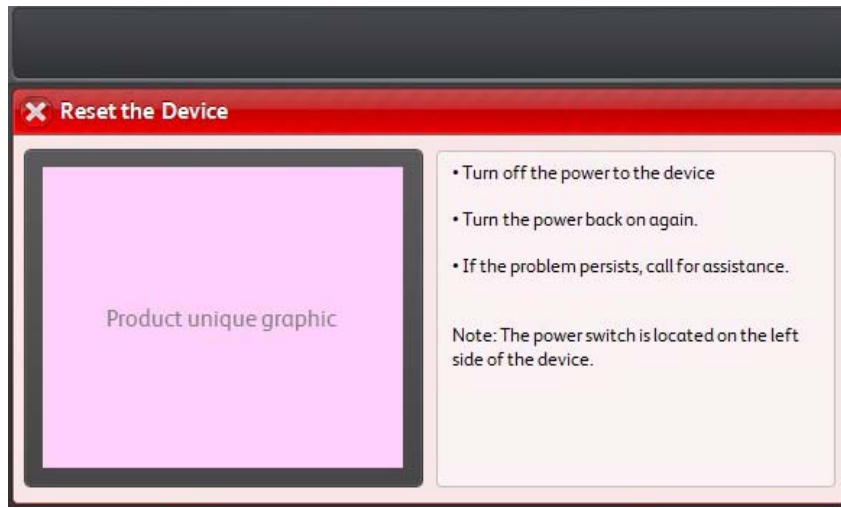


Figure 7 Power On failed

#### PWS AltBoot Procedure

PWS AltBoot is a tool used to load system software in accounts that do not permit the use of USB Flash drives. The PWS AltBoot tool and installation instructions are available on GSN.

**NOTE:** Before loading system software, the system should be fully operational. If possible, clear any active faults or jams before starting this procedure.

1. Perform an NVM Save, [dC361](#).
2. Perform the Network Clone procedure, [GP 13](#).
3. Print a Configuration Report, [GP 6](#).
4. If possible, complete or delete all pending print jobs. If jobs cannot be deleted, warn the customer that all pending jobs will be lost.
5. Install the PWS AltBoot tool on the PWS using the installation instructions from GSN. Make sure to copy over the system software (.DLM) files, ulmage and uboot files.
6. Switch Off the system.
7. Use these steps configure a PWS LAN connection so the PWS can communicate with the system Network Controller. Once established, settings remain in effect until changed.

**NOTE:** Record the original data for every place you make a change. You may or may not need to reset the IP address, depending on PWS usage and local network practice.

- a. Right click on the **My Network Places** icon.
- b. Select **Properties** to bring up the Network and Dial-up Connections window.
- c. Right click on **Local Area Connection** and select **Properties**.
- d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/IP** and select **Properties**.
- e. Select the **Use the following IP address** radio button.

- f. Enter an IP address one digit different than the system IP address listed on the Configuration Report for example, if the system IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43.
  - g. Enter 255.255.255.0 for Subnet mask.
  - h. Select **OK** to close the **TCP/IP Properties** window
  - i. Select **OK** to close the **Local Area Connection Properties** window.
  - j. You may need to reboot the PWS to load the settings.
8. Connect the PWS to the system with the Communication Data Cable to the RJ11 connector on the SBC PWB. Connect the other end to the serial port on your PWS.
  9. Disconnect the customer's network connection. Connect a crossover cable between the network ports on the system and PWS.
  10. Start the PWS AltBoot tool on the PWS.
  11. A Browse for Folder window will open. Browse to and highlight the folder that contains the upgrade files. Select **OK**.
  12. Switch on the machine. After approximately 10 seconds, the transfer of the ulmage and uboot files begins.
  13. After file transfer, the settings menu appears in the terminal window. Check that the 'Received packet' line is displayed and that the IP address is set one digit away from the packet was received from address.  
Press **y** at the prompt and continue. If the valid netmask is not set, press **n** and change it to 255.255.255.0
  14. From the next menu, select **5> Install SBC software**.
  15. At the **Proceed?** prompt, select **Y**.
  16. At the second **Proceed?** prompt, select **Y**.
  17. From the next menu, select **4> Continue**.
  18. A list will display the .DLM file(s) in the directory identified in step 2. Select the correct DLM file to download to the machine. A transfer progress window will then open.
  19. After the DLM file has been downloaded to the machine, the Software Upgrade start screen will display on the UI.
  20. After approximately 1 minute the upgrade will begin and the Software Upgrade in progress screen will open. If the upgrade process screen is not displayed after 2 minutes, restart the process.
  21. The AltBoot process should complete after approximately 5 minutes and the Upgrade Complete screen will open. Ignore the instruction to remove the USB flash drive, only press **0** to continue.
  22. The machine will reboot several times before returning to a ready state. During the reboot, the hard drive is encrypted. Switching off the machine can cause only partial encryption of the hard disks partitions. The AltBoot process may need to be re-run if power is removed at this step. The UI displays the Data Encryption/Decryption in Progress screen.
  23. After the reboots have finished the machine will boot up and come online. In the SBC-AlternateBoot window on the PWS should display SBC System is 'OPERATIONAL'.
  24. Disconnect the cable from the PWS serial port and the machine. Disconnect the crossover cable from the PWS network and the machine.
  25. Connect the customer's network cable to the machine.
  26. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
  27. Perform an NVM Restore, [dC361](#).

28. Perform a Network Clone Restore, [GP 13](#).

### Troubleshooting

Listed below are possible problems that may stop AltBoot software loading:

Possible causes and solutions are:

- Incompatible USB Flash drive. Use a Xerox approved model of USB Flash drive.
- Corrupt.dlm file. Replace the .dlm file.
- Incorrect spelling of the AltBoot directory on USB flash drive.
- AltBoot and upgrade folders on the USB Flash drive.
- Bad data connection to the Hard Drive. Reseat the Hard Drive harnesses.
- Hard drive corruption or failure.
- USB port or cable damage. Use a different USB port or cable.
- UI failure.
- SBC PWB failure.
- Check the +5V supply to the USB ports on the SBC PWB.

## GP 10 PWS Communication with the SBC

### Purpose

This procedure provides instruction on how to connect the PWS directly to the CCS communication port on the SBC using serial cable 600T80374 and level adaptor 600T80375 (XP) or USB cable 600T02332 and PWS Altboot tool (W7). Depending on your operating system, follow one these procedures:

- XP Connection
- W7 Connection

### Windows XP Connection Procedure

To configure your PWS for a HyperTerminal connection, connect the serial cable and level adaptor between the PWS and printer and perform the following:

1. In the Task bar at the bottom left of your PWS, select **Start**.
2. Select **All Programs**.
3. Select **Accessories**.
4. Select **Communications**.
5. Select **HyperTerminal**.
6. If a **Default Telnet Program?** dialog box appears, select **No**.
7. When the **Connection Description** dialog box appears, enter **SBC** in the **Name** space.
8. In the **Connect To** dialog box, select **COM1** in the **Connect using:** pull-down
9. Ensure that the following are set in the **COM1 Properties/Port Settings** window:
  - **Bits per second:** = 115200
  - **Data bits:** = 8
  - **Parity:** = None
  - **Stop bits:** = 1
  - **Flow Control:** = None
10. Select **Apply**, then select **OK**.

### Windows 7 Connection Procedure

To configure your PWS for a USB connection, download and install the USB device driver from GSN. After rebooting the PWS, connect the PWS to the CCS communication port on the SBC. The GND indicator on the cable goes towards the top of the printer. With the PWS and printer connected, perform the following:

1. In the Task bar, select **Start**.
2. TBD.

## GP 11 Resetting the System Administrator Password

When a customer requires a new administrator password, the customer must call the Welcome Center and request an administrator password reset.

1. The Welcome Center will request the machine serial number and current copy count.
2. The Welcome Center generates a 12 digit Feature Key number.
3. Press the Machine Status button, then Tools tab.
4. Select the General feature, then Feature Installation.
5. Enter the Feature Key on the Feature Key screen to reset the Administrator credentials to the default values (**admin** and **1111**).
6. If Password reset has been disabled in CWIS, the password can only be reset by a CSE arriving on site and performing a **Regular AltBoot** (GP 9).

## GP 13 Cloning Network Configurations

### Purpose

Use this procedure to connect to the printer and capture Network Configuration settings. The clone file is used to duplicate settings to other machines or restore settings following AltBoot. If Internet Explorer is being used, clear browser proxy settings. Depending on your PWS operating system, follow one of the network connection procedures provided:

- Windows XP Connection
- Windows 7 Connection

### Clear IE Proxy Settings

Perform these steps to clear Internet Explorer proxy settings before connecting to the printer.

1. Open **Internet Explorer**.
2. Select **Tools - Internet Options**.
3. Select the **Connections** Tab.
4. Select the **LAN Settings** box.
5. Ensure that the "Use a proxy server for your LAN" box is **un-checked**.
6. Select **OK** to close the **Local Area Network Settings** window.
7. Select **OK** to close the **Internet Options window**.
8. Close **Windows Internet Explorer**.

### Windows XP Connection Procedure

The following steps establish a Local Area Network (LAN) connection between the PWS and SBC network controller. Once established, settings remain in effect until changed.

**NOTE:** Record the original data for every place you make a change. You may or may not need to reset the IP address, depending on PWS usage and local network practice

1. Record any setting changes, so you can restore the original configuration when finished.
2. Print a Configuration Report (GP 6).
3. Configure the PWS IP Address:
  - a. Right click on the **My Network Places** icon.
  - b. Select **Properties** to bring up the Network and Dial-up Connections window.
  - c. Right click on **Local Area Connection** and select **Properties**.
  - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/IP** and select **Properties**.
  - e. Select the **Use the following IP address** radio button.
  - f. Enter an **IP address** one digit different than the machine IP address listed on the Configuration Report for example, if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - g. Enter 255.255.255.0 for **Subnet mask**.
4. Select **OK** to close the **TCP/IP Properties** window
5. Select **OK** to close the **Local Area Connection Properties** window.

**NOTE:** You may need to reboot the PWS to load the settings.
6. Connect the crossover cable between ethernet ports on the PWS and SBC.

## Windows 7 Connection Procedure

**NOTE:** Clear all Internet Explorer proxy settings.

1. Print a Configuration Report. Refer to GP 6.
2. Configure the PWS IP Address:
  - a. Click on the Windows **Start** button.
  - b. Select **Control Panel**.
  - c. Select **Network and Sharing Center**.
  - d. On the left Windows pane, Select **Change Adaptor Settings**.
  - e. Right click on **Local Area Connection** and select **Properties**.
  - f. Select the **Networking** tab and scroll down to Internet Protocol Version 4 (TCP/IPv4). Highlight TCP/ IP and select **Properties**.
  - g. Select the **Use the following IP address** radio button.
  - h. Enter an IP address one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - i. Enter **255.255.255.0** for Subnet mask.
3. Connect the crossover cable between ethernet ports on the PWS and SBC.

## Create the Clone File

**NOTE:** If the customer has enabled Administrator Password, you will be asked for a user name and password. Defaults are **admin** as the user name, and **1111** for the password.

1. Open Internet Explorer
2. Enter the machine's IP address in the **Address** line and select **Go**.
3. When **Centware® Internet Services** opens, select the **Properties** Tab. Click on the **General Setup** link, then **Cloning** (Figure 1).



Figure 1 Cloning Screen

4. Scroll down the page to see critical information about the cloning process (Figure 2). Click the **View Feature Details** link to get a list of data that is backed up and/or restored using the Cloning Feature.

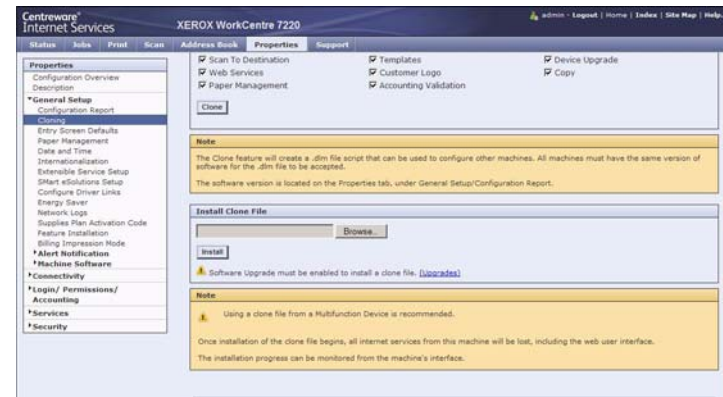


Figure 2 Important Notes!

5. Select the **Clone** button under the **View Feature Details** link (Figure 1).

### CAUTION

*Do NOT attempt to open the clone file as it may cause the file to become corrupt.*

6. Right click on **Cloning.dlm** to save the clone file (Figure 3).

**NOTE:** When the file is saved, a **.txt** extension may automatically be placed at the end of the file name. Before loading this clone file, navigate to the saved file, right-click on the file and select **Rename**. The correct format for the file name is **xxxxxxx.dlm**.



Figure 3 Saving the Clone File



## Uploading a Clone file

**NOTE:** This procedure can be done from ANY PC connected to the network or the PWS connected to the machine using a crossover cable. The only requirement is an Internet Browser.

1. Open Internet Explorer
2. Enter the machine's IP address in the **Address** line and select **Go**.
3. When the **Centroware® Internet Services** window opens, select the **Properties** Tab. Click on the **General Settings** link, then the **Cloning** link (Figure 1).
4. Scroll to the bottom of the page (Figure 2).
5. Use the **Browse** button to navigate to the clone file, or type the full path to the file. Click the **Install** button. If the machine does not reboot after five minutes, power the machine off/on.
6. Verify the cloned settings with a new Configuration Report.

## GP 14 External Fax Line Test

When the customer reports a fax issue sometimes it is very difficult to determine if the problem is with the customer's phone line or the Xerox machine.

The preferred method of verifying the phone line functionality is to use the Modem saver device part number 600T2133 to ensure the fax line is wired correctly and to use the Analog hand set part number 600T1937 or customer's analog phone to place calls on the line. Be sure that both local and long distance calls can be placed and the line quality is clear, no static.

Use Handset:

- Can it dial externally on the line?
- Can it receive a call on the line?
- Evaluate Line quality. Check Line for unwanted beeps, or noise.

Use Breakout Box to measure voltages (Use the machine chassis as ground). Refer to Fax 101 training for Breakout Box usage instruction:

- Check ground continuity.
- Line Voltage -20 to -50 VDC?
- Loop Current 15 to 95 mA DC?
- Ring Signal 50 to 90 VAC?
- Check Ring-Ground and Tip-Ground <1VAC

If a line quality issue or incorrect voltage is found then the customer will need to resolve these problems.

# GP 16 Toner CRUM Conversion

## Purpose

This procedure explains how to set the Geographic Differentiation Code and Toner Cartridge Type to the correct values.

## Introduction

The WC 7850/7855 machines are shipped with “Worldwide Neutral” Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

There are three types of toner: Metered Service, which is a single part number world wide, Sold toner that is specific to the DMO/XING market, and Sold toner that is specific to US/XCL/XE market. See [CRUs and Consumables](#) for part numbers. If a toner cartridge of the wrong type (i.e., a “sold” cartridge in a “metered” configured machine) is installed, it will generate a fault code and/or a message on the UI indicating toner incompatibility.

If the problem occurs after several toner replacements, the customer may have received the wrong toner in a consumables order; either because the wrong part number was ordered, or the shipment did not match the order. Resolution in this case is simple; the customer should exchange the toner for the correct part.

If the wrong toner was installed at the first toner replacement after install, or if the configuration NVM have changed due to software or NVM corruption, perform the following procedure:

## Procedure (Non-Page Pack)

1. Record the machine serial number and the number of **Total Impressions**
2. Call Field Engineering or your NTS and provide the information collected in step 1.
3. You will be given a 6-character passcode.
4. Press the **Machine Status** button on the Control Panel.
5. Select the **Tools** tab. The Tools menu will be displayed.

On the left side of the screen are several buttons for the categories of features.

Within each category are **Groups** of features. Each **Group** contains one or more **Features**.

6. Select the **Device Settings** category, then the **Supplies** group, then select **Enter Supplies Activation Code**.

**NOTE:** The passcode must be entered within 500 page counts of when it was issued, or it will not be valid.

7. Enter the passcode string provided in Step 4. If the Passcode contains a special character, the level of software installed on the machine may not allow entry of this character because it is grayed out. Use the following procedure to enter the special character.
  - a. Log into Tools
  - b. In the Features column, select [General...]
  - c. Select [Custom Keyboard Button...]

- d. The 3rd button on the bottom row is the customizable button
  - e. Select [Clear Text]
  - f. Select [Shift]
  - g. Select the special character contained in the Passcode
  - h. Select [Save]
  - i. Log out of Tools
8. The Geographic Differentiation Code and Toner Cartridge Type will be reset to the values of the customer's agreed-to supplies plan.

## Procedure (Page Pack)

1. Before a 4000 page count is reached, a PIN number must be entered, otherwise the machine will not operate after the 4000 page limit.
2. If a bad PIN is entered 3 times consecutively, you must wait 24 hours before a good PIN can be entered.

## GP 18 Restoring the Public Address Book

The Public Address Book is not included in the clone file. To restore the Public Address Book use one of these procedures.

### Restore from a USB Flash Drive

Use this procedure to restore the address book using a Flash drive. Refer to [Figure 1](#).

1. Press the Log In/Out button on the UI.
2. Log in as administrator (admin/1111 is the default).
3. Press the **Machine Status** button, then select the **Tools** tab.
4. Select **Service Settings**, then the **Device Address Book** feature.
5. Pull down the menu and select **Import**.
6. Insert the USB Flash drive and browse to the address book .csv file.
7. Select the proper delimiter and addition policy.
8. Click on the **Import** button to transfer the .csv file.

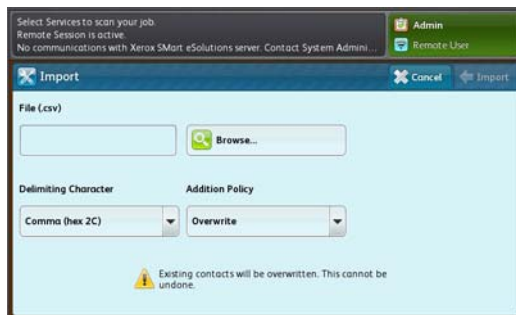


Figure 1 UI Address book import screen.

### Restore Using CWIS

To import address books (.csv format), enable HTTPS (SSL) using Centroware® Internet Services. With HTTPS enabled, use this procedure to restore the Public Address Book. Refer to [Figure 2](#):

1. On the CWIS **Address Book** pane, select **Import From File**.
2. Select the **Browse** button and locate the .csv file to import.
3. Select **Comma** for the record delimiter for .csv files.
4. Check the **Remove Bracket** checkbox if desired.
5. Select the radio button to specify whether to append or replace an existing address book.
6. Click on the **Upload File** button to transfer the .csv file.



Figure 2 Address book file import screen



## GP 20 Reporting Billing Meter Resets

### Procedure

The CSE is required to call in billing meter reads to one of these Customer Business Centers when a machine's meters have been reset:

- Chicago CBC: 1-888-771-5225 (7am - 7pm Central Time). Choose Option 4 - (All other administrative Inquiries).
- St. Petersburg CBC: 1-888-435-6333 (8am - 8pm Eastern Standard Time). Choose Option 4 - (If you have questions regarding your Invoice or account.)
- Dallas CBC: 1-888-339-7887 (7am - 6pm Central Time). Choose Option 4 - (If you have questions regarding your Invoice or account.)

The Customer Business Centers will need the following information:

- CSE/Analyst/Service Agent Name and Employee Number
- 9 Digit Equipment Serial Number
- Old Meter Read and Date
- New Meter Read and Date

## GP 22 Foreign Device Interface Setup

### Purpose

This procedure explains the process for troubleshooting, installing and configuring the Foreign Device Interface (FDI).

### Procedure

1. The FDI Kit has been installed, but the Configuration sheet indicates that the Foreign Interface Board is not present. Go to [Configuring the Foreign Device Interface](#).
2. The External Device does not enable the machine or does not count. Use the Foreign Interface and External Device Test Tool to resolve the problem.
3. Directions for the Foreign Device Test Tool are not packaged with the tool.

### Installation

Prerequisites: FDI Interface Kit.

**NOTE:** This is a purchased item and must be ordered through Sales.

**NOTE:** Observe all Electrostatic Discharge (ESD) precautions when performing this procedure.

1. Switch off the printer power. Disconnect the power cord.
2. Remove the Control Unit.
3. Remove the FDI Harness Connector Cutout Cover from the Control Unit ([Figure 1](#))
4. Remove the two (2) standoffs from the FDI Connector, then using the Standoffs, secure the FDI Connector to the Control Unit. [Figure 2](#).
5. Plug the Harness into the FDI PWB then mount the FDI PWB onto [J12](#) of the SBC PWB.

**NOTE:** It is possible to connect the Foreign Interface Cable in reverse on the FDI PWB. Orient the cable properly.

6. Replace the Control Unit and Power On the Machine.

### Configuring the Foreign Device Interface

1. Press the Log In/Out button.
2. Log into the machine as **admin**, with default password of **1111**.
3. Touch **[Machine Status]**, then from Tools, press the **Accounting Settings** button.
4. Press **Accounting Mode**
5. Press **Auxiliary Access** and select one of Auxiliary Device Type buttons available to configure the device and select **Save**.
6. From the Auxiliary Device Configuration menu, Select **Service Access & Accounting** and select those services that will be restricted by the auxiliary device. A check mark in the box will indicate those services which will be restricted, Select Save.

**NOTE:** If no selections are made, the Foreign Interface board will indicate **not present** on the configuration report.

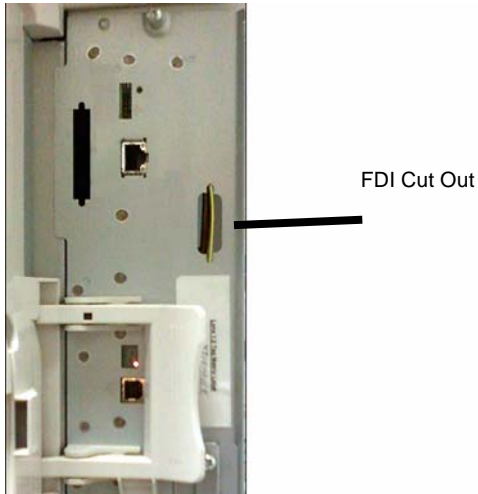


Figure 1 FDI Cut Out Cover

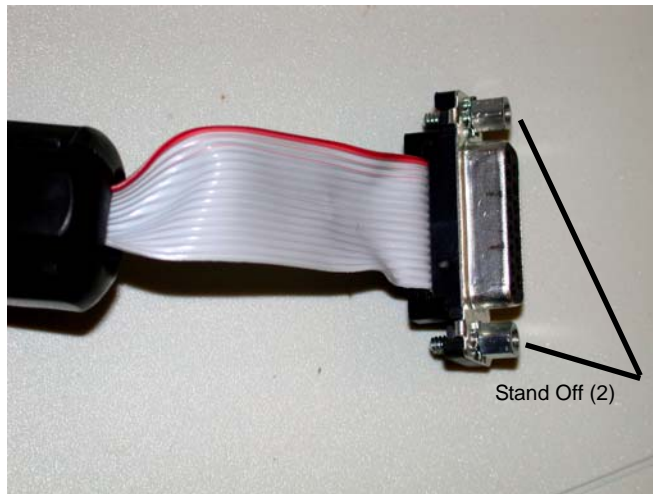


Figure 2 Connector Standoff

## GP 23 Intermittent or Noise Problem RAP

### Purpose

The purpose of this RAP is to provide guidance for resolving an intermittent or noise problem. This is not an exact procedure, but a set of recommended actions that use the resources of the service manual to help locate the cause of an intermittent or noise problem.

### Procedure

1. Check the service log. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may be the cause of the new intermittent problem.
2. Noise problems may be due to improper installation. Check for packing materials that have not been removed. Check for loose or missing hardware.
3. Run the machine in a mode that vigorously exercises the function that is suspected. The machine may fail more frequently or may fail completely under these conditions. Look for signs of failure or abnormal operation.

An intermittent problem can usually be associated with a RAP, since when it does fail, it results in a fault code, a jam code, or some other observable symptom.

4. Using the RAP that is associated with the symptom of the intermittent problem, examine all of the components that are referenced in the RAP. Look for:
  - contamination, such as a feed roller that has a build up of dirt or toner
  - wear, such as gear teeth that are rounded or have excessive backlash
  - HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
  - wires chafing against components of the machine, especially against moving components
  - misaligned, mis-adjusted, or incorrectly installed components
  - slow or slipping clutches; slow or binding solenoids
  - damaged components
  - excessive heat, or symptoms of excessive heat, such as the discoloration of a component
  - loose cables or wires
5. Using the RAP that is associated with the symptom of the intermittent problem, perform all of the adjustments for the components or functions that are referenced in the RAP. Check to ensure that the adjustment can be made and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem.
6. Operate all of the components in the appropriate RAP that is associated with the symptom of the intermittent problem with Component Control. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
7. Check that the AC and DC power are within specification.
8. Get technical advice or assistance when it is appropriate. This will depend upon the situation and the established local procedures.
9. Examine the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Look for:

- contamination, such as a feed roller that has a build up of dirt or toner
  - wear, such as gear teeth that are rounded or have excessive backlash
  - HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
  - wires chafing against components of the machine, especially against moving components
  - misaligned, mis-adjusted, or incorrectly installed components
  - slow or slipping clutches; slow or binding solenoids
  - damaged components
  - excessive heat, or symptoms of excessive heat, such as the discoloration of a component
  - loose cables or wires
10. Perform the adjustments for the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Check to ensure that the adjustment CAN BE MADE and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem
  11. Operate all of the components that are not in the RAP, but are associated with the function that is failing with Component Control. Refer to the BSDs. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
  12. Replace any components or consumables that are known to be a frequent cause of the problem. When doing this, consider the cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.
  13. Leave an accurate and detailed record of your actions in the service log. Describe what you have observed, what actions you took, and the recommended next steps.

## GP 24 How to turn off the Power Saver Functions

The following procedure is to be used to disable the power saver and/or Low Power Mode per customer request or for testing purposes.

### Procedure

**NOTE:** Both the Engine and the Network Controller must be disabled.

1. To disable the Engine, perform the following:
  - a. Enter NVM Read/Write in the UI diagnostics and change the following locations from 1 (enabled) to 0 (disabled):
    - 616-002 Low Power Enabled
    - 616-008 Power Off Enabled
  - b. Exit diagnostics and power off then power on
2. To disable the Network Controller, perform the following:
  - a. Log into the webpage as Administrator and uncheck the box shown in the attachment
  - b. Select Apply then log out

## GP 25 Remote Control Panel

The Remote Control Panel feature enables users the ability to:

- Remotely view the local UI display graphics
- Operate both hard and soft buttons on the control panel

The Remote Control Panel on the remote user PC mimics the device control panel enabling the remote user to operate the device as though they were standing at the machine.

### Operation

**Feature enablement** – The feature is defaulted off when delivered to the customer. The System Administrator is required to enable the feature to allow usage.

1. In the Centroware window, login as admin.
2. Select [Support > Remote Control Panel].
3. Under Configuration, select [Edit].
4. Select [Enable].

**Feature access permissions** – The SA is required to set the permissions of the feature for it to be usable. When Enable is selected, the permission levels are displayed.

- SA only – This setting will prevent any user including Service Engineer personal from using the feature.
- SA and Service Engineer – This setting allows only the SA or Service Engineer to use the feature by authenticating their respective user credentials.
- All users – This opens the feature to all users without the need to authenticate.

**Remote Session** – The Remote Control Panel session is initiated under Access. This feature allows only the Admin and Diagnostics User to interact with the machine's local Control Panel. Before starting the session, the remote user should determine if the session collaborative or blocked.

- **Collaborative** - This mode means that both the Remote Control Panel and the Local UI are active. This mode can be used by System administrator, help desk support, IT support, or training when the person at the machine and the remote user need to see how the other is operating the machine.
- **Local UI blocking** – Check the box by Block Local Control Panel (local user can only observe). This blocks the local panel when the remote session is initiated. This protects the machine during remote service procedures. When activated, the local user is notified by a message that the local panel hard and soft keys are not functional at this time.

Only one remote connection at a time is allowed. If a user attempts to initiate a session while another one is active, they will get a message indicating the system is busy and to try again later. This allows a service engineer to view the device remotely without concern that another non-Service Engineer session can also connect.

**NOTE:** If a general user has a remote session active and an SA initiates a session, the SA has a button that will disconnect the general user. This way the SA can take control when desired.

A secure connection is required to create a remote session. If SSL is not set on the machine, a message will appear stating that it must be set. The window for enabling SSL will be displayed and can be set so that the machine is configured to allow the remote session. After the machine reboots, the remote session can start.

**Remote session indication** – When the remote session is initiated, a temporary popup message is displayed on the Local UI alerting any local users that there is a remote user online. A status message is then indicated in the status region and soft login button. The soft login button region is meant to describe the user roles. Authenticated users, including CSEs, are displayed. These remain persistent until the session is closed. A local Service Engineer will know whether the device is being used.

**Remote Session Operation** - When the Remote Control Panel is opened, the remote user will see a mimic of the local UI.

- The soft and hard buttons from the machine control panel are displayed on the Remote Control Panel. The hard buttons are located in slightly different locations, but are labeled and function the same as on the local control panel.
- Operation of all the machine features is the same on the Remote Control Panel as at the local control panel and UI.

**NOTE:** If the browser magnification is set to 75%, then the viewing window will be smaller than the control panel and the touch screen will be truncated. Conversely, if the browser magnification is set to 125%, the viewing window is larger than the remote control panel. The entire control panel is visible but there will be large grey areas around the panel.

**Service Access** - The System Administrator has access to the machine within the customer firewall. The service engineer must be invited inside the firewall.

- The procedure for the customer to invite the service engineer to remotely access the machine is OPCO dependent. Contact your OPCO for instructions on how to engage the customer.
- After the customer has given the service engineer a portal through their firewall, the service engineer can connect to the machine.

Only the service engineer should have the diagnostic User ID and Password. Only the Service Engineer can launch a diagnostics session from the remote UI.

**NOTE:** If the device is in service mode when a remote session is initiated, the session will only connect if logged in as diag in CentreWare. This prevents non-service engineers from connecting into the device while it is being serviced.

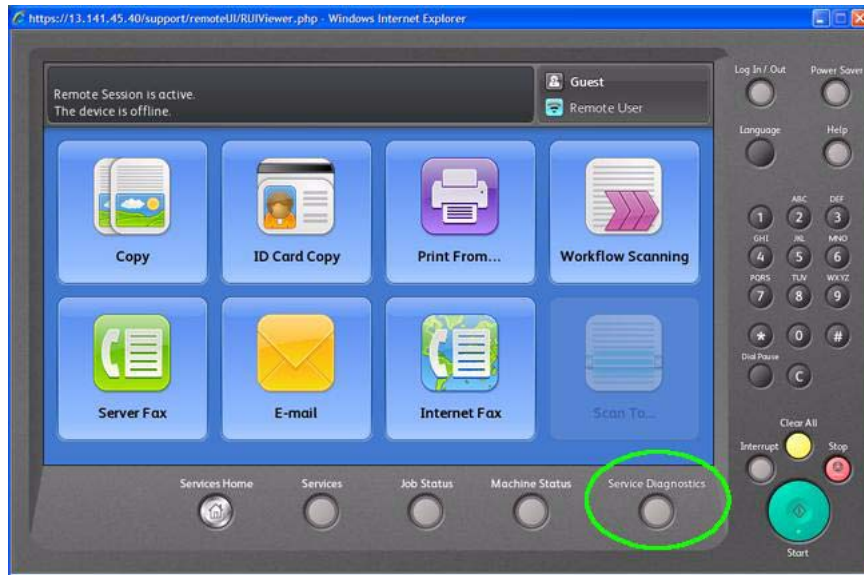
1. Connect to the printer via CentreWare IS.
2. Login to Centerware
  - User ID - **diag**
  - Password - **3424**
3. Select [**Support**], then select [**Remote Control Panel**].
4. If required, check Block Local Control Panel (user can only observe).
5. Select [**Open Remote Control Panel**].

**NOTE:** Only one Remote Control session at a time is allowed. If a remote session is in progress, a message (Remote Control Panel session is already active.) will appear. If approved by the SA, select Disconnect Current Session to enable access. If the message returns, the machine may need to be rebooted.

6. If the window "The web site's certificate cannot be verified. Do you want to continue." appears, select [**Yes.**].

If the window "There is a problem with this website's security certificate." appears, select **[Continue to this website (not recommended.)]**

7. To start diagnostic mode on the machine, Select the Service Diagnostics button on the mimic and login (6789).



**Figure 1 Diagnostic Access**

**Ending the session** - A session can be terminated in several different ways. If in a diagnostic session, remember to perform Call Closeout on the machine before ending the session.

- Remote user closes the Remote Control Panel window.
- Machine reboots.
- Unplug the internet cable at the machine.
- Customer host that invited the service access closes their browser.
- System Timers - The session will be terminated if the system timers time out.

## GP 26 Obtaining a Replacement SIM Card

Use this procedure when a customer requires a replacement SIM Card due to loss or damage of the original SIM Card.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

## Product Codes

Table 1 Product Codes

Item	Code
WC 7830/35 Base IOT w/ 3 Tray Module - 120 VAC	MX0
WC 7830/35 Base IOT w/ High Capacity Tandem Tray Module - 120 VAC	MX1
WC 7830/35 Base IOT w/ 3 Tray Module - 120 VAC GSA	MX0N
WC 7830/35 Base IOT w/ 3 Tray Module - 220 VAC	MX2
WC 7830/35 Base IOT w/ High Capacity Tandem Tray Module - 220 VAC	MX3
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF- 120 VAC	MX4
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF - 120 VAC GSA	MX4N
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF - 220 VAC	MX5
WC 7830/35 IOT w/3 Tray module - without SB Controller - 120V	MX0E
WC 7830/35 IOT w/ High Capacity Tandem Tray Module- without SB Controller - 120V	MX1E
WC 7830/35 IOT w/ 3 Tray module - without SB Controller - 220V	MX2
WC 7830/35 IOT w/ High Capacity Tandem Tray module- without SB Controller - 220V	MX3
WC 7845/55 IOT w/ High Capacity Tandem Tray module - without SB Controller - 120V	MX4E
WC 7845/55 IOT w/ High Capacity Tandem Tray module - without SB Controller - 220V	MX5
Finisher, Office LX (SB-Finisher)	XLN
Finisher, Integrated (A-Finisher)	XDE
Finisher, Professional (C-Finisher) w/Booklet Maker	XLP for WH XLR for EH
TTM (Tandem Tray Module)	XLF
3TM (Three Tray Module)	XLE
High Capacity Feeder	GBK

## Common Tools

Table 1 Common Tools

Description	Part Number
Screw Driver (-) 3 x 50	600T40205
Screw Driver (+) 6 x 100	600T1989
Screw Driver (+) NO.1	499T356
Stubby Driver (+) (-)	600T40210
Screw Driver (=) 100MM	499T355
Spanner and Wrench 5.5 x 5.5	600T40501
Spanner and Wrench 7x 7	600T40502
Hex Key Set	600T02002
Box Driver 5.5MM	600T1988
Side Cutting Nipper	600T40903
Round Nose Pliers	600T40901
Digital Multi-meter Set	600T2020
Interlock Cheater	600T91616
Silver Scale 150MM	600T41503
CE Tool Case	600T1901
Magnetic Screw Pick-up Tool	600T41911
Scribe Tool	600T41913
Magnetic pickup	600T41911
Eye Loop	600T42008
Flash Light	600T1824
Brush	600T41901
Tester Lead Wire (red)	600T 9583
Tester Lead Wire (black)	600T2030

## Product Tools and Test Patterns

Table 1 Tools and Test Patterns

Description	Part Number
Color Test Pattern	82E13120
Geometric Test Pattern	82E8220
DADF Test Pattern	82E2000
DADF Test Pattern (A3)	82P521
Copy Paper Carrying Case	600T1999
Copy Paper Zip Lock Bag	600T2000
Xerox Color Xpressions Plus 24# 11×17 in,	3R5465
Colortech Plus - 90 gsm - A3	3R94642
Service and Machine NVM Log	700P97436
USB Cable	600T02231
PWS power cord adapter	600T2018
Micro Probe Kit	600T02177
Machine Service Log	Adobe PDF file on CD
USB Flash Drive	701P30980
Communication Data Cable	600T02304

## Cleaning Materials

Table 1 Cleaning Materials

Description	USSG Part Number	XE Part Number
Cleaning fluid (8oz., Formula A)	43P48	8R90034
Film remover (8 oz.)	43P45	8R90176
Lens/mirror cleaner	43P81	8R90178
Lint-free (white) cleaning cloth	19P3025	19P3025
Lint-free Optics cleaning cloth	499T90417	499T90417
Cleaning towels	35P3191	600S4372
Drop cloth	35P1737	35P1737
Cotton Swab	35P2162	35P2162

## CRUs and Consumables

Table 1 CRUs and Consumables

Name	Part Number	Comments
Black Toner Cartridge	006R01509	metered (worldwide)
	006R01513	US/XCL/XE sold
	006R01517	DMO sold
Cyan Toner Cartridge	006R01512	metered (worldwide)
	006R01516	US/XCL/XE sold
	006R01520	DMO sold
Magenta Toner Cartridge	006R01511	metered (worldwide)
	006R01515	US/XCL/XE sold
	006R01519	DMO sold
Yellow Toner Cartridge	006R01510	metered (worldwide)
	006R01514	US/XCL/XE sold
	006R01518	DMO sold
SMart Kit Drum Cartridge	013R00662	
SMart Kit Waste Toner Container	008R13061	
Transfer Belt Cleaner	001R00613	
2nd BTR	008R13064	
Staple Refills - Convenience Stapler	008R12941	3 refills/carton
Staple Refills - Integrated Office Finisher	008R12941	3 refills/carton
Staple Refills - Office Finisher LX	008R12941	3 refills/carton
Staple Refills - Professional Finisher	008R12941	3 refills/carton
Staple Cartridge - Convenience Stapler	008R12964	1 cartridge
Staple Cartridge - Office Finisher LX	008R12964	1 cartridge
Staple Cartridge - Office Finisher LX Booklet Maker	008R12897	8 cartridges/carton
Staple Cartridge - Professional Finisher	008R12964	1 cartridge
Staple Cartridge - Professional Finisher Booklet Maker	008R12925	4 cartridges/carton

## Glossary of Terms

Table 1 Glossary

Term	Description
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
AC	Alternating Current is type of current available at power source for machine.
ACT	Advanced Customer Training; teaches customers to perform some of service that is normally performed by Xerox Service Representative.
A/D	Analog to Digital refers to conversion of signal
ADC	Automatic Density Control
ADJ	Adjustment Procedure
AGC	Automatic Gain Control
A/P	Advanced/Professional (Finishers)
ATC	Automatic Toner Concentration
Bit	Binary digit, either 1 or 0, representing an electrical state.
BSD	Block Schematic Diagram
BTR	Bias Transfer Roll
BUR	Back up Roll
CCD	Charge Coupled Device (Photoelectric Converter)
CCM	Color Control Module
CD	1:Circuit Diagram; 2: Compact Disc
Chip	Integrated Circuit (IC)
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Memory
CYMK	Toner colors for machine; Y=yellow, C=cyan, M=magenta, and K=black
DADF	Duplexing Automatic Document Feeder
DC	Direct Current is type of power for machine components. Machine converts AC power from power source to DC power.
DMM	Digital Multimeter is generic name for meter that measures voltage, current, or electrical resistance.
Duplex	2-sided printing or copying
EA	Emulsion Aggregation (toner)
EME	Electromagnetic Emissions are emitted from machine during normal operation and power of these emissions are reduced by machine design features.
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostatic potential.
ESG	European Solutions Group - also referred to as XE (Xerox Europe)
FE	Field Engineer
FS	Fast Scan (direction) - Inboard-to Outboard
GND	Ground
HCF	High Capacity Feeder
HDD	Hard Disk Drive



Table 1 Glossary

Term	Description
HFSI	High Frequency Service Item
HGEA	High Grade Emulsion Aggregation (toner)
HVPS	High Voltage Power Supply
Hz	Hertz (Cycles per second)
IBT	Intermediate Belt Transfer
I/F	Interface
IIO	Intermediate Image Overwrite
IIT	Image Input Terminal - the Scanner/CCD portion of the machine
IOT	Image Output Terminal - the ROS/Xero/paper handling/ fusing portion of the machine
IPS	Image Processing Subsystem
IQ	Image Quality
JBA	Job-based Accounting
KC	1000 copies
LCD	Liquid Crystal Display
LE	Lead Edge of copy or print paper, with reference to definition of term TE
LED	Light Emitting Diode
LEF	Long Edge Feed
LPH	SLED Print Head
LTR	Letter size paper (8.5 x 11 inches)
LUT	Look Up Table - array of NVM locations that store process control data
LVPS	Low Voltage Power Supply
MCU	Machine Control Unit
MF	Multi-Function
MN	Multinational
MOB	Marks On Belt
MRD	Machine Resident Disk
MSI	Multi Sheet Insert
NIC	Network Interface Card
NVM	Non Volatile Memory
OCT	Offset Catch Tray
OEM	Original equipment manufacturer
OGM	On-going Maintenance
PC	Personal Computer
PL	Parts List
P/O	Part of (Assembly Name)
PWB	Printed Wiring Board
PWS	Portable Workstation for Service
PJ	Plug Jack (electrical connections)
RAM	Random Access Memory

Table 1 Glossary

Term	Description
RAP	Repair Analysis Procedure for diagnosis of machine status codes and abnormal conditions
R/E	Reduction/Enlargement refers to features selection or components that enable reduction or enlargement
Regi-Con	Registration Control
REP	Repair Procedure for disassembly and reassembly of component on machine
RIS	Raster Input Scanner
ROM	Read Only Memory
SAD	Solid Area Density
SBC	Single Board Controller
SCP	Service Call Procedure
SEF	Short Edge Feed
Self-test	An automatic process that is used to check Control Logic circuitry. Any fault that is detected during self-test is displayed by fault code or by LEDs on PWB.
SIMM	Single Inline Memory Module used to increase printing capacity
Simplex	Single sided copies
SLED	Light-Emitting Diode print head
SOK	System Operation Key, Software Option Key
FS	Fast Scan (direction) - LE - to - TE
TE	Trail Edge of copy or print paper, with reference to definition of term LE
TRC	Tone Reproduction Curve
UM	Unscheduled Maintenance
UI	User Interface
USB	Universal Serial Bus
W/	With - indicates machine condition where specified condition is present
W/O	Without - indicates machine condition where specified condition is not present
XBRA	Xerox Brazil
XE	Xerox Europe - also referred to as ESG (European Solutions Group)
XLA	Xerox Latin America
YCMK	Toner colors for machine; Y=yellow, C=cyan, M=magenta, and K=black
XMEX	Xerox Mexico

# Change Tags

## Change Tag Introduction

Important modifications to the copier are identified by a tag number which is recorded on a tag matrix:

- The tag matrix for the IOT is molded into the inside of the Front Door.
- The tag matrix for the Finisher is a label affixed to the inside of the Finisher Front Door

This section describes all of the tags associated with the machine, as well as multinational applicability, classification codes, and permanent or temporary modification information.

### Classification Codes

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures.

A tag number may also be required to identify the presence of optional hardware, special non-volatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made. The classification codes and their descriptions are listed in [Table 1](#).

**Table 1 Classification Codes**

Classification Code	Description
M	Mandatory tag.
N	Tag not installed in the field.
O	Optional tag.
R	Repair tag.



**TAG: P-001**

**CLASS:** R

**NAME:** Duplex Assembly Clutch

**PURPOSE:** Replace one-way clutch with gear for cost improvement

**KIT NUMBER:** 604K63890

**PARTS LIST ON:** [PL 14.6](#)

**TAG: P-002**

**CLASS:** R

**NAME:** UI USB Cable

**PURPOSE:** Replace mounting bracket and two-piece UI-to-MCU USB cable with new bracket and single piece-cable.

**PARTS LIST ON:** [PL 1.2](#)

# 7 Wiring Data

## 7.1 Plug/Jack Location List

Plug/Jack Location .....	7-3
IOT Plug/Jack Illustrations .....	7-14
HCF Plug/Jack Illustrations .....	7-32
Professional Finisher Plug/Jack Illustrations .....	7-33
Integrated Office Finisher Plug/Jack Illustrations .....	7-40
Office Finisher LX Plug/Jack Illustrations .....	7-41

## 7.2 Wire Network

AC Wirenets .....	7-49
1.8 VDC Wirenets .....	7-51
1.8 VRTN Wirenet .....	7-52
+2.5 VDC Wirenet .....	7-53
2.5VDC RTN .....	7-54
+3.3 VDC-1 Wirenet .....	7-55
+ 3.3 VDC-2 Wirenet .....	7-56
3.3 VDC RTN-1 Wirenet.....	7-57
3.3 VDC RTN-2 Wirenet.....	7-58
+5VDC-1 Wirenet .....	7-59
+5VDC-2 Wirenet .....	7-60
+5VDC-3 Wirenet .....	7-61
+5VDC-4 Wirenet .....	7-62
+5VDC-5 Wirenet .....	7-63
+5VDC-6 Wirenet .....	7-64
5VRTN-1 Wirenet.....	7-65
5VDC RTN-2 Wirenet.....	7-66
5VDC RTN-3 Wirenet.....	7-67
5VDC RTN-4 Wirenet.....	7-68
5VDC RTN-5 Wirenet.....	7-69
5VDC RTN-6 Wirenet.....	7-70
+24VDC-1 Wirenet .....	7-71
+24VDC-2 Wirenet .....	7-72
+24VDC-3 Wirenet .....	7-73
+24VDC-4 Wirenet .....	7-74
24VDC RTN-1 Wirenet.....	7-75
24VDC RTN-2 Wirenet.....	7-76
24VDC RTN-3 Wirenet.....	7-77
IIT +3.3/+24VDC/ANA Wirenet .....	7-78
IIT_3.3/24/ANA VRTN Wirenet .....	7-79
IIT +5 VDC Wirenet.....	7-80
IIT +5 VDC RTN Wirenet.....	7-81
DADF +5VDC Wirenet (DADF-110) .....	7-82
DADF 5VRTN Wirenet (DADF-110) .....	7-83
DADF +5VDC Wirenet (DADF-130 / 1 Pass) .....	7-84
DADF 5VRTN Wirenet (DADF-130) .....	7-85
DADF +24VDC Wirenet (DADF-110) .....	7-86
DADF +24VDC Wirenet (DADF-130) .....	7-87

DADF +24VRTN Wirenet .....	7-88
HCF +24VDC Wirenet.....	7-89
HCF +5VDC Wirenet.....	7-90
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## IOT Plug/Jack Location List

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J1	21	6	Main Low Voltage Power Supply
P/J1	23	4	LED Lamp PWB
P/J1	25	7	UI I/F PWB
P/J1	29	18	CIS (7845/55)
J1	11	18	SBC PWB
P1	10	30	Motor Driver Main PWB
J1	14	1	MCU-PF PWB
J1	36	2	Fax Option
P/J2	29	17	CIS (7845/55)
J2	36	3	Fax Option
P/J3	25	1	UI I/F PWB
P/J4	25	2	UI I/F PWB
J4	11	8	SBC PWB
P/J5	21	8	Main Low Voltage Power Supply
P/J5	25	4	UI I/F PWB
J5	11	4	SBC PWB
P/J6	21	7	Main Low Voltage Power Supply
J6	11	16	SBC PWB
P/J7	25	3	UI I/F PWB
J7	11	3	SBC PWB
P/J8	22	4	Sub Low Voltage Power Supply (7845/55)
J8	36	1	Fax Option
P10	10	9	Motor Driver Main PWB
J10	19	7	GFI (Blk)
J10	11	20	SBC PWB
J11	19	8	GFI (Wht)
J11	11	19	SBC PWB
P/J12	2	6	Main Power Switch (Blk)
J12	11	15	SBC PWB (FDI Option)
P/J13	2	3	Main Power Switch (Blk)
P/J14	2	5	Main Power Switch (Wht)
P14	10	26	Motor Driver Main PWB
P/J15	2	4	Main Power Switch (Wht)
P/J15	25	5	UI 10-key PWB
J15	11	10	SBC PWB
J16	11	6	SBC PWB
P/J17	15	2	CIS PWB
J21	11	1	SBC PWB

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
J22	11	14	SBC PWB
J23	11	9	SBC PWB
J25	11	12	SBC PWB
P/J30	22	7	IH Driver PWB
J32	11	17	SBC PWB
J35	11	13	SBC PWB
J37	11	11	SBC PWB
J39	11	7	SBC PWB
J60	22	6	IH Driver PWB
J61	22	5	IH Driver PWB
P85	19	6	Finisher Outlet (Blk)
P86	19	5	Finisher Outlet (Wht)
P87	19	10	Finisher Outlet
P90	19	9	GFI
J90	19	12	Connector
J91	19	13	Connector
J93	19	14	Connector
P/J100	16	6	L/H Cover Interlock Switch
P/J101	2	1	Front Cover Interlock Switch
P/J101	30	7	3T Module Tray 2 Paper Size Sensor
P/J101	35	1	TT Module-Tray 2 Paper Size Sensor
P/J102	16	7	L/H Cover Interlock Switch
P/J102	30	6	3T Module Tray 3 Paper Size Sensor
P/J102	35	3	TT Module-Tray 3 Paper Size Sensor
P/J103	30	5	3T Module Tray 4 Paper Size Sensor
P/J103	35	2	TT Module-Tray 4 Paper Size Sensor
P/J104	30	8	3T Module - TM L/H Cover Interlock Switch
P/J104	33	3	TT Module - TM L/H Cover Interlock Switch
P/J106	30	3	3T Module - Tray2 No Paper Sensor
P/J106	34	3	TT Module - Tray2 No Paper Sensor
P/J107	30	2	3T Module - Tray 2 Nudger Level Sensor
P/J107	34	2	TT Module - Tray 2 Nudger Level Sensor
P/J108	30	4	3T Module - Feed Out Sensor 2
P/J108	33	2	TT Module - Feed Out Sensor 2
P/J109	34	4	TT Module - Tray 3 Pre Feed Sensor
P/J110	21	17	Waste Toner Bottle Full Sensor
P/J110	30	3	3T Module - Tray 3 No Paper Sensor
P/J110	34	3	TT Module-Tray 3 No Paper Sensor
P/J111	21	16	Waste Toner Bottle Position Sensor
P/J111	30	2	3T Module - Tray 3 Nudger Level Sensor

**Table 1 IOT Plug/Jack List**

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J111	34	2	TT Module -Tray 3 Nudger Level Sensor
P/J112	1	10	Drum CRUM Coupler Assembly (Y)
P/J112	30	10	3T Module Tray 3 Feed Out Sensor
P/J112	33	1	TT Module-Tray 3 Feed Out Sensor
P/J113	1	8	Drum CRUM Coupler Assembly (M)
P/J113	34	8	TT Module - Tray 4 Pre Feed Sensor
P/J114	1	6	Drum CRUM Coupler Assembly (C)
P/J114	30	3	3T Module - Tray 4 No Paper Sensor
P/J114	34	7	TT Module -Tray 4 No Paper Sensor
P/J115	1	4	Drum CRUM Coupler Assembly (K)
P/J115	30	2	3T Module - Tray 4 Nudger Level Sensor
P/J115	34	6	TT Module -Tray 4 Nudger Level Sensor
P/J116	30	9	3T Module - Tray 4 Feed Out Sensor
P/J116	34	9	TT Module - Tray 4 Feed Out Sensor
P/J120	3	4	Toner Cartridge CRUM PWB (Y)
P/J121	3	3	Toner Cartridge CRUM PWB (M)
P/J122	3	2	Toner Cartridge CRUM PWB (C)
P/J123	3	1	Toner Cartridge CRUM PWB (K)
P/J124	1	11	ATC PWB - ATC Sensor (Y)
P/J125	1	14	ATC PWB - ATC Sensor (M)
P/J126	1	15	ATC PWB - ATC Sensor (C)
P/J127	1	16	ATC PWB - ATC Sensor (K)
P/J130	21	11	NOHAD STS
P/J144	16	3	1st BTR Contact/Retract Sensor
P/J150	4	2	TMA Sensor IN
P/J151	4	6	TMA Sensor OUT
P/J153	4	5	TMA Sensor
P/J154	4	4	Temp and Humidity Sensor
P/J160	8	3	Registration Sensor
P/J162	6	9	Exit 1 OCT Home Position Sensor
P/J163	6	12	Exit 1 Full Stack Sensor (option)
P/J164	6	4	Exit 2 Sensor
P/J165	6	3	Exit 2 OCT Home Position Sensor
P/J168	6	5	L/H Upper Cover Interlock Switch
P/J169	6	6	Face Up Tray Detect Switch
P/J170	7	1	DC Heater
P/J171	8	6	Tray 1 Pre Feed Sensor (7845/55)
P/J172	9	5	MSI No Paper Sensor
P/J173	9	3	MSI Paper size Sensor
P/J174	20	8	Tray 1 Paper Size Sensor

**Table 1 IOT Plug/Jack List**

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J175	7	3	Duplex Path Sensor
P/J176	7	8	Duplex Cover Switch
P/J177	8	9	Tray 1 Nudger Level Sensor
P/J178	8	8	Tray1 No Paper Sensor
P/J179	9	4	MSI Feed Out Sensor
P/J180	7	2	POB Sensor
P/J183	9	6	MSI Nudger Position Sensor
P/J192	5	4	Fuser Exit Sensor
P/J193	5	1	P/R Latch Sensor
P/J194	5	9	Fuser Belt Rotation Sensor
P/J195	5	8	Center STS / Rear STS (4 pin)
P/J197	5	6	Thermostat
P/J198	5	5	Thermostat
P/J210	1	9	Erase Lamp (Y)
P/J211	1	7	Erase Lamp (M)
P/J212	1	5	Erase Lamp (C)
P/J213	1	3	Erase Lamp (K)
P/J215	21	15	Agitator Motor
P/J217	7	12	L/H Fan 2 (option)
P/J218	7	13	L/H Fan 3 (option)
P/J220	19	1	Toner Dispense Motor (Y)
P/J221	19	4	Toner Dispense Motor (M)
P/J221	30	1	3T Module - Tray 2 Feed/Lift Up Motor
P/J221	34	1	TT Module -Tray 2 Feed/Lift Up Motor
P/J222	19	2	Toner Dispense Motor (C)
P/J222	30	1	3T Module - Tray 3 Feed/Lift Up Motor
P/J222	34	1	TT Module -Tray 3 Feed/Lift Up Motor
P/J223	19	3	Toner Dispense Motor (K)
P/J223	30	1	3T Module - Tray 4 Feed/Lift Up Motor
P/J223	34	5	TT Module -Tray 4 Feed/Lift Up Motor
P/J224	31	11	3T Module - TM Take Away Motor 1
P/J224	32	14	TT Module - TM Take Away Motor 1 (7845/55)
P/J224	32	15	TT Module - TM Take Away Motor 1 (7830/35)
P/J225	22	11	IH Exhaust Fan
P/J226	31	10	3T Module - TM Take Away Motor 2 (7845/55)
P/J226	22	9	IH Intake Fan
P/J226	32	13	TT Module - TM Take Away Motor 2 (7845/55)
P/J227	22	10	C Exhaust Fan
P/J228	1	12	Process 1 Fan
P/J230	16	5	Fuser Fan



Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J231	16	11	Suction Fan
P/J233	17	1	SBC Fan
P/J234	19	11	Rear Bottom Fan
P/J235	21	14	Making Fan (7845/55), HV Fan (7830/35)
P/J238	1	17	Process 2 Fan (4 pin) (Option)
P/J239	21	9	Front LVPS Fan
P/J240	16	15	Drum/Deve Drive Motor (2 pin) (K)
P/J241	16	16	Drum/Deve Drive Motor (8 pin) (K)
P/J242	16	10	Fuser Drive Motor (2 pin)
P/J243	16	9	Fuser Drive Motor (8 pin)
P/J244	16	12	Main Drive Motor (2 pin) (7830/35)
P/J244	18	1	Main Drive Motor (2 pin) (7845/55)
P/J245	16	13	Main Drive Motor (8 pin) (7830/35)
P/J245	18	2	Main Drive Motor (8 pin) (7845/55)
P/J246	16	17	Drum/Deve Drive Motor (Y,M,C) (2 pin) (7830/35)
P/J246	18	7	Drum Drive Motor (Y,M,C) (2 pin) (7845/55)
P/J247	16	18	Drum/Deve Drive Motor (Y,M,C) (8 pin) (7830/35)
P/J247	18	6	Drum Drive Motor (Y,M,C) (8 pin) (7845/55)
P/J248	16	19	IBT Drive Motor (2 pin)
P/J249	16	20	
P/J250	16	2	1st BTR Contact/Retract Clutch
P/J251	18	5	Deve Drive Motor (2 pin) (7845/55)
P/J252	18	4	Deve Drive Motor (8 pin) (7845/55)
P/J253	18	3	Takeaway Motor (7845/55)
P/J254	16	8	P/R Latch Motor
P/J260	8	2	Registration Clutch
P/J261	16	14	Takeaway Clutch (7830/35)
P/J262	6	2	Exit gate solenoid
P/J263	6	8	Face Up Gate Solenoid
P/J265	6	7	Exit 2 Drive Motor
P/J266	6	1	Exit 2 OCT Motor
P/J268	8	4	Tray 1 Feed/Lift UP Motor
P/J269	9	2	MSI Feed/Nudger Motor
P/J271	6	11	Exit 1 OCT Motor
P/J272	1	1	IBT Front Cover Switch
P/J275	7	5	Duplex Motor
J300	17	5	Connector
J300	11	21	SBC PWB
P/J301	29	19	CIS (7845/55)
P/J302	29	20	CIS (7845/55)

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
J309	11	2	SBC PWB
J309	12	2	Backplane (rear)
P/J313	17	4	Backplane (rear)
J335	11	5	SBC PWB
P335	12	9	Backplane (rear)
P336	12	1	Backplane (rear)
P2/J350	24	13	Connector
P/J390	12	3	Backplane (rear)
P/J411	10	1	Motor Driver Main PWB
P/J412	10	13	Motor Driver Main PWB
P/J414	10	11	Motor Driver Main PWB
P/J415	10	3	Motor Driver Main PWB
P/J416	10	2	Motor Driver Main PWB
P/J417	10	10	Motor Driver Main PWB
P/J431	10	4	Motor Driver Main PWB
P/J450	7	9	LH Fan PWB (option)
P451	10	31	Motor Driver Main PWB
J451	12	8	Backplane (rear)
P452	10	25	Motor Drive Main PWB
J452	13	3	Motor Drive Sub PWB
P/J453	7	11	LH Fan PWB (LH Fan 1) (option)
P/J454	7	10	LH Fan PWB (option)
P/J460	21	12	HVPS (DEVE/BCR) (7830/35)
P/J461	16	1	HVPS (1st/2nd/BTR)
P/J501	21	4	Main LVPS
P/J502	21	3	Main LVPS
P/J503	21	5	Main LVPS
P/J504	22	3	Sub LVPS (7845/55)
P/J505	22	1	Sub LVPS (7845/55)
P/J506	22	2	Sub LVPS (7845/55)
P/J510	21	1	Main LVPS
P/J513	21	10	HVPS (BCR) (7845/55)
P/J514	21	13	HVPS (DEVE) (7845/55)
P/J520	10	24	Motor Driver Main PWB
P/J521	10	22	Motor Driver Main PWB
P/J522	13	1	Motor Driver Sub PWB
P/J523	10	27	Motor Driver Main PWB
P/J524	13	2	Motor Driver Sub PWB
P/J525	10	29	Motor Driver Main PWB
P/J526	10	19	Motor Driver Main PWB

**Table 1 IOT Plug/Jack List**

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J527	10	17	Motor Driver Main PWB
P/J528	10	14	Motor Driver Main PWB
P/J529	13	8	Motor Driver Sub PWB
P/J530	22	8	IH Driver PWB
P/J532	10	20	Motor Driver Main PWB
P/J534	10	21	Motor Driver Main PWB
P/J535	10	12	Motor Driver Main PWB
P/J536	10	23	Motor Driver Main PWB
P/J537	10	15	Motor Driver Main PWB (7845/55)
P/J538	13	7	Motor Driver Sub PWB (7845/55)
P/J539	13	9	Motor Driver Sub PWB
P/J540	10	28	Motor Driver Main PWB
P/J541	31	2	3T Module - Tray Module PWB
P/J541	32	2	TT Module - Tray Module PWB
P/J542	31	1	3T Module - Tray Module PWB
P/J542	32	1	TT Module - Tray Module PWB
P/J545	31	6	3T Module - Tray Module PWB
P/J545	32	6	TT Module - Tray Module PWB
P/J548	31	9	3T Module - Tray Module PWB
P/J548	32	9	TT Module - Tray Module PWB
P/J549	31	8	3T Module - Tray Module PWB
P/J549	32	8	TT Module - Tray Module PWB
P/J550	20	7	LPH Rear PWB (K)
P/J550	31	3	3T Module - Tray Module PWB
P/J550	32	3	TT Module - Tray Module PWB
P/J551	20	7	LPH Rear PWB (C)
P/J551	31	4	3T Module - Tray Module PWB
P/J551	32	4	TT Module - Tray Module PWB
P/J552	20	7	LPH Rear PWB (M)
P/J552	31	5	TT Module -Tray Module PWB (7845/55)
P/J552	32	5	3T Module - Tray Module PWB (7845/55)
P/J553	20	7	LPH Rear PWB (Y)
P/J553	31	7	3T Module -Tray Module PWB
P/J553	32	7	TT Module -Tray Module PWB
P/J554	10	5	Motor Driver Main PWB
P/J555	10	6	Motor Driver Main PWB
P/J556	10	7	Motor Driver Main PWB
P/J557	10	8	Motor Driver Main PWB
P/J558	20	6	LPH Rear PWB (K)
P/J559	20	6	LPH Rear PWB (C)

**Table 1 IOT Plug/Jack List**

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J560	20	6	LPH Rear PWB (M)
P/J561	20	6	LPH Rear PWB (Y)
P/J562	20	5	LPH H PWB (K)
P/J563	20	5	LPH H PWB (C)
P/J564	20	5	LPH H PWB (M)
P/J565	20	5	LPH H PWB (Y)
P/J566	20	4	LPH H PWB (K)
P/J567	20	4	LPH H PWB (C)
P/J567	5	7	Fuser Resistance Detector
P/J568	20	4	LPH H PWB (M)
P/J569	20	4	LPH H PWB (Y)
P/J570	20	3	LPH (K)
P/J571	20	3	LPH (C)
P/J572	20	3	LPH (M)
P/J573	20	3	LPH (Y)
P/J574	20	2	LPH (K)
P/J575	20	2	LPH (C)
P/J576	20	2	LPH (M)
P/J577	20	2	LPH (Y)
P/J578	20	1	LPH Rear PWB / LPH H PWB (K)
P/J579	20	1	LPH Rear PWB / LPH H PWB (C)
P/J580	20	1	LPH Rear PWB / LPH H PWB (M)
P/J581	20	1	LPH Rear PWB / LPH H PWB (Y)
P590	13	6	Motor Driver Sub PWB
P591	13	5	Motor Driver Sub PWB
P592	13	4	Motor Driver Sub PWB
J592	31	13	Connector (3TM)
J592	32	10	Connector (TTM)
P/J593	10	18	Motor Driver Main PWB (option)
P/J594	10	16	Motor Driver Main PWB (option)
DP600	5	2	Fuser
DJ600	5	3	Connector
P/J610	1	2	Connector (30 pin)
P/J610	4	1	Connector
P/J611	8	5	Connector
P/J612	7	6	Connector (24 pin)
P/J615	2	2	Power Switch
P/J616	9	1	Link Connector (18 pin) (MSI Unit)
P/J617	9	7	Connector
P/J618	8	7	Connector (7845/55)

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J619	3	5	Cartridge Fan
P/J624	7	4	Connector
P/J631	16	4	Connector
P/J632	8	1	Connector (8 pin)
P/J633	1	13	ATC PWB
P/J635	7	7	Connector (5 Pin)
P/J640	6	10	Connector
P/J661	30	19	3T Module - Connector (4 pin)
P/J661	33	8	TT Module - Connector (4 pin)
P/J662	30	16	3T Module - Connector (4 pin)
P/J662	33	6	TT Module - Connector (4 pin)
P/J663	30	13	3T Module - Connector (4 pin)
P/J663	34	11	TT Module - Connector (4 pin)
P/J668	30	11	3T Module - Connector (2 pin)
P/J668	33	4	TT Module - Connector (2 pin)
P/J669	30	18	3T Module - Connector (9 pin)
P/J669	33	9	TT Module - Connector (9 pin)
P/J671	30	15	3T Module - Connector (9 pin)
P/J671	33	5	TT Module - Connector (9 pin)
P/J672	30	17	3T Module - Connector (3 pin)
P/J672	33	7	TT Module - Connector (3 pin)
P/J673	30	12	3T Module - Connector (9 pin)
P/J673	34	10	TT Module - Connector (9 pin)
P/J674	30	14	3T Module - Connector (3 pin)
P/J675	32	11	TT Module - Connector (4 pin)
P/J676	32	12	TT Module - Connector (12 pin)
P/J700	23	3	Connector
P/J700	23	6	CCD
P/J710	24	5	IIT Trans PWB
P/J720	24	6	IIT Trans PWB
P/J722	24	7	IIT Trans PWB
P/723	24	4	IIT Trans PWB
J740	28	25	Connector (7845/55)
P/J740	15	1	CIS PWB
P/J745	29	4	DCDC PWB (7845/55)
P/J746	29	6	DCDC PWB (7845/55)
P750	26	17	Connector (7830/35)
J750	24	3	IIT Trans PWB
P750	28	24	Connector (7845/55)
P/J751	27	12	Connector (7830/35)

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J751	29	15	Connector (7845/55)
P/J752	27	11	Connector (7830/35)
P/J752	29	14	Connector (7845/55)
P/J753	27	10	Connector (7830/35)
P/J753	29	13	Connector (7845/55)
P/J754	27	4	Connector (7830/35)
P/J754	29	11	Connector (7845/55)
P/J755	27	9	Connector (7830/35)
P/J755	29	12	Connector (7845/55)
P/J756	27	3	Connector (7830/35)
P/J756	29	10	Connector (7845/55)
P/J757	27	1	Connector (7830/35)
P/J757	29	9	Connector (7845/55)
P/J758	27	2	Connector (7830/35)
P/J758	29	8	Connector (7845/55)
P/J759	27	14	Connector (7830/35)
P759	29	7	Connector (7845/55)
P/J760	27	13	Connector (7830/35)
P760	29	16	Connector (7845/55)
P/J761	26	19	Doc. Tray Size Sensor 2 (7830/35)
P/J762	26	3	Doc. Tray Set Guide Sensor 3 (7830/35)
P/J762	28	2	Doc. Tray Size Sensor 1 (7845/55)
P/J763	26	2	Doc. Tray Set Guide Sensor 2 (Blu conn.) (7830/35)
P/J763	28	1	Doc. Tray Size Sensor 2 (7845/55)
P/J764	26	1	Doc. Tray Size Sensor 2 (7830/35)
P/J764	28	3	Doc. Tray Set Guide Sensor 3 (7845/55)
P/J765	26	18	Doc. Tray Set Guide Sensor 1 (7830/35)
P/J765	28	4	Doc. Tray Set Guide Sensor 2 (7845/55)
P/J766	26	11	Connector (9 pin) (7830/35)
P/J766	28	23	Doc. Tray Set Guide Sensor 1 (7845/55)
P/J767	26	4	DADF APS Sensor 3 (7830/35)
P/J767	28	14	Connector (10 pin) (7845/55)
P/J768	26	5	DADF APS Sensor 2 (7830/35)
P/J768	28	6	DADF APS Sensor 3 (7845/55)
P/J769	26	6	DADF APS Sensor 1 (7830/35)
P/J769	28	5	DADF APS Sensor 2 (7845/55)
P/J770	26	10	Connector (10 pin) (7830/35)
P/J770	28	7	DADF APS Sensor 1 (7845/55)
P/J771	23	8	APS Sensor 1

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J771	27	5	DADF Document Set Sensor (7830/35)
P/J771	28	13	Connector (9 pin) (7845/55)
J772	23	7	Connector
P/J772	27	6	DADF Feed Out Sensor (7830/35)
P/J772	28	10	DADF Reg. Sensor (7845/55)
P/J773	23	2	IIT Reg.Sensor
P/J773	26	7	DADF Invert Sensor (7830/35)
P/J773	28	8	DADF Out Sensor (7845/55)
P/J774	23	1	Platen Angle Sensor
P/J774	26	9	DADF Pre Reg. Sensor (7830/35)
P/J774	28	12	DADF Pre Reg. Sensor (7845/55)
P/J775	23	9	Platen Interlock Switch
P/J775	26	8	DADF Reg. Sensor (7830/35)
P/J775	28	17	DADF Document Set Sensor (7845/55)
P/J776	23	5	Carriage Motor
P/J776	27	8	DADF Feed Motor (7830/35)
P/J777	27	7	DADF Reg. Motor (7830/35)
P/J777	28	16	Connector (3 pin) (7845/55)
P/J778	26	15	Exit Nip Release Solenoid (7830/35)
P/J778	28	22	DADF Exit Sensor (7845/55)
P/J779	26	14	Document Set Gate Solenoid (Blu conn.) (DADF-10)
P/J779	28	15	Connector (6 pin) (7845/55)
P/J780	26	16	Stamp Solenoid (7830/35) (option)
P/J780	28	9	DADF Feed Out Sensor (7845/55)
P/J781	28	11	DADF Feed In Sensor (7845/55)
P/J782	29	2	DADF Reg. Motor (7845/55)
P/J783	29	3	DADF Feed Motor (7845/55)
P/J784	29	1	DADF Pre Reg. MOTOR (7845/55)
P/J786	28	19	Connector (7845/55)
P/J790	28	21	Stamp Solenoid (7845/55) (option)
P/J791	26	20	DADF Document Set LED (7830/35)
P/J791	28	26	DADF Document Set LED (7845/55)
DP800	17	2	Connector (option)
P904	31	12	3T Module - Connector
P/J1301	12	4	BP PWB
P/J1311	12	6	BP PWB
P/J1312	12	7	BP PWB
P/J1313	12	5	BP PWB
P/J1343	17	3	Backplane (rear)

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P1395	12	10	BP PWB
P/J7191	30	2	IIT Trans PWB
P/J7192	30	1	IIT Trans PWB
P/J7461	29	5	DCDC PWB (7845/55)
CN101	21	2	LVPS Fan
F1	26	13	DADF Interlock Switch (7830/35)
F1	28	20	DADF Interlock Switch (7845/55)
F2	26	12	DADF Interlock Switch (7830/35)
F2	28	18	DADF Interlock Switch (7845/55)
LCD CN1	25	6	UI LCD Module
SJ1	23	10	Shunting Jack
USB P2	25	8	USB Connector

## HCF Plug/Jack Location List

Table 2 HCF Plug/Jack List

P/J No.	Figure No.	Item	Remarks (where to connect)
J678	1	10	AP/DC-II 7000G, 700DCP (FX)
J800	1	11	AP/DC-III C4100G, AP/DC-IV C5570G (FX)
PF/JF01	2	4	
PF/JF02	2	5	
PF/JF03	2	6	
PF/JF04	2	7	
PF/JF05	2	8	
PF/JF06	2	9	
PF/JF08	2	3	
PF/JF51	2	2	
PF/FJ52	2	1	
PF/JF53	2	10	
PF/JF54	1	2	
PF/JF56	1	9	
PF/JF56A	1	9	
PF/JF56B	1	9	
PF/JF57	2	11	
PF/JF58	1	1	
PF/JF60	1	7	
PF/JF61	1	5	
PF/JF62	1	6	
PF/JF67	1	4	
FS001	1	3	
FS002	1	3	
FS003	1	8	
FS004	1	8	

## Professional Finisher Plug/Jack Location List

Table 3 Professional Finisher Plug/Jack Location List

Connector Number	Figure Number	Item Number	Figure Title
P/J2	Figure 8	9	Stacker, H-Transport PWB, LVPS
P/J502	Figure 8	11	Stacker, H-Transport PWB, LVPS
P/J505	Figure 8	10	Stacker, H-Transport PWB, LVPS
P/J800	Figure 2	6	Professional Finisher Rear
P/J8175	Figure 11	5	Booklet Front -Professional Finisher
P/J8176	Figure 10	5	Booklet Rear -Professional Finisher
P/J8177	Figure 10	2	Booklet Rear -Professional Finisher

Table 3 Professional Finisher Plug/Jack Location List

Connector Number	Figure Number	Item Number	Figure Title
P/J8178	Figure 10	4	Booklet Rear -Professional Finisher
P/J8179	Figure 10	12	Booklet Rear -Professional Finisher
P/J8180	Figure 10	11	Booklet Rear -Professional Finisher
P/J8181	Figure 11	4	Booklet Front -Professional Finisher
P/J8182	Figure 11	1	Booklet Front -Professional Finisher
P/J8183	Figure 11	2	Booklet Front -Professional Finisher
P/J8185	Figure 10	6	Booklet Rear -Professional Finisher
P/J8186	Figure 10	10	Booklet Rear -Professional Finisher
P/J8187	Figure 10	7	Booklet Rear -Professional Finisher
P/J8188	Figure 10	13	Booklet Rear -Professional Finisher
P/J8189	Figure 11	6	Booklet Front -Professional Finisher
P/J8190	Figure 10	3	Booklet Rear -Professional Finisher
P/J8191	Figure 10	1	Booklet Rear -Professional Finisher
P/J8196	Figure 10	9	Booklet Rear -Professional Finisher
P/J8197	Figure 10	8	Booklet Rear -Professional Finisher
J8201	Figure 11	9	Booklet Front -Professional Finisher
P8201	Figure 11	3	Booklet Front -Professional Finisher
J8202	Figure 13	6	Professional Finisher - Booklet PWB
P8202	Figure 9	7	Professional Finisher - Finisher PWB
J8203	Figure 9	7	Professional Finisher - Finisher PWB
P8203	Figure 9	8	Professional Finisher - Finisher PWB
P/J8218	Figure 12	3	Professional Finisher Booklet Tray Unit
P/J8300	Figure 9	7	Professional Finisher - Finisher PWB
P/J8301	Figure 9	8	Professional Finisher - Finisher PWB
P/J8302	Figure 9	16	Professional Finisher - Finisher PWB
P/J8303	Figure 7	8	Professional Finisher Rear
P/J8304	Figure 9	1	Professional Finisher - Finisher PWB
P/J8305	Figure 9	18	Professional Finisher - Finisher PWB
P/J8306	Figure 9	4	Professional Finisher - Finisher PWB
P/J8307	Figure 9	5	Professional Finisher - Finisher PWB
P/J8308	Figure 9	2	Professional Finisher - Finisher PWB
P/J8309	Figure 9	19	Professional Finisher - Finisher PWB
P/J8310	Figure 9	9	Professional Finisher - Finisher PWB
P8311	Figure 9	15	Professional Finisher - Finisher PWB
P/J8312	Figure 7	6	Professional Finisher - Rear
P/J8313	Figure 9	12	Professional Finisher - Finisher PWB
P/J8314	Figure 9	11	Professional Finisher - Finisher PWB
P/J8315	Figure 9	13	Professional Finisher - Finisher PWB
P/J8316	Figure 9	10	Professional Finisher - Finisher PWB
P/J8317	Figure 9	14	Professional Finisher - Finisher PWB

**Table 3 Professional Finisher Plug/Jack Location List**

Connector Number	Figure Number	Item Number	Figure Title
P/J8319	Figure 2	8	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
P/J8320	Figure 3	1	Professional Finisher Compiler Exit Sensor, Buffer Path Sensor
P/J8321	Figure 2	2	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
P/J8322	Figure 2	3	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
P/J8324	Figure 7	25	Professional Finisher - Rear
P/J8325	Figure 7	23	Professional Finisher - Rear
P/J8326	Figure 8	4	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS
P/J8327	Figure 8	3	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS
P/J8328	Figure 7	20	Professional Finisher - Rear
P/J8330	Figure 8	1	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS
P/J8331	Figure 8	2	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS
P/J8332	Figure 7	16	Professional Finisher - Rear
P/J8333	Figure 7	13	Professional Finisher - Rear
P/J8334	Figure 7	4	Professional Finisher - Rear
P/J8335	Figure 7	3	Professional Finisher - Rear
P/J8336	Figure 7	24	Professional Finisher - Rear
P/J8338	Figure 7	22	Professional Finisher - Rear
P/J8339	Figure 7	2	Professional Finisher - Rear
P/J8340	Figure 3	2	Professional Finisher - Compiler Exit Sensor, Buffer Path Sensor
P/J8440	Figure 7	17	Professional Finisher - Rear
P/J8341	Figure 7	19	Professional Finisher - Rear
P/J8342	Figure 7	12	Professional Finisher - Rear
P/J8343	Figure 7	11	Professional Finisher - Rear
P/J800	Figure 9	6	Professional Finisher - Finisher PWB
P/J8344	Figure 6	3	Professional Finisher - Puncher Unit
P/J8345	Figure 7	10	Professional Finisher - Rear
P/J8346	Figure 6	8	Professional Finisher - Puncher Unit
P/J8347	Figure 6	7	Professional Finisher - Puncher Unit
P/J8348	Figure 6	1	Professional Finisher - Puncher Unit
P/J8349	Figure 7	9	Professional Finisher - Rear
P/J8350	Figure 6	5	Professional Finisher - Puncher Unit
P/J8351	Figure 6	4	Professional Finisher - Puncher Unit

**Table 3 Professional Finisher Plug/Jack Location List**

Connector Number	Figure Number	Item Number	Figure Title
P/J8352	Figure 6	2	Professional Finisher - Puncher Unit
P/J8353	Figure 6	6	Professional Finisher - Puncher Unit
P/J8354	Figure 4	3	Professional Finisher - Stapler Unit
P/J8355	Figure 7	14	Professional Finisher - Rear
P/J8356	Figure 4	1	Professional Finisher - Stapler Unit
P/J8357	Figure 4	2	Professional Finisher - Stapler Unit
P/J8358	Figure 4	4	Professional Finisher - Stapler Unit
P/J8359	Figure 5	2	Professional Finisher - Compile Tray Assembly
P/J8360	Figure 5	3	Professional Finisher - Compile Tray Assembly
P/J8361	Figure 5	1	Professional Finisher - Compile Tray Assembly
P/J8362	Figure 5	5	Professional Finisher - Compile Tray Assembly
P/J8363	Figure 5	4	Professional Finisher - Compile Tray Assembly
J8364	Figure 2	4	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
J8365	Figure 2	7	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
P/J8371	Figure 8	5	Professional Finisher - Stacker, H-Transport PWB, LVPS
P/J8373	Figure 8	7	Professional Finisher - Stacker, H-Transport PWB, LVPS
P/J8376	Figure 9	17	Professional Finisher - Finisher PWB
P/J8377	Figure 13	3	Professional Finisher - Booklet PWB
P/J8378	Figure 13	1	Professional Finisher - Booklet PWB
P/J8383	Figure 2	6	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
J8384	Figure 2	5	Professional Finisher - Top Tray Exit Sensor, Gate Sensor
P8389	Figure 9	3	Professional Finisher - Finisher PWB
P/J8391	Figure 7	26	Professional Finisher - Rear
P/J8392	Figure 3	3	Professional Finisher Compiler Exit Sensor, Buffer Path Sensor
P/J8393	Figure 7	1	Professional Finisher - Rear
P/J8394	Figure 7	21	Professional Finisher - Rear
P/J8396	Figure 8	6	Professional Finisher - Stacker, H-Transport PWB, LVPS
P/J8405	Figure 13	4	Professional Finisher - Booklet PWB
P/J8406	Figure 13	10	Professional Finisher - Booklet PWB
P/J8407	Figure 13	9	Professional Finisher - Booklet PWB
P/J8408	Figure 13	8	Professional Finisher - Booklet PWB
P/J8409	Figure 7	7	Professional Finisher - Rear
P/J8411	Figure 13	11	Professional Finisher - Booklet PWB
P/J8429	Figure 13	5	Professional Finisher - Booklet PWB
P/J8432	Figure 2	1	Professional Finisher - Top Tray Exit Sensor, Gate Sensor

**Table 3 Professional Finisher Plug/Jack Location List**

<b>Connector Number</b>	<b>Figure Number</b>	<b>Item Number</b>	<b>Figure Title</b>
P/J8434	Figure 7	5	Professional Finisher - Rear
P/J8440	Figure 7	17	Professional Finisher - Rear
P/J8441	Figure 7	18	Professional Finisher - Rear
J8444	Figure 1	6	Professional Finisher - H-Transport Assembly
P8444	Figure 8	8	Professional Finisher - Stacker, H-Transport PWB, LVPS
P/J8445	Figure 1	8	Professional Finisher - H-Transport Assembly
P/J8446	Figure 1	2	Professional Finisher - H-Transport Assembly
P/J8447	Figure 1	1	Professional Finisher - H-Transport Assembly
P/J8448	Figure 1	7	Professional Finisher - H-Transport Assembly
P/J8449	Figure 1	3	Professional Finisher - H-Transport Assembly
P/J8450	Figure 1	4	Professional Finisher - H-Transport Assembly
P/J8453	Figure 1	5	Professional Finisher - H-Transport Assembly
P/J8460	Figure 12	2	Professional Finisher Booklet Tray Unit
P/J8461	Figure 8	12	Professional Finisher - Stacker, H-Transport PWB, LVPS



## Integrated Office Finisher Plug/Jack Location List

Table 4 Integrated Office Finisher Plug/Jack Location List

Connector Number	Figure Number	Item Number	Figure Title
P/J8700	2	2	Integrated Office Finisher PWB Location
P/J8701	2	1	Integrated Office Finisher PWB Location
P/J8702	2	11	Integrated Office Finisher PWB Location
P/J8703	2	10	Integrated Office Finisher PWB Location
P/J8704	2	13	Integrated Office Finisher PWB Location
P/J8705	2	12	Integrated Office Finisher PWB Location
P/J8706	2	8	Integrated Office Finisher PWB Location
P/J8707	2	3	Integrated Office Finisher PWB Location
P/J8708	2	17	Integrated Office Finisher PWB Location
P/J8709	2	16	Integrated Office Finisher PWB Location
P/J8710	2	9	Integrated Office Finisher PWB Location
P/J8711	2	4	Integrated Office Finisher PWB Location
P/J8721	3	2	Integrated Office Finisher Bottom Location
P/J8722	3	1	Integrated Office Finisher Bottom Location
P/J8723	3	6	Integrated Office Finisher Bottom Location
P/J8724	1	1	Integrated Office Finisher Front Location
P/J8725	3	11	Integrated Office Finisher Bottom Location
P/J8726	1	7	Integrated Office Finisher Front Location
P/J8727	1	9	Integrated Office Finisher Front Location
P/J8728	1	8	Integrated Office Finisher Front Location
P/J8729	1	6	Integrated Office Finisher Front Location
P/J8730	1	2	Integrated Office Finisher Front Location
P/J8731	1	4	Integrated Office Finisher Front Location
P/J8732	1	3	Integrated Office Finisher Front Location
P/J8733	2	14	Integrated Office Finisher PWB Location
P/J8734	2	15	Integrated Office Finisher PWB Location
P/J8735	1	5	Integrated Office Finisher Front Location
P/J8736	3	5	Integrated Office Finisher Bottom Location
J8737A	3	9	Integrated Office Finisher Bottom Location
J8737B	3	9	Integrated Office Finisher Bottom Location
J8738A	3	10	Integrated Office Finisher Bottom Location
J8738B	3	10	Integrated Office Finisher Bottom Location
P/J8739	2	7	Integrated Office Finisher PWB Location
P/J8740	2	5	Integrated Office Finisher PWB Location
P/J8741	2	6	Integrated Office Finisher PWB Location
J8742A	3	7	Integrated Office Finisher Bottom Location
J8742B	3	8	Integrated Office Finisher Bottom Location
CN3	3	4	Integrated Office Finisher Bottom Location

Table 4 Integrated Office Finisher Plug/Jack Location List

Connector Number	Figure Number	Item Number	Figure Title
CN4	3	3	Integrated Office Finisher Bottom Location

## Office Finisher LX Plug/Jack Location List

Table 5 Office Finisher (LX) Plug/Jack List

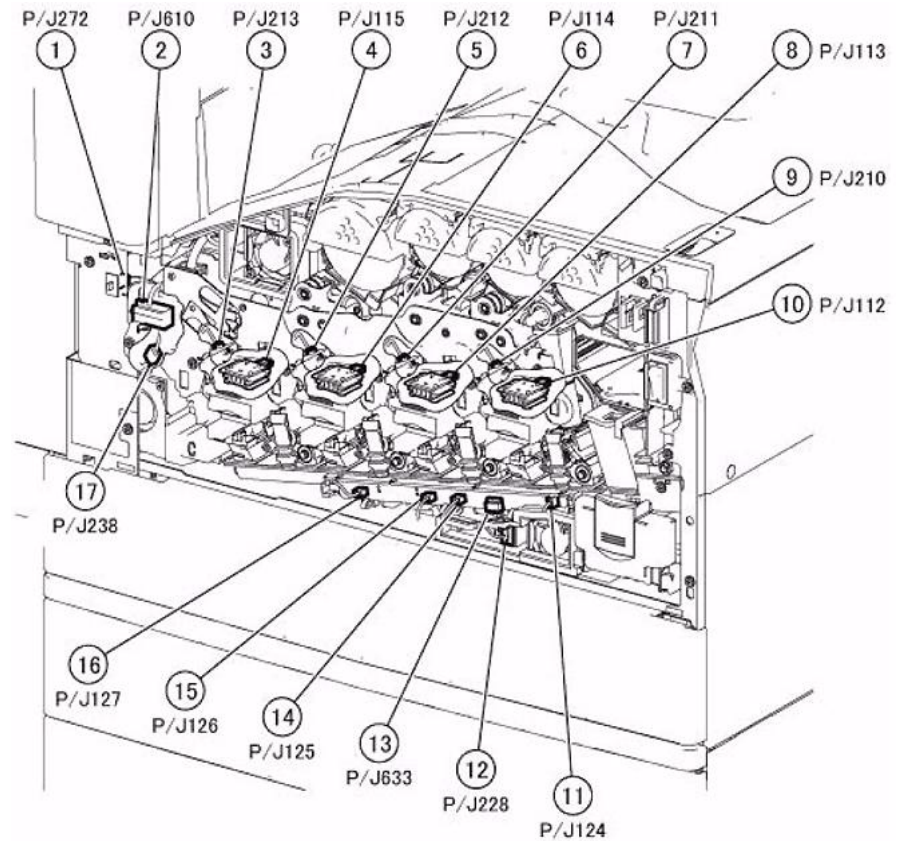
Connector Number	Figure Number	Item Number	Figure Title
P/J590	3	15	Finisher (LX) Rear
P/J591	3	14	Finisher (LX) Rear
J8860	1	1	Finisher (LX) Horizontal Transport
J8861	1	4	Finisher (LX) Horizontal Transport
P/J8862	1	2	Finisher (LX) Horizontal Transport
J8863	1	7	Finisher (LX) Horizontal Transport
P8863	1	5	Finisher (LX) Horizontal Transport
J8864	1	8	Finisher (LX) Horizontal Transport
J8865	1	10	Finisher (LX) Horizontal Transport
J8866	1	6	Finisher (LX) Horizontal Transport
P/J8867	1	9	Finisher (LX) Horizontal Transport
J8868	4	4	Finisher (LX) Eject
J8869	4	3	Finisher (LX) Eject
J8870	3	24	Finisher (LX) Rear
J8871	3	23	Finisher (LX) Rear
J8872	3	21	Finisher (LX) Rear
J8873	3	2	Finisher (LX) Rear
J8874	3	1	Finisher (LX) Rear
J8875	3	22	Finisher (LX) Rear
P/J8876	4	5	Finisher (LX) Eject
P/J8877	3	20	Finisher (LX) Rear
P/J8878	3	7	Finisher (LX) Rear
P/J8879	3	5	Finisher (LX) Rear
J8880	4	7	Finisher (LX) Eject
J8881	4	11	Finisher (LX) Eject
J8882	4	6	Finisher (LX) Eject
P/J8883	4	8	Finisher (LX) Eject
P/J8884	4	10	Finisher (LX) Eject
J8885	2	7	Finisher (LX) Front
J8886	2	6	Finisher (LX) Front
J8887	2	5	Finisher (LX) Front
P/J8888	4	9	Finisher (LX) Eject
J8889	3	3	Finisher (LX) Rear



Table 5 Office Finisher (LX) Plug/Jack List

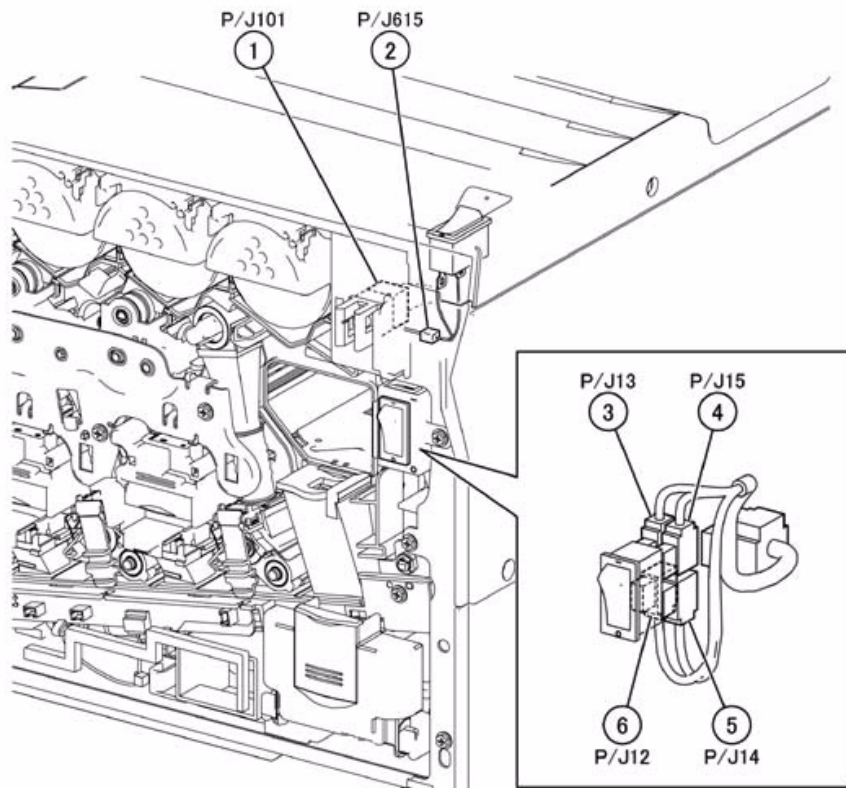
Connector Number	Figure Number	Item Number	Figure Title
J8890	3	4	Finisher (LX) Rear
J8891	4	2	Finisher (LX) Eject
P/J8892	5	1	Booklet Maker Stapler Assembly
P/J8893	5	2	Booklet Maker Stapler Assembly
J8894	6	1	Booklet Maker PWB
J8895	6	3	Booklet Maker PWB
P/J8896	5	7	Booklet Maker Stapler Assembly
J8897	5	4	Booklet Maker Stapler Assembly
J8898	5	5	Booklet Maker Stapler Assembly
J8899	5	6	Booklet Maker Stapler Assembly
J8900	5	8	Booklet Maker Stapler Assembly
J8901	5	3	Booklet Maker Stapler Assembly
P/J8903	2	2	Finisher (LX) Front
P8903	4	1	Finisher (LX) Eject
J8904	2	3	Finisher (LX) Front
P/J8905	2	4	Finisher (LX) Front
P/J8906	6	2	Booklet Maker PWB
J8980	3	19	Finisher (LX) Rear
P/J8981	3	10	Finisher (LX) Rear
J8982	3	18	Finisher (LX) Rear
P/J8983	3	9	Finisher (LX) Rear
J8984	3	6	Finisher (LX) Rear
J8985	6	4	Booklet Maker PWB
P8985	3	17	Finisher (LX) Rear
P/J8986	3	8	Finisher (LX) Rear
J8987	1	3	Finisher (LX) Horizontal Transport
P8987	3	16	Finisher (LX) Rear
P/J8988	3	11	Finisher (LX) Rear
J8989	3	13	Finisher (LX) Rear
P/J8990	3	12	Finisher (LX) Rear
P/J8991	6	9	Booklet Maker PWB
P/J8992	6	7	Booklet Maker PWB
P/J8993	6	6	Booklet Maker PWB
P/J8994	6	5	Booklet Maker PWB
P/J8995	6	8	Booklet Maker PWB

## IOT Plug/Jack Illustrations



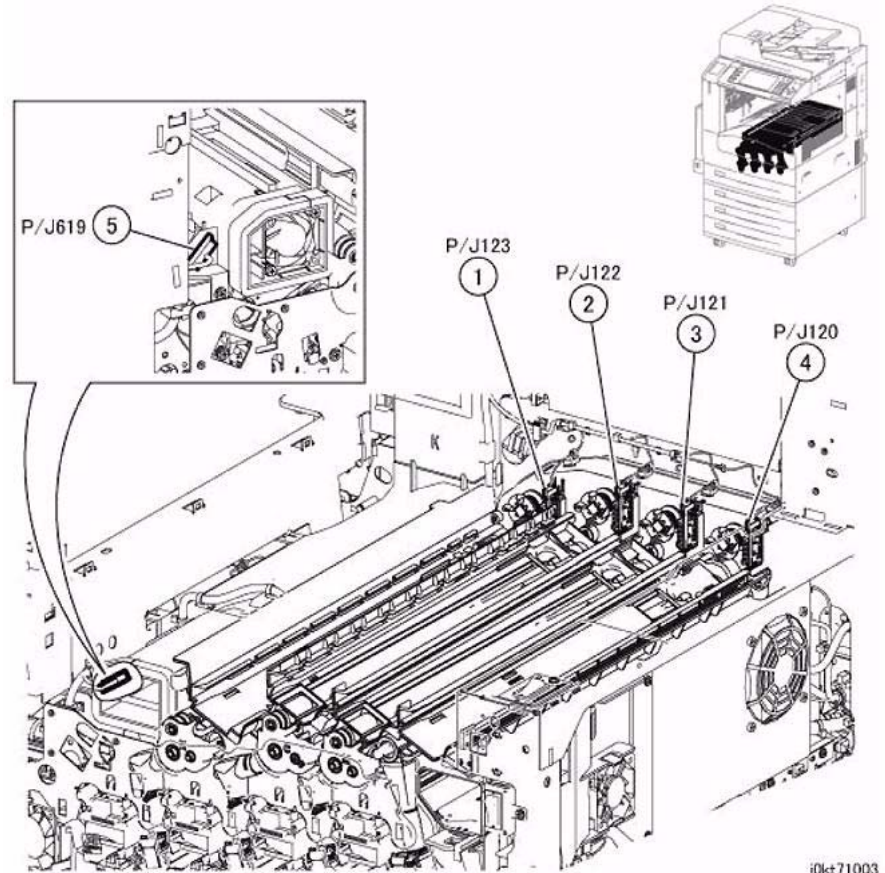
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Figure 1 Front Xerographics



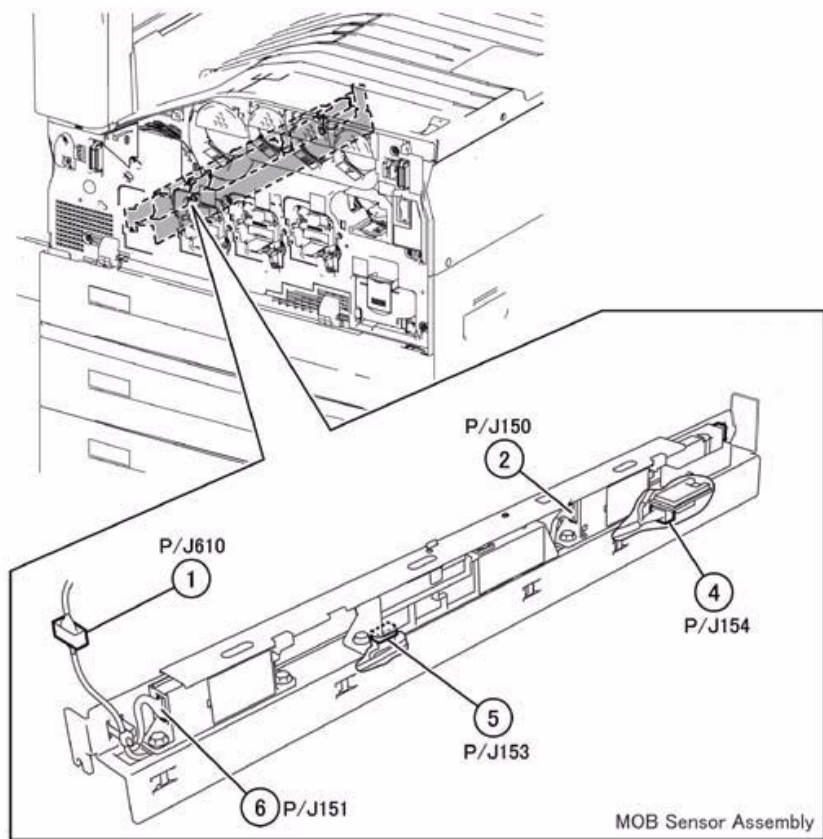
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Figure 2 Main Power/Front Cover Interlock Switch



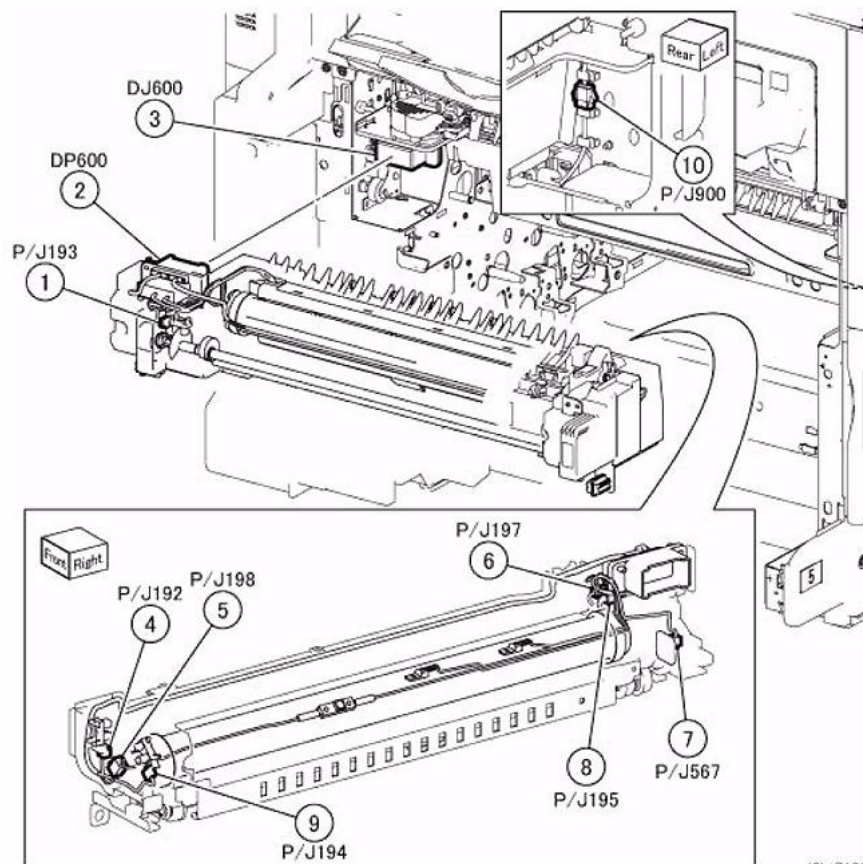
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Figure 3 Toner CRUM Coupler, IBT Fan 1/2



j0ki70004

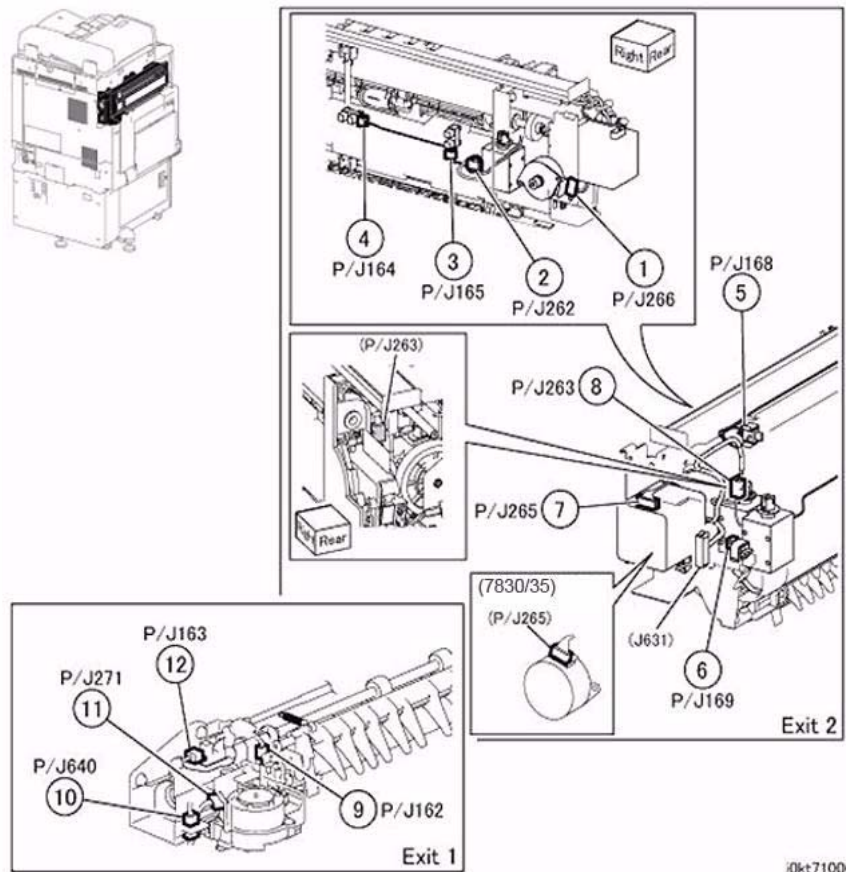
Figure 4 MOB ADC Assembly



j0kt71005

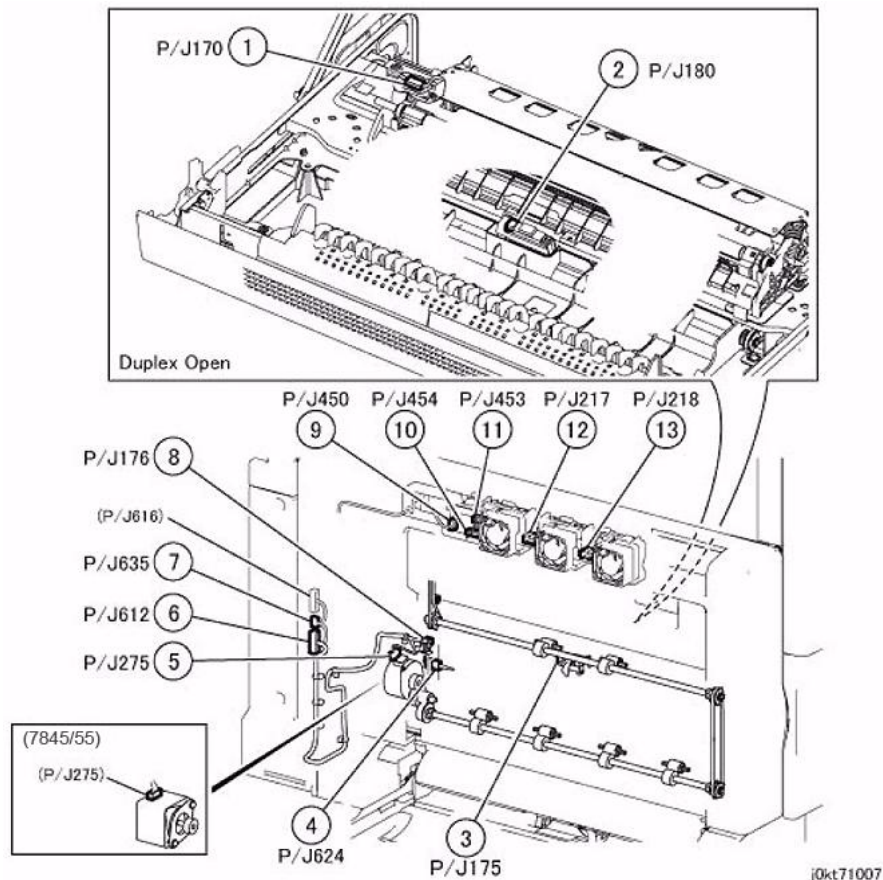
Figure 5 Fuser





j0kt71006

Figure 6 Exit



j0kt71007

Figure 7 L/H Cover

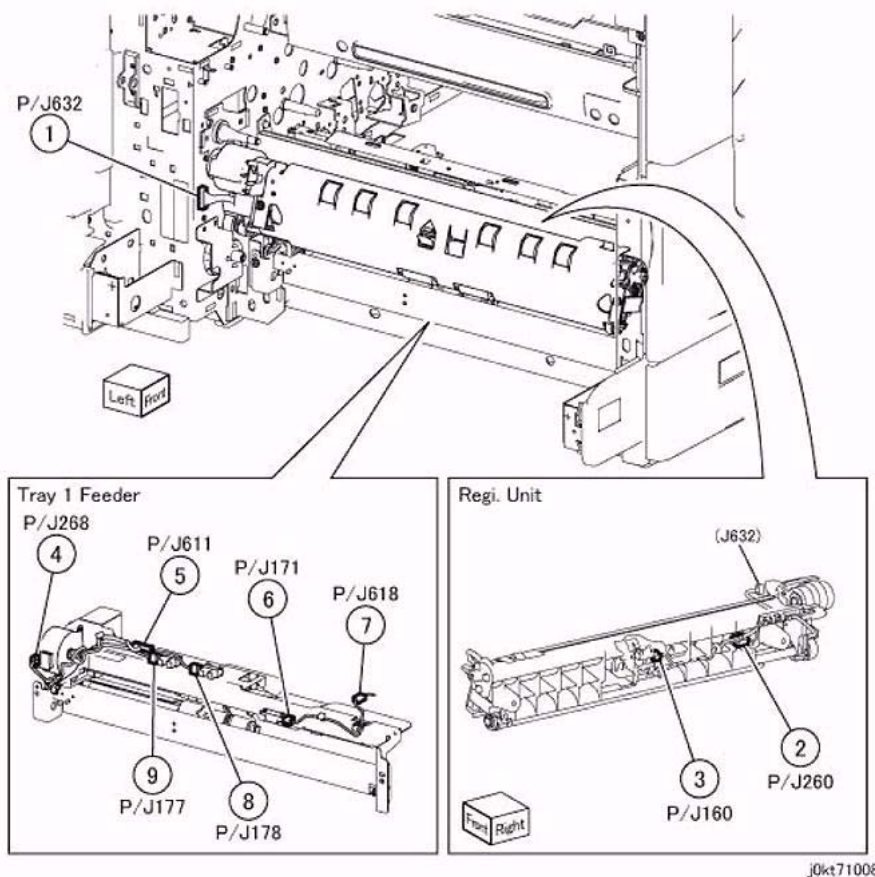


Figure 8 IOT Paper Feed / Transport

j0kt71008

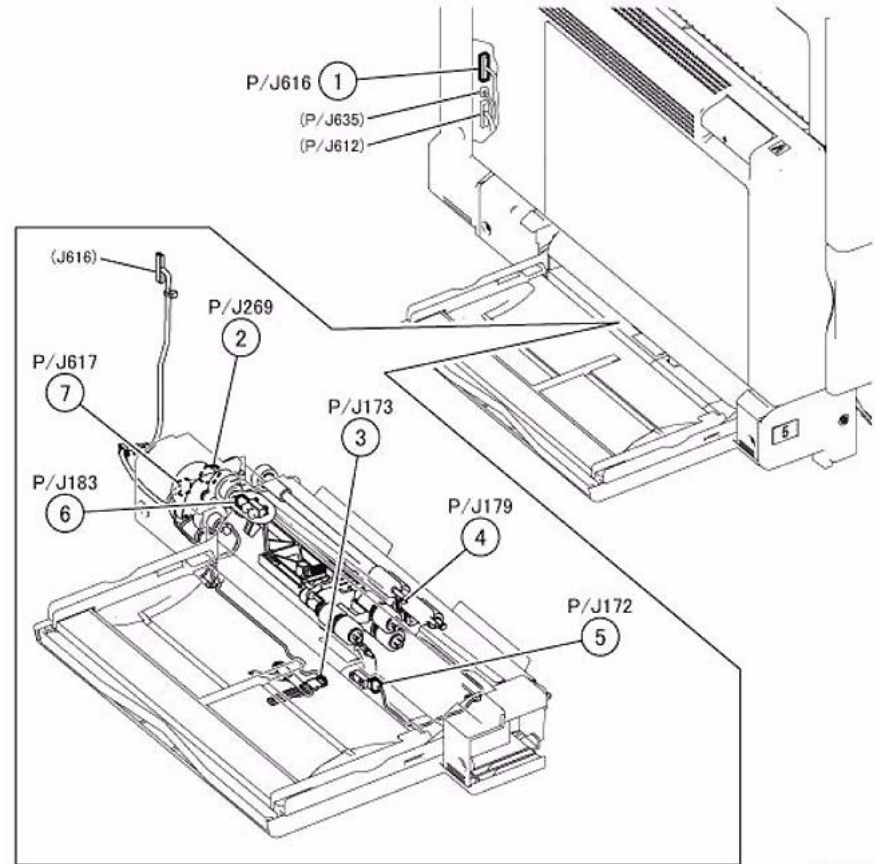


Figure 9 Bypass Tray (MSI)

j0kt71009

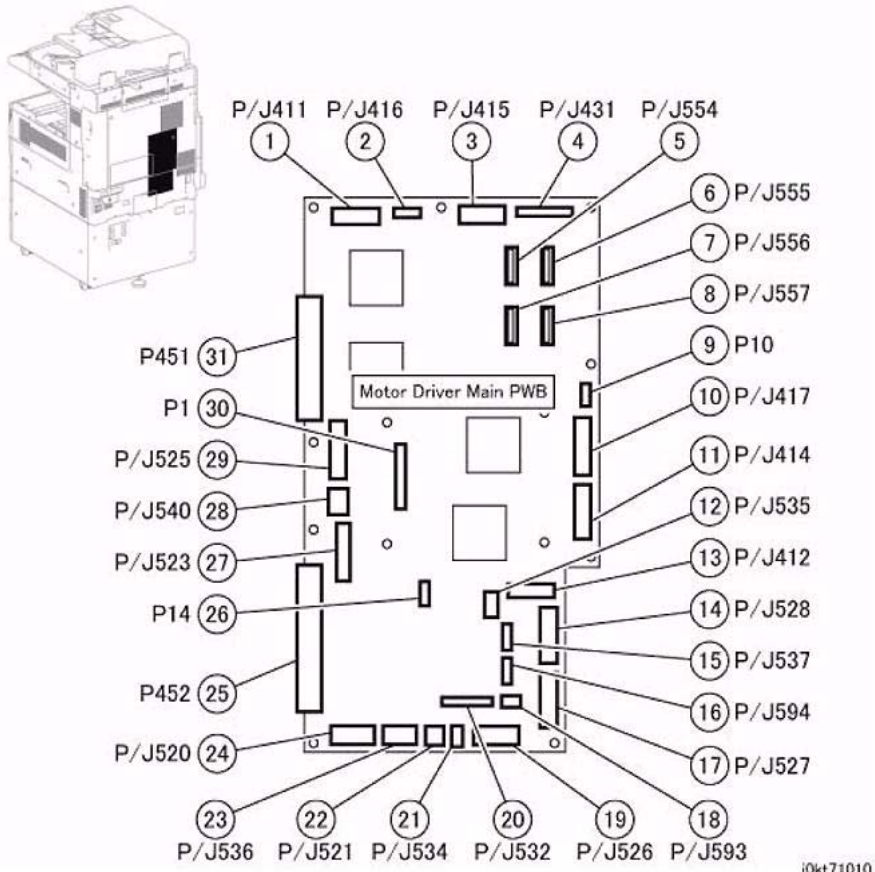


Figure 10 Motor Driver (MD) Main PWB

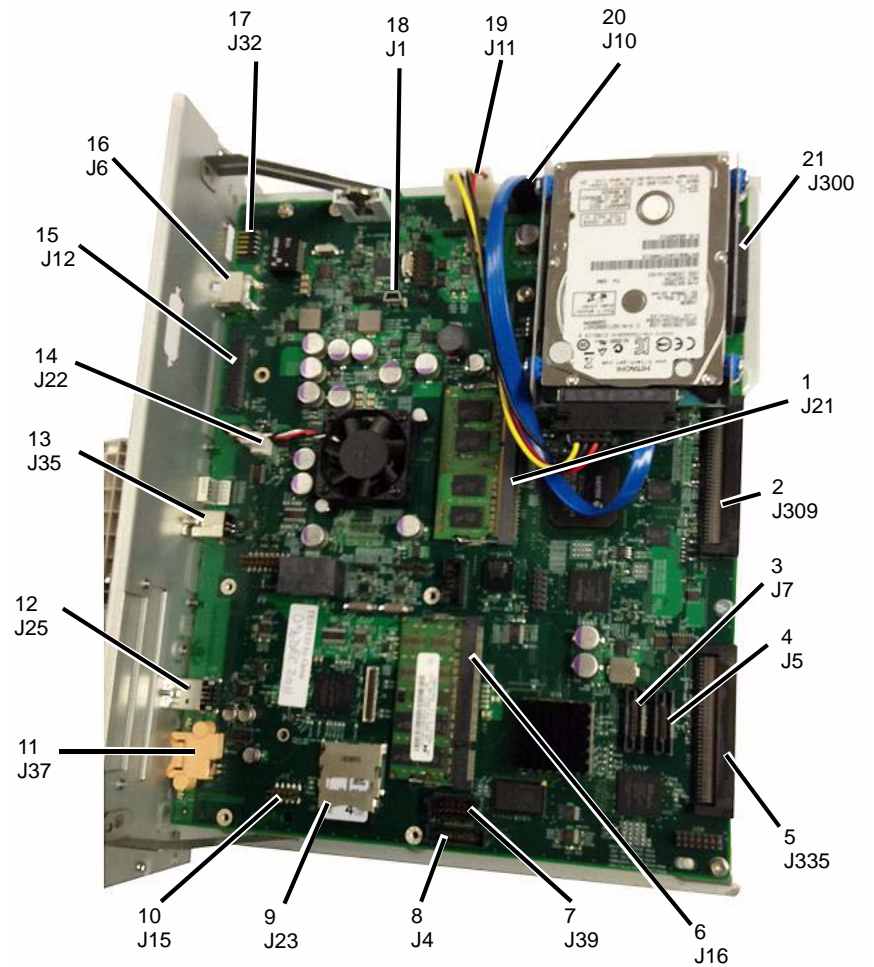


Figure 11 SBC



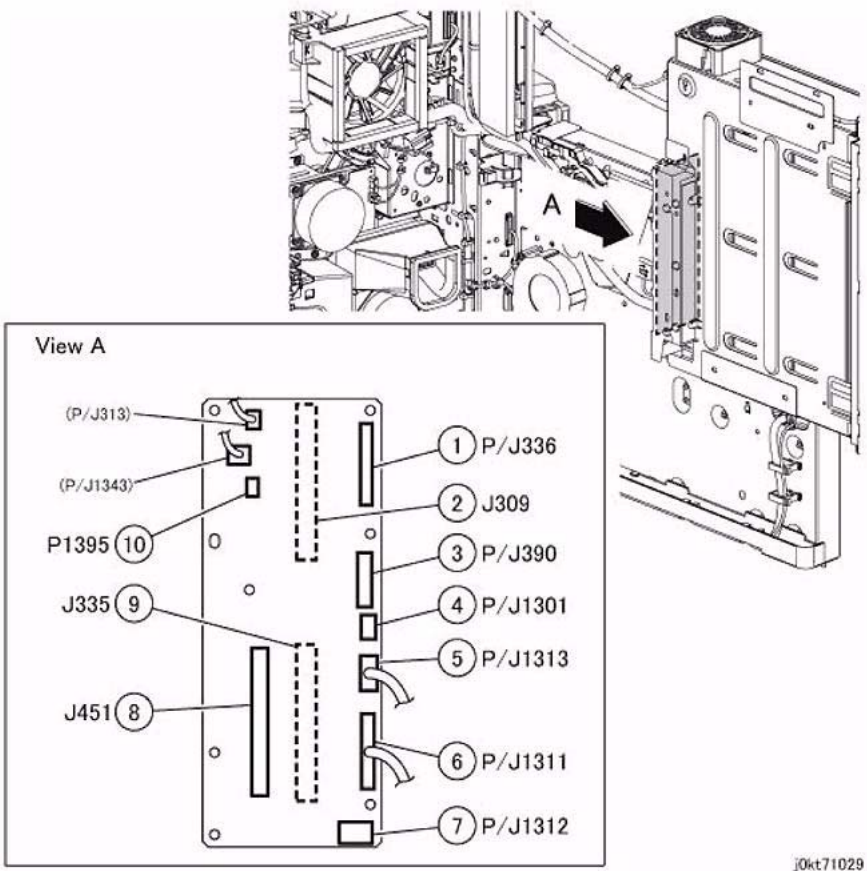


Figure 12 Backplane PWB

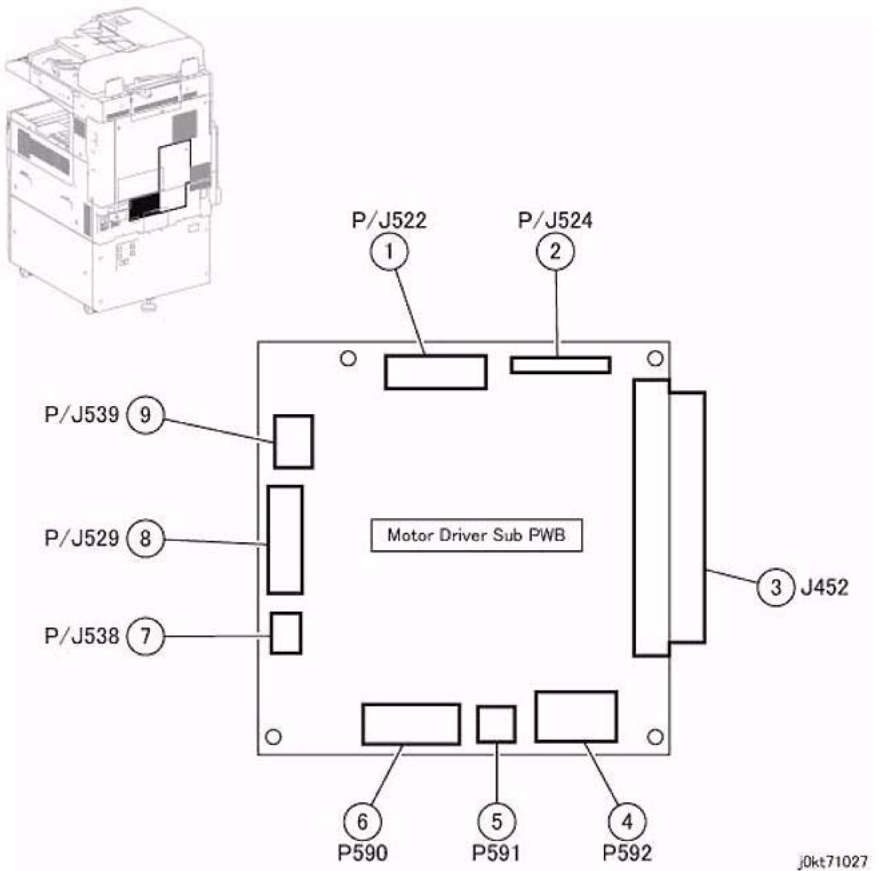


Figure 13 Motor Driver Sub PWB

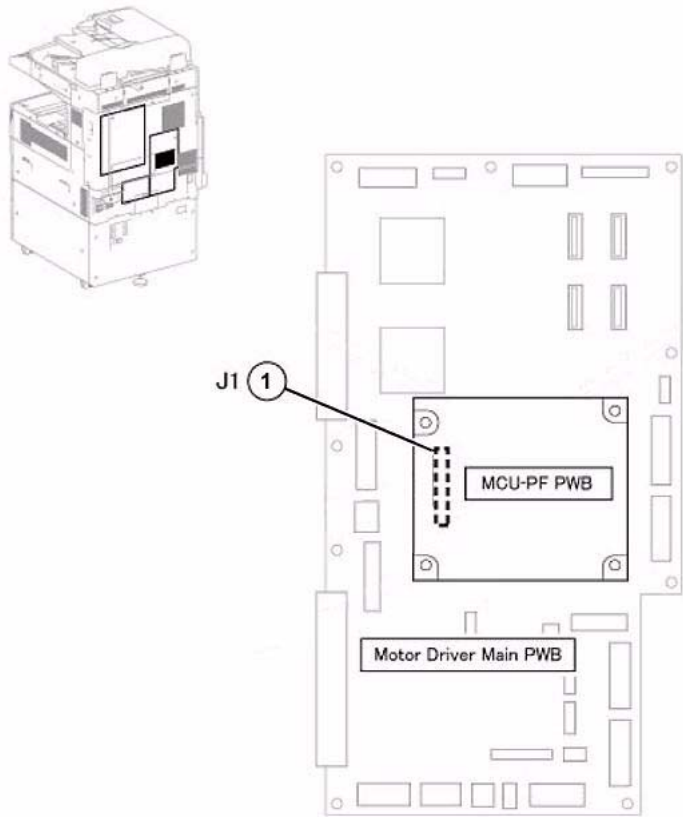


Figure 14 MCU-PF PWB

j0kt71042

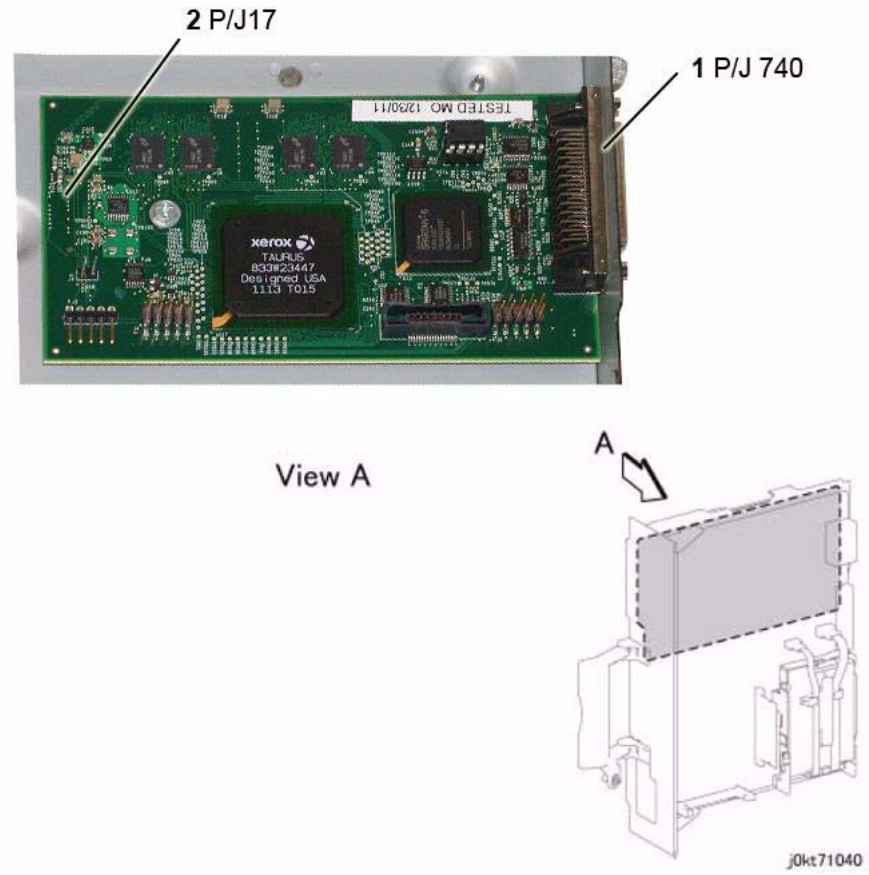


Figure 15 CIS PWB

j0kt71040



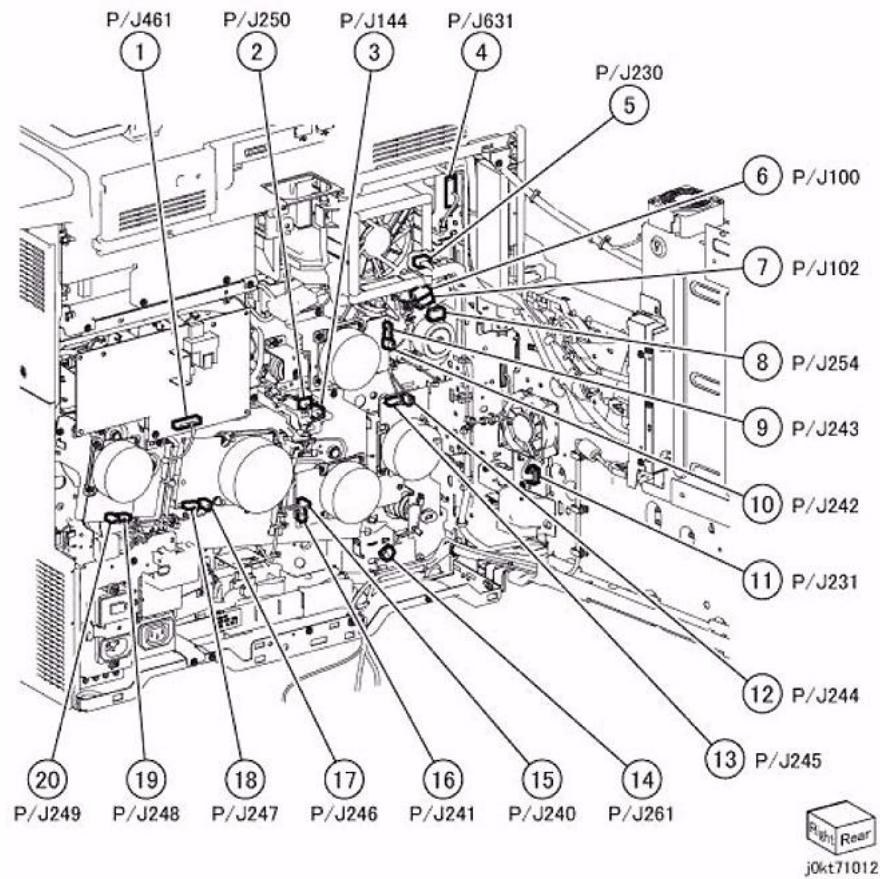


Figure 16 IOT Rear Location

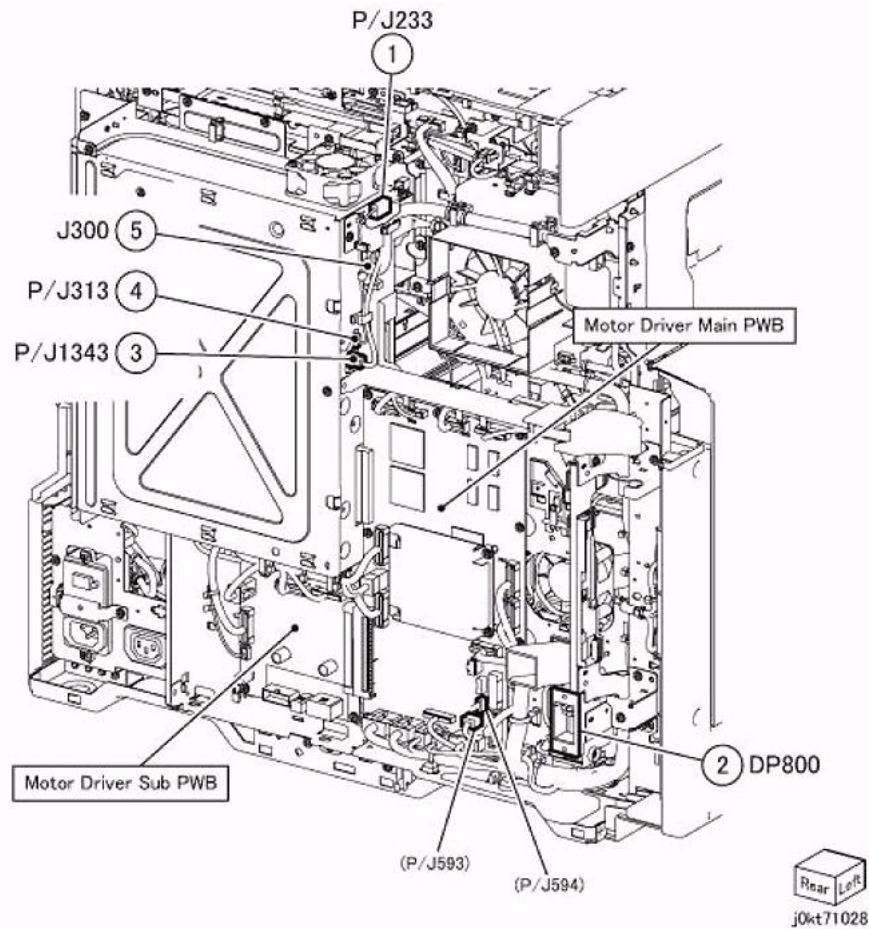


Figure 17 IOT Rear (Close)

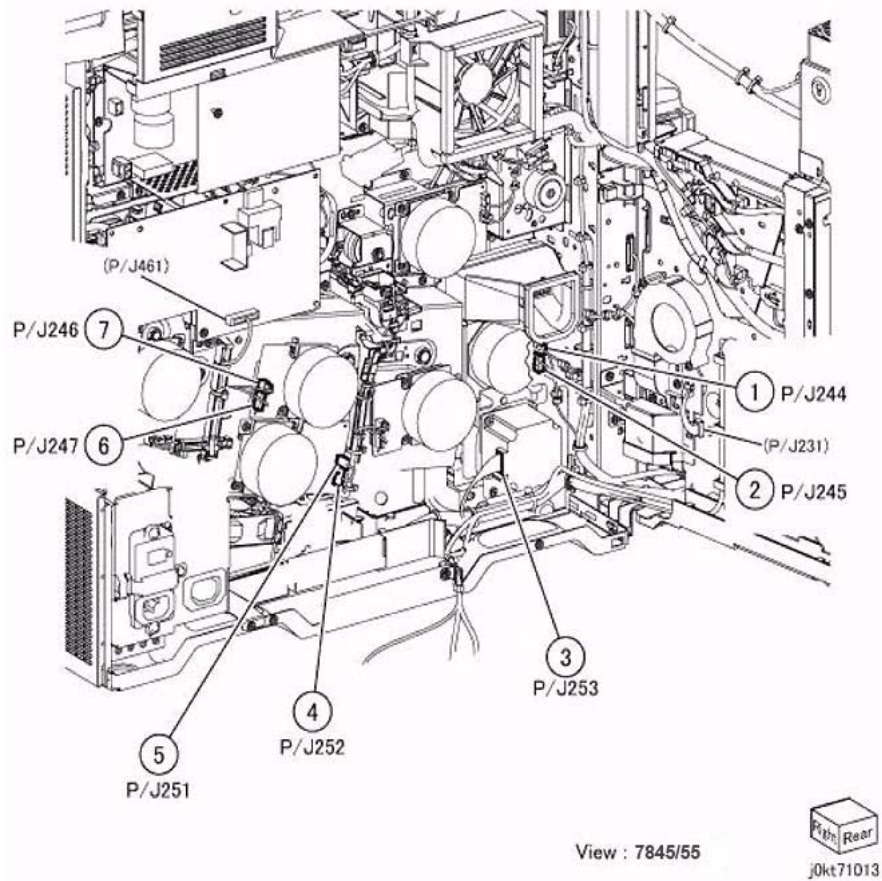


Figure 18 Rear Location - Open (7845/55)

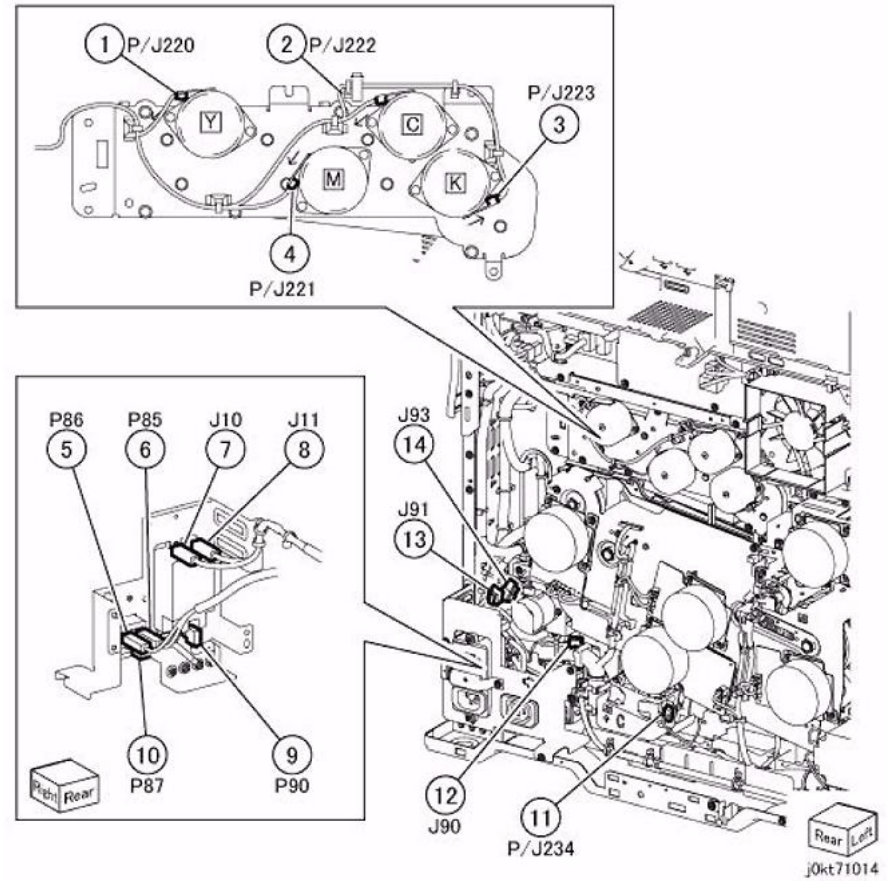


Figure 19 Toner Dispense Motor (Y,M,C,K), GFI Chassis, Bottom Fan



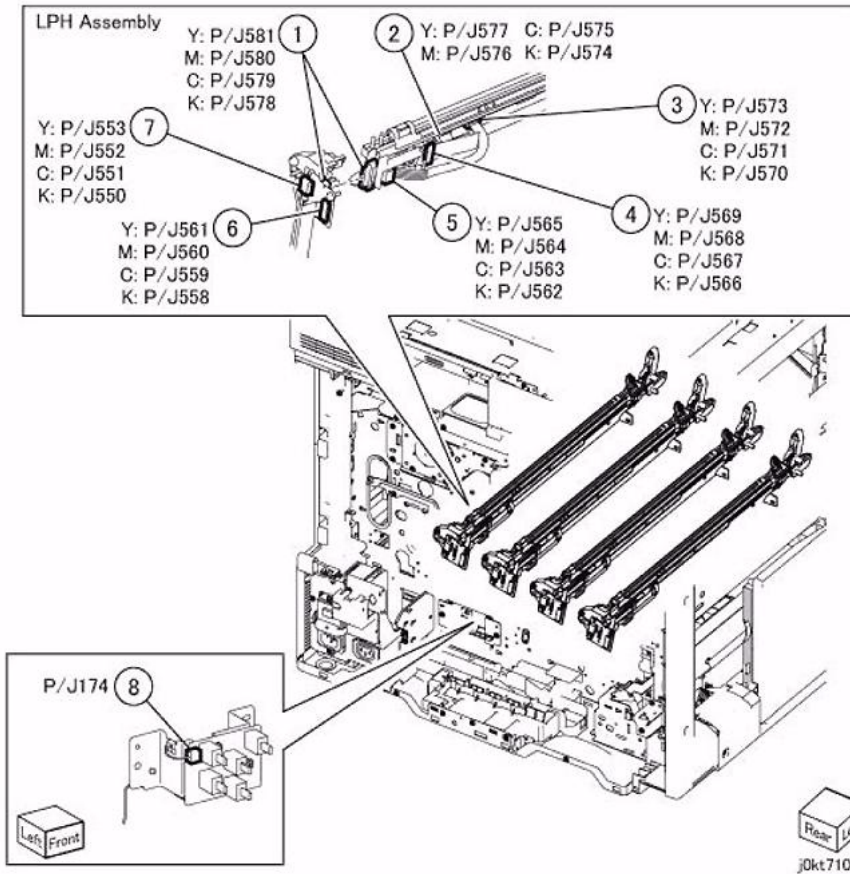


Figure 20 LPH Unit, Tray1 Paper Size Sensor, IOT Heater

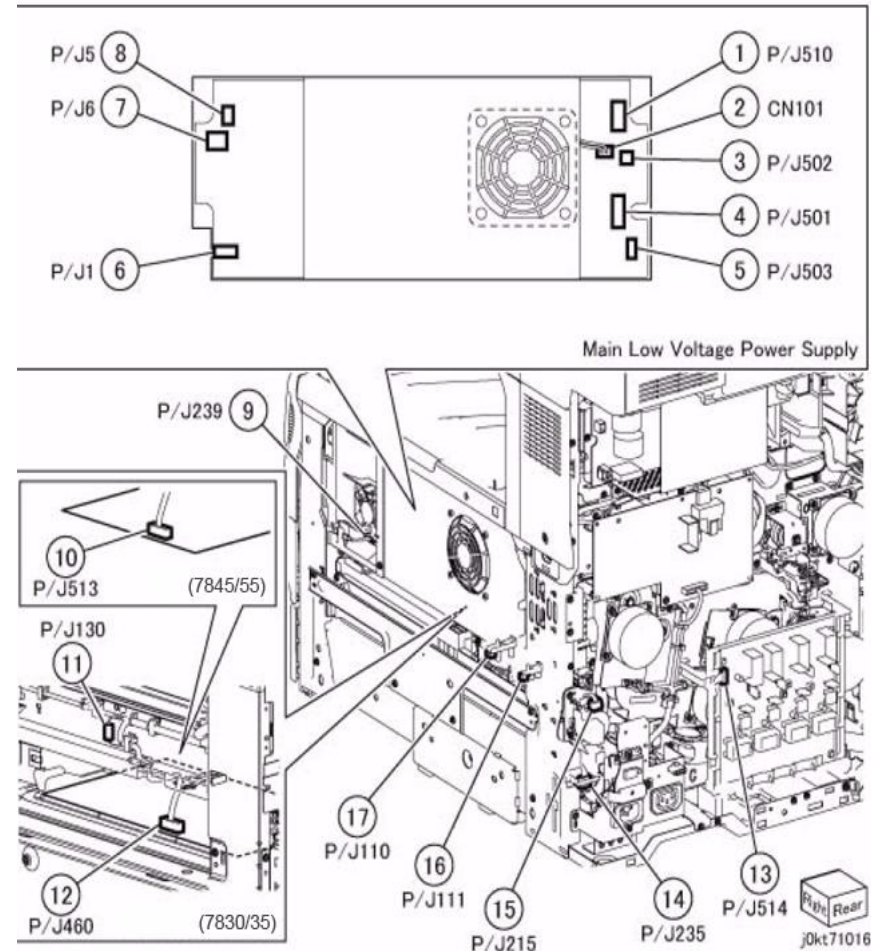


Figure 21 Main LVPS, HVPS (DEV/BCR), Agitator Motor

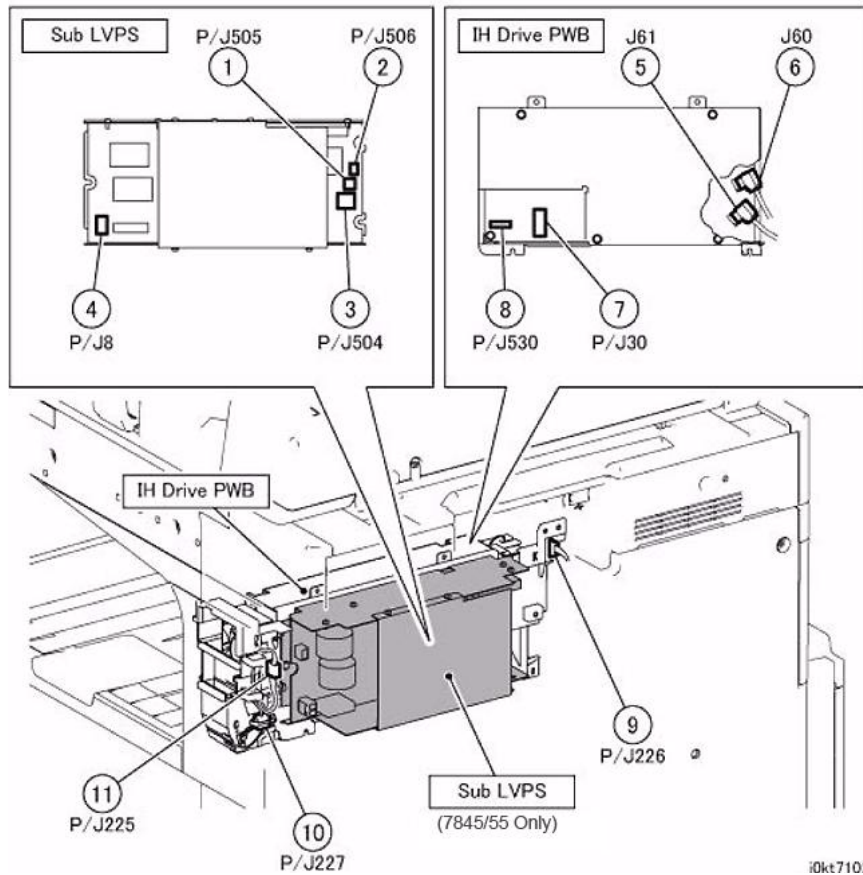


Figure 22 IH PWB, Sub LVPS

i0kt71026

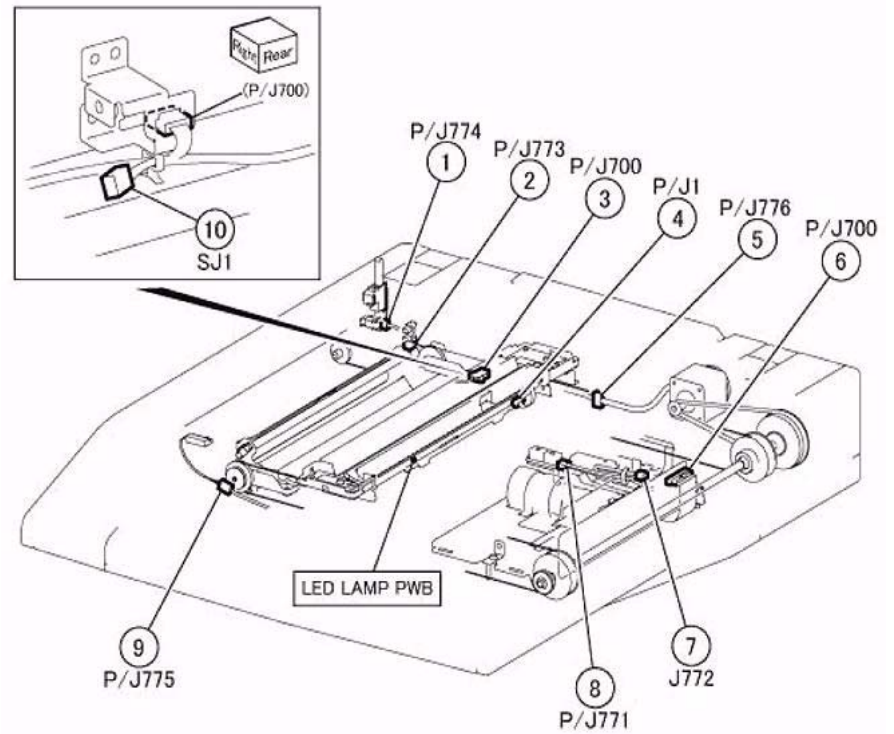


Figure 23 IIT (1 of 2)

j0kt71017

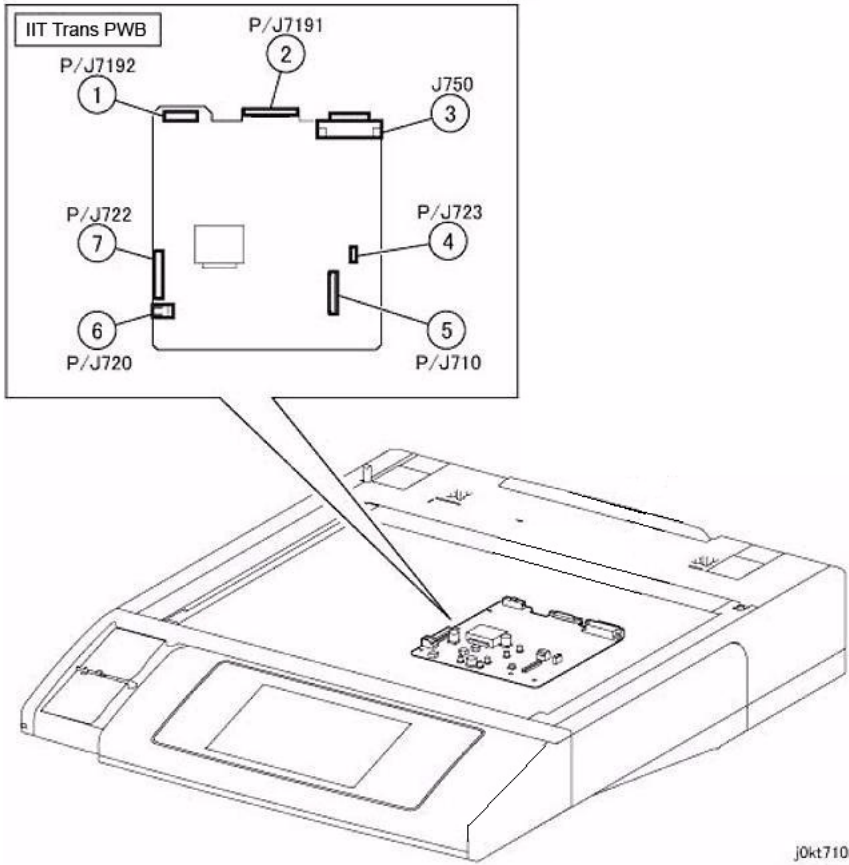


Figure 24 IIT (2 of 2)

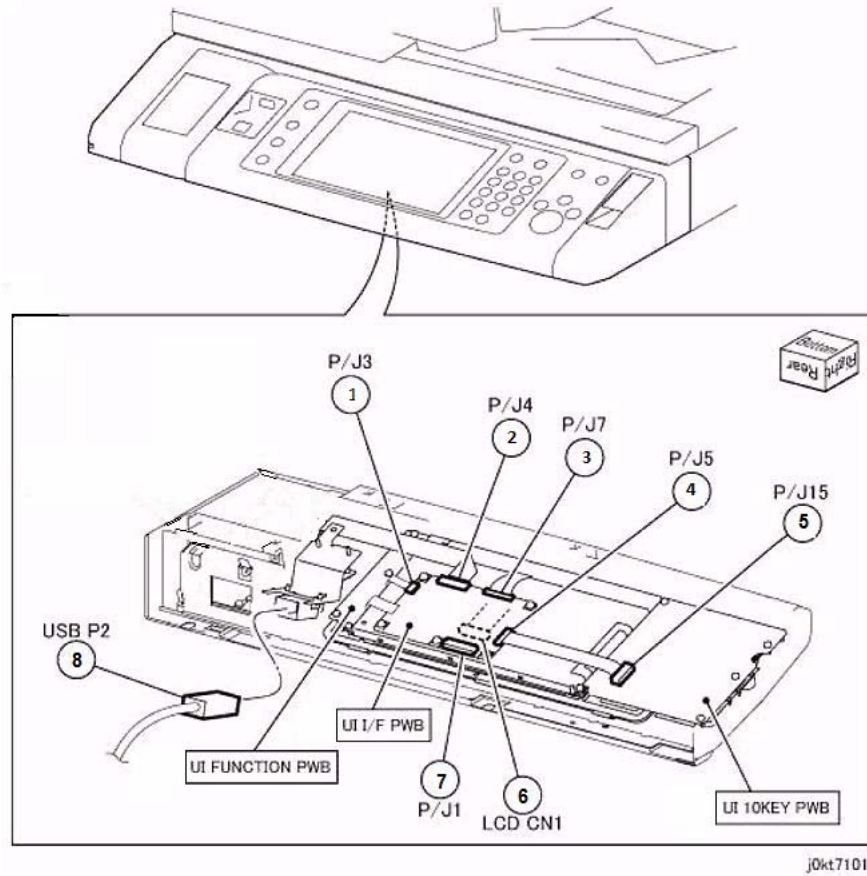
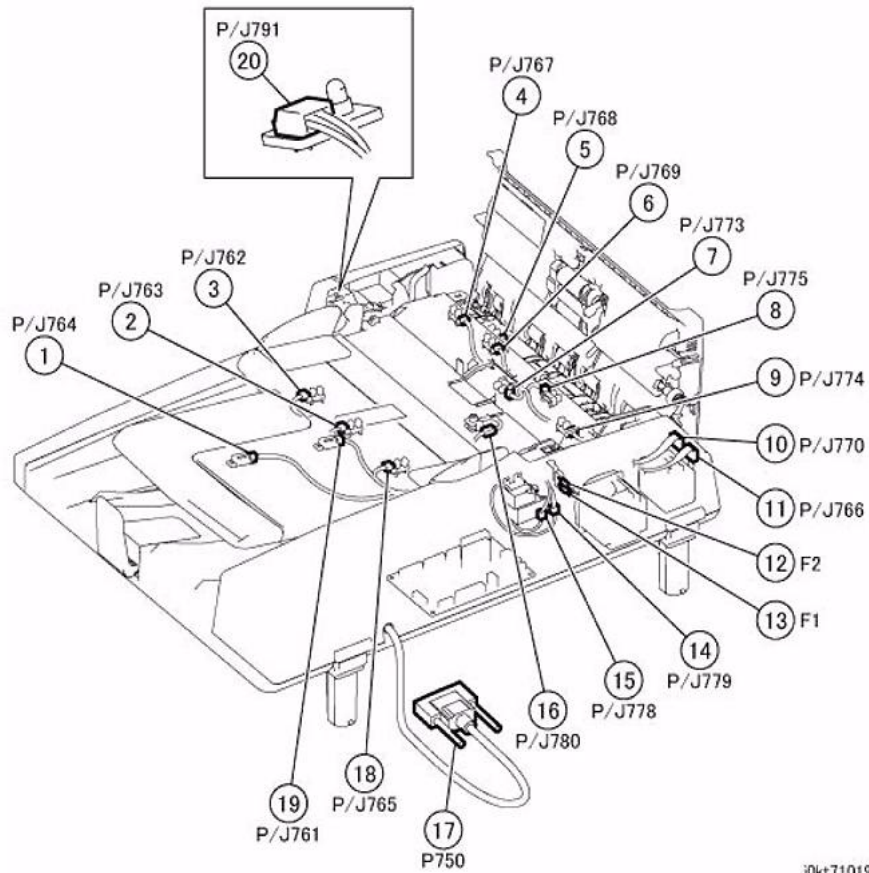


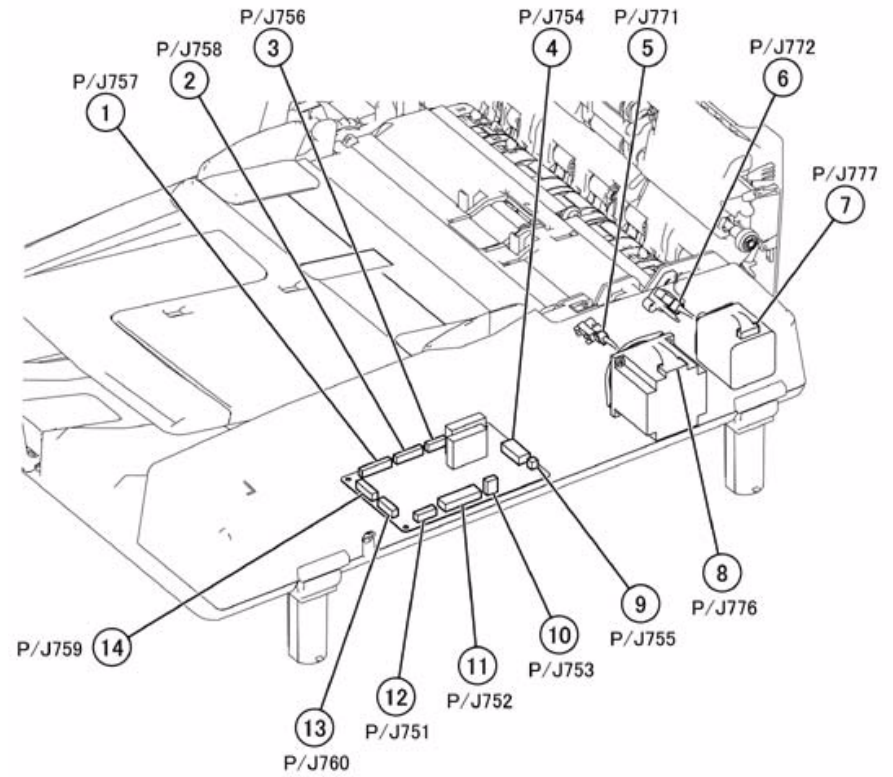
Figure 25 MCW Control Panel





j0kt71019

Figure 26 DADF Rear Location (7830/35)



j0ki70020

Figure 27 DADF PWB (7830/35)

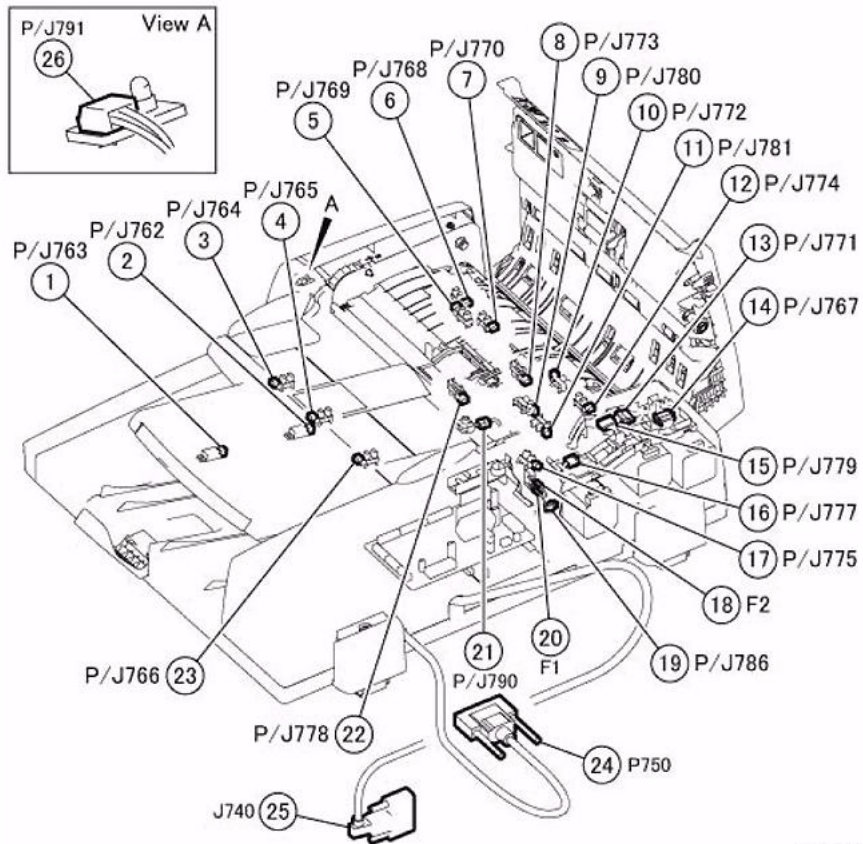


Figure 28 DADF Rear Location (7845/55)

j0kt71032

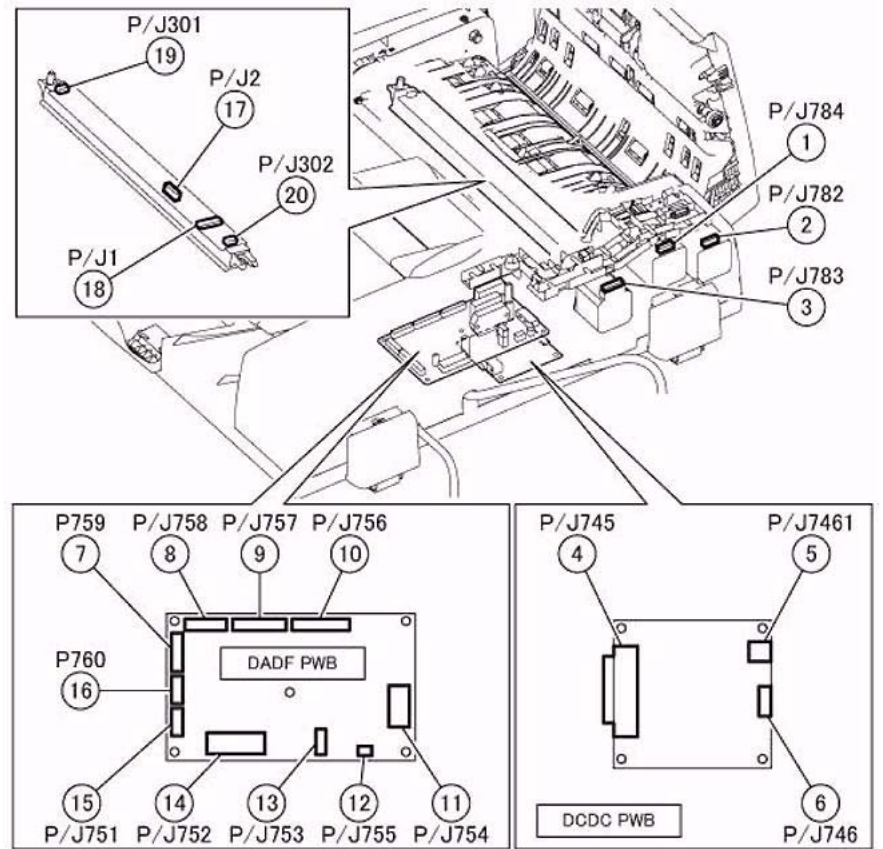


Figure 29 DADF PWB (7845/55)

j0kt71033

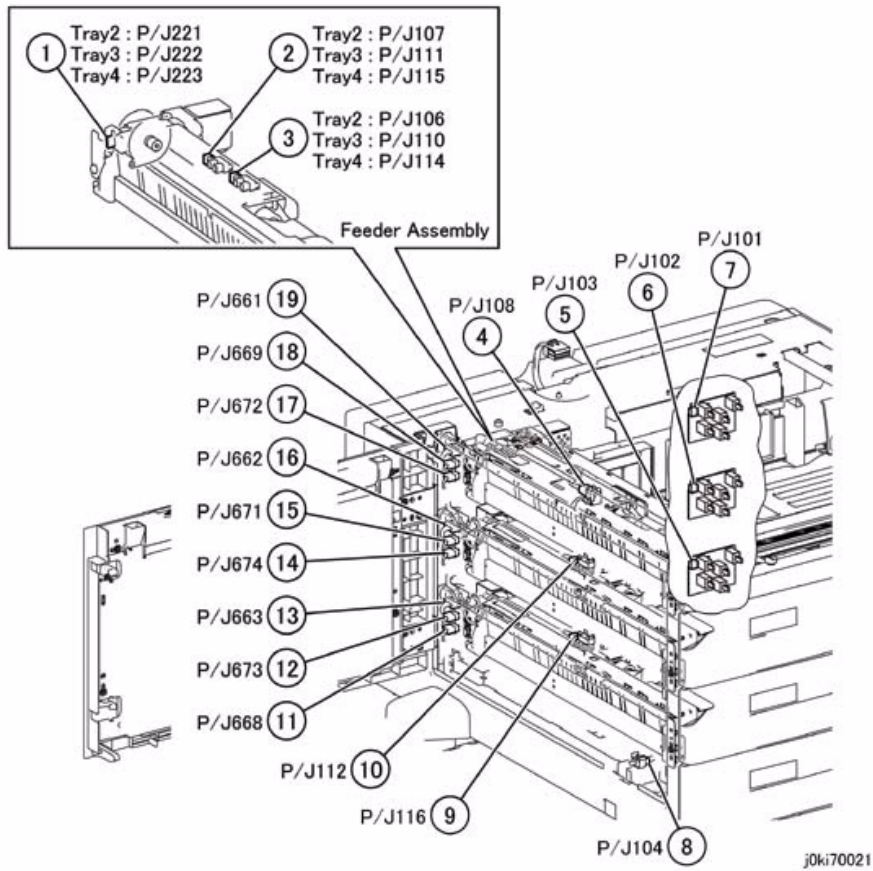


Figure 30 3T Module - Tray2/3/4 Feeder, Feed Out Sensor, Paper Size Sensor

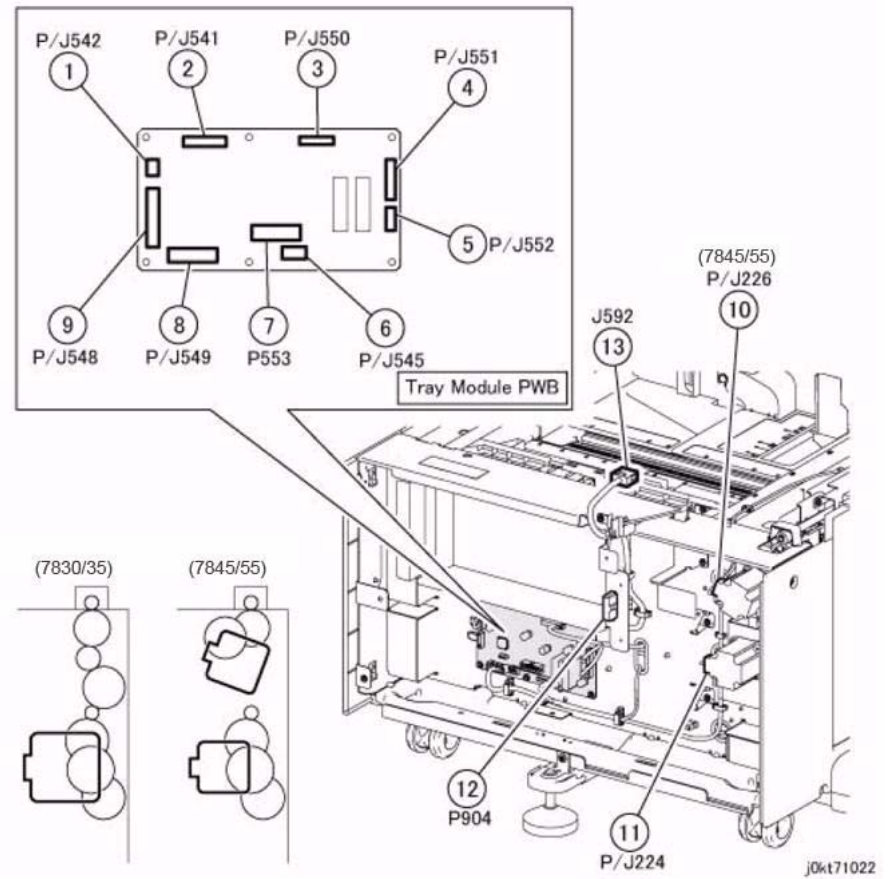


Figure 31 3T Module - Tray Module PWB, TM Take Away Motor



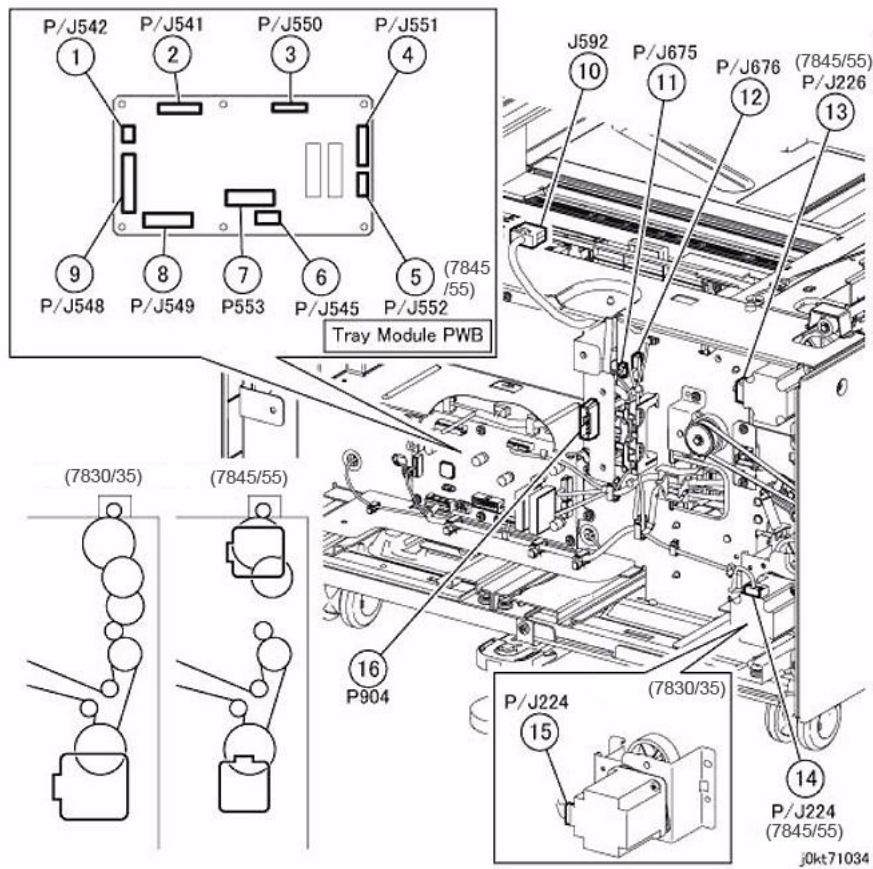


Figure 32 TT Module - Rear Location

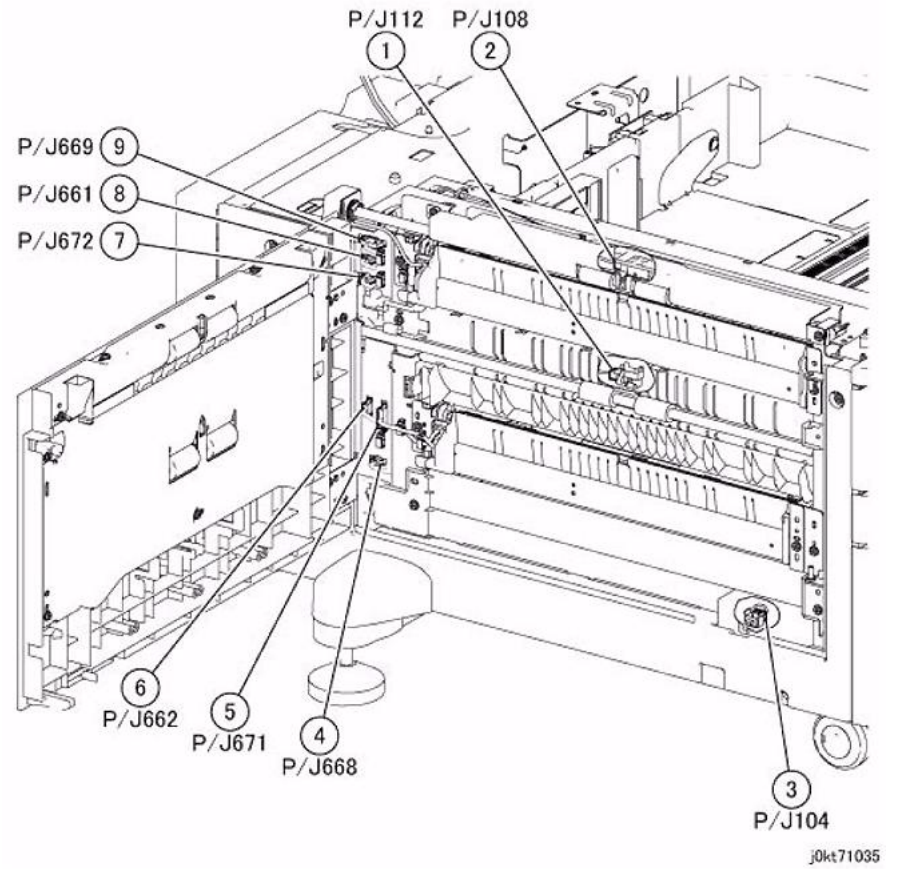
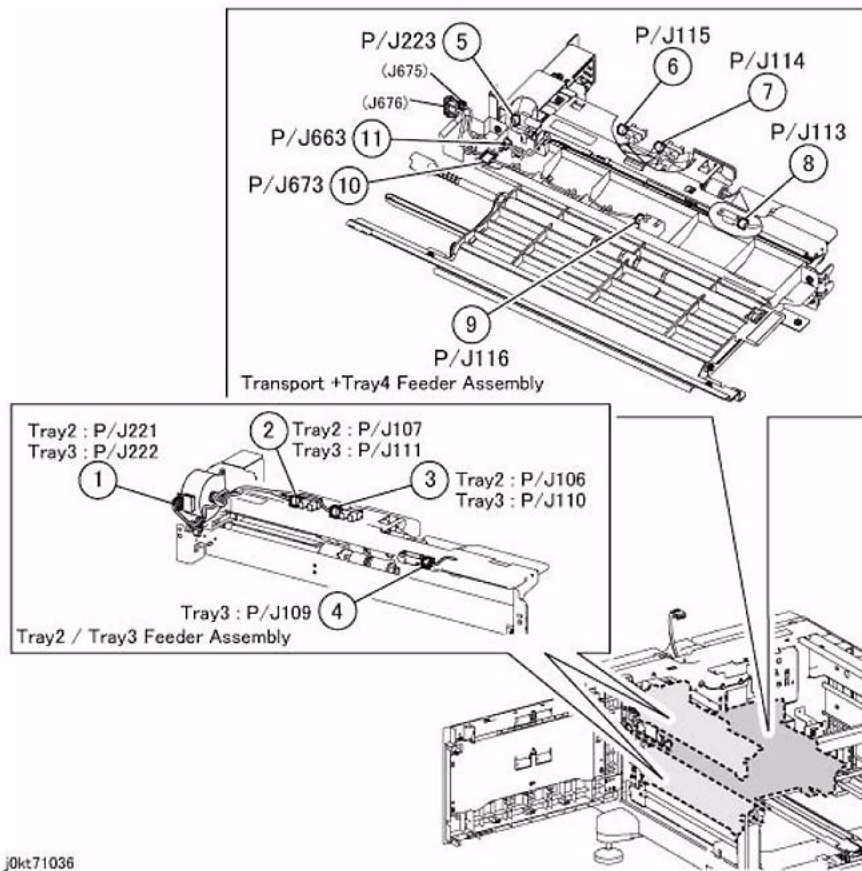
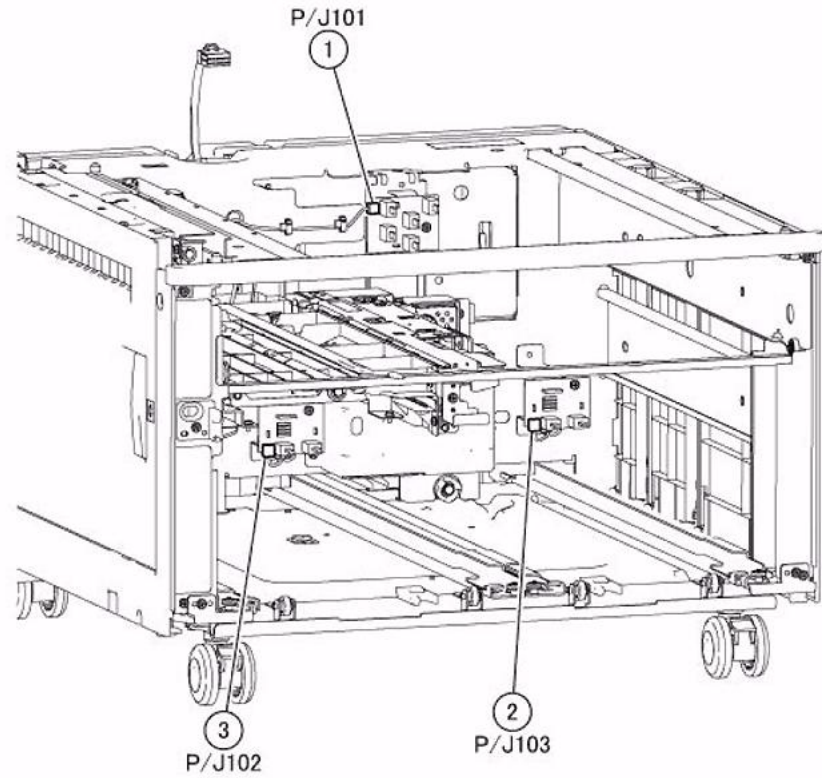


Figure 33 TT Module - Left Location



j0kt71036

Figure 34 TT Module - Tray 2/3/4 Feeder



j0kt71037

Figure 35 TT Module - Tray 2/3/4 Paper Size Sensor

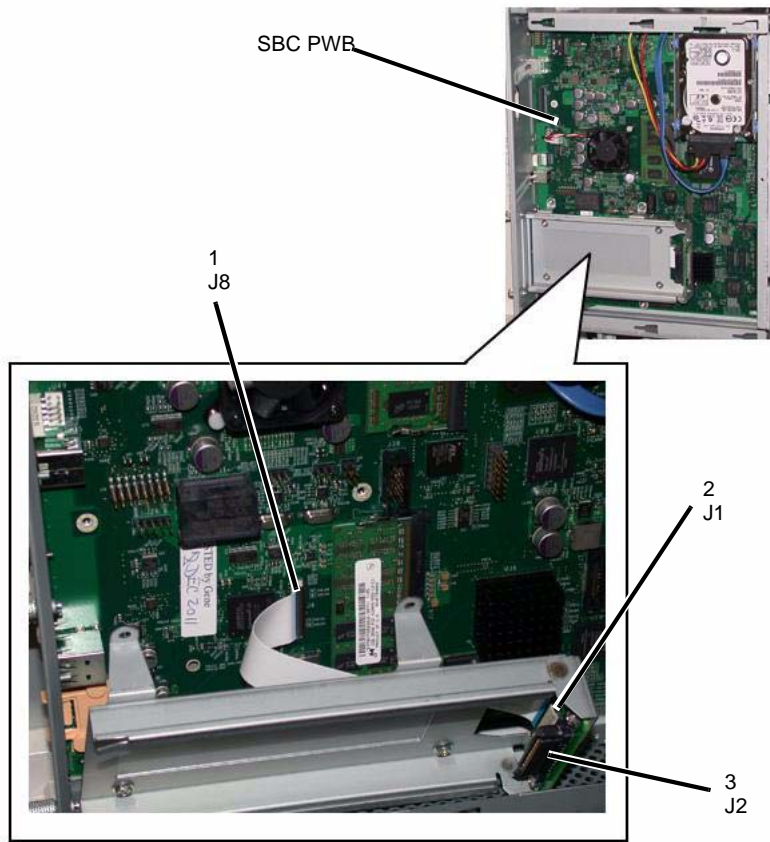


Figure 36 FAX Option

## HCF Plug/Jack Illustrations

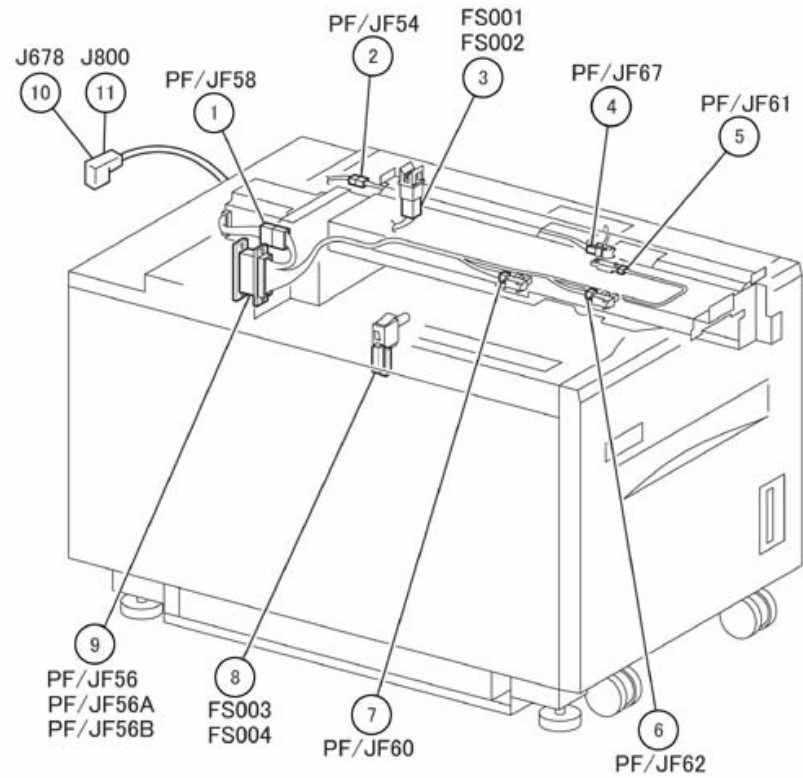


Figure 1 HCF 1 of 2

j0lit712801



## Professional Finisher Plug/Jack Illustrations

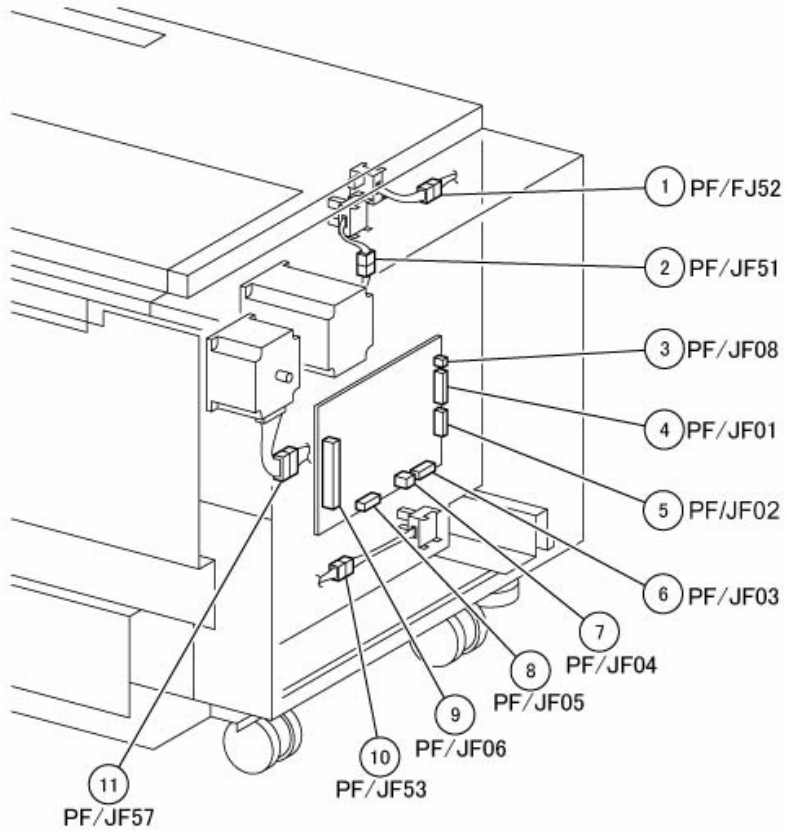


Figure 2 HCF 2 of 2

j0ha712802

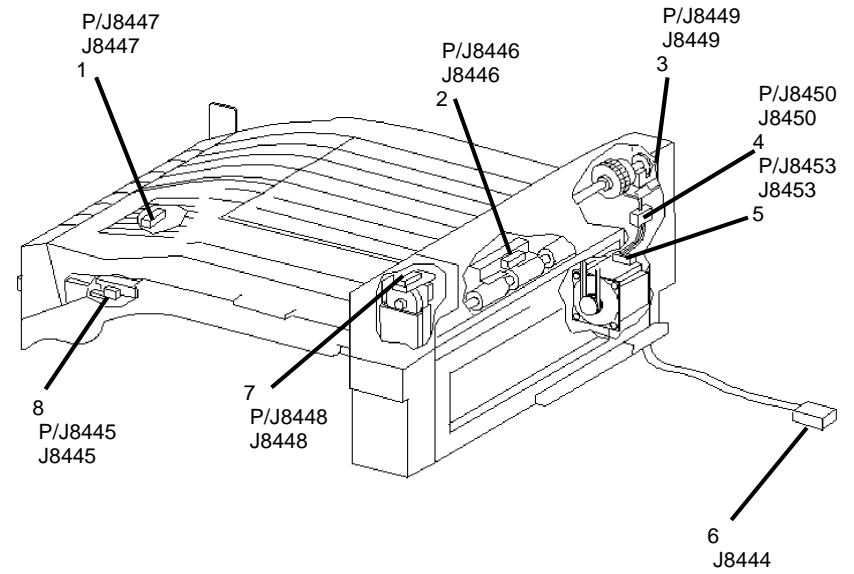
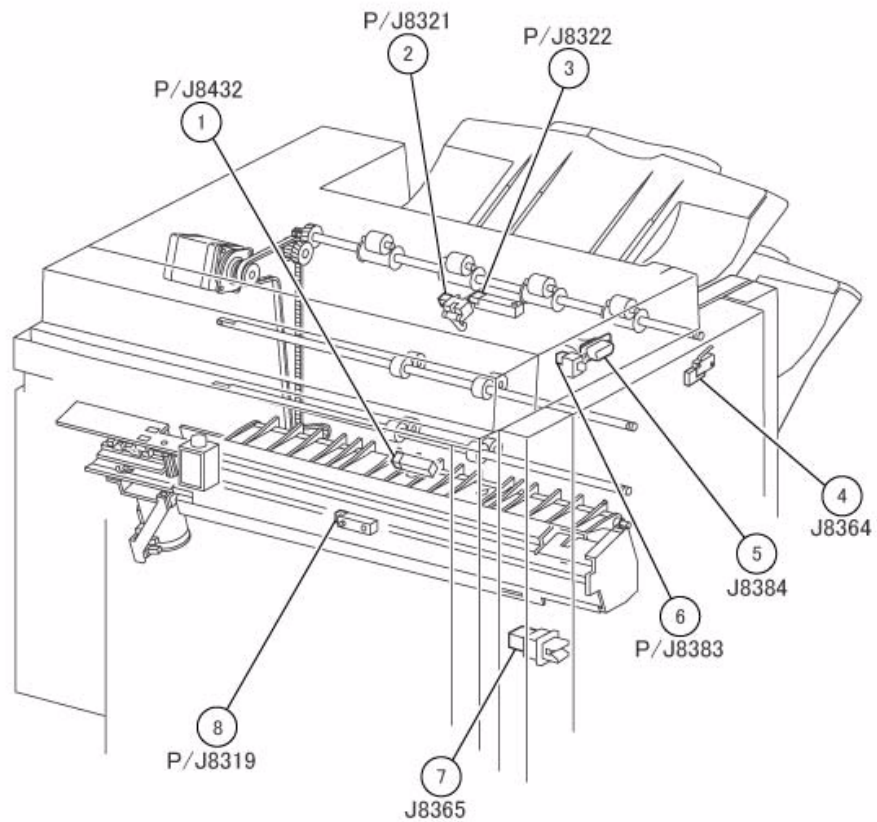
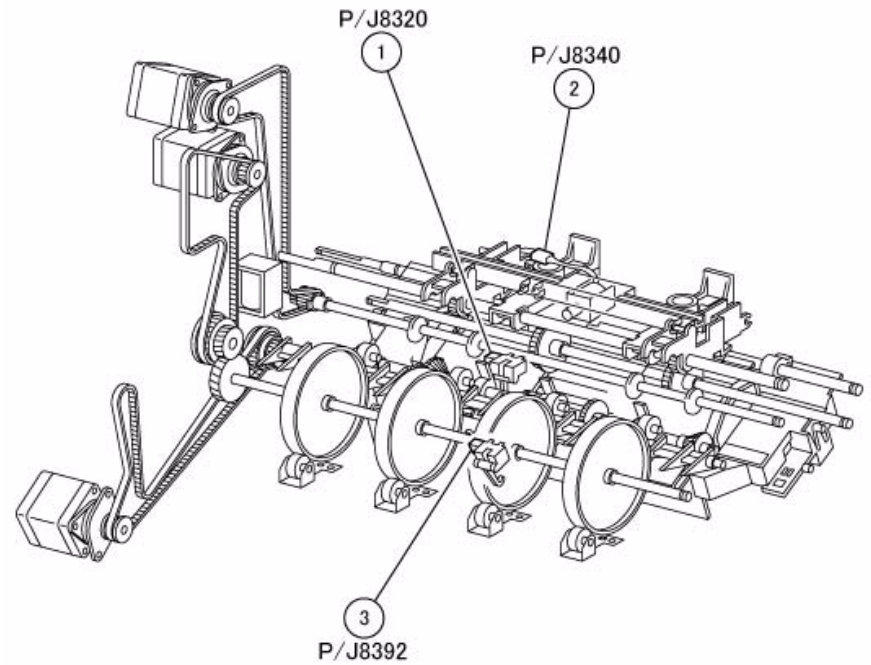


Figure 1 Professional Finisher - H-Transport Assembly



j0sr7138

Figure 2 Professional Finisher - Top Tray Exit Sensor, Gate Sensor



j0sr7139

Figure 3 Professional Finisher - Compiler Exit Sensor, Buffer Path Sensor

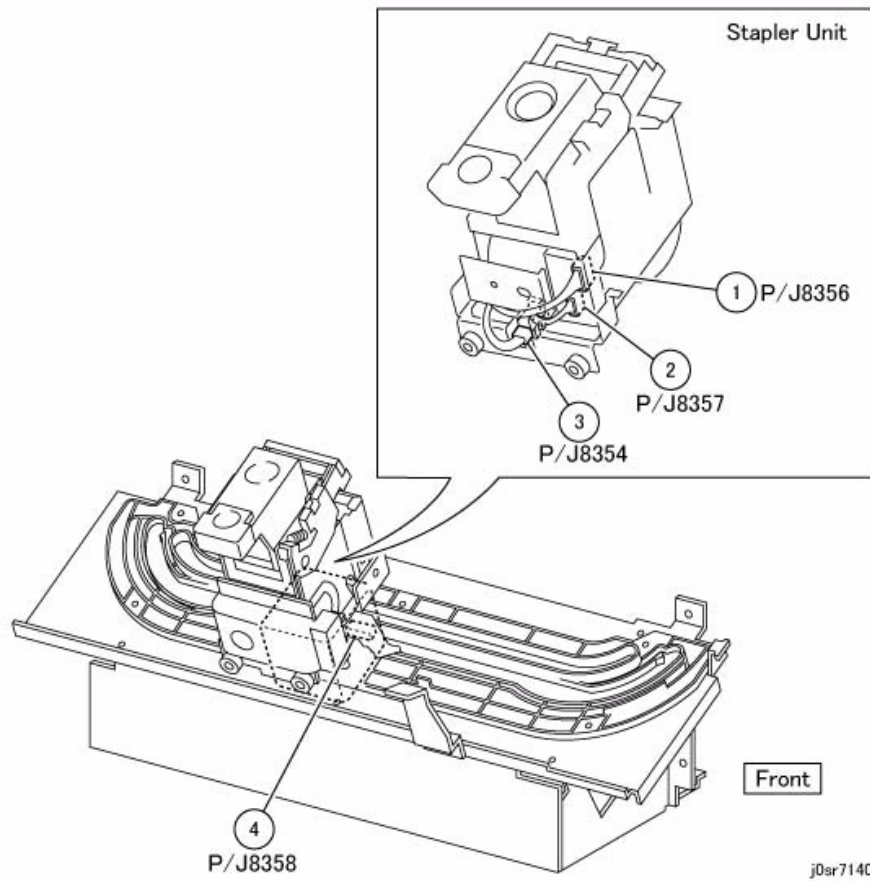


Figure 4 Professional Finisher - Stapler Unit

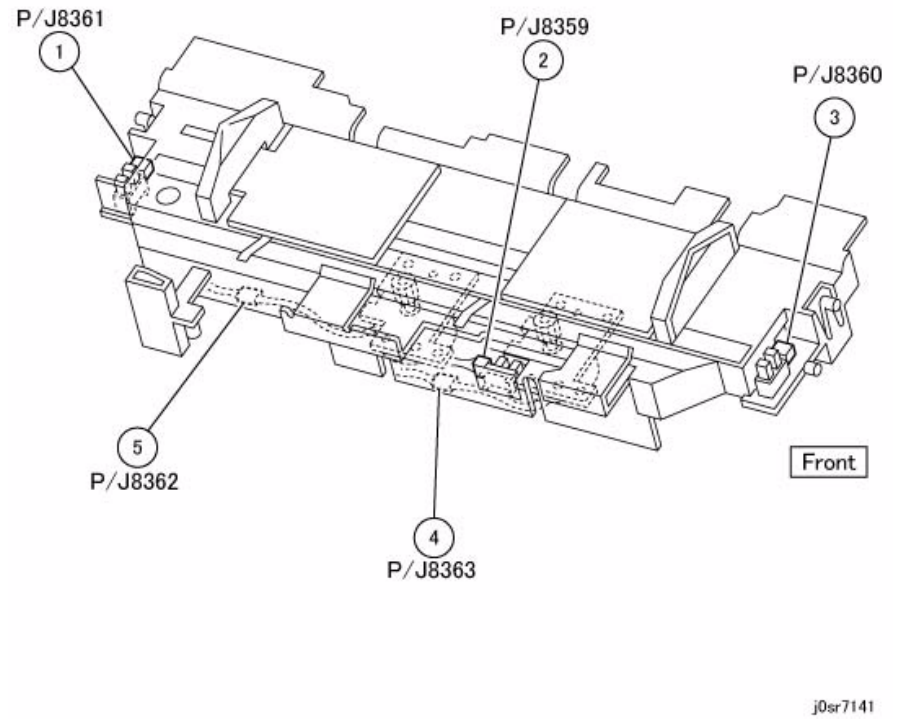


Figure 5 Professional Finisher - Compile Tray Assembly

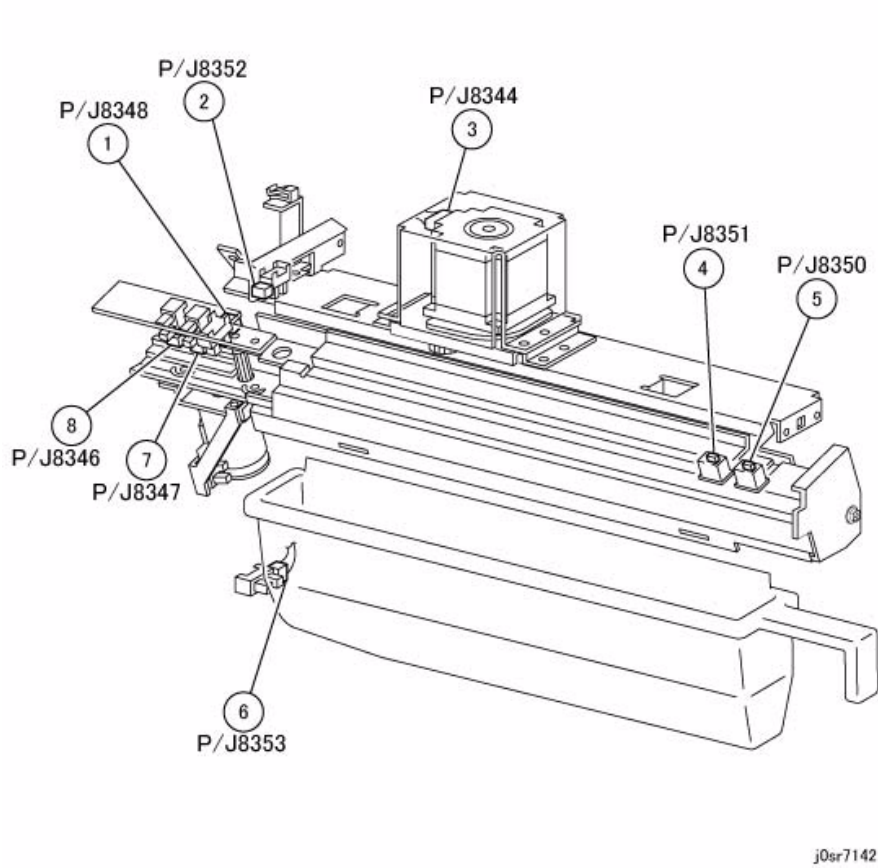


Figure 6 Professional Finisher - Puncher Unit

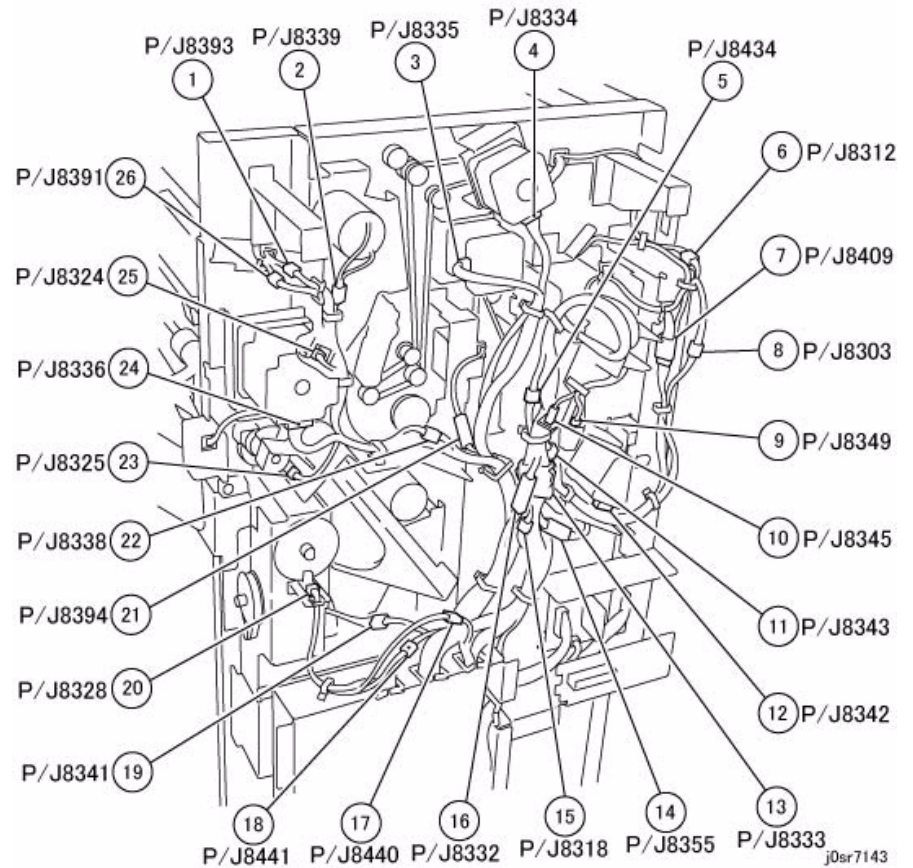


Figure 7 Professional Finisher - Rear



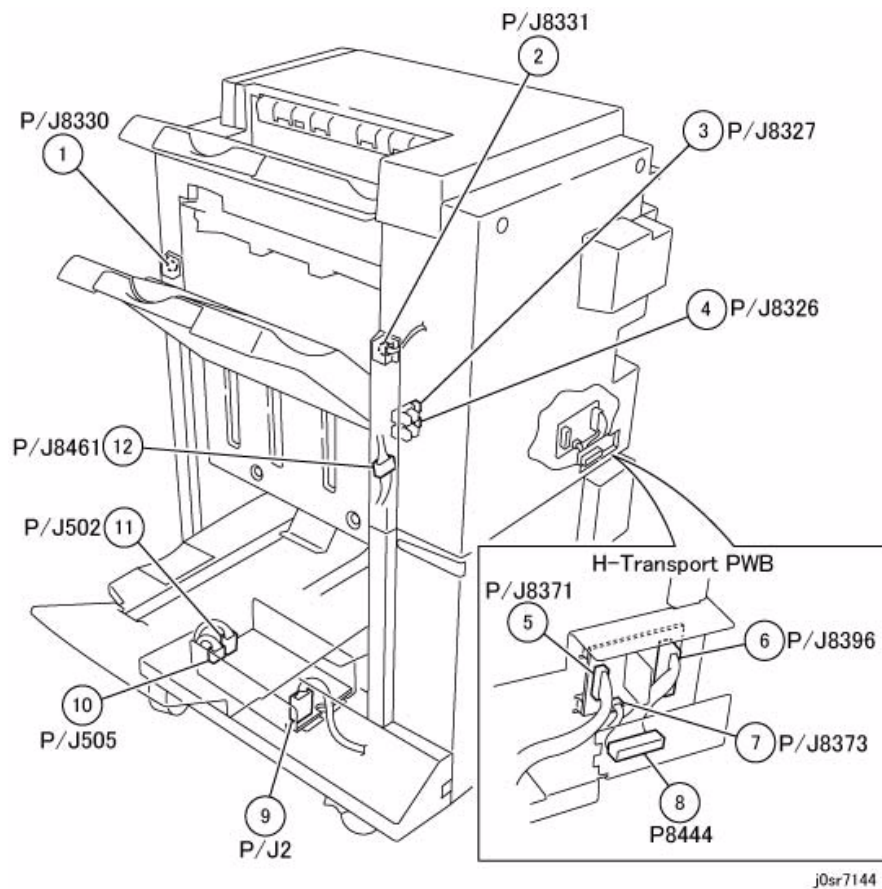


Figure 8 Professional Finisher - Stacker, H-Transport PWB, LVPS

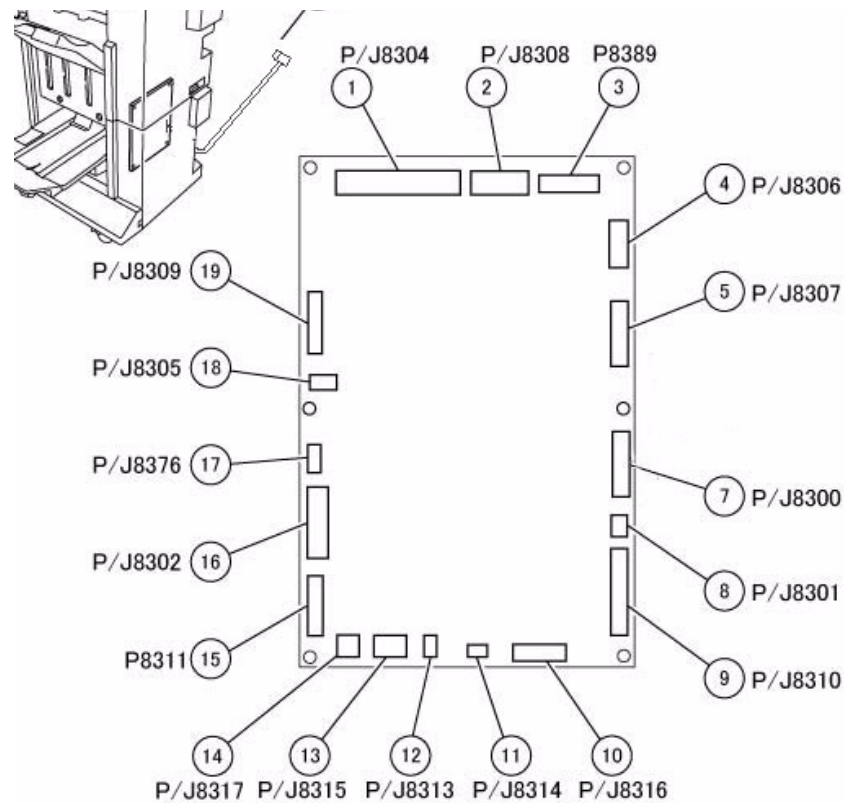


Figure 9 Professional Finisher PWB



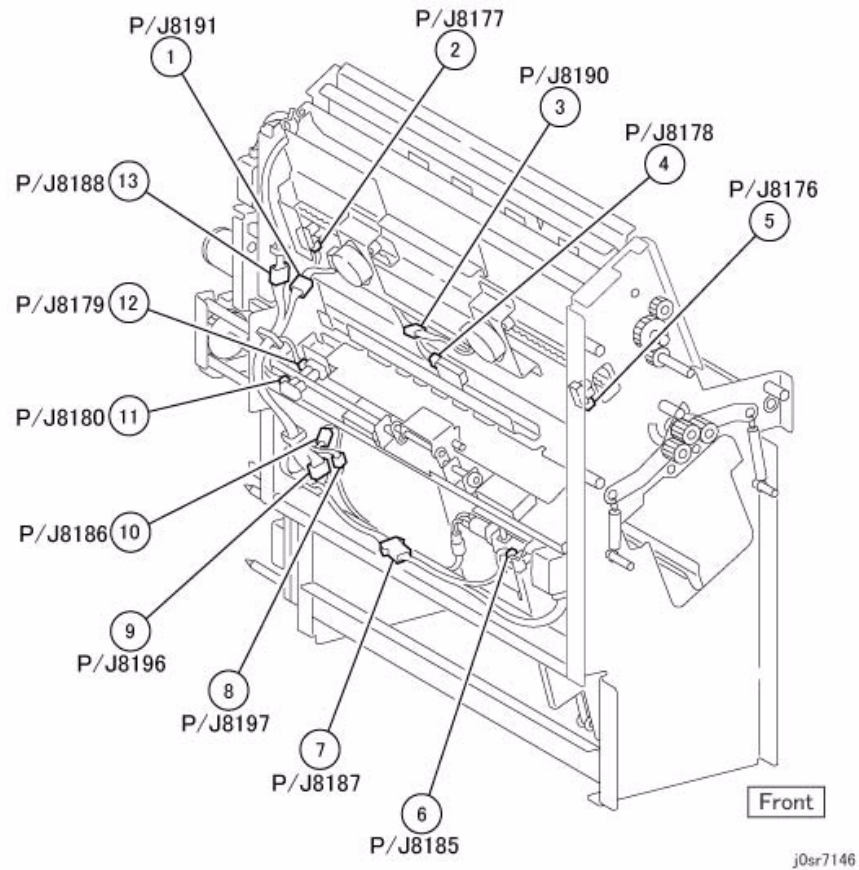


Figure 10 Booklet Rear -Professional Finisher

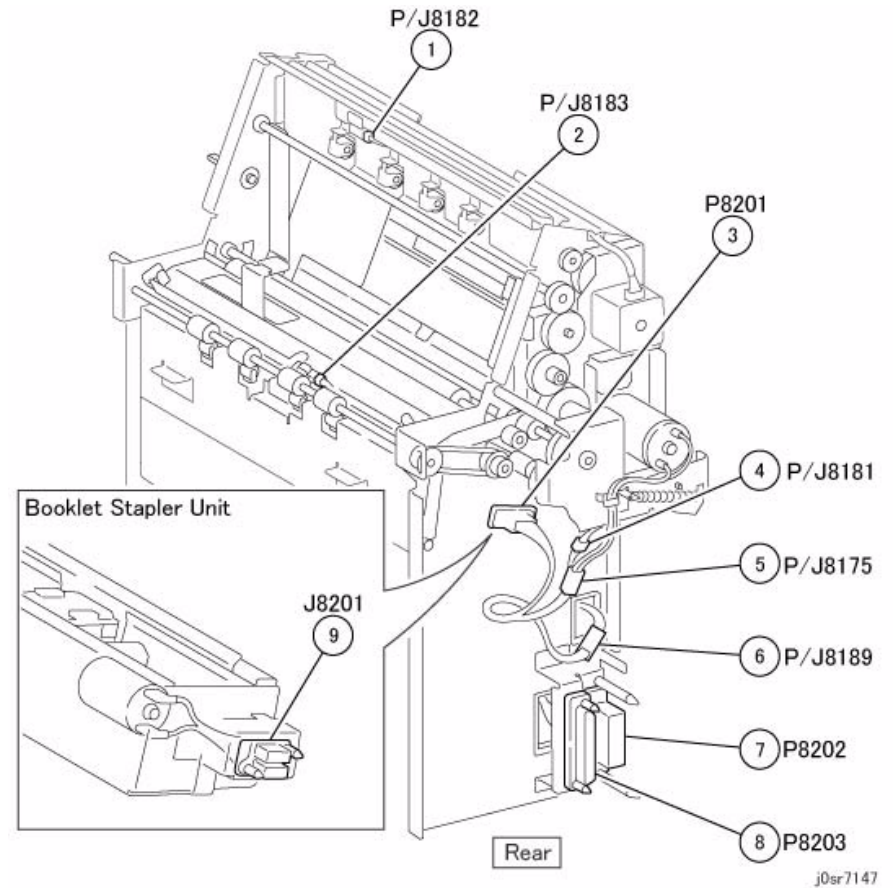
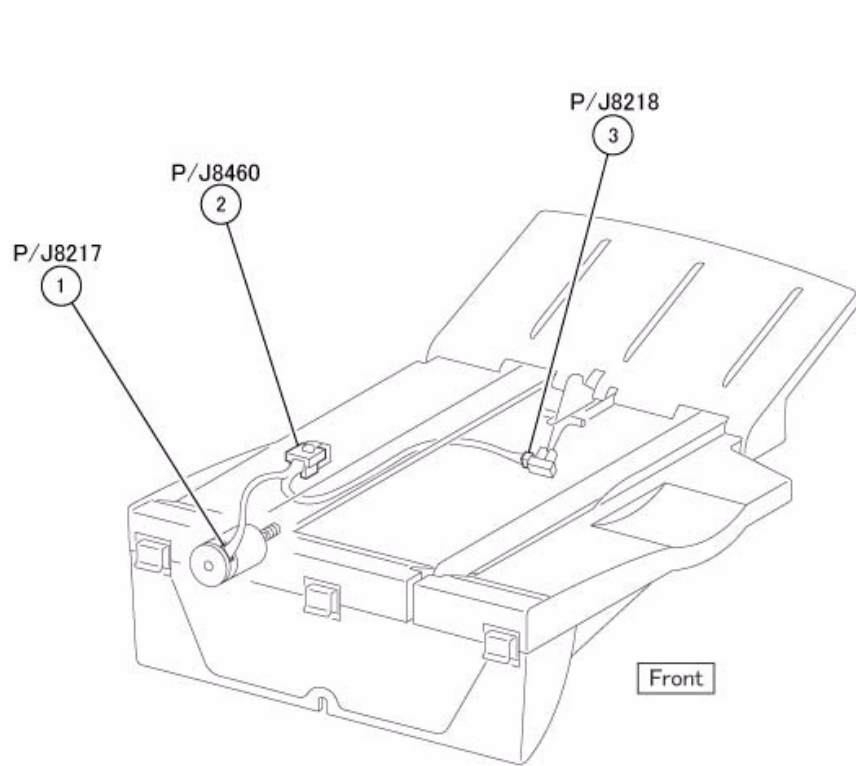
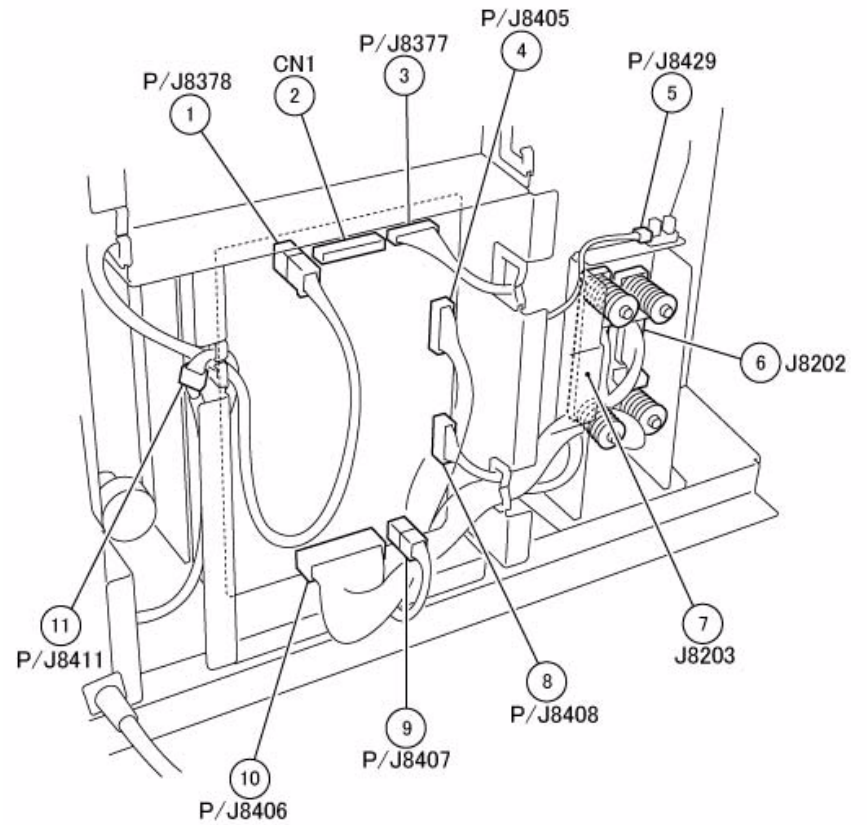


Figure 11 Booklet Front -Professional Finisher



j0sr7148

Figure 12 Professional Finisher Booklet Tray Unit



j0sr7149

Figure 13 Professional Finisher - Booklet PWB

## Integrated Office Finisher Plug/Jack Illustrations

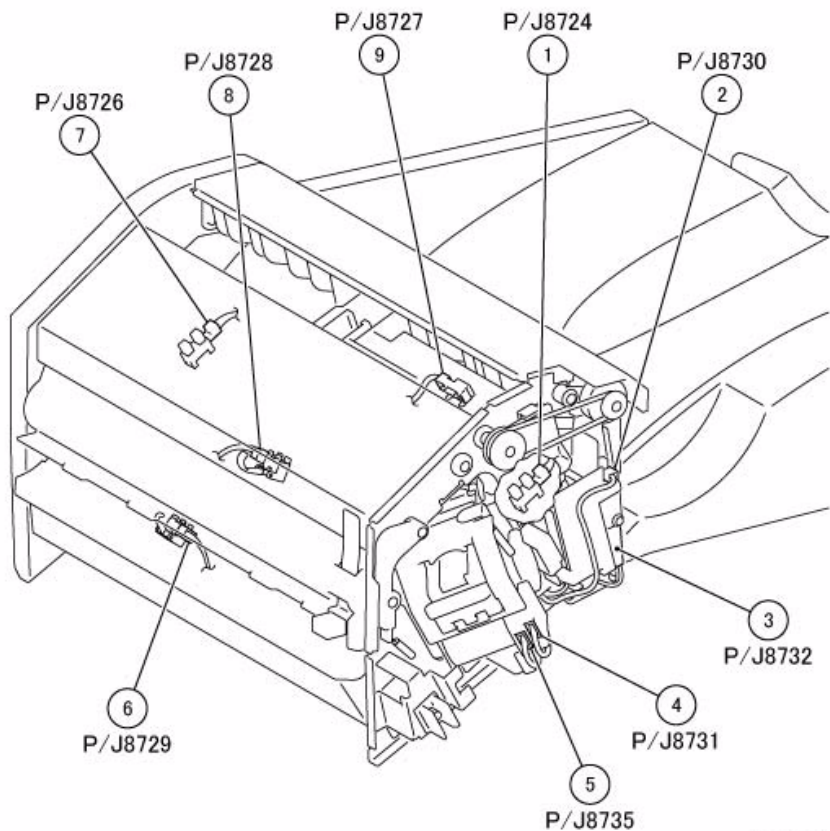
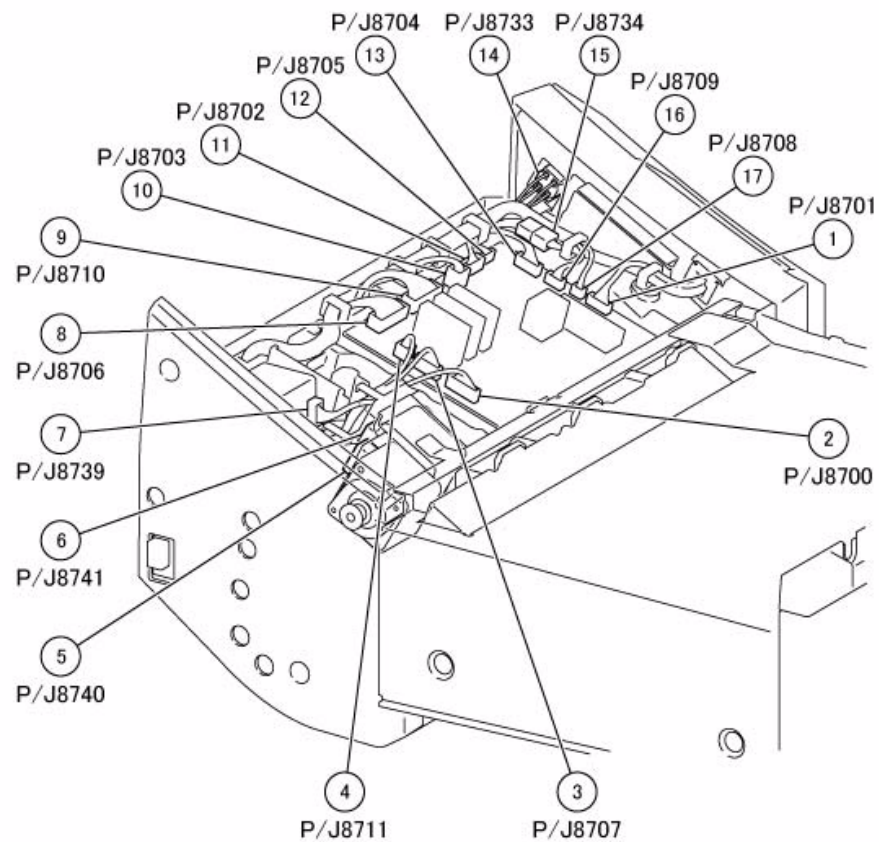


Figure 1 Integrated Office Finisher Front Location

j0fa71001



j0fa71002

Figure 2 Integrated Office Finisher PWB Location

## Office Finisher LX Plug/Jack Illustrations

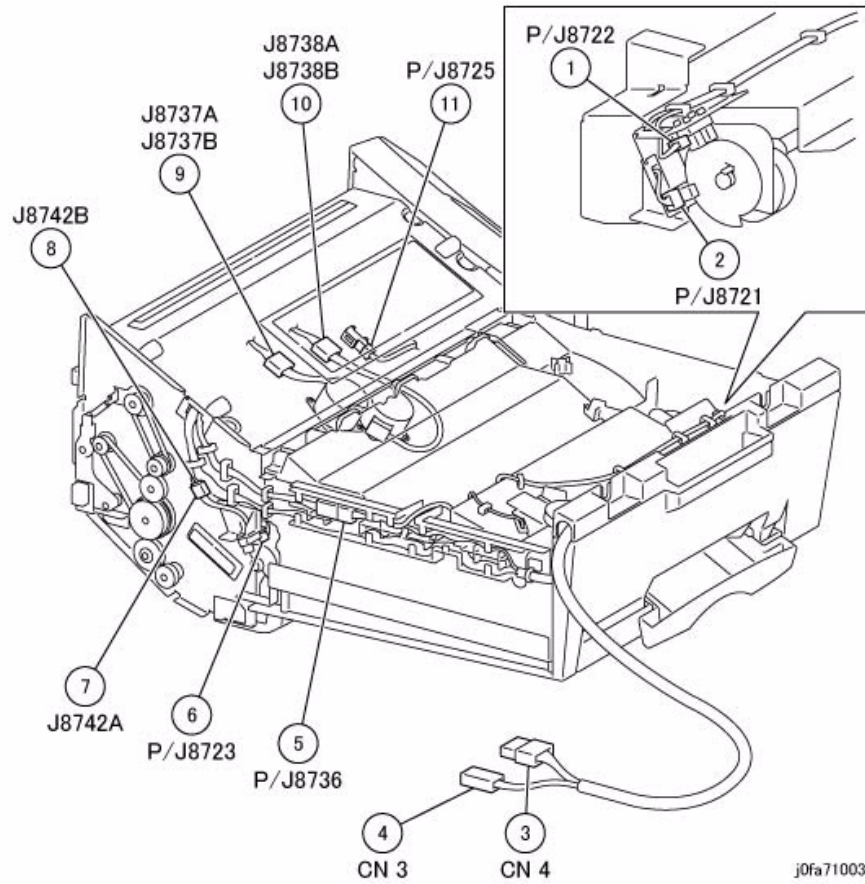


Figure 3 Integrated Office Finisher Bottom Location

# Plug/Jack Illustrations

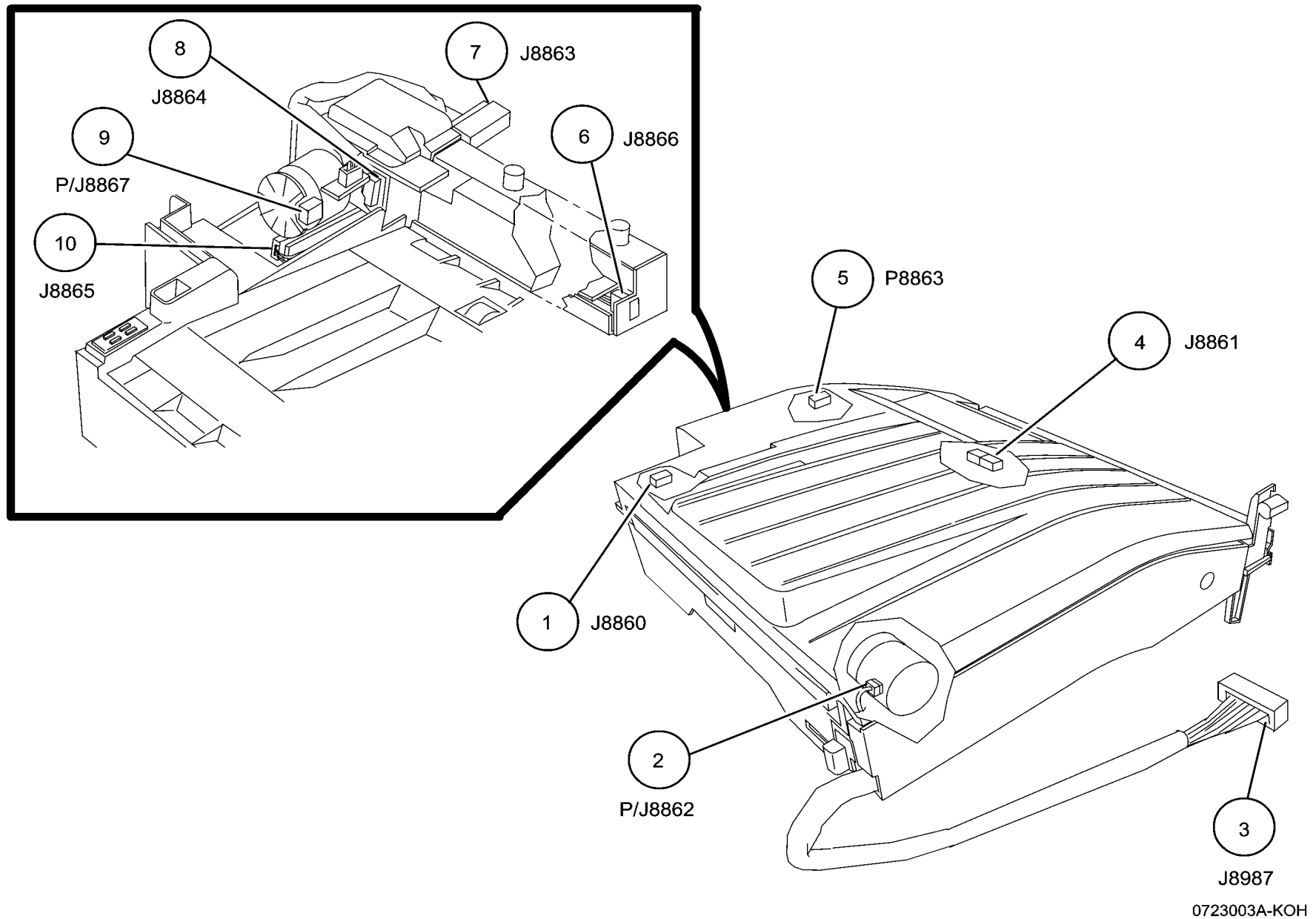
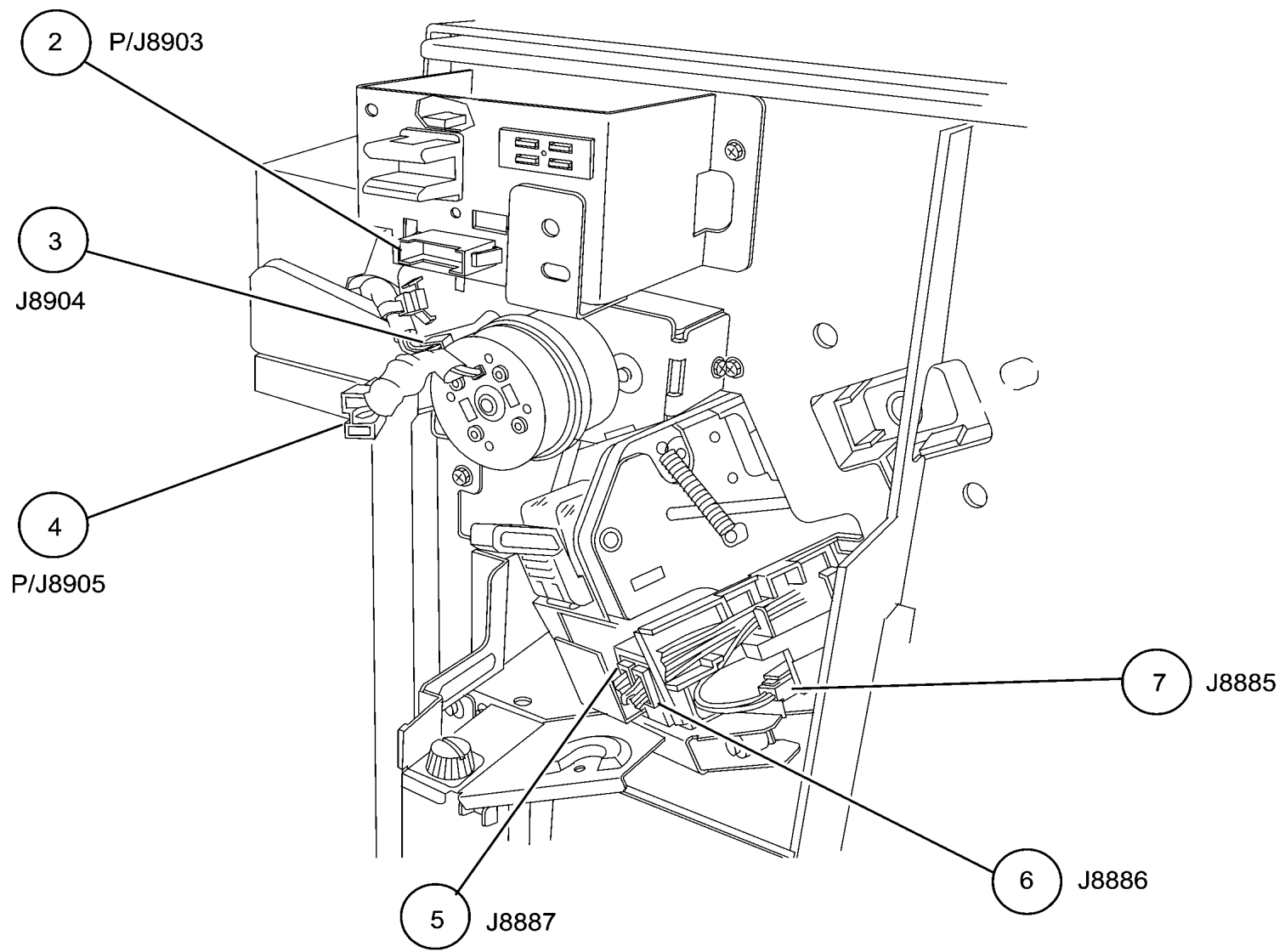


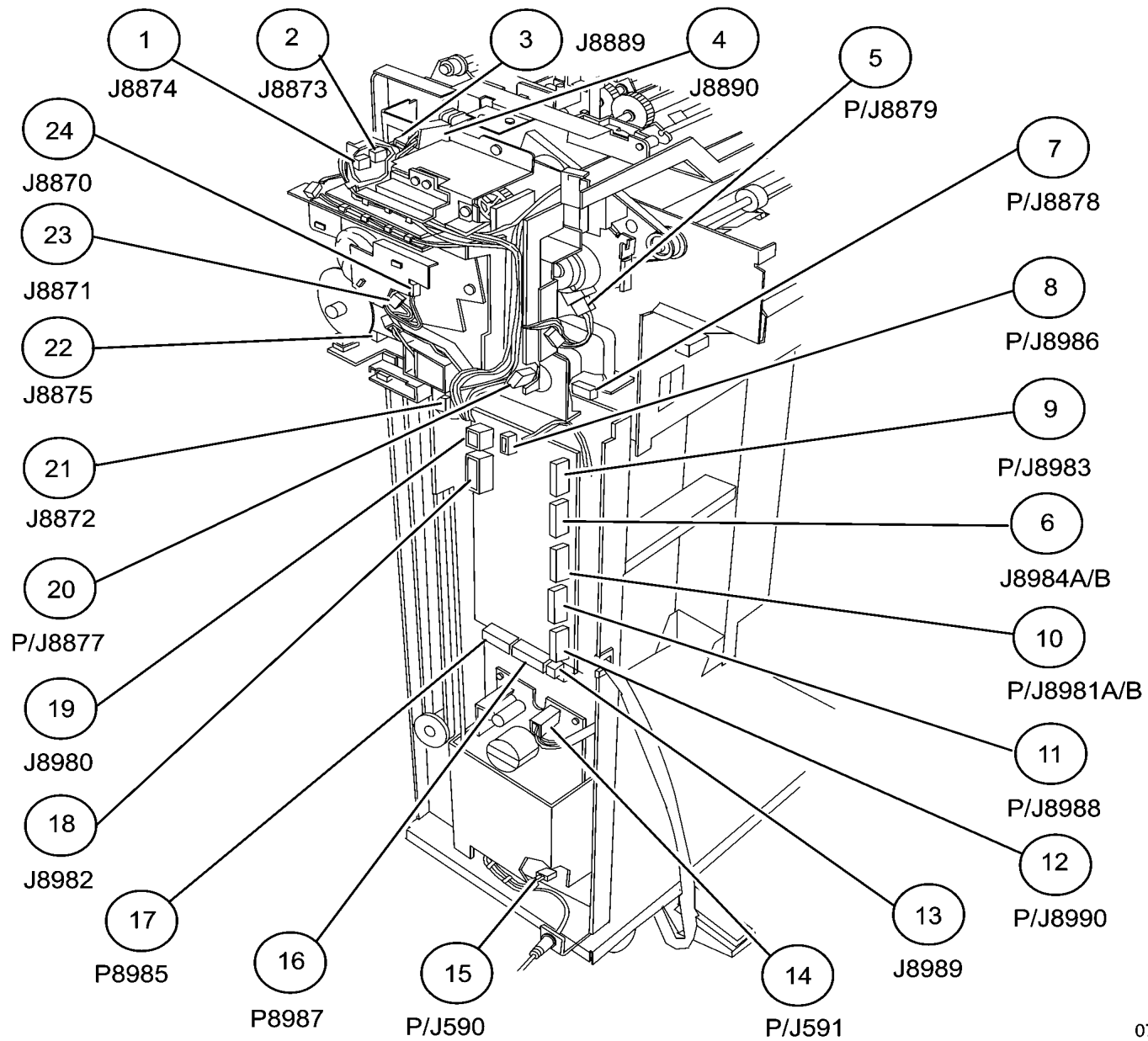
Figure 1 Finisher (LX) Horizontal Transport





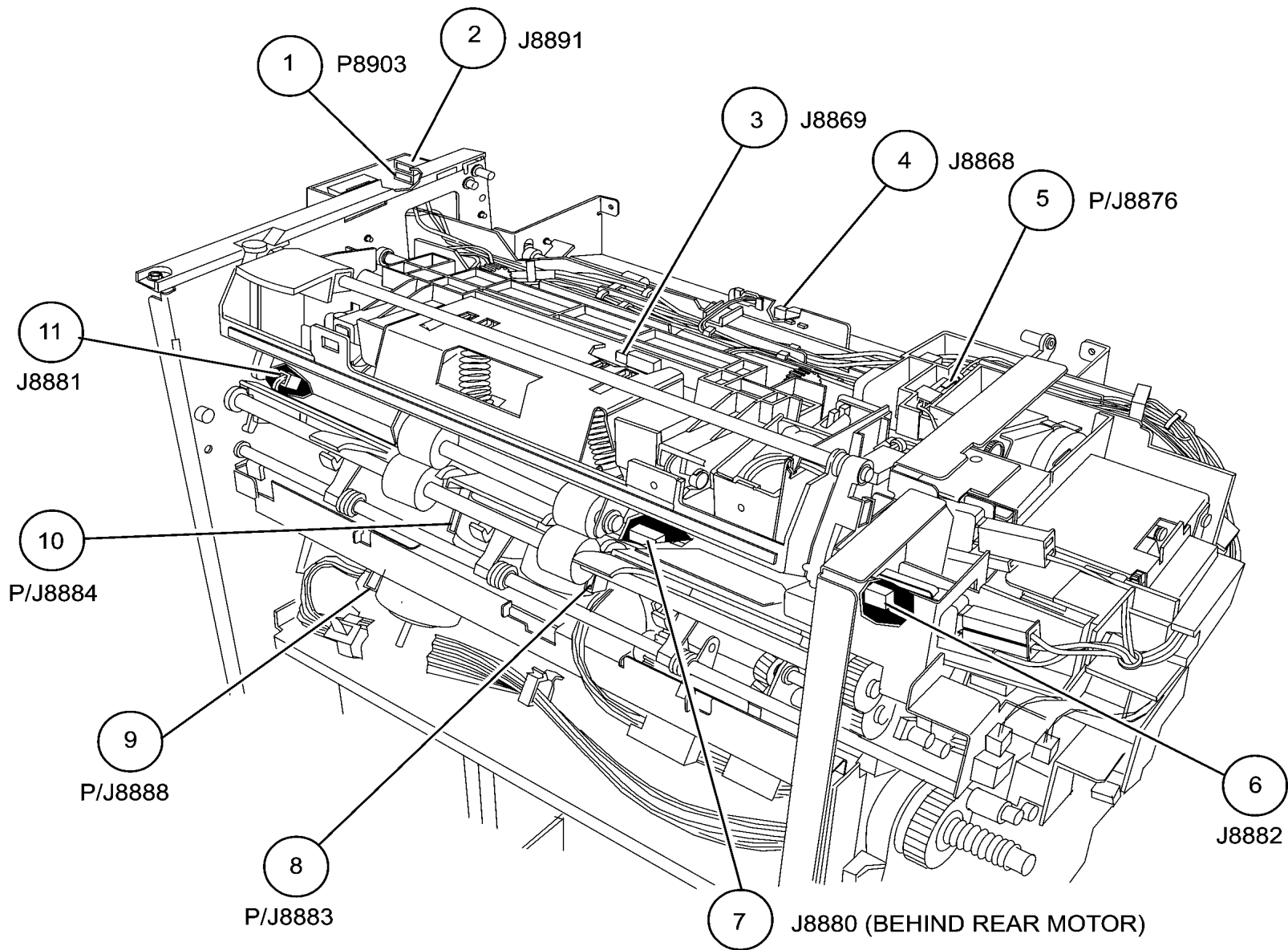
0723004A-KOH

Figure 2 Finisher (LX) Front



0723006A-KOH

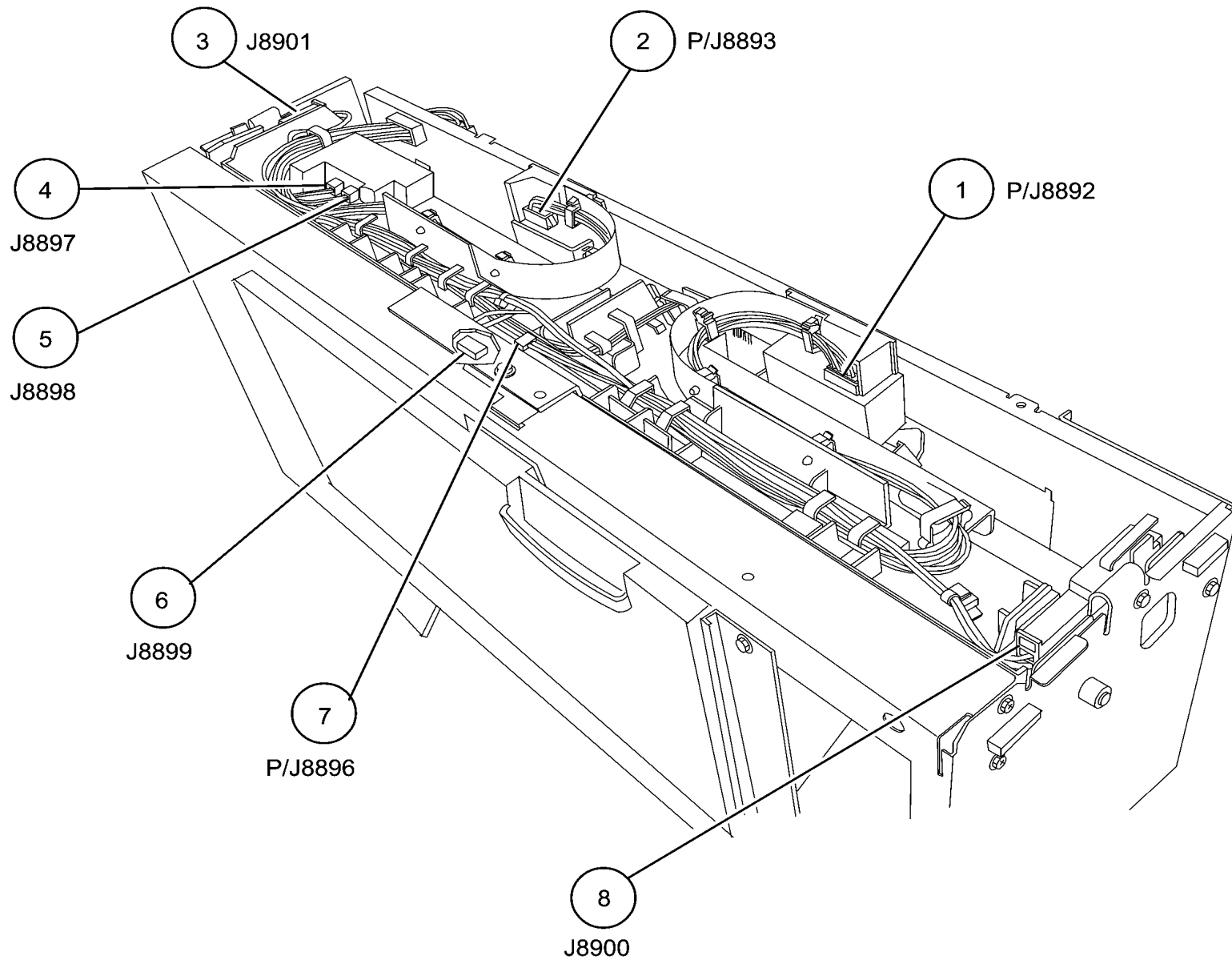
Figure 3 Finisher (LX) Rear



0723005A-KOH

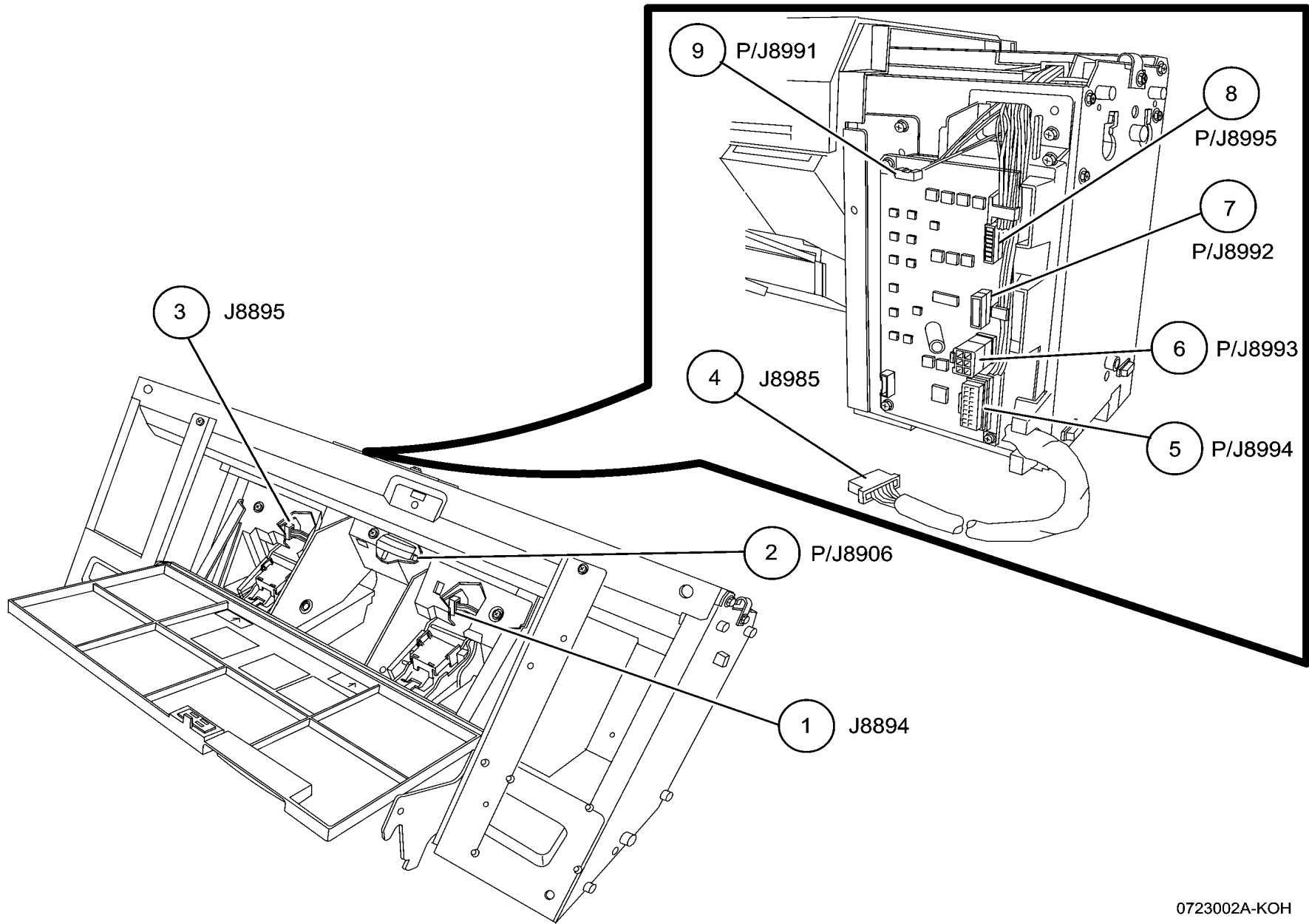
Figure 4 Finisher (LX) Eject





0723001A-KOH

Figure 5 Booklet Maker Stapler Assembly



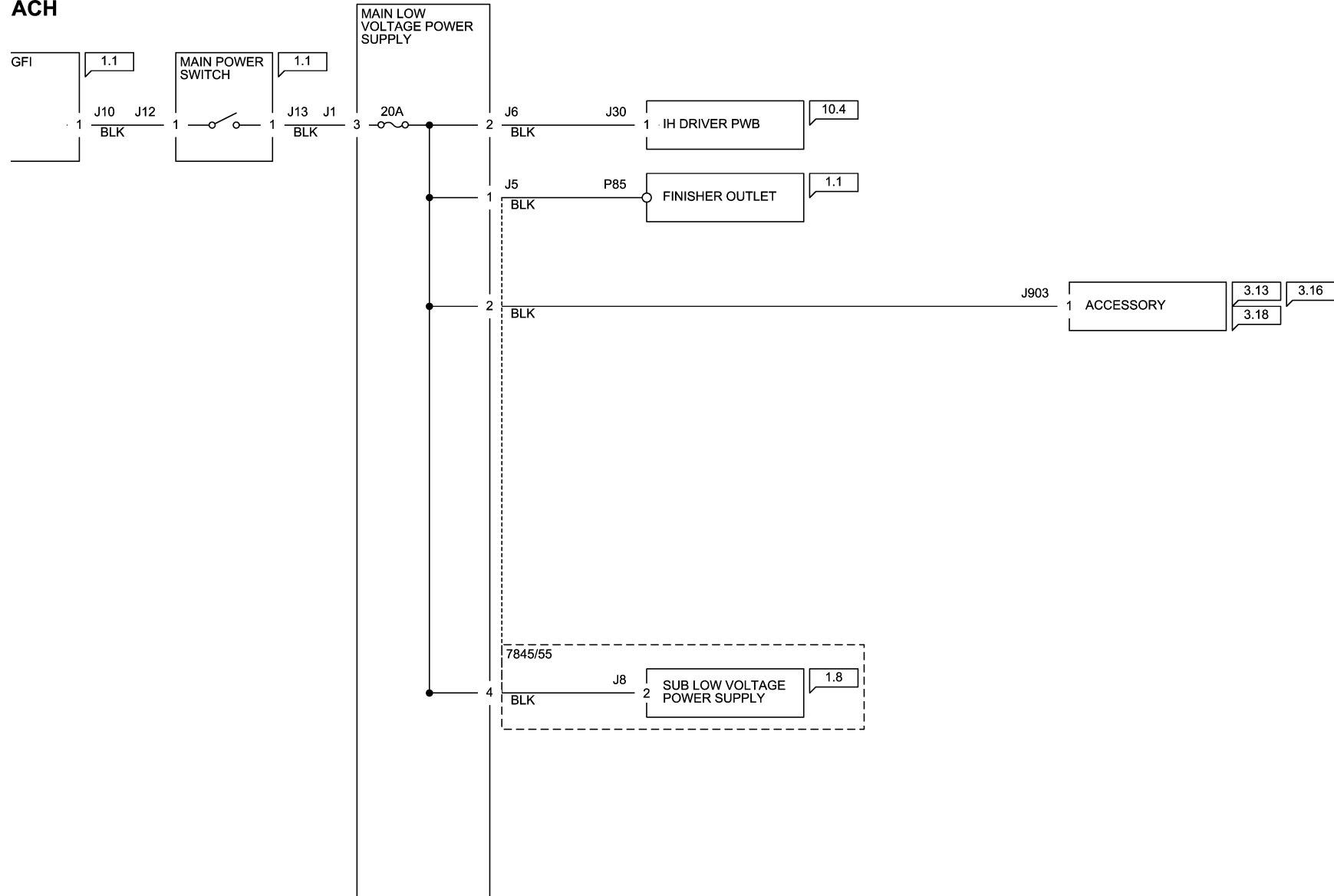
0723002A-KOH

Figure 6 Booklet Maker PWB



# AC Wirenets

## ACH

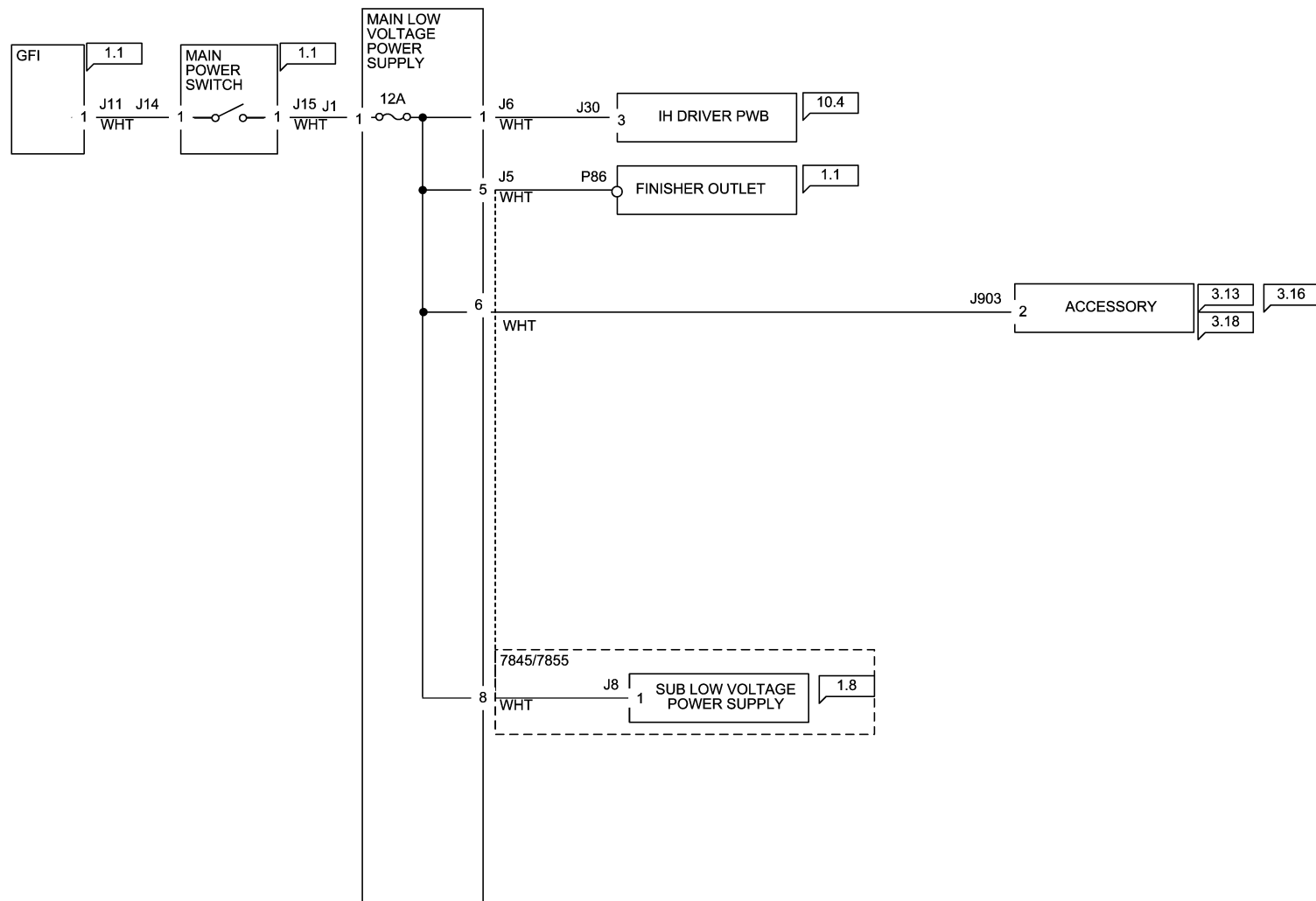


05/08/12

72001\_SPY.VSD

Figure 1 ACH

**ACN**



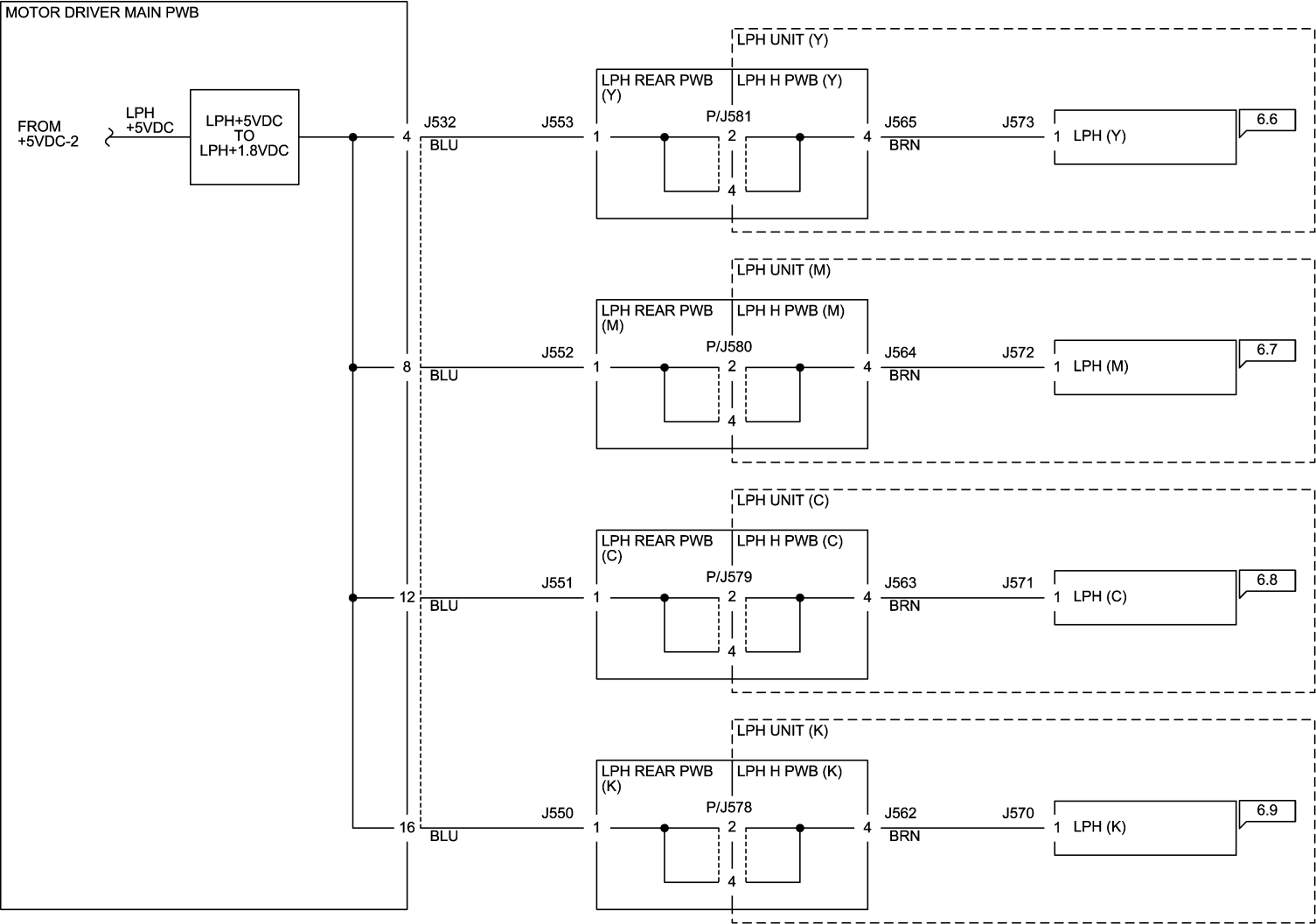
05/08/12

72002\_SPY.VSD

Figure 2 ACN Wirenet

# 1.8 VDC Wirenets

## IOT +1.8VDC

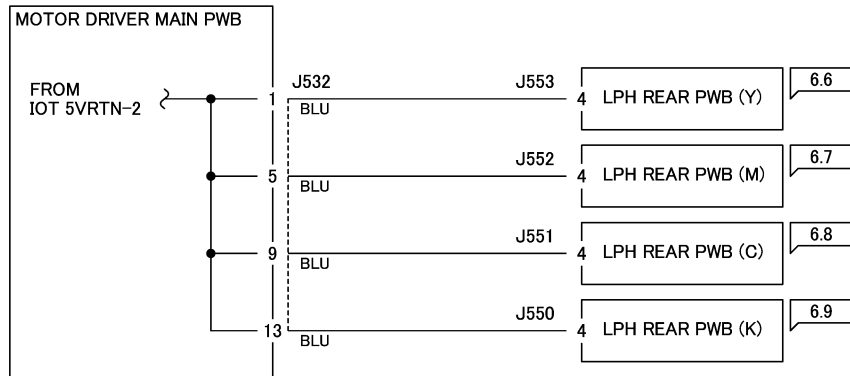


05/08/12 72003\_SPY.VSD

Figure 1 +1.8VDC Wirenet

# 1.8 VRTN Wirenet

## IOT 1.8V RTN



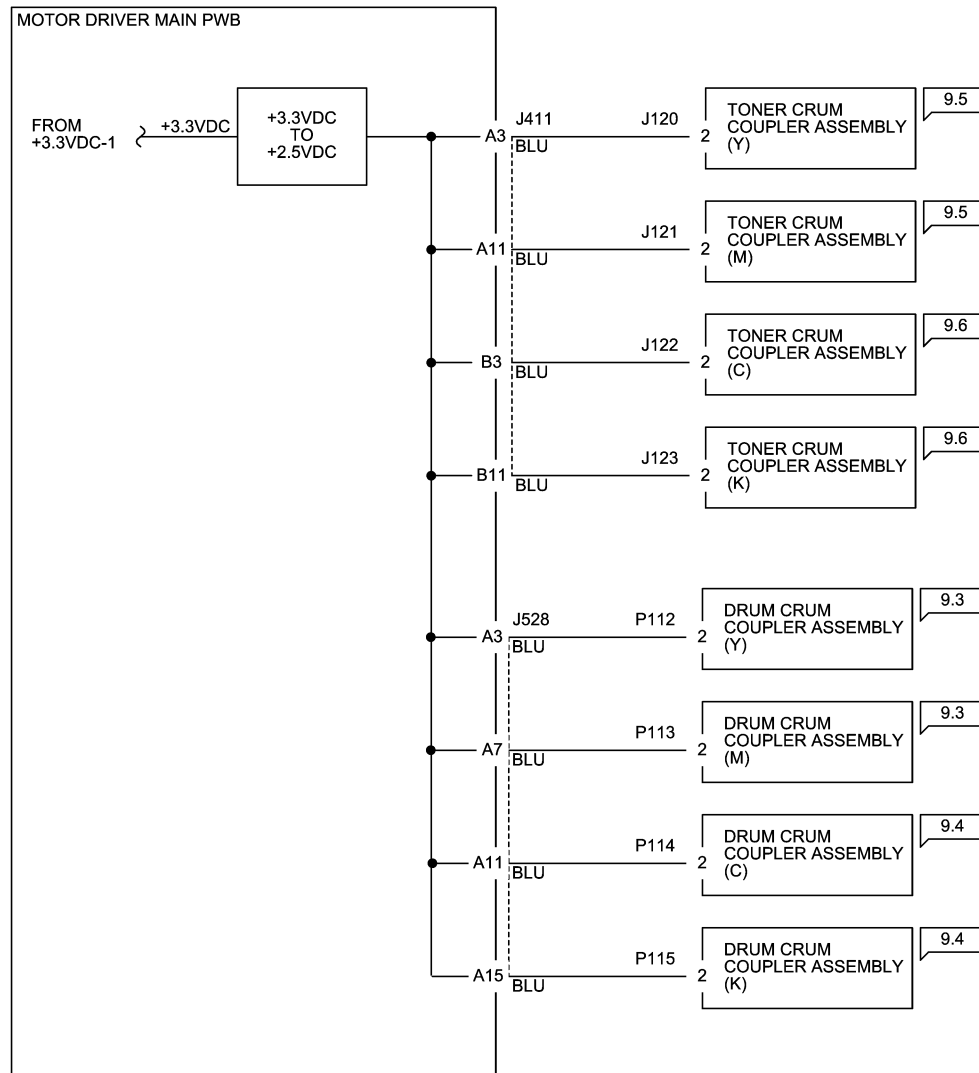
05/08/12

72004\_SPY.VSD

Figure 1 1.8VDC RTN Wirenet

# +2.5 VDC Wirenet

## IOT +2.5VDC



05/08/12

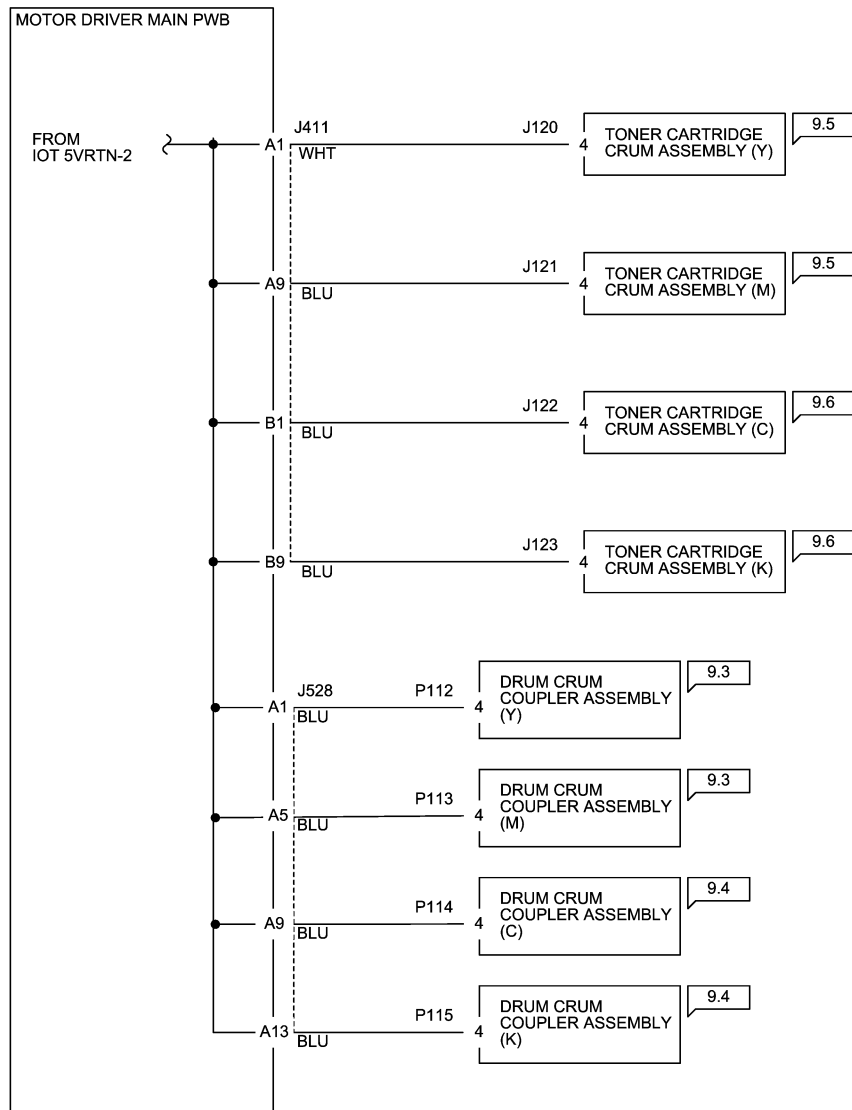
72005\_SPY.VSD

Figure 1 +2.5VDC Wirenet



## 2.5VDC RTN

### IOT 2.5V RTN



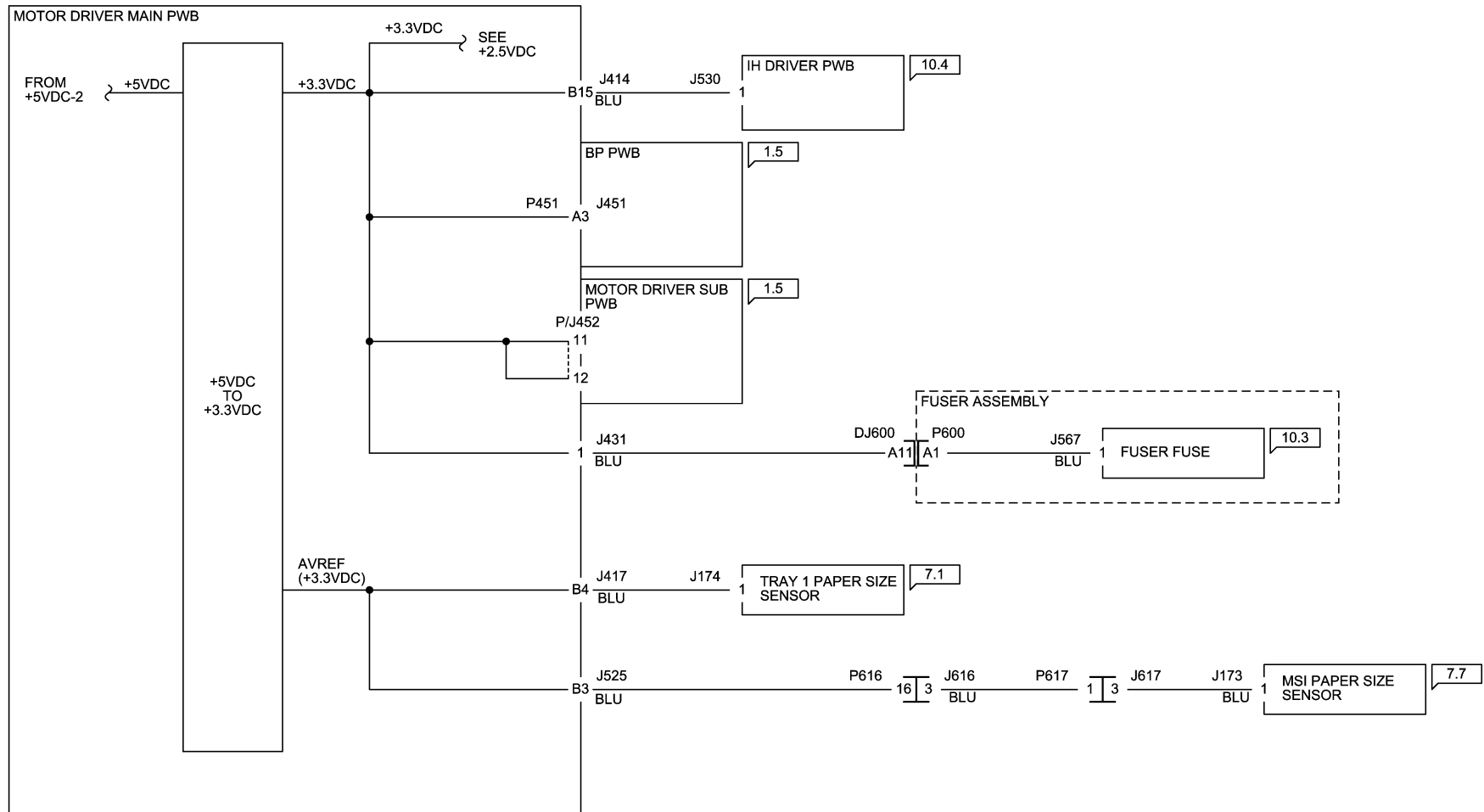
05/08/12

72006\_SPY.VSD

Figure 1 2.5VDC RTN Wirenet

# +3.3 VDC-1 Wirenet

## IOT +3.3VDC-1 / AVREF



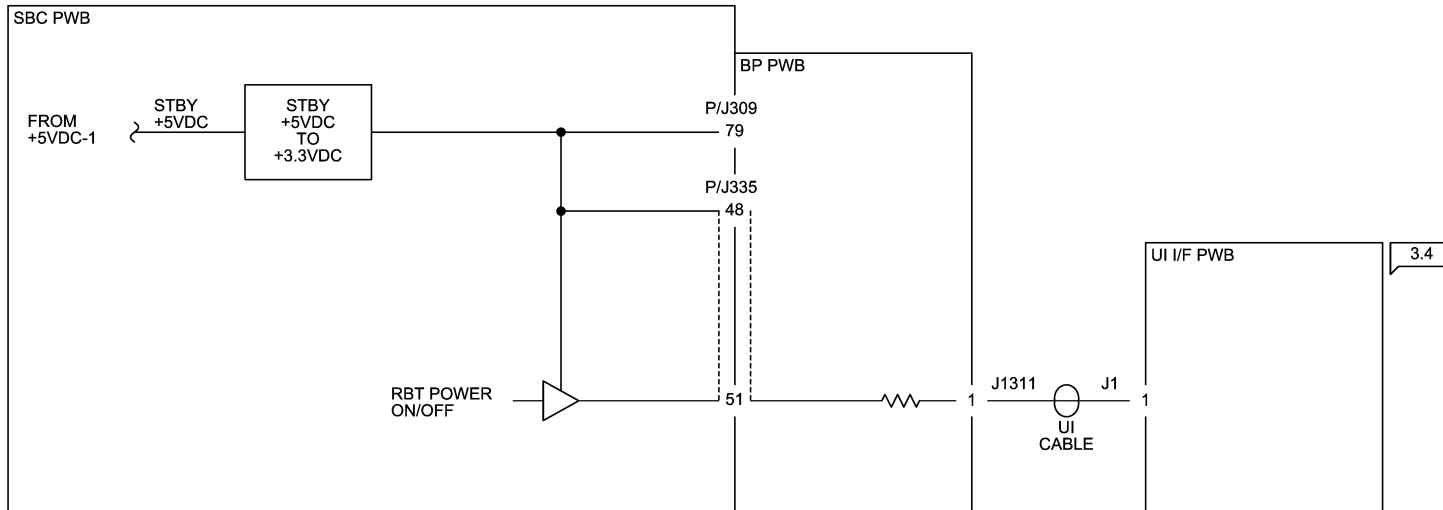
05/08/12

72007\_SPY.VSD

Figure 1 +3.3VDC-1 Wirenet

## + 3.3 VDC-2 Wirenet

### IOT +3.3VDC-2



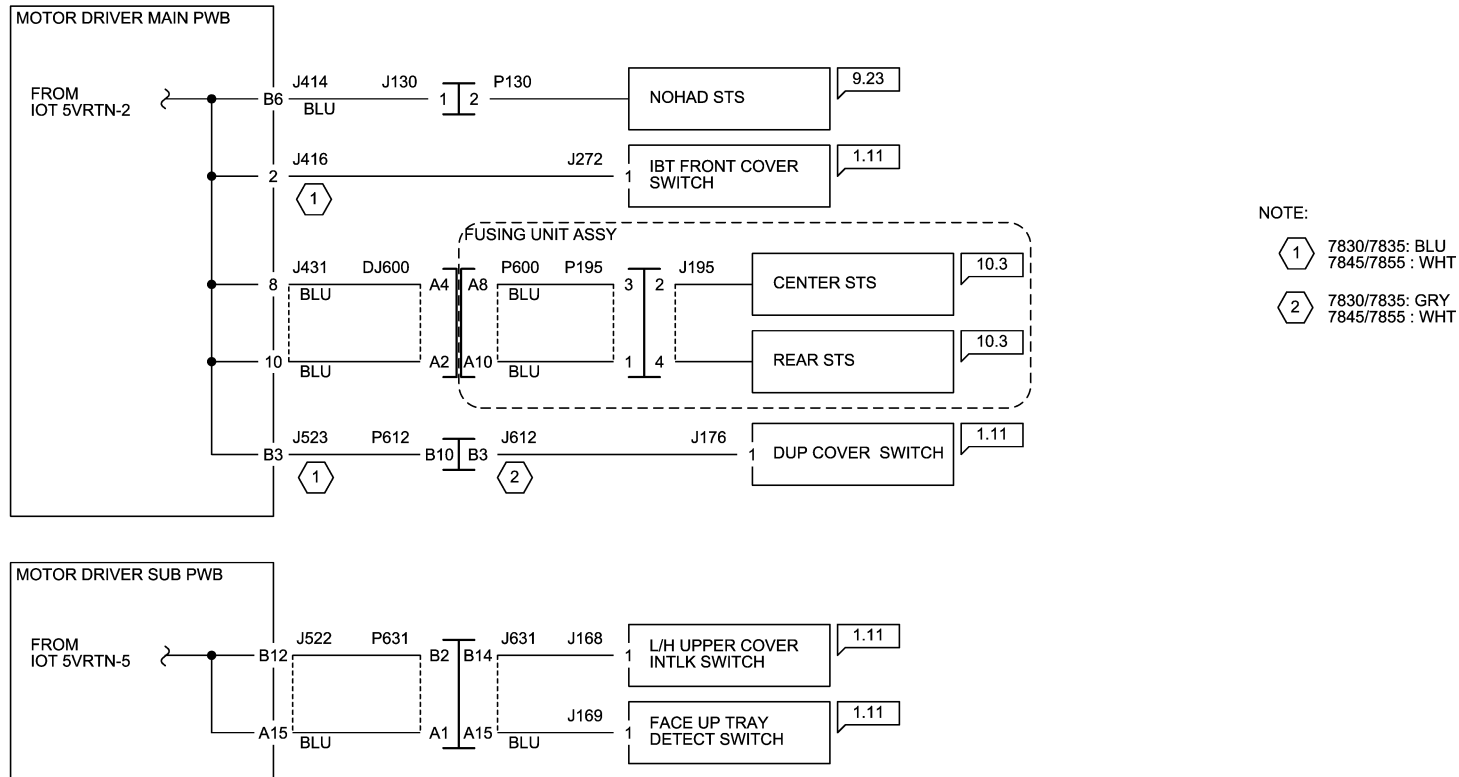
05/08/12

72008\_SPY.VSD

Figure 1 +3.3VDC-2 Wirenet

### 3.3 VDC RTN-1 Wirenet

#### IOT 3.3VRTN



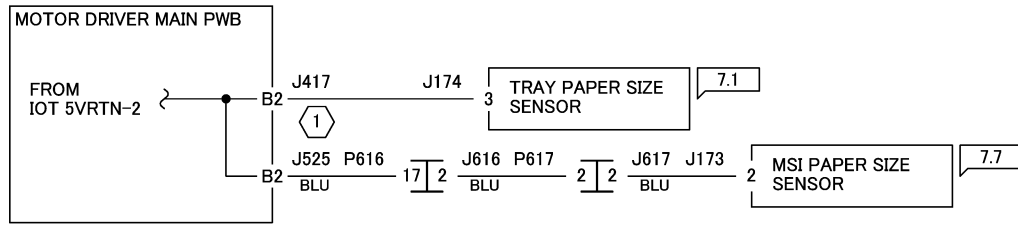
05/08/12

72009\_SPY.VSD

Figure 1 3.3VDC-1 RTN Wirenet

### 3.3 VDC RTN-2 Wirenet

#### IOT AVREF (+3.3VDC) RTN



NOTE:

1 7830/7835: BLU  
7845/7855: WHT

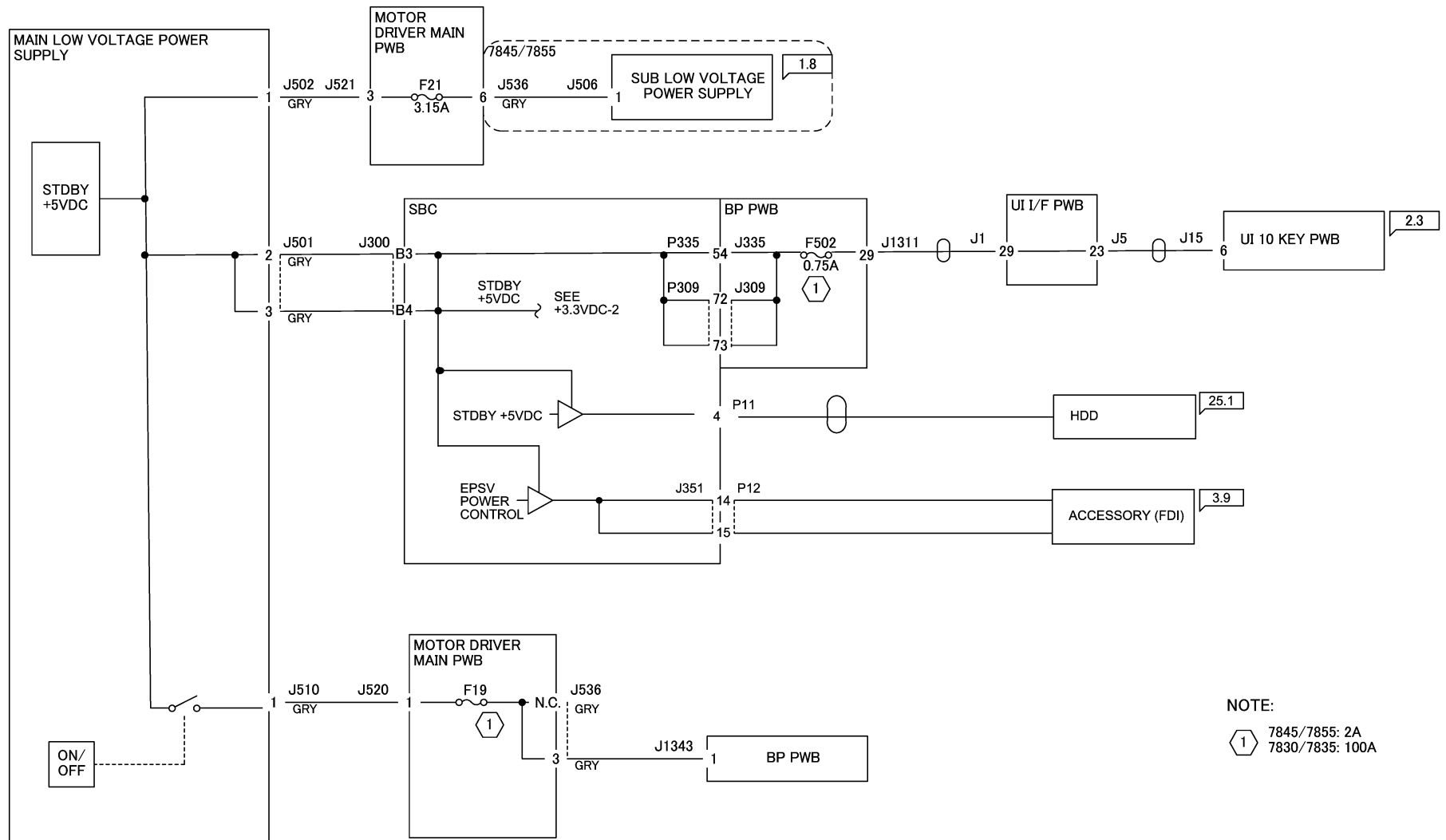
05/08/12

72010\_SPY.VSD

Figure 1 3.3 VDC RTN-2 Wirenet

# +5VDC-1 Wirenet

## IOT +5VDC-1



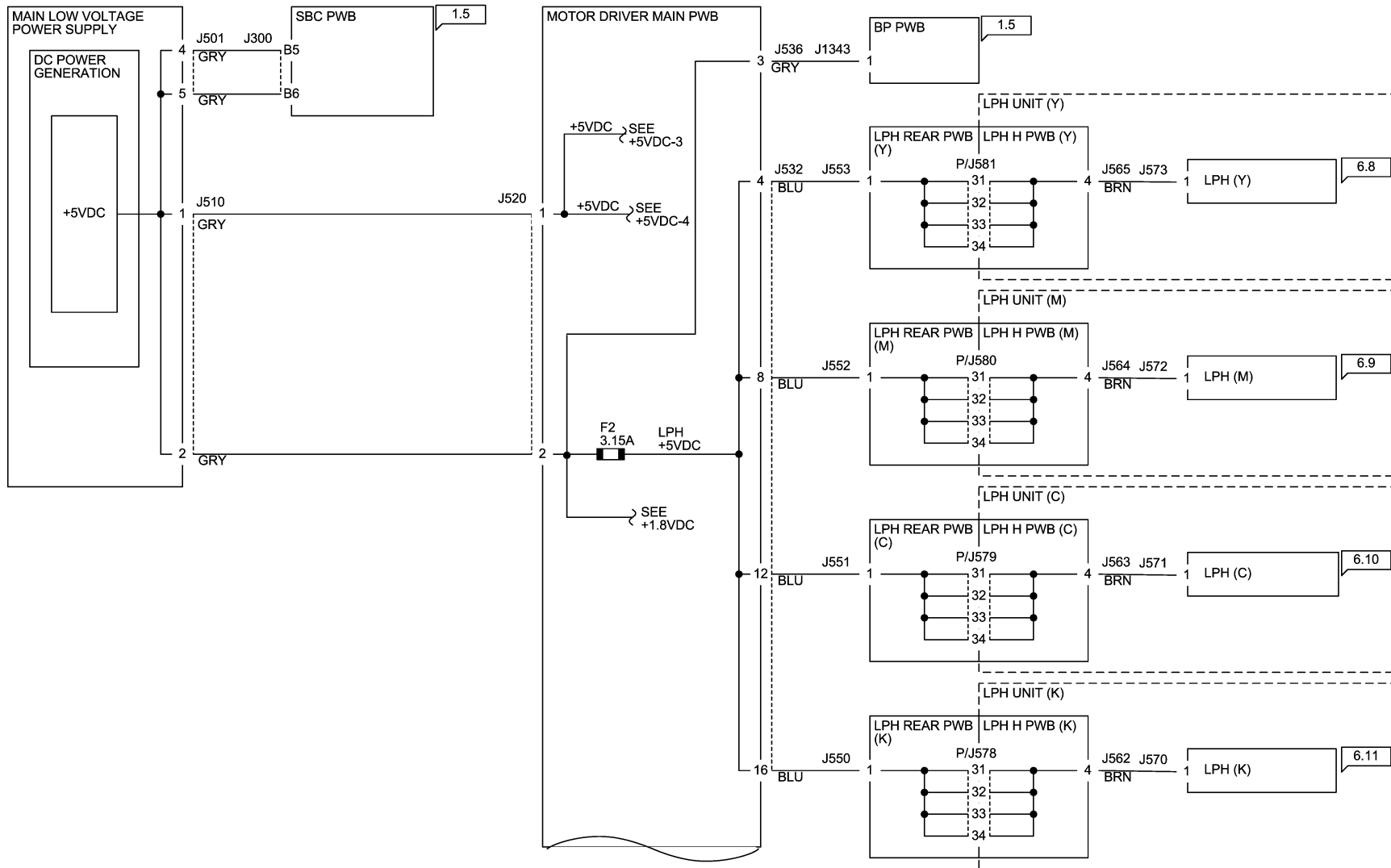
NOTE:  
 1 7845/7855: 2A  
 7830/7835: 100A

05/08/12 72011\_SPY.VSD

Figure 1 +5VDC-1 Wirenet

# +5VDC-2 Wirenet

## IOT +5VDC-2



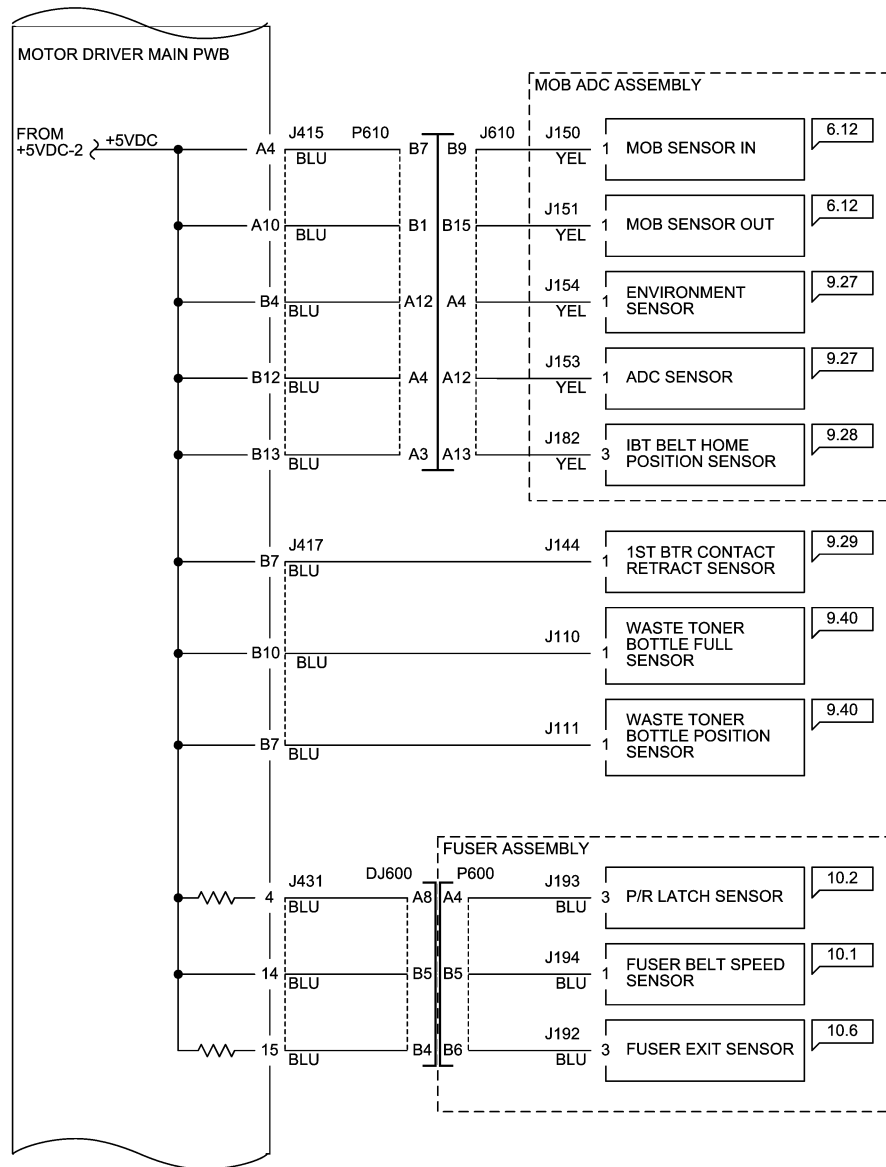
05/08/12

72012\_SPY.VSD

Figure 1 +5VDC-2 Wirenet

# +5VDC-3 Wirenet

## IOT +5VDC-3



05/08/12

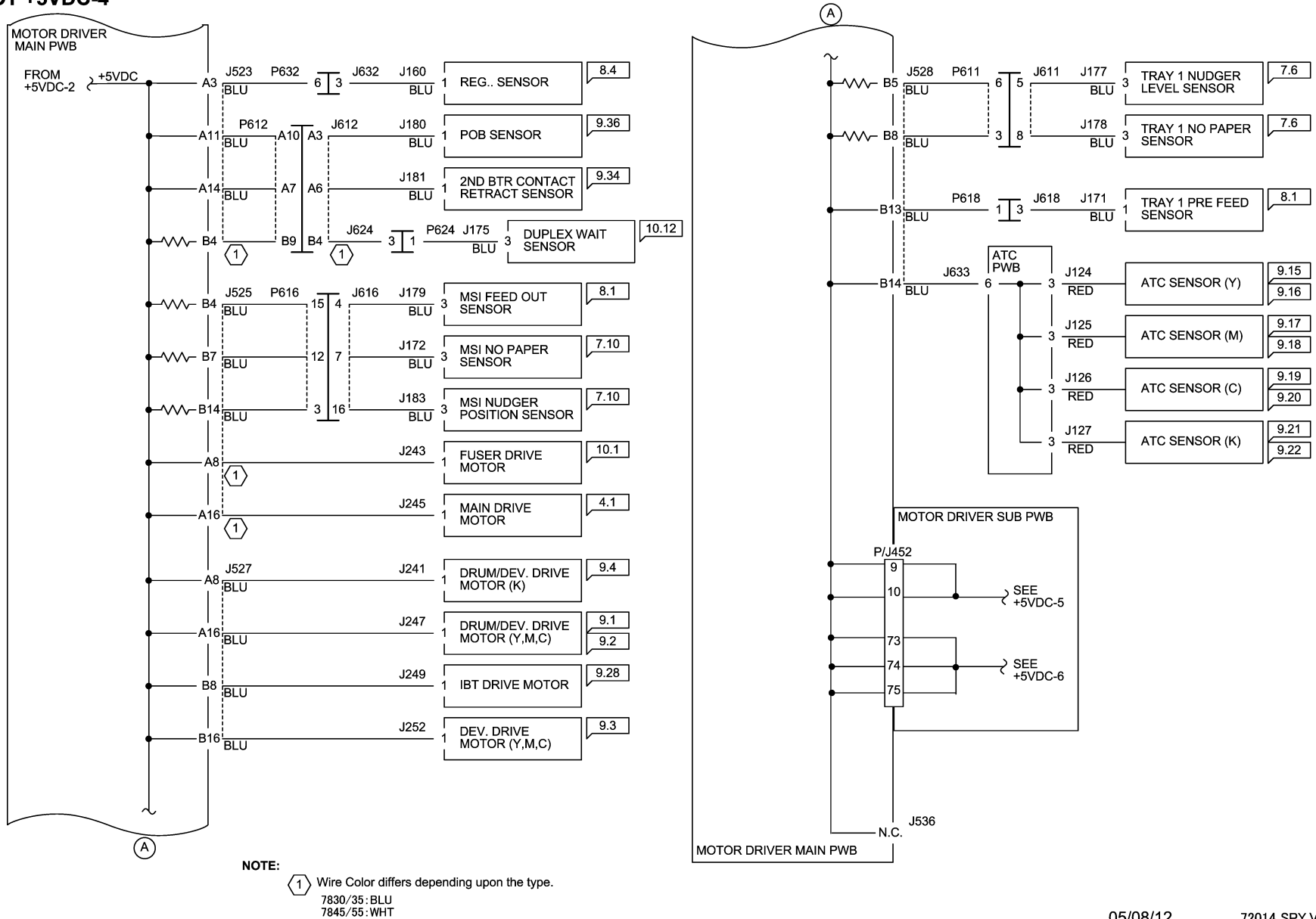
72013.SPY.VSD

Figure 1 +5VDC-3 Wirenet



# +5VDC-4 Wirenet

## IOT +5VDC-4



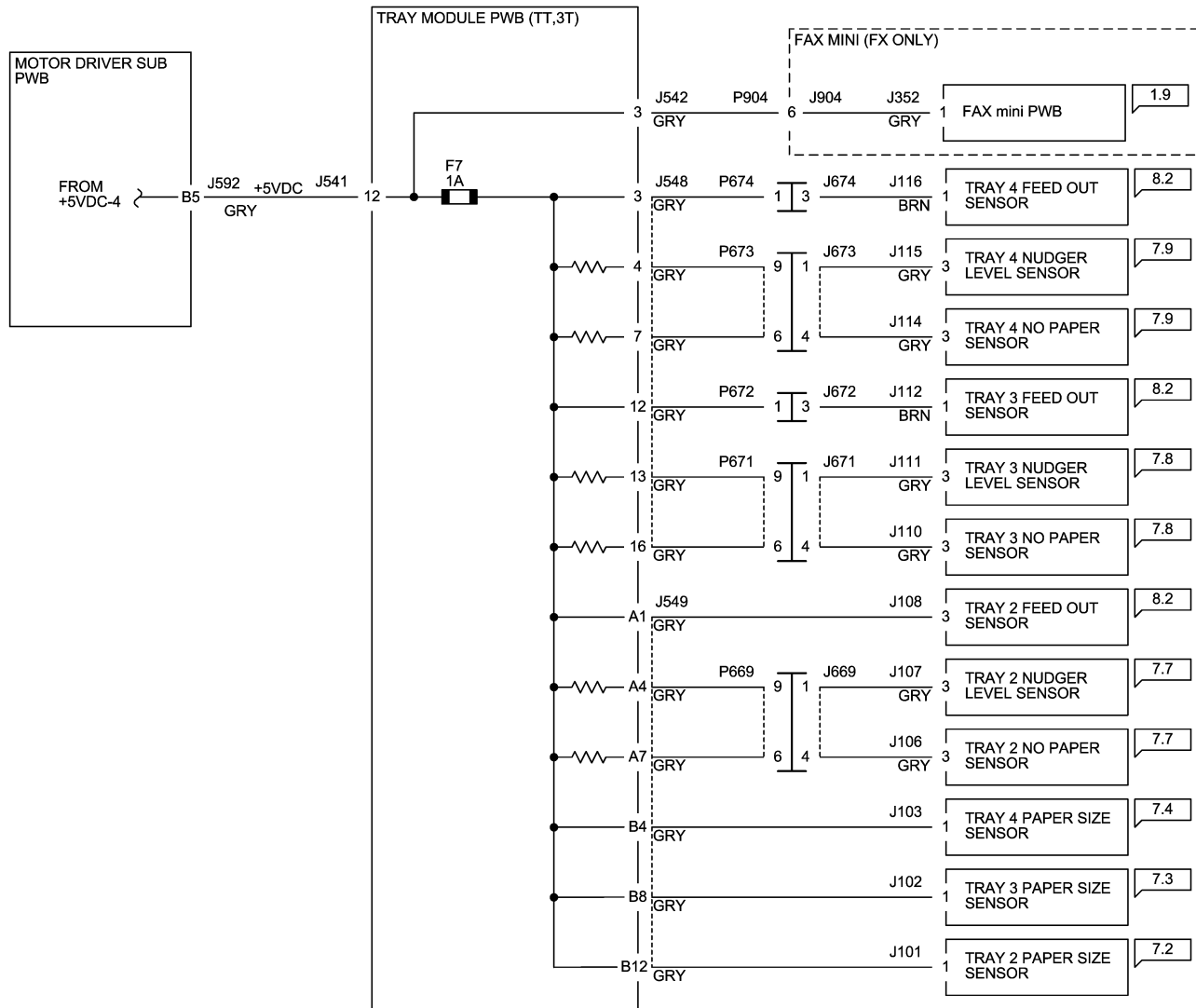
05/08/12

72014\_SPY.VSD

Figure 1 +5VDC-4 Wirenet

# +5VDC-5 Wirenet

## IOT +5VDC-5



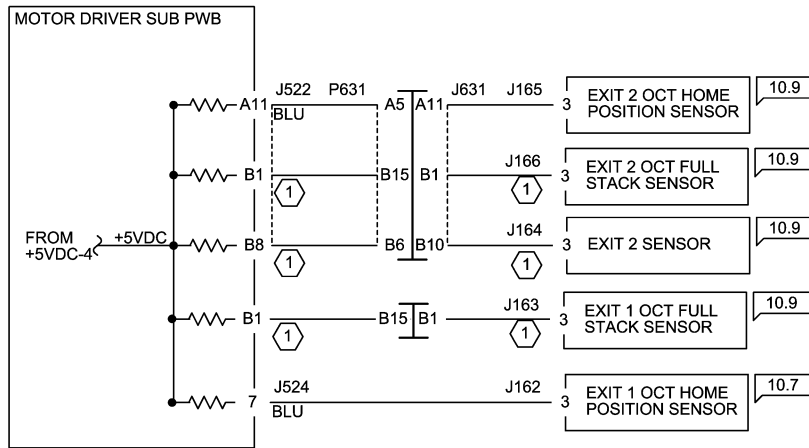
05/08/12

72015\_SPY.VSD

Figure 1 +5VDC-5 Wirenet

# +5VDC-6 Wirenet

## IOT +5VDC-6



05/08/12

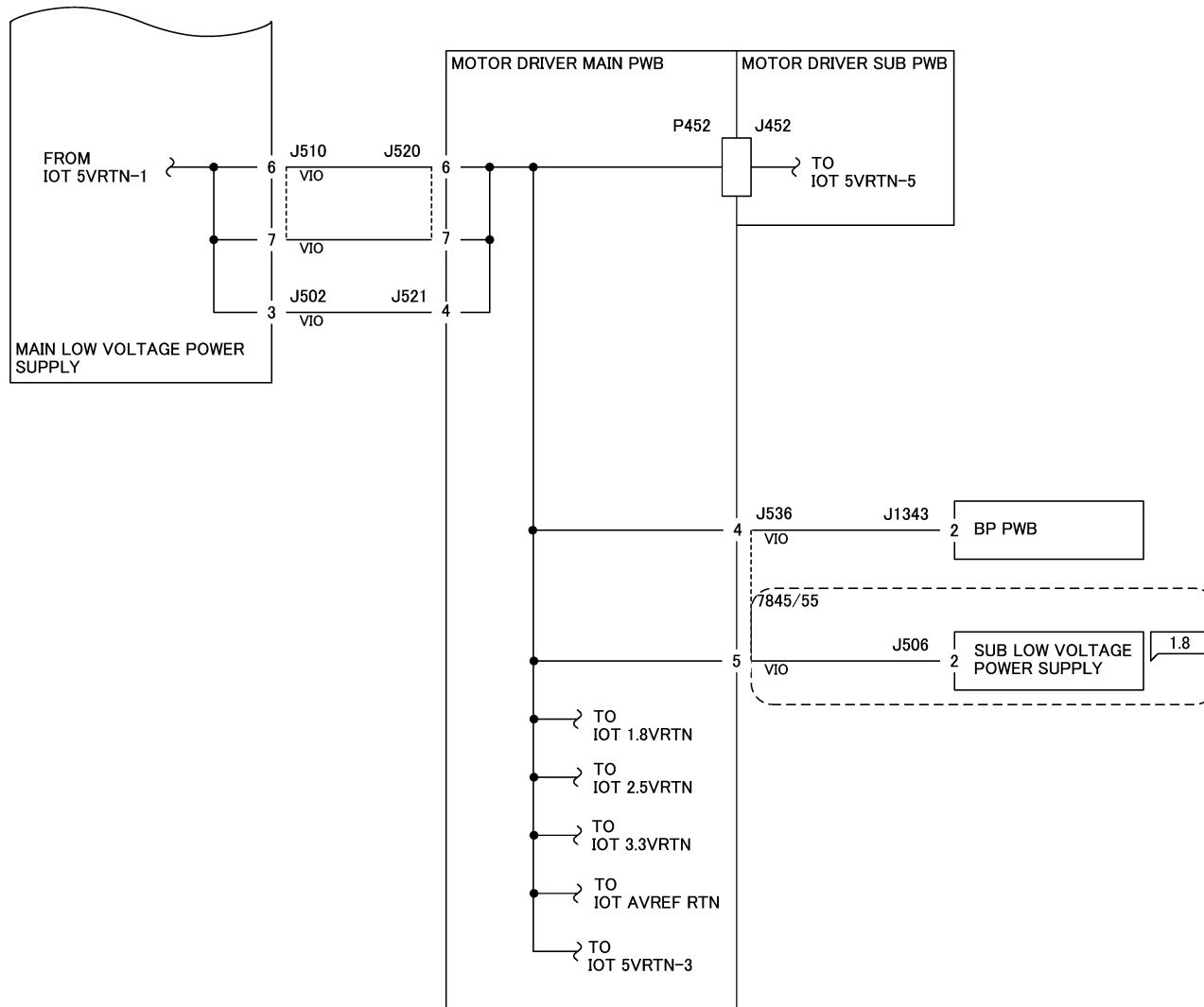
72016\_SPY.VSD

Figure 1 +5VDC-6 Wirenet



# 5VDC RTN-2 Wirenet

## IOT 5VRTN-2



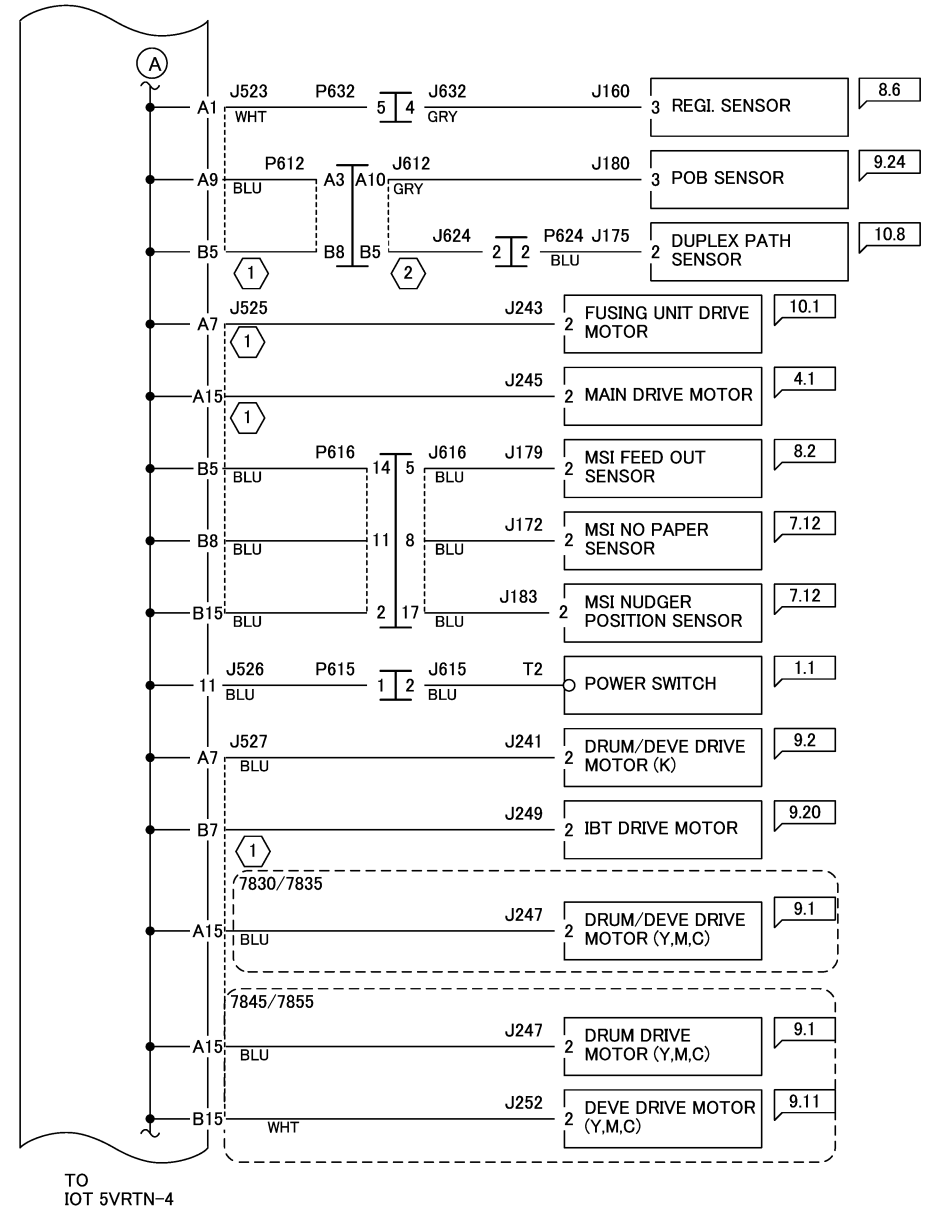
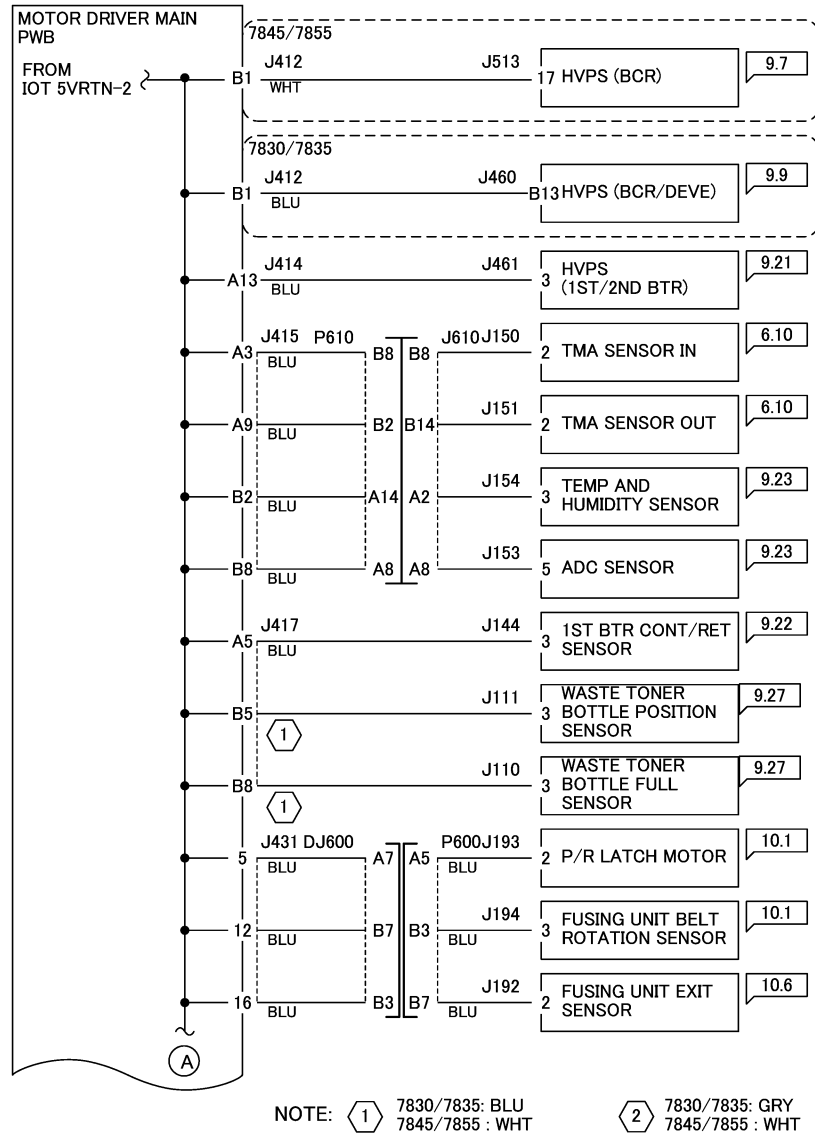
05/08/12

72018\_SPY.VSD

Figure 1 5VDC RTN-2 Wirenet

# 5VDC RTN-3 Wirenet

## IOT 5VRTN-3



05/08/12

72019\_SPY.VSD

Figure 1 5VDC RTN-3 Wirenet

# 5VDC RTN-4 Wirenet

## IOT 5VRTN-4

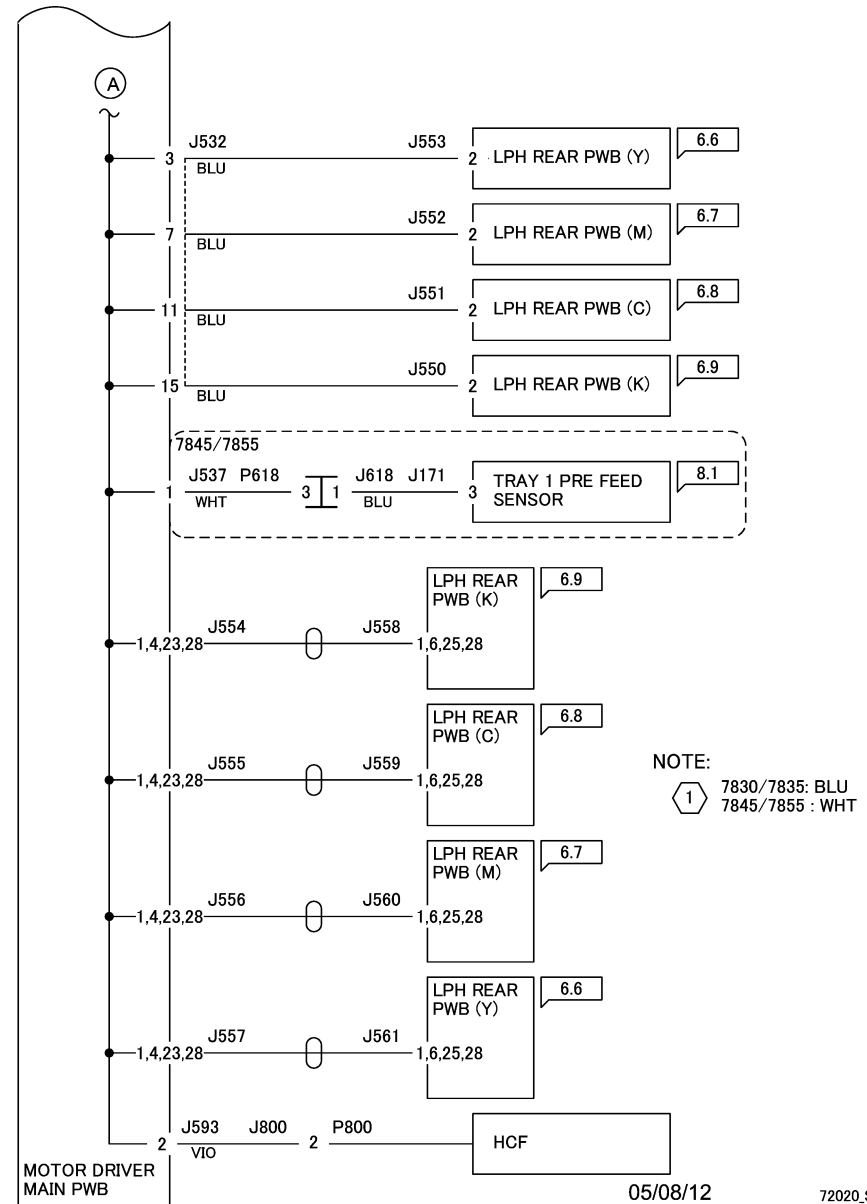
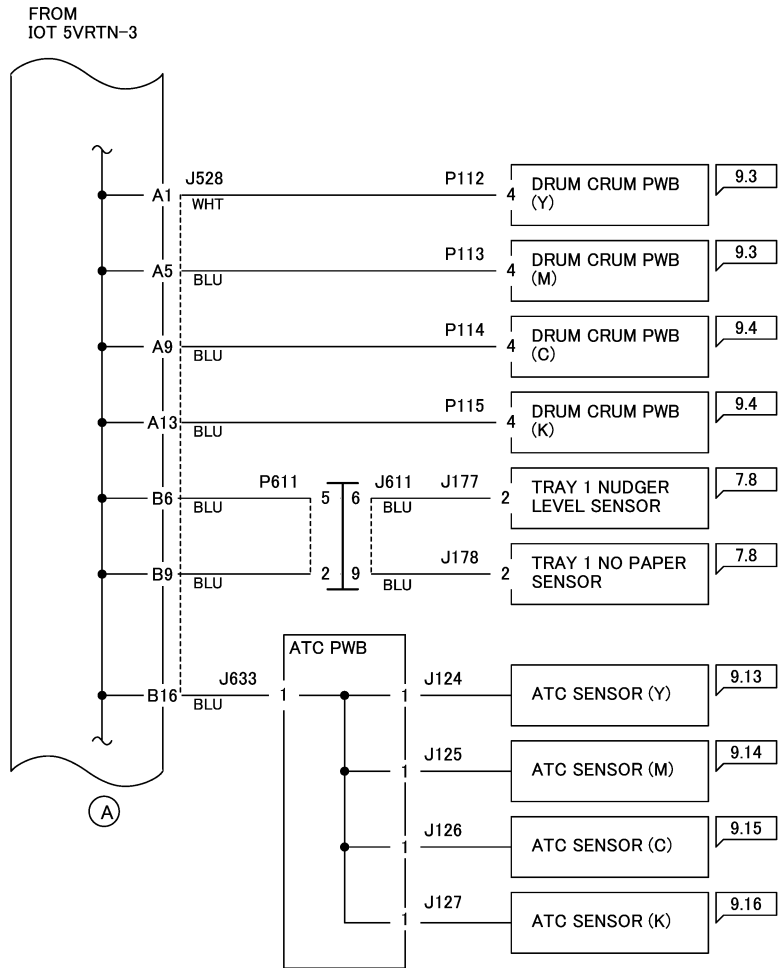
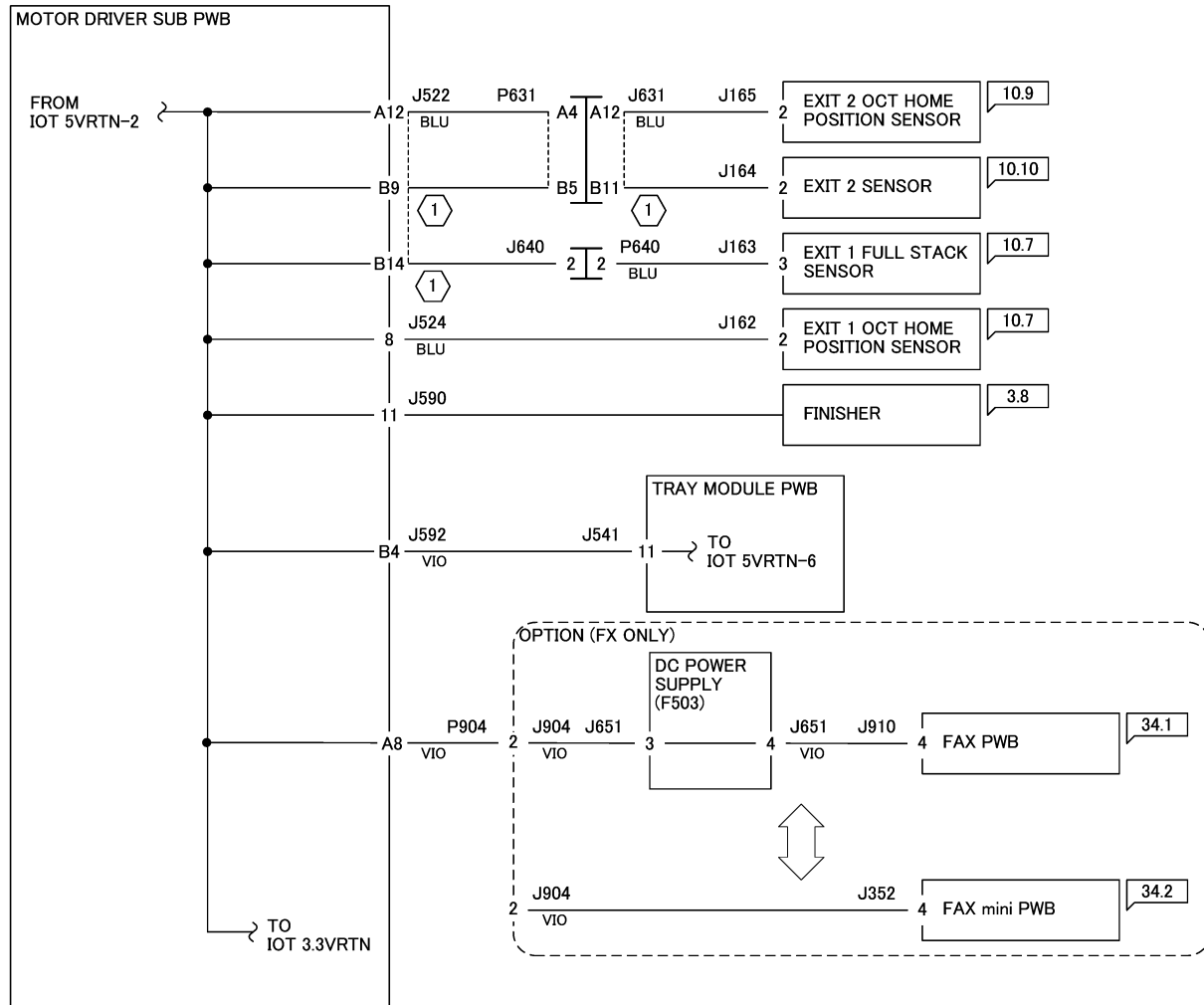


Figure 1 5VDC RTN-4 Wirenet

# 5VDC RTN-5 Wirenet

## IOT 5VRTN-5



NOTE:  
 1 7830/7835: BLU  
 7845/7855: WHT

05/08/12

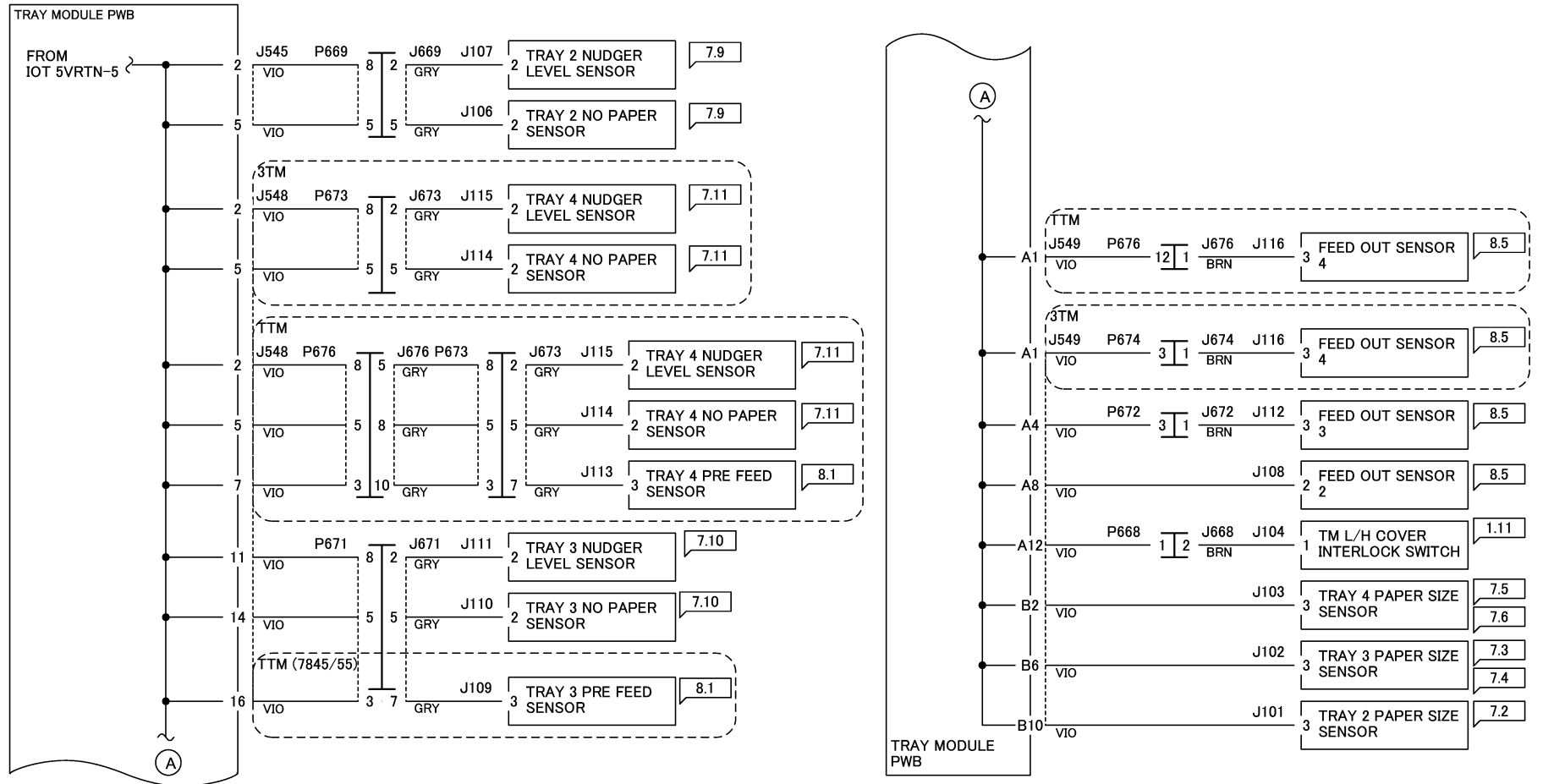
72021\_SPY.VSD

Figure 1 5VDC RTN-5 Wirenet



# 5VDC RTN-6 Wirenet

## IOT 5VRTN-6



05/08/12

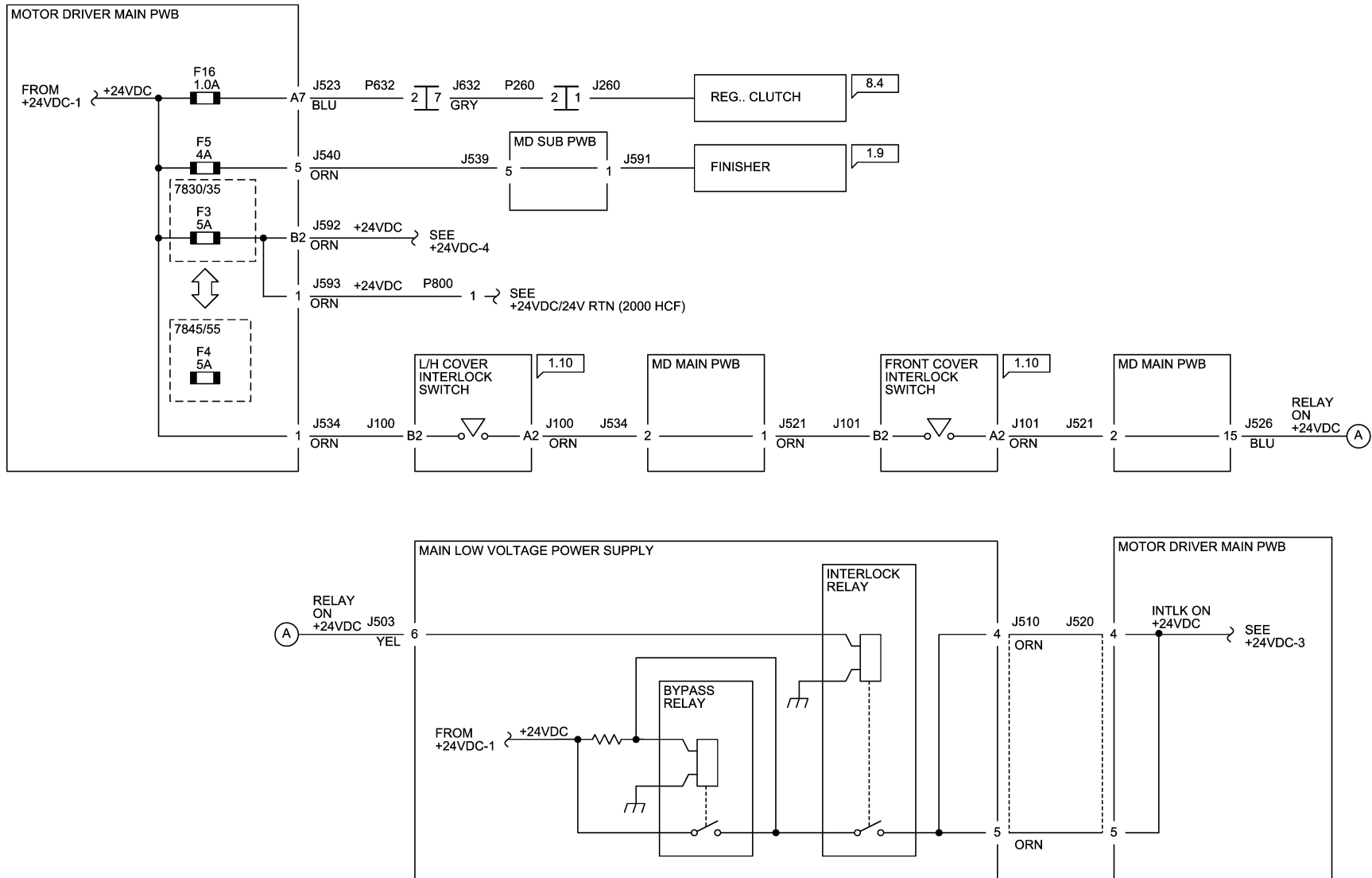
72022\_SPY.VSD

Figure 1 5VDC RTN-6 Wirenet



# +24VDC-2 Wirenet

## IOT +24VDC-2



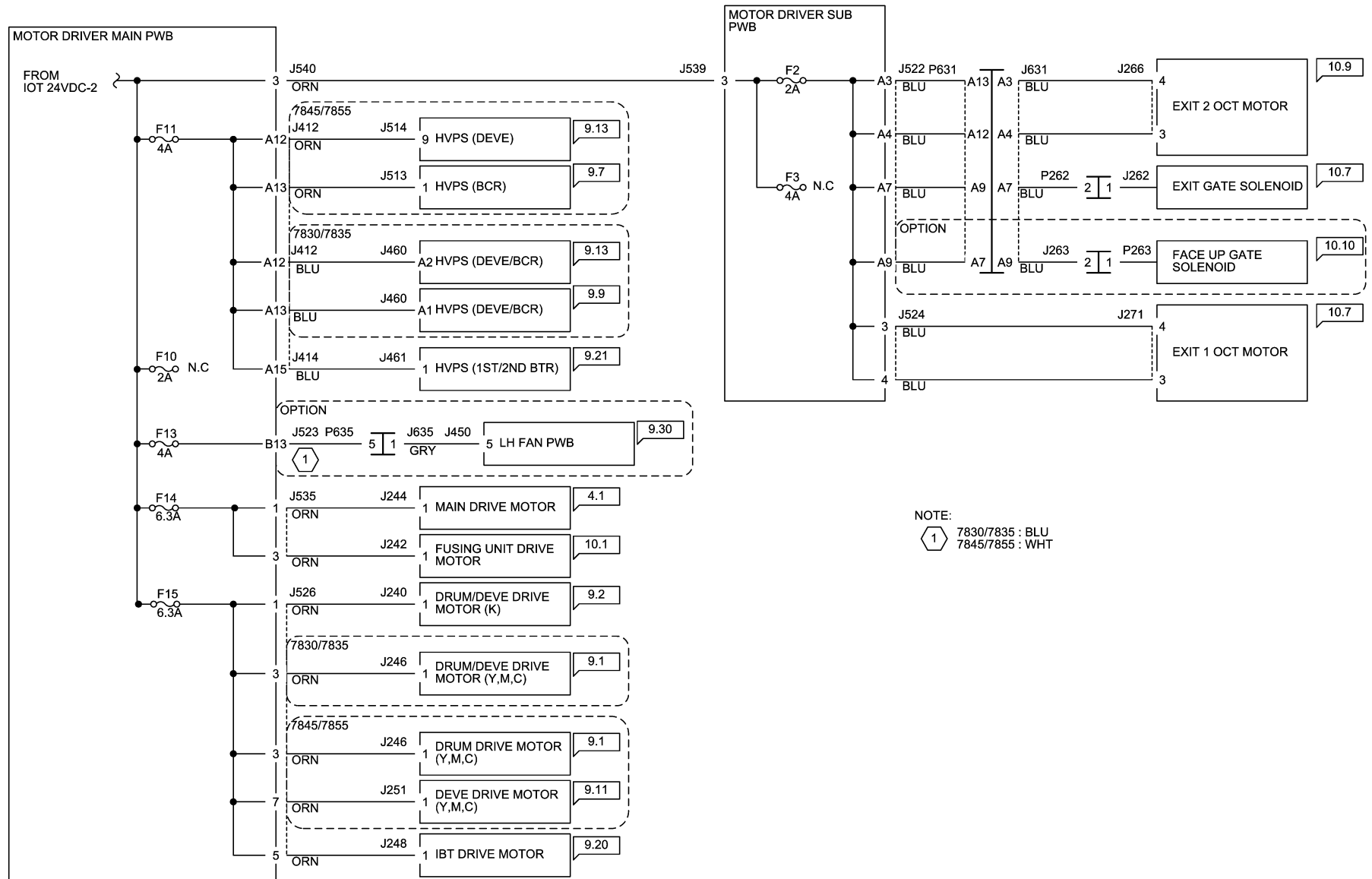
05/08/12

72024\_SPY.VSD

Figure 1 +24VDC-2 Wirenet

# +24VDC-3 Wirenet

## IOT +24VDC-3



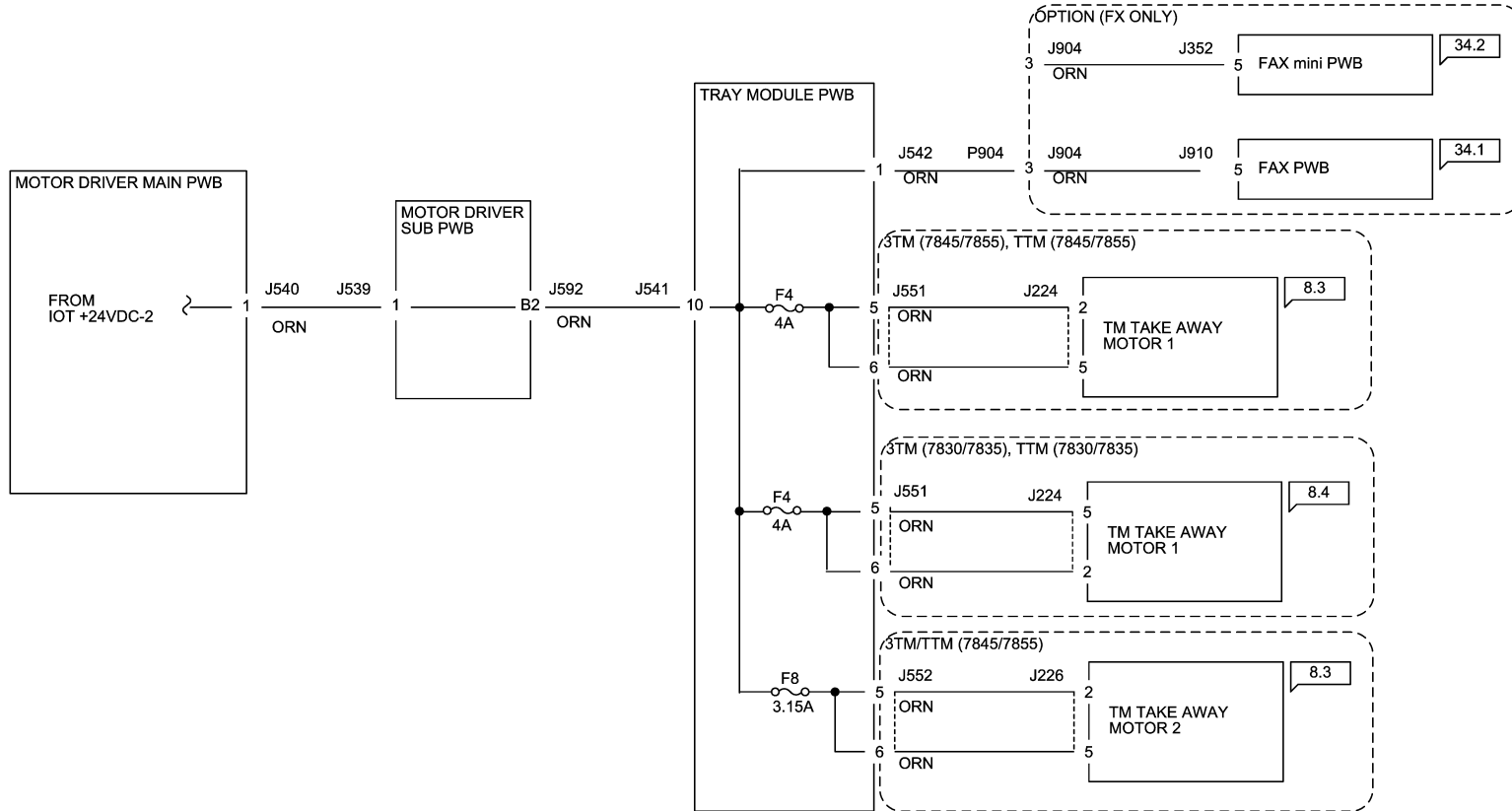
05/08/12

72025\_SPY.VSD

Figure 1 +24VDC-3 Wirenet

# +24VDC-4 Wirenet

## IOT +24VDC-4



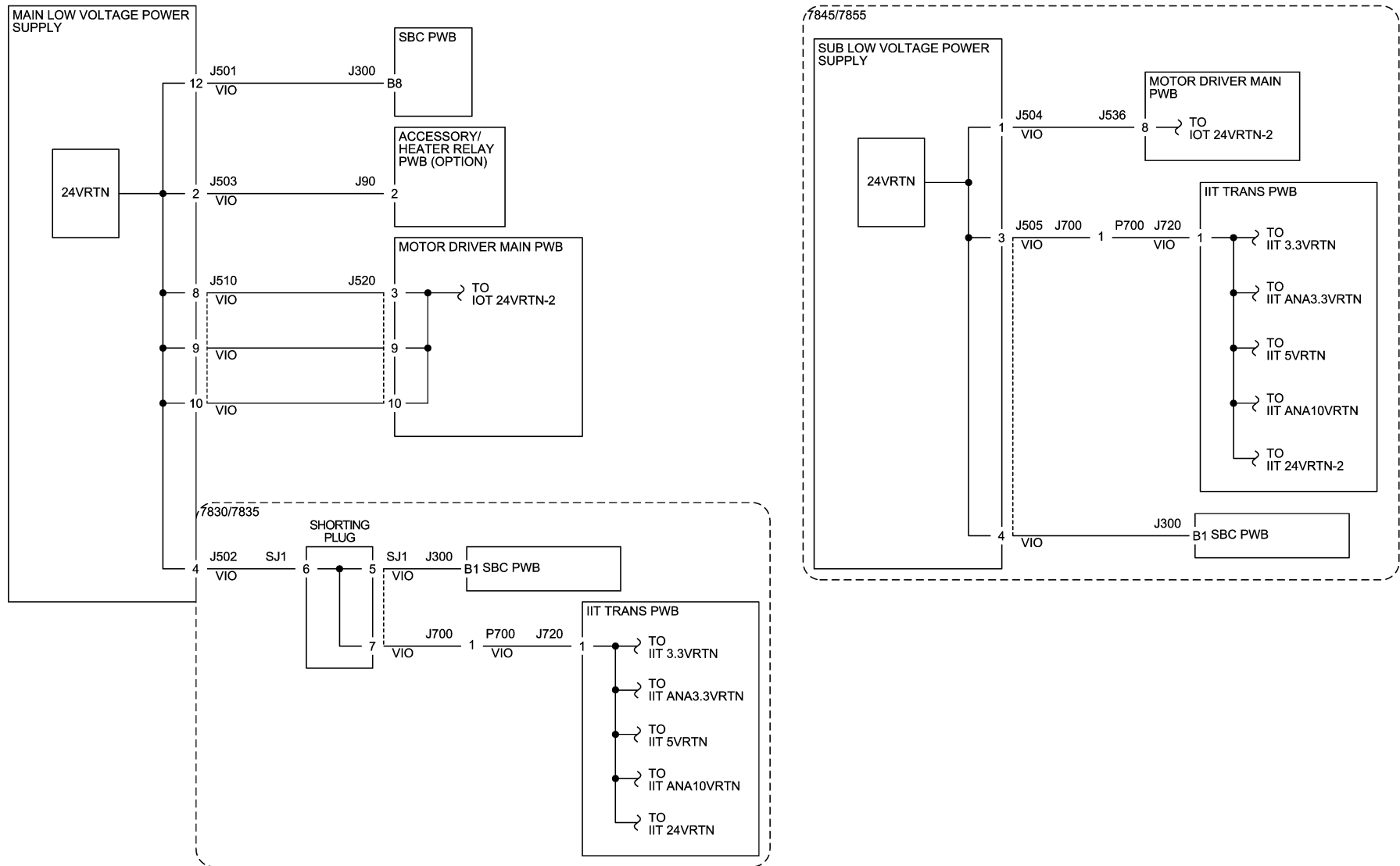
05/08/12

72026\_SPY.VSD

Figure 1 +24VDC-4 Wirenet

# 24VDC RTN-1 Wirenet

## IOT 24VRTN-1



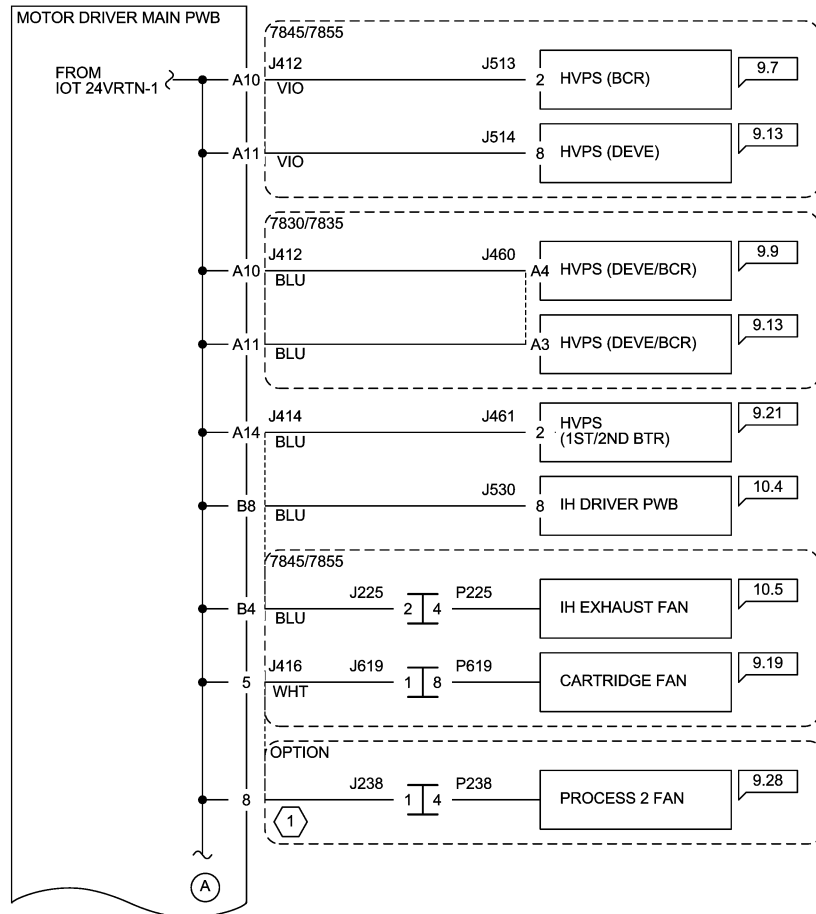
05/08/12

72027\_SPY.VSD

Figure 1 24VDC RTN-1 Wirenet

# 24VDC RTN-2 Wirenet

## IOT 24VRTN-2



NOTE:

1 7830/7835/7845 : BLU  
7850/7855 : WHT

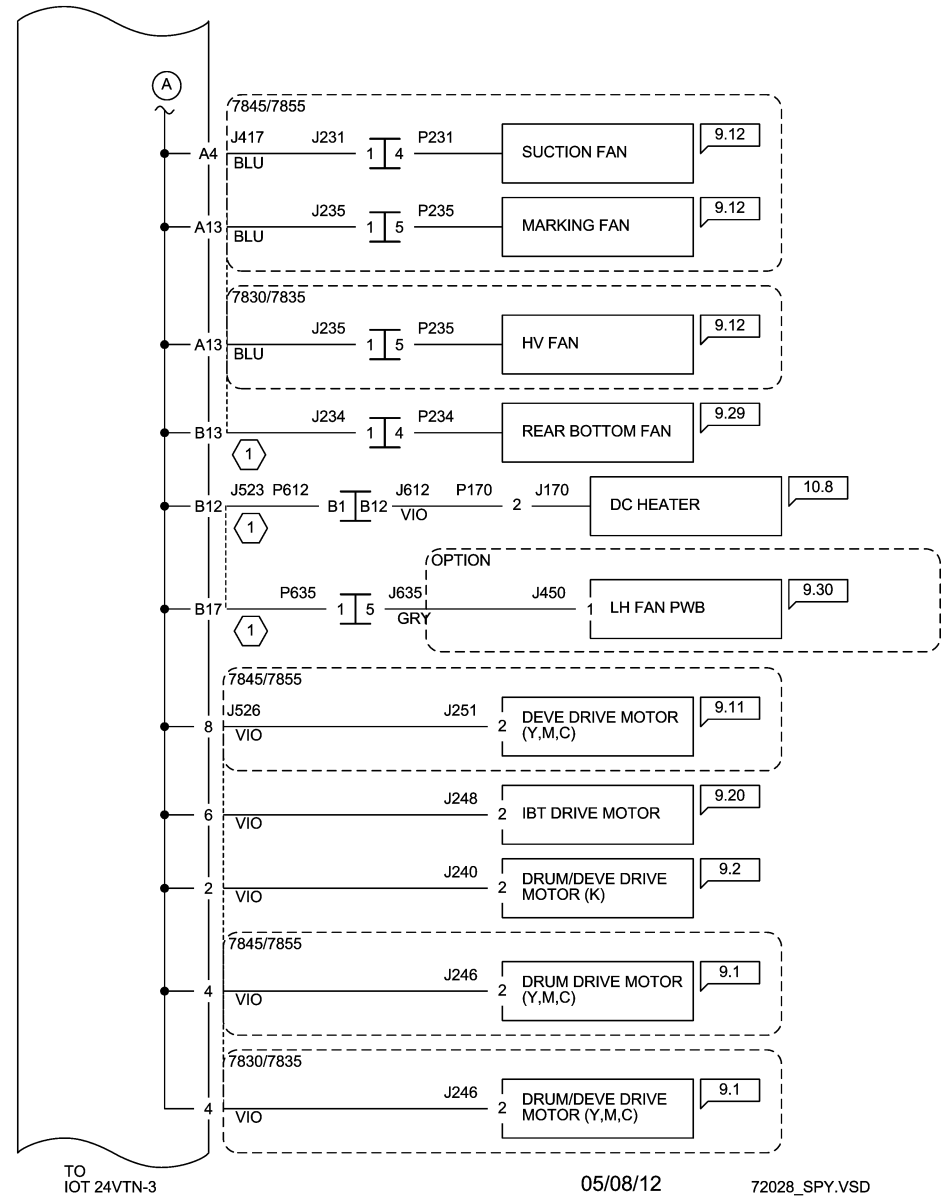
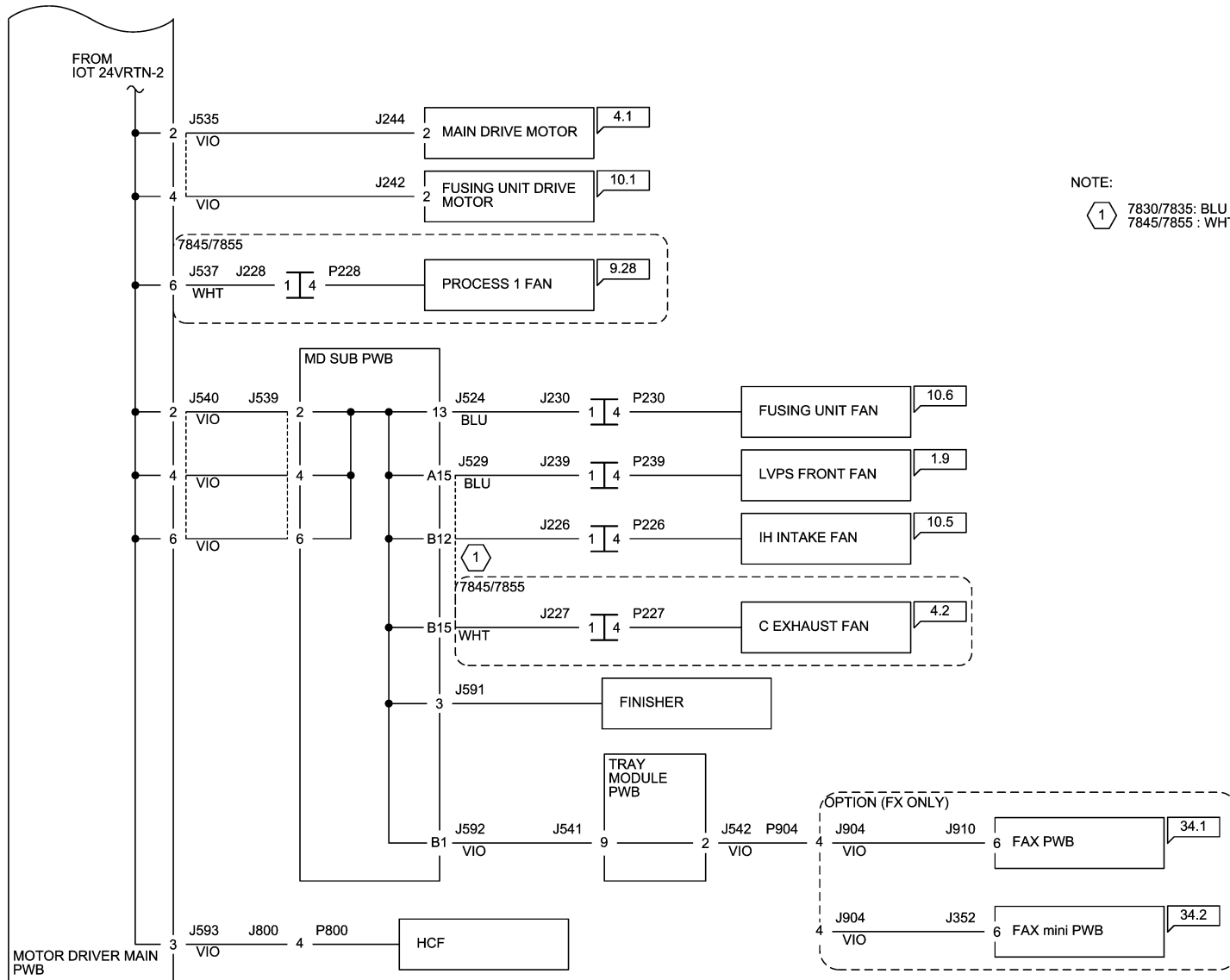


Figure 1 24VDC RTN-2 Wirenet

# 24VDC RTN-3 Wirenet

## 7.2.20 IOT 24VRTN-3



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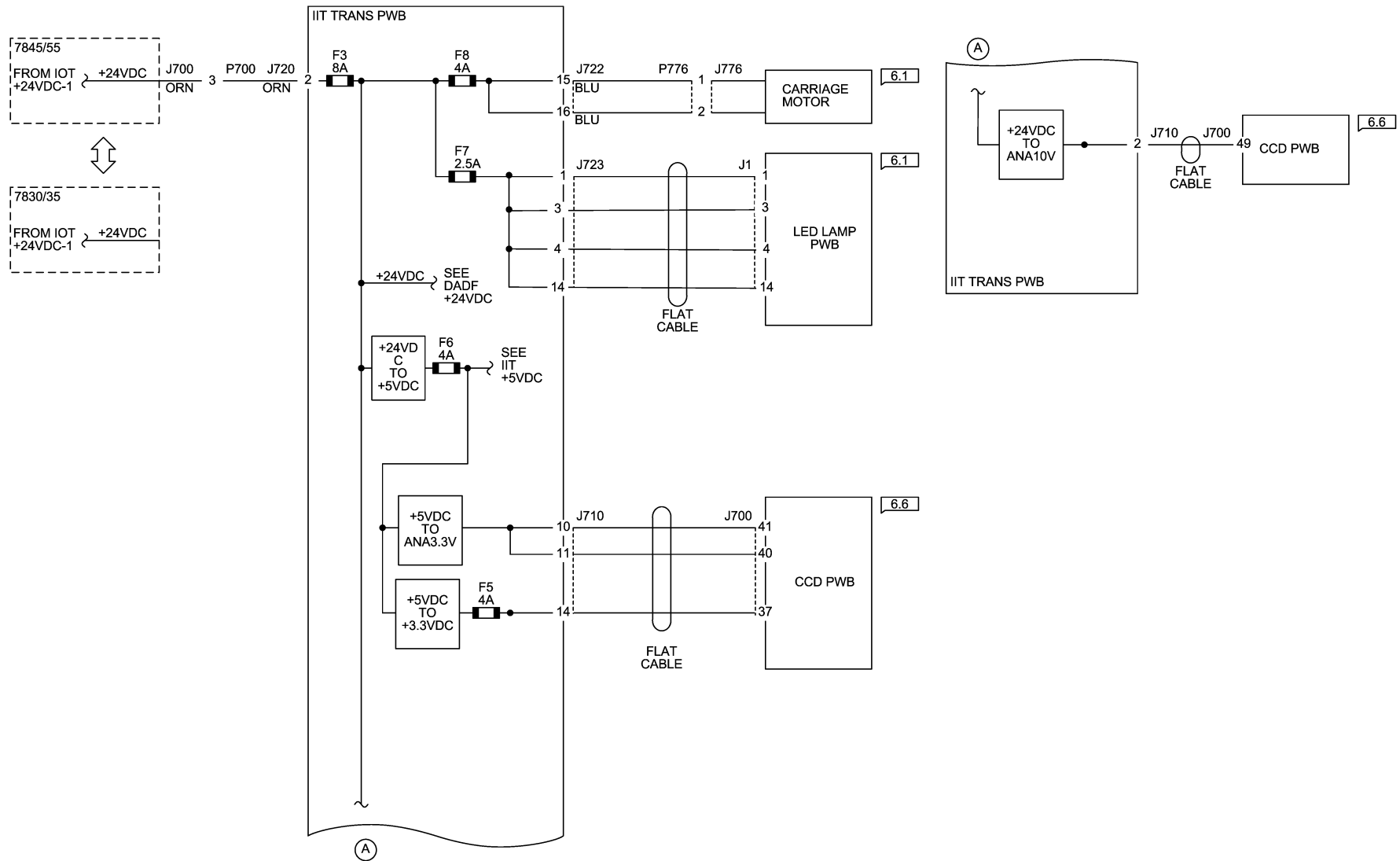
72029\_SPY.VSD

Figure 1 24VDC RTN-3 Wirenet



# IIT +3.3/+24VDC/ANA Wirenet

## IIT +3.3/+24/ANA



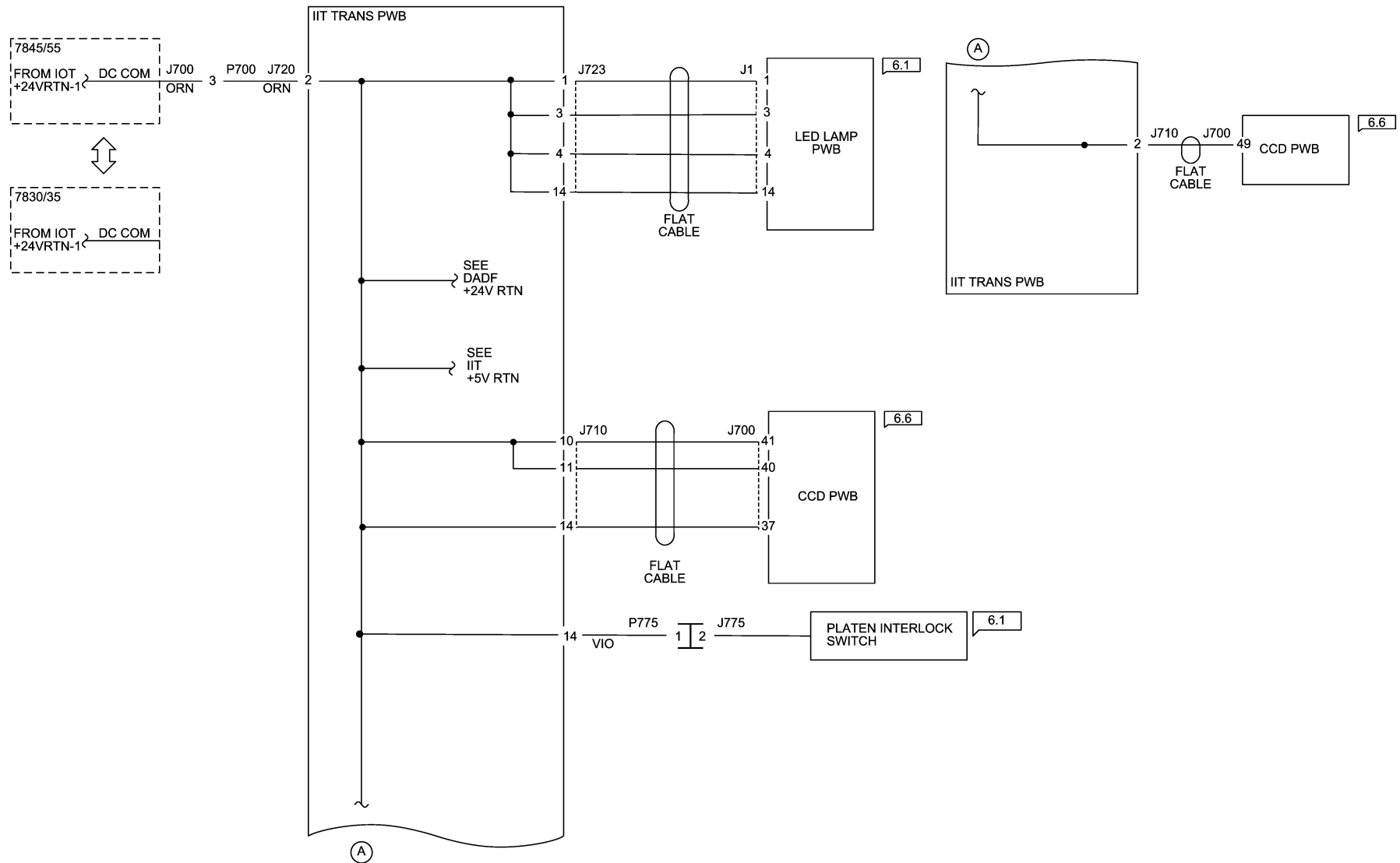
05/08/12

72030\_SPY.VSD

Figure 1 IIT +3.3/+24VDC/ANA Wirenet

# IIT\_3.3/24/ANA VRTN Wirenet

## IIT +3.3/+24/ANA VRTN



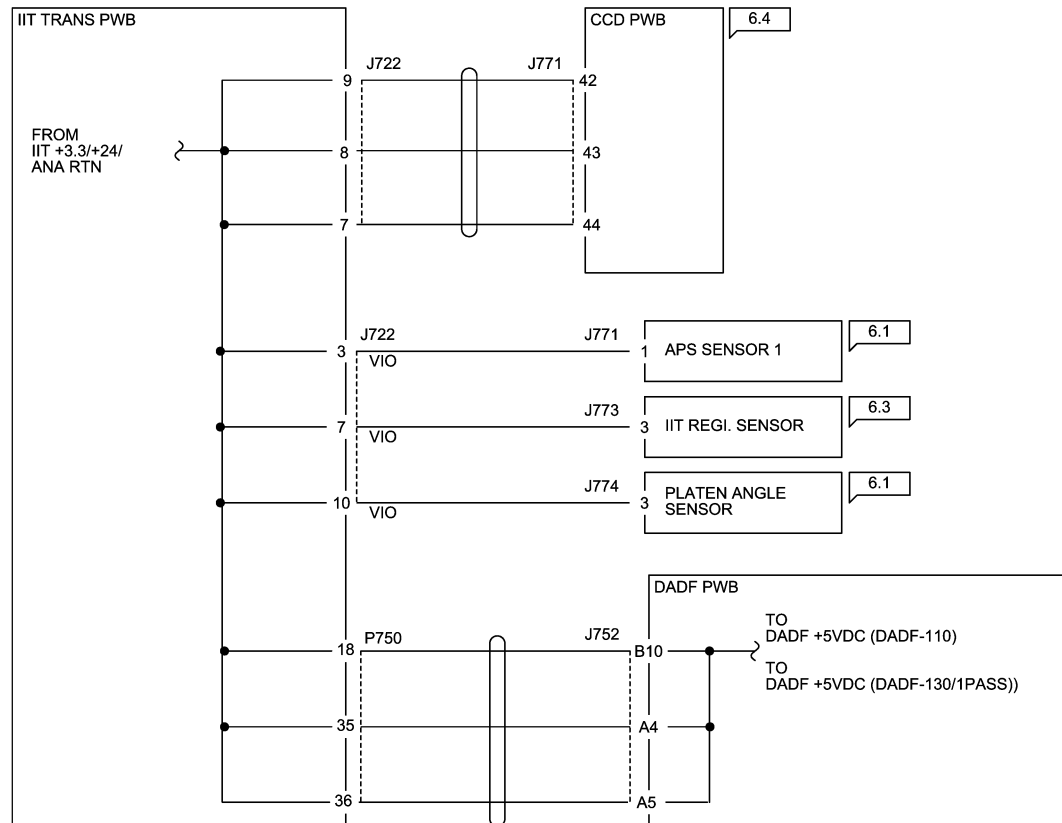
05/08/12

72031\_SPY.VSD

Figure 1 IIT\_3.3/24/ANA VRTN Wirenet

# IIT +5 VDC Wirenet

## IIT +5VDC



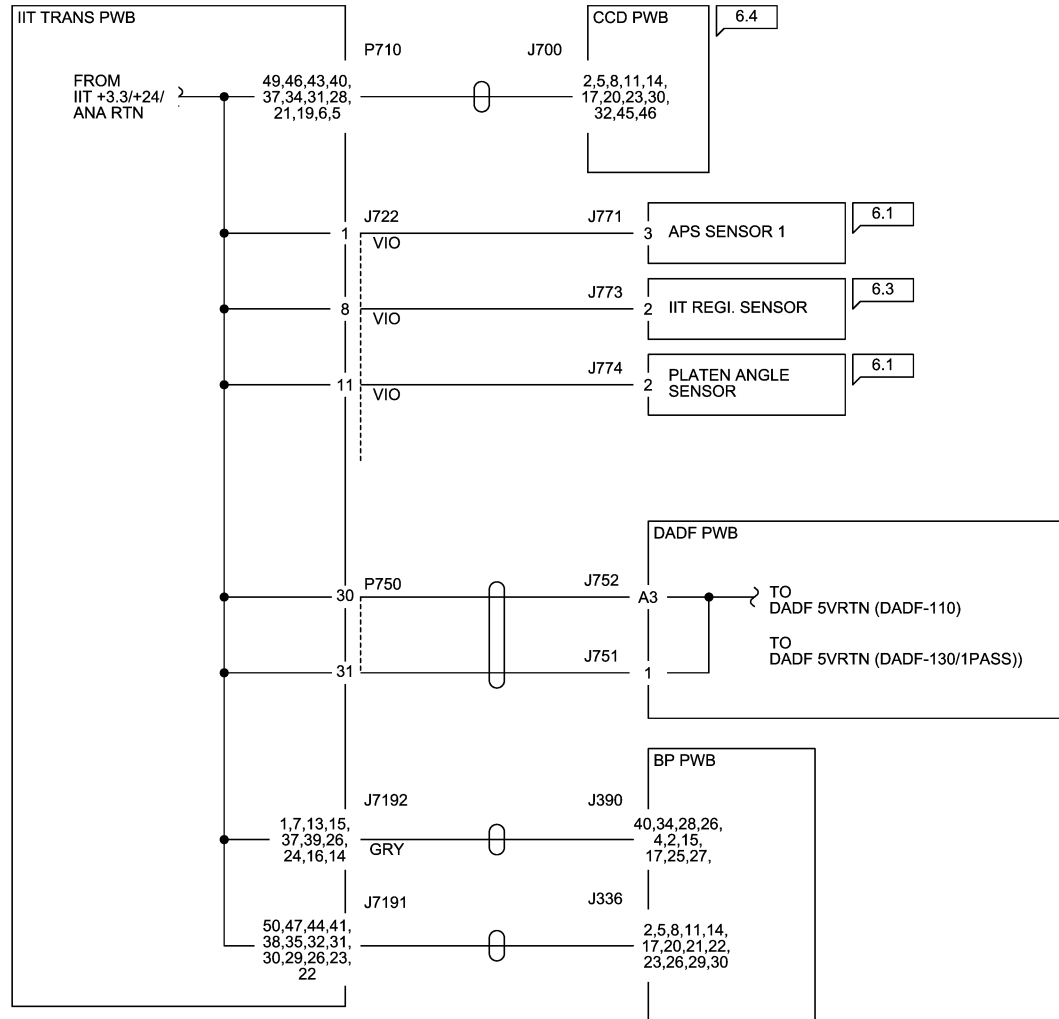
05/08/12

72032\_SPY.VSD

Figure 1 IIT +5 VDC Wirenet

# IIT +5 VDC RTN Wirenet

## IIT 5VRTN



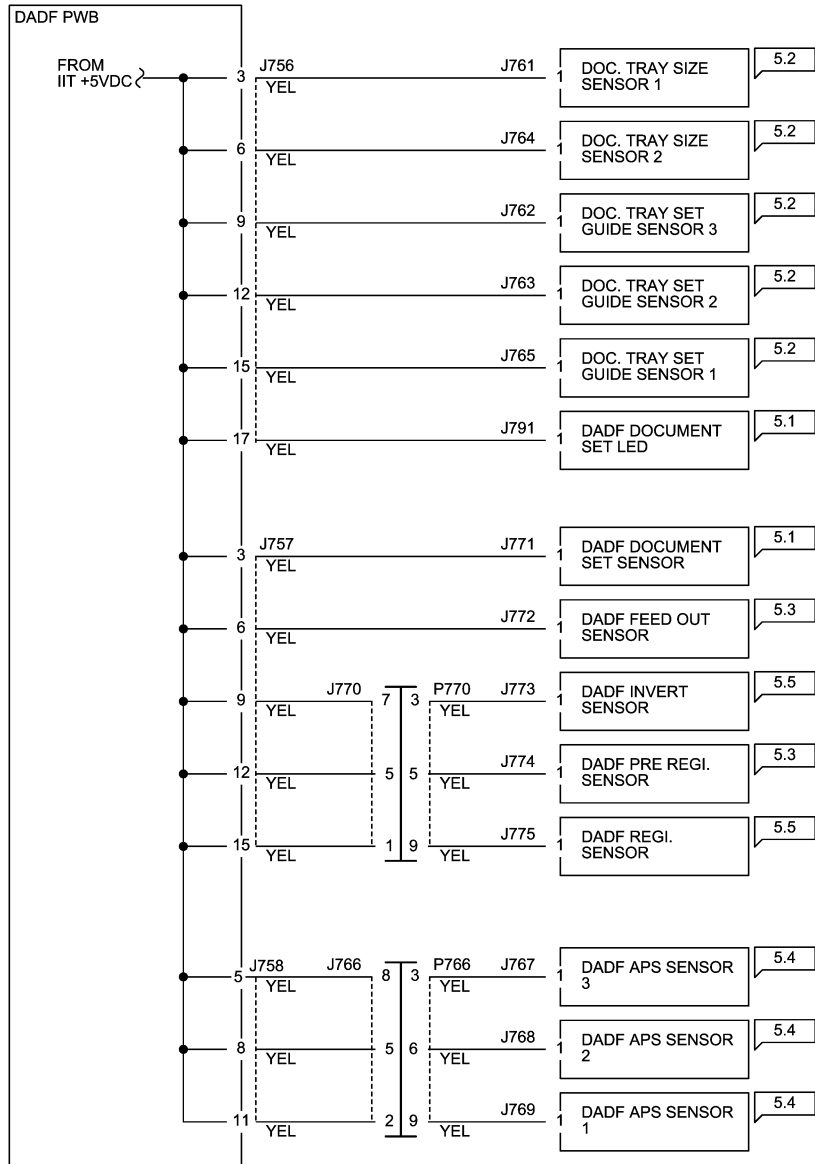
05/08/12

72033\_SPY.VSD

Figure 1 IIT +5 VDC RTN Wirenet

# DADF +5VDC Wirenet (DADF-110)

## DADF +5VDC (DADF-110 / 2 PASS)



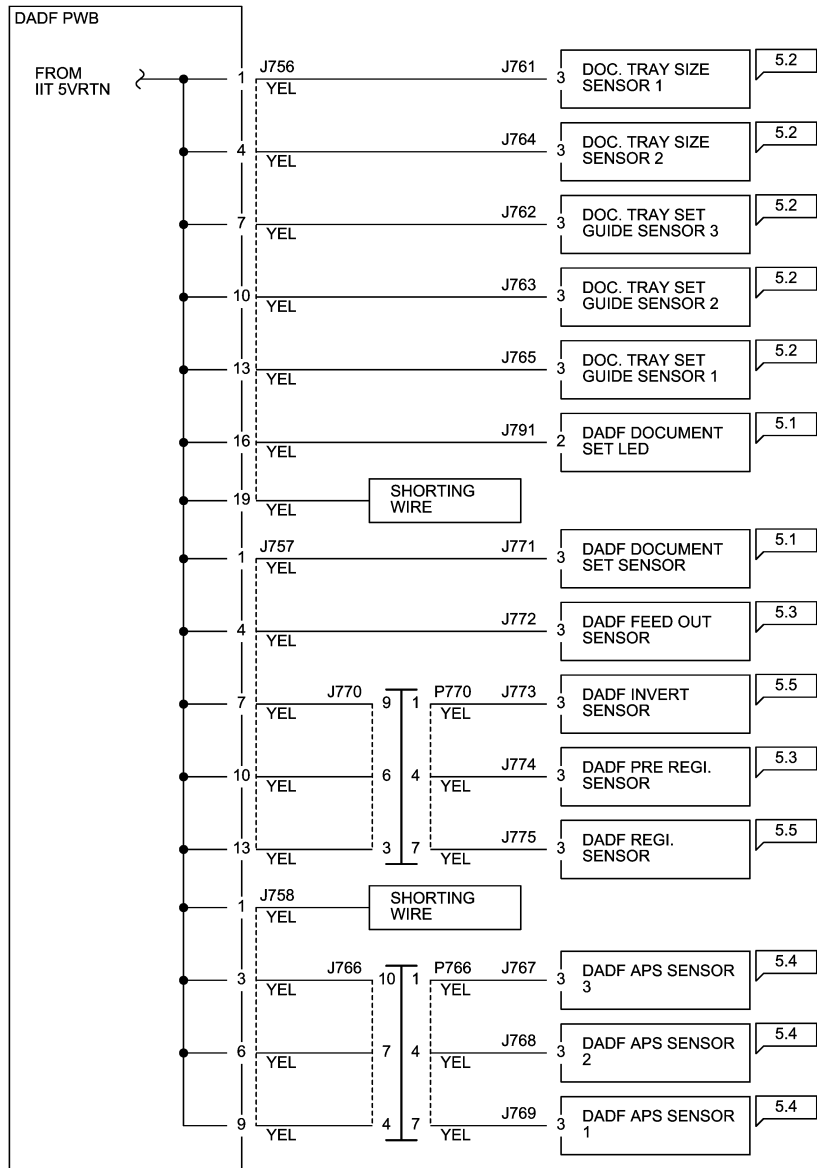
05/08/12

72034\_SPY.VSD

Figure 1 DADF\_+5VDC Wirenet (DADF-110 / 2 Pass)

# DADF 5VRTN Wirenet (DADF-110)

## DADF 5VRTN (DADF-110 / 2 PASS)



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72035\_SPY.VSD

Figure 1 DADF\_5VRTN Wirenet (DADF-110 / 2 Pass)

# DADF +5VDC Wirenet (DADF-130 / 1 Pass)

## DADF +5VDC (DADF-130/1PASS)

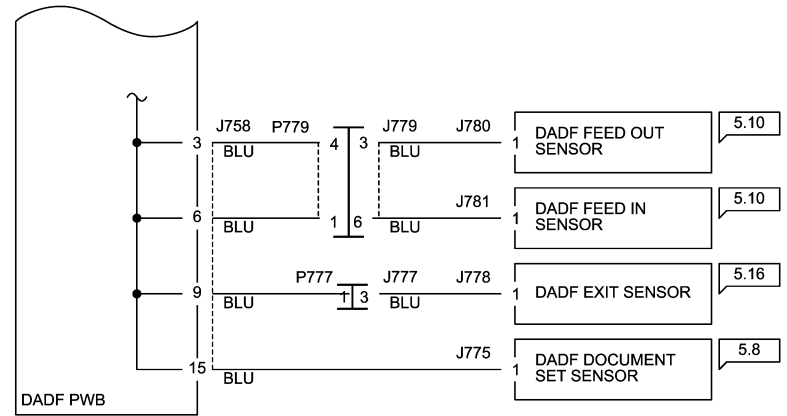
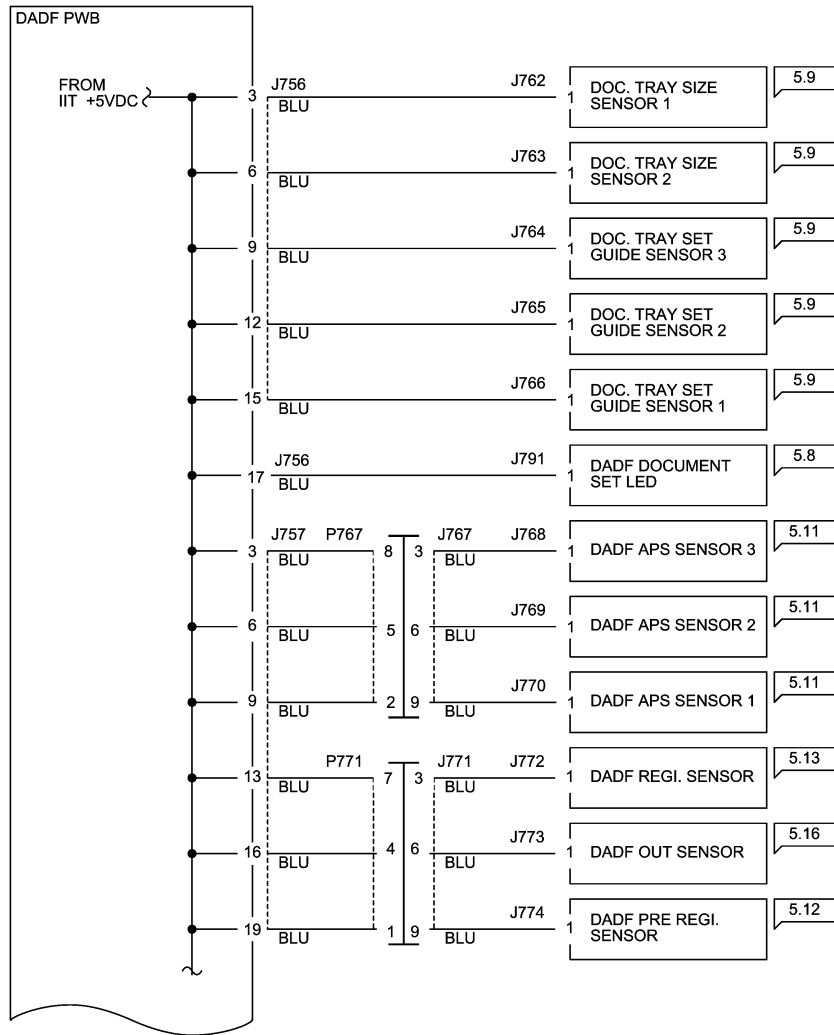


Figure 1 DADF\_+5VDC Wirenet (DADF-130 / 1 Pass)

05/08/12

72036\_SPY.VSD

# DADF 5VRTN Wirenet (DADF-130)

## DADF 5VRTN (DADF-130/1PASS)

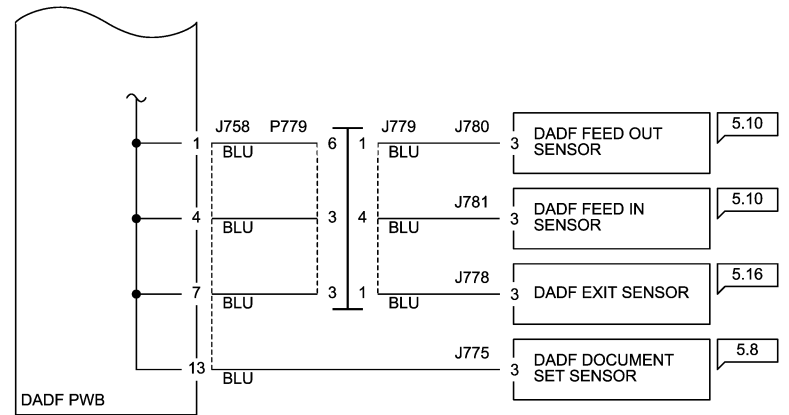
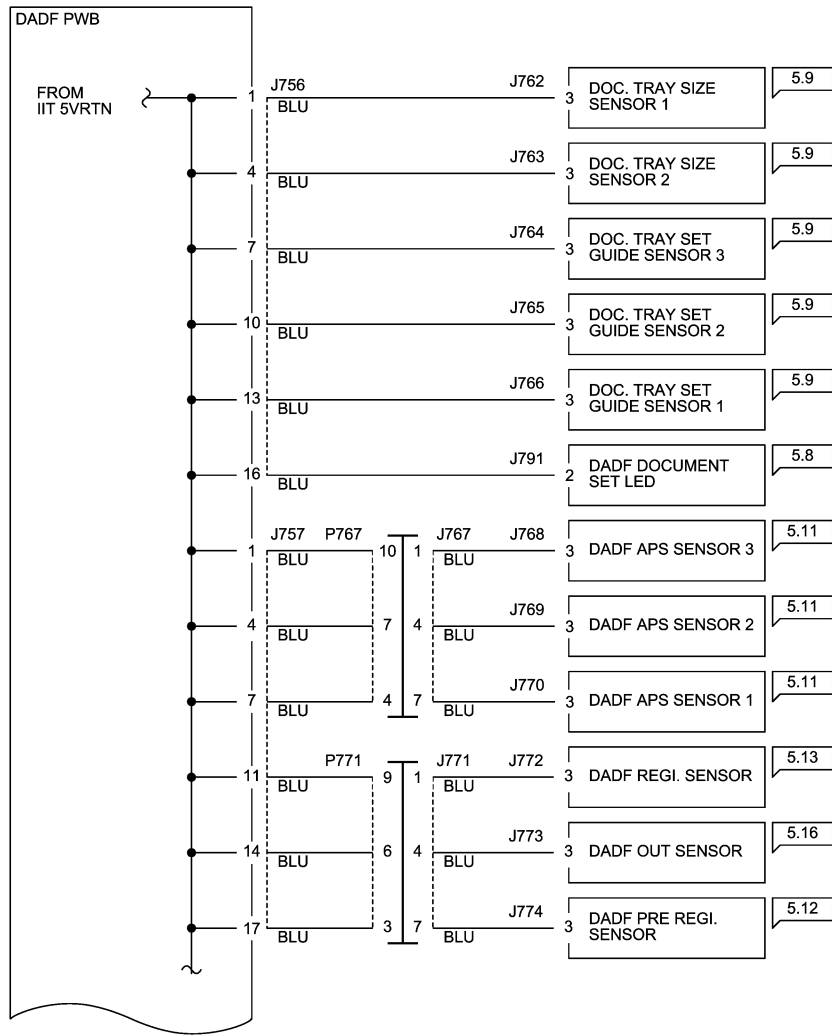
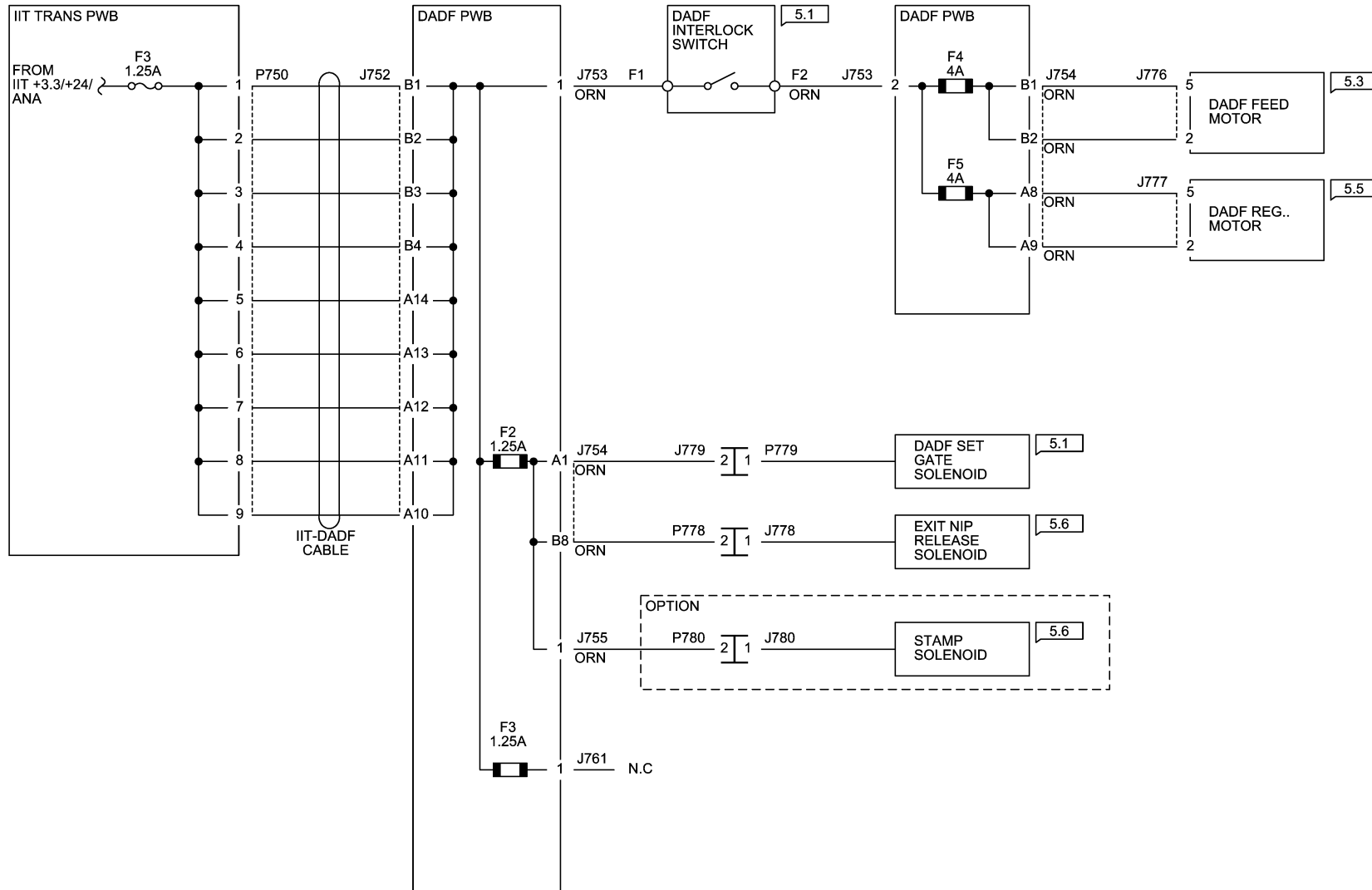


Figure 1 DADF\_5VRTN Wirenet (DADF-130 / 1 Pass)



# DADF +24VDC Wirenet (DADF-110)

## DADF +24VDC (DADF-110 / 2 PASS)



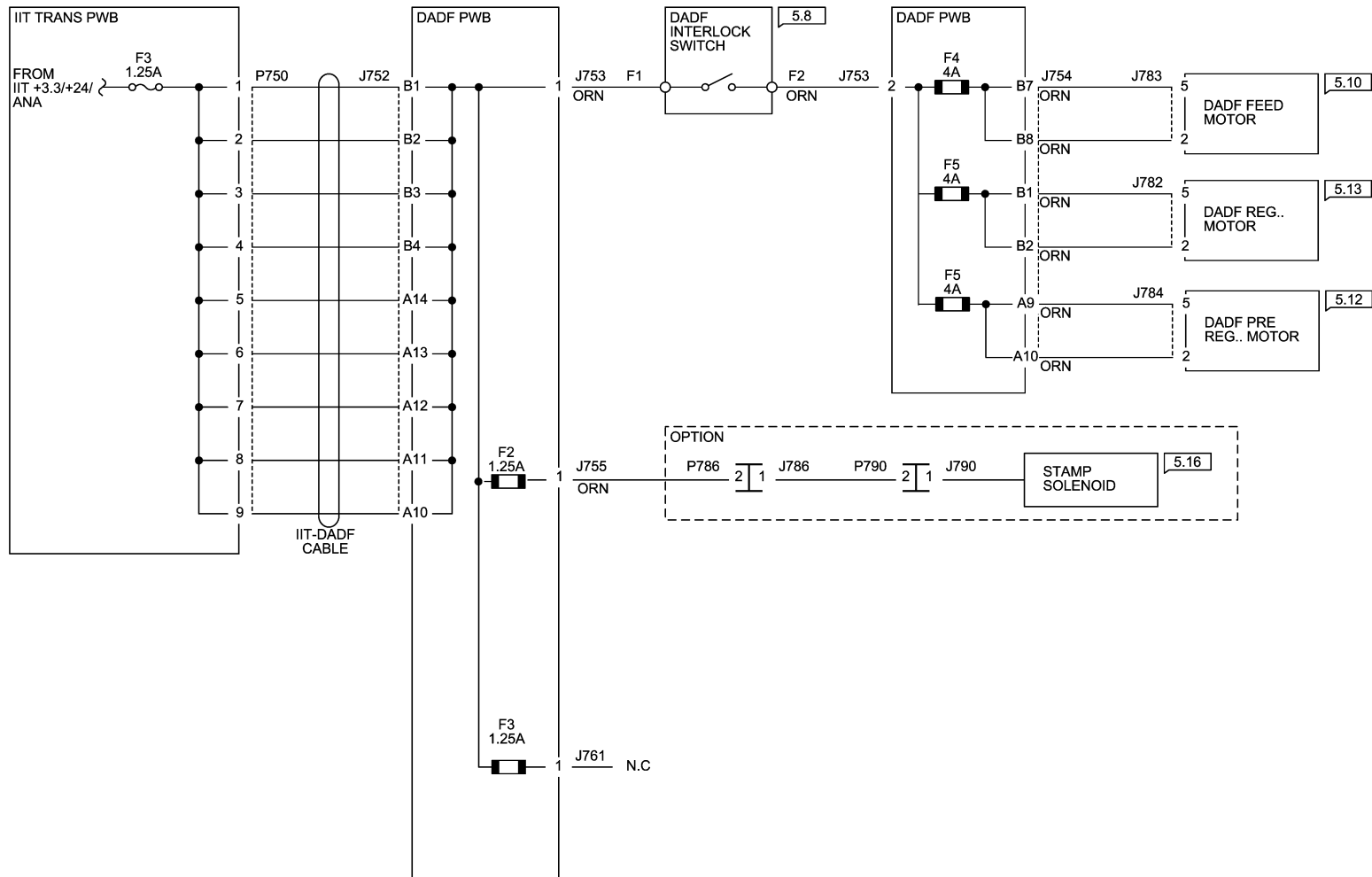
05/09/12

72038\_SPY.VSD

Figure 1 DADF\_+24VDC Wirenet (DADF-110 / 2 Pass)

# DADF +24VDC Wirenet (DADF-130)

## DADF +24VDC (DADF-130 / 1 PASS)



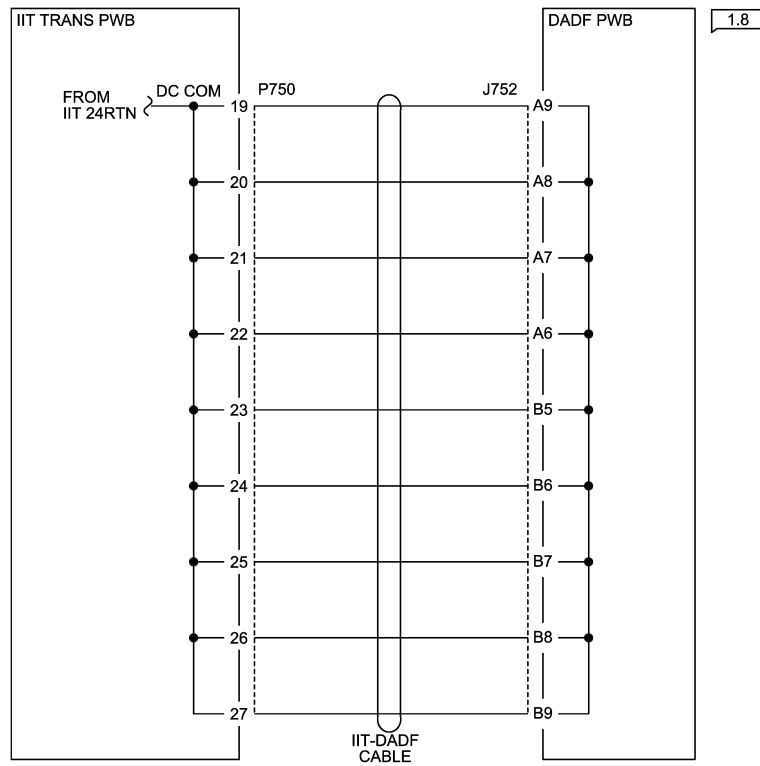
05/09/12

72039\_SPY.VSD

Figure 1 DADF\_+24VDC Wirenet (DADF-130 / 1 Pass)

# DADF +24VRTN Wirenet

## DADF 24VRTN



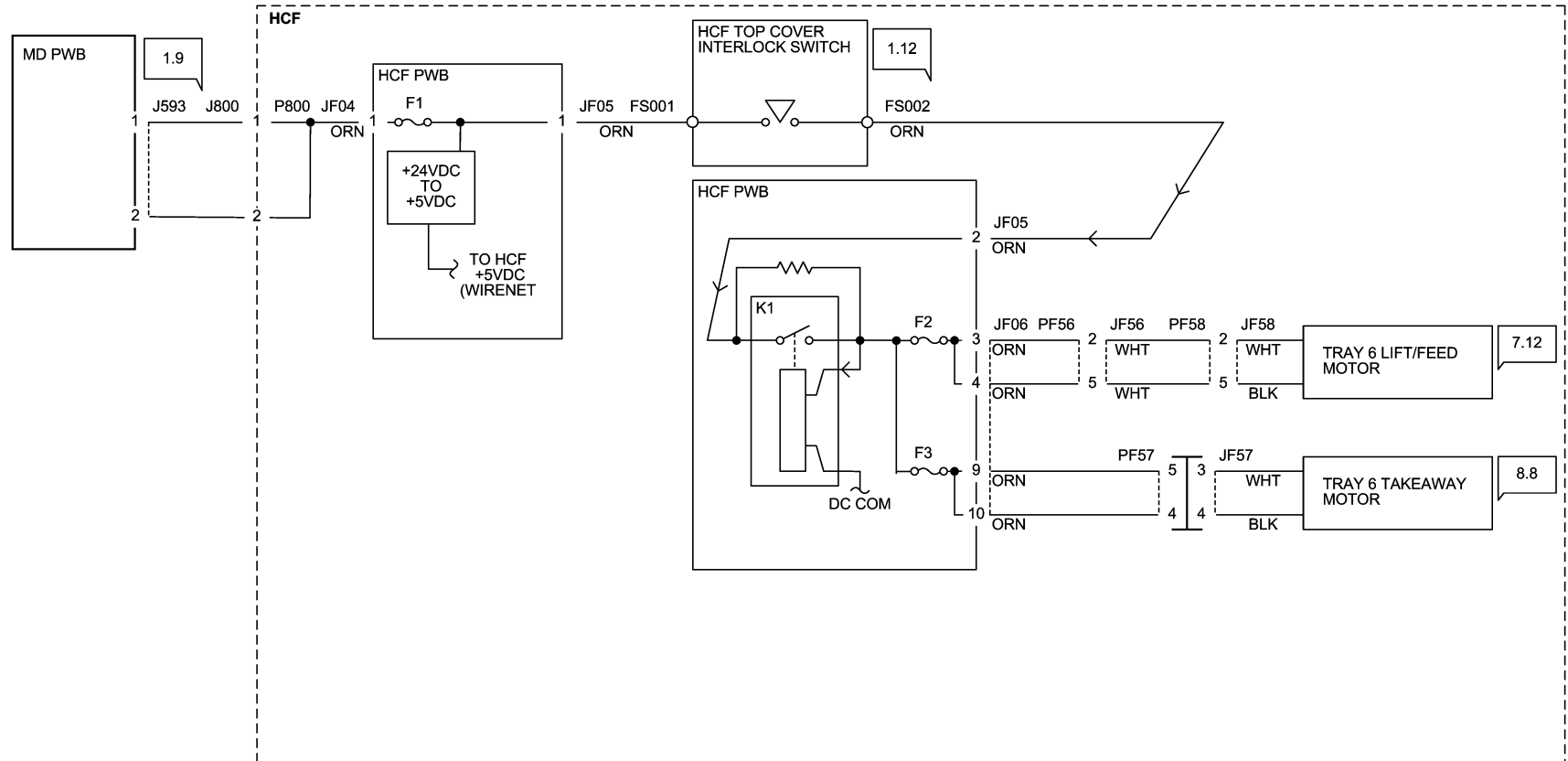
05/09/12

72040\_SPY.VSD

Figure 1 DADF 24VRTN Wirenet

# HCF +24VDC Wirenet

## HCF +24VDC WIRENET



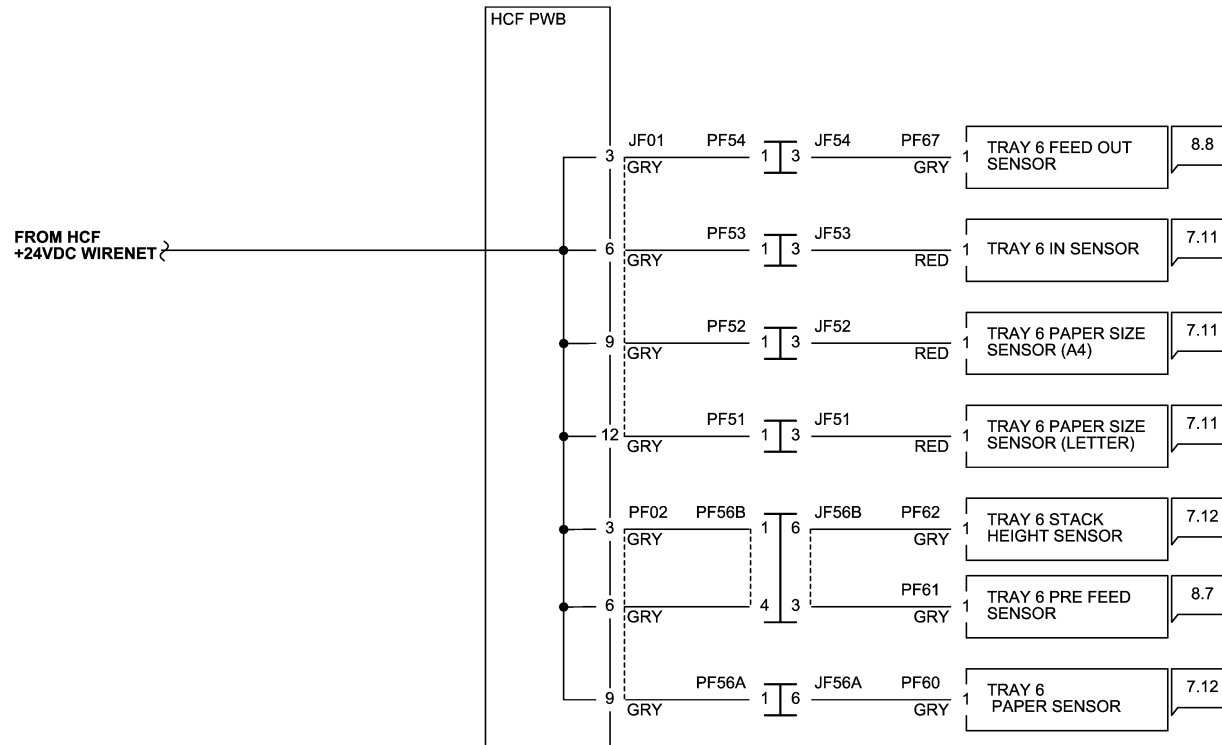
72034\_NOR.VSD

11/30/11

Figure 1 HCF +24VDC Wirenet

# HCF +5VDC Wirenet

## HCF +5VDC WIRENET



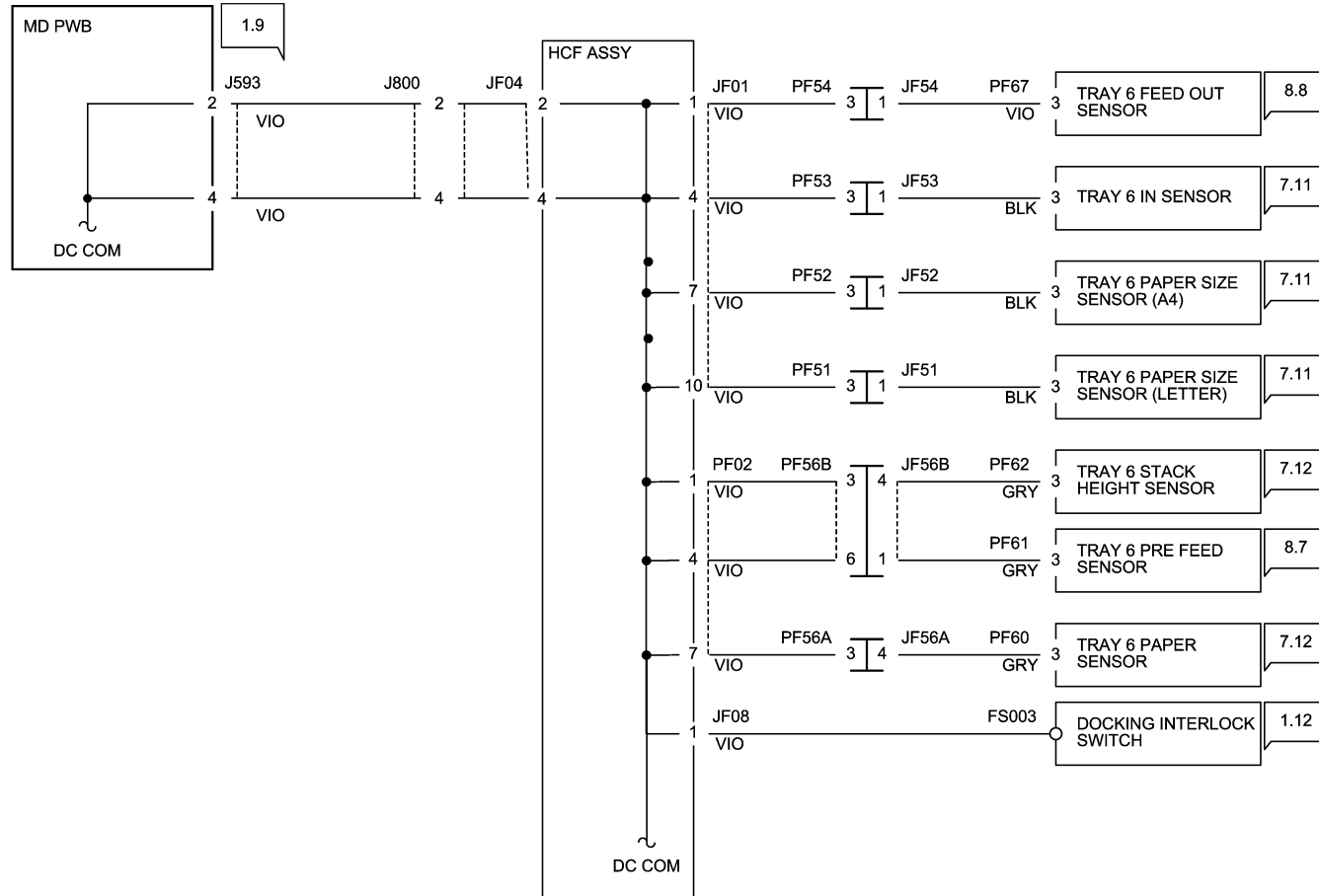
72035\_NOR.VSD

11/30/11

Figure 1 HCF +5VDC Wirenet

# HCF DC COM Wirenet

## HCF DC COM WIRENET



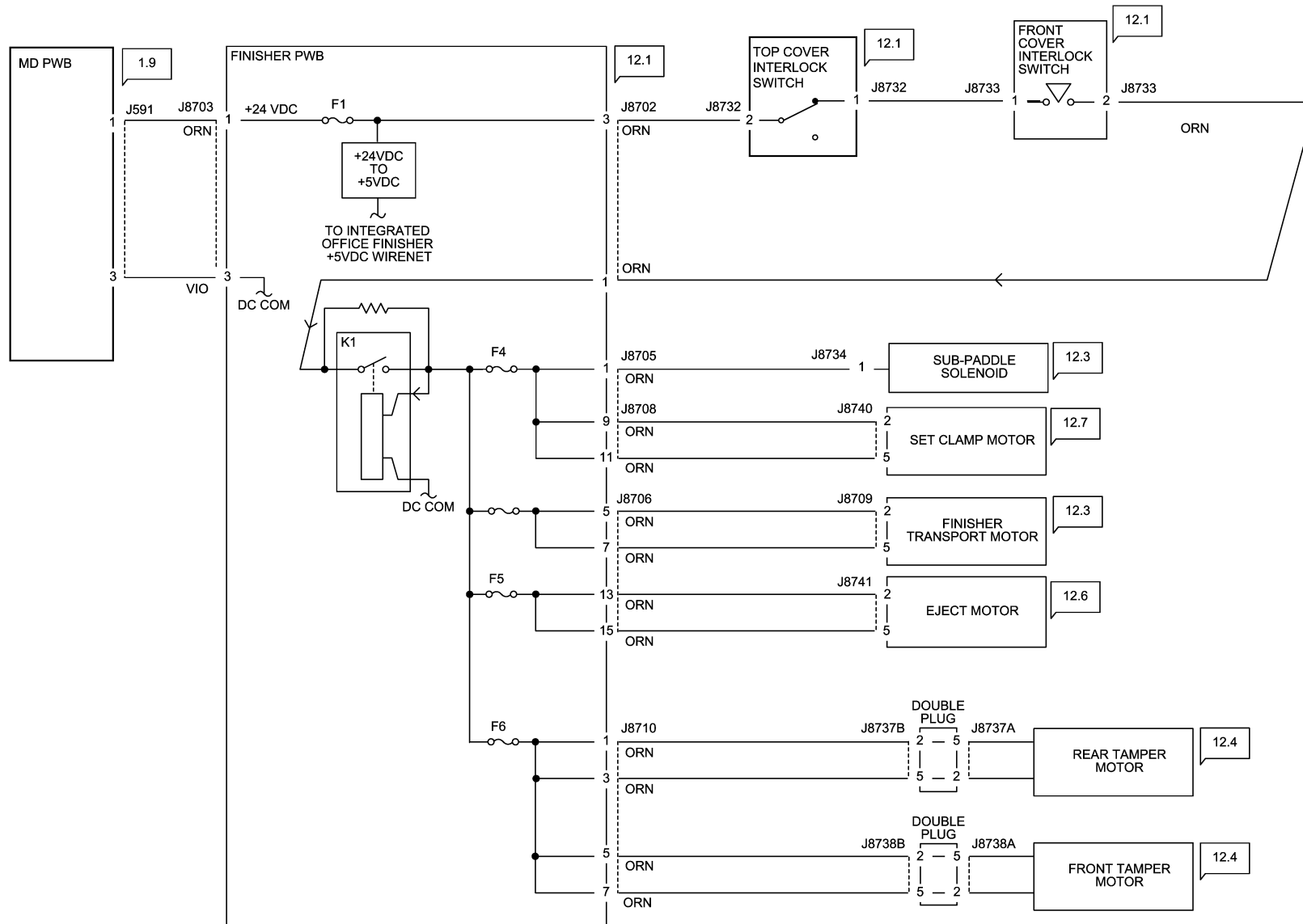
72036\_NOR.VSD

11/30/11

Figure 1 HCF DC COM Wirenet

# Finisher (Int) +24VDC/24VDC RTN

## INTEGRATED OFFICE FINISHER +24VDC/24V RTN WIRENET



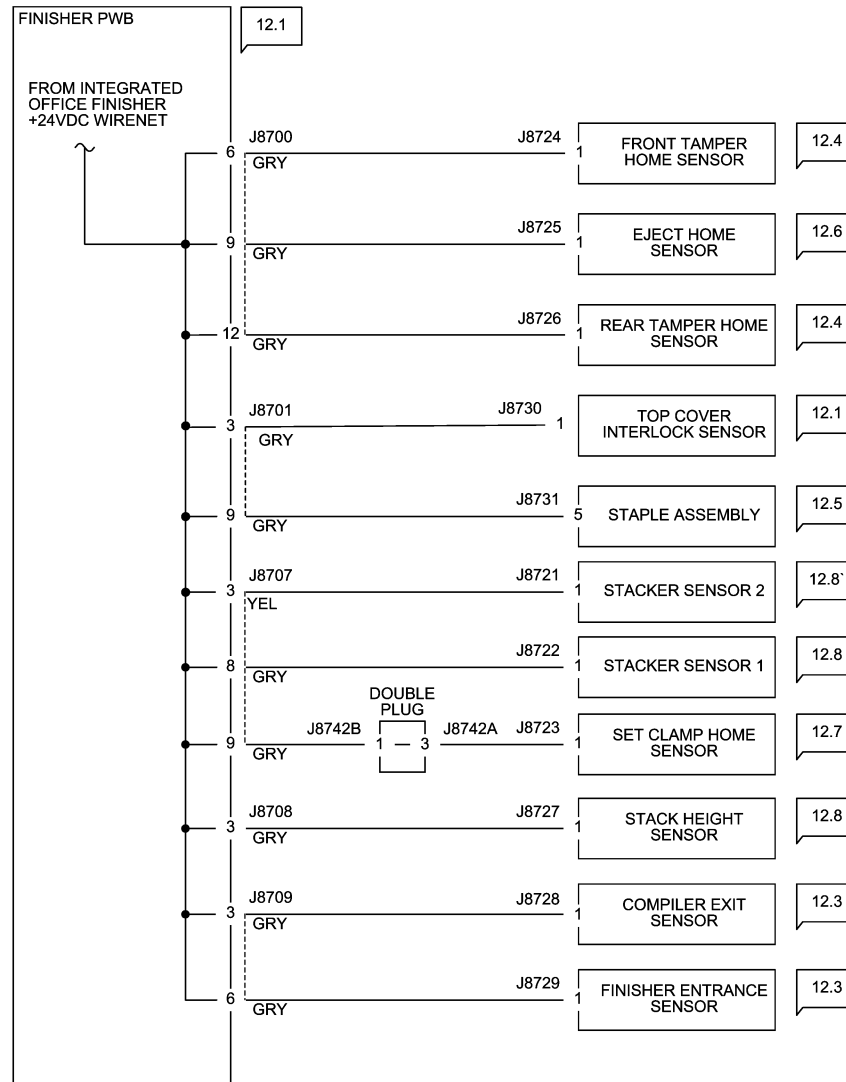
12/12/11

72037\_NOR

Figure 1 Int. Office Finisher +24VDC/24VDC RTN Wirenets

# Finisher (Int) +5VDC Wirenet

## INTEGRATED OFFICE FINISHER +5VDC WIRENET



12/12/11

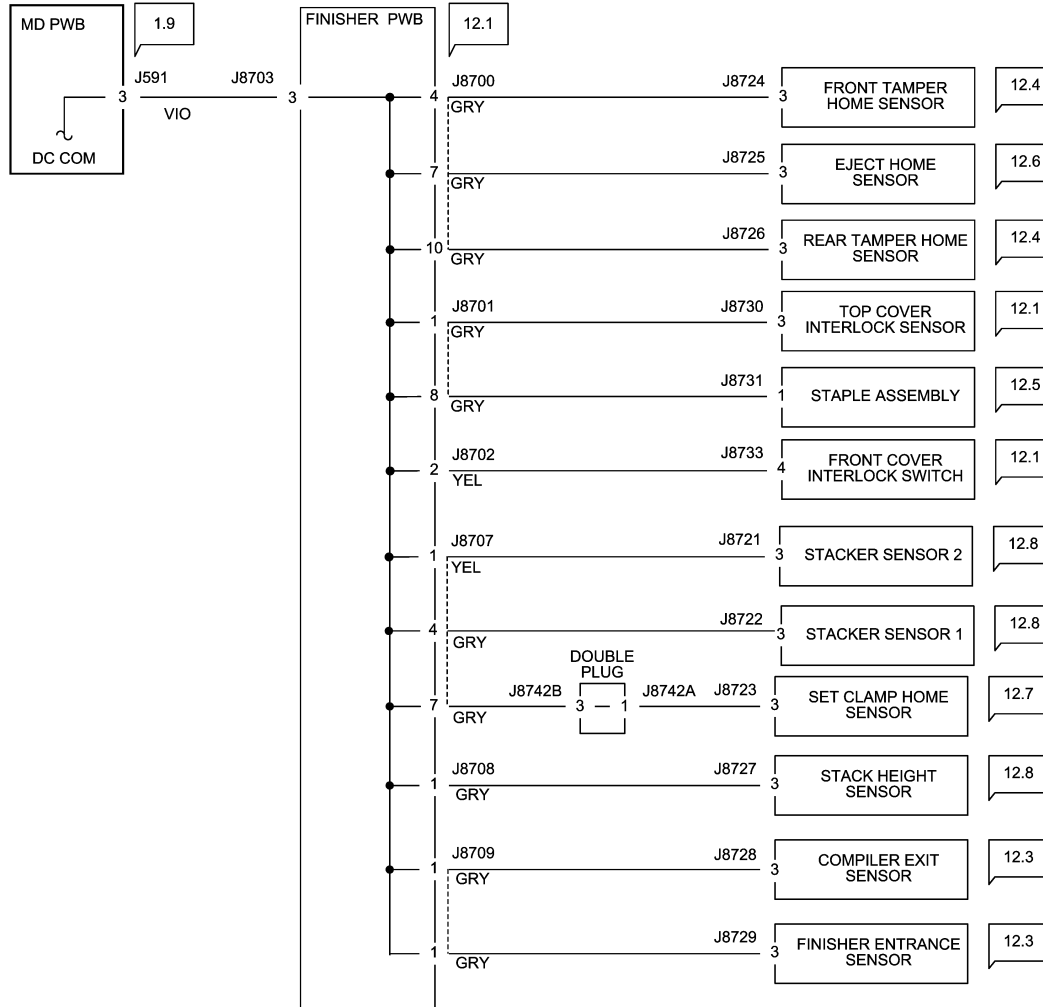
72038\_NOR

Figure 1 Int. Office Finisher +5VDC Wirenet



# Finisher (Int) DC COM Wirenet

## INTEGRATED OFFICE FINISHER DC COM WIRENET



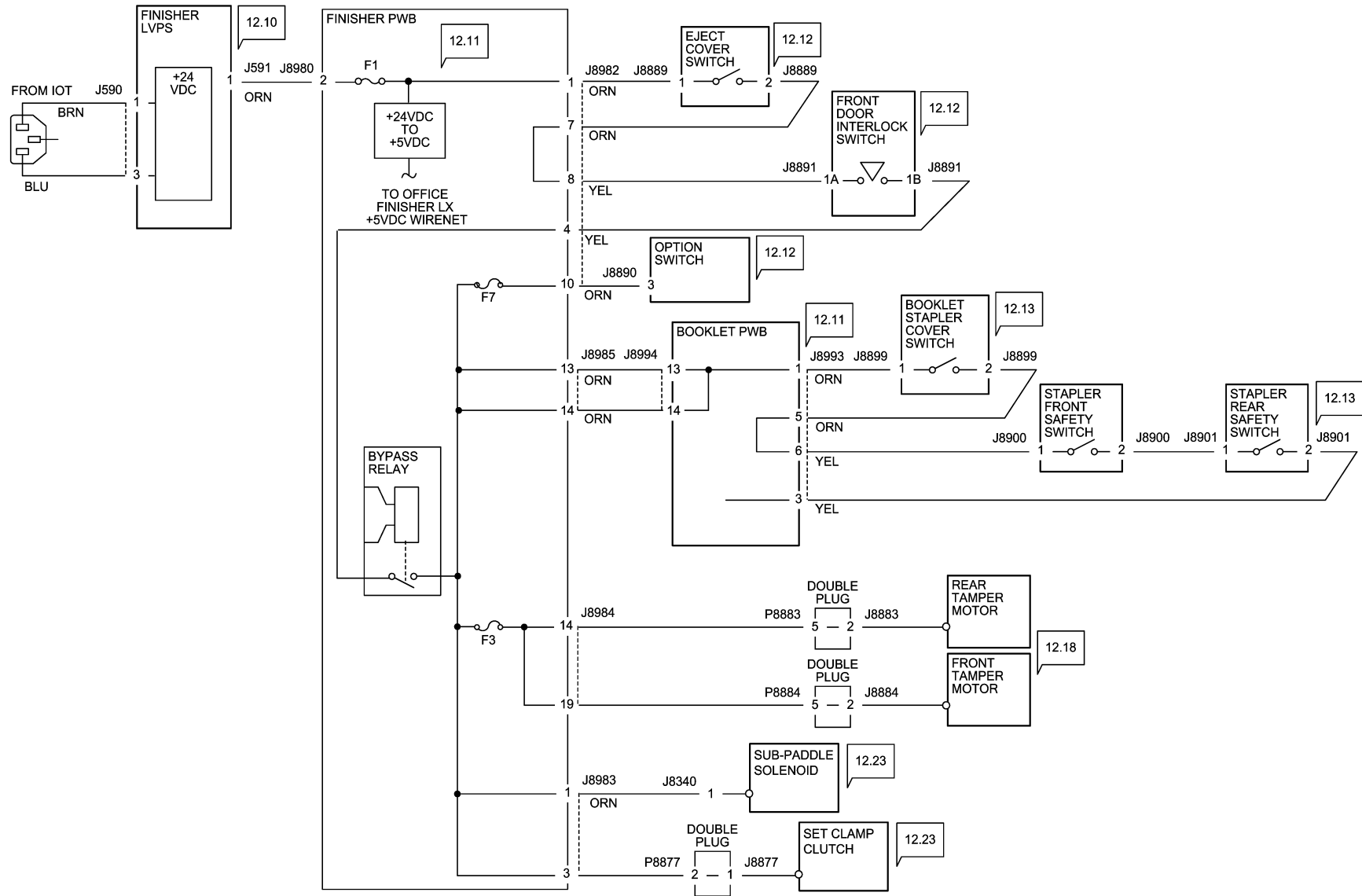
12/12/11

72039\_NOR.VSD

Figure 1 Int. Office Finisher DC COM Wirenet

# Office Finisher LX Wirenets

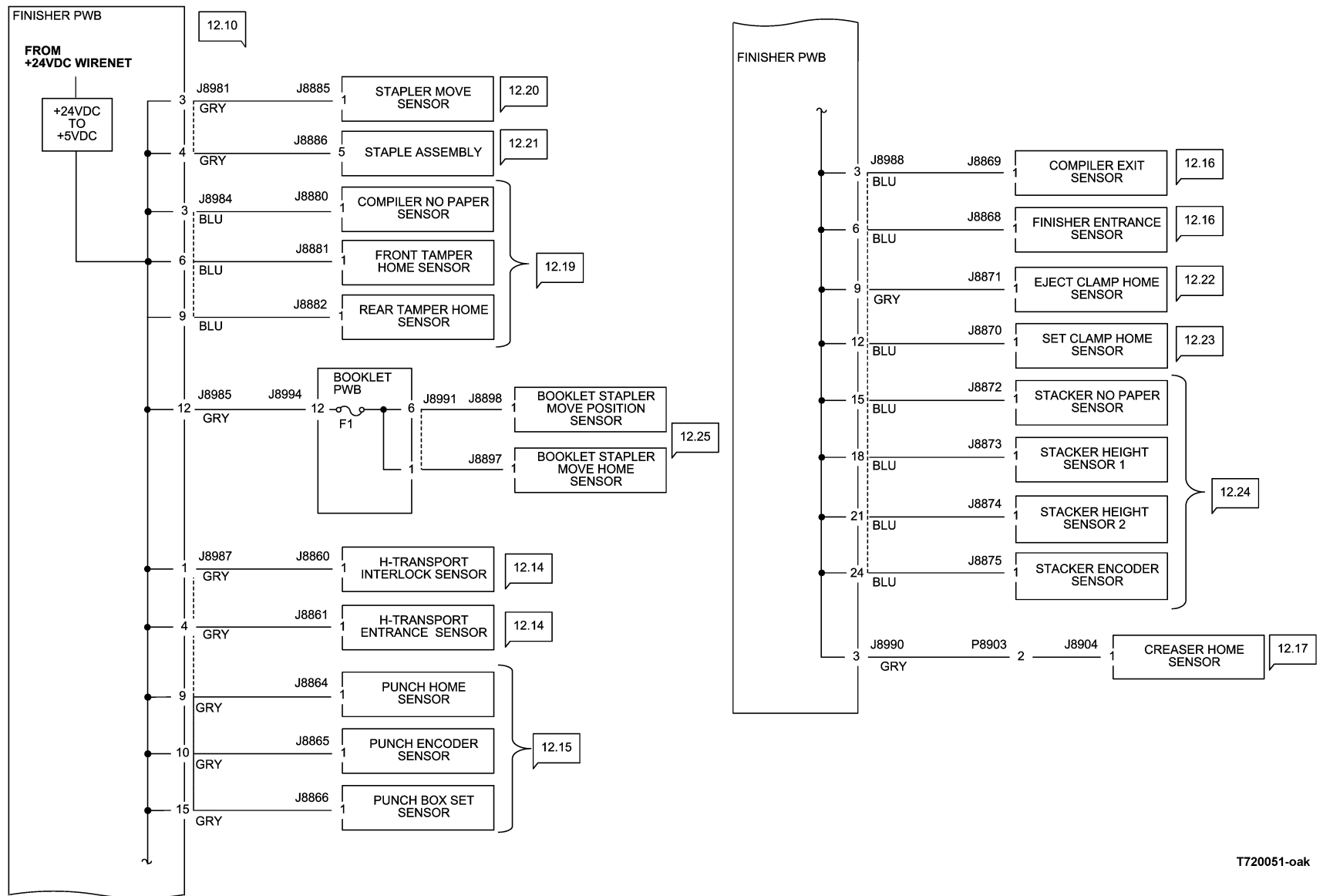
## OFFICE FINISHER LX +24VDC WIRENET



T720050-OAK

Figure 1 Office Finisher LX +24VDC Wirenet

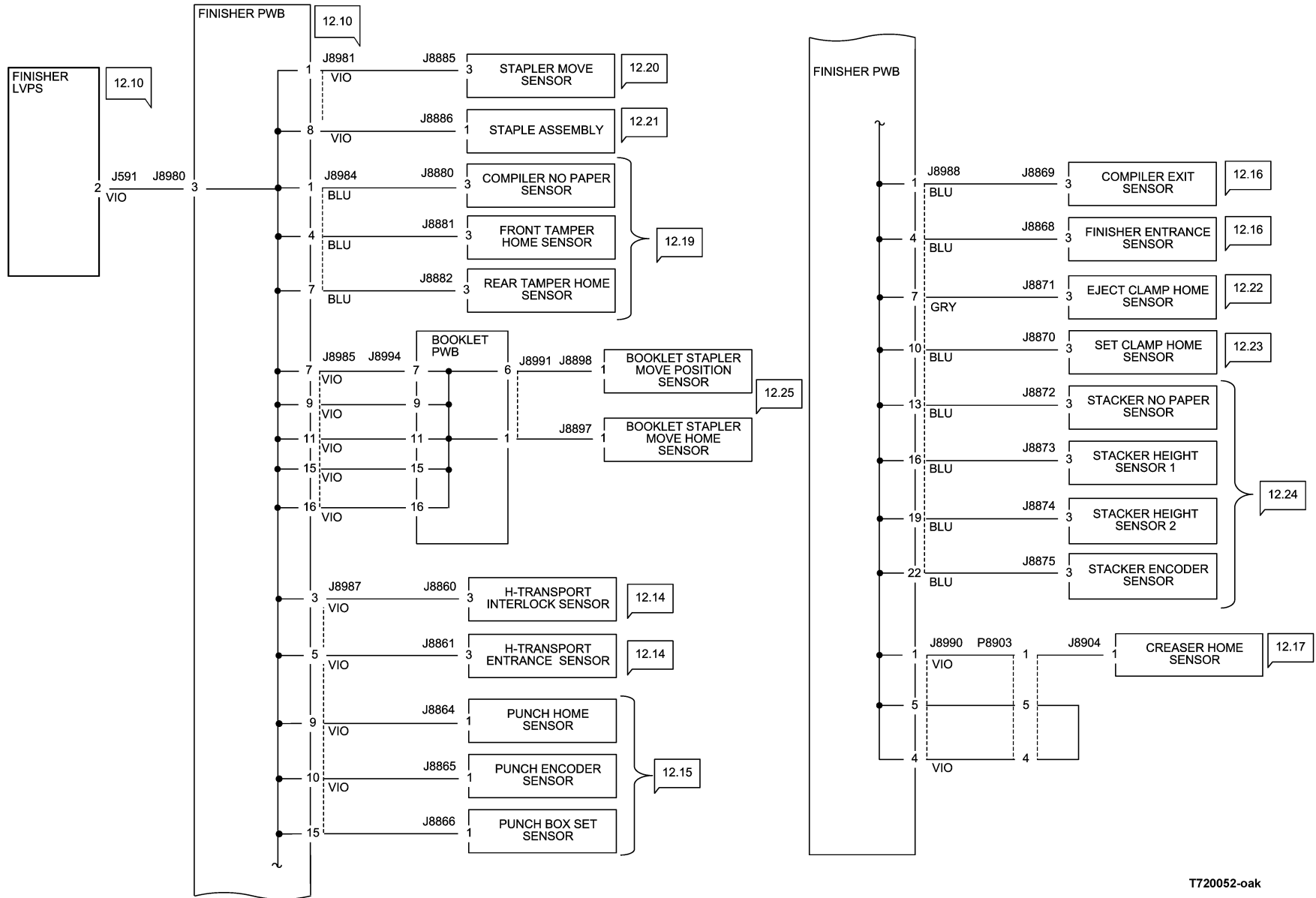
OFFICE FINISHER LX +5VDC WIRENET



T720051-oak

Figure 2 Office Finisher LX +5VDC Wirenet

OFFICE FINISHER LX DC COM WIRENET

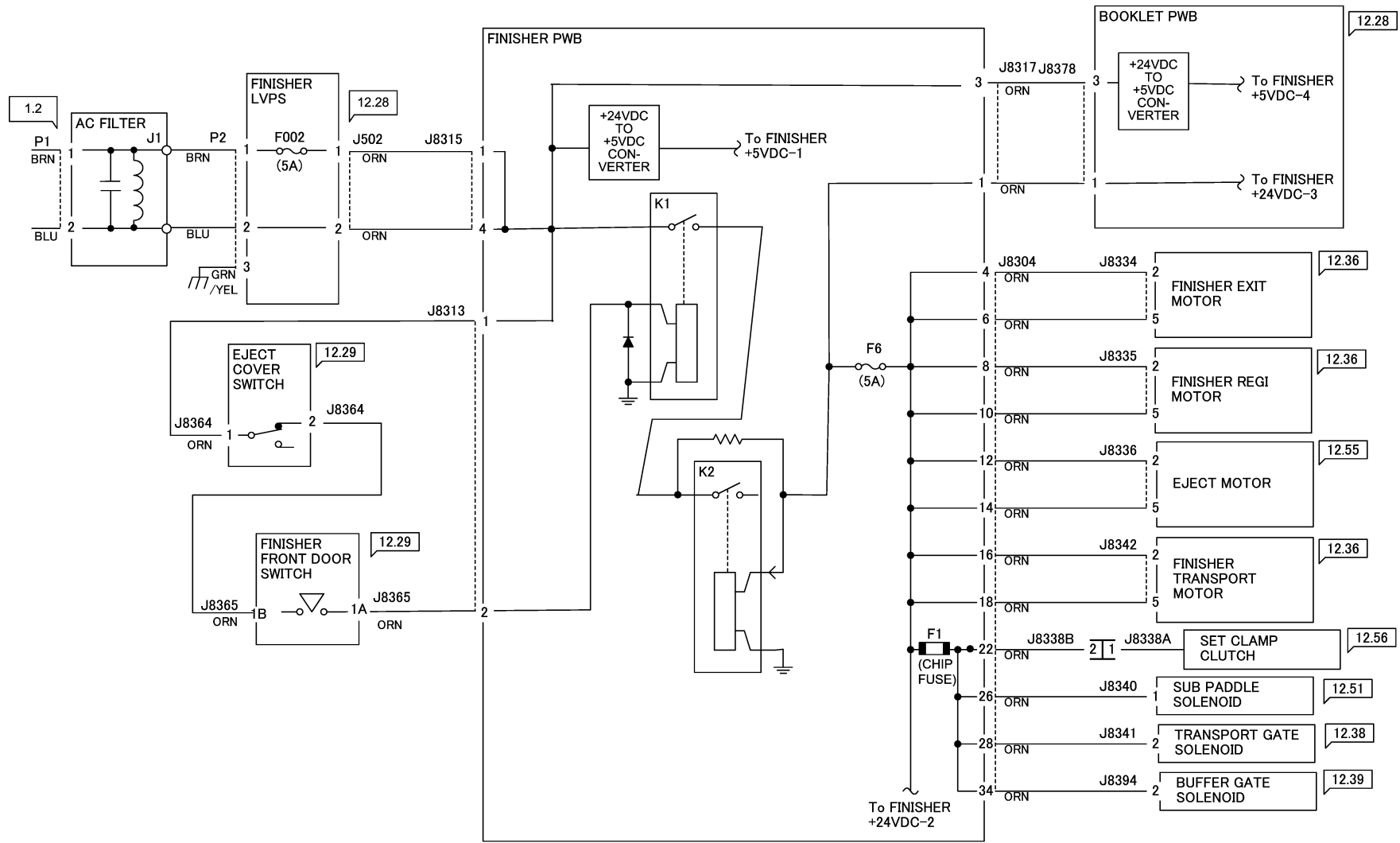


T720052-oak

Figure 3 Office Finisher LX DC COM Wirenet

# A/P Finisher Wirenets

## A/P FINISHER +24VDC DISTRIBUTION (1 OF 3)

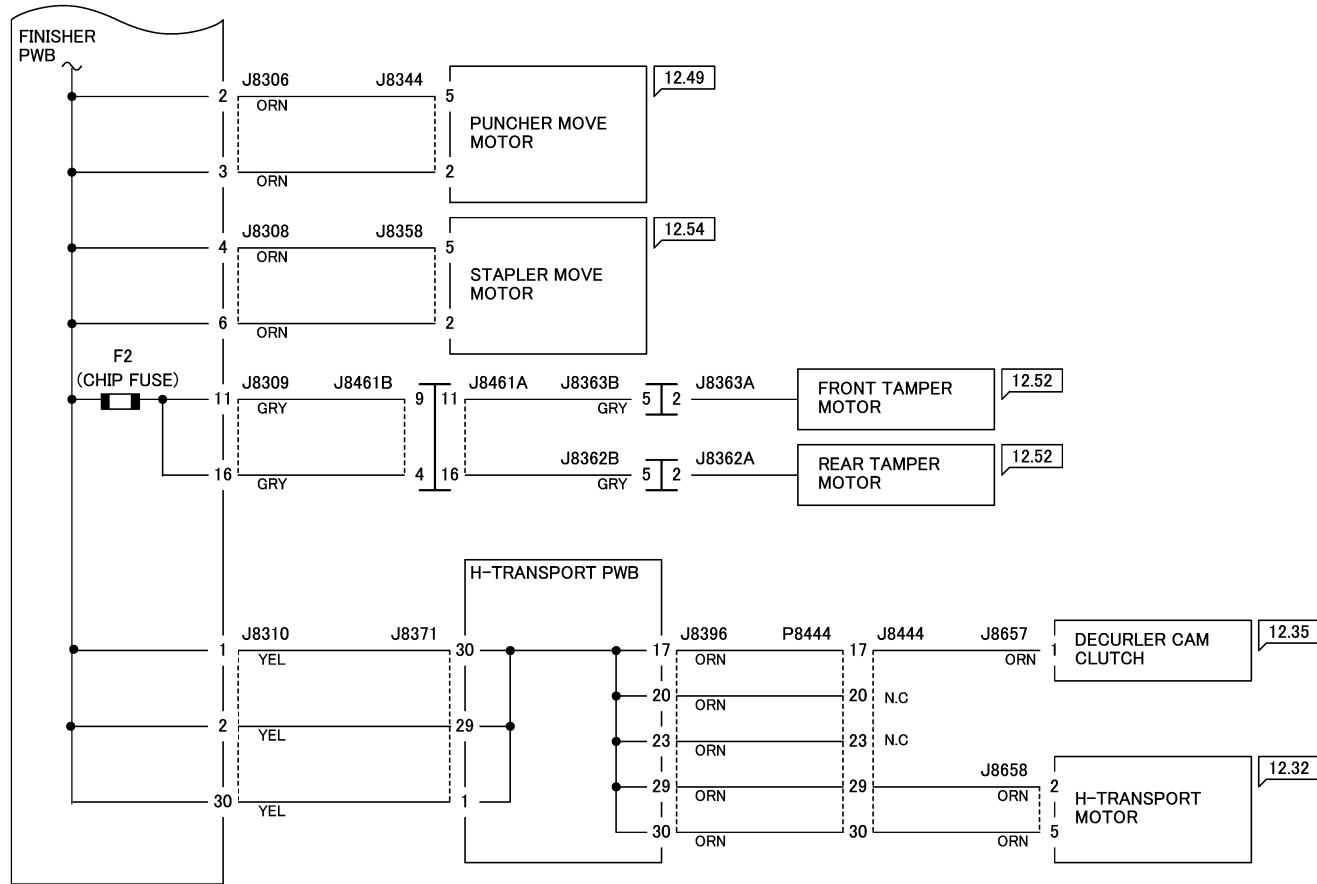


72040\_NOR.VSD

12/08/11

Figure 1 A/P Finisher +24VDC Wirenet (1 of 3)

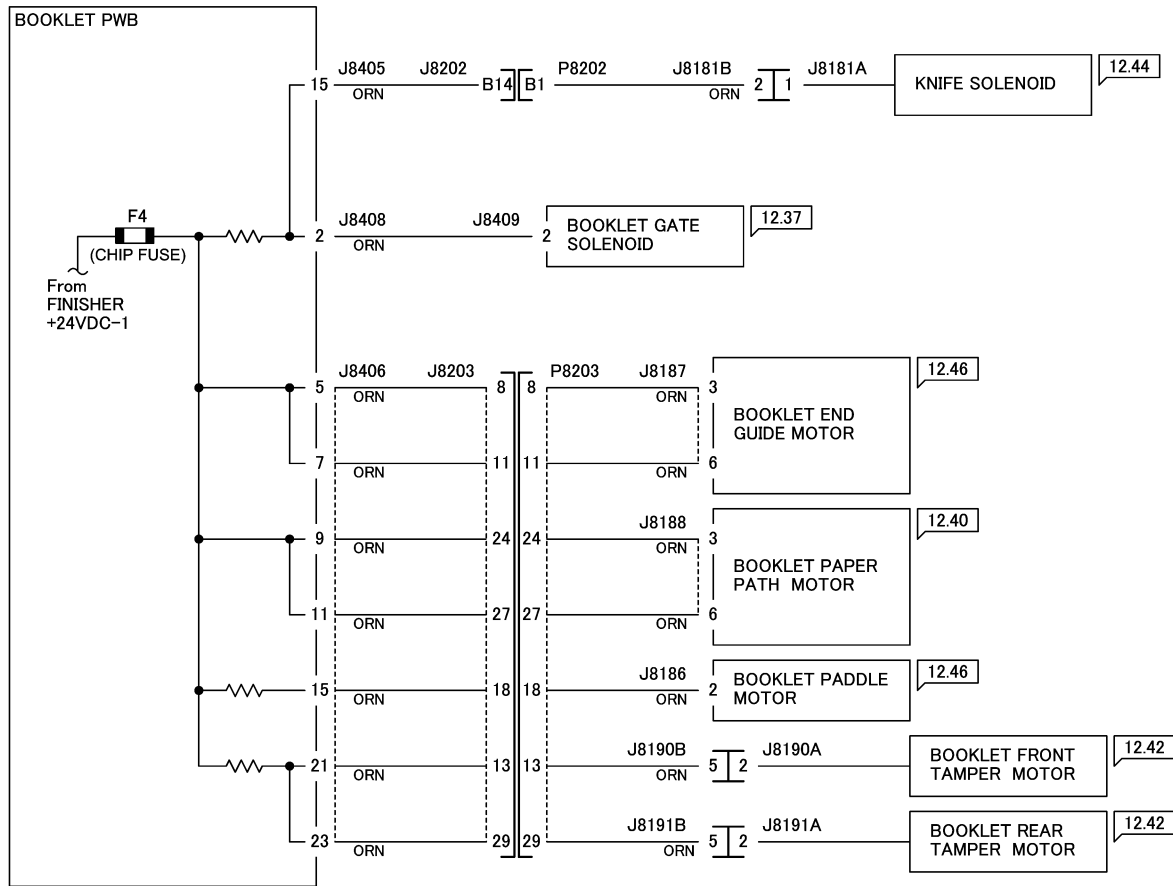
**A/P FINISHER +24VDC DISTRIBUTION (2 OF 3)**



12/08/11 72041\_NOR.VSD

**Figure 2 A/P Finisher +24VDC Wirenet (2 of 3)**

**A/P FINISHER +24VDC DISTRIBUTION (3 OF 3)**

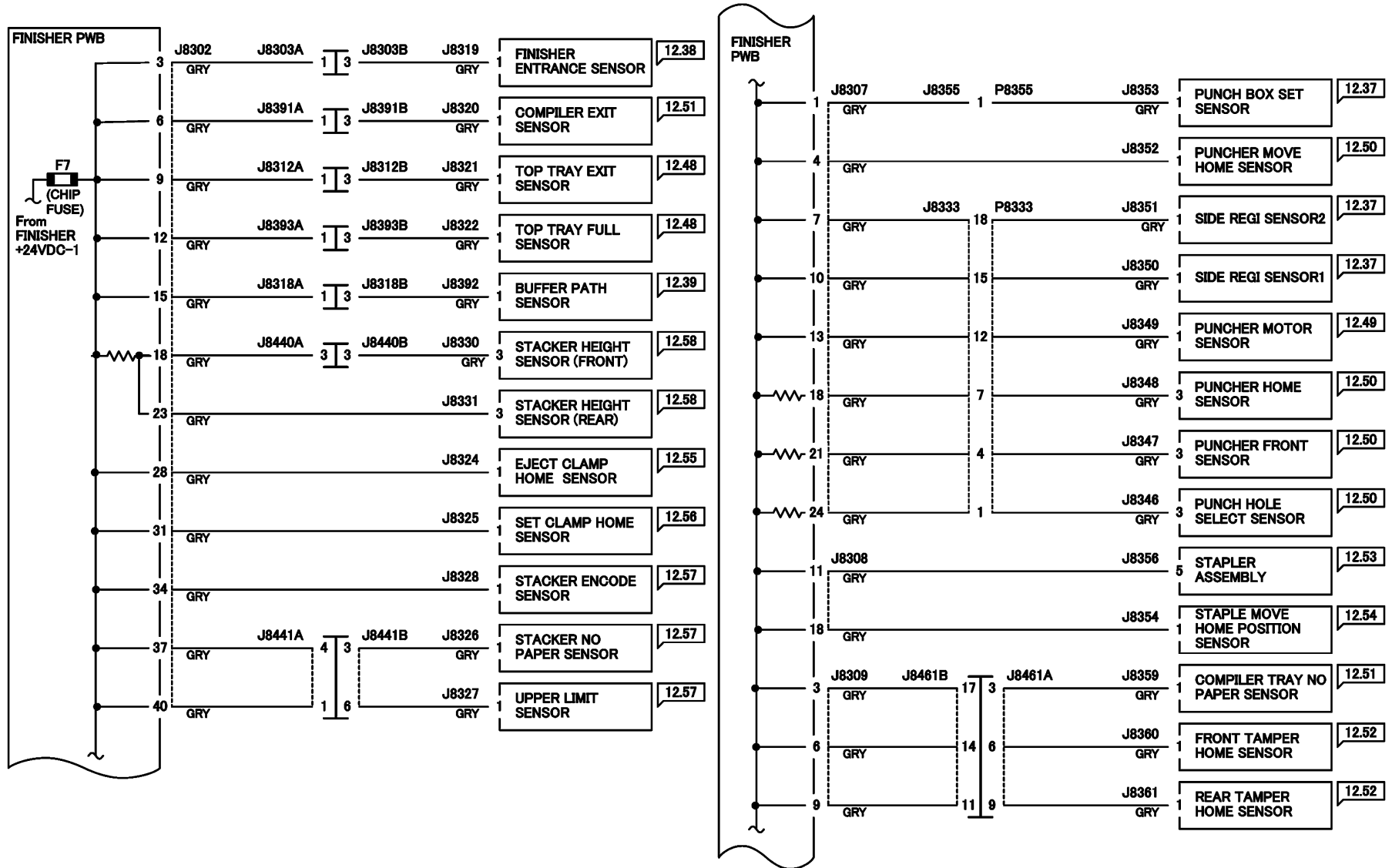


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**Figure 3 A/P Finisher +24VDC Wirenet (3 of 3)**

**A/P FINISHER +5VDC DISTRIBUTION (1 OF 3)**



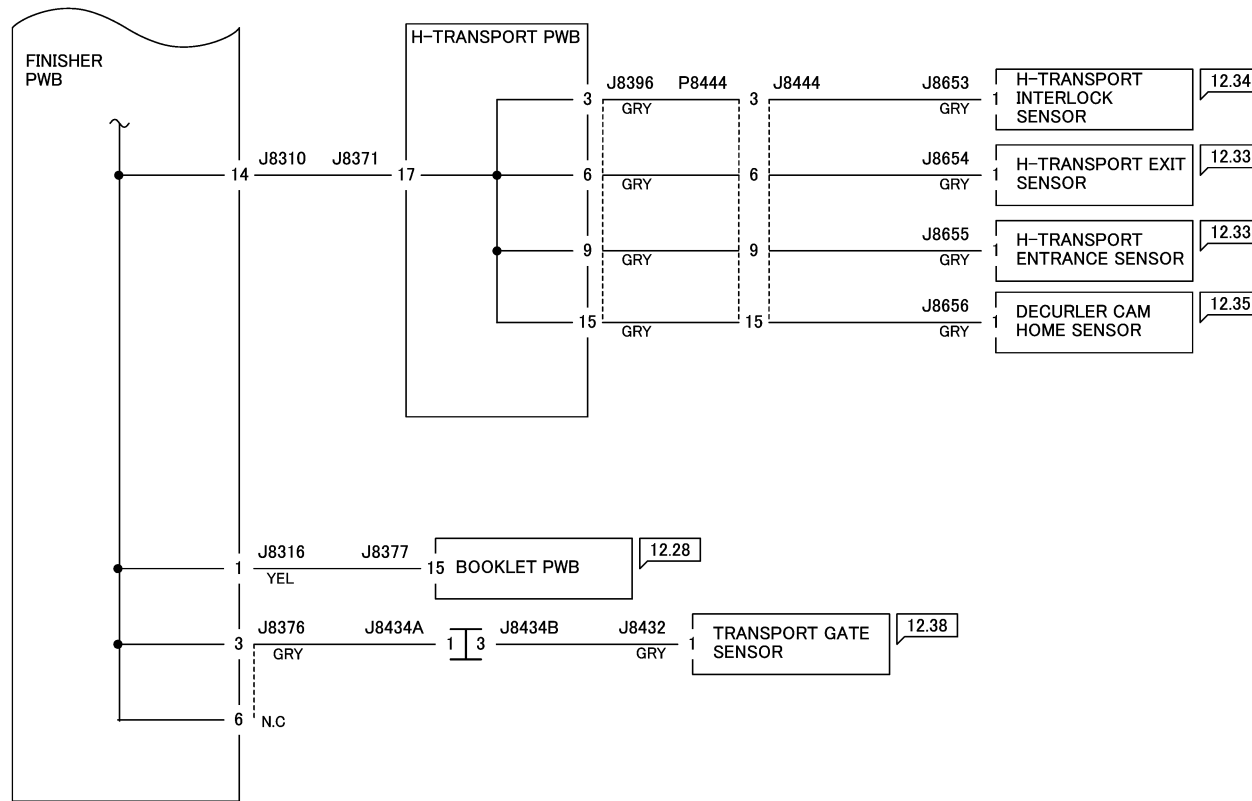
72043\_NOR.VSD

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Figure 4 A/P Finisher +5VDC Wirenet (1 of 3)



**A/P FINISHER +5VDC DISTRIBUTION (2 OF 3)**

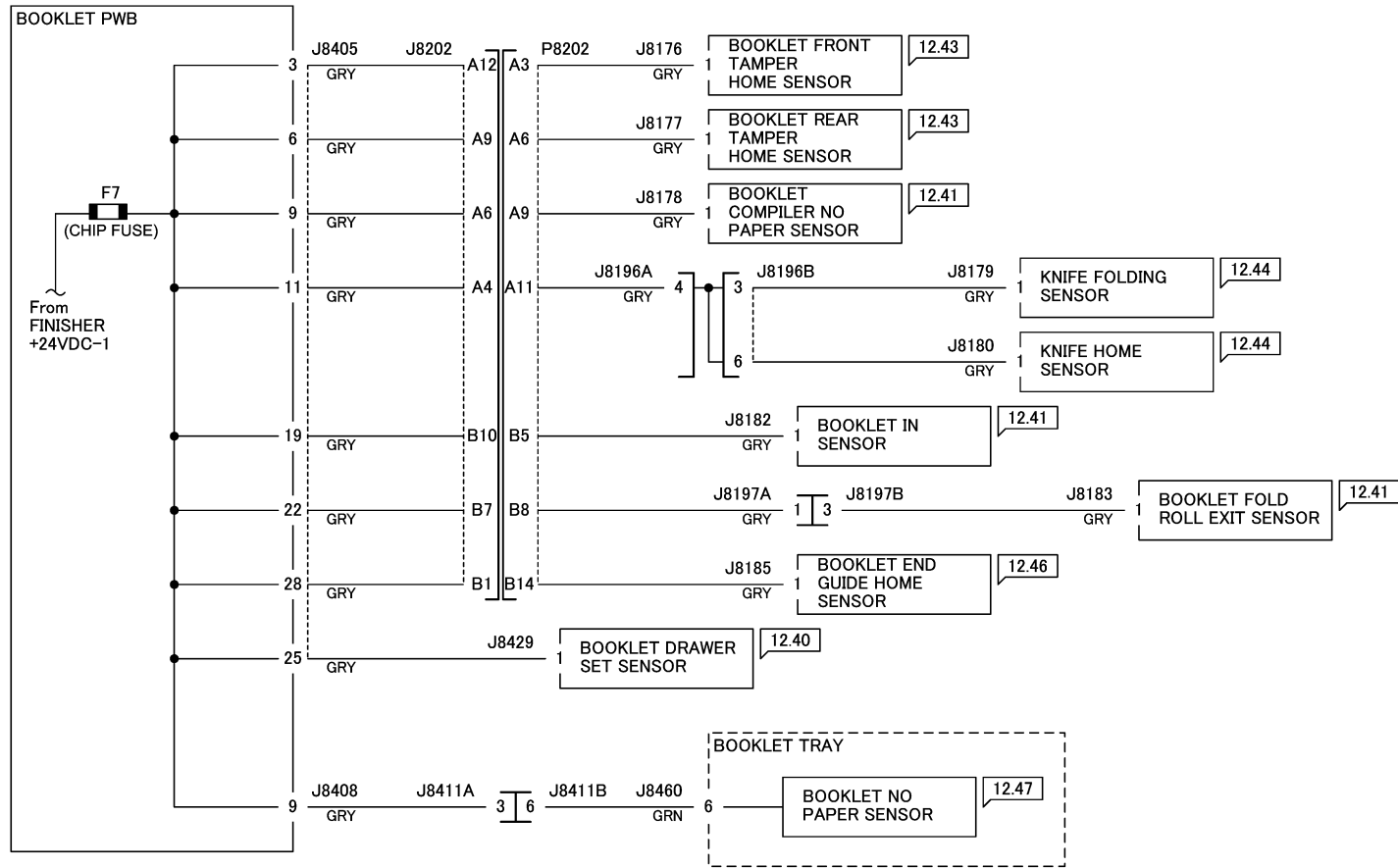


12/08/11

72044\_NOR.VSD

**Figure 5 A/P Finisher +5VDC Wirenet (2 of 3)**

**A/P FINISHER +5VDC DISTRIBUTION (3 OF 3)**

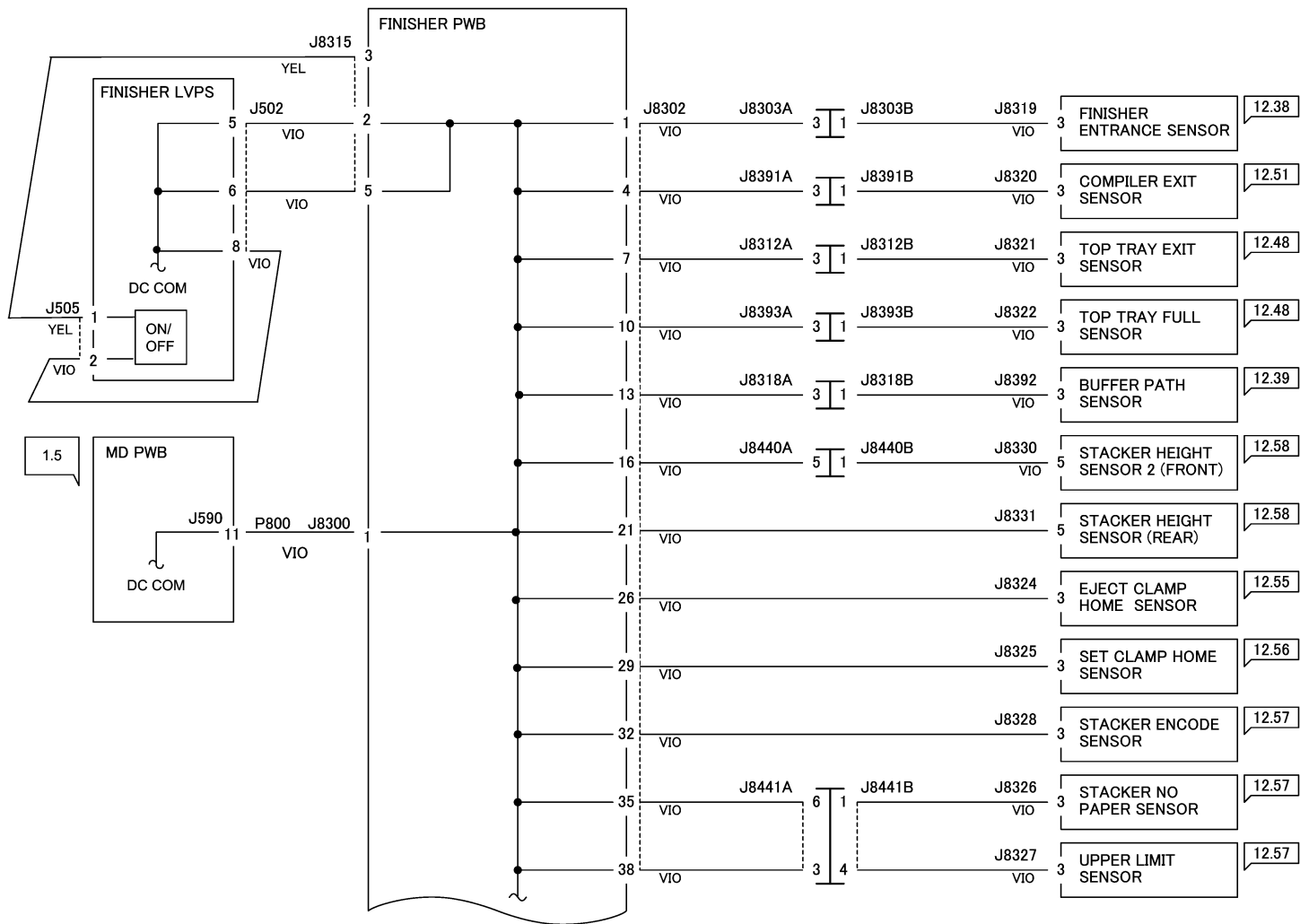


12/08/11

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**Figure 6 A/P Finisher +5VDC Wirenet (3 of 3 - Booklet Maker)**

**A/P FINISHER DC COM DISTRIBUTION (1 OF 4)**

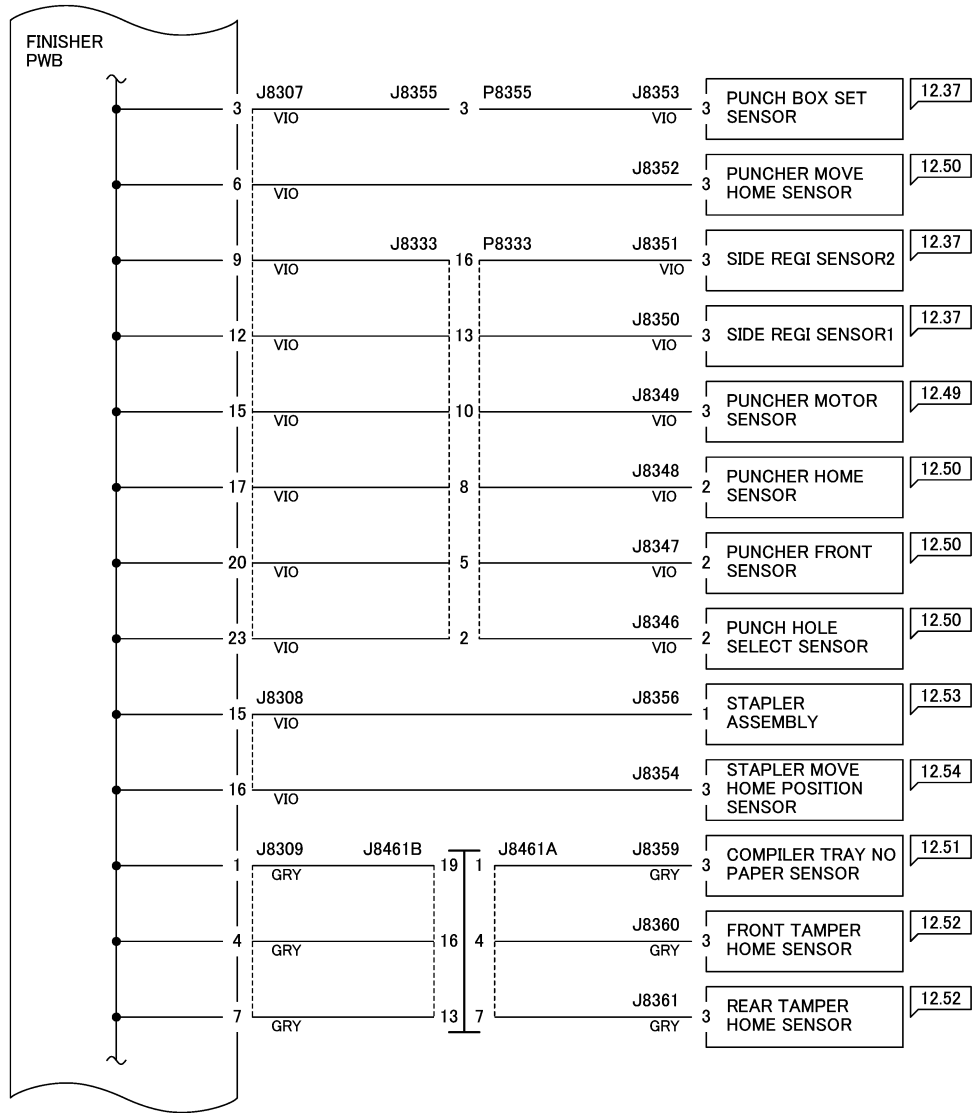


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**Figure 7 A/P Finisher DC COM Wirenet (1 of 4)**

**A/P FINISHER DC COM DISTRIBUTION (2 OF 4)**

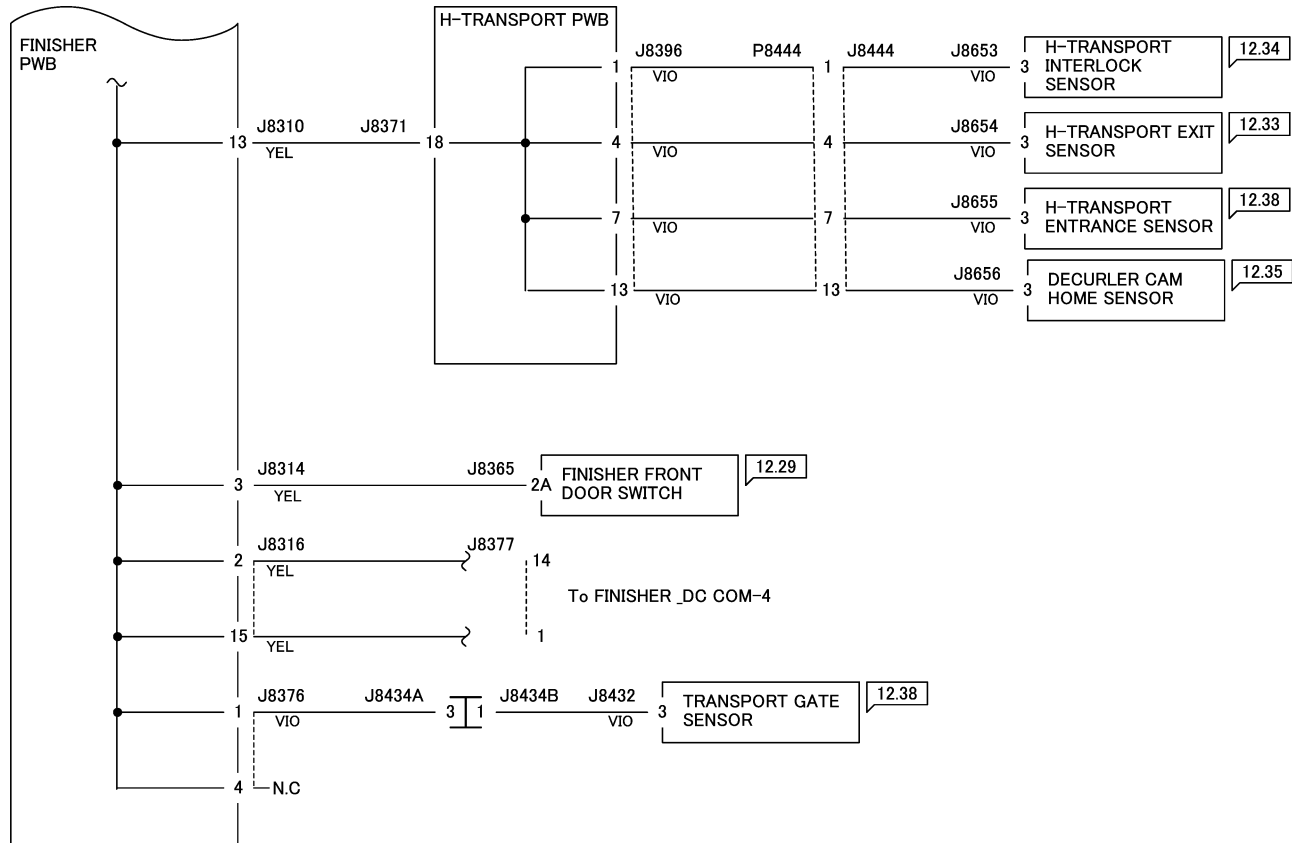


12/08/11

72047\_NOR.VSD

**Figure 8 A/P Finisher DC COM Wirenet (2 of 4)**

**A/P FINISHER DC COM DISTRIBUTION (3 OF 4)**

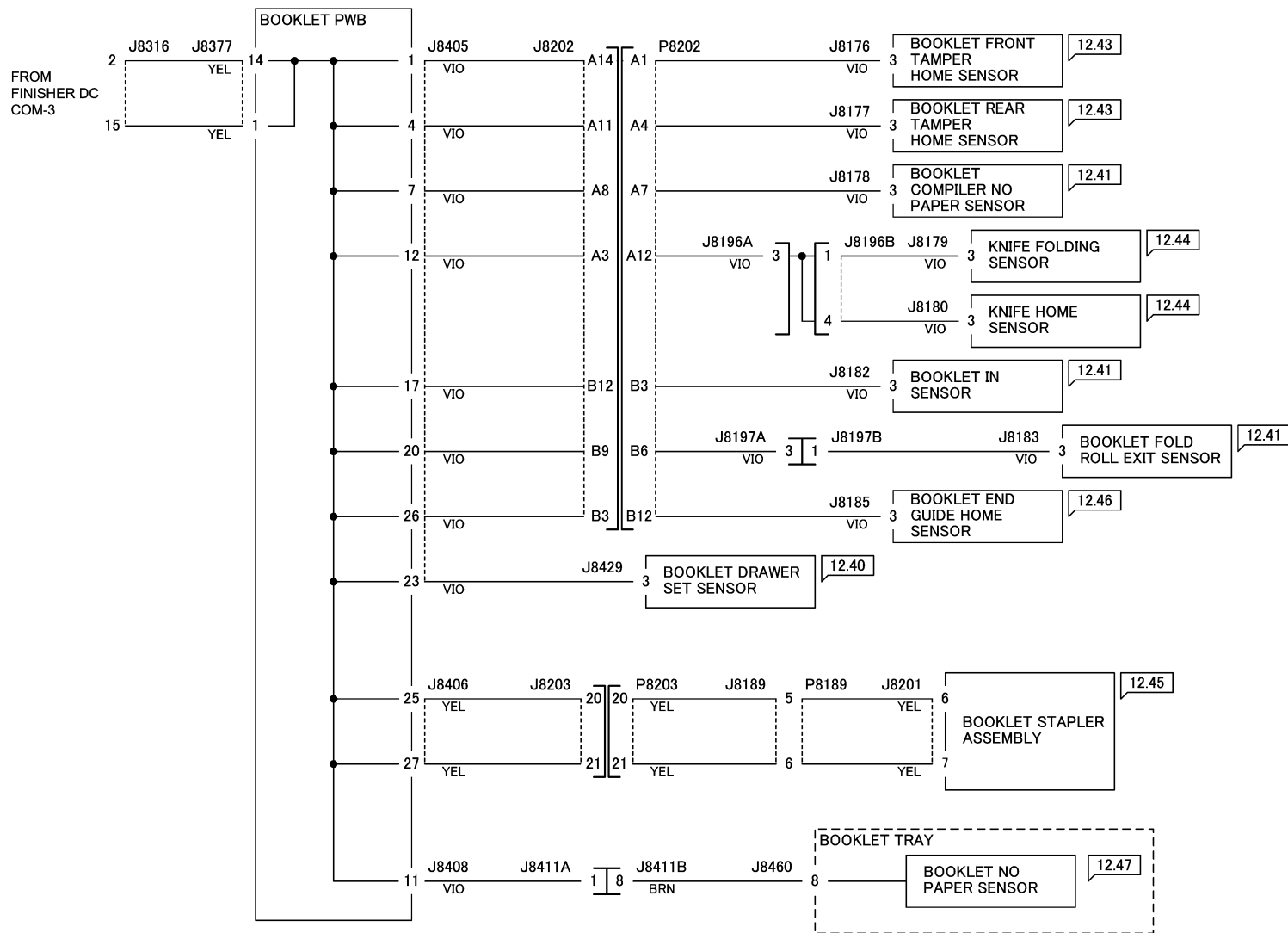


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Figure 9 A/P Finisher DC COM Wirenet (3 of 4)

**A/P FINISHER DC COM DISTRIBUTION (1 OF 4) – BOOKLET MAKER**



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**Figure 10 A/P Finisher DC COM Wirenet (4 of 4 - Booklet Maker)**



## WorkCentre 7830/7835/7845/7855 BSDs

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BSD 1.2 Machine Power Control
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BSD 1.4 DC Power Generation (2 of 5)
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BSD 1.6 DC Power Generation (4 of 5)
BSD 1.7 DC Power Generation (5 of 5)
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BSD 1.9 DC Power Distribution - Options
BSD 1.10 DC Power Distribution - HCF Option
BSD 1.11 LVPS Cooling
BSD 1.12 Interlocked Power
BSD 1.13 Interlocked Cover Switches
BSD 1.14 PWB Fuse Status
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BSD 2.1 Control Panel Switches (1 of 2)
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BSD 2.3 Control Panel LEDs
BSD 2.4 LCD Control
BSD 2.5 Touch Panel Control
BSD 3.1 PWB Communication (1 of 9)
BSD 3.2 PWB Communication (2 of 9)
BSD 3.3 PWB Communication (3 of 9)
BSD 3.4 PWB Communication (4 of 9)
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BSD 3.6 PWB Communication (6 of 9)
BSD 3.7 PWB Communication (7 of 9)
BSD 3.8 PWB Communication (8 of 9)
BSD 3.9 PWB Communication (9 of 9)
BSD 3.10 Poor Cable Connection
BSD 3.11 PWB Detection
BSD 4.1 Main Drive Control
BSD 4.2 Drive Unit Cooling
BSD 5.1 DADF Document Setting (DADF-110)
BSD 5.2 DADF Document Size Sensing (DADF-110)

Table 1 7830/7835/7845/7855 BSDs

BSD 5.3 DADF Document Feeding (1 of 2) (DADF-110)
BSD 5.4 Document Feeding (2 of 2) (DADF-110)
BSD 5.5 DADF Document Scan and Invert (DADF-110)
BSD 5.6 DADF Document Exit (DADF-110)
BSD 5.7 DADF Document Path and Drive (DADF-110)
BSD 5.8 DADF Interlock & Document Setting (DADF-130 / 1 Pass)
BSD 5.9 DADF Document Size Sensing (DADF-130 / 1 Pass)
BSD 5.10 DADF Document Feeding (DADF-130 / 1 Pass) (1 of 2)
BSD 5.11 DADF Document Feeding (DADF-130 / 1 Pass) (2 of 2)
BSD 5.12 DADF Pre Registration (DADF-130 / 1 Pass)
BSD 5.13 DADF Registration (DADF-130 / 1 Pass)
BSD 5.14 DADF Document Scan (DADF-130 / 1 Pass)
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BSD 6.2 Document Illumination
BSD 6.3 Carriage Control
BSD 6.4 Image Input (1 of 2) (SBC to CCD)
BSD 6.5 Image Input (2 of 2) (CCD to SBC)
BSD 6.6 LPH Control (Y)
BSD 6.7 LPH Control (M)
BSD 6.8 LPH Control (C)
BSD 6.9 LPH Control (K)
BSD 6.10 Image Registration Control
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BSD 7.2 Tray 2 Paper Size Sensing
BSD 7.3 Tray 3 Paper Size Sensing (3TM)
BSD 7.4 Tray 3 Paper Size Sensing (TTM)
BSD 7.5 Tray 4 Paper Size Sensing (3TM)
BSD 7.6 Tray 4 Paper Size Sensing (TTM)
BSD 7.7 MSI (Tray 5) Paper Size Sensing
BSD 7.8 Tray 1 Paper Stacking
BSD 7.9 Tray 2 Paper Stacking
BSD 7.10 Tray 3 Paper Stacking
BSD 7.11 Tray 4 Paper Stacking
BSD 7.12 MSI (Tray 5) Paper Stacking



**Table 1 7830/7835/7845/7855 BSDs**

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BSD 7.14 Standard HCF Option (Tray 6) Paper Stacking
BSD 8.1 Tray 1/3/4 Paper Pre-Feeding
BSD 8.2 Tray 1 and MSI Paper Transportation
BSD 8.3 Tray Module Paper Transportation (1 of 2)
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BSD 8.6 Registration
BSD 8.7 Paper Path (7845/55 - 3TM)
BSD 8.8 Paper Path (7845/55 - TTM)
BSD 8.9 Paper Path (7830/35 - 3TM)
BSD 8.10 Paper Path (7830/35 - TTM)
BSD 8.11 Standard HCF Option (Tray 6) Paper Feeding
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BSD 9.1 Drum/Developer Drive Control (Y,M,C)
BSD 9.2 Drum/Developer Drive Control (K)
BSD 9.3 Drum Life Control (Y,M)
BSD 9.4 Drum Life Control (C,K)
BSD 9.5 Toner Cartridge Life Control (Y,M)
BSD 9.6 Toner Cartridge Life Control (C,K)
BSD 9.7 Charging and Exposure (7845/55) (1 of 2)
BSD 9.8 Charging and Exposure (7845/55) (2 of 2)
BSD 9.9 Charging and Exposure (7830/35) (1 of 2)
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BSD 9.12 Toner Suction and Marking Module
BSD 9.13 Development (Y)
BSD 9.14 Development (M)
BSD 9.15 Development (C)
BSD 9.16 Development (K)
BSD 9.17 Toner Dispense Control (Y,M)
BSD 9.18 Toner Dispense Control (C,K)
BSD 9.19 Toner Cartridge Cooling (7845/55)
BSD 9.20 IBT Belt Drive Control
BSD 9.21 First Transfer
BSD 9.22 First BTR Contact/Retract Control
BSD 9.23 ADC Patch and Environment Sensing

**Table 1 7830/7835/7845/7855 BSDs**

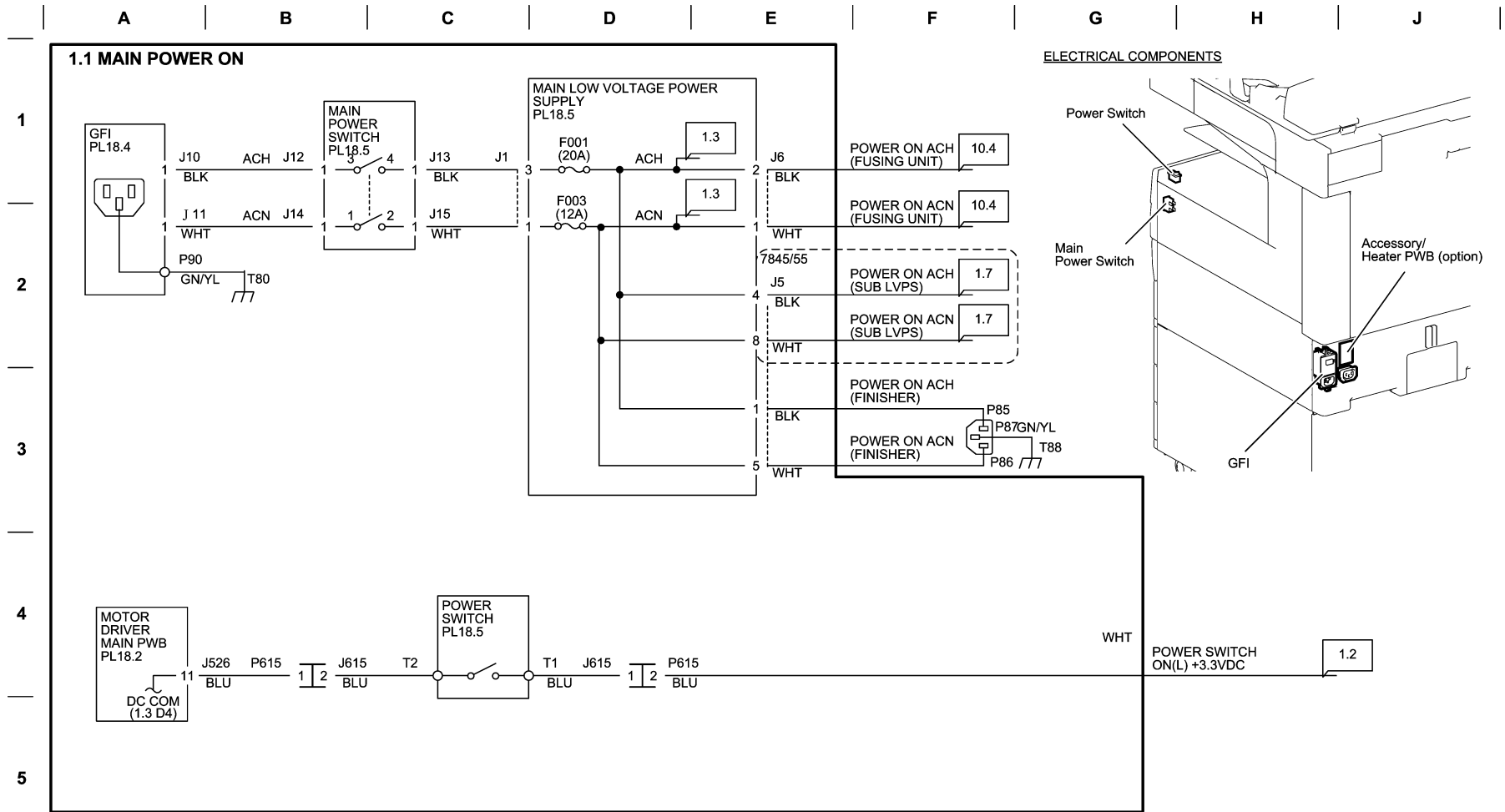
BSD 9.24 Second Transfer
BSD 9.25 Drum Cleaning
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BSD 9.27 Waste Toner Disposal (1 of 2)
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BSD 9.29 Rear Bottom Fan Control
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BSD 10.1 Fuser Drive Control (1 of 2)
BSD 10.2 Fuser Drive Control (2 of 2)
BSD 10.3 Fusing Heat Control (1 of 3)
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BSD 10.6 Fusing
BSD 10.7 Fused Paper Exit 1
BSD 10.8 Fused Paper Exit 2 (1 of 4)
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BSD 12.1 Integrated Finisher DC Power and Interlock Switching
BSD 12.2 PWBS Communication IOT - Integrated Finisher
BSD 12.3 Integrated Finisher Transportation
BSD 12.4 Integrated Finisher tamping and Offset
BSD 12.5 Integrated Finisher Staple Control
BSD 12.6 Integrated Finisher Set Eject (1 of 2)
BSD 12.7 Integrated Finisher Set Eject (2 of 2)
BSD 12.8 Integrated Finisher Stacker Tray Control
BSD 12.9 Office Finisher LX Communication (IOT-Finisher)
BSD 12.10 Office Finisher LX DC Power Generation
BSD 12.11 Office Finisher LX DC Power Distribution
BSD 12.12 Office Finisher LX Interlock Switching
BSD 12.13 Office Finisher LX Booklet Interlock Switching
BSD 12.14 Office Finisher LX Horizontal Transportation
BSD 12.15 Office Finisher LX Punch
BSD 12.16 Office Finisher LX Transportation
BSD 12.17 Office Finisher LX Folding
BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)
BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)
BSD 12.20 Office Finisher LX Staple Positioning
BSD 12.21 Office Finisher LX Staple Control
BSD 12.22 Office Finisher LX Eject Control (1 of 2)

**Table 1 7830/7835/7845/7855 BSDs**

BSD 12.23 Office Finisher LX Eject Control (2 of 2)
BSD 12.24 Office Finisher LX Stacker Tray Control
BSD 12.25 Office Finisher LX Booklet Staple Positioning
BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)
BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)
BSD 12.28 Professional Finisher Power Generation
BSD 12.29 Professional Finisher Interlocks
BSD 12.30 Professional Finisher Detection and Communication
BSD 12.31 Professional Finisher PWB Communication
BSD 12.32 H-Transport Drives
BSD 12.33 Horizontal Transportation (1 of 2)
BSD 12.34 Horizontal Transportation (2 of 2)
BSD 12.35 Professional Finisher Decurling
BSD 12.36 Professional Finisher Drives
BSD 12.37 Professional Finisher Booklet/Punch Transport
BSD 12.38 Professional Finisher Transport Top Tray Gating
BSD 12.39 Professional Finisher Buffer Transport
BSD 12.40 Booklet Drive
BSD 12.41 Booklet Transportation
BSD 12.42 Booklet Tamper Control (1 of 2)
BSD 12.43 Booklet Tamper Control (2 of 2)
BSD 12.44 booklet Knife Control
BSD 12.45 Booklet Staple Control
BSD 12.46 Booklet End Guide Control
BSD 12.47 Booklet Tray Control
BSD 12.48 Professional Finisher Top Tray Stacking
BSD 12.49 Professional Finisher Punch Drive
BSD 12.50 Professional Finisher Punch Hole Control
BSD 12.51 Professional Finisher Compiling
BSD 12.52 Professional Finisher Tamper Control
BSD 12.53 Professional Finisher Stapler Control
BSD 12.54 Professional Finisher Staple Positioning
BSD 12.55 Professional Finisher Eject Drive
BSD 12.56 Professional Finisher Set Clamp Control
BSD 12.57 Professional Finisher Stacker Drive
BSD 12.58 Professional Finisher Stack Height Detection
BSD 34.1 FAX

# Chain 1 BSDs

# BSD 1.1 Main Power On



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06/08/12

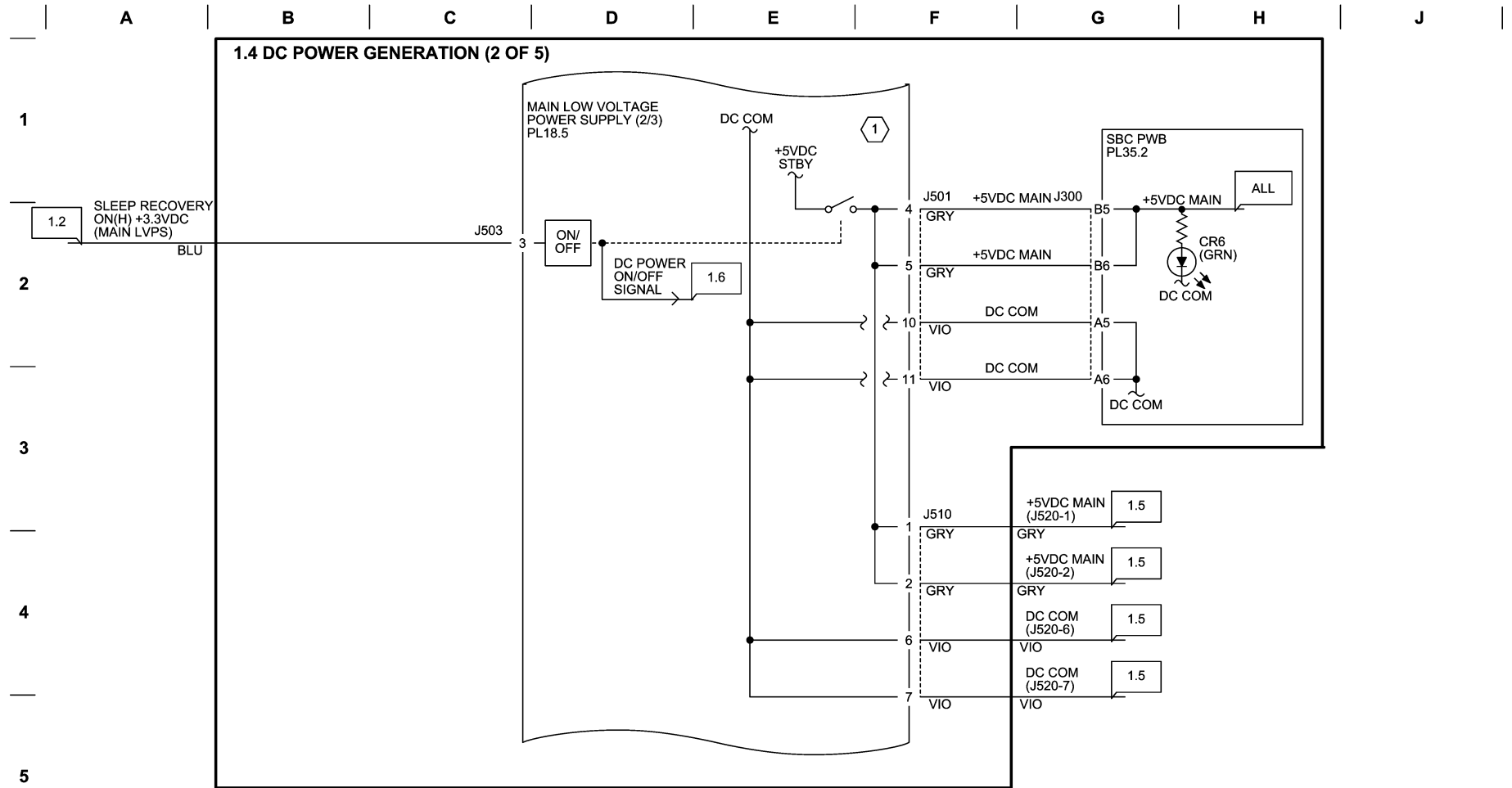
730101\_SPY.VSD

Figure 1 BSD 1.1 Main Power On





# BSD 1.4 DC Power Generation (2 of 5)



NOTE:



• Short Protection (Over-current Protection) •

Voltage	Output Status at Shorting	Recovery Requirements
+5VDC STBY	All outputs are cut off.	To restore them, repair the short circuit, power off, allow 15 sec, and then power on.
+5VDC MAIN	• +5VDC STBY is normal. • +5VDC MAIN, +24VDC SQ, and +24VDC INTLK are cut off.	
+24VDC SQ		
+24VDC INTLK	• +5VDC STBY, +5VDC MAIN, and +24VDC are normal. • +24VDC INTLK is cut off.	

• Over-voltage Protection: If one of the outputs reaches its over-voltage listed below, all outputs are cut off. •

Voltage	Over Voltage Value Detected	Recovery Requirements
+5VDC STBY	6~8V	Confirm that no damage has been incurred, power off, allow 15 sec, and then power on.
+5VDC MAIN		
+24VDC SQ		
+24VDC INTLK	26.7~32V	

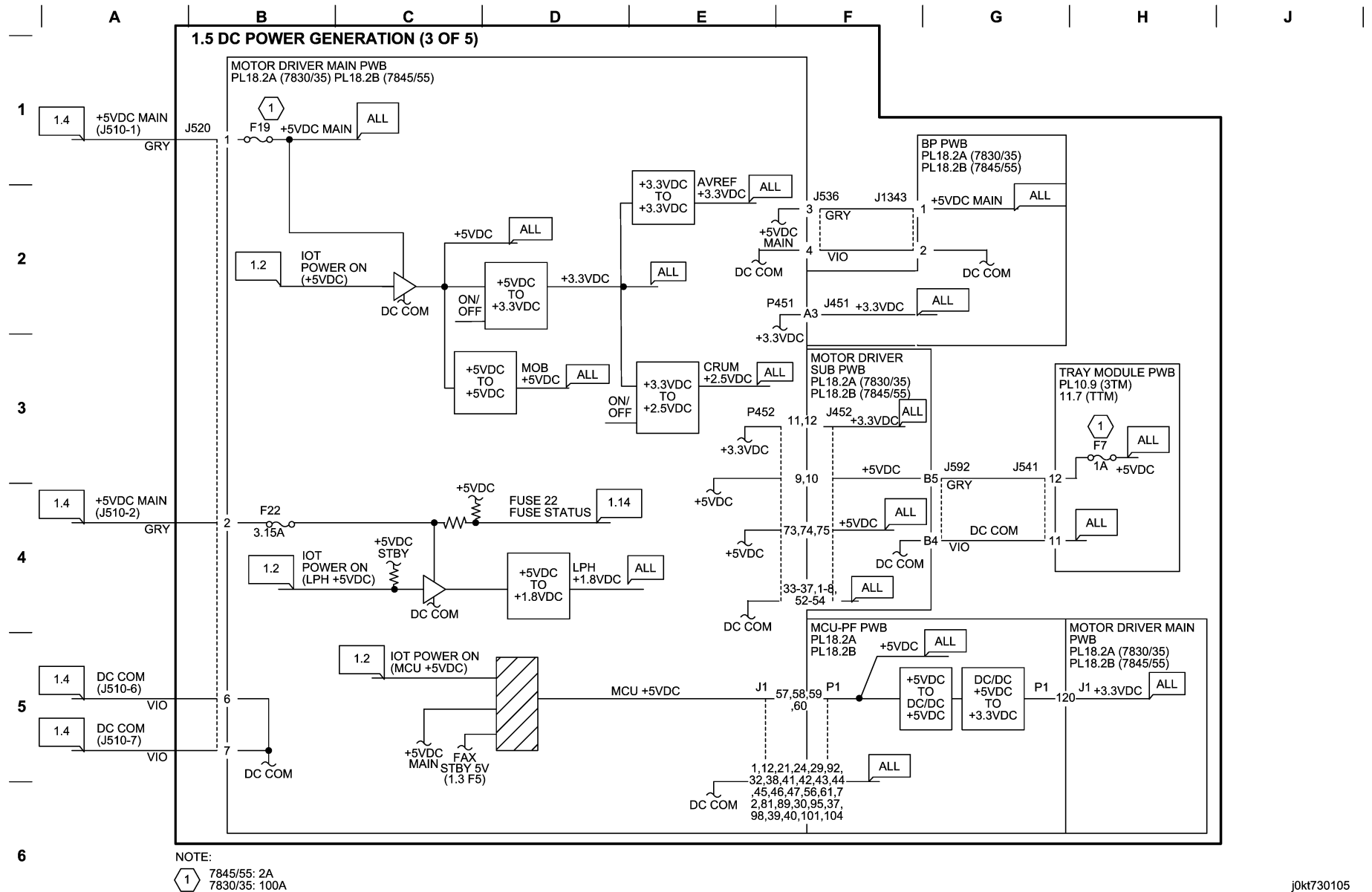
j0kt730104

06/08/12

730104\_SPY.VSD

Figure 4 BSD 1.4 DC Power Generation (2 of 5)

# BSD 1.5 DC Power Generation (3 of 5)



j0kt730105

10/11/12

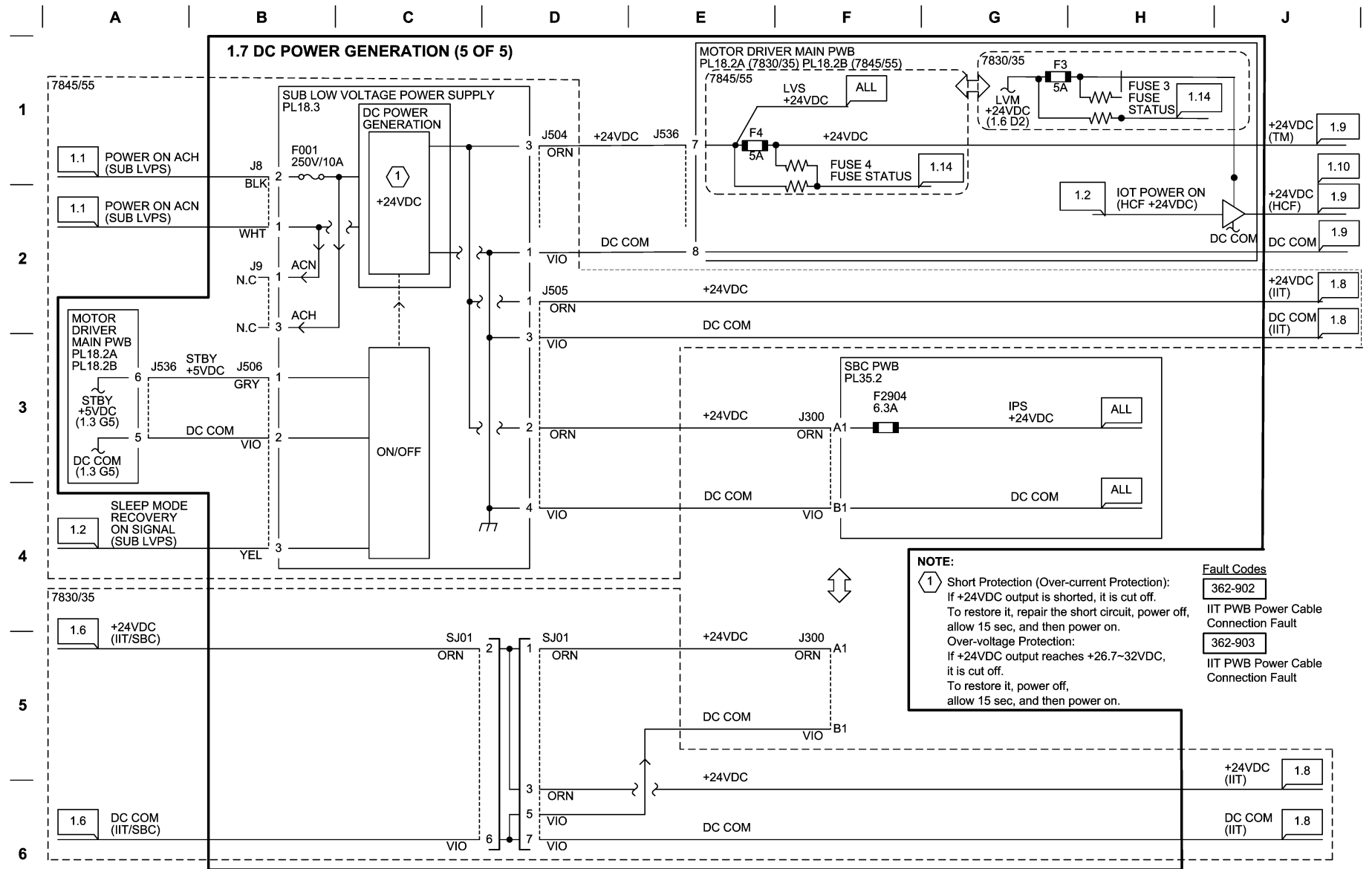
730105\_SPY.VSD

Figure 5 BSD 1.5 DC Power Generation (3 of 5)





**BSD 1.7 DC Power Generation (5 of 5)**

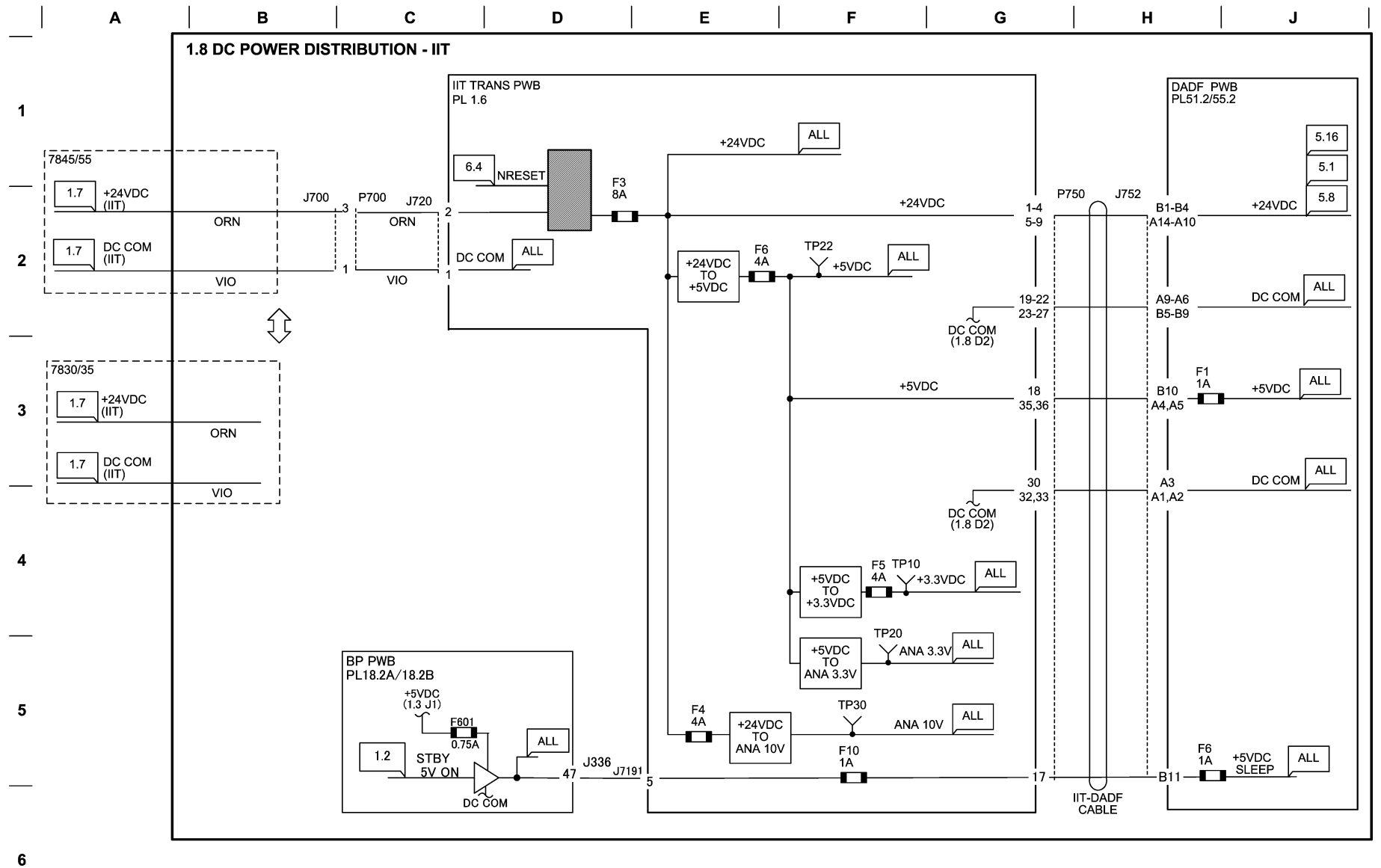


10/11/12

730107\_SPY.VSD

**Figure 7 BSD 1.7 DC Power Generation (5 of 5)**

# BSD 1.8 IIT DC Power Distribution



10/12/12

730108\_SPY.VSD

Figure 8 BSD 1.8 IIT DC Power Distribution

# BSD 1.9 DC Power Distribution - Options

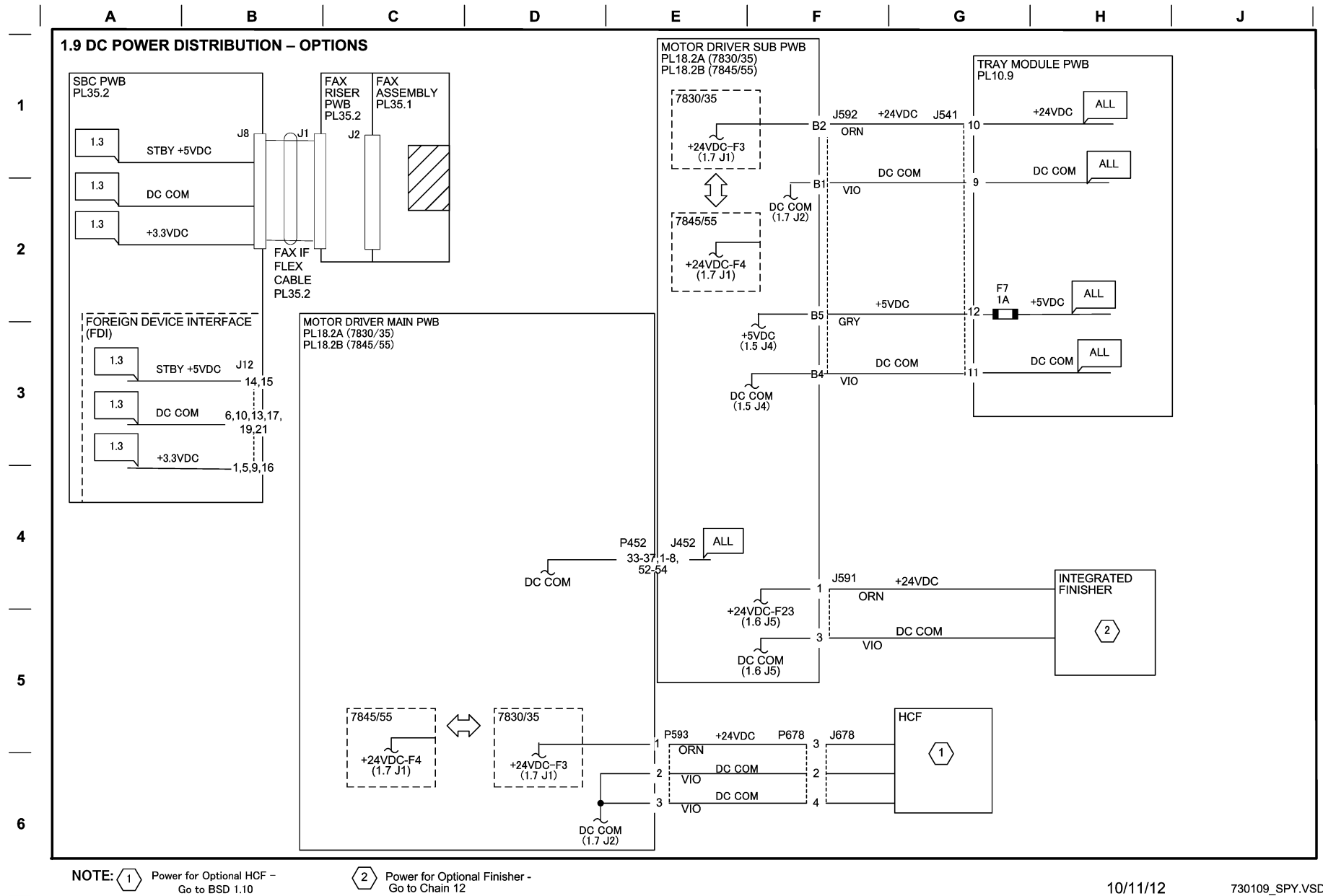


Figure 9 BSD 1.9 DC Power Distribution - Options

# BSD 1.10 DC Power Distribution - HCF Option

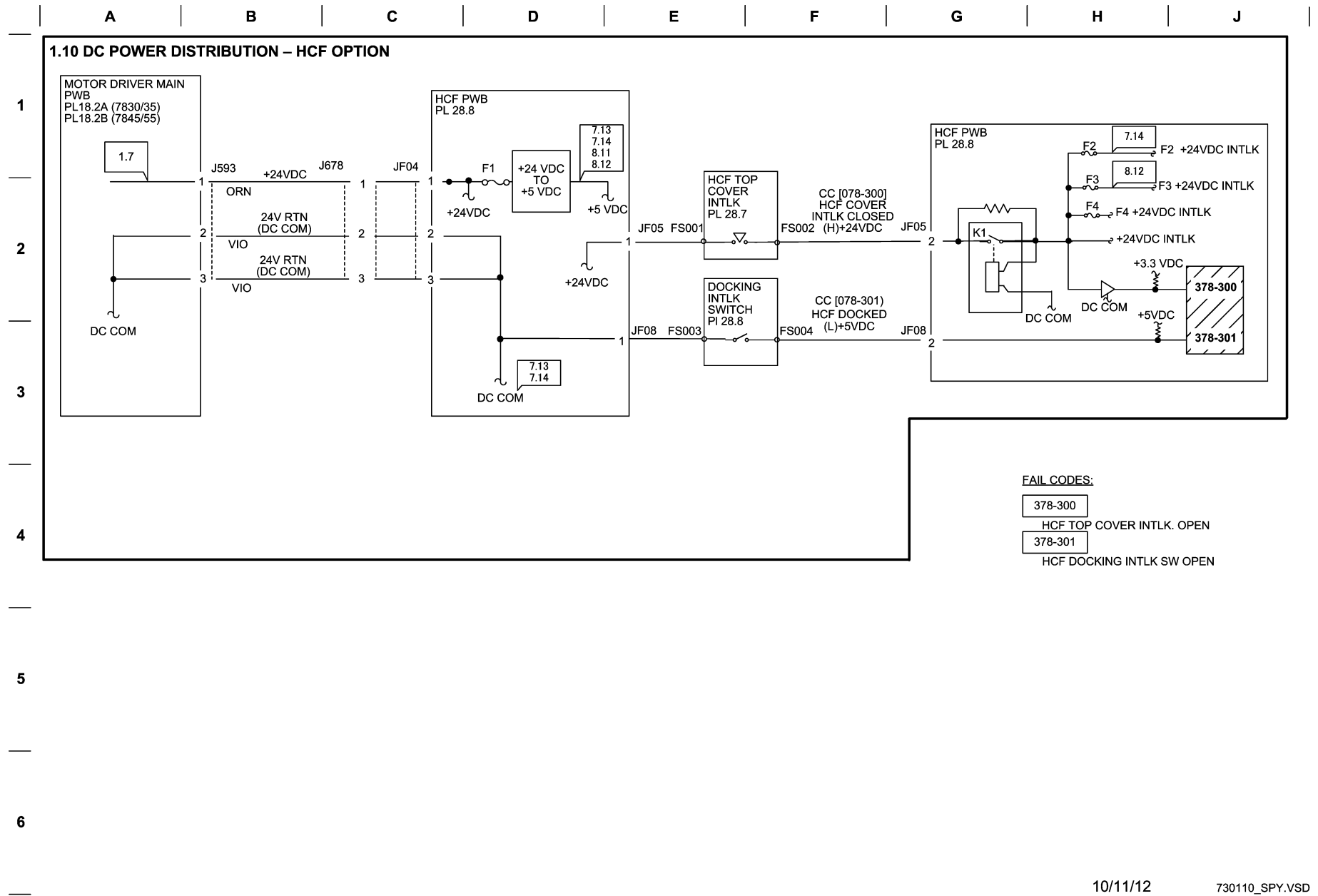


Figure 10 BSD 1.10 DC Power Distribution - HCF Option

# BSD 1.11 LVPS Cooling

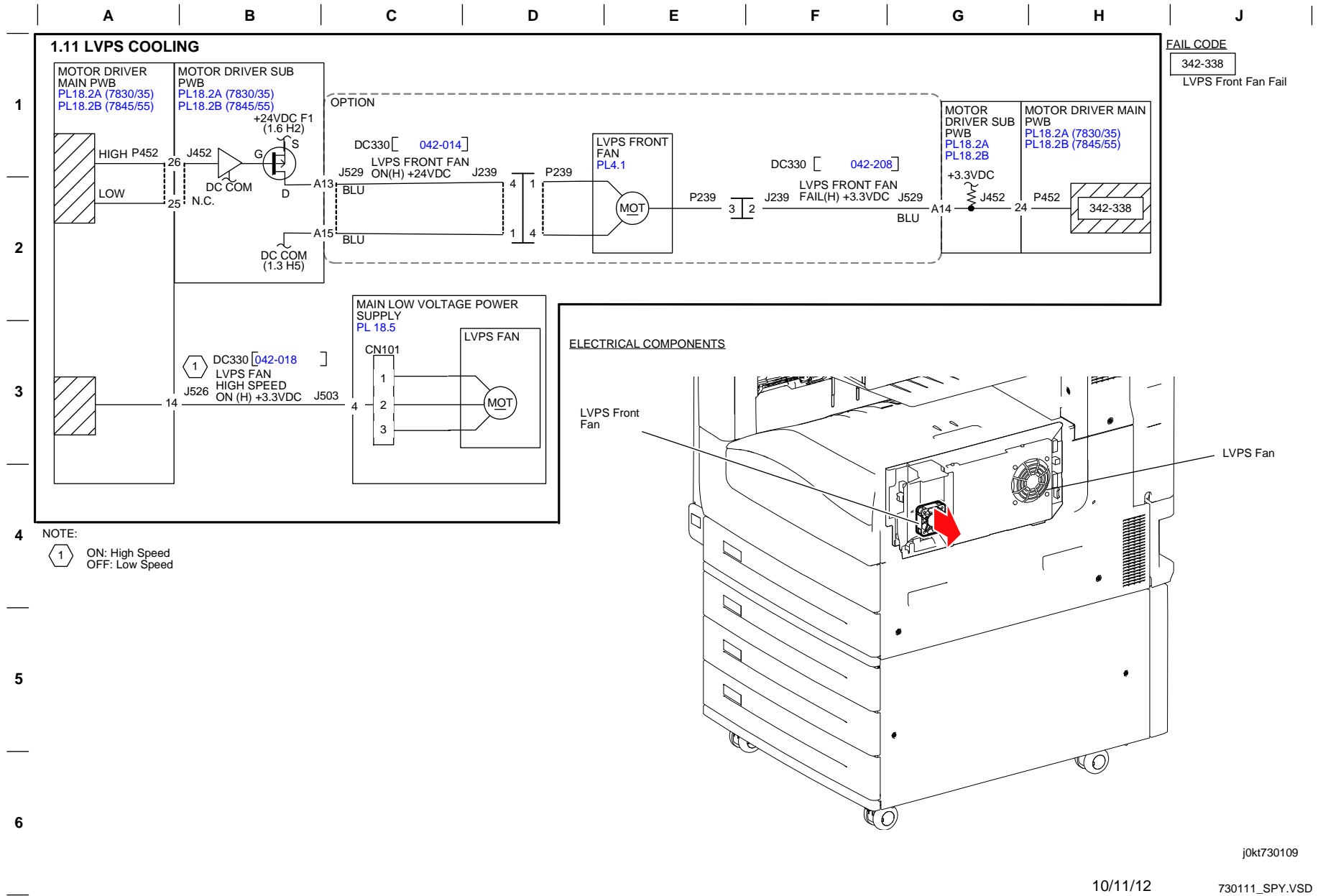


Figure 11 BSD 1.11 LVPS Cooling

# BSD 1.12 Interlocked Power

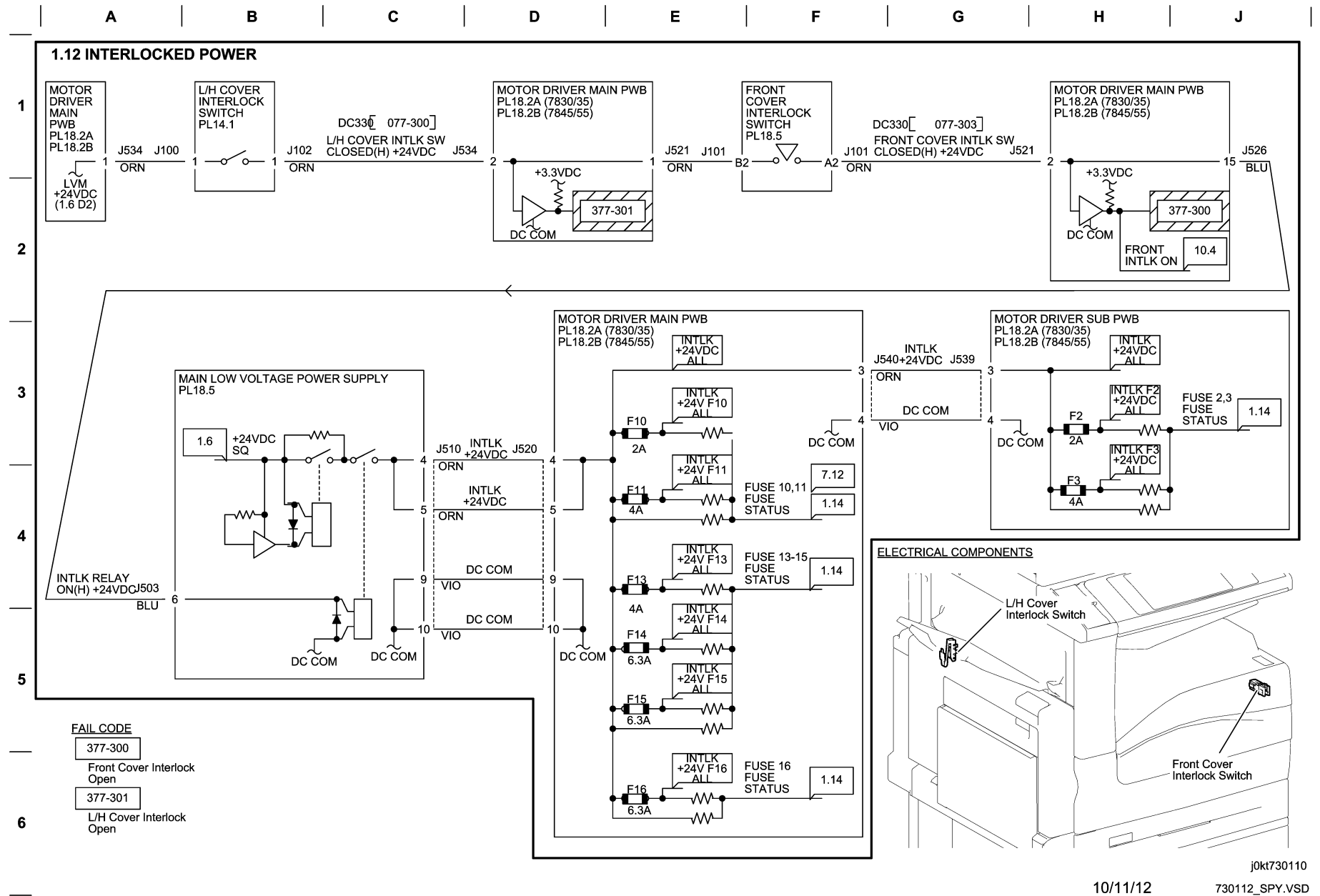
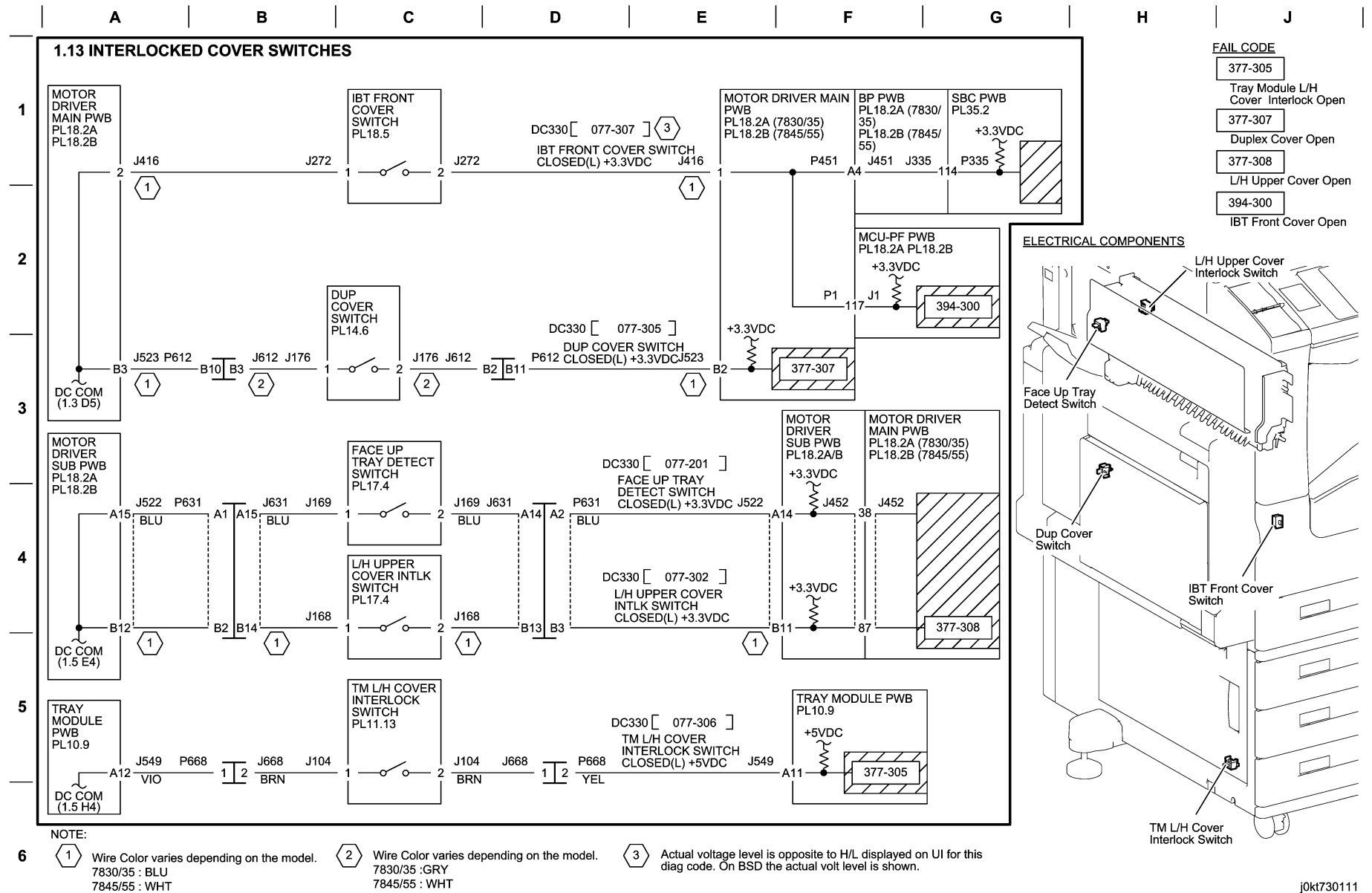


Figure 12 BSD 1.12 Interlocked Power

# BSD 1.13 Interlocked Cover Switches



j0kt730111

10/11/12

73000\_SPY.VSD

Figure 13 BSD 1.13 Interlocked Cover Switches

# BSD 1.14 PWB Fuse Status

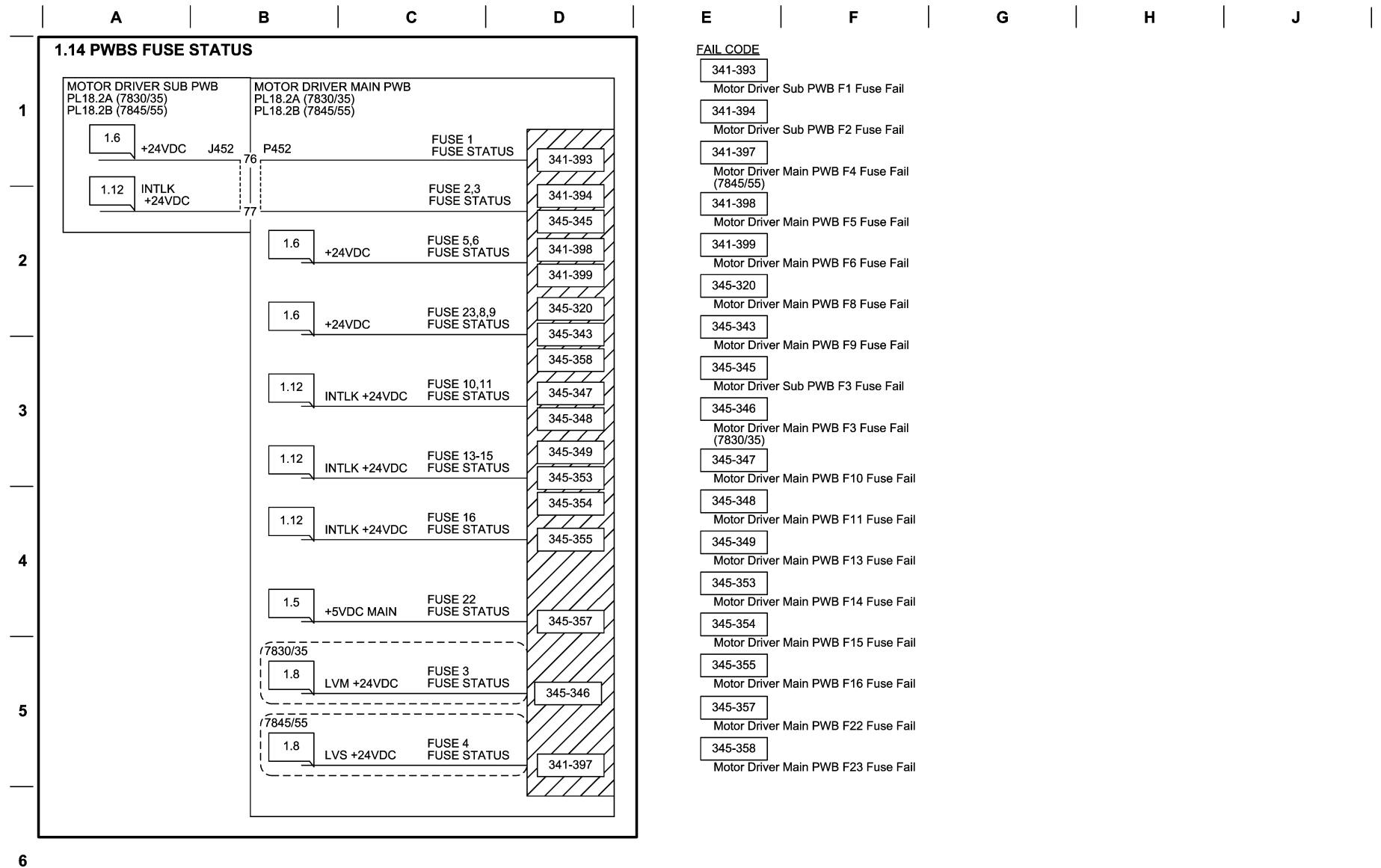


Figure 14 BSD 1.14 PWB Fuse Status

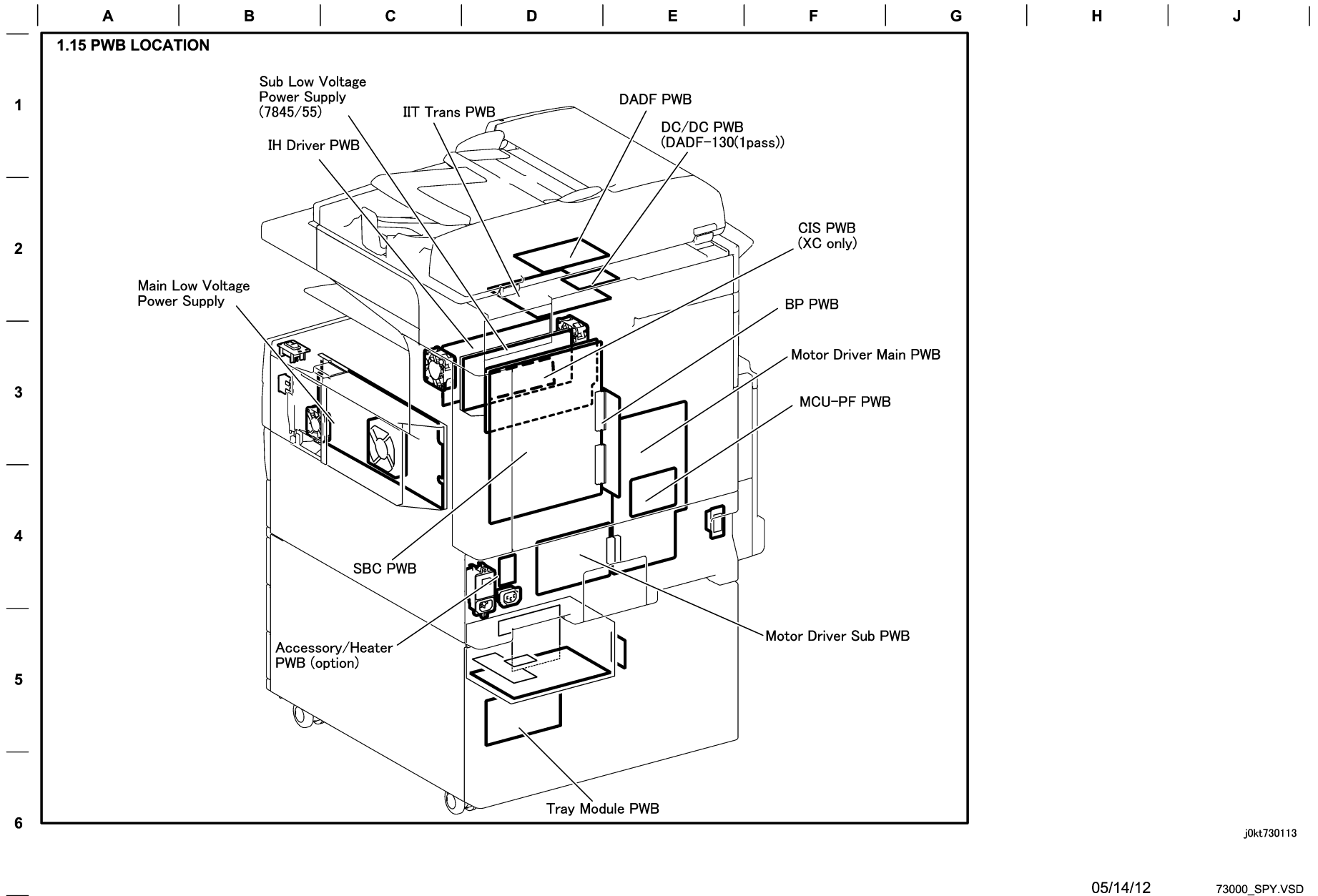
j0kt730112

10/11/12

73000\_SPY.VSD



# BSD 1.15 PWB Location



j0kt730113

05/14/12

73000\_SPY.VSD

Figure 15 BSD 1.12 PWB Location



**BSD 2.2 Control Panel Switches (2 of 2)**

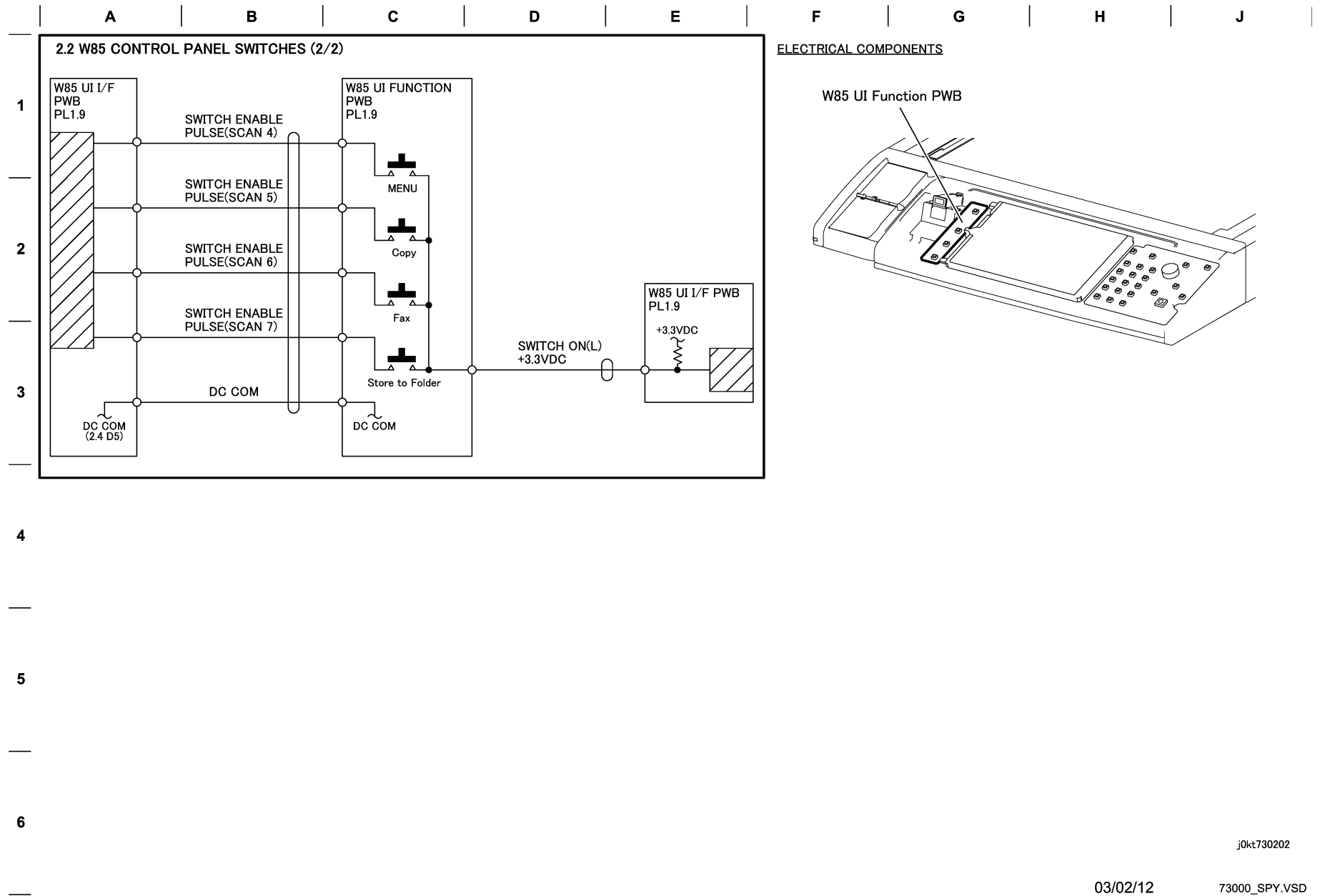


Figure 2 BSD 2.2. Control Panel Switches (2 of 2)

# BSD 2.3 Control Panel LEDs

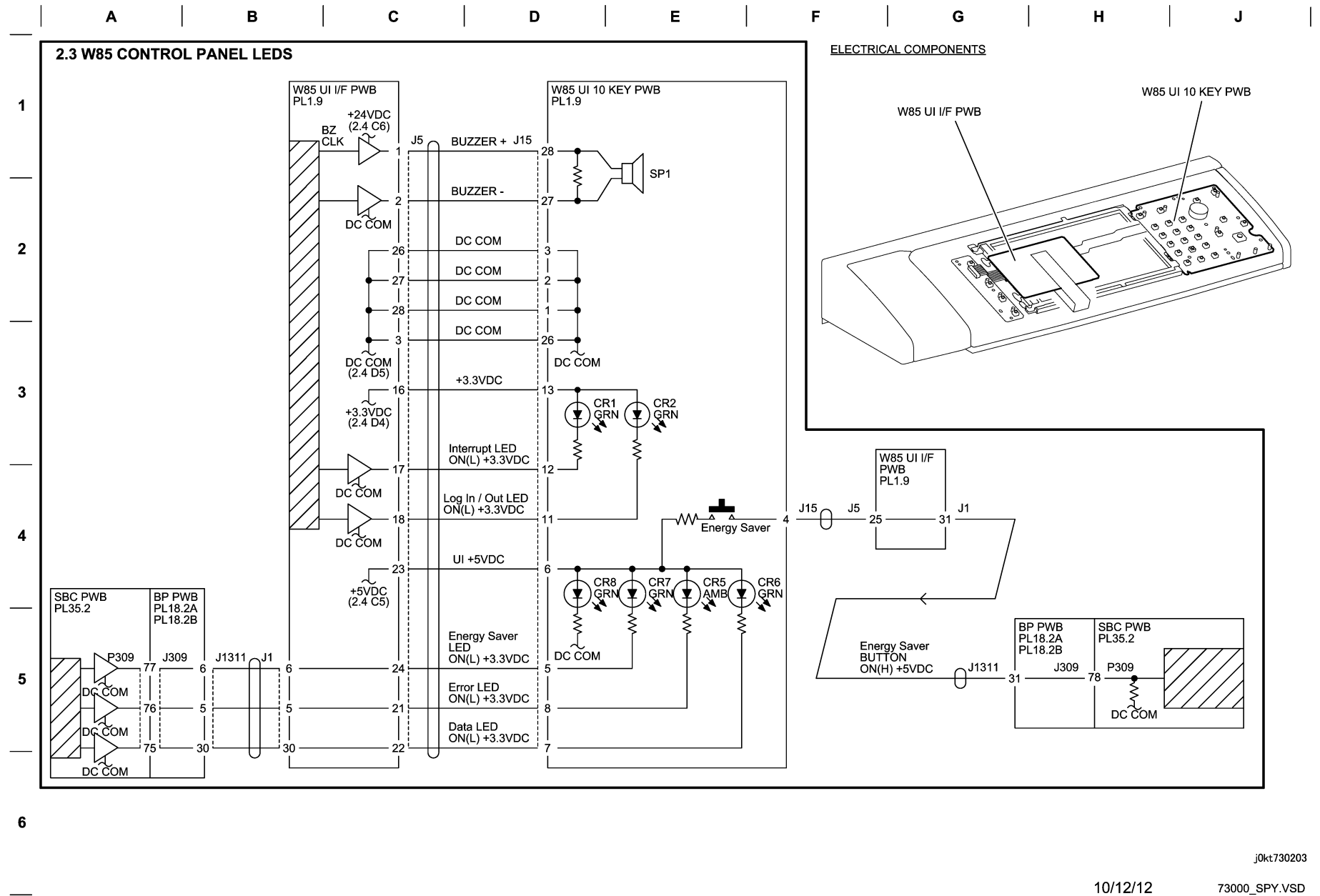
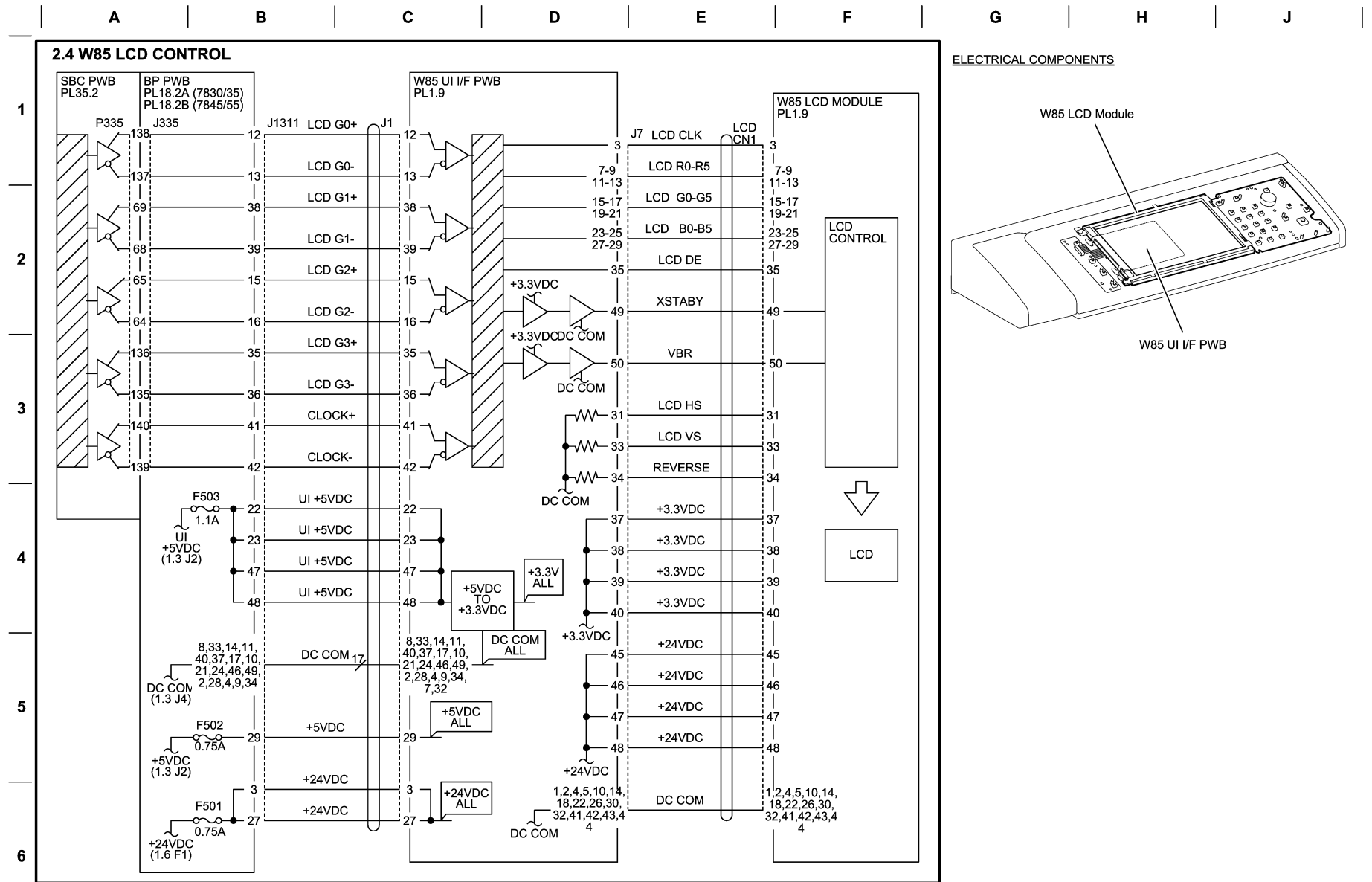


Figure 3 BSD 2.3 Control Panel LEDs

# BSD 2.4 LCD Control



j0kt730204

10/11/12

73000\_SPY.VSD

Figure 4 BSD 2.4 LCD Control

# BSD 2.5 Touch Panel Control

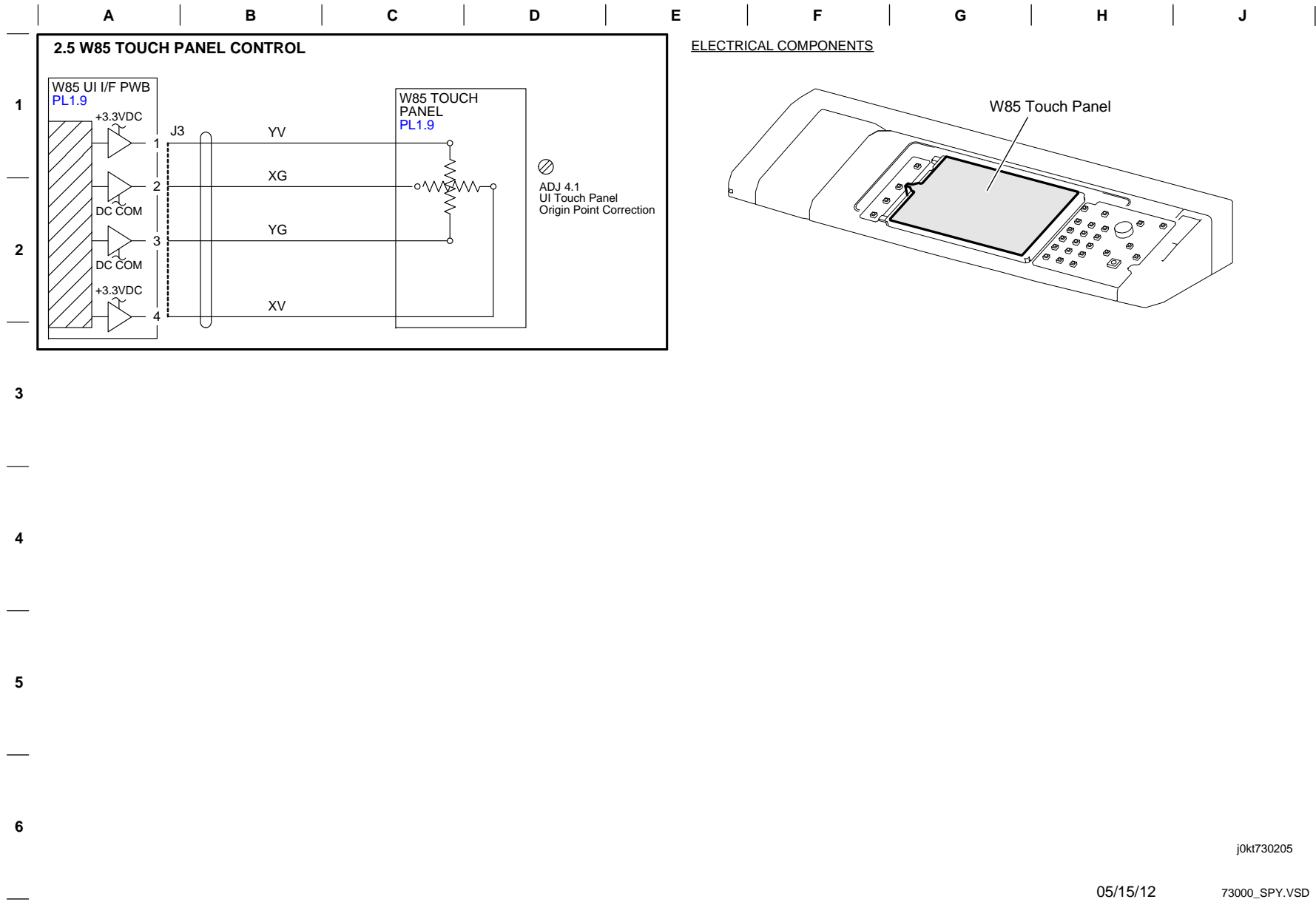


Figure 5 BSD 2.5 Touch Panel Control

j0kt730205

05/15/12

73000\_SPY.VSD

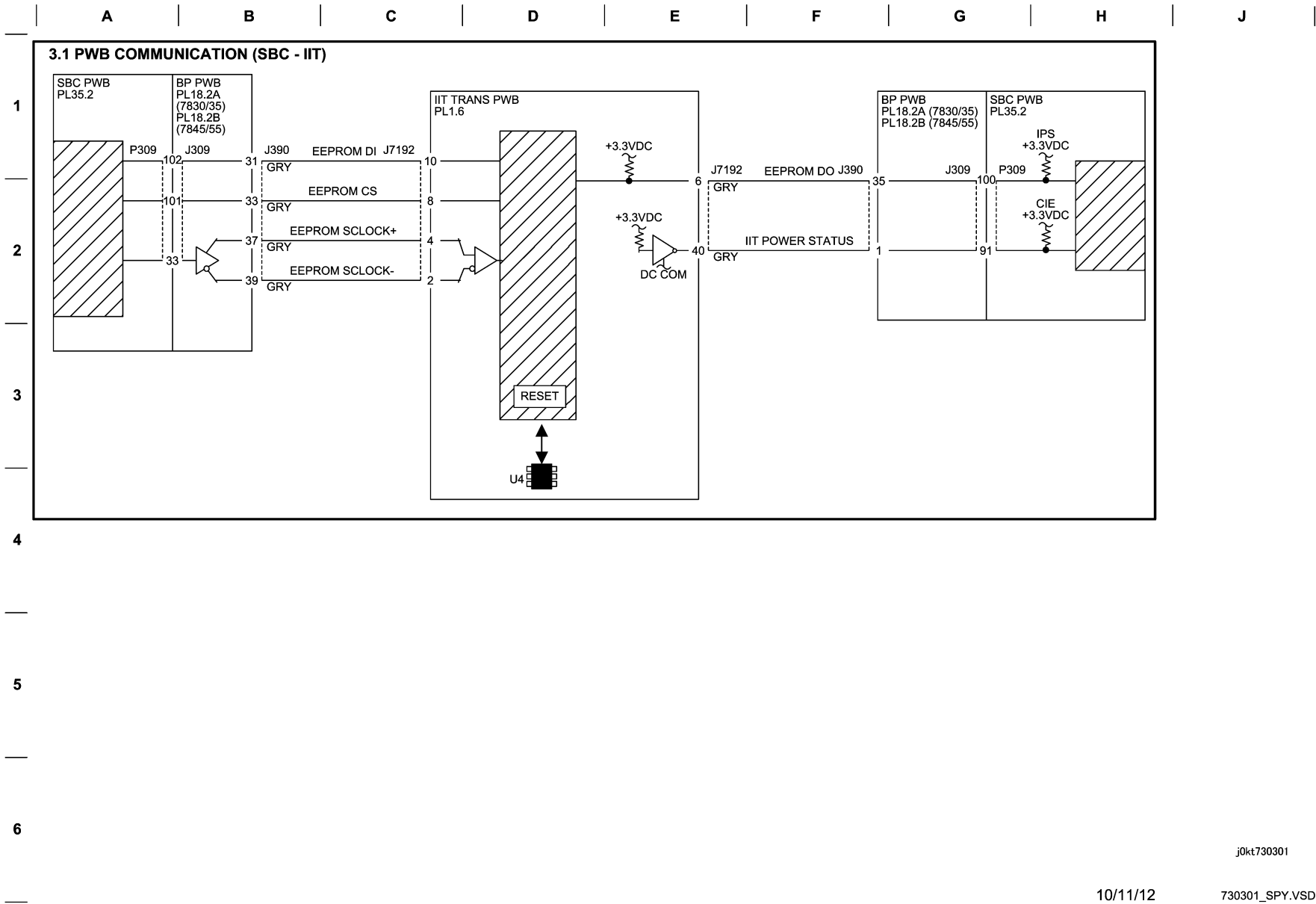
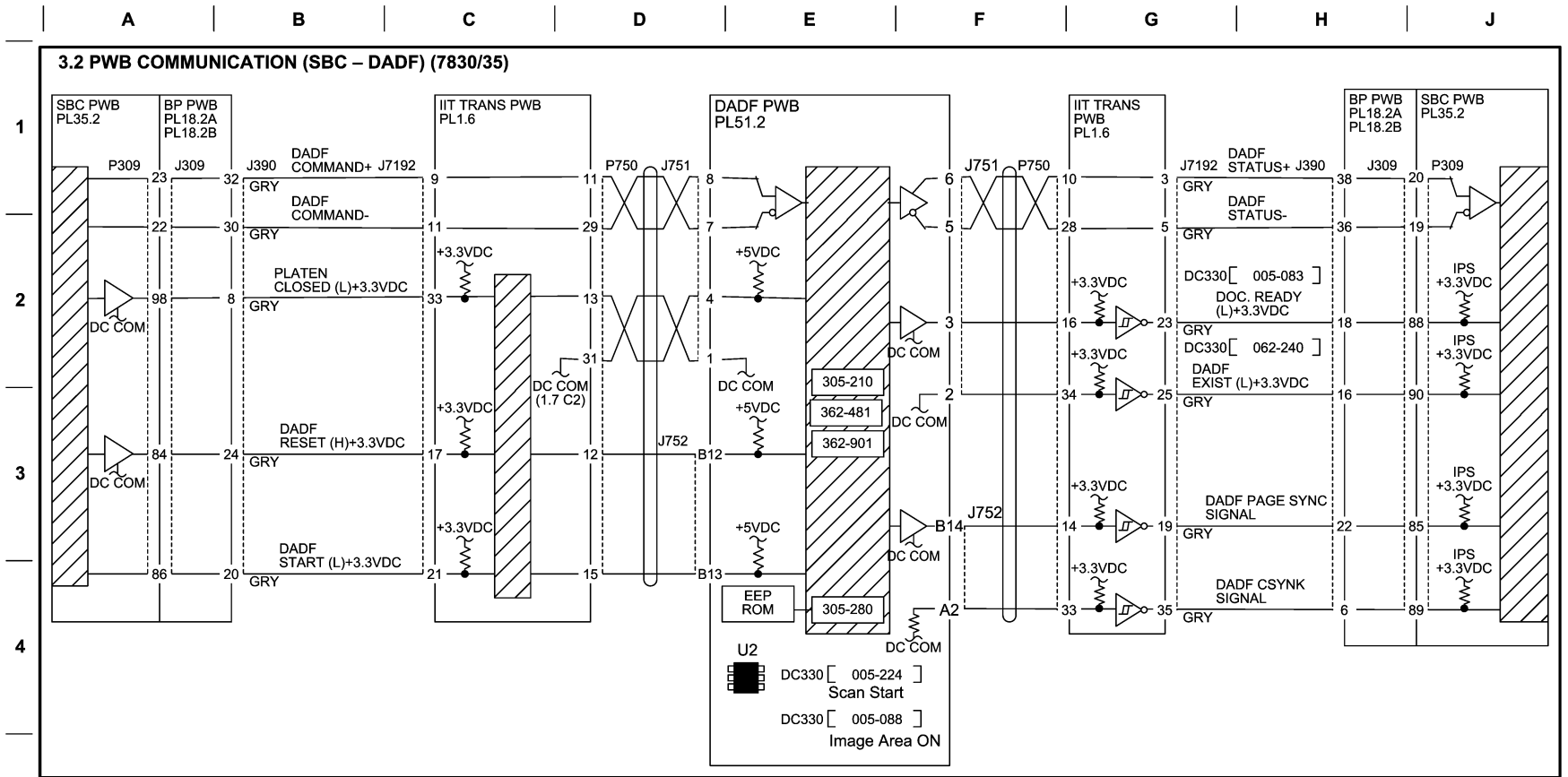


Figure 1 BSD 3.1 PWB Communication (1 of 9)

BSD 3.2 PWB Communication (2 of 9)



**FAIL CODE**

305-210	DADF Download Fail
305-280	DADF EEPROM Fail
362-481	DADF Communication Time out
362-901	IPS-DADF Communication Fail

j0kt730302

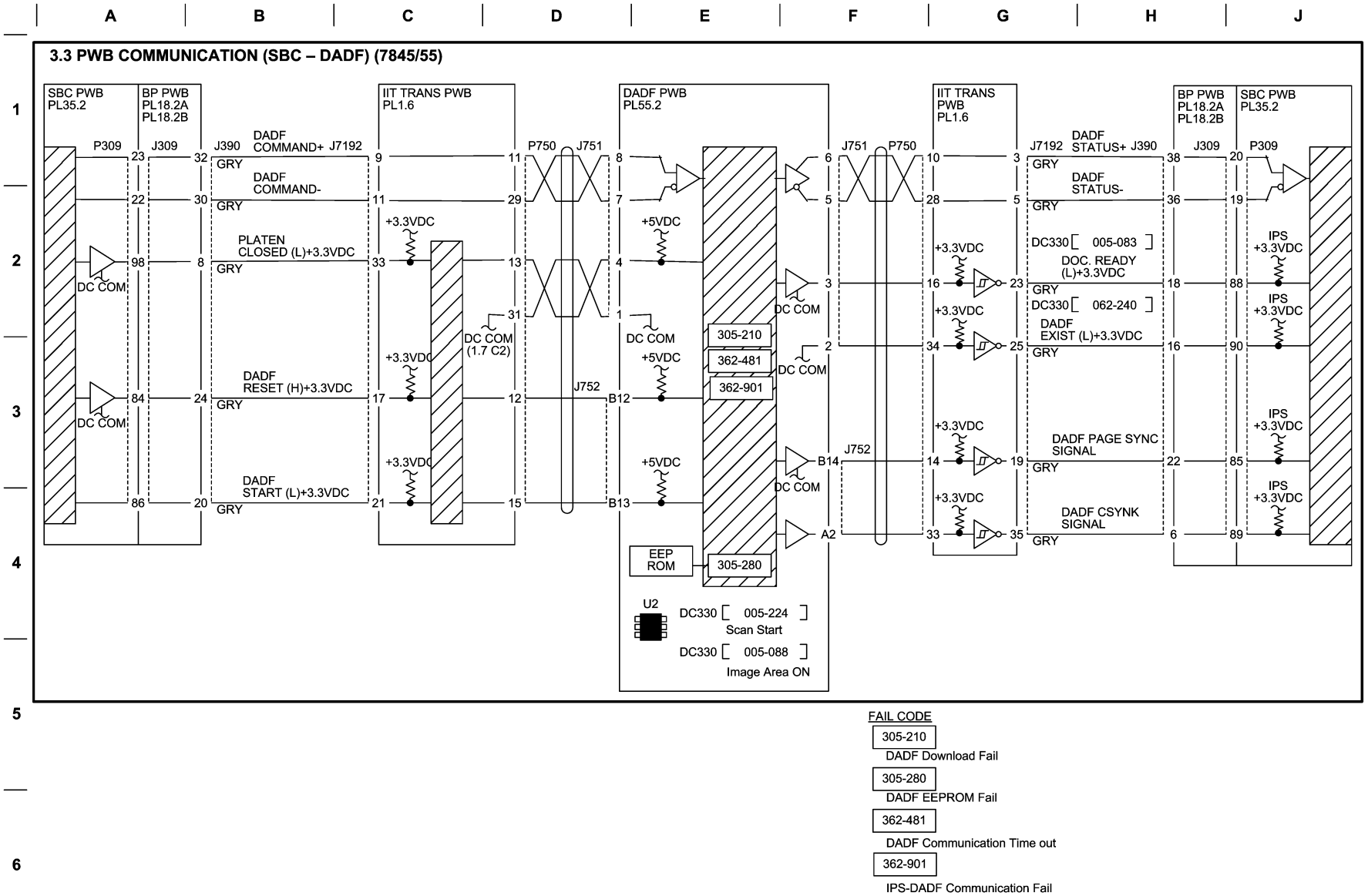
10/11/12

730302\_SPY.VSD

Figure 2 BSD 3.2 PWB Communication (2 of 9)



BSD 3.3 PWB Communication (3 of 9)



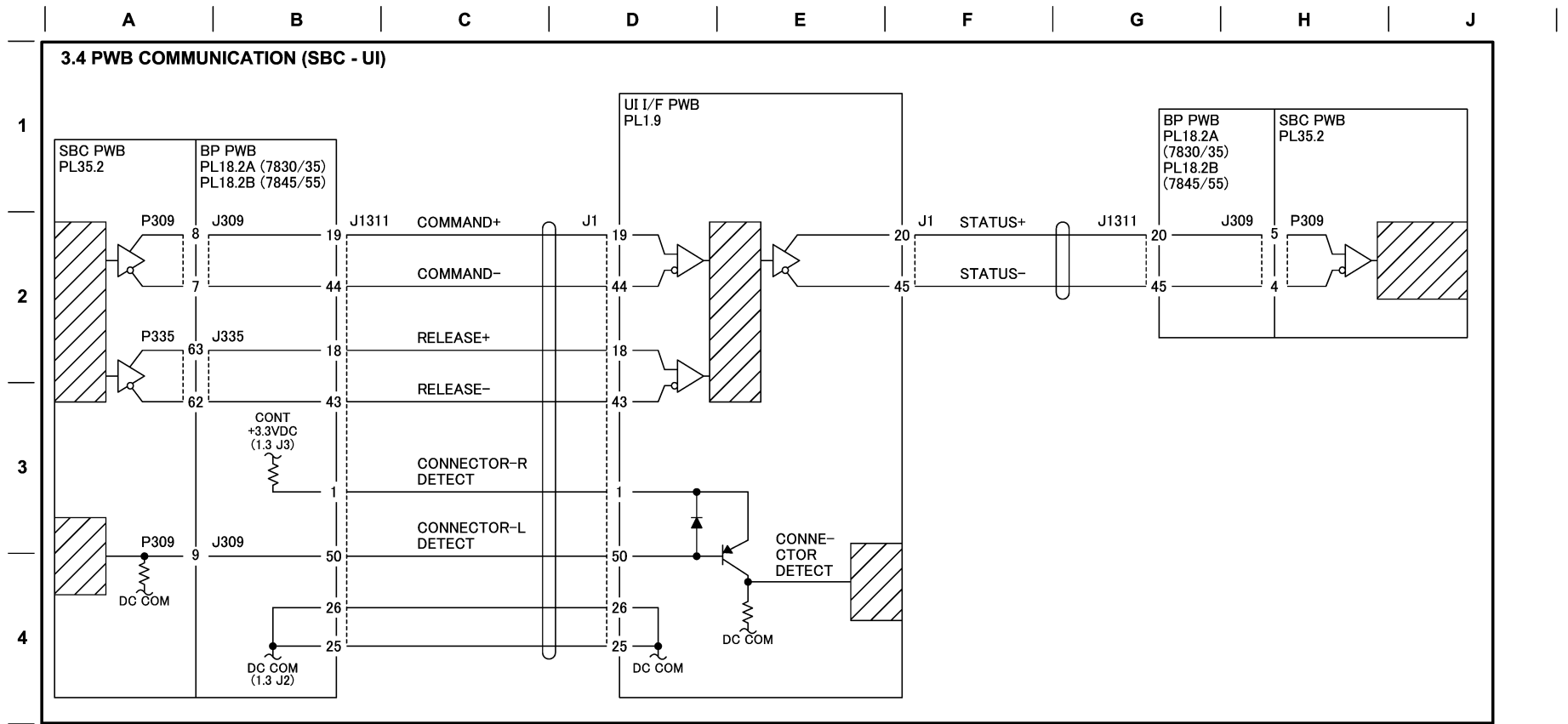
j0k730303

10/11/12

730303\_SPY.VSD

Figure 3 BSD 3.3 PWB Communication (3 of 9)

**BSD 3.4 PWB Communication (4 of 9)**



**FAIL CODE**

303-347

UI Communication Fault

j0kt730304

10/11/12

730304\_SPY.VSD

**Figure 4 BSD 3.4 PWB Communication (4 of 9)**

BSD 3.5 PWB Communication (5 of 9)

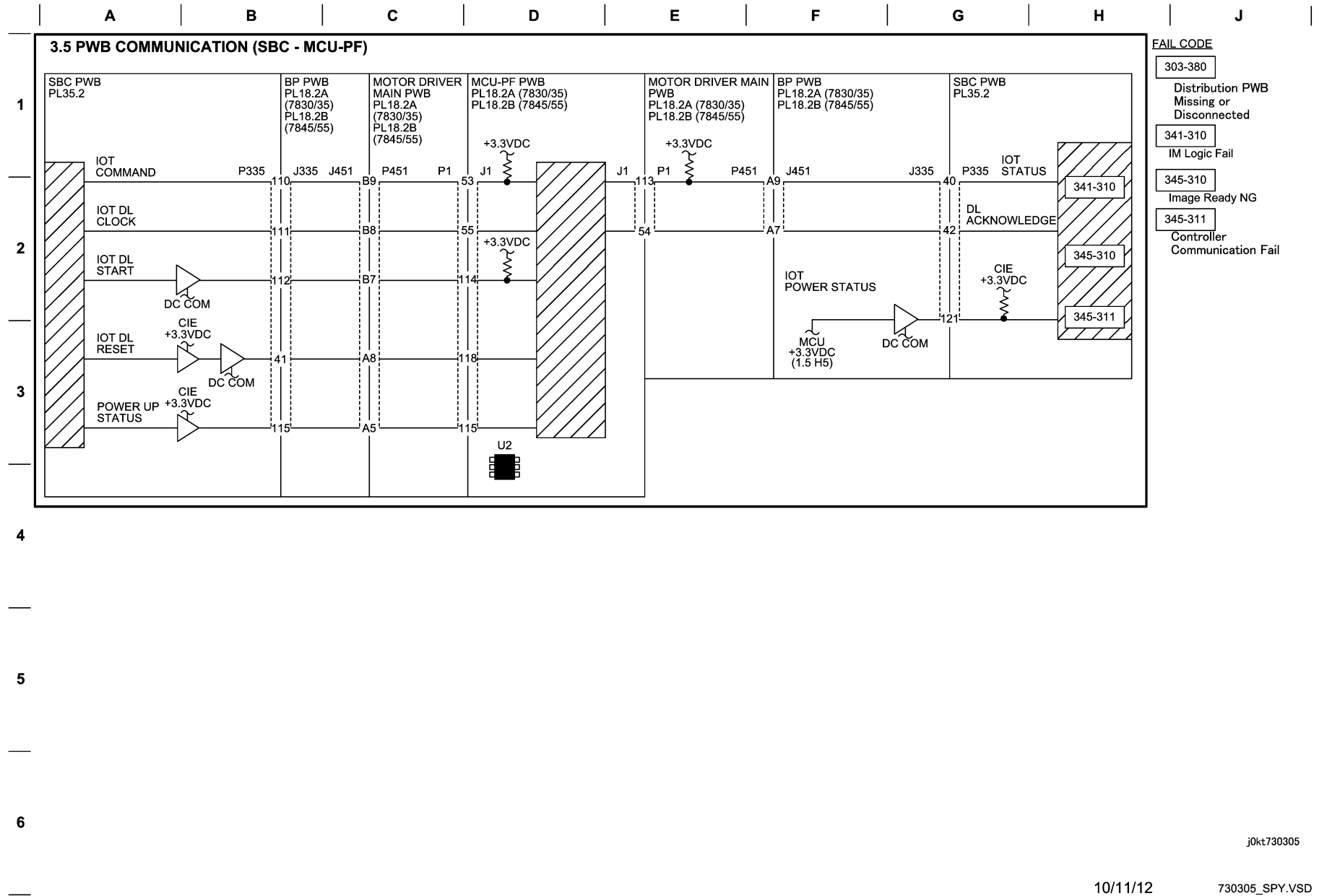
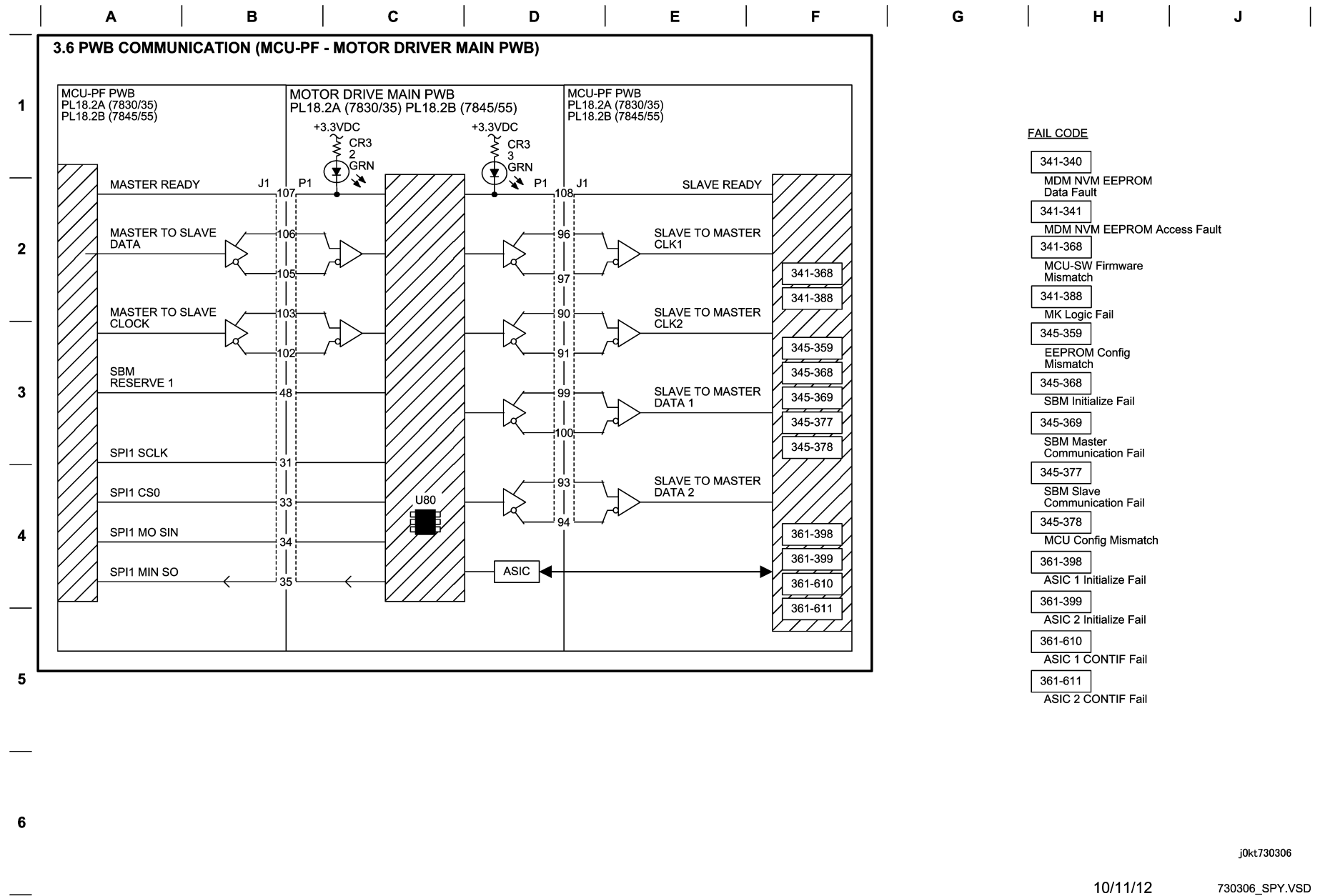


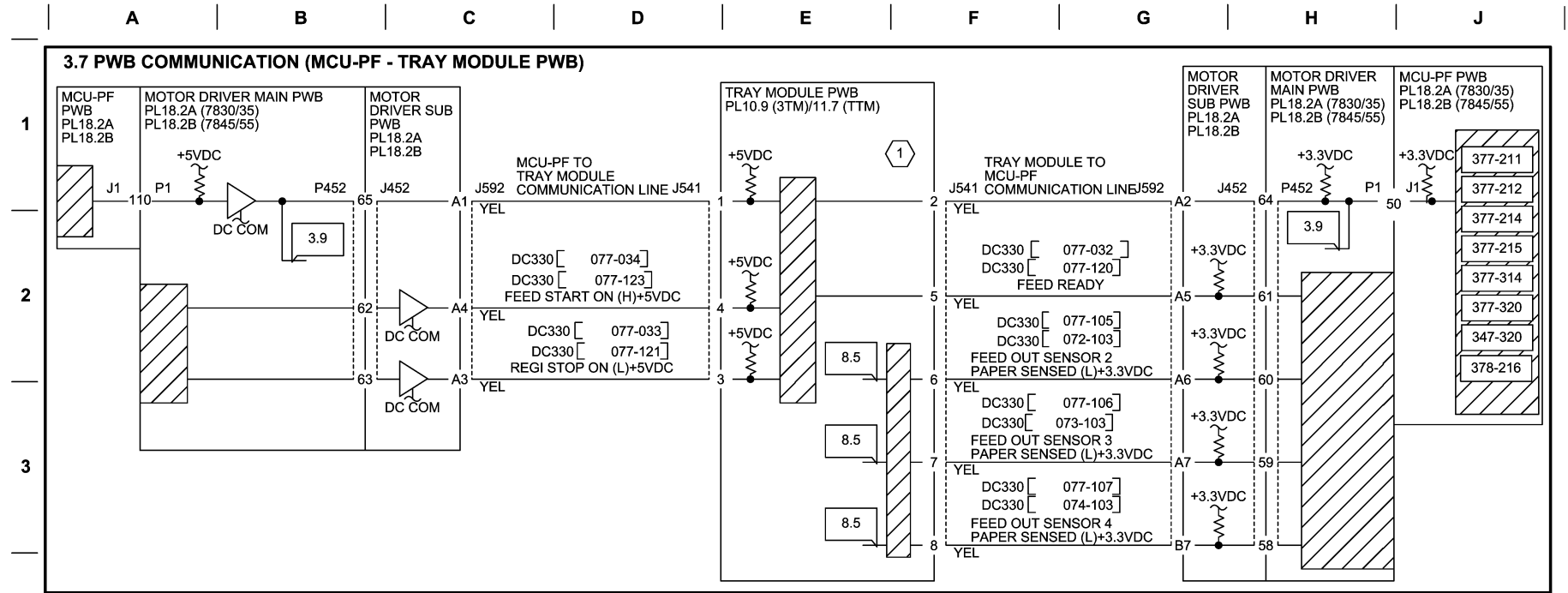
Figure 5 BSD 3.5 PWB Communication (5 of 9)

**BSD 3.6 PWB Communication (6 of 9)**



**Figure 6 BSD 3.6 PWB Communication (6 of 9)**

# BSD 3.7 PWB Communication (7 of 9)



NOTE:

4 1 The DIP switch settings of the Tray Module PWB are as follows:

7845/55*		7830/35*	
TTM	ON	TTM	ON
	1:OFF 2:ON 3:ON 4:ON		1:ON 2:ON 3:OFF 4:ON
3TM	ON	3TM/	ON
	1:OFF 2:ON 3:OFF 4:ON		1:ON 2:ON 3:ON 4:ON

\* Each Tray Module is identified based on the settings in NVM [742-934].

### FAIL CODE

<span style="border: 1px solid black; padding: 2px;">377-211</span> Tray Module Kind Mismatch	<span style="border: 1px solid black; padding: 2px;">377-314</span> P/H Module Logic Fail
<span style="border: 1px solid black; padding: 2px;">377-212</span> Tray Module Reset Fail	<span style="border: 1px solid black; padding: 2px;">377-320</span> All Feed Tray Broken Fail
<span style="border: 1px solid black; padding: 2px;">377-214</span> Tray Module Logic Fail	<span style="border: 1px solid black; padding: 2px;">347-320</span> ALL Destination Tray Broken
<span style="border: 1px solid black; padding: 2px;">377-215</span> Tray Module Communication Fail	<span style="border: 1px solid black; padding: 2px;">378-216</span> Logic Failure

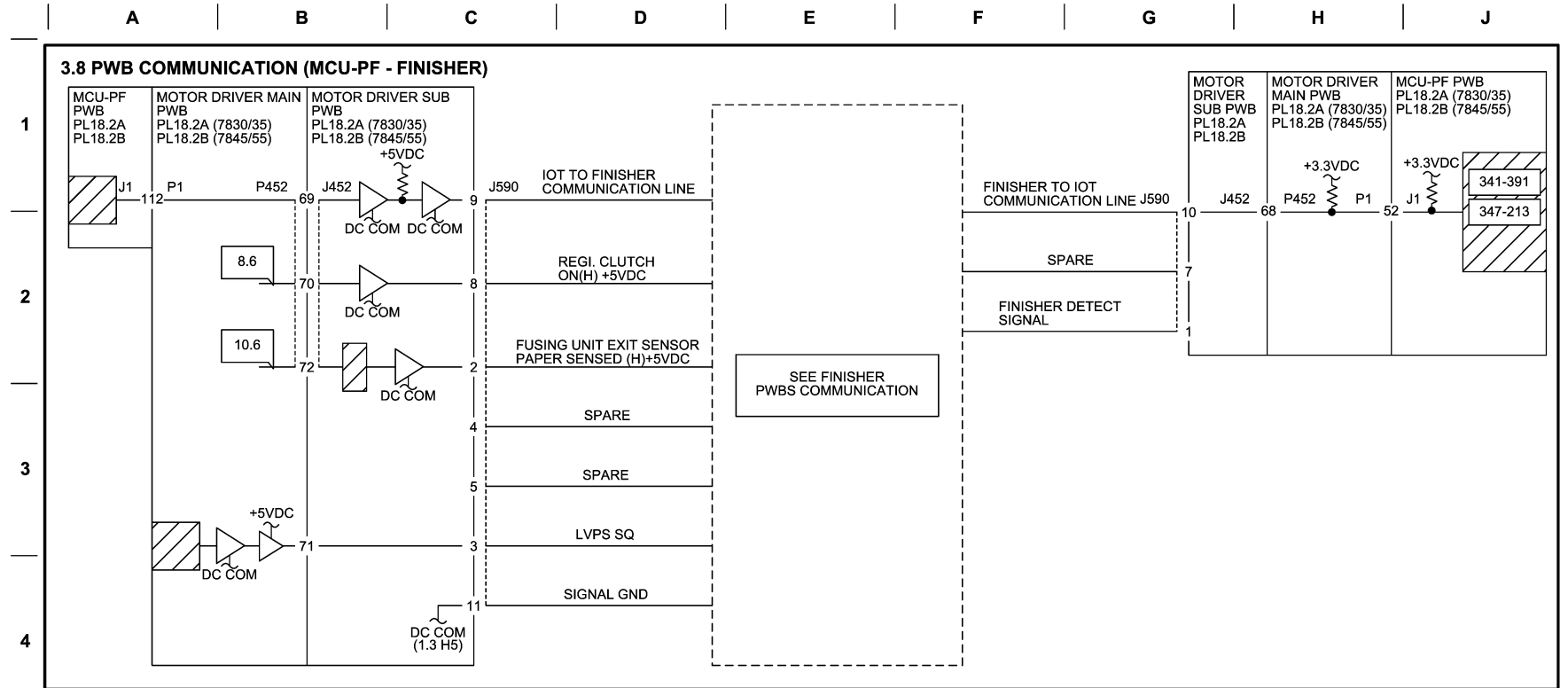
jokt730307

10/11/12

730307\_SPY.VSD

Figure 7 BSD 3.7 PWB Communication (7 of 9)

**BSD 3.8 PWB Communication (8 of 9)**



**FAIL CODE**

341-391  
Finisher Module Logic Fail

347-213  
Finisher Kind Mismatch

j0kt730308

10/11/12

730308\_SPY.VSD

**Figure 8 BSD 3.8 PWB Communication (8 of 9)**

BSD 3.9 PWB Communication (9 of 9)

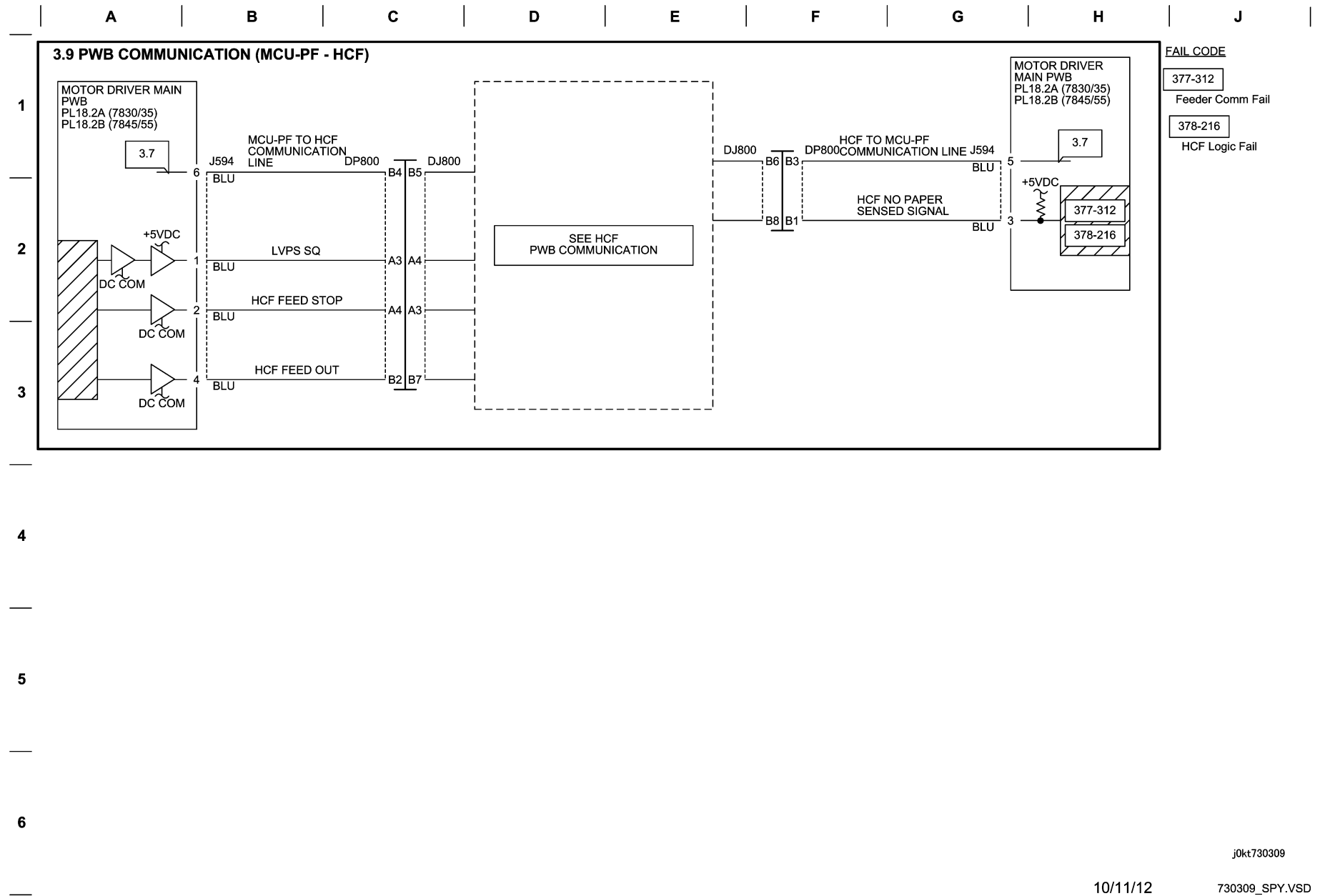


Figure 9 BSD 3.9 PWB Communication (9 of 9)

# BSD 3.10 Poor Cable Connection

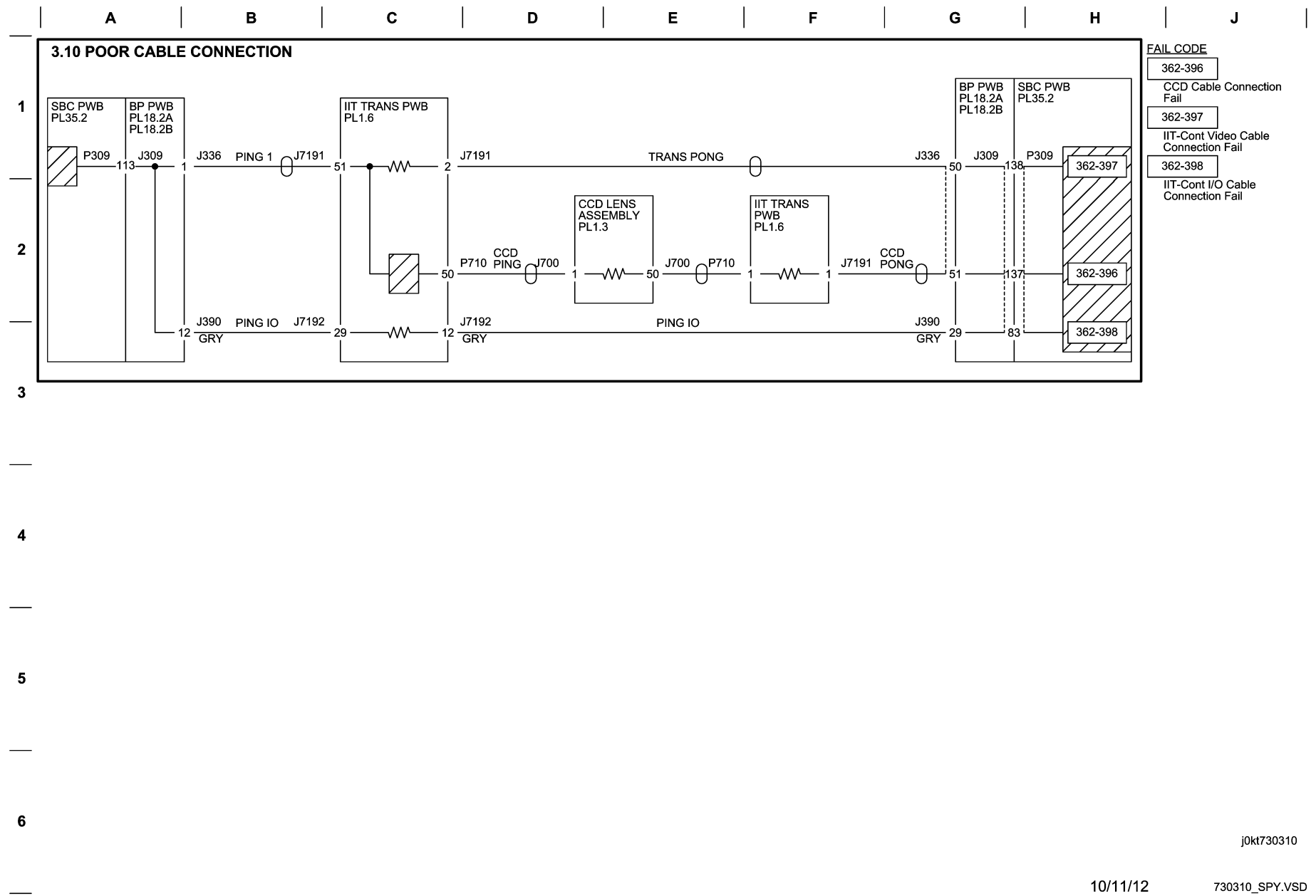


Figure 10 BSD 3.10 Poor Cable Connection



# BSD 3.11 PWB Detection

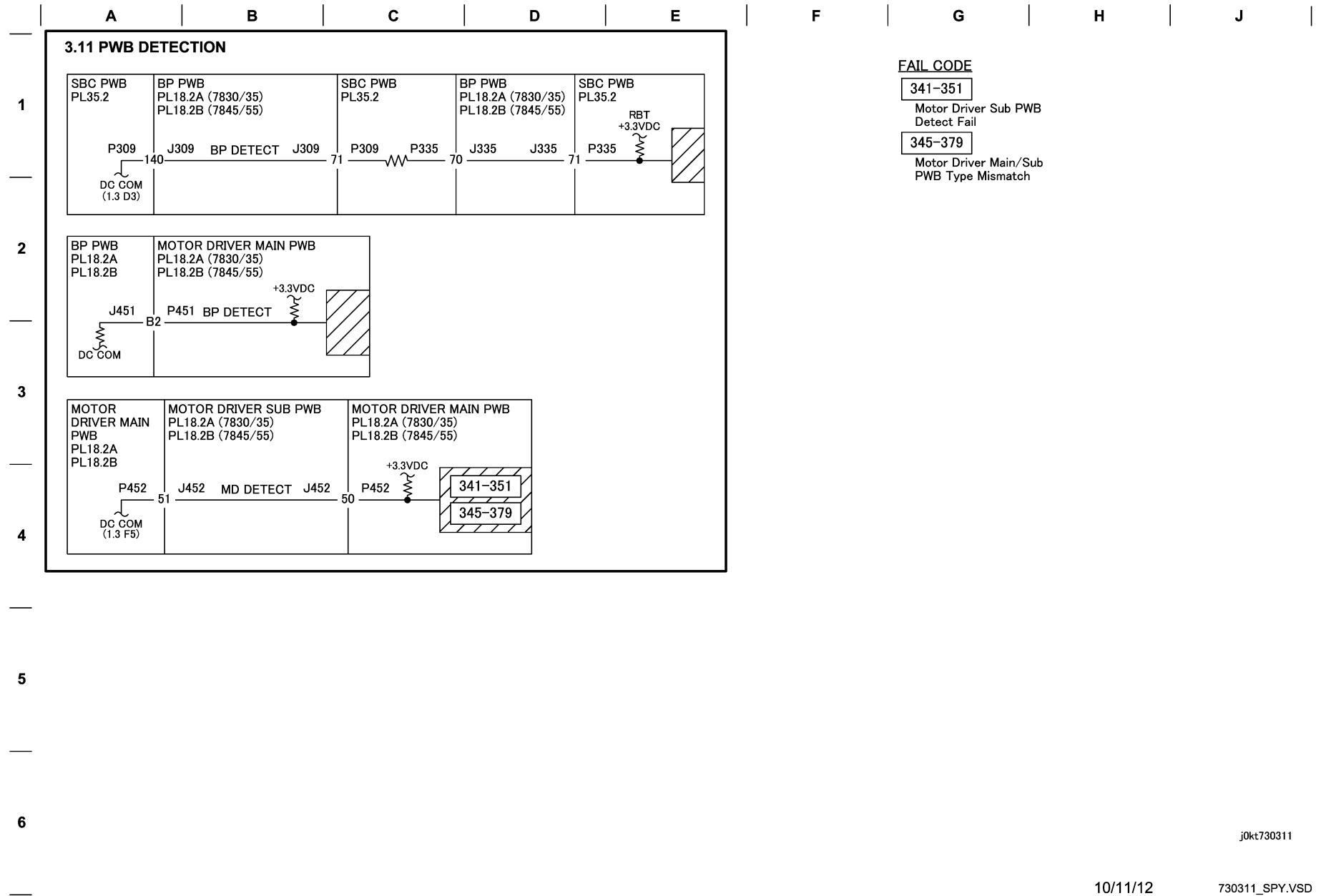
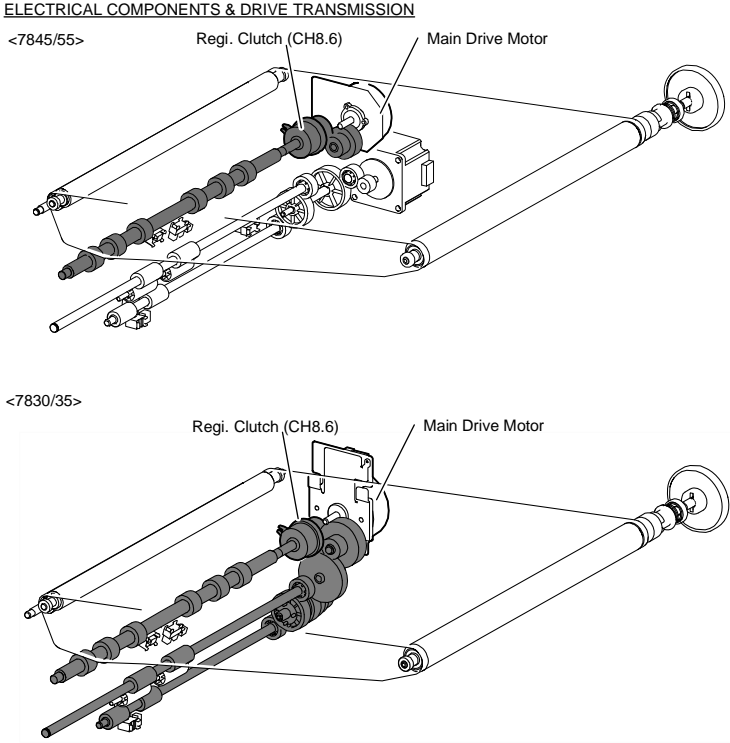
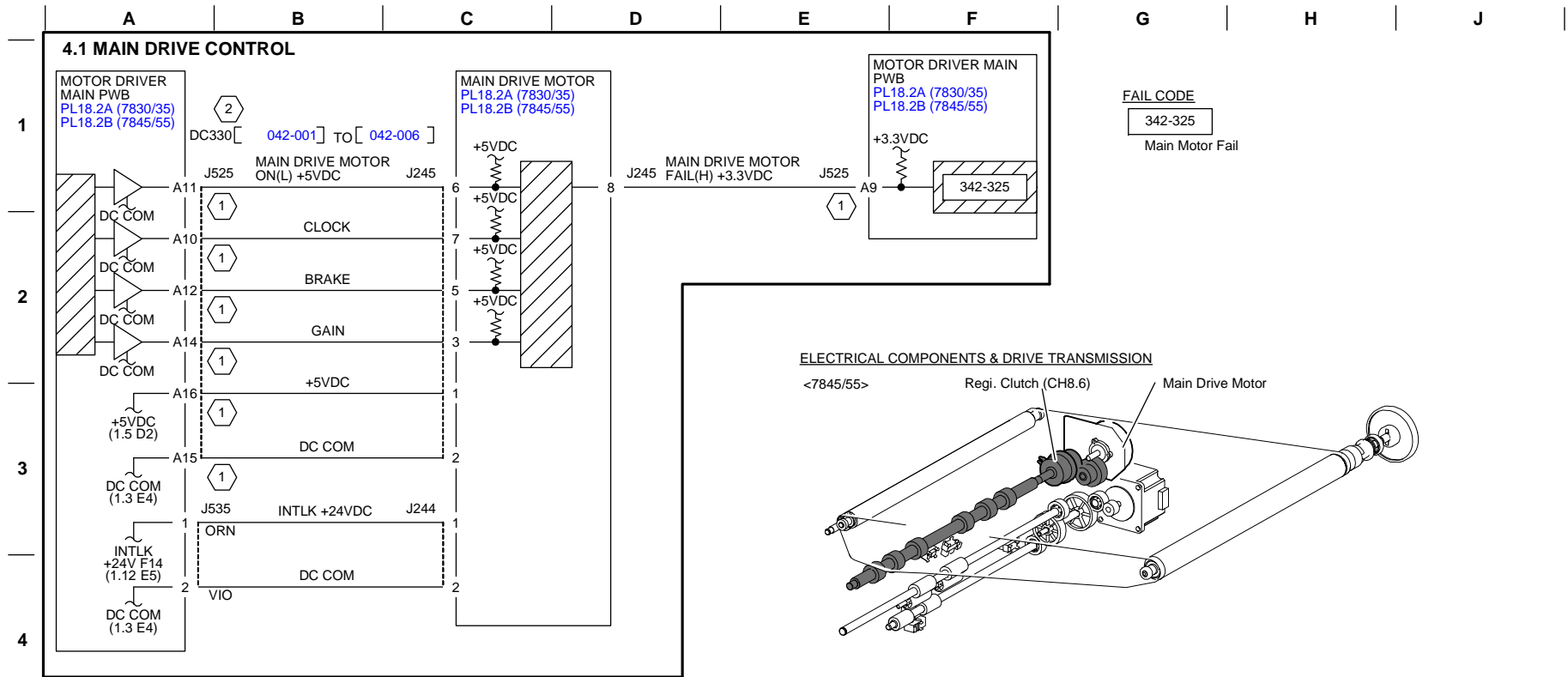


Figure 11 BSD 3.11 PWB Detection



NOTE:

① Wire Color varies depending on the model.  
7830/35 : BLU  
7845/55 : WHT

② The operation varies depending on the diag code.

DC330	Process Speed
042-001	79mm/sec
042-002	121mm/sec
042-003	175mm/sec
042-004	220mm/sec
042-005	228mm/sec
042-006	255mm/sec

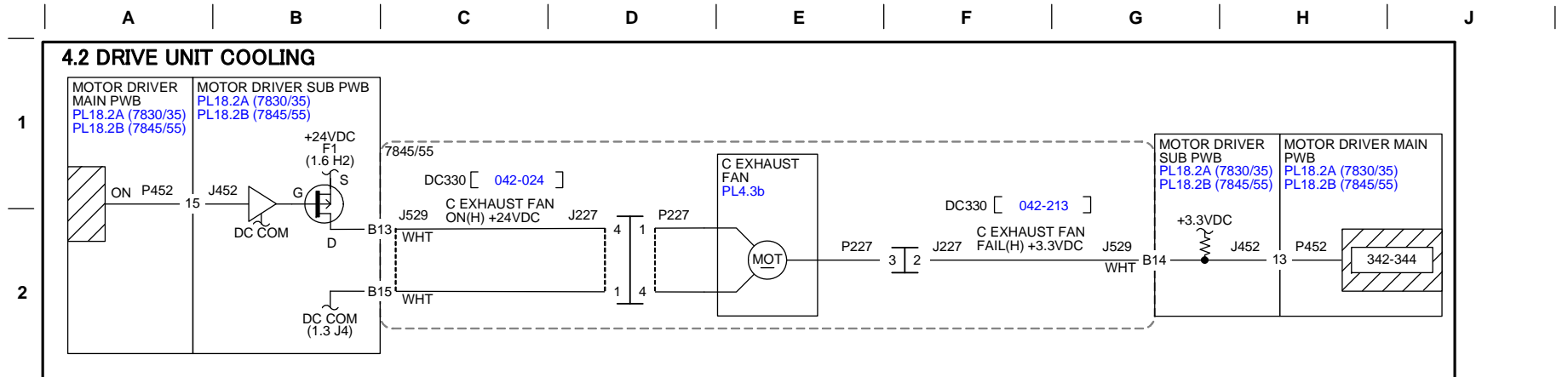
j0kt730401

10/12/12

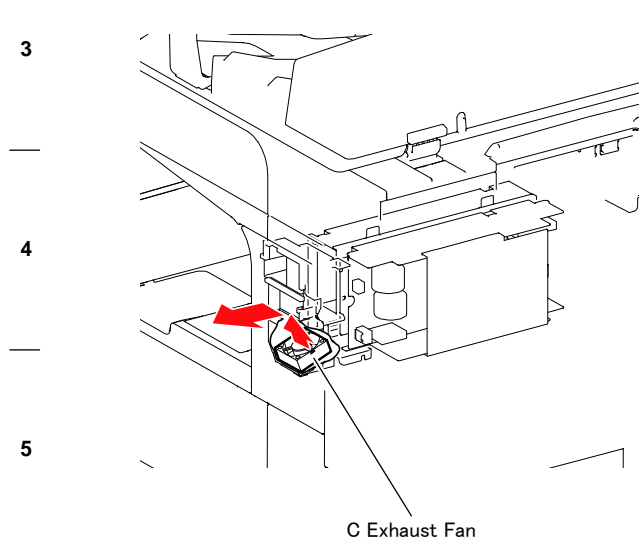
730401\_SPY.VSD

Figure 1 BSD 4.1 Main Drive Control

# BSD 4.2 Drive Unit Cooling



## ELECTRICAL COMPONENTS



**FAIL CODE**  
 342-344  
 C Exhaust Fan Fail  
 (7845/55)

j0kt730402

10/12/12

730402\_SPY.VSD

Figure 2 BSD 4.2 Drive Unit Cooling

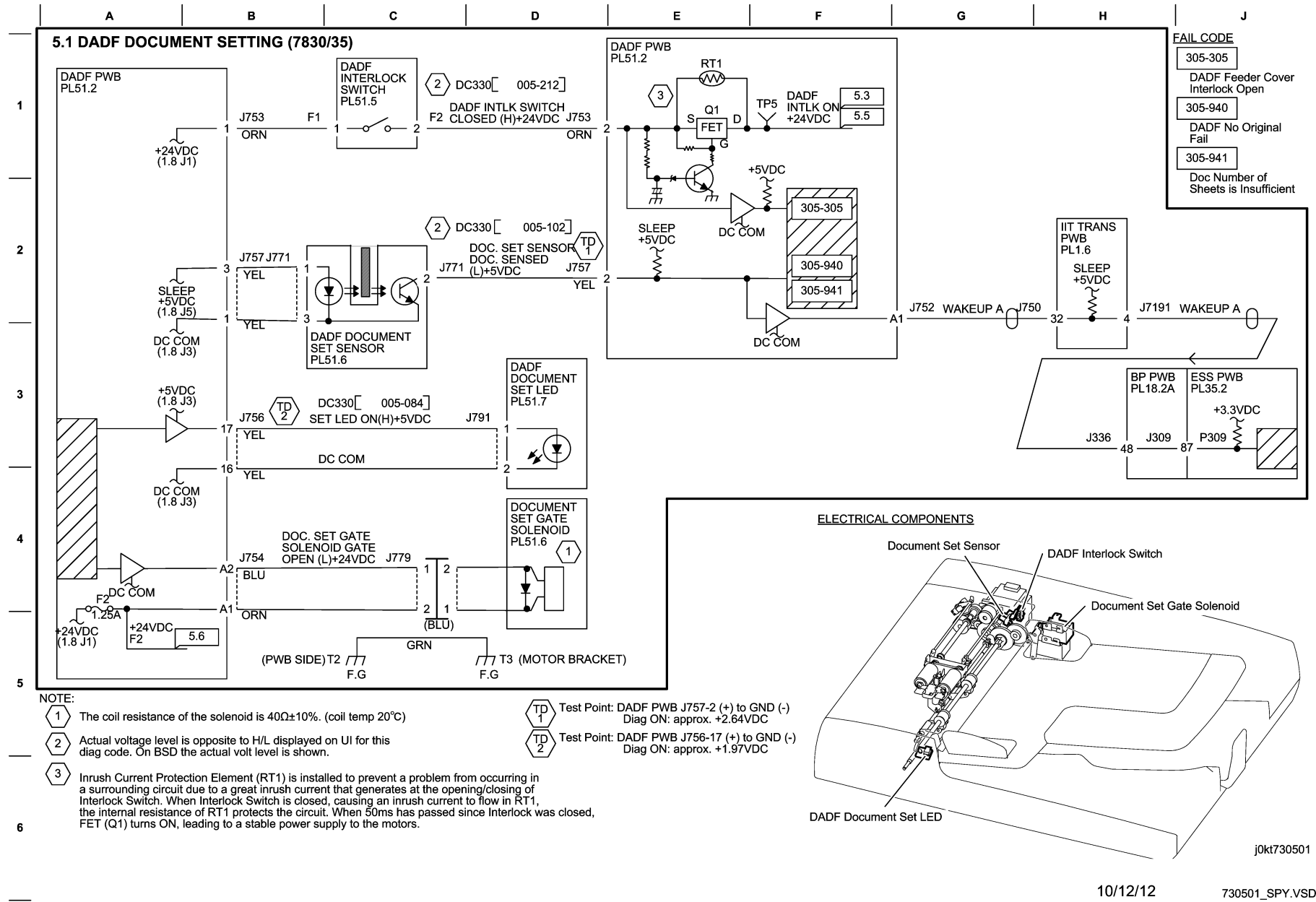
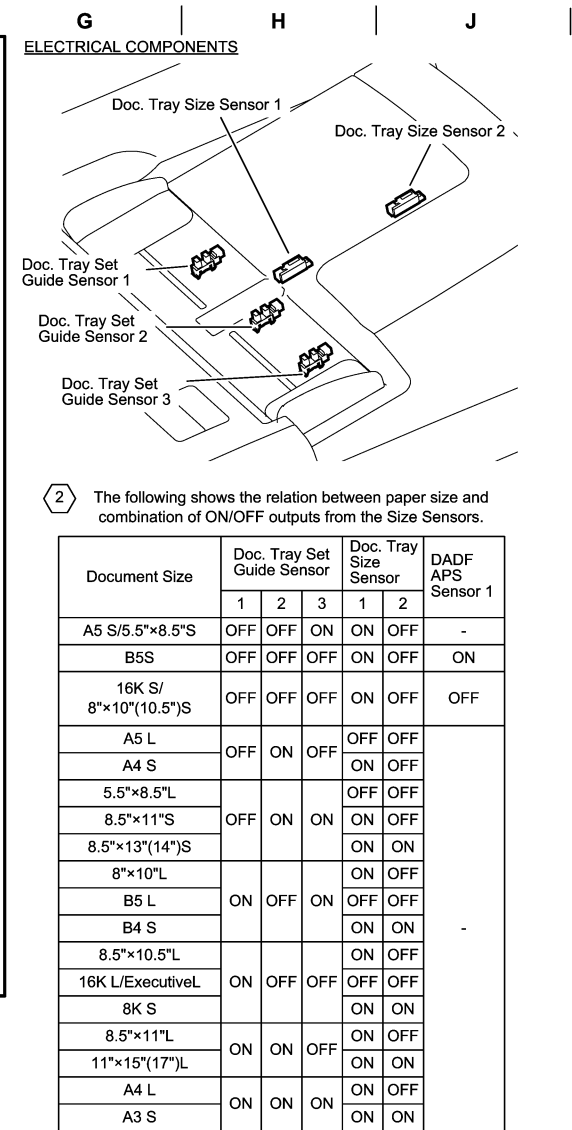
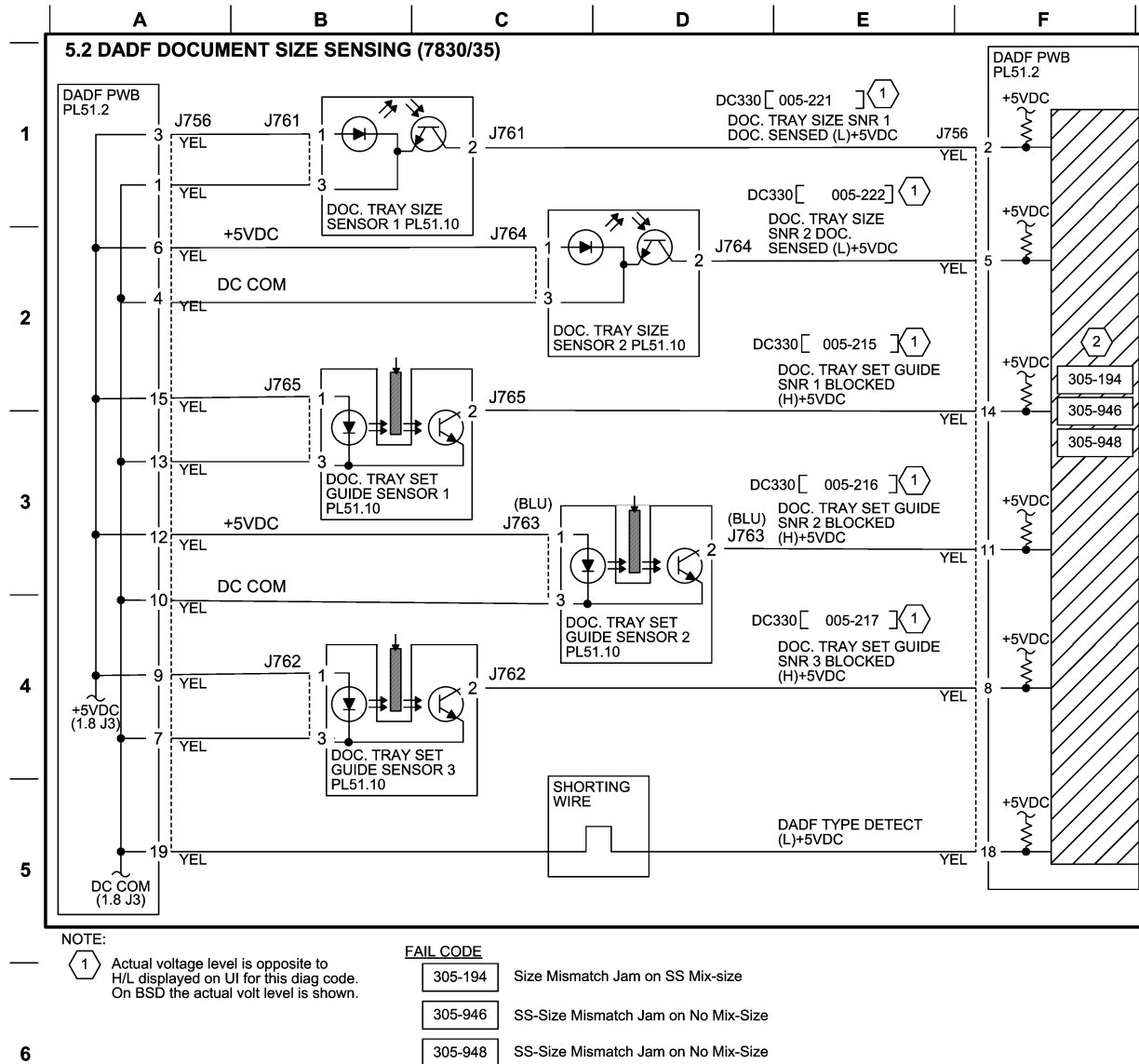


Figure 1 BSD 5.1 DADF Document Setting (7830/35)

# BSD 5.2 DADF Document Size Sensing (7830/35)



j0k730502

10/05/12

730502\_SPY.VSD

Figure 2 BSD 5.2 DADF Document Size Sensing (7830/35)

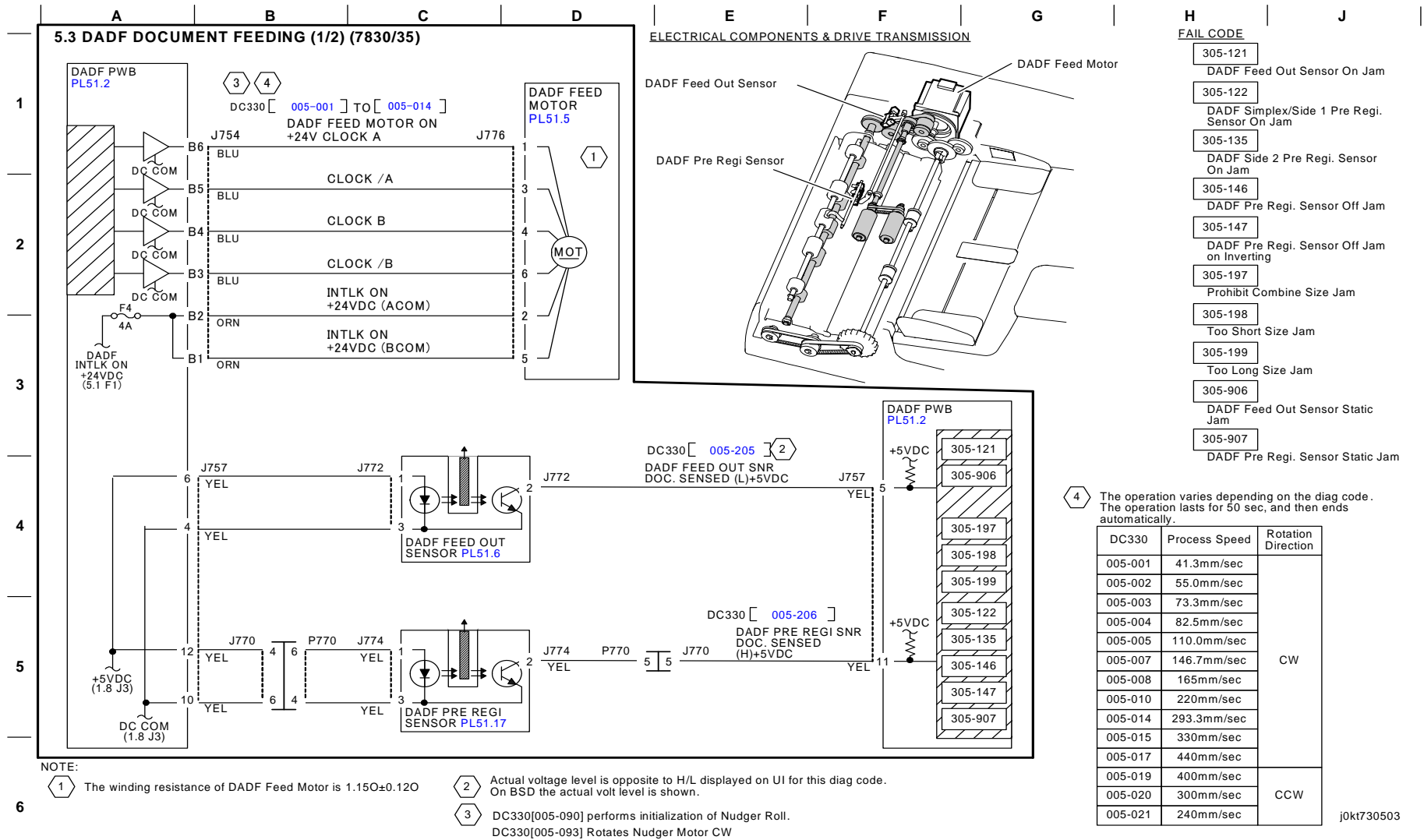
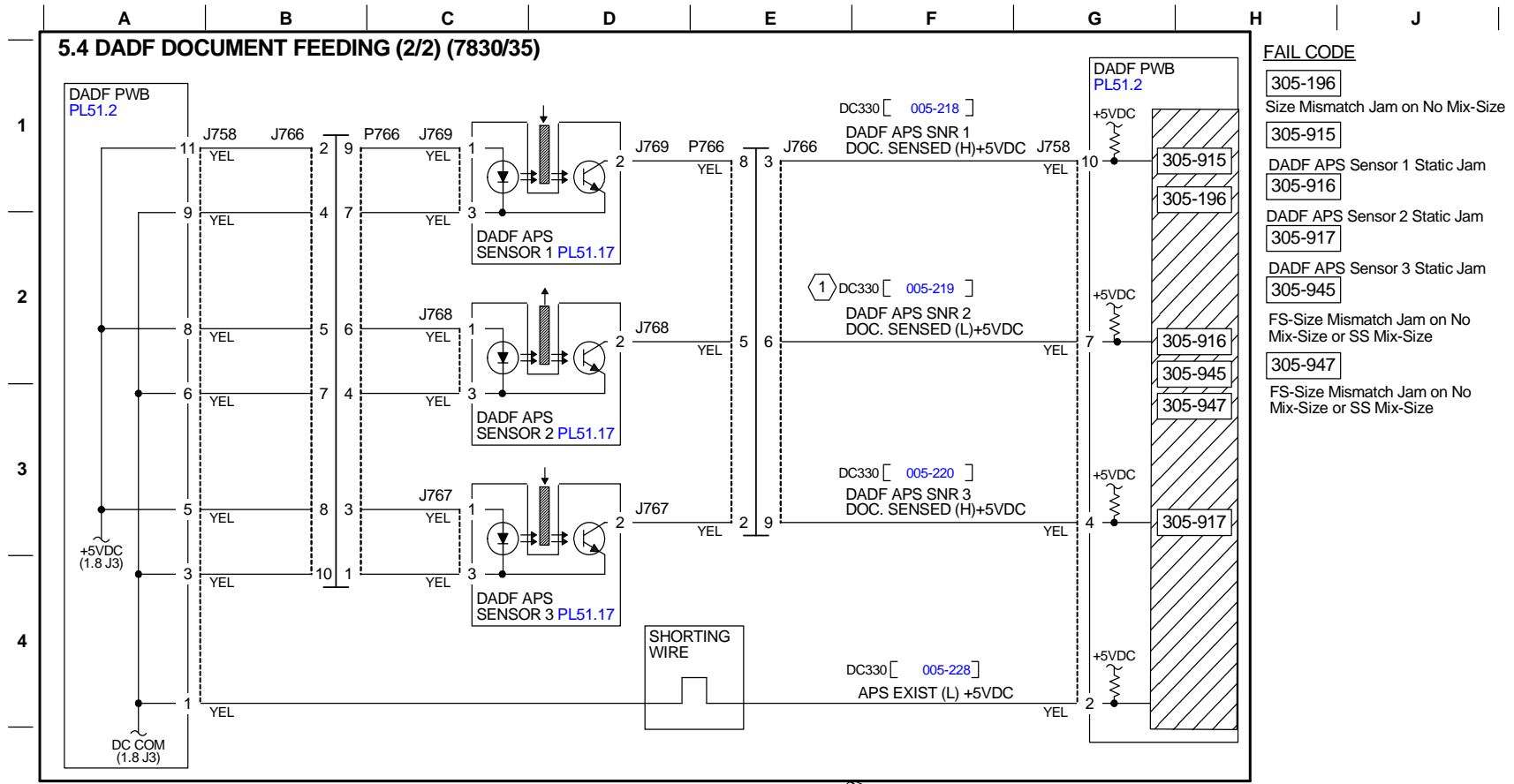


Figure 3 BSD 5.3 DADF Document Feeding (1 of 2) (7830/35)



NOTE:

① Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual voltage level is shown.

ELECTRICAL COMPONENTS

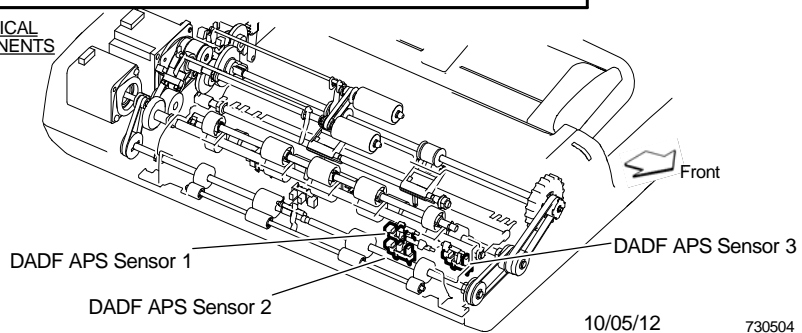
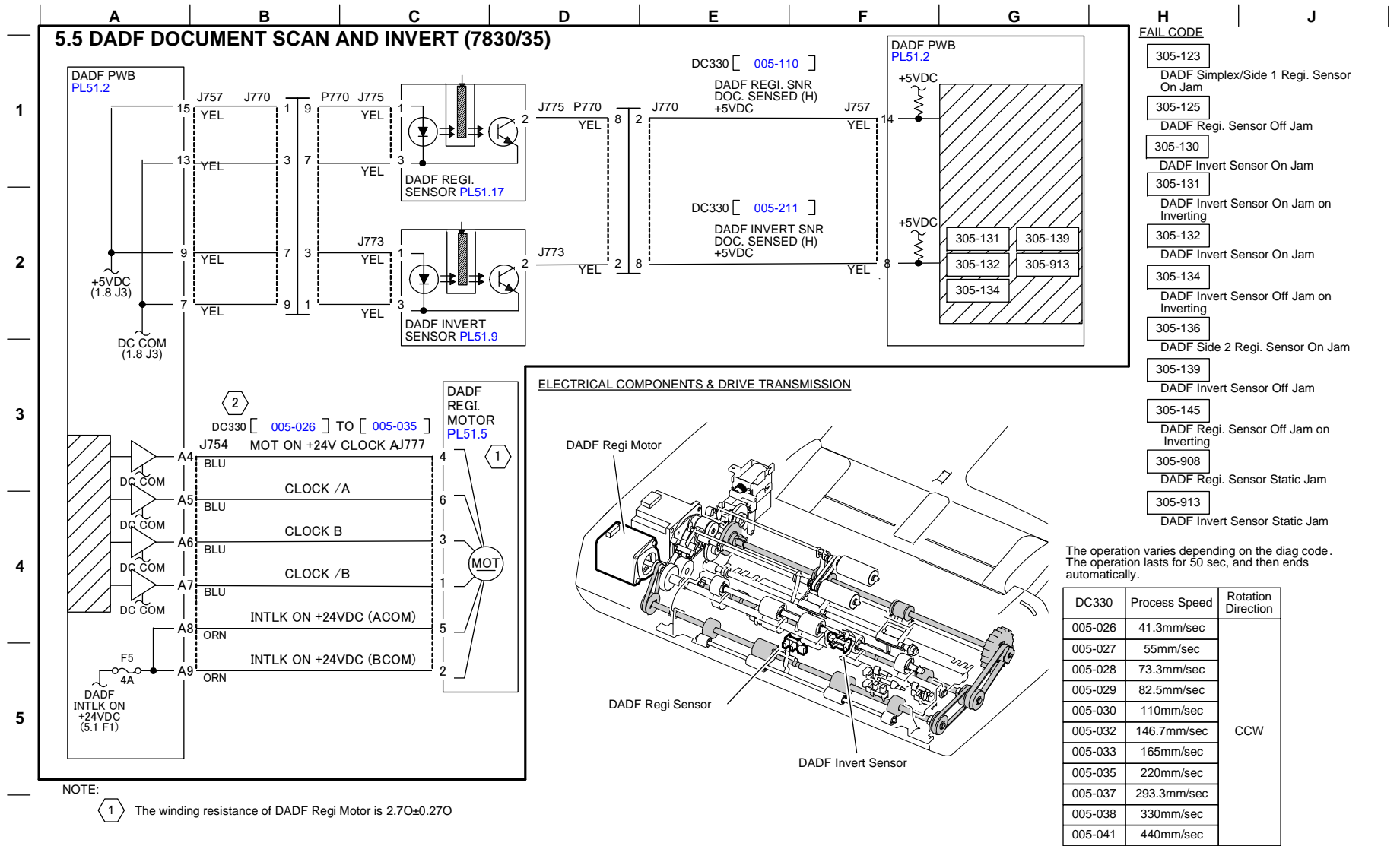


Figure 4 BSD 5.4 Document Feeding (2 of 2) (7830/35)

**BSD 5.5 DADF Document Scan and Invert (7830/35)**



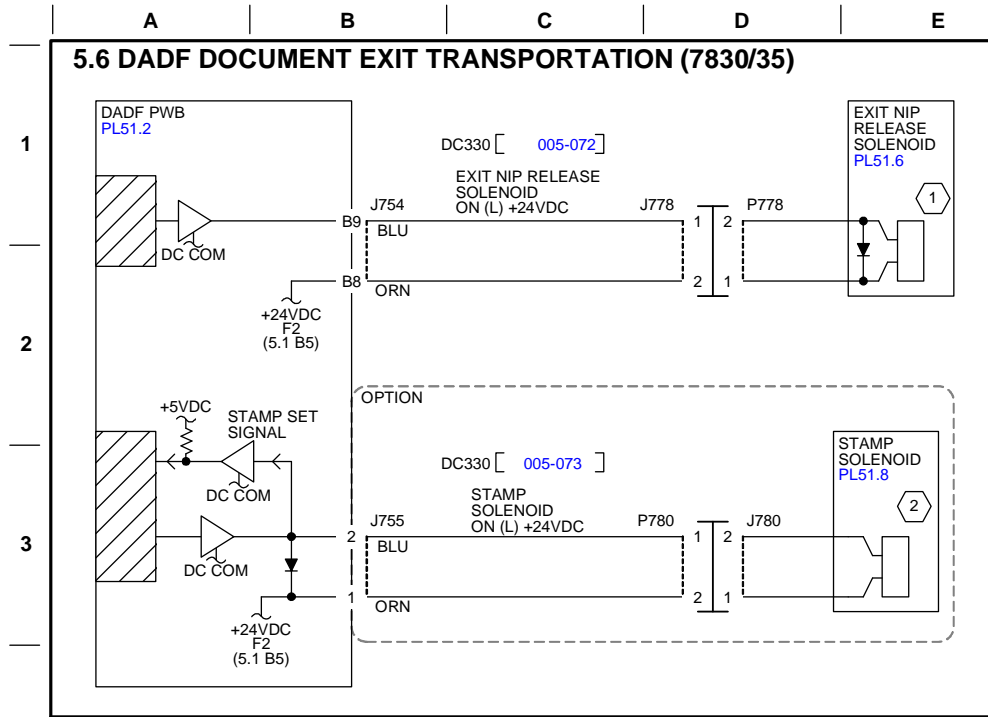
j0kt730505

10/05/12

730505\_SPY.VSD

**Figure 5 BSD 5.5 DADF Document Scan and Invert (7830/35)**

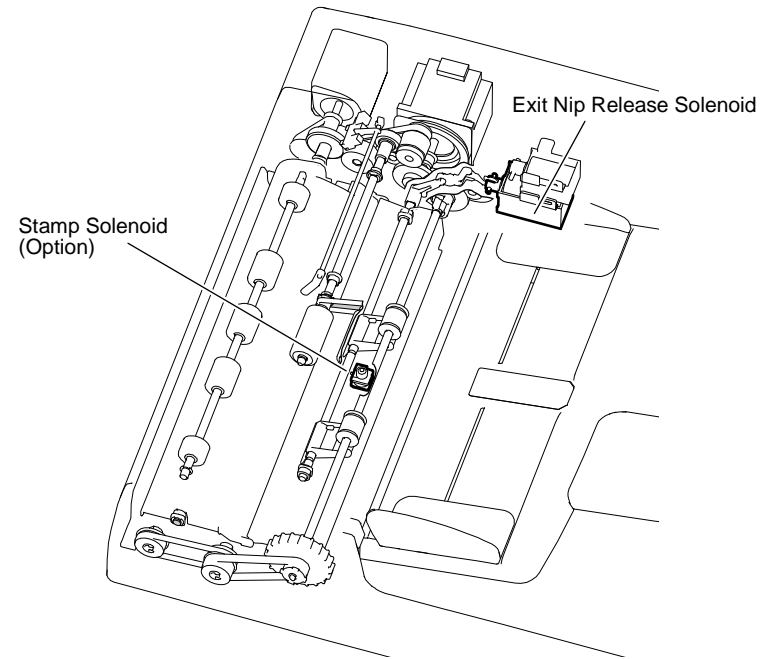




NOTE:

- ① The coil resistance of Exit Nip Release Solenoid is  $500 \pm 10\%$  (coil temp 20° )
- ② The coil resistance of Stamp Solenoid is  $600 \pm 10\%$  (coil temp 20° )

ELECTRICAL COMPONENTS



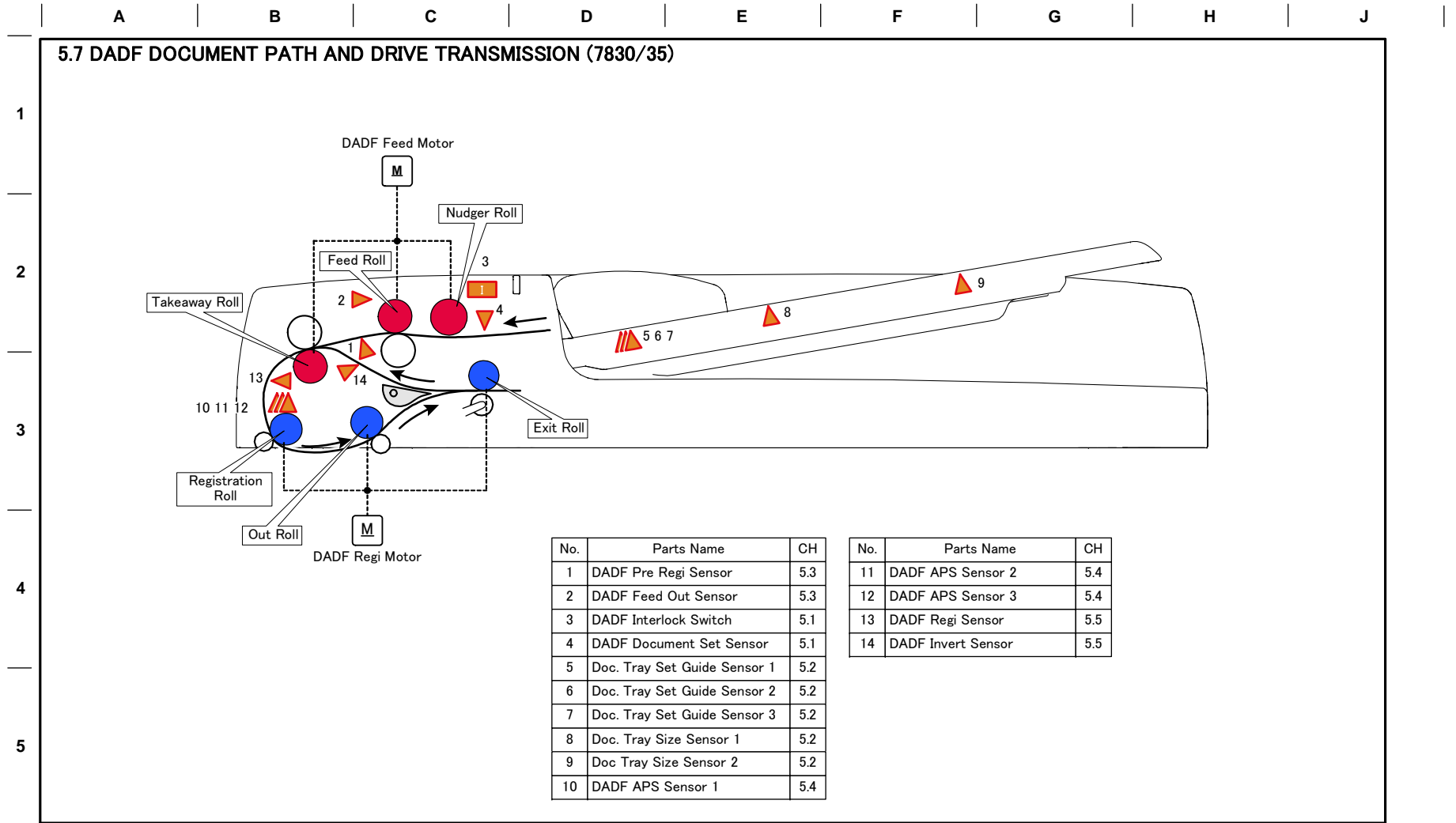
j0kt730506

10/05/12

730506\_SPY.VSD

Figure 6 BSD 5.6 DADF Document Exit (7830/35)

**BSD 5.7 DADF Document Path and Drive (7830/35)**



The meaning of symbols: **M** Stepping Motor **▼** Sensor

NOTE: The position of motors and sensors on the figure is different from the actual one.

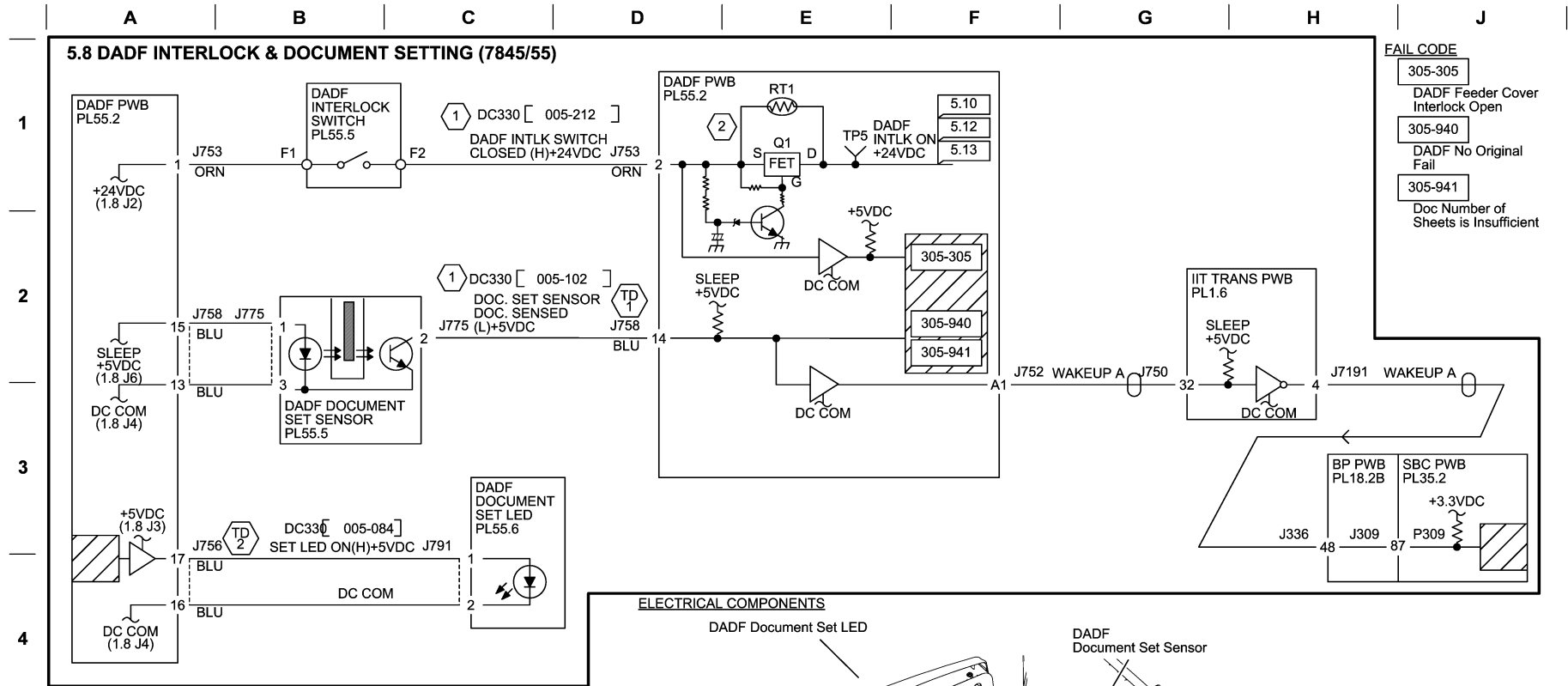
j0kt730507

10/05/12

730507\_SPY.VSD

**Figure 7 BSD 5.7 DADF Document Path and Drive (7830/35)**

# BSD 5.8 DADF Interlock & Document Setting (7845/55)



**NOTE:**

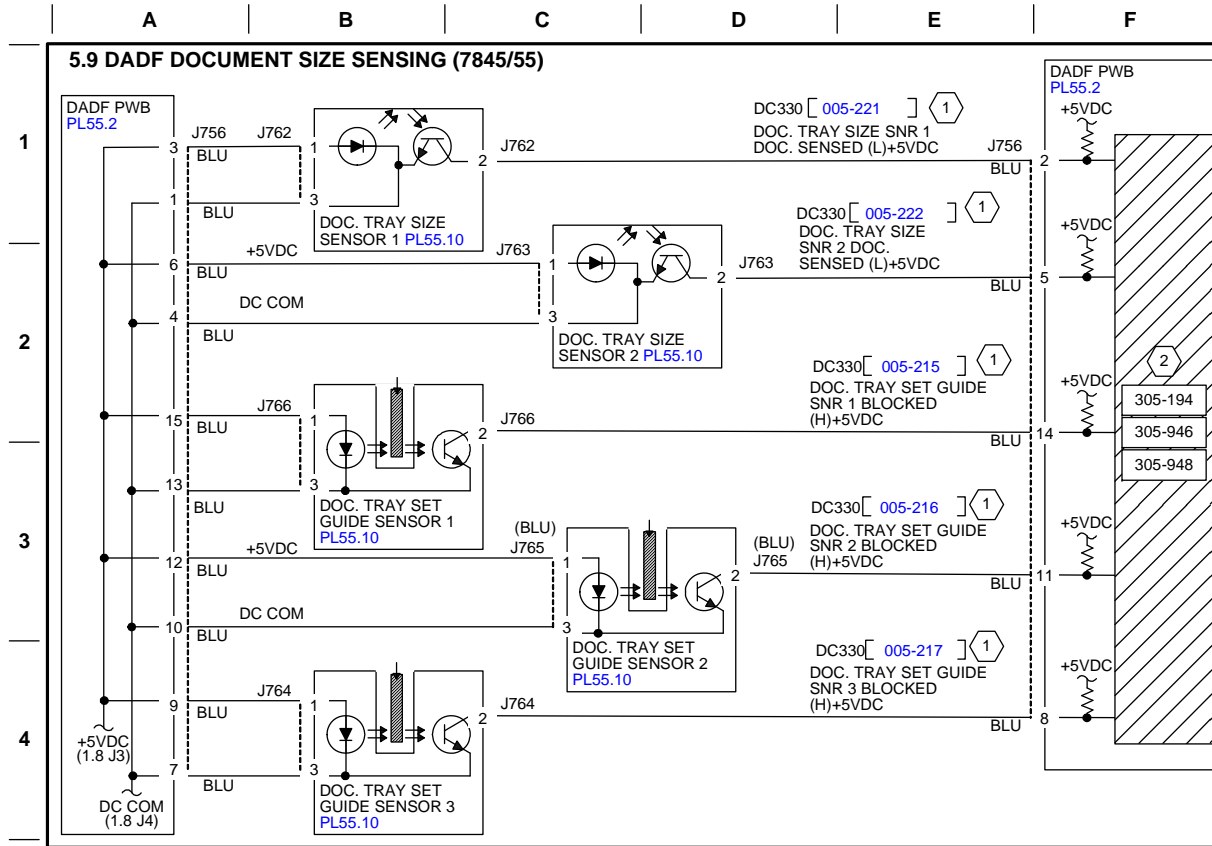
- 1 Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.
- 2 Inrush Current Protection Element (RT1) is installed to prevent a problem from occurring in a surrounding circuit due to a great inrush current that generates at the opening/closing of Interlock Switch. When Interlock Switch is closed, causing an inrush current to flow in RT1, the internal resistance of RT1 protects the circuit. When 50ms has passed since Interlock was closed, FET (Q1) turns ON, leading to a stable power supply to the motors.
- TD1 Test Point: DADF PWB J758-14 (+) to GND (-)  
Diag ON: approx. +2.63VDC
- TD2 Test Point: DADF PWB J756-17 (+) to GND (-)  
Diag ON: approx. +1.99VDC

j0k1730508

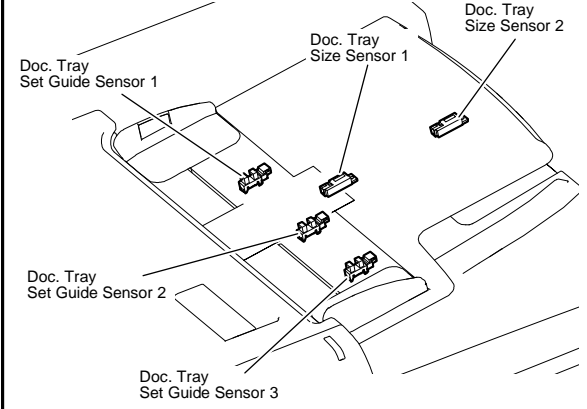
10/12/12 730508\_SPY.VSD

Figure 8 BSD 5.8 DADF Interlock & Document Setting (7845/55)

# BSD 5.9 DADF Document Size Sensing (7845/55)



## ELECTRICAL COMPONENTS



2 The following shows the relation between paper size and combination of ON/OFF outputs from the Size Sensors.

Document Size	DOC. Tray Set Guide Sensor			DOC. Tray Size Sensor		DADF APS Sensor 1
	1	2	3	1	2	
A5 S/5.5"x8.5"S	OFF	OFF	ON	ON	OFF	-
B5S	OFF	OFF	OFF	ON	OFF	ON
16K S/8"x10"(10.5")S	OFF	OFF	OFF	ON	OFF	OFF
A5 L	OFF	ON	OFF	OFF	OFF	-
A4 S	OFF	ON	OFF	ON	OFF	
5.5"x8.5"L	OFF	ON	ON	OFF	OFF	
8.5"x11"S	OFF	ON	ON	ON	OFF	
8.5"x13"(14")S	OFF	ON	ON	ON	ON	
8"x10"L	OFF	ON	ON	ON	OFF	
B5 L	ON	OFF	ON	OFF	OFF	
B4 S	ON	OFF	ON	ON	ON	
8.5"x10.5"L	ON	OFF	OFF	ON	OFF	
16K L/ExecutiveL	ON	OFF	OFF	OFF	OFF	
8K S	ON	OFF	OFF	ON	ON	
8.5"x11"L	ON	ON	OFF	ON	OFF	
11"x15"(17")L	ON	ON	OFF	ON	ON	
A4 L	ON	ON	ON	ON	OFF	
A3 S	ON	ON	ON	ON	ON	

NOTE:  
1 Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

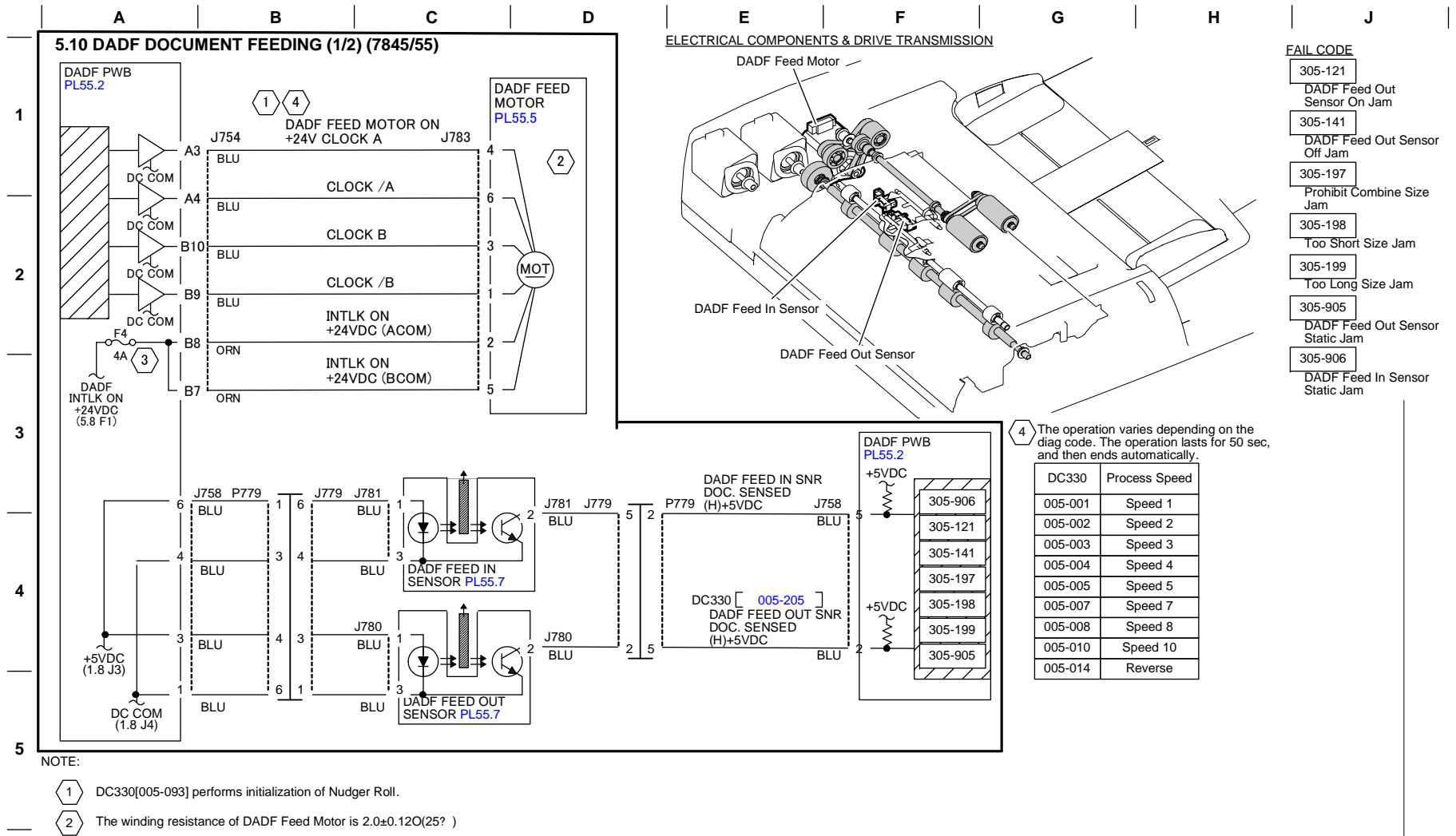
FAIL CODE	
305-194	Size Mismatch Jam on SS Mix-size
305-946	SS-Size Mismatch Jam on No Mix-Size
305-948	SS-Size Mismatch Jam on No Mix-Size

j0kt730509

10/05/12 730509.SPY.VSD

Figure 9 BSD 5.9 DADF Document Size Sensing (7845/55)

**BSD 5.10 DADF Document Feeding (7845/55) (1 of 2)**

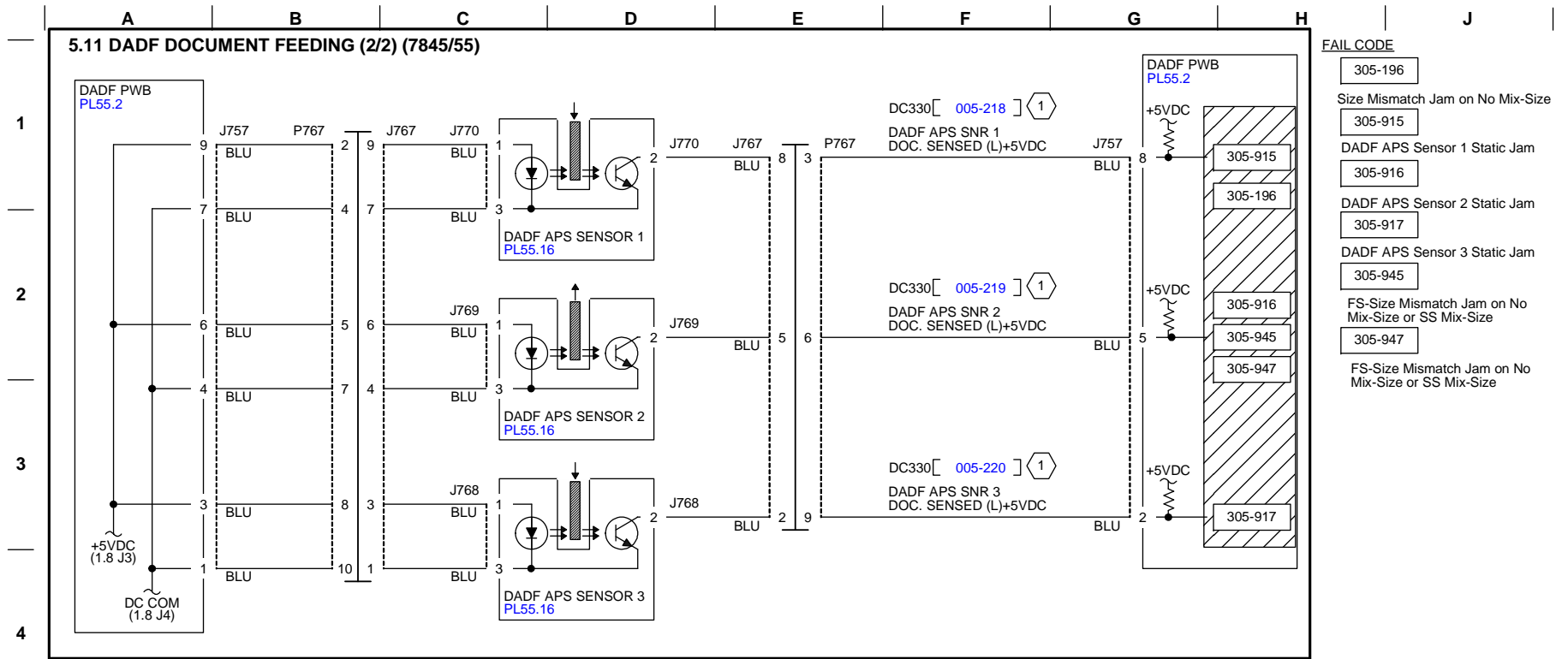


jokt730510

10/05/12 730510.SPY.VSD

**Figure 10 BSD 5.10 DADF Document Feeding (7845/55) (1 of 2)**

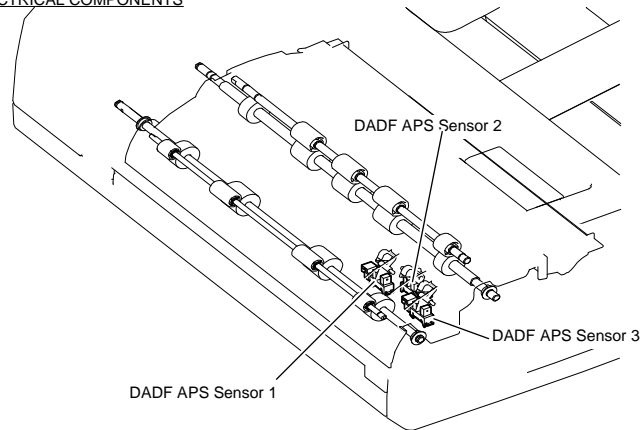
**BSD 5.11 DADF Document Feeding (7845/55) (2 of 2)**



**NOTE:**

1 Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

**ELECTRICAL COMPONENTS**

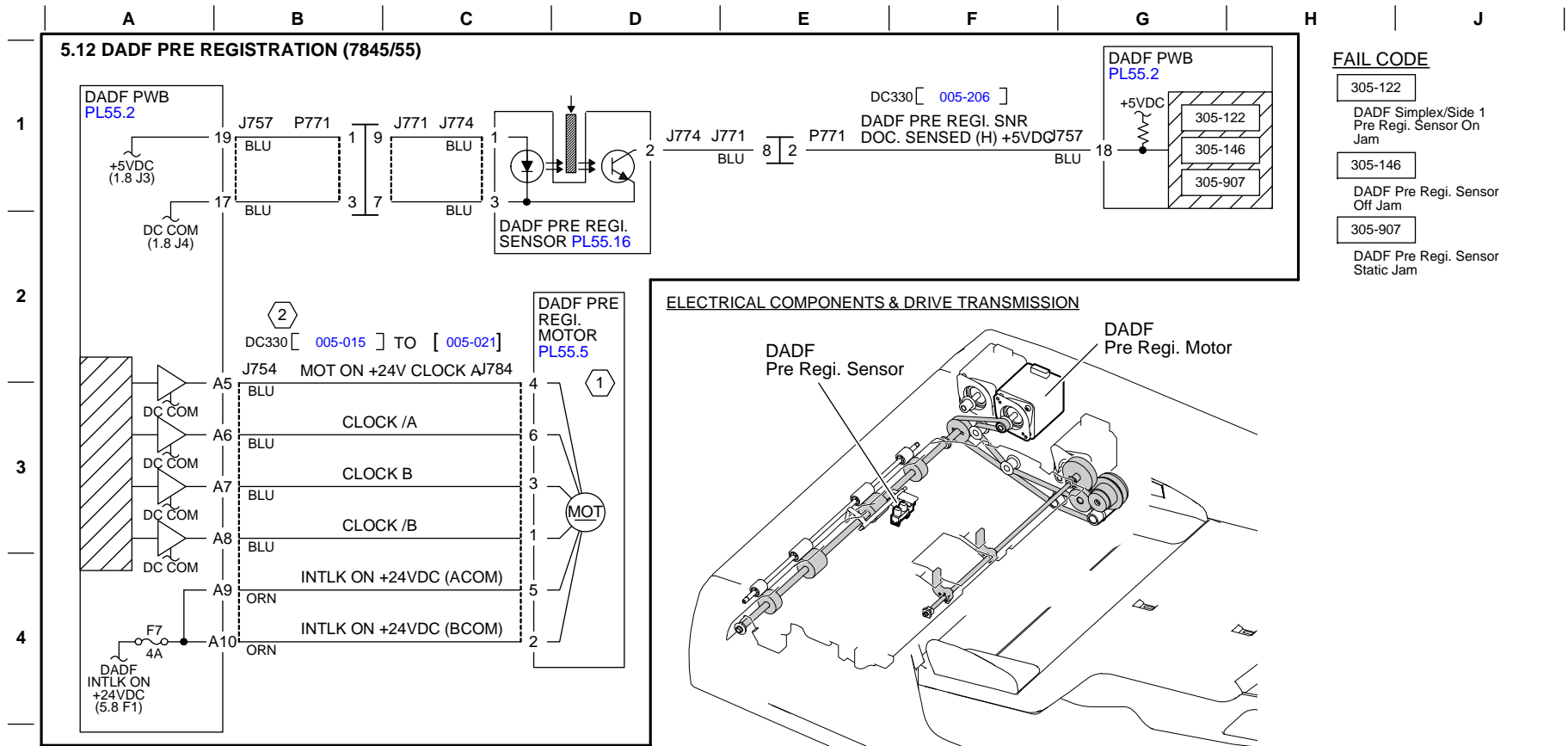


j0kt730511

10/05/12 730511\_SPY.VSD

**Figure 11 BSD 5.11 DADF Document Feeding (7845/55) (2 of 2)**

# BSD 5.12 DADF Pre Registration (7845/55)



### FAIL CODE

- 305-122  
DADF Simplex/Side 1 Pre Regi. Sensor On Jam
- 305-146  
DADF Pre Regi. Sensor Off Jam
- 305-907  
DADF Pre Regi. Sensor Static Jam

### NOTE:

- 1 The winding resistance of DADF Pre Regi Motor is 2.70±0.27Ω.
- 2 The operation varies depending on the diag code. The operation lasts for 50 sec, and then ends automatically.

DC330	Process Speed	DC330	Process Speed
005-015	Speed 1	005-019	Speed 5
005-016	Speed 2	005-020	Speed 6
005-017	Speed 3	005-021	Speed 7
005-018	Speed 4		

j0kt730512

10/05/12 730512\_SPY.VSD

Figure 12 BSD 5.12 DADF Pre Registration (7845/55)

# BSD 5.13 DADF Registration (7845/55)

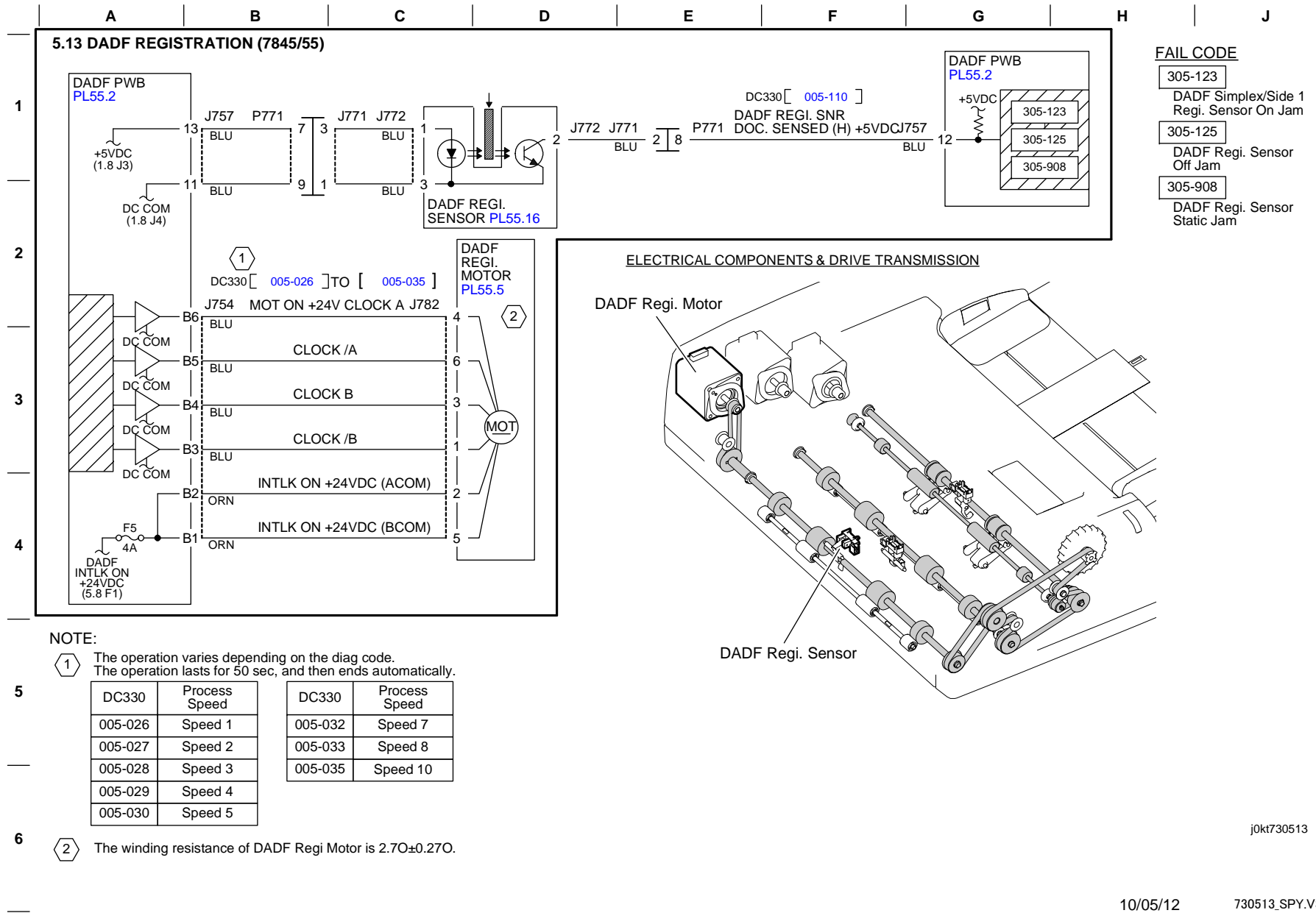
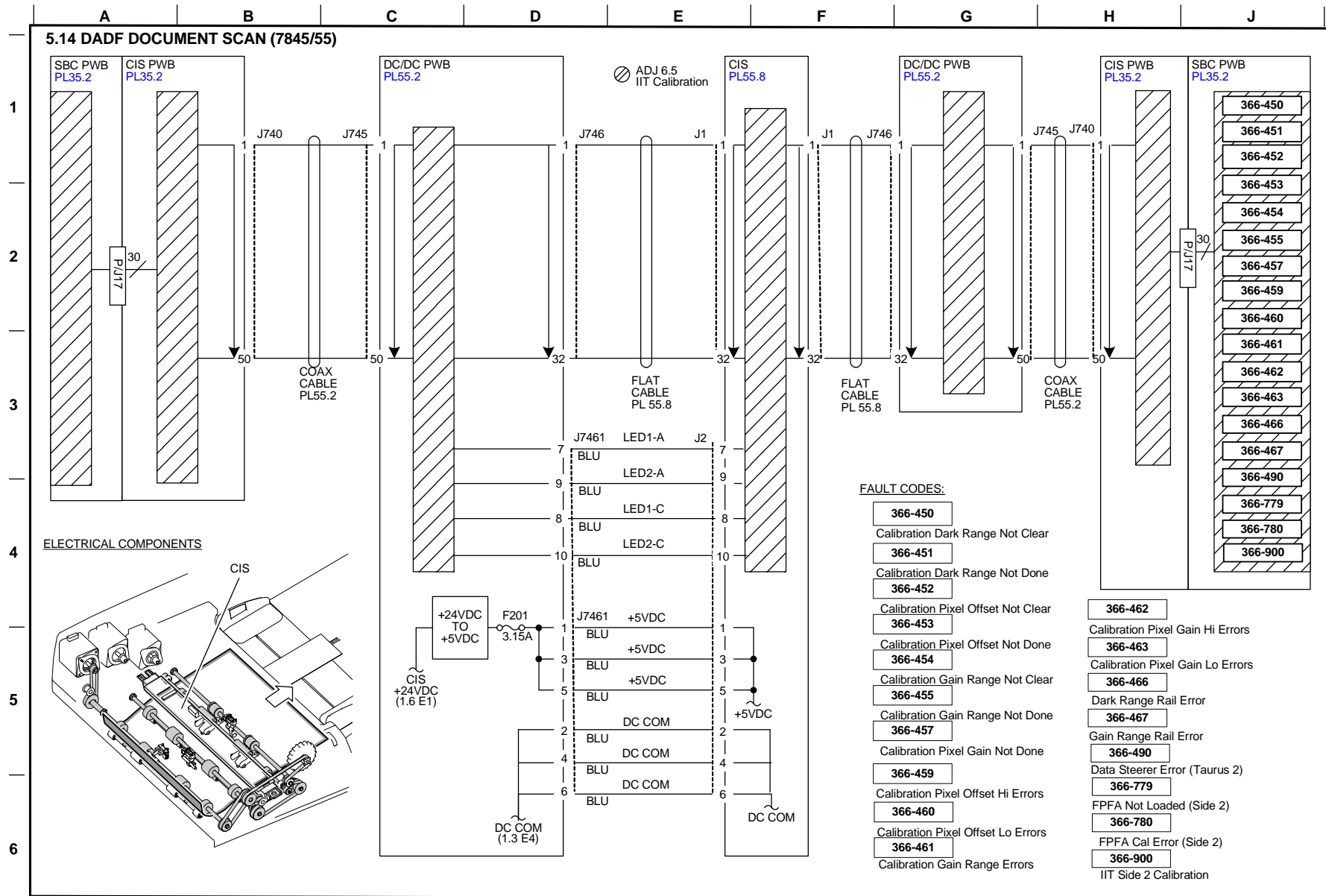


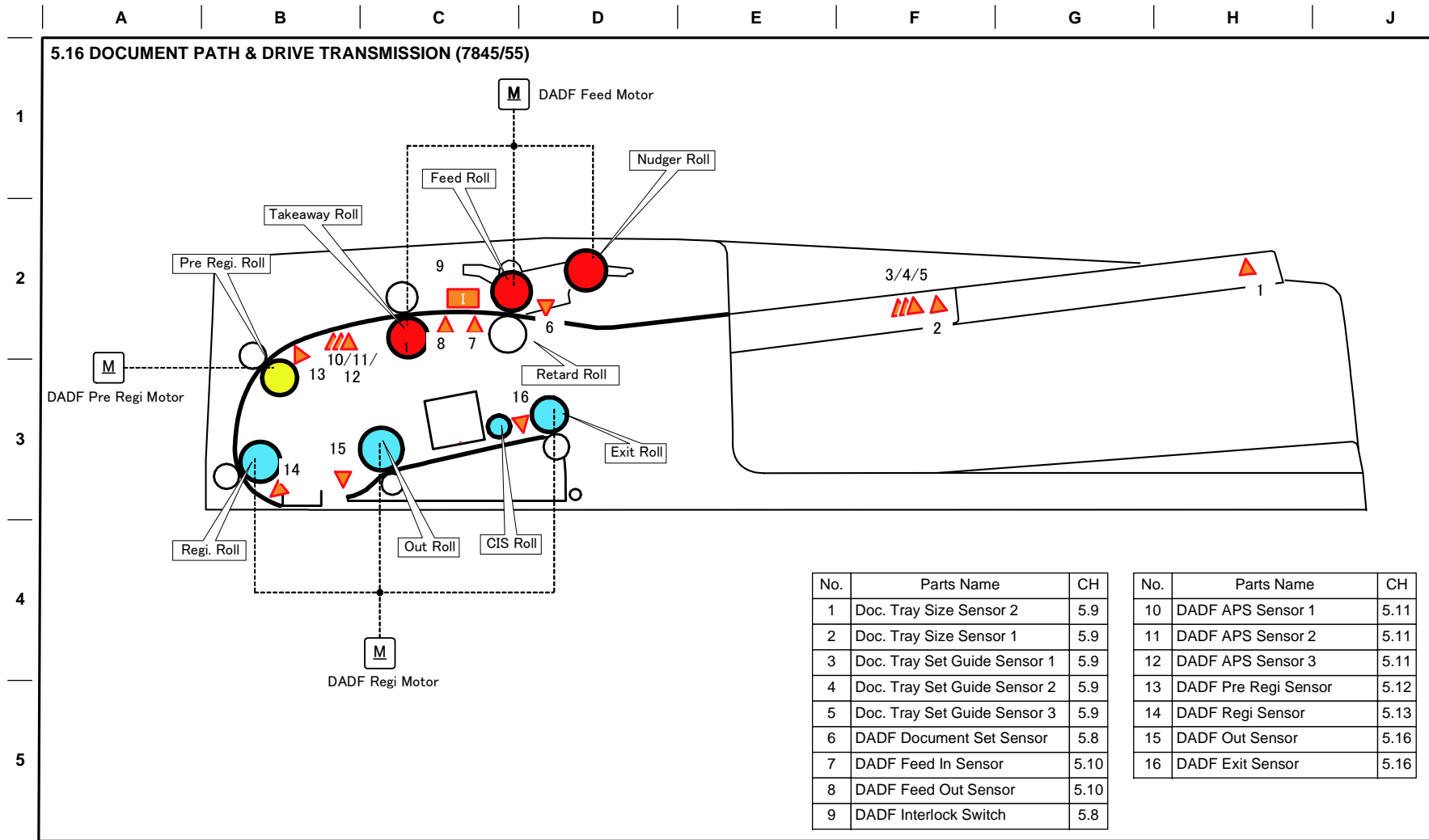
Figure 13 BSD 5.13 DADF Registration (7845/55)





10/09/12 730518\_SPY.VSD

Figure 14 BSD 5.14 DADF Document Scan (7845/55)



No.	Parts Name	CH
1	Doc. Tray Size Sensor 2	5.9
2	Doc. Tray Size Sensor 1	5.9
3	Doc. Tray Set Guide Sensor 1	5.9
4	Doc. Tray Set Guide Sensor 2	5.9
5	Doc. Tray Set Guide Sensor 3	5.9
6	DADF Document Set Sensor	5.8
7	DADF Feed In Sensor	5.10
8	DADF Feed Out Sensor	5.10
9	DADF Interlock Switch	5.8

No.	Parts Name	CH
10	DADF APS Sensor 1	5.11
11	DADF APS Sensor 2	5.11
12	DADF APS Sensor 3	5.11
13	DADF Pre Regi Sensor	5.12
14	DADF Regi Sensor	5.13
15	DADF Out Sensor	5.16
16	DADF Exit Sensor	5.16

The meaning of symbols: **M** Stepping Motor    **▼** Sensor

NOTE: The position of motors and sensors on the figure is different from the actual one.

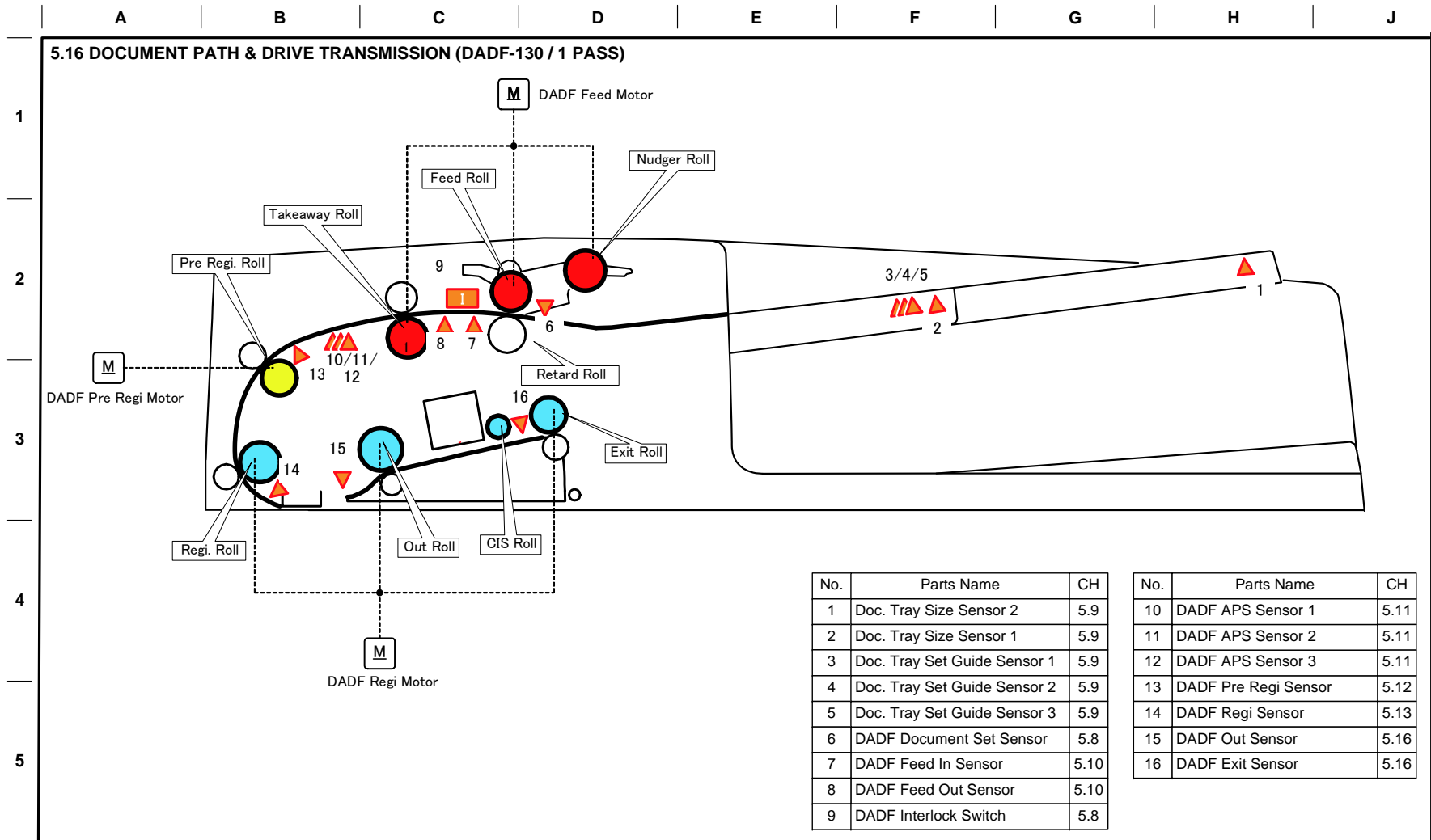
6

j0kt730517

10/05/12    730517\_SPY.VSD

Figure 15 BSD 5.15 DADF Document Exit (7845/55)

# BSD 5.16 Document Path and Drive Transmission (DADF-130 / 1 Pass)



The meaning of symbols: **M** Stepping Motor **▼** Sensor

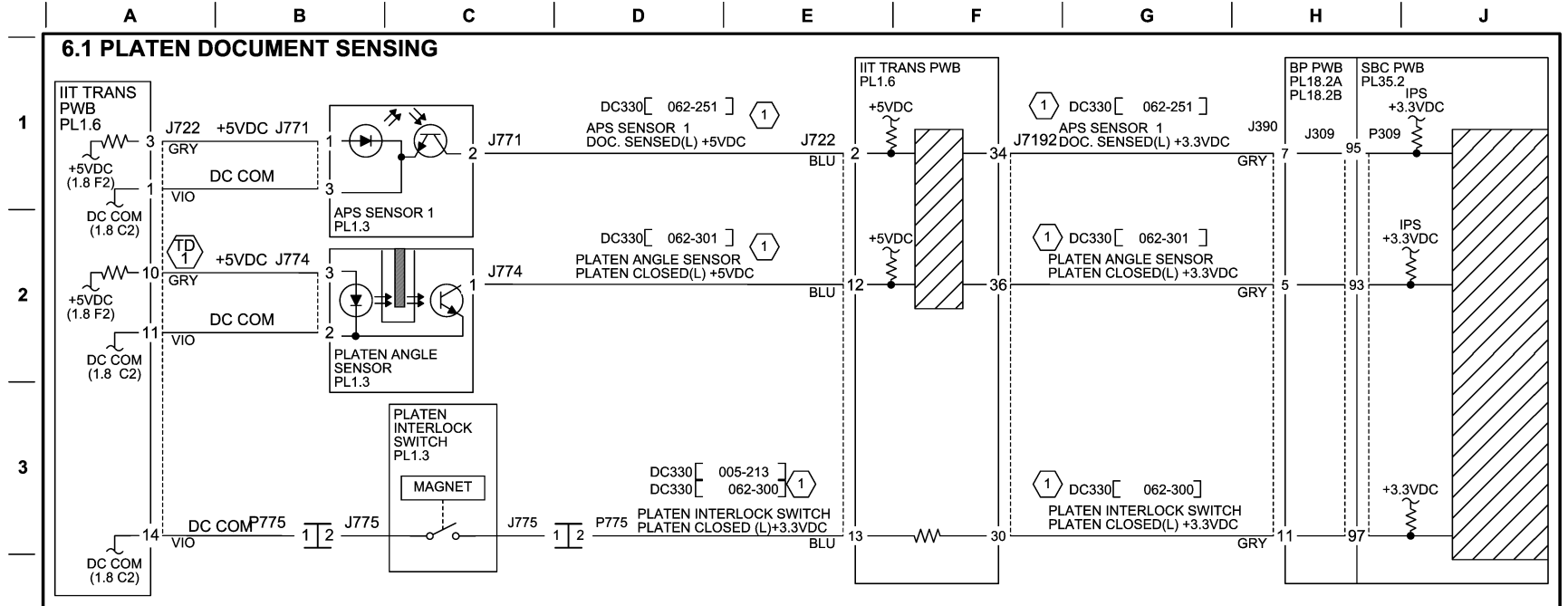
NOTE: The position of motors and sensors on the figure is different from the actual one.

6

j0kt730517

06/05/12 730517\_SPY.VSD

Figure 16 BSD 5.16 Document Path and Drive Transmission (DADF-130 / 1 Pass)

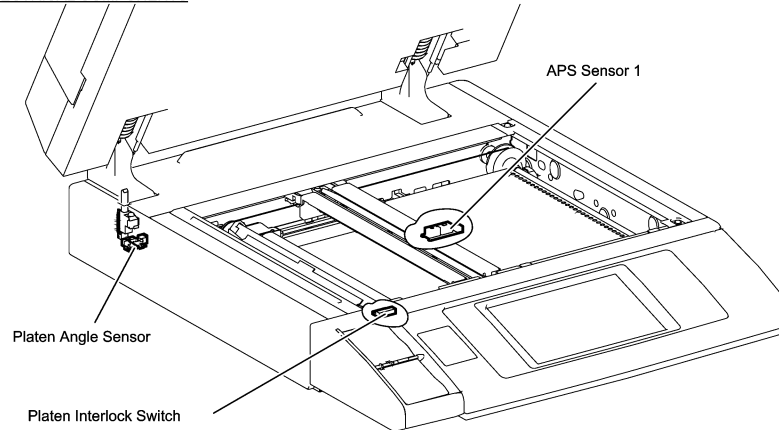


NOTE:

① Actual voltage level is opposite to H/L displayed on UI for this diag code.  
On BSD the actual volt level is shown.

TD ① Test Point: IIT TRANS PWB J722-10 (+) to GND (-)  
With sensor connected, approx. +1.2VDC

ELECTRICAL COMPONENTS



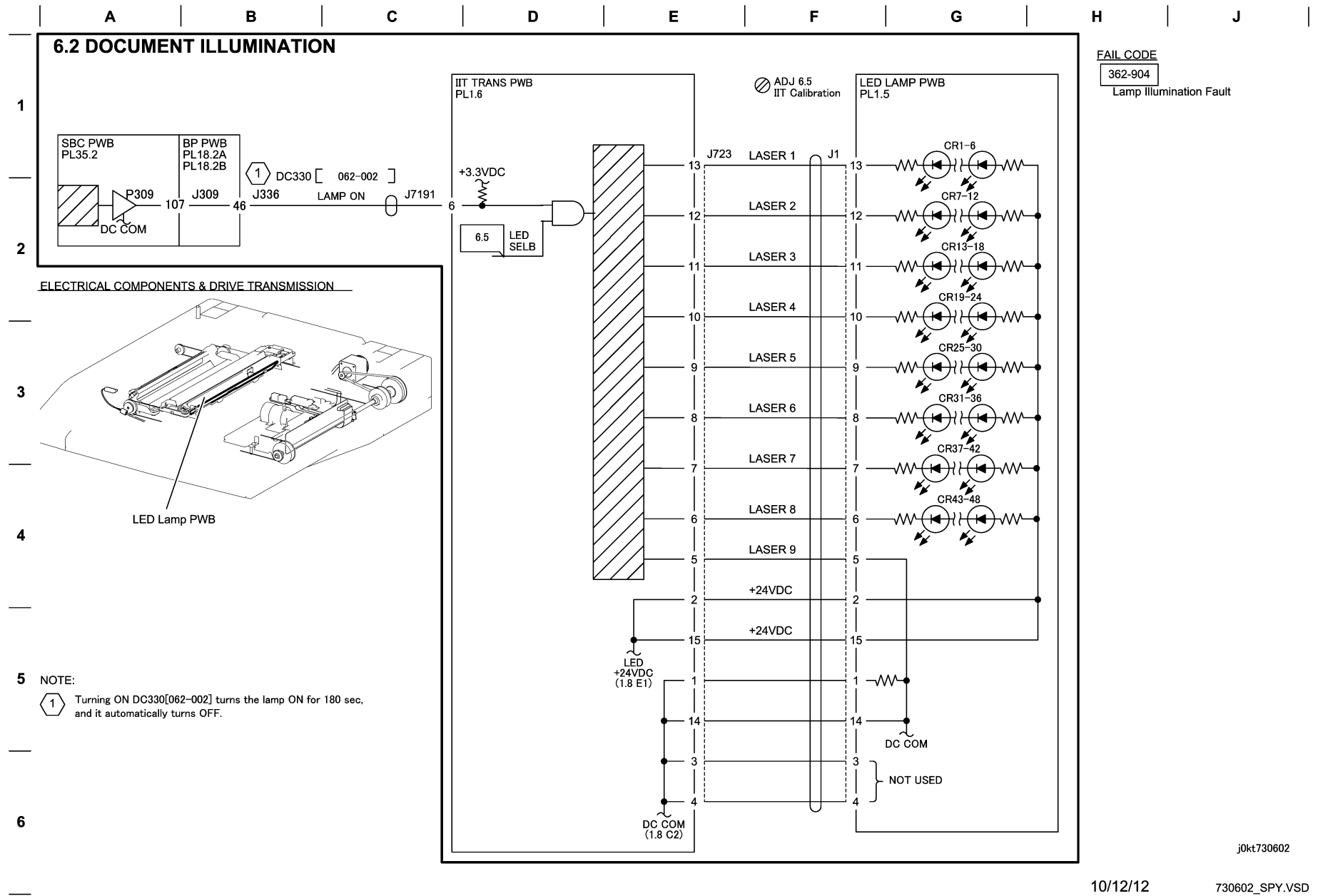
j0kt730601

10/12/12

730601\_SPY.VSD

Figure 1 BSD 6.1 Platen Document Sensing

**BSD 6.2 Document Illumination**



**Figure 2 BSD 6.2 Document Illumination**

# BSD 6.3 Carriage Control

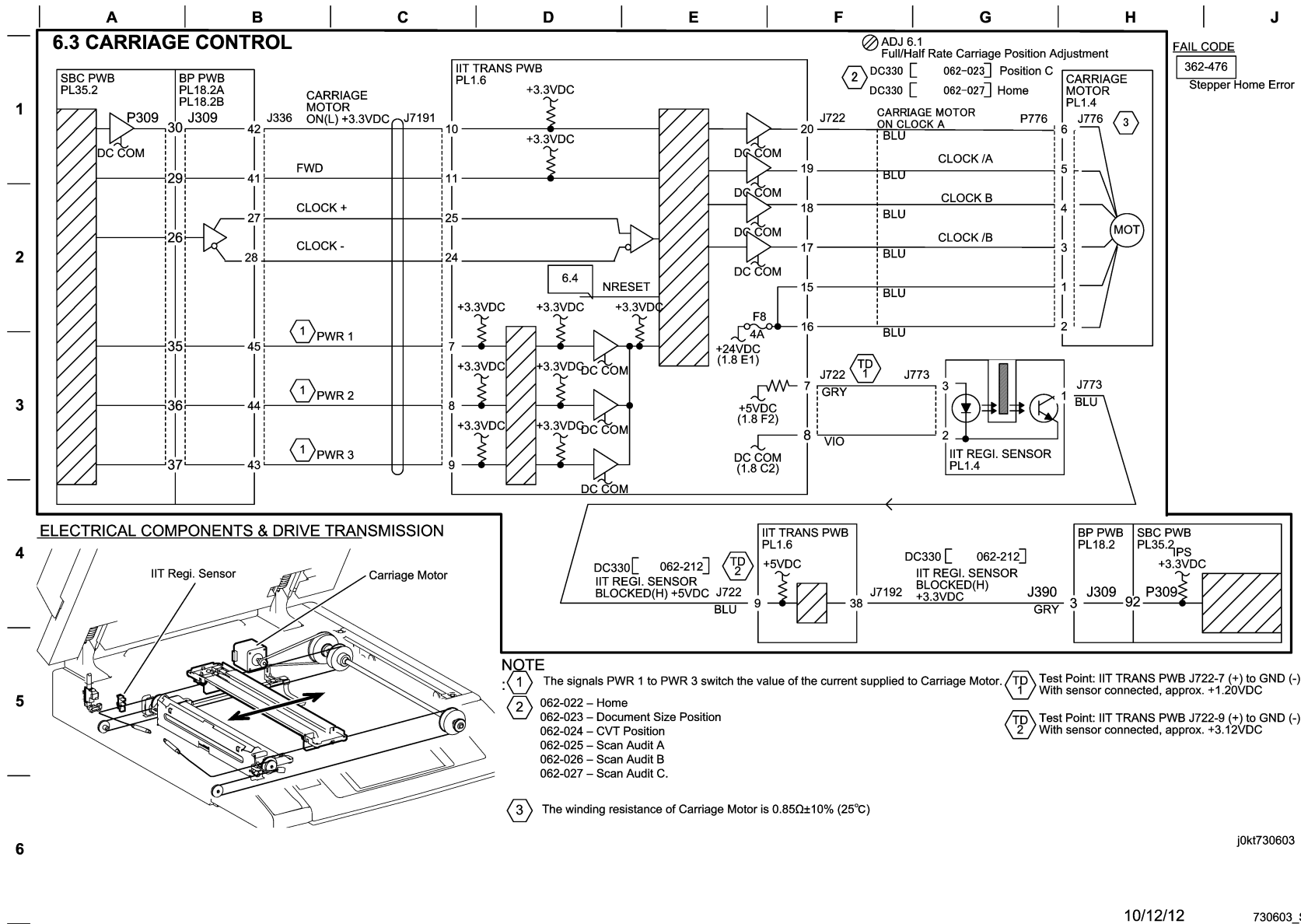


Figure 3 BSD 6.3 Carriage Control

BSD 6.4 Image Input (1 of 2) (SBC to CCD)

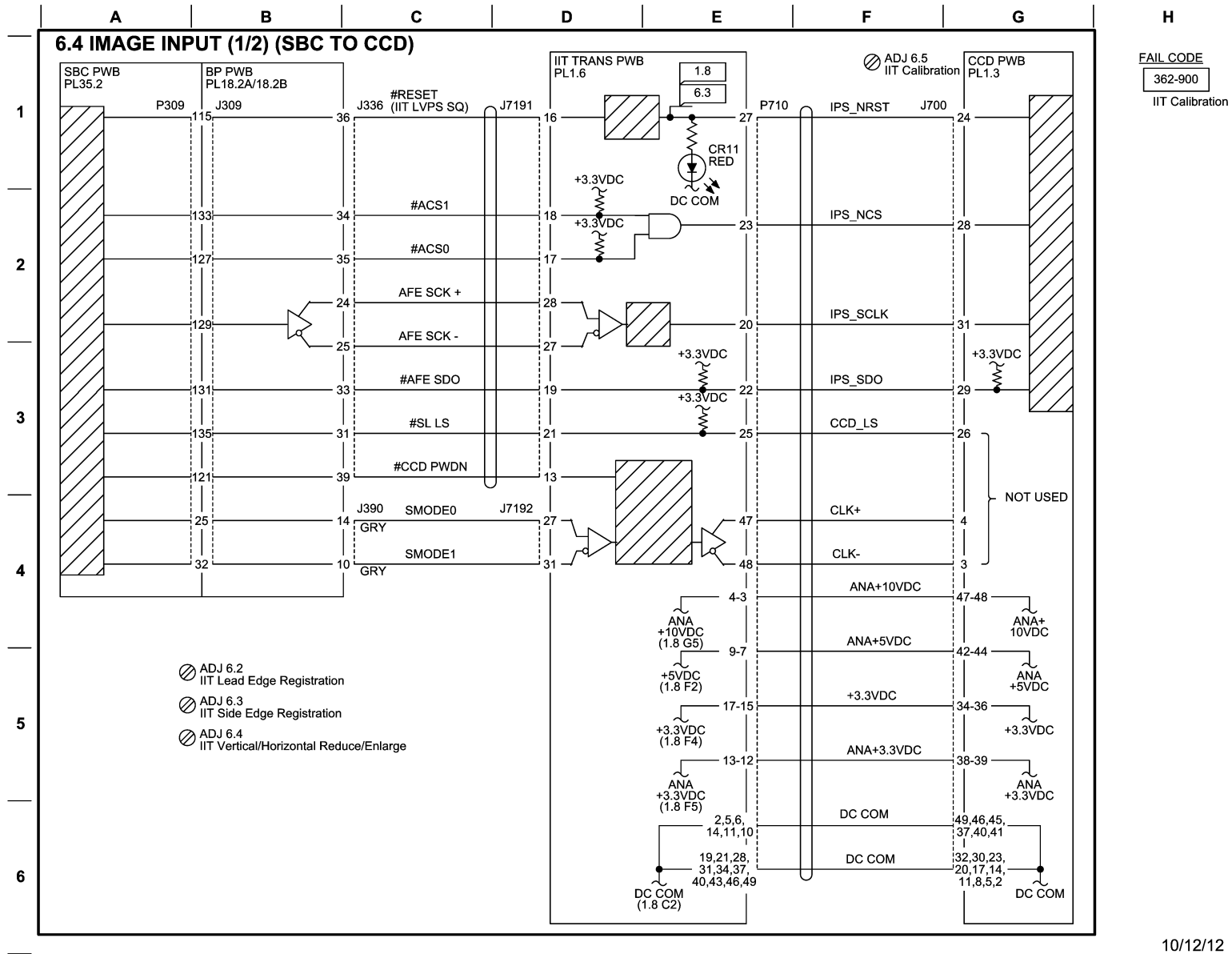
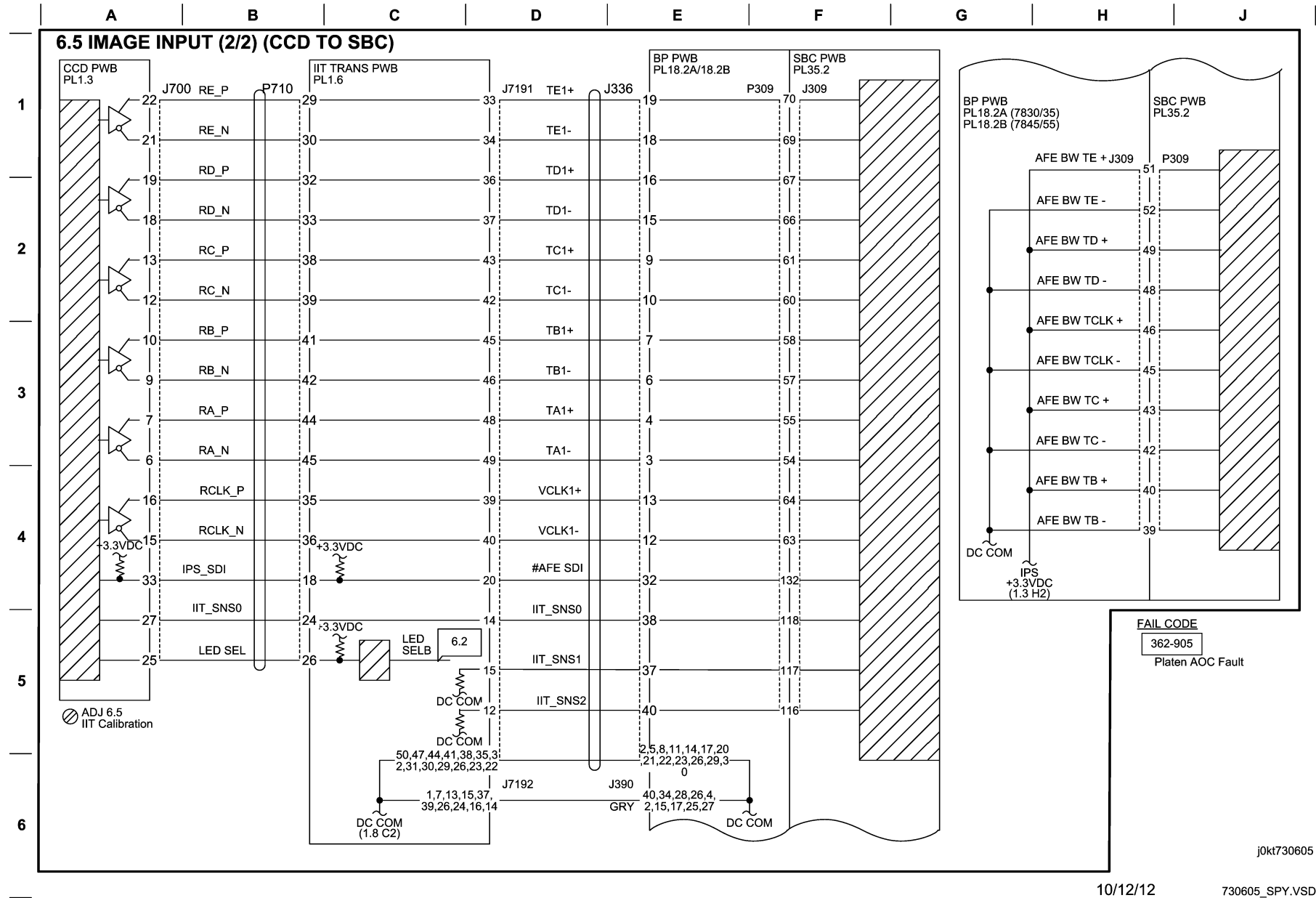


Figure 4 BSD 6.4 Image Input (1 of 2) (SBC to CCD)

**BSD 6.5 Image Input (2 of 2) (CCD to SBC)**



**Figure 5 BSD 6.5 Image Input (2 of 2) (CCD to SBC)**



# BSD 6.6 LPH Control (Y)

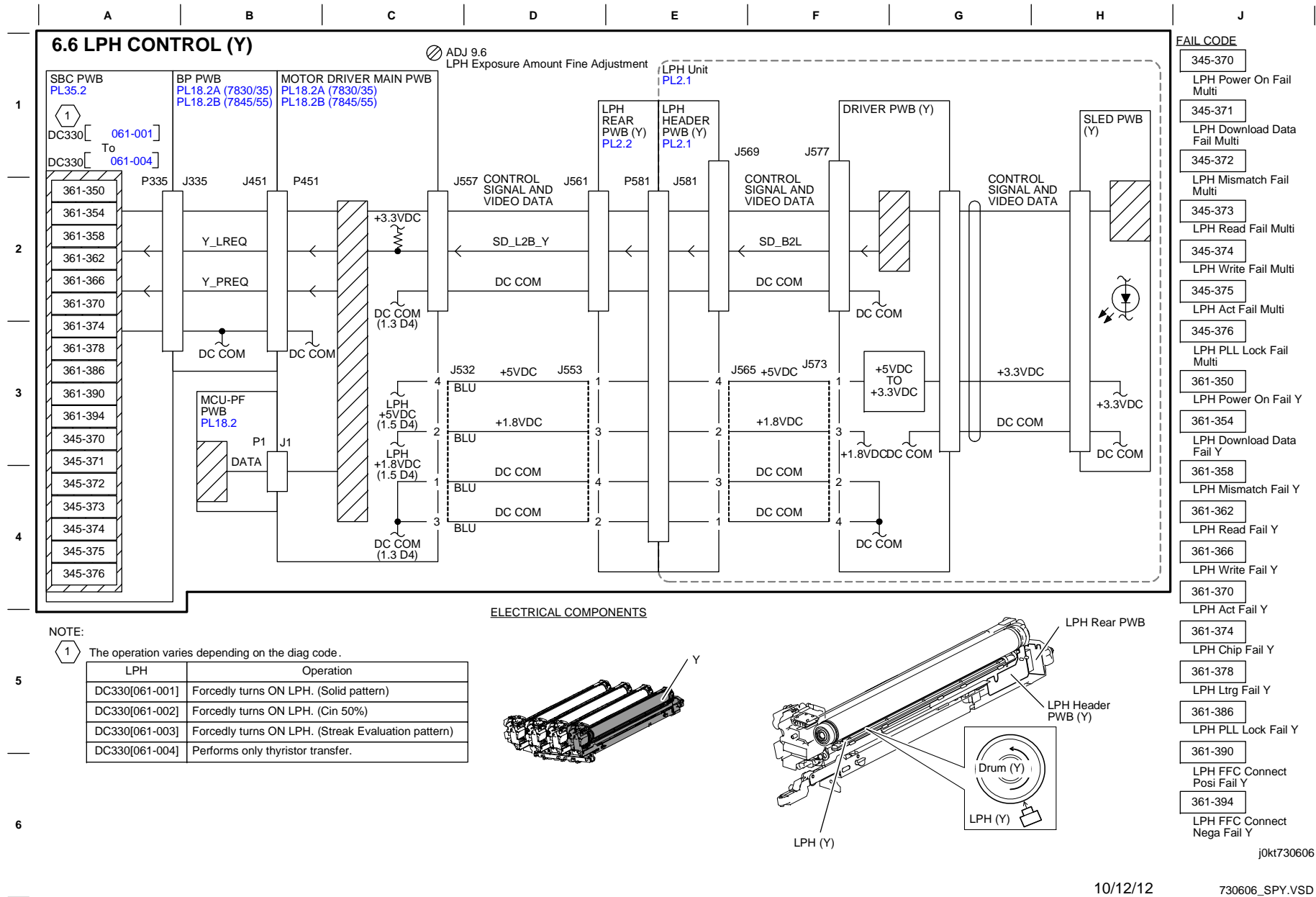
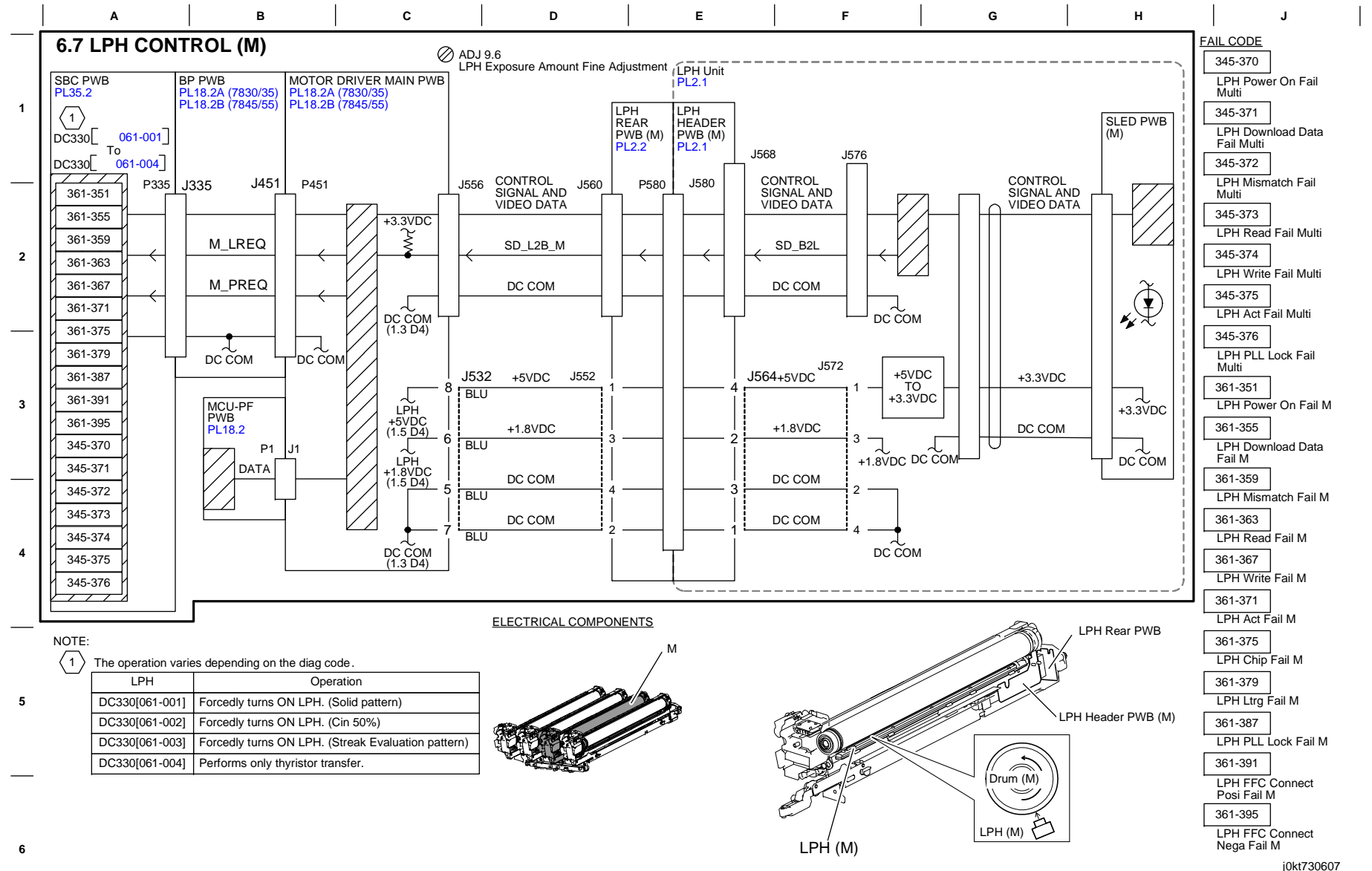


Figure 6 BSD 6.6 LPH Control (Y)

# BSD 6.7 LPH Control (M)



j0kt730607

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730607\_SPY.VSD

Figure 7 BSD 6.7 LPH Control (M)

# BSD 6.8 LPH Control (C)

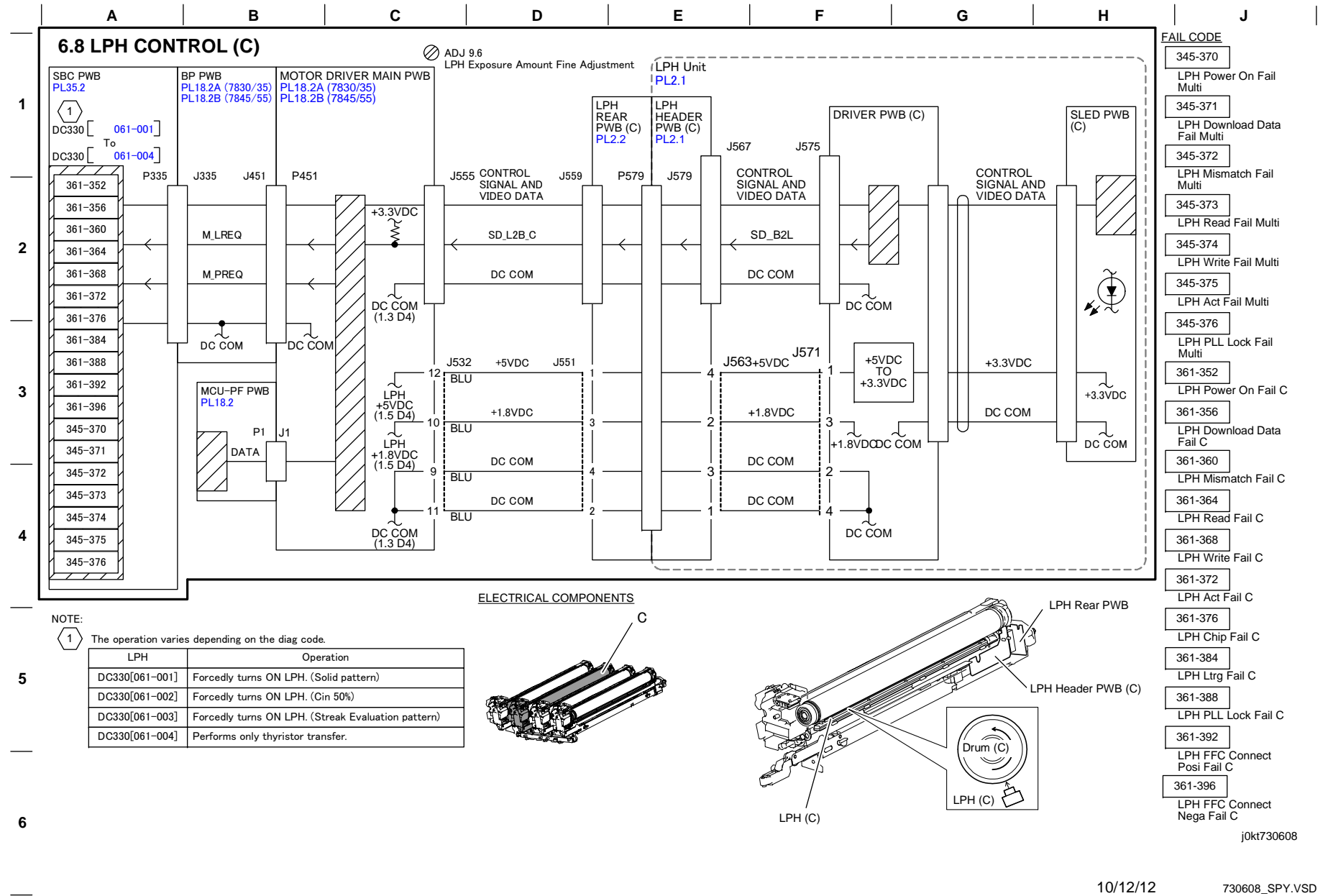
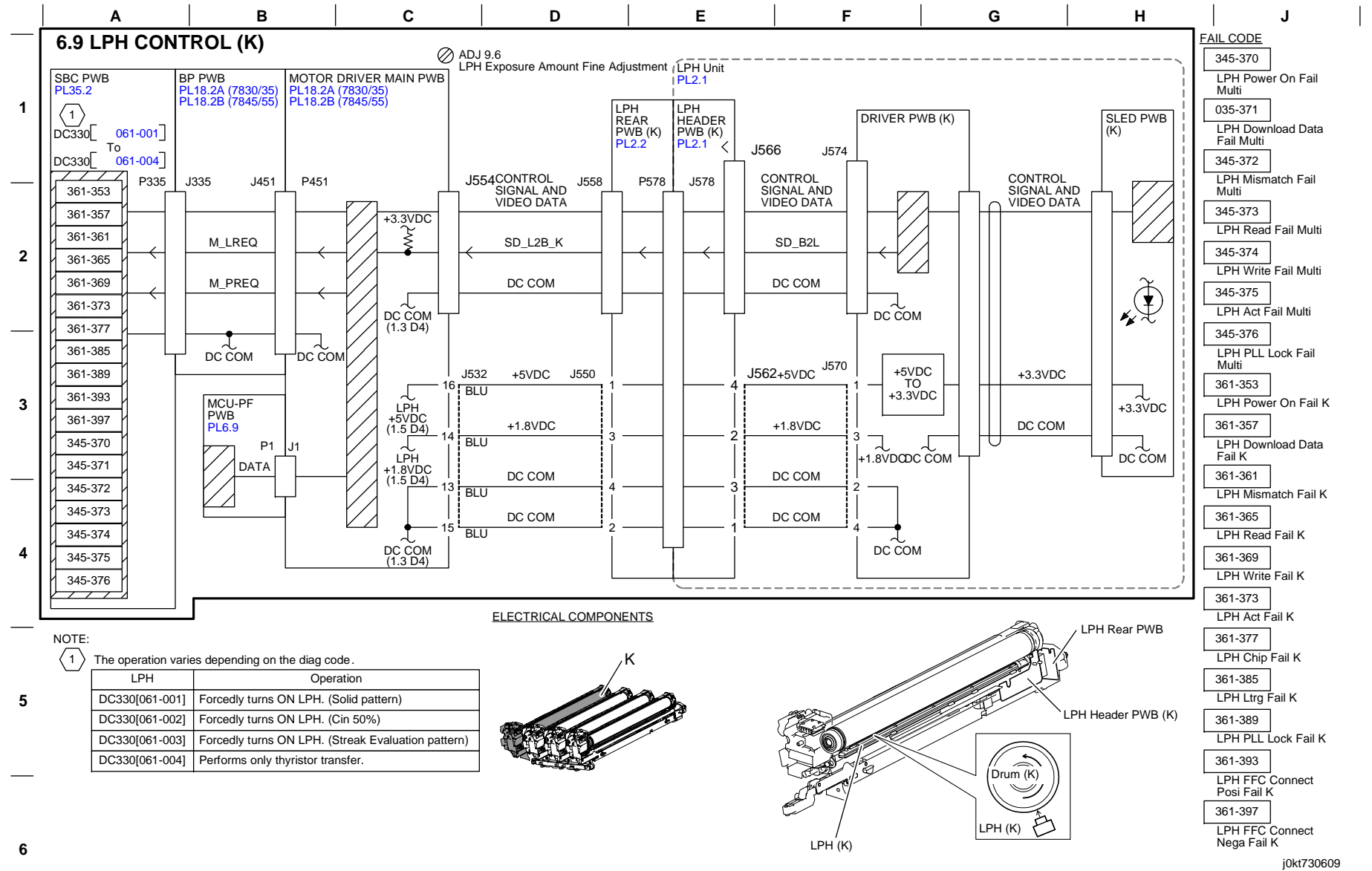


Figure 8 BSD 6.8 LPH Control (C)

# BSD 6.9 LPH Control (K)



j0k730609

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730609\_SPY.VSD

Figure 9 BSD 6.9 LPH Control (K)

# BSD 6.10 Image Registration Control

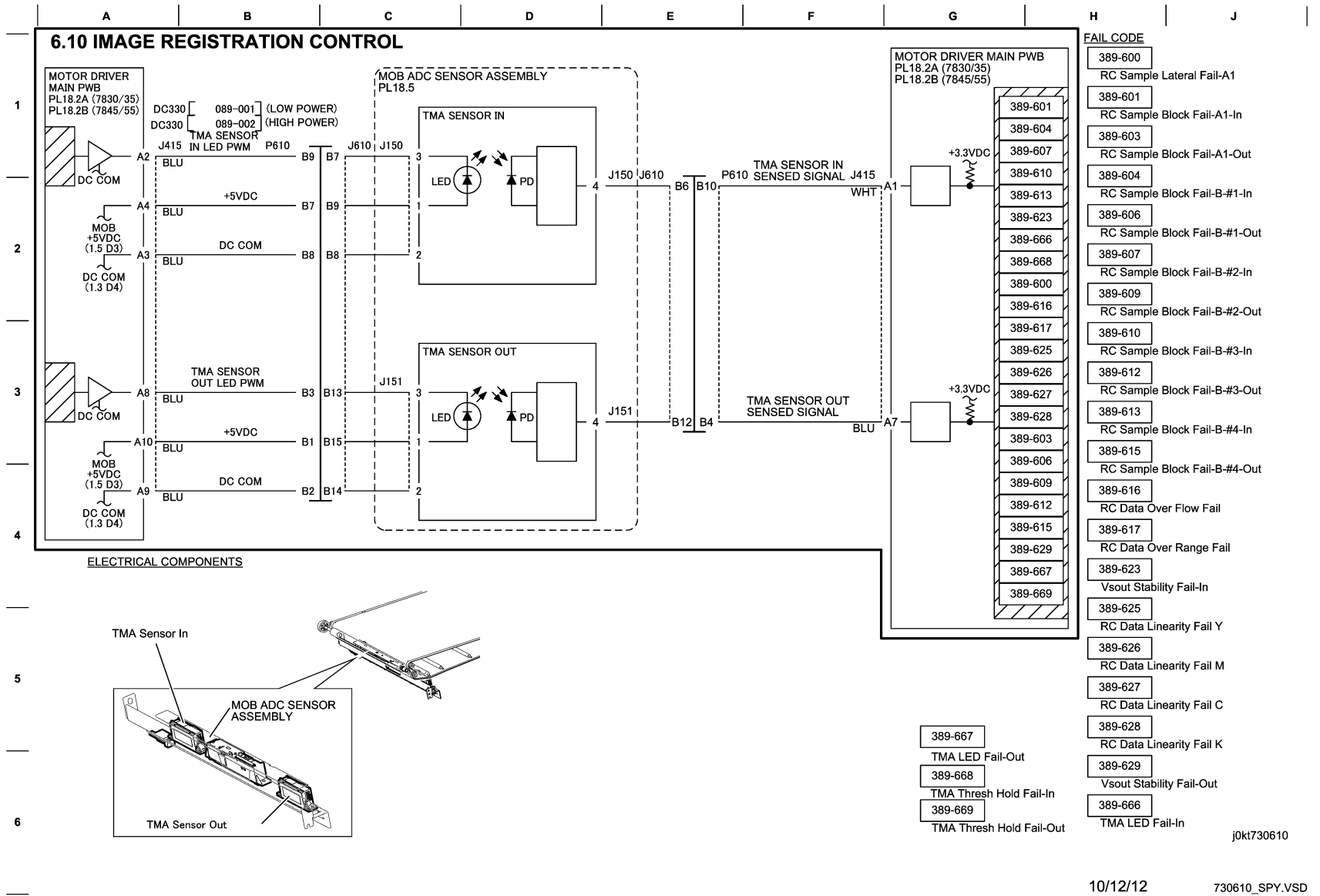
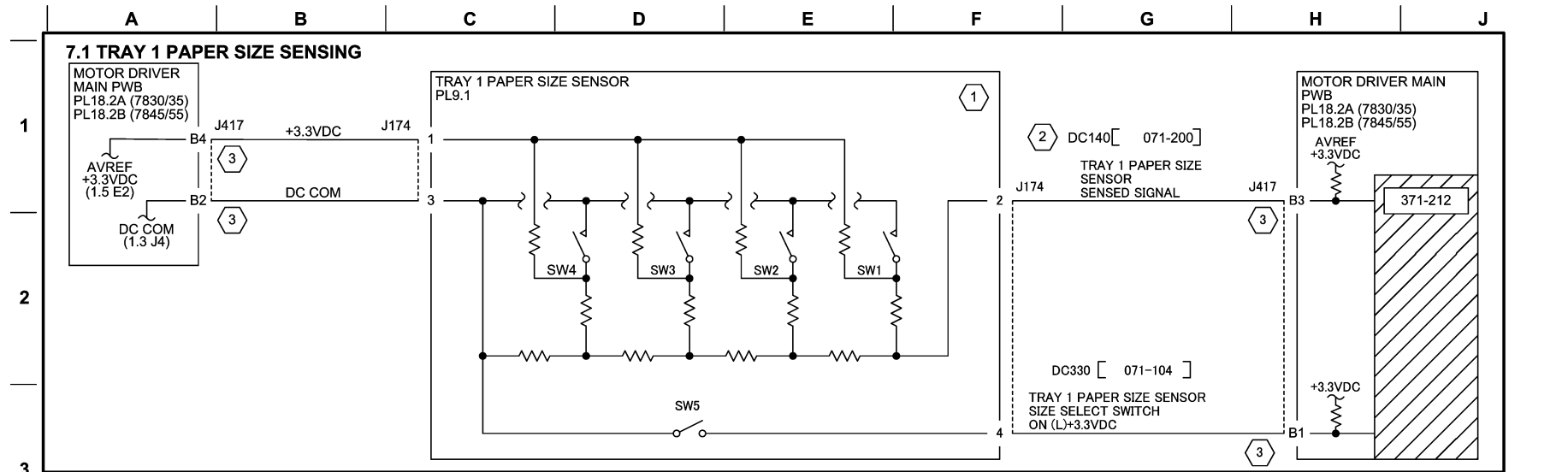


Figure 10 BSD 6.10 Image Registration Control



NOTE:

1 Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off.  
The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage Value (V) (J417-B3)	AD Value DC140[071-200]
No Tray	OFF	OFF	OFF	OFF	OFF	3.085±0.066	922-989
A5S/5.5"X8.5"S (*1)	OFF	OFF	ON	OFF	OFF	2.671±0.066	797-857
B5S	OFF	OFF	ON	ON	ON	2.468±0.066	735-796
8.5"X13"S	OFF	ON	OFF	ON	OFF	2.064±0.066	610-671
8.5"X14"S	OFF	ON	OFF	ON	ON		
A4S	OFF	ON	ON	OFF	OFF	1.864±0.066	548-609
8.5"X11"S	OFF	ON	ON	OFF	ON		
SRA3 S/12"X18"S(*1)	ON	OFF	OFF	ON	ON	1.278±0.066	366-427
A4L	ON	OFF	ON	OFF	OFF	1.079±0.066	304-365
A3S	ON	OFF	ON	ON	OFF	0.881±0.066	244-303
B5L/7.25"X10.5"L(*1)	ON	ON	OFF	OFF	ON	0.691±0.066	184-243
8KS(*2)	ON	ON	OFF	ON	OFF	0.493±0.066	124-183
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF	0.300±0.066	64-123
16KL(*2)/7.25"X10.5"L(*1)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON	0.106±0.066	0-63

\*1: Paper size is changed in diag.

\*2: System Setting enables switching between GCO and TFX sizes.

2 DC140[071-200] displays AD Value from Tray 1 Paper Size Sensor. Normally, the value is in the following output range:  
• Normal output range : 0-989  
• Abnormal range : Other than the above.

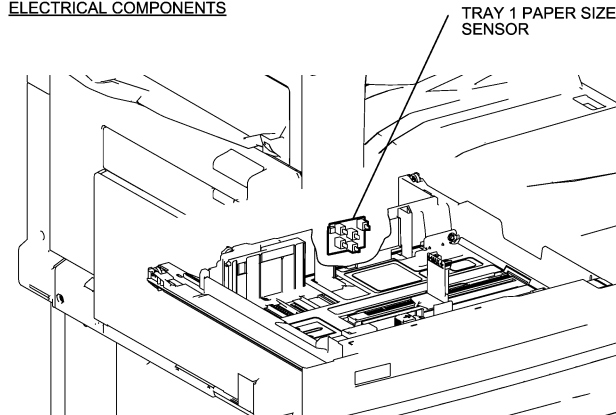
3 Wire Color varies depending on the model.  
• 7830/35: BLU  
• 7845/55: WHT

FAIL CODE

371-212

Tray 1 Paper Size Sensor Broken

ELECTRICAL COMPONENTS



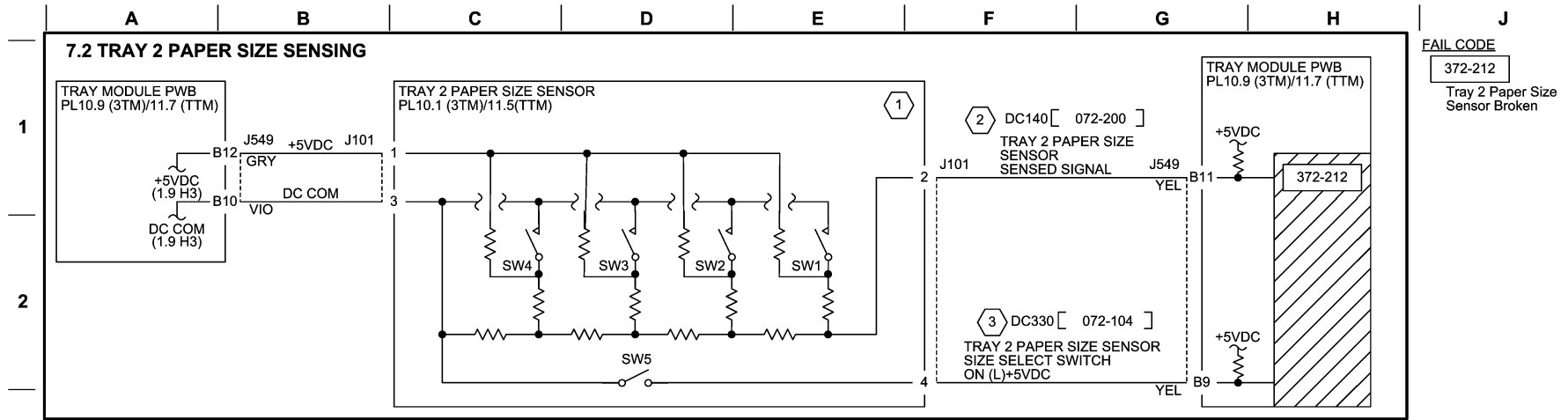
j0kt730701

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730701\_SPY.VSD

Figure 1 BSD 7.1 Tray 1 Paper Size Sensing

## BSD 7.2 Tray 2 Paper Size Sensing



NOTE: <sup>1</sup> Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

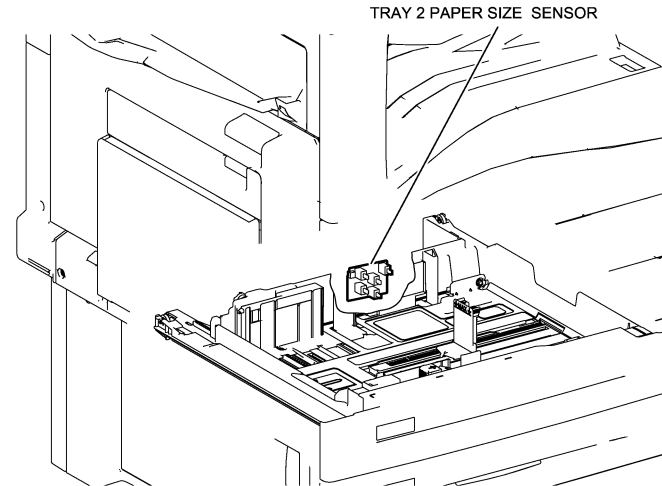
Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage Value (V) (J549-B11)	AD Value DC140[072-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.05	231-247
A5S/5.5"X8.5"S (*1)	OFF	OFF	ON	OFF	OFF	4.01±0.05	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.05	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.05	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON	2.75±0.05	137-152
A4S	OFF	ON	ON	OFF	OFF	2.44±0.05	122-136
8.5"X11"S	OFF	ON	ON	OFF	ON	1.83±0.05	92-106
8"X10"S	OFF	ON	ON	ON	ON	1.52±0.05	77-91
SRA3 S/12"X18"S(*1)	ON	OFF	OFF	ON	ON	1.21±0.05	61-76
A4L	ON	OFF	ON	OFF	OFF	0.91±0.05	46-60
A3S	ON	OFF	ON	ON	OFF	0.60±0.05	31-45
B5L/7.25"X10.5"L(*1)	ON	ON	OFF	OFF	ON	0.30±0.05	16-30
8KS(*2)	ON	ON	OFF	ON	OFF	0.00±0.05	0-15
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF		
16KL(*2)/7.25"X10.5"L(*1)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON		

\*1: Paper size is changed in diag.  
\*2: System Setting enables switching between GCO and TFX sizes.

<sup>2</sup> DC140[072-200] displays AD Value from Tray 2 Paper Size Sensor. Normally, the value is in the following output range:  
• Normal output range : 0-247  
• Abnormal range : Other than the above.

<sup>3</sup> Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

### ELECTRICAL COMPONENTS



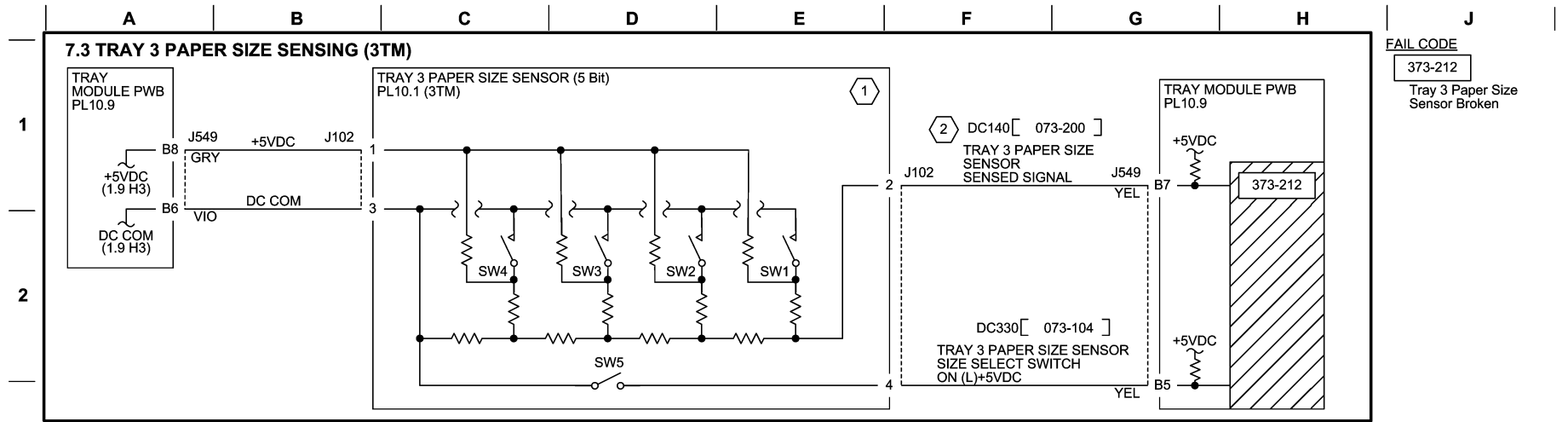
j0kt730702

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730702\_SPY.VSD

Figure 2 BSD 7.2 Tray 2 Paper Size Sensing

# BSD 7.3 Tray 3 Paper Size Sensing (3TM)



FAIL CODE  
373-212  
Tray 3 Paper Size Sensor Broken

NOTE: **1** Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value.  
(Any combination other than the ones below results in an undetermined size.)

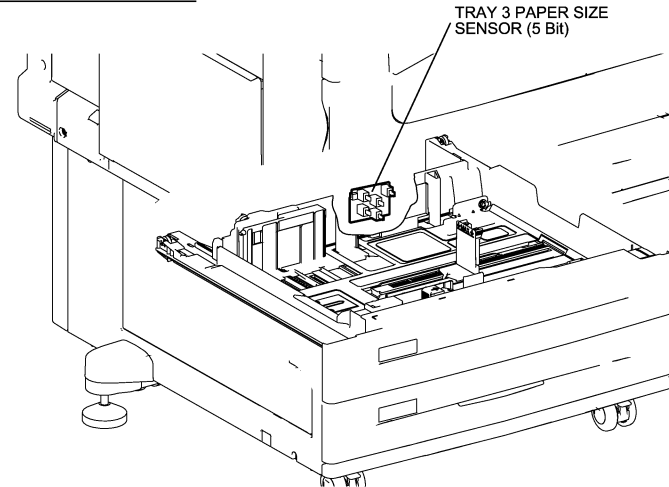
Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage Value (V) (J549-B7)	AD Value DC140[073-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.05	231-247
A5S/5.5"X8.5"S (*1)	OFF	OFF	ON	OFF	OFF	4.01±0.05	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.05	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.05	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON	3.07±0.05	153-167
A4S	OFF	ON	ON	OFF	OFF	2.75±0.05	137-152
8.5"X11"S	OFF	ON	ON	OFF	ON	2.75±0.05	137-152
8"X10"S	OFF	ON	ON	ON	ON	2.44±0.05	122-136
SRA3 S/12"X18"S(*1)	ON	OFF	OFF	ON	ON	1.83±0.05	92-106
A4L	ON	OFF	ON	OFF	OFF	1.52±0.05	77-91
A3S	ON	OFF	ON	ON	OFF	1.21±0.05	61-76
B5L/7.25"X10.5"L(*1)	ON	ON	OFF	OFF	ON	0.91±0.05	46-60
8KS(*2)	ON	ON	OFF	ON	OFF	0.60±0.05	31-45
B4S	ON	ON	OFF	ON	ON	0.60±0.05	31-45
8.5"X11"L	ON	ON	ON	OFF	OFF	0.30±0.05	16-30
16KL(*2)/7.25"X10.5"L(*1)	ON	ON	ON	OFF	ON	0.30±0.05	16-30
11"X17"S	ON	ON	ON	ON	ON	0.00±0.05	0-15

\*1: Paper size is changed in diag.  
\*2: System Setting enables switching between GCO and TFX sizes.

**2** DC140[073-200] displays AD Value from Tray 3 Paper Size Sensor. Normally, the value is in the following output range:  
·Normal output range : 0-247  
·Abnormal range : Other than the above.

**3** Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

### ELECTRICAL COMPONENTS



j0kt730703

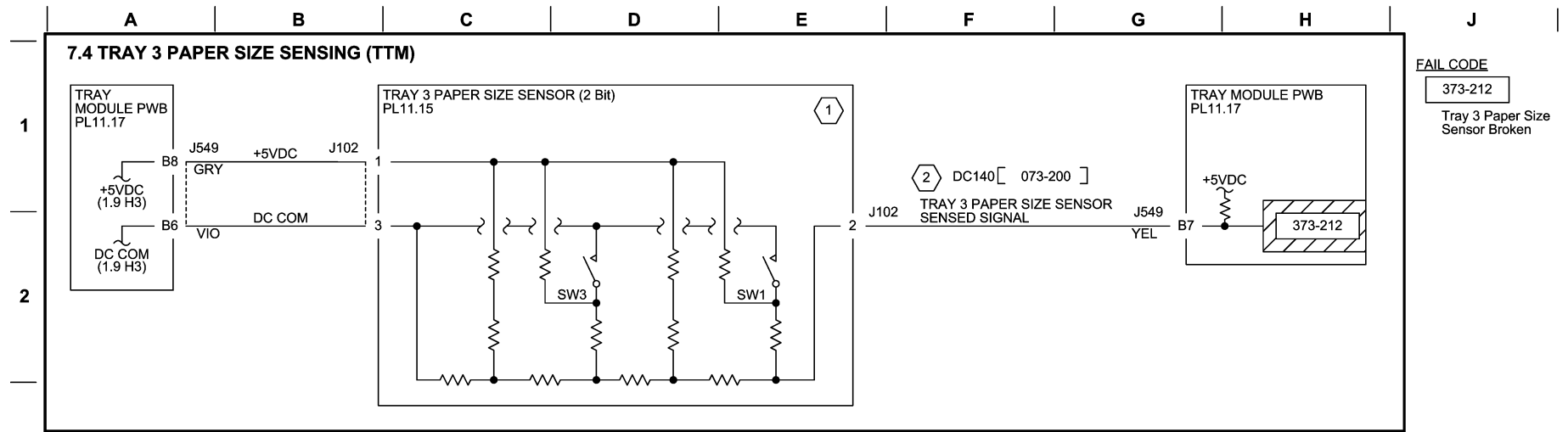
10/11/12

730703\_SPY.VSD

Figure 3 BSD 7.3 Tray 3 Paper Size Sensing (3TM)



# BSD 7.4 Tray 3 Paper Size Sensing (TTM)



**FAIL CODE**  
 373-212  
 Tray 3 Paper Size Sensor Broken

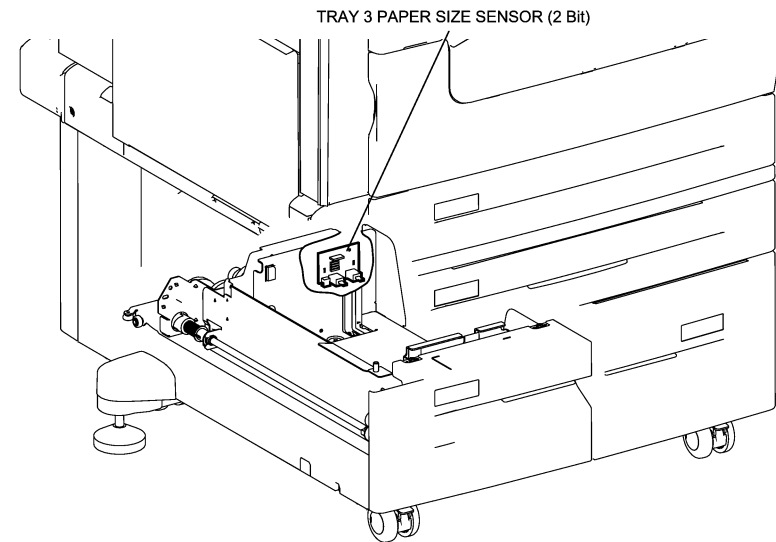
**3** NOTE: 1 Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	Voltage (V) (J549-B7)	AD Value DC140[073-200]
No Tray	OFF	OFF	4.66±0.05	231-247
B5L/7.25"X10.5"L(*1)	OFF	ON	4.01±0.05	168-230
8.5"X11"L	ON	OFF	2.15±0.05	92-167
A4L	ON	ON	1.52±0.05	0-91

\*1 : Paper size is changed in diag.

**4** 2 DC140[073-200] displays AD Value from Tray 3 Paper Size Sensor. Normally, the value is in the following output range:  
 •Normal output range : 0-247  
 •Abnormal range : Other than the above.

### ELECTRICAL COMPONENTS



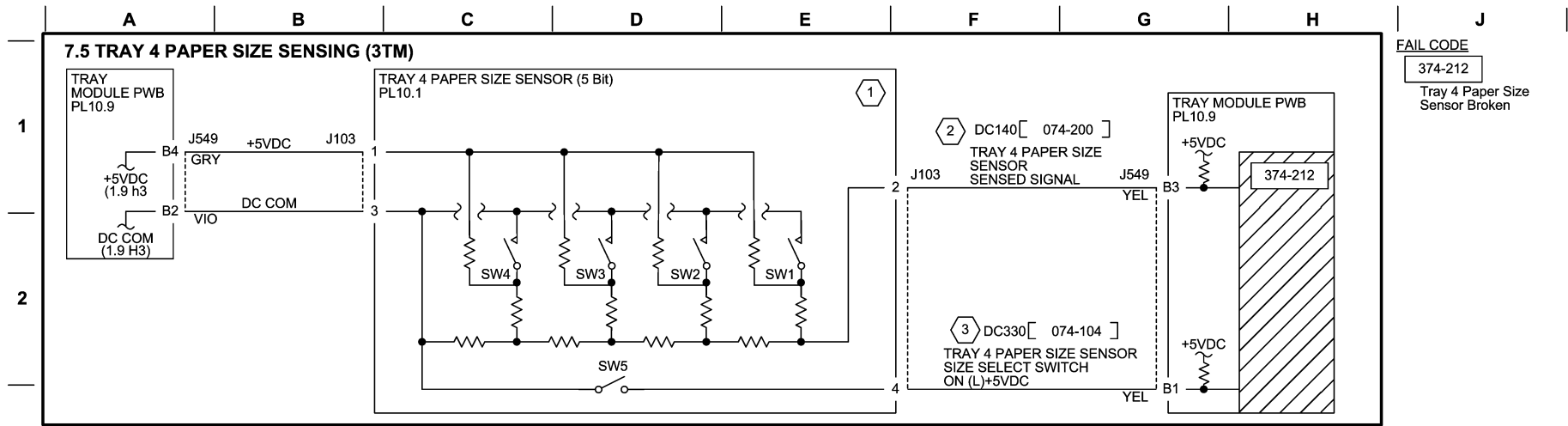
j0kt730704

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730704\_SPY.VSD

Figure 4 BSD 7.4 Tray 3 Paper Size Sensing (TTM)

# BSD 7.5 Tray 4 Paper Size Sensing (3TM)



FAIL CODE  
374-212  
Tray 4 Paper Size Sensor Broken

NOTE: **1** Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor and SW5 On/Off. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value.  
(Any combination other than the ones below results in an undetermined size.)

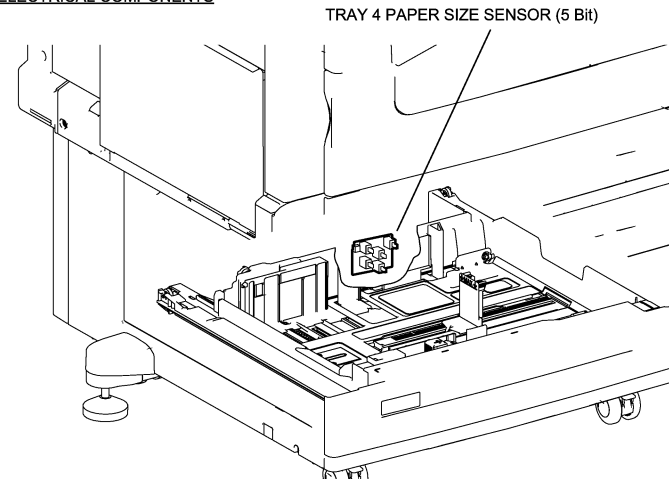
Paper Size	SW1	SW2	SW3	SW4	SW5	Voltage Value (V) (J549-B11)	AD Value DC140[072-200]
No Tray	OFF	OFF	OFF	OFF	OFF	4.66±0.05	231-247
A5S/5.5"X8.5"S (*1)	OFF	OFF	ON	OFF	OFF	4.01±0.05	199-214
B5S	OFF	OFF	ON	ON	ON	3.69±0.05	184-198
8.5"X13"S	OFF	ON	OFF	ON	OFF	3.07±0.05	153-167
8.5"X14"S	OFF	ON	OFF	ON	ON		
A4S	OFF	ON	ON	OFF	OFF	2.75±0.05	137-152
8.5"X11"S	OFF	ON	ON	OFF	ON		
8"X10"S	OFF	ON	ON	ON	ON	2.44±0.05	122-136
SRA3 S/12"X18"S(*1)	ON	OFF	OFF	ON	ON	1.83±0.05	92-106
A4L	ON	OFF	ON	OFF	OFF	1.52±0.05	77-91
A3S	ON	OFF	ON	ON	OFF	1.21±0.05	61-76
B5L/7.25"X10.5"L(*1)	ON	ON	OFF	OFF	ON	0.91±0.05	46-60
8KS(*2)	ON	ON	OFF	ON	OFF	0.60±0.05	31-45
B4S	ON	ON	OFF	ON	ON		
8.5"X11"L	ON	ON	ON	OFF	OFF	0.30±0.05	16-30
16KL(*2)/7.25"X10.5"L(*1)	ON	ON	ON	OFF	ON		
11"X17"S	ON	ON	ON	ON	ON	0.00±0.05	0-15

\*1: Paper size is changed in diag.  
\*2: System Setting enables switching between GCO and TFX sizes.

**2** DC140[074-200] displays AD Value from Tray 4 Paper Size Sensor. Normally, the value is in the following output range:  
•Normal output range : 0-247  
•Abnormal range : Other than the above.

**3** Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

### ELECTRICAL COMPONENTS



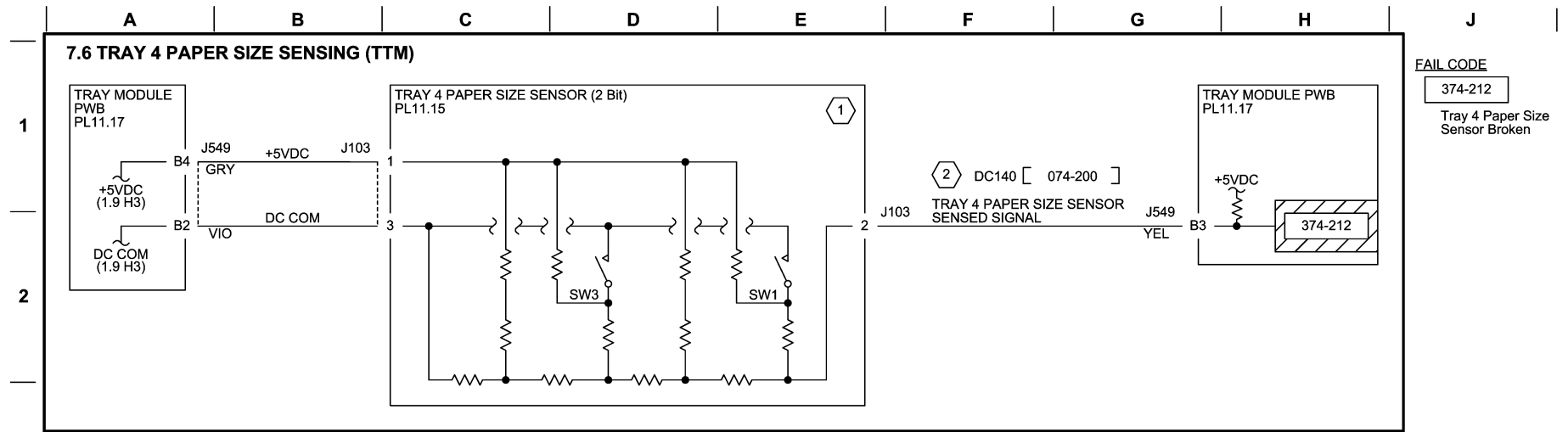
j0k730705

10/11/12

730705\_SPY.VSD

Figure 5 BSD 7.5 Tray 4 Paper Size Sensing (3TM)

# BSD 7.6 Tray 4 Paper Size Sensing (TTM)



**FAIL CODE**  
 374-212  
 Tray 4 Paper Size Sensor Broken

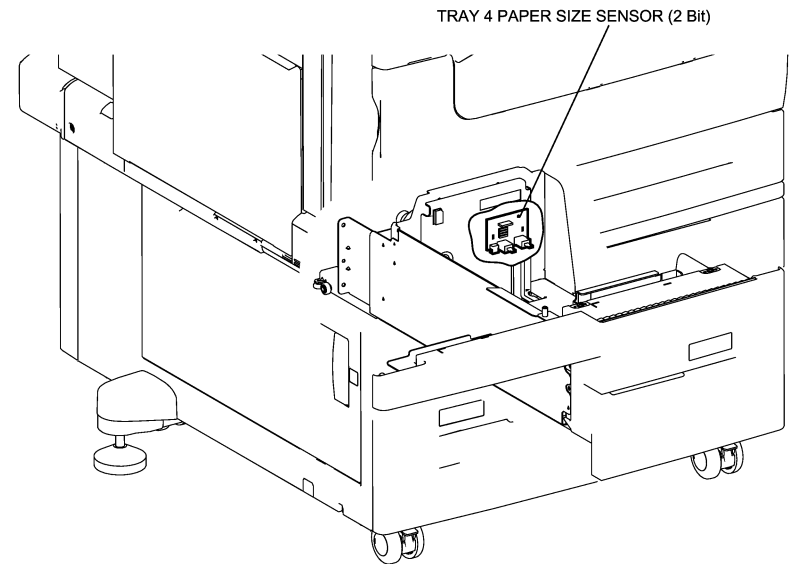
NOTE: <sup>1</sup> Paper size is sensed by voltage corresponding to combined resistance of Paper Size Sensor. The table below shows the relation between paper size and combination of Switch ON/OFF pattern, voltage and AD value. (Any combination other than the ones below results in an undetermined size.)

Paper Size	SW1	SW2	Voltage (V) (J549-B7)	AD Value DC140[073-200]
No Tray	OFF	OFF	4.66±0.05	231-247
B5L/7.25"X10.5"L(*1)	OFF	ON	4.01±0.05	168-230
8.5"X11"L	ON	OFF	2.15±0.05	92-167
A4L	ON	ON	1.52±0.05	0-91

\*1 : Paper size is changed in diag.

<sup>2</sup> DC140[074-200] displays AD Value from Tray 4 Paper Size Sensor. Normally, the value is in the following output range:  
 •Normal output range : 0-247  
 •Abnormal range : Other than the above.

### ELECTRICAL COMPONENTS



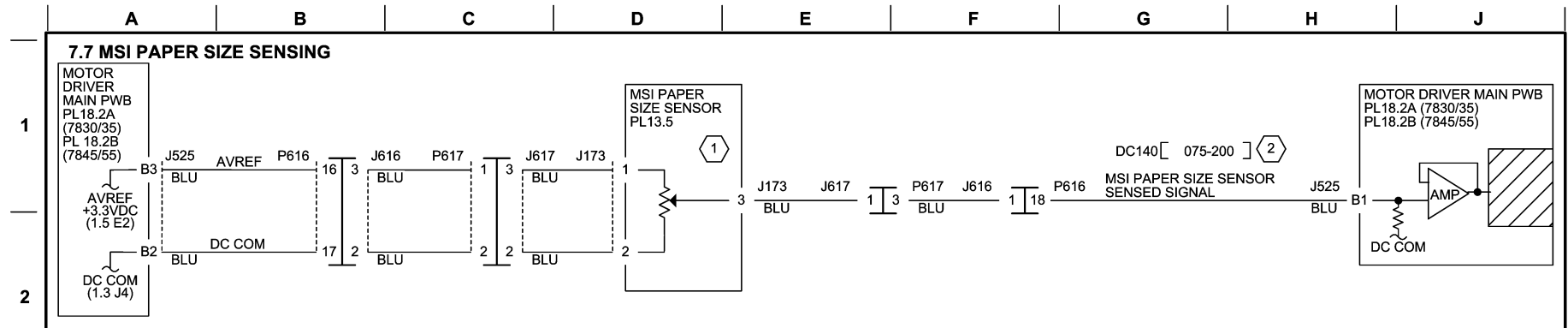
j0kt730706

10/09/12

730706\_SPY.VSD

Figure 6 BSD 7.6 Tray 4 Paper Size Sensing (TTM)

# BSD 7.7 MSI (Tray 5) Paper Size Sensing



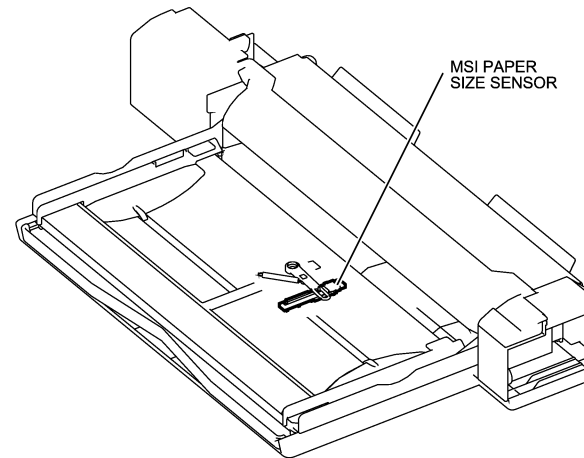
NOTE: 1 Paper width (size in fast scan direction) is sensed by voltage corresponding to MSI Paper Size Sensor resistance. As to MSI, AD values corresponding to paper sizes (widths) vary depending on the machine because when MSI is installed on IOT before shipment, MSI Size Sensing is adjusted in the diag. The values below are for reference.

2 DC140[075-200] displays AD Value from MSI Paper Size Sensor. Normally, the value is in the following output range:  
 • Normal output range : 86-966 (Nominal)  
                                   51-1023 (NVM range)  
 • Abnormal range : Constant and within the NVN range above.

Paper Size	Voltage Value (V) (J525-B1)	AD Value DC140[075-200]
Post Card S	2.676-2.732	824.958-851.600
5.5"X8.5"S	2.246-2.302	691.590-718.233
A5S	2.156-2.212	663.708-690.350
B5S	1.788-1.843	549.488-576.131
8"X10"S	1.636-1.692	502.457-529.099
8.5"X11"S(Letter)&X13"X14"	1.503-1.559	461.304-487.947
A4S	1.484-1.540	455.425-482.068
7.25"X10.5"L	0.972-1.028	296.694-323.337
B5L	0.975-1.031	297.534-324.176
B4S		
16KL(Taiwan)	0.867-0.922	263.940-290.583
8KS(Taiwan)		
16KL(Mainland China)	0.834-0.890	253.862-280.504
8KS(Mainland China)		
11"X17"S	0.732-0.788	222.284-248.926
8.5"X11"L(Letter)		
A4L	0.541-0.597	163.159-189.801
A3S		
12.6"X19.2"S	0.415-0.470	123.854-150.496
13"X19"(X18")	0.308-0.364	90.932-117.574
SRA3	0.292-0.348	85.893-112.535

Ref. Paper length (size in slow scan direction) is sensed by timing how long paper takes to pass Regi. Sensor.

### ELECTRICAL COMPONENTS



j0kt730707

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730707\_SPY.VSD

Figure 7 BSD 7.7 MSI (Tray 5) Paper Size Sensing

# BSD 7.8 Tray 1 Paper Stacking

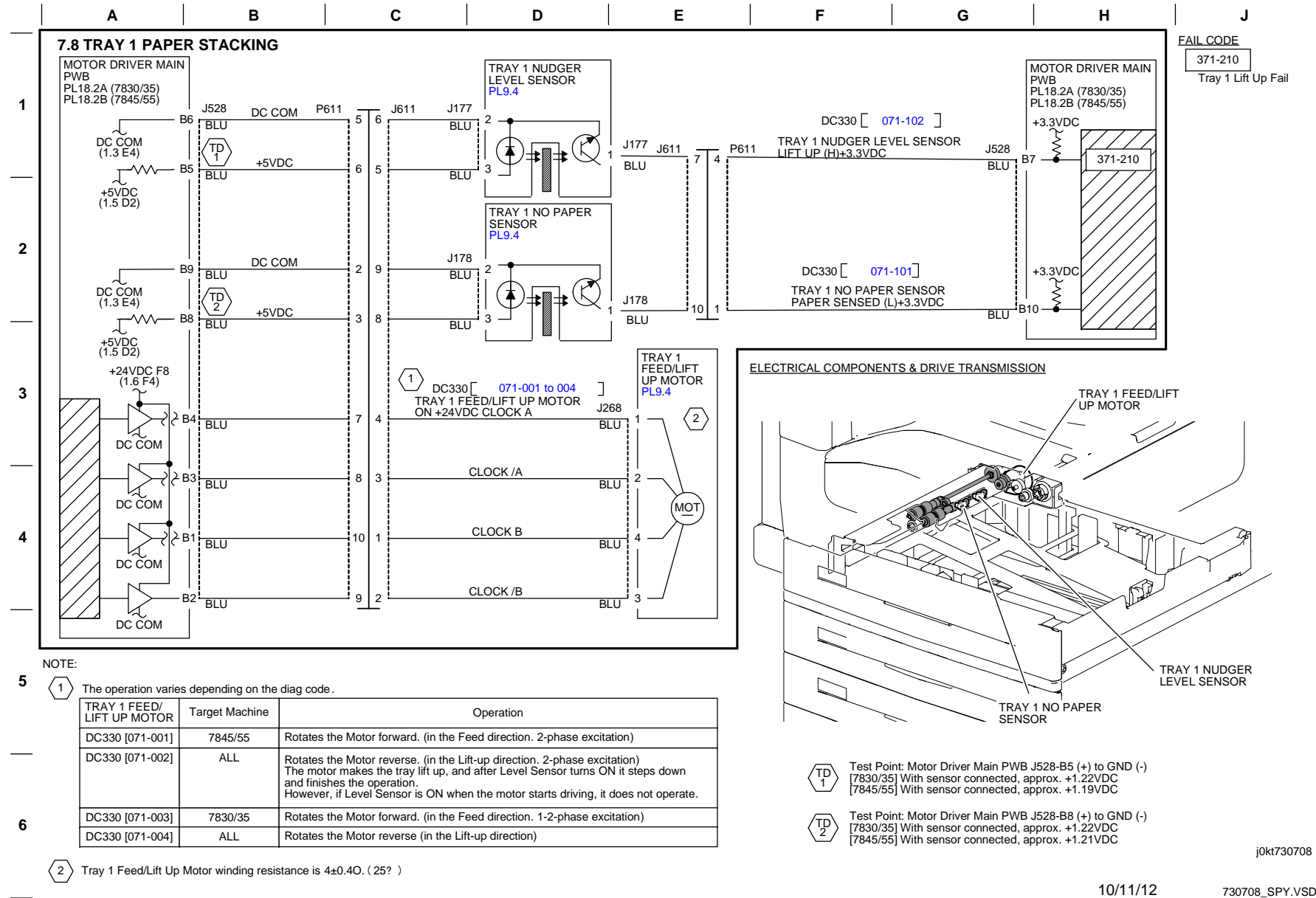


Figure 8 BSD 7.8 Tray 1 Paper Stacking

# BSD 7.9 Tray 2 Paper Stacking

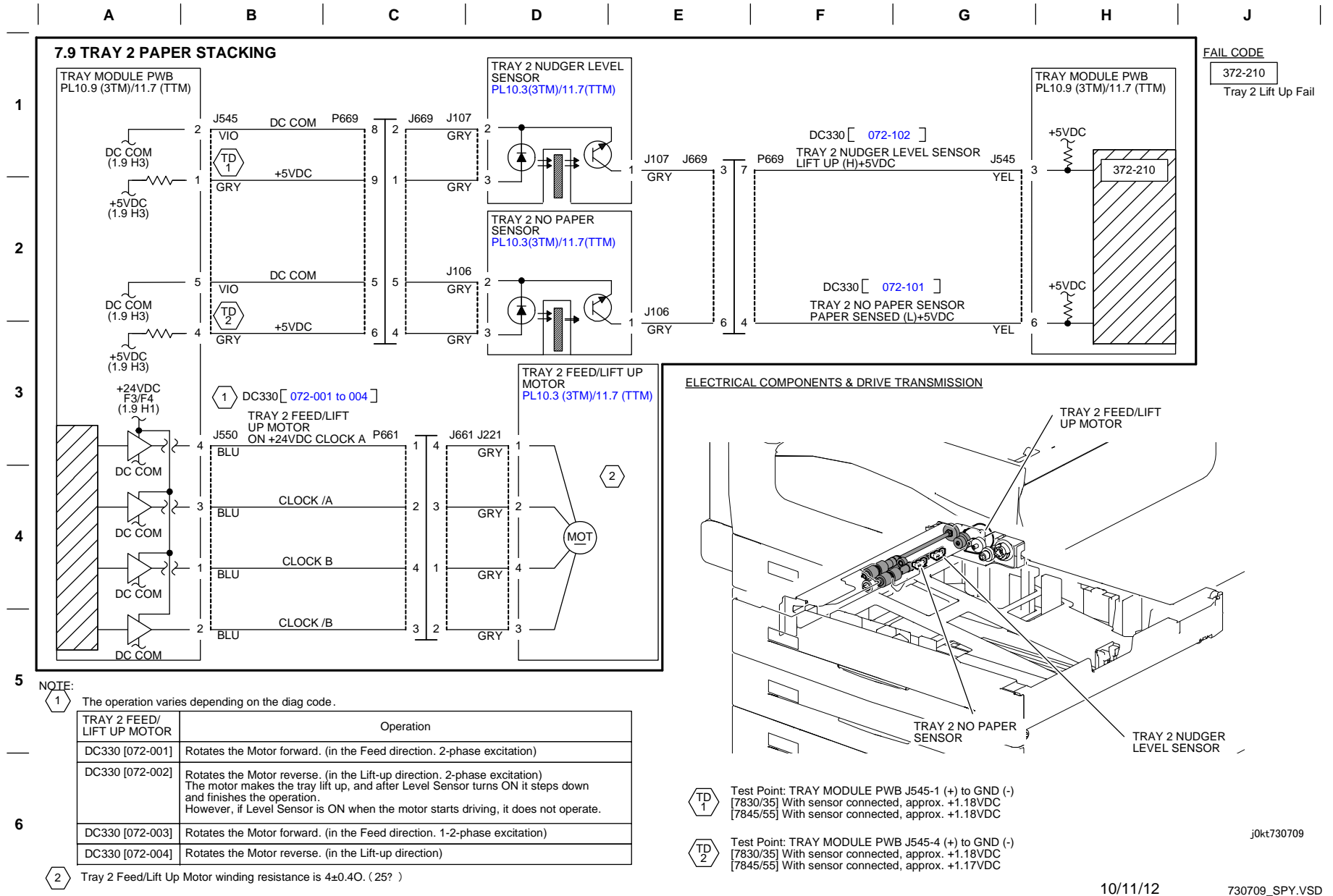


Figure 9 BSD 7.9 Tray 2 Paper Stacking



# BSD 7.11 Tray 4 Paper Stacking

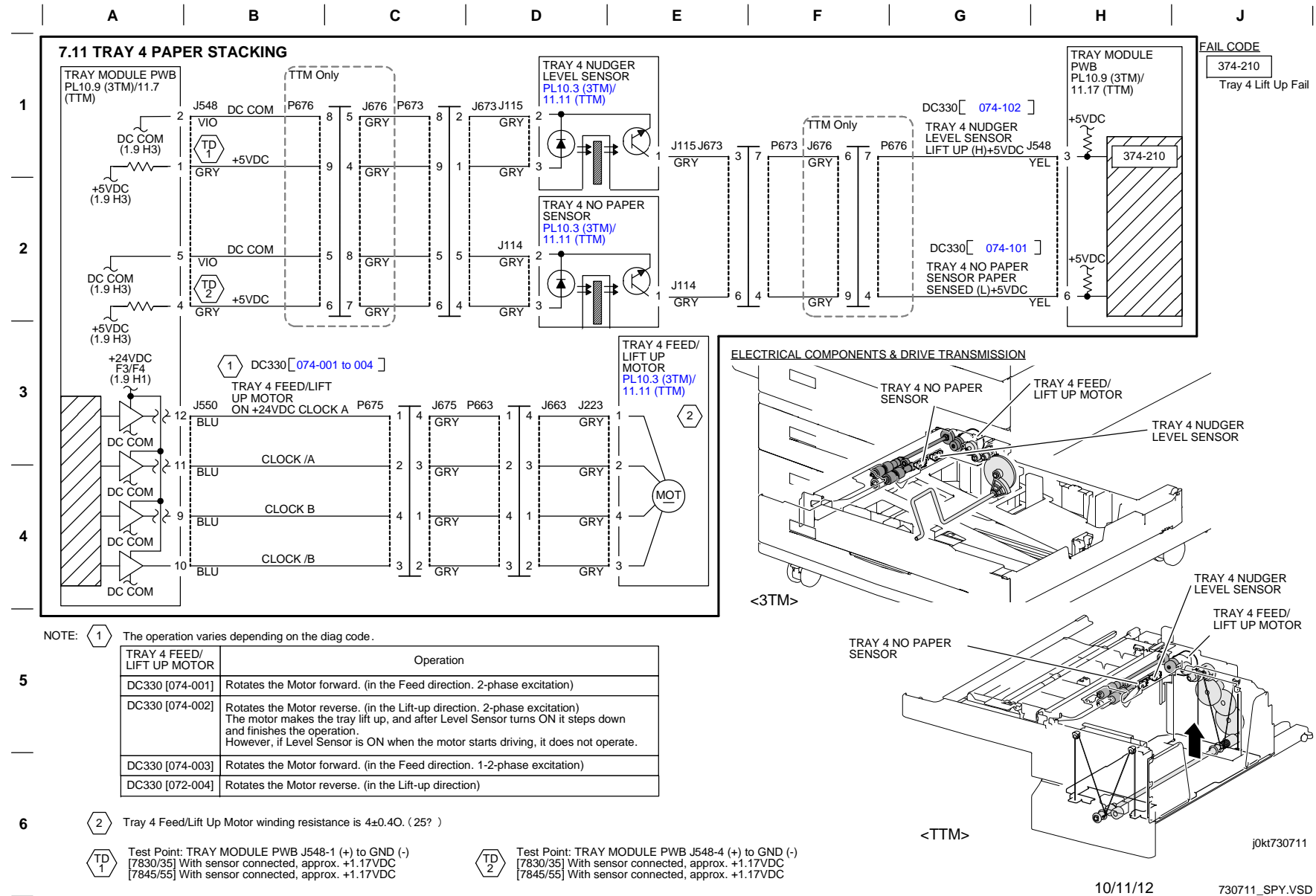
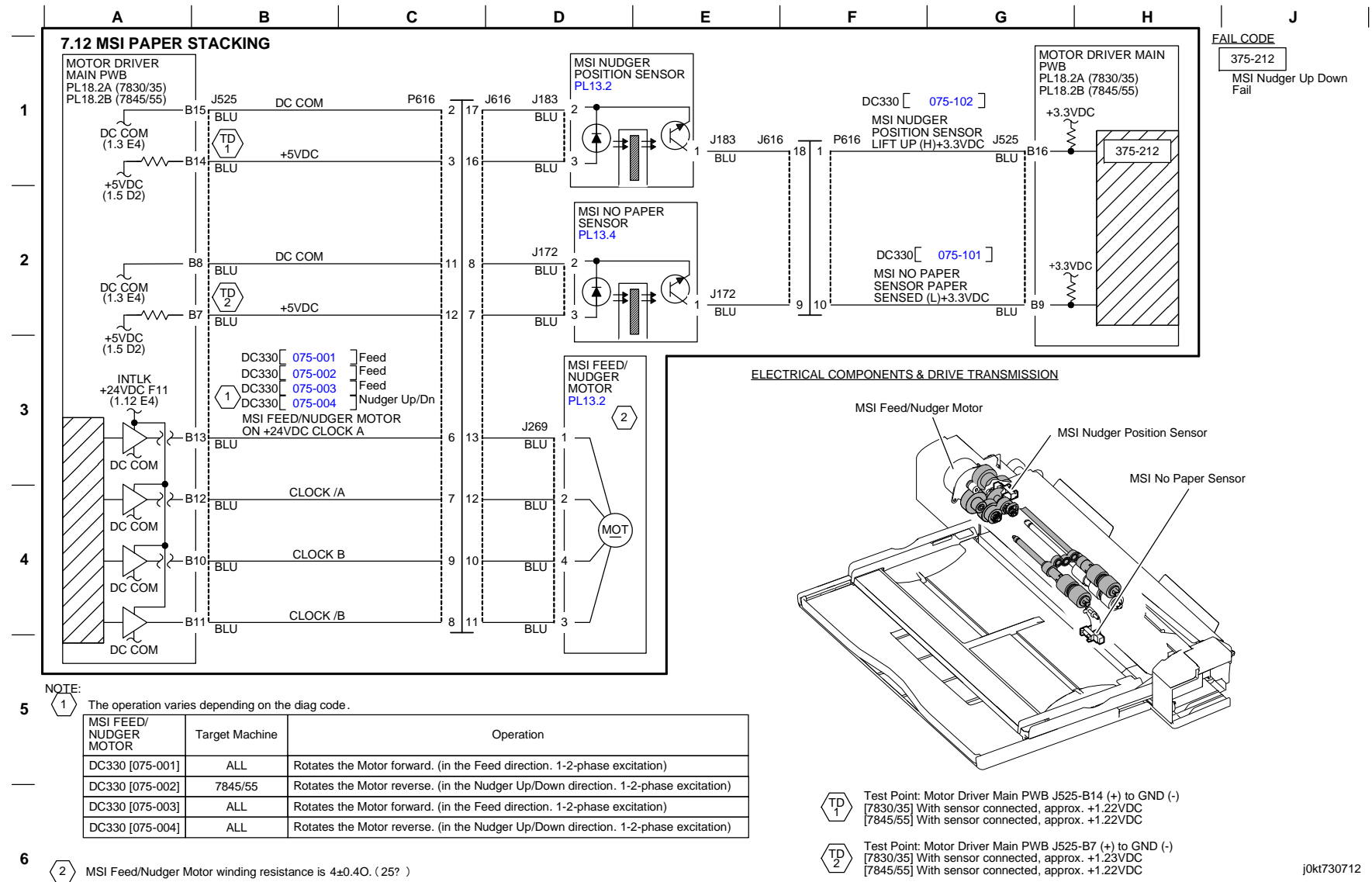


Figure 11 BSD 7.11 Tray 4 Paper Stacking



# BSD 7.12 MSI (Tray 5) Paper Stacking



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730712\_SPY.VSD

Figure 12 BSD 7.12 MSI (Tray 5) Paper Stacking

# BSD 7.13 Standard HCF Option (Tray 6) Paper Size Sensing

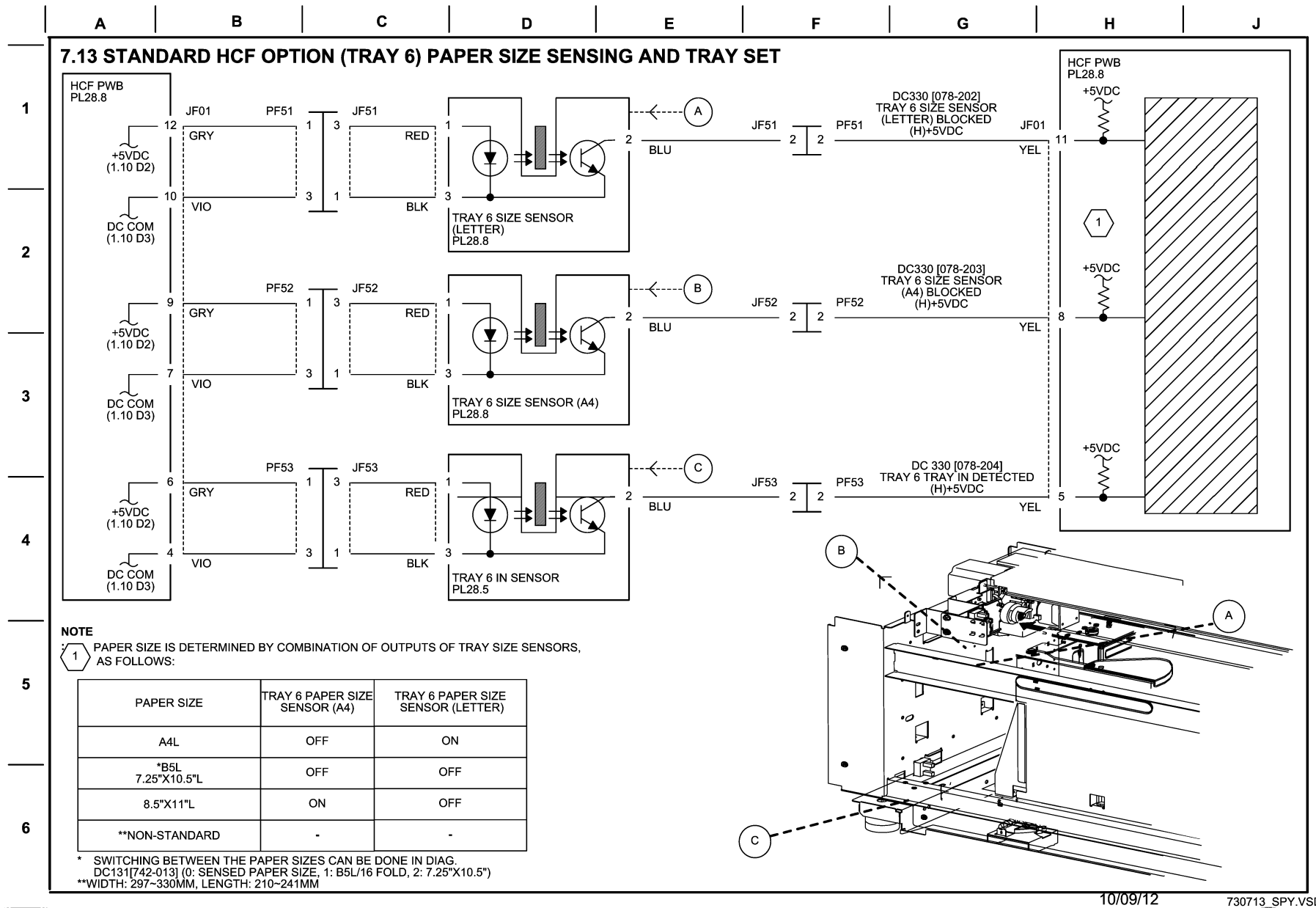
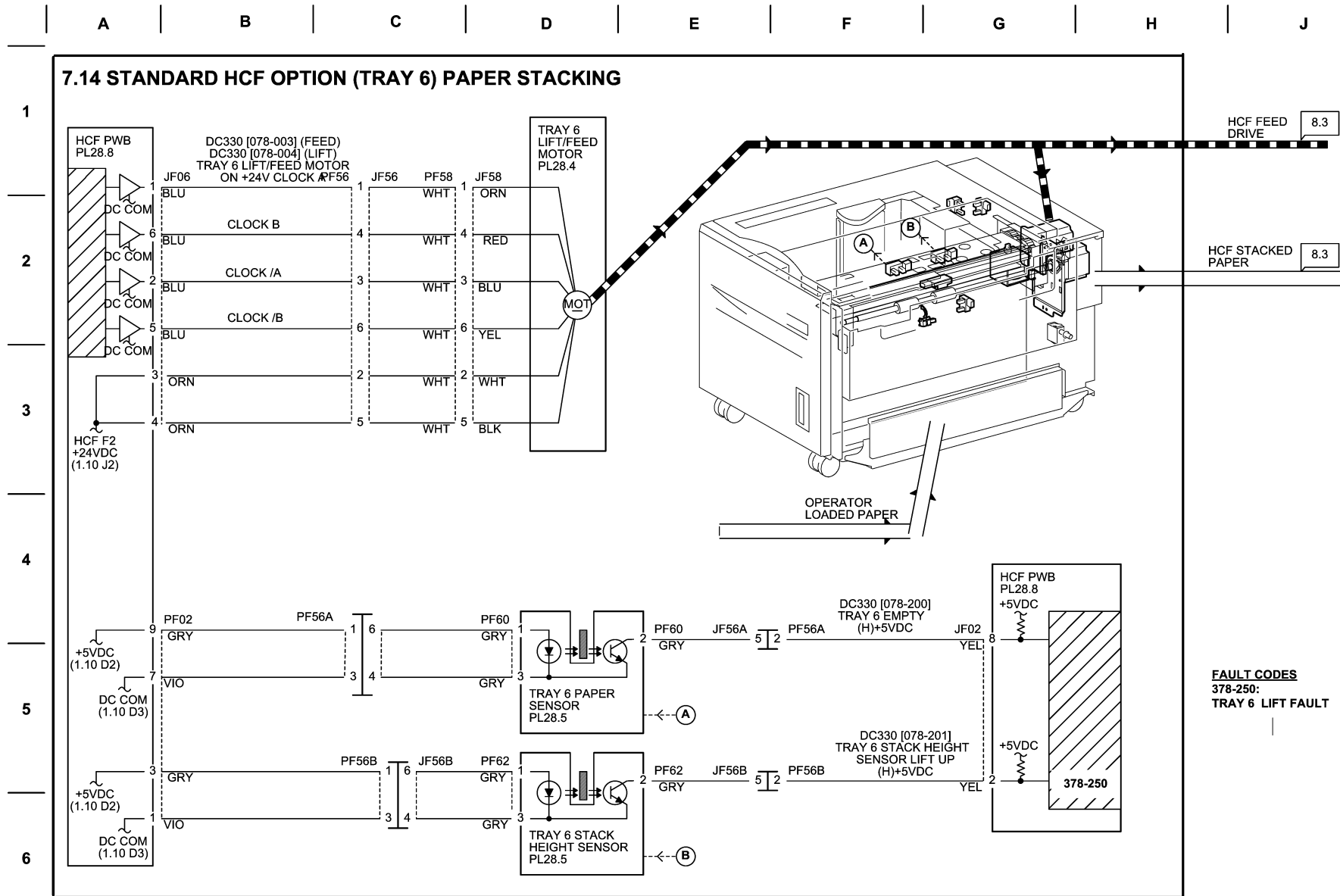


Figure 13 BSD 7.13 Standard HCF Option (Tray 6) Paper Size Sensing

**BSD 7.14 Standard HCF Option (Tray 6) Paper Stacking**



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**Figure 14 BSD 7.14 Standard HCF Option (Tray 6) Paper Stacking**

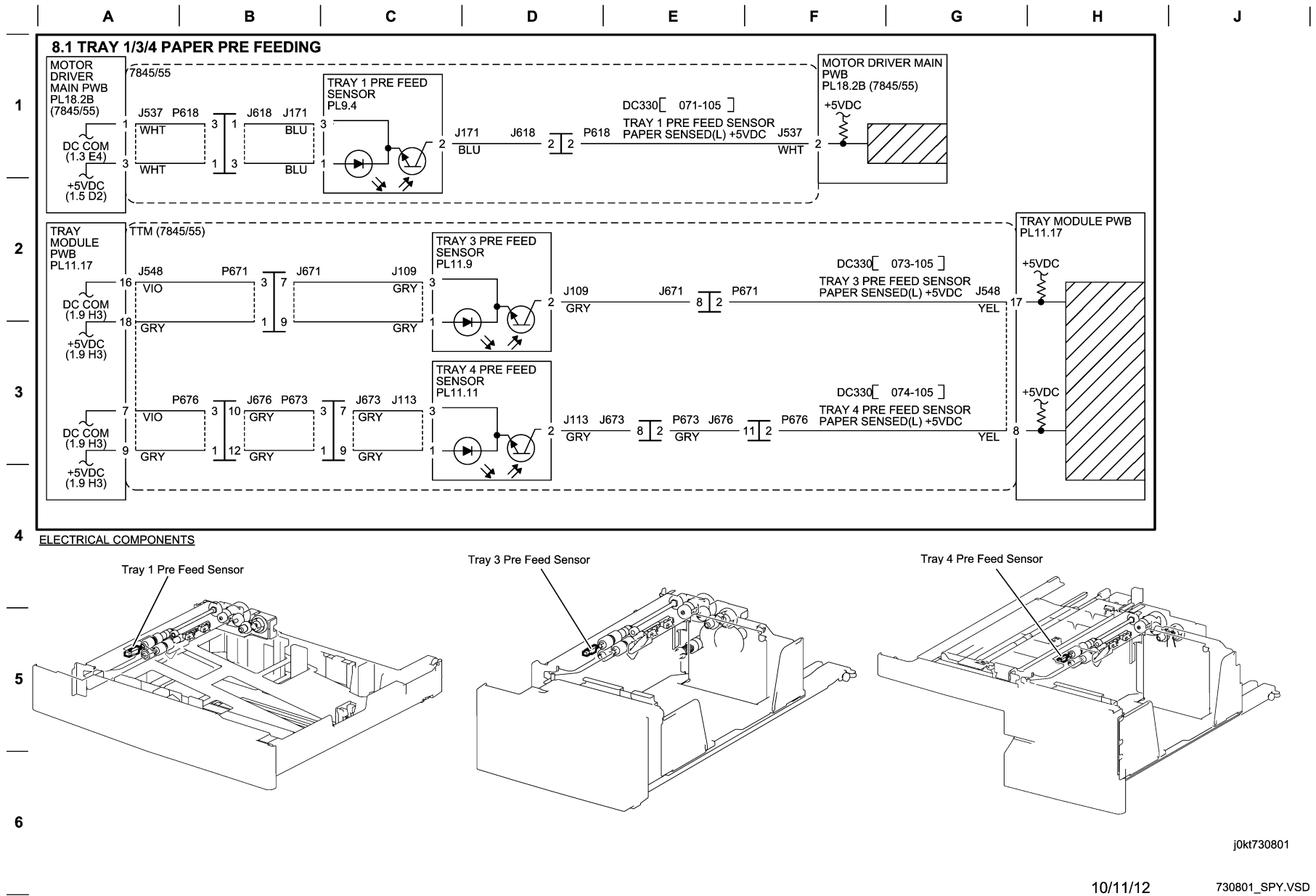


Figure 1 BSD 8.1 Tray 1/3/4 Paper Pre-Feeding

# BSD 8.2 Tray 1 and MSI Paper Transportation

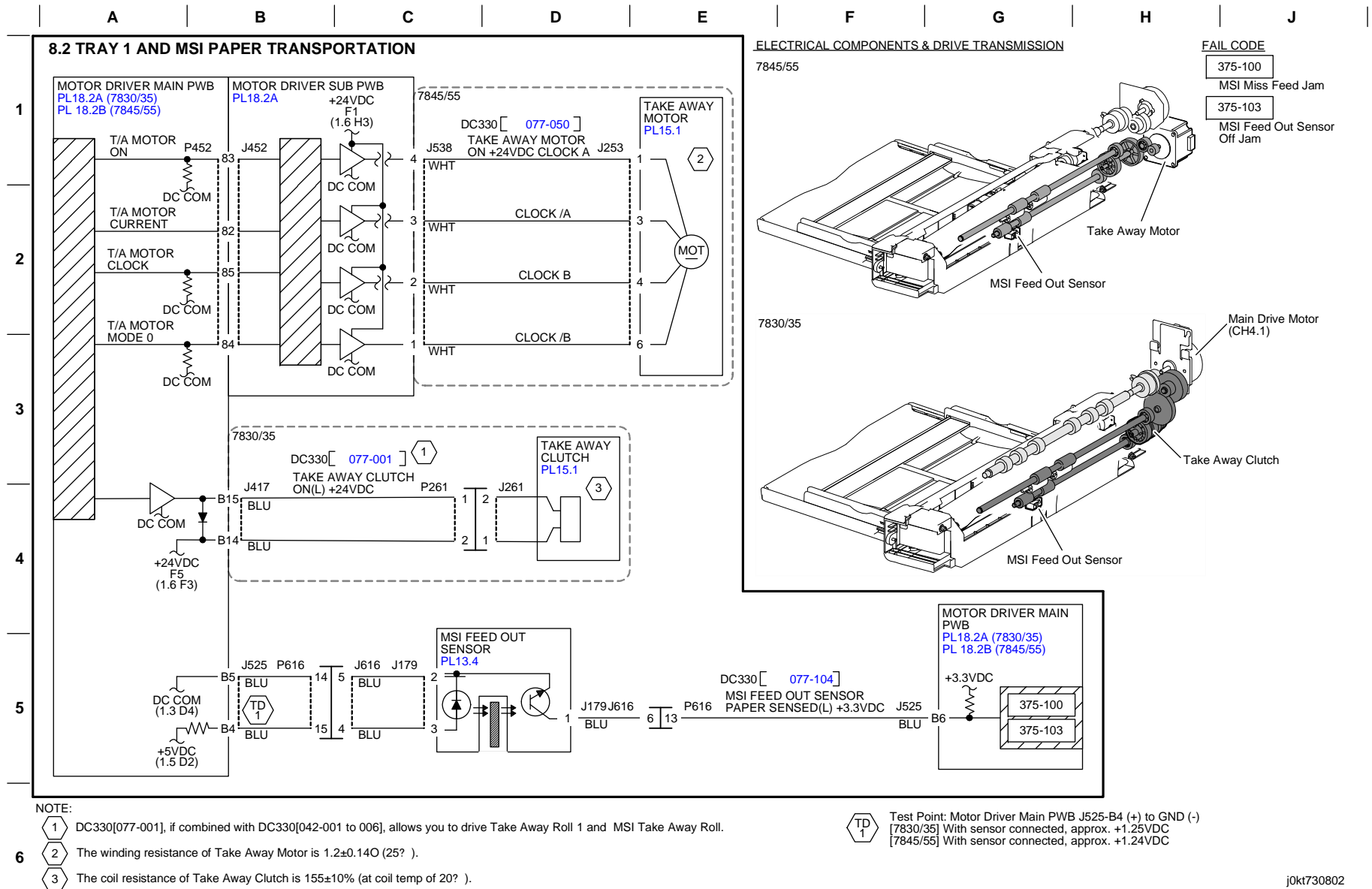
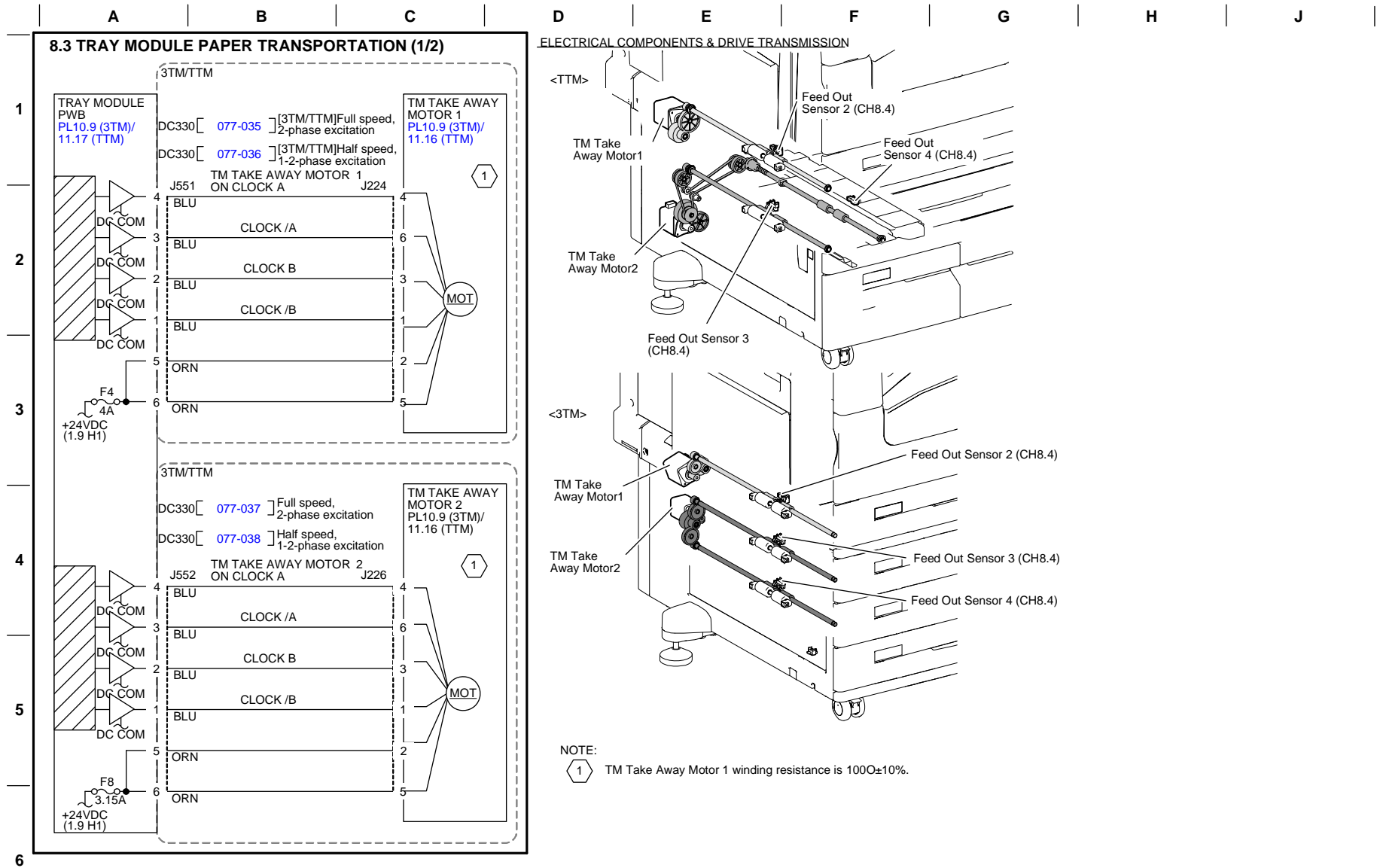


Figure 2 BSD 8.2 Tray 1 and MSI Paper Transportation

# BSD 8.3 Tray Module Paper Transportation (1 of 2)



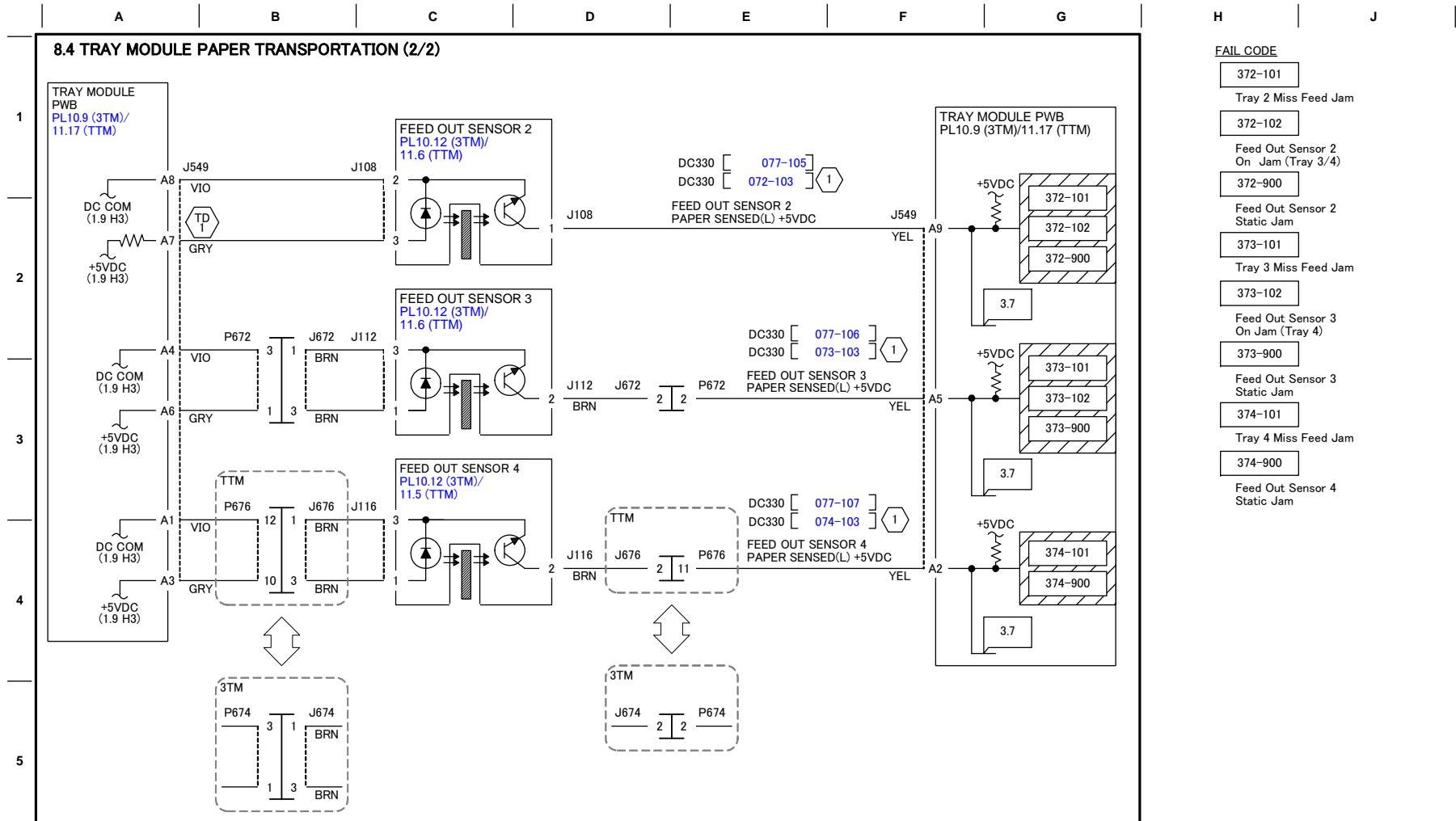
jokt730803

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730803\_SPY.VSD

Figure 3 BSD 8.3 Tray Module Paper Transportation (1 of 3)

# BSD 8.4 Tray Module Paper Transportation (2 of 2)



**NOTE:**

1 Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

TD 1 Test Point: TRAY MODULE PWB J549-A7 (+) to GND (-)  
[7830/35] With sensor connected, approx. +1.18VDC  
[7845/55] With sensor connected, approx. +1.18VDC

6

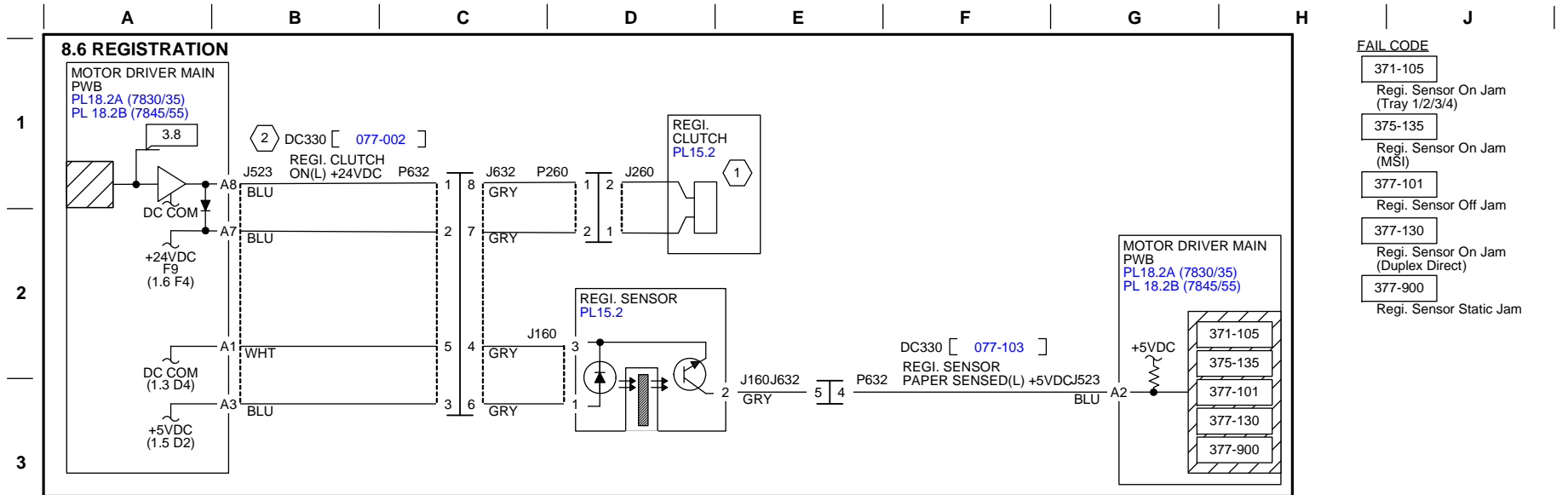
j0kt730805

10/10/12

730805\_SPY.VSD

Figure 4 BSD 8.4 Tray Module Paper Transportation (2 of 3)

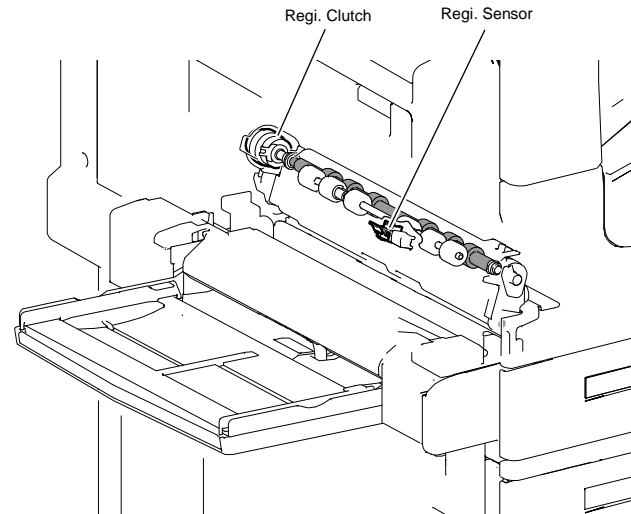
# BSD 8.6 Registration



NOTE:

- ① The coil resistance of Regi. Clutch is 192±10% (at coil temp of 20° ).
- ② DC330[077-002], if combined with DC330[042-001 to 006], allows you to drive Regi. Roll.

## ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0kt730806

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730806\_SPY.VSD

Figure 5 BSD 8.6 Registration



# BSD 8.7 Paper Path (7845/55 - 3TM)

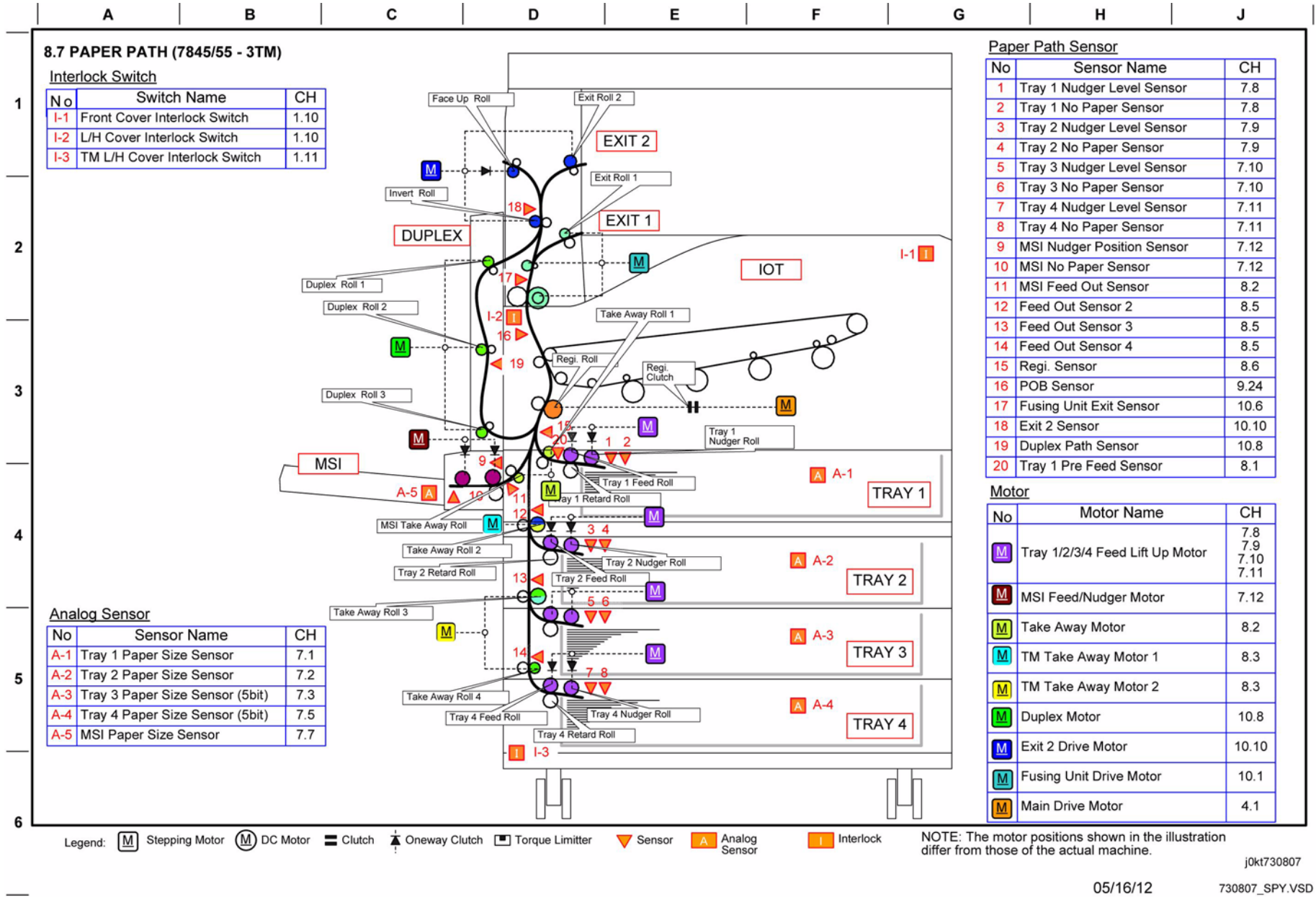


Figure 6 BSD 8.7 Paper Path (7845/55 - 3TM)

# BSD 8.8 Paper Path (7845/55 - TTM)

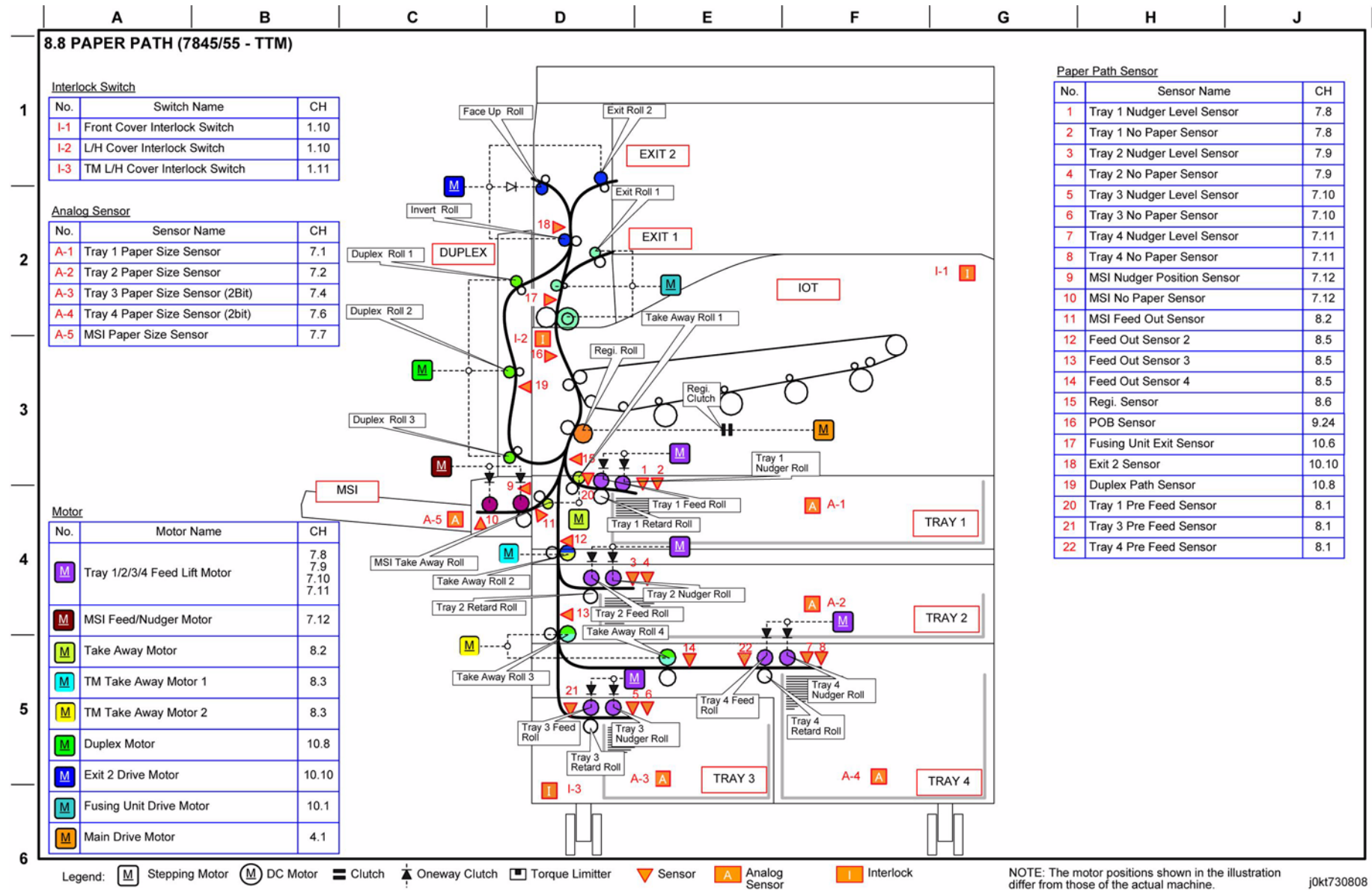
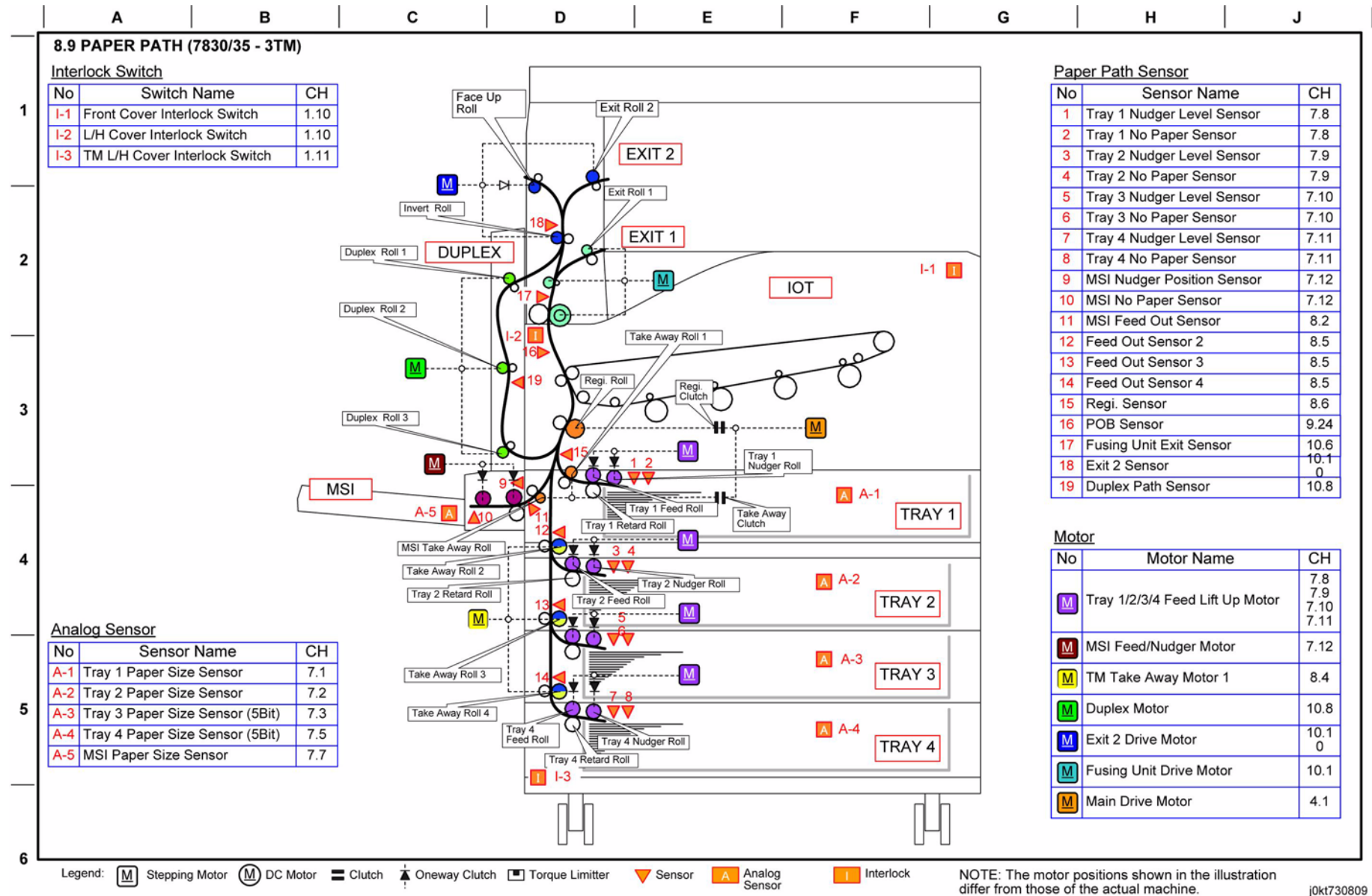


Figure 7 BSD 8.8 Paper Path (7845/55 - TTM)

# BSD 8.9 Paper Path (7830/35 - 3TM)



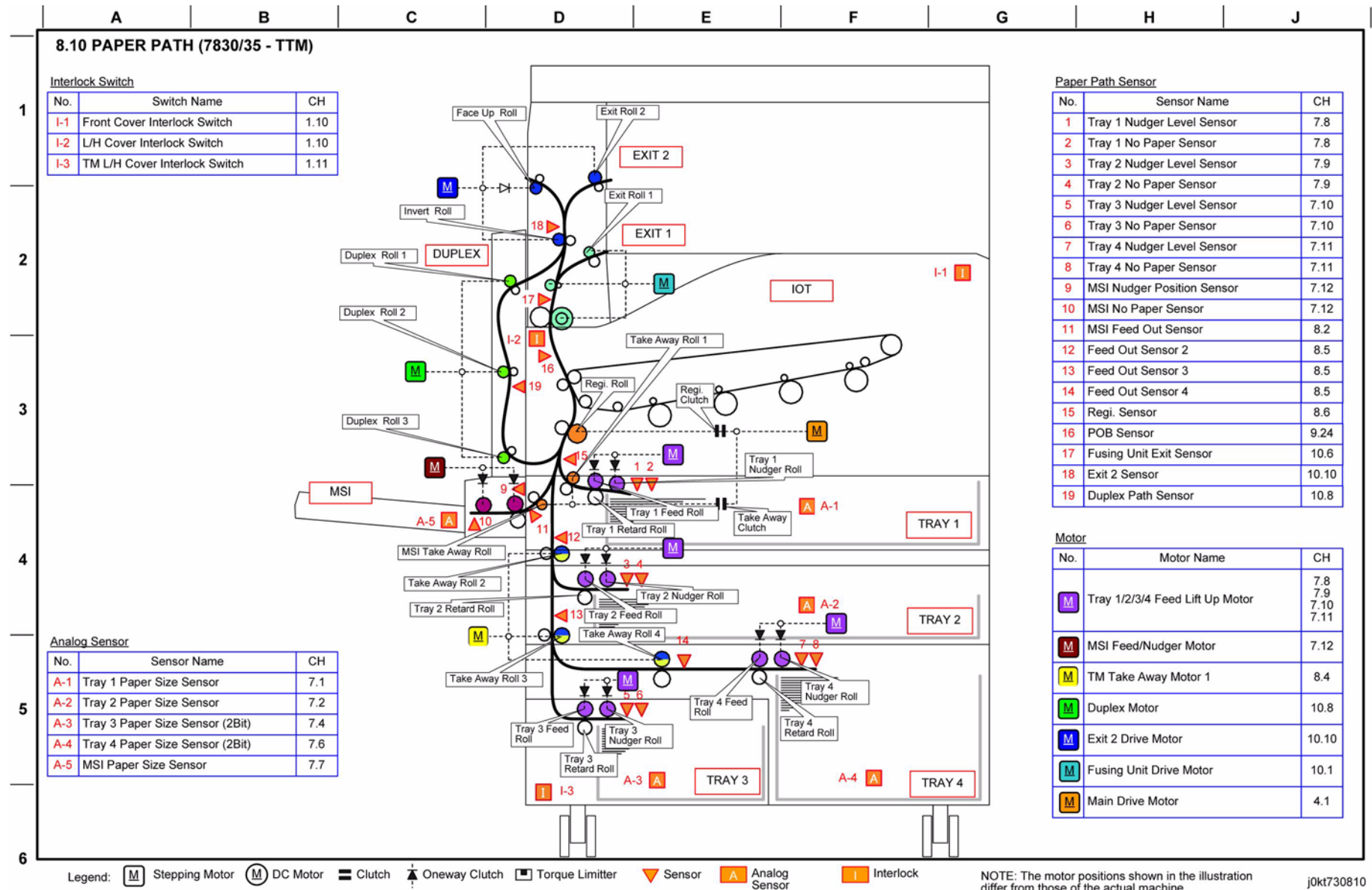
05/16/12

730809\_SPY.VSD

Figure 8 BSD 8.9 Paper Path (7830/35 - 3TM)



# BSD 8.10 Paper Path (7830/35 - TTM)

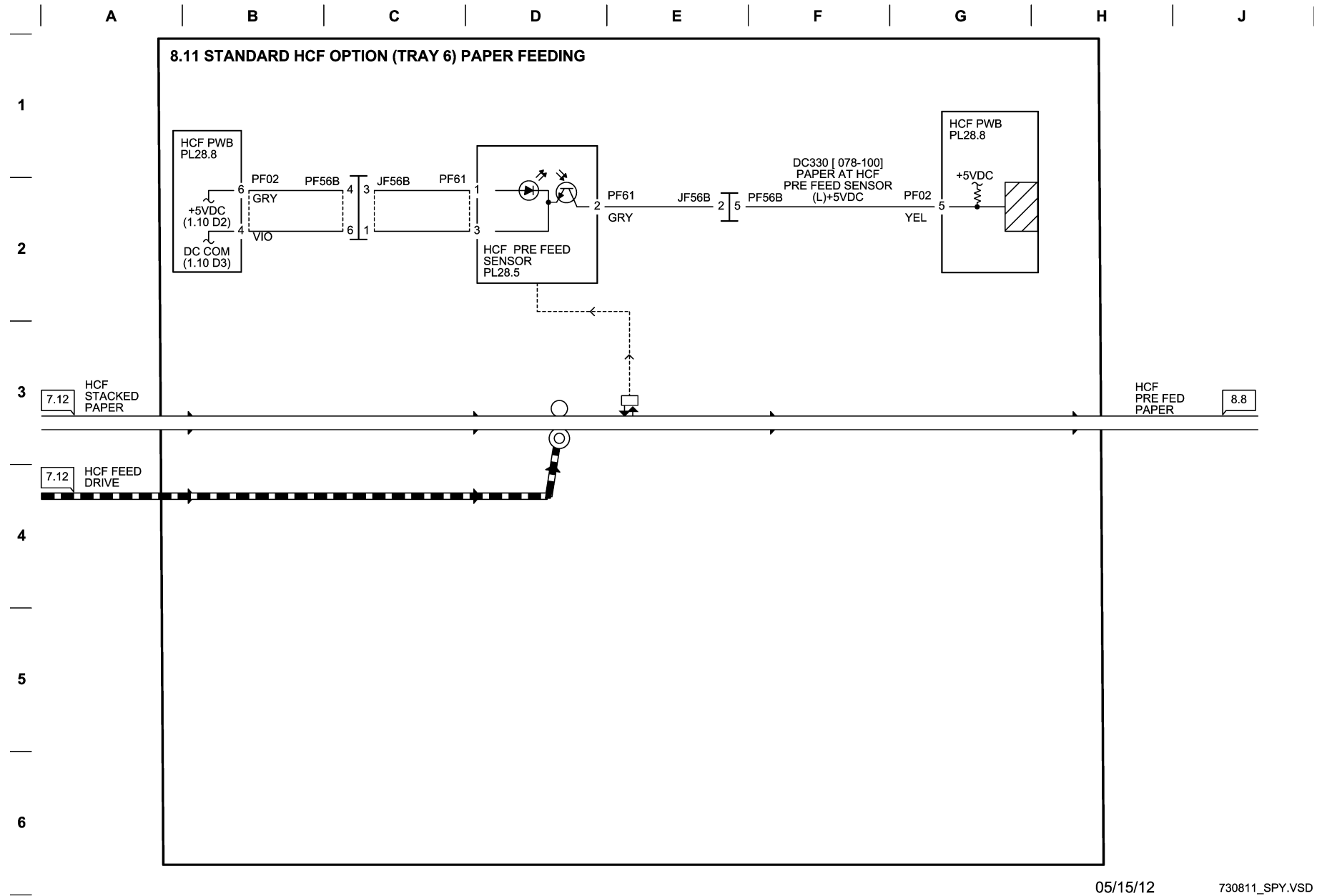


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730810\_SPY.VSD

Figure 9 BSD 8.10 Paper Path (7830/35 - TTM)

**BSD 8.11 Standard HCF Option (Tray 6) Paper Feeding**



**Figure 10 BSD 8.11 Standard HCF Option (Tray 6) Paper Feeding**

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730811\_SPY.VSD

BSD 8.12 Standard HCF Option (Tray 6) Paper Transportation

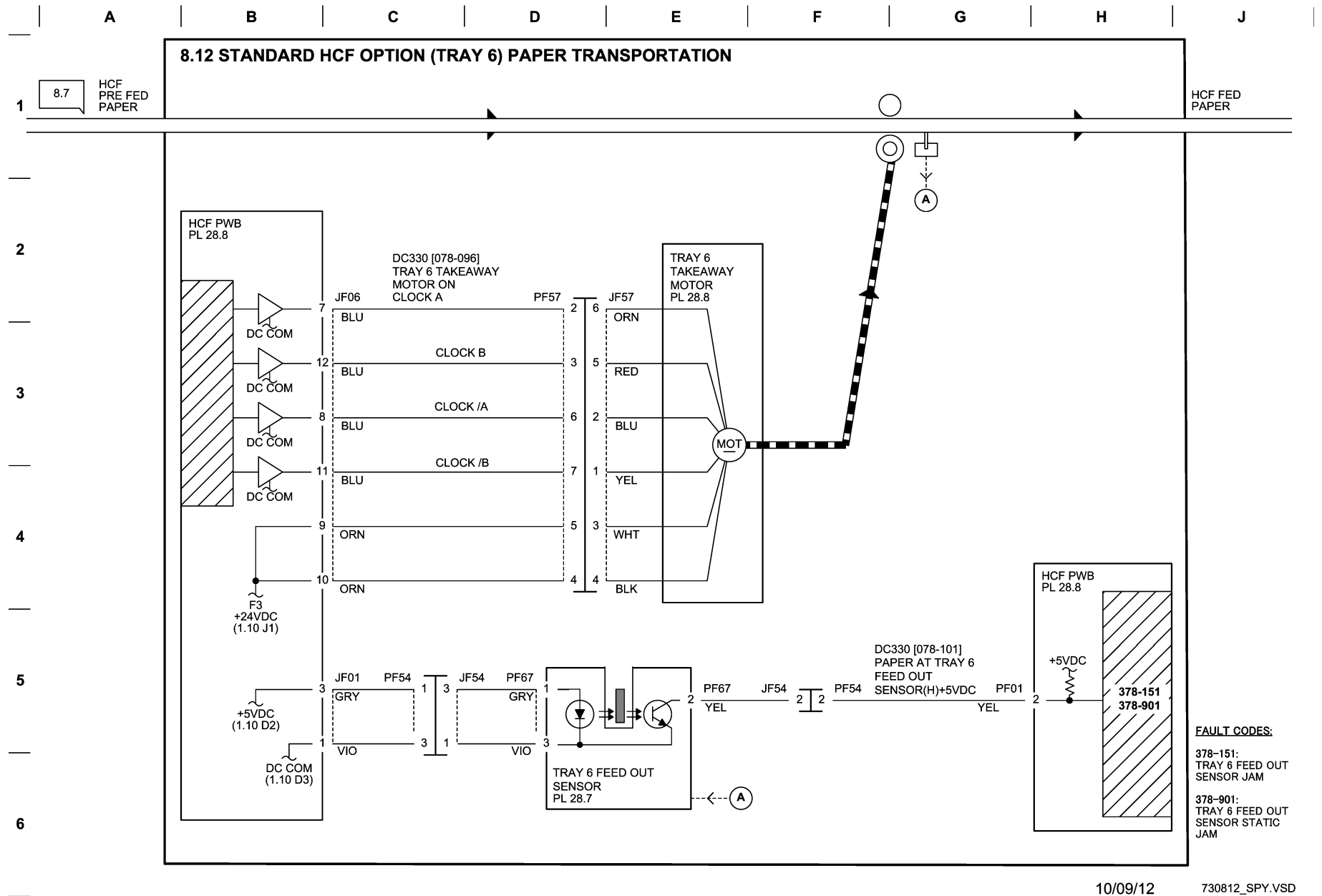


Figure 11 BSD 8.12 Standard HCF Option (Tray 6) Paper Transportation

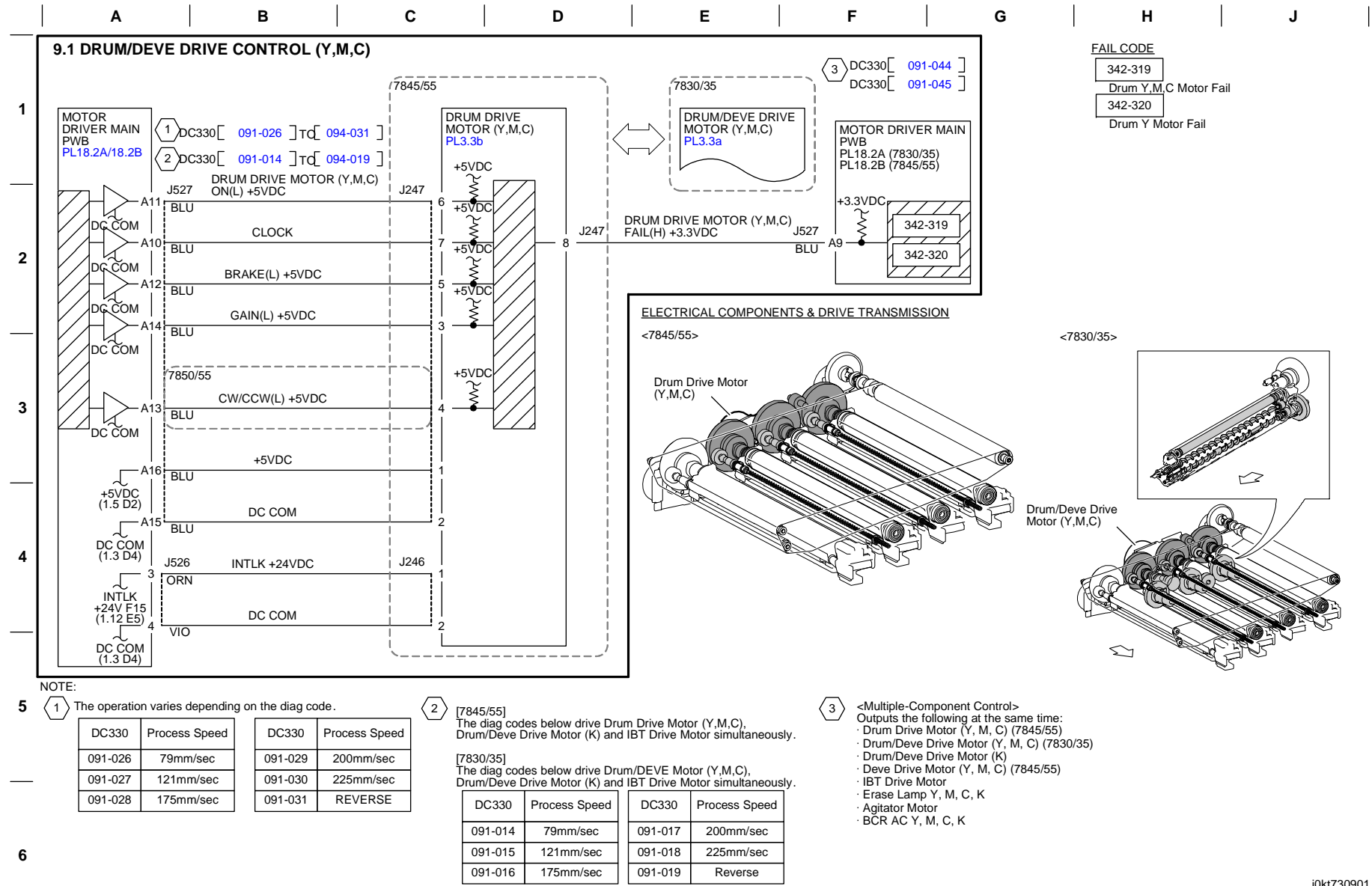


Figure 1 BSD 9.1 Drum/Developer Drive Control (Y,M,C)

# BSD 9.2 Drum/Developer Drive Control (K)

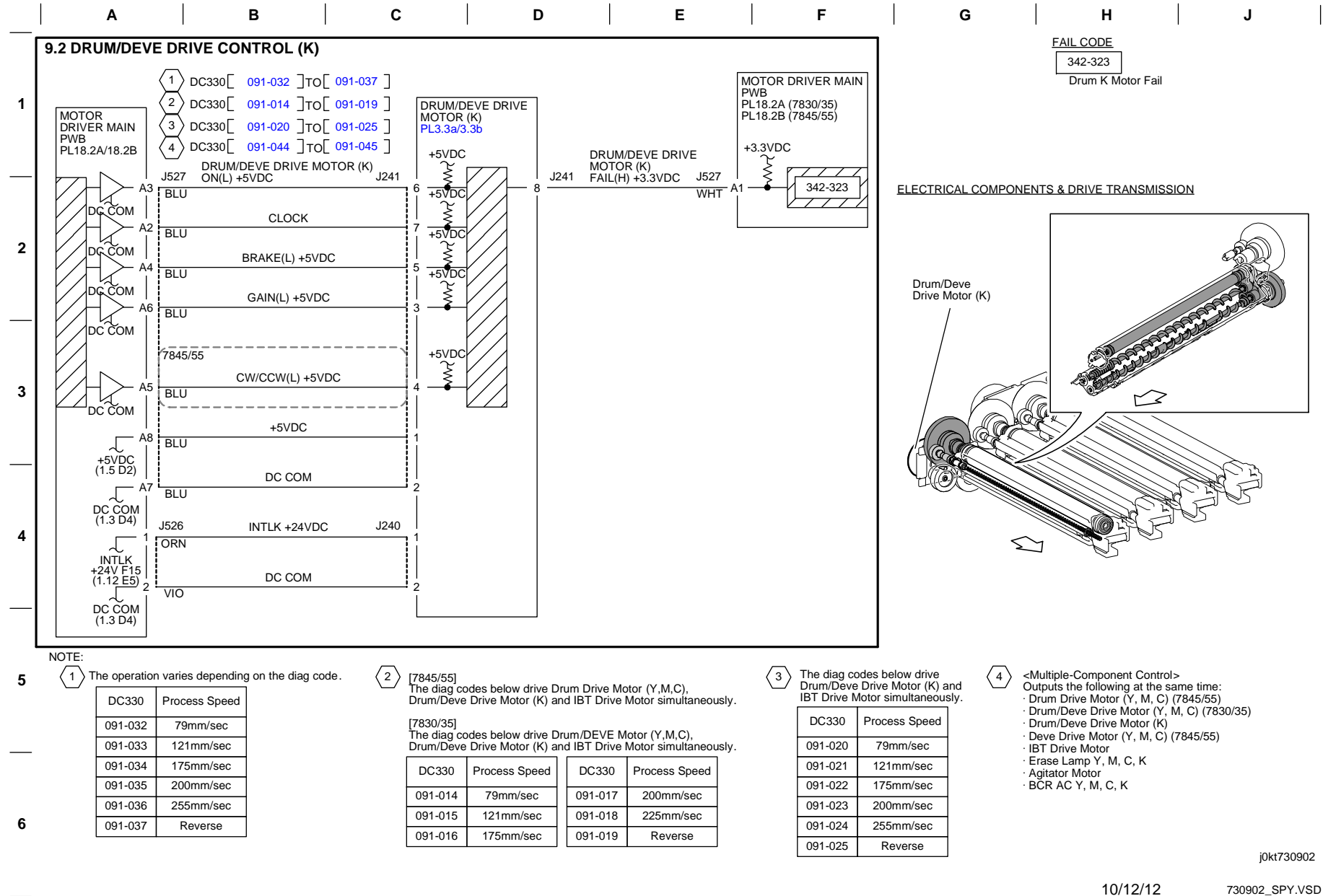


Figure 2 BSD 9.2 Drum/Developer Drive Control (K)



# BSD 9.3 Drum Life Control (Y,M)

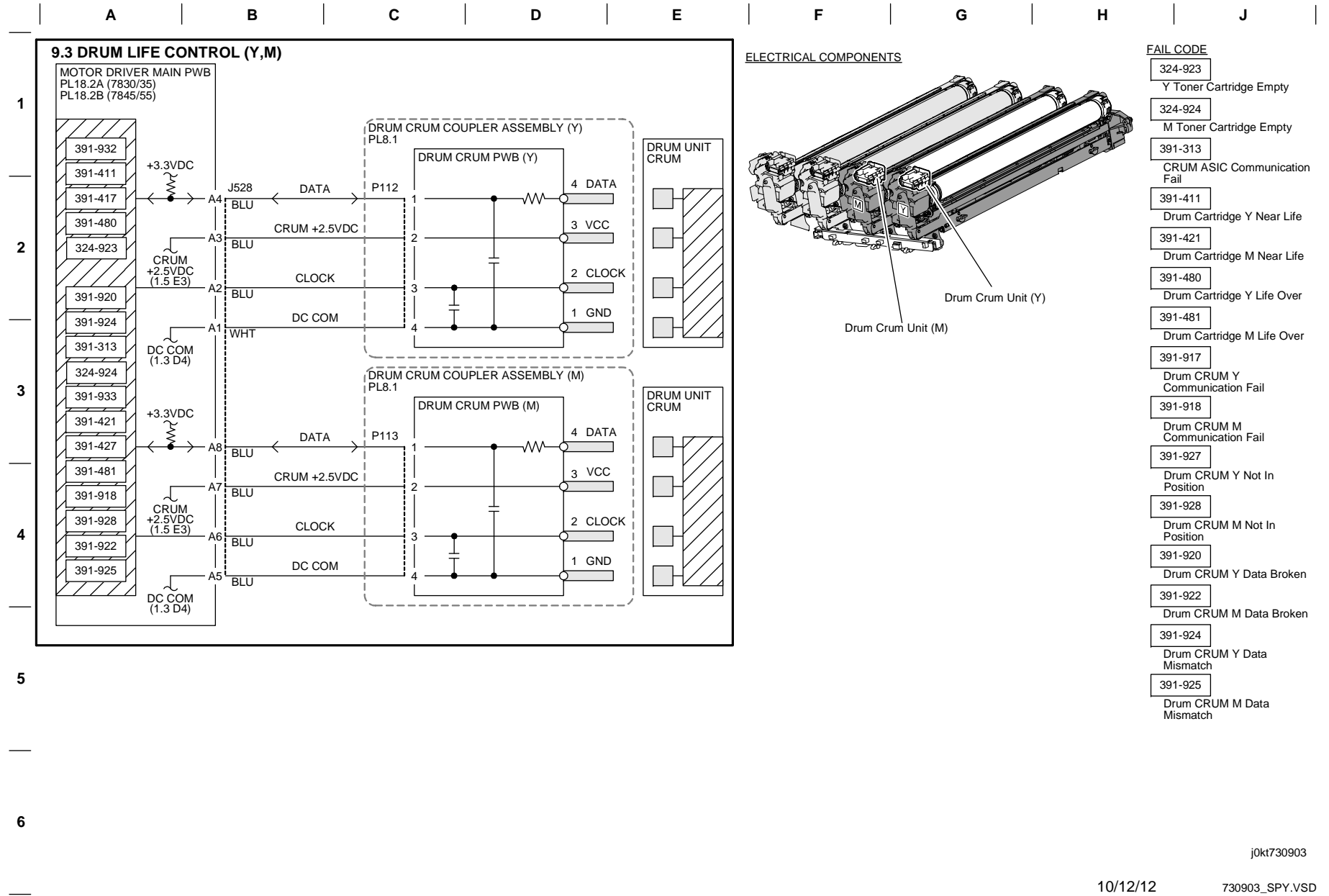


Figure 3 BSD 9.3 Drum Life Control (Y,M)



# BSD 9.5 Toner Cartridge Life Control (Y,M)

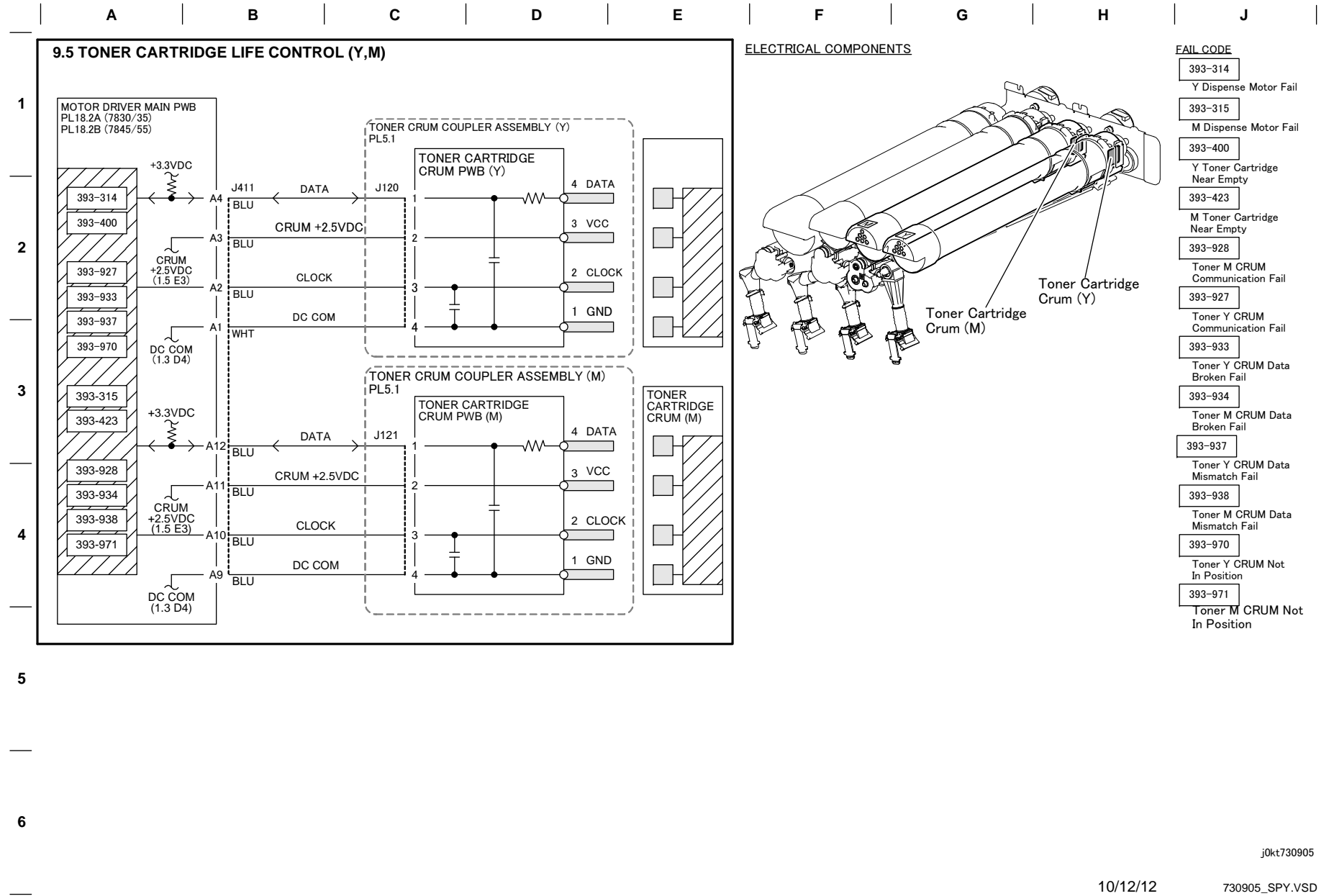


Figure 5 BSD 9.5 Toner Cartridge Life Control (Y,M)

# BSD 9.6 Toner Cartridge Life Control (C,K)

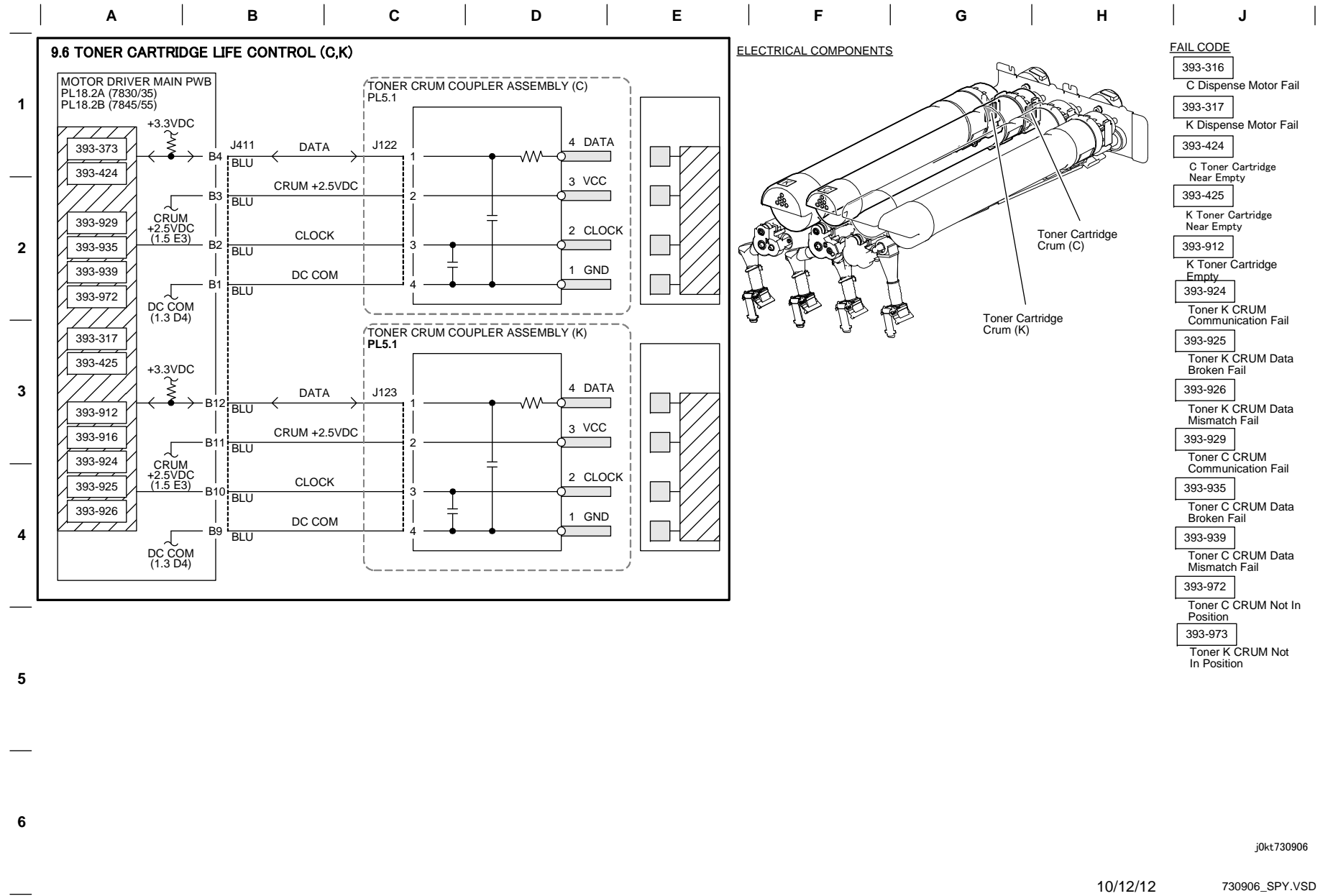


Figure 6 BSD 9.6 Toner Cartridge Life Control (C,K)

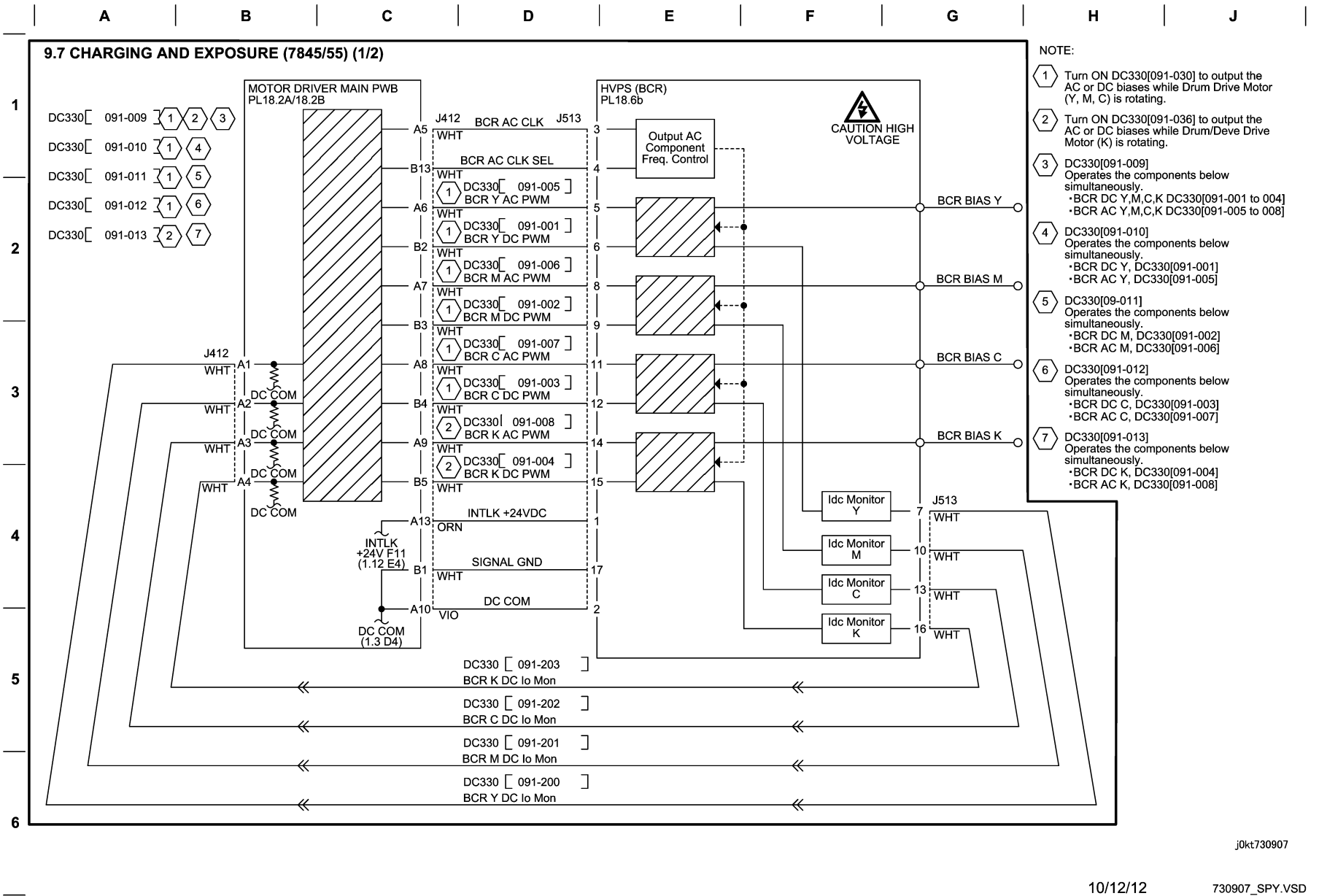
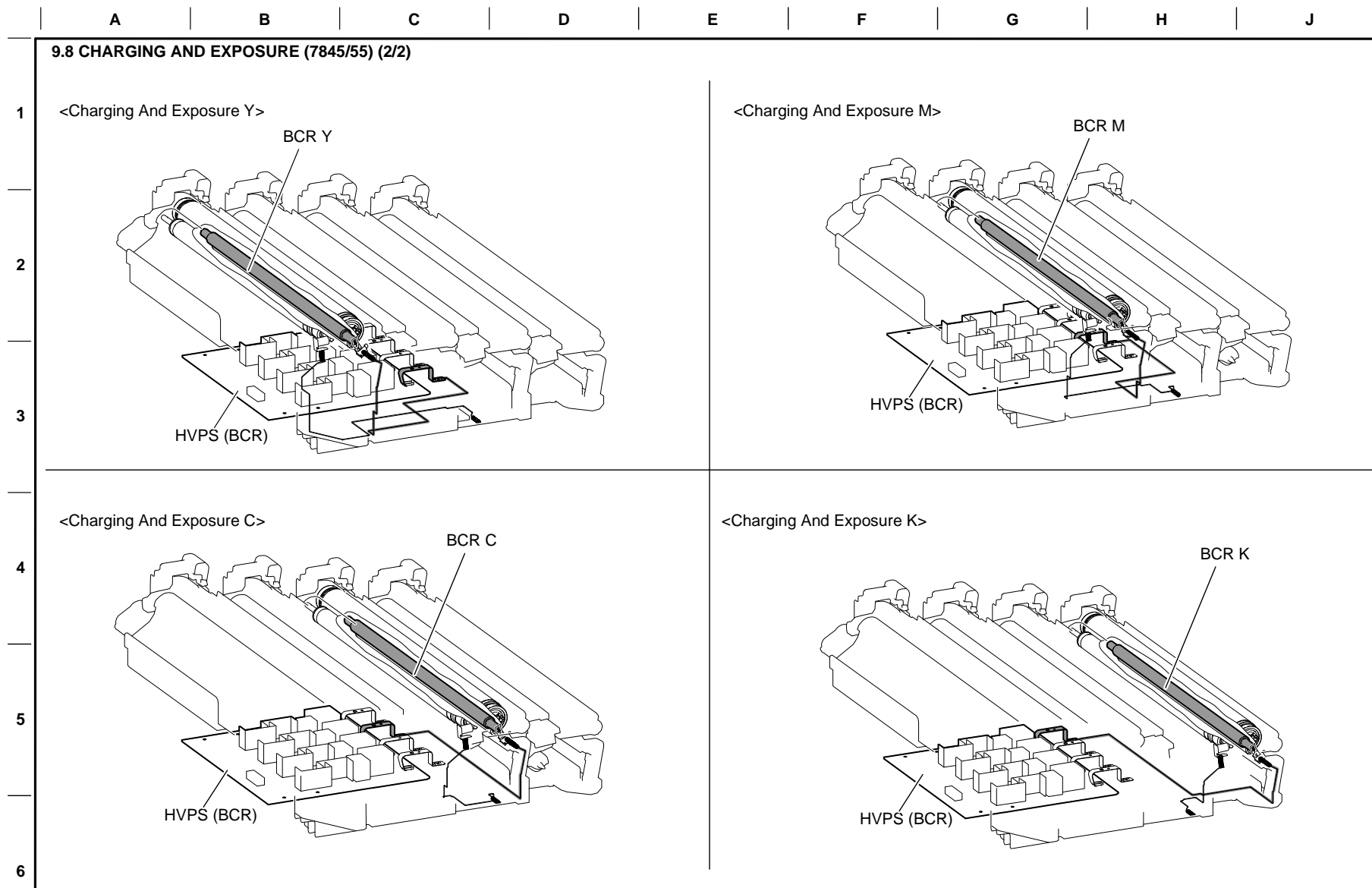


Figure 7 BSD 9.7 Charging and Exposure (7845/55) (1 of 2)

**BSD 9.8 Charging and Exposure (7845/55) (2 of 2)**



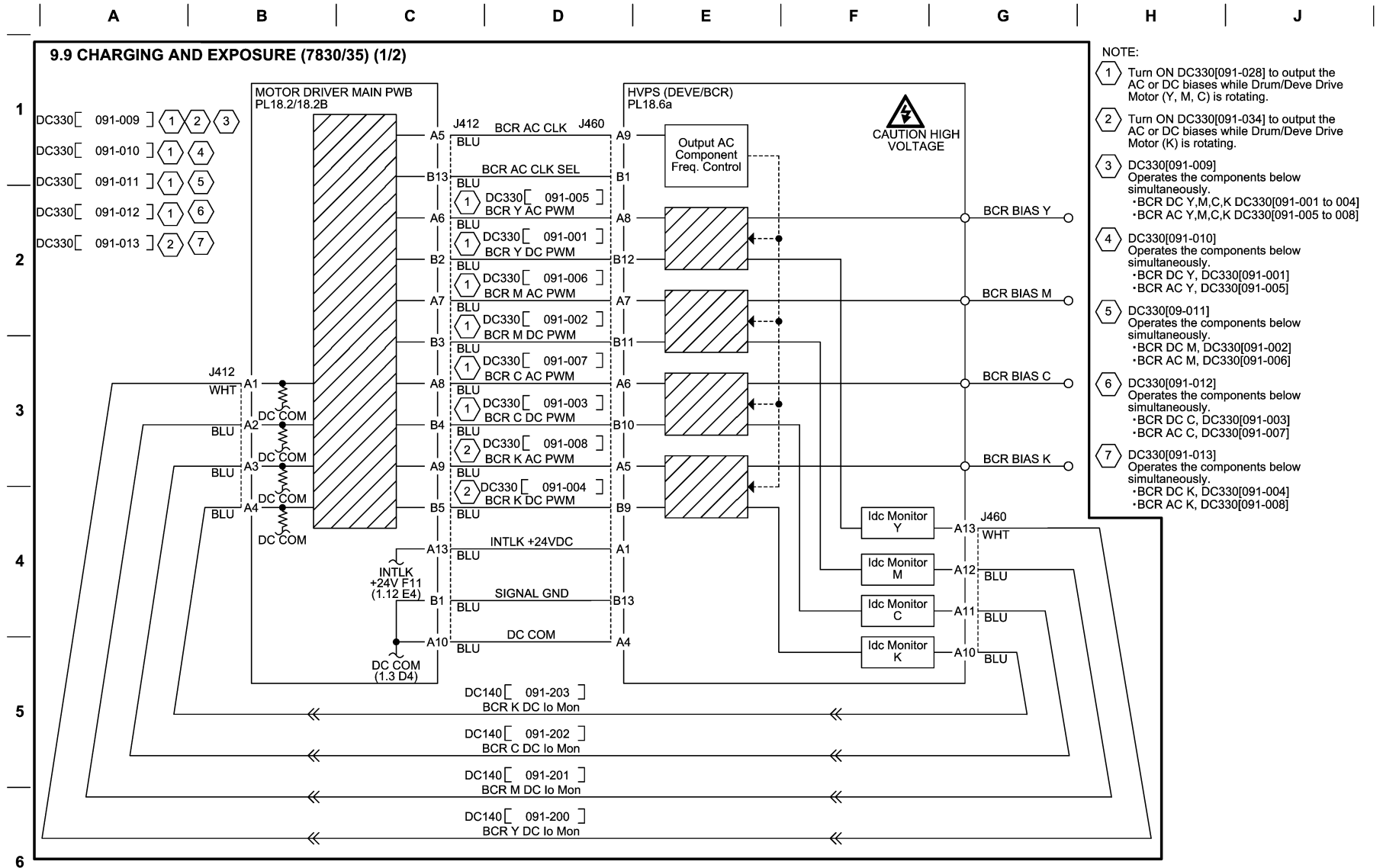
j0kt730908

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730908\_SPY.VSD

**Figure 8 BSD 9.8 Charging and Exposure (7845/55) (2 of 2)**

**BSD 9.9 Charging and Exposure (7830/35) (1 of 2)**



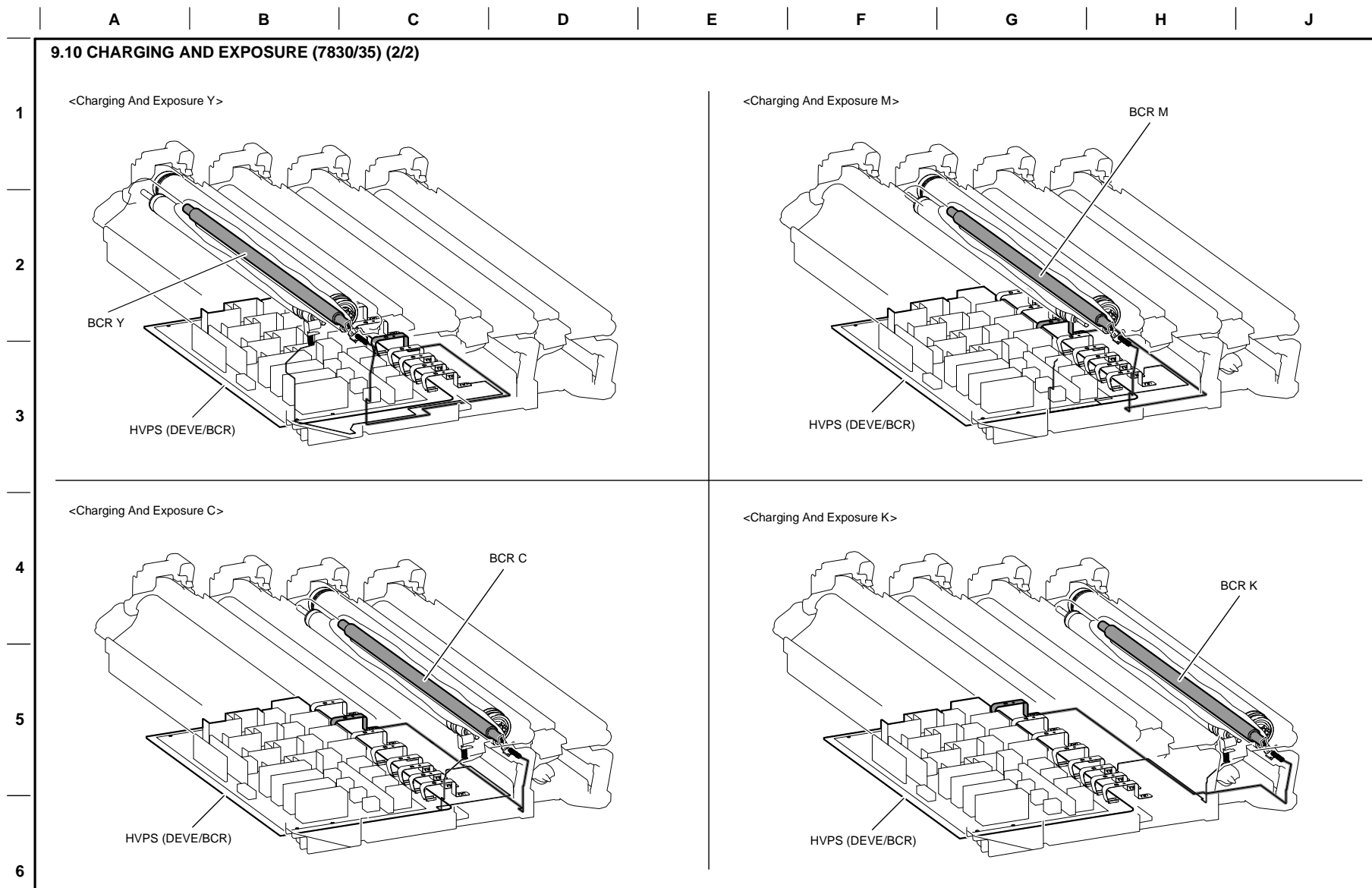
j0kt730909

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**Figure 9 BSD 9.9 Charging and Exposure (7830/35) (1 of 2)**

**BSD 9.10 Charging and Exposure (7830/35) (2 of 2)**



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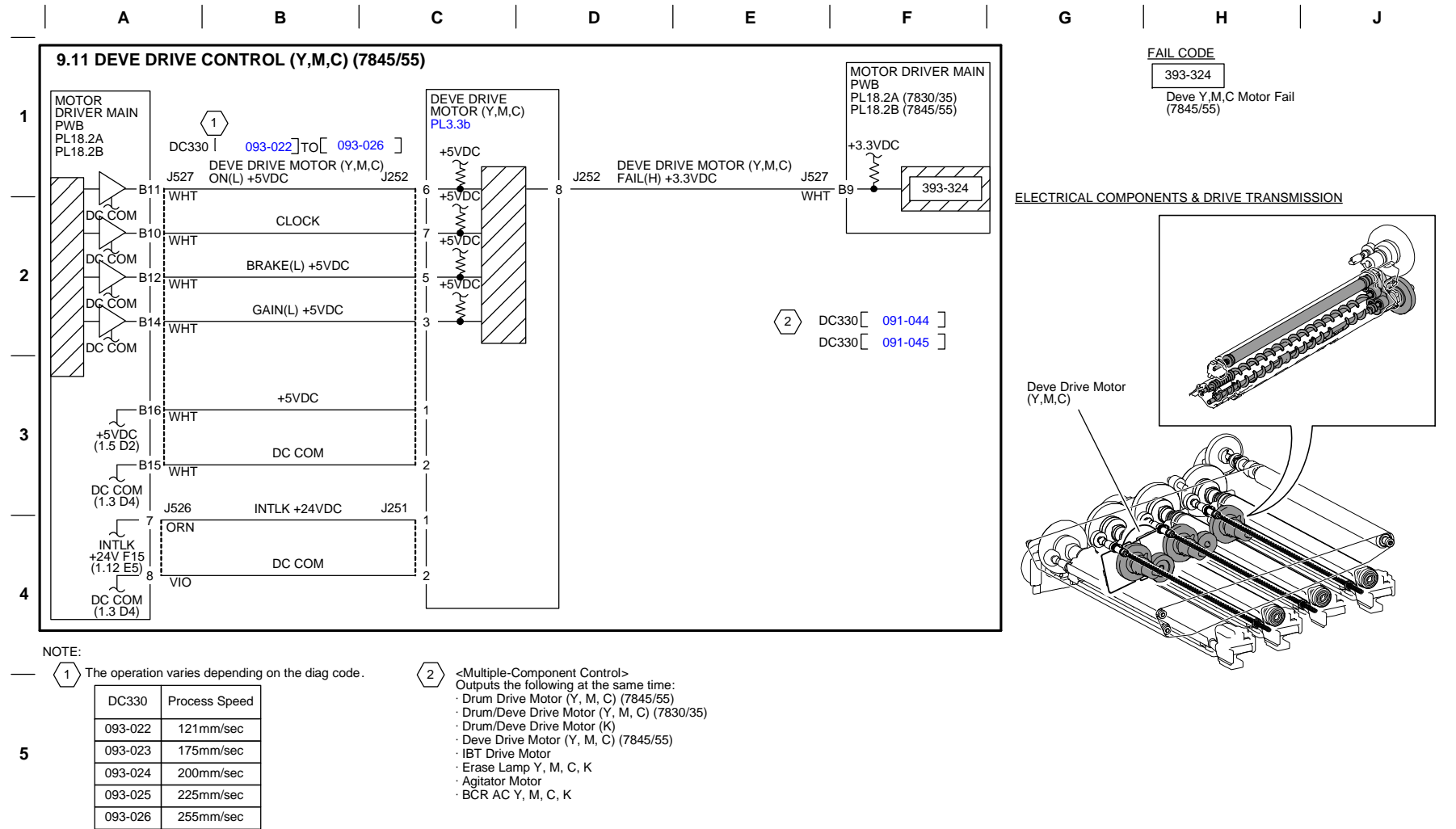
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730910\_SPY.VSD

**Figure 10 BSD 9.10 Charging and Exposure (7830/35) (2 of 2)**



# BSD 9.11 Developer Drive Control (Y,M,C) (7845/55)



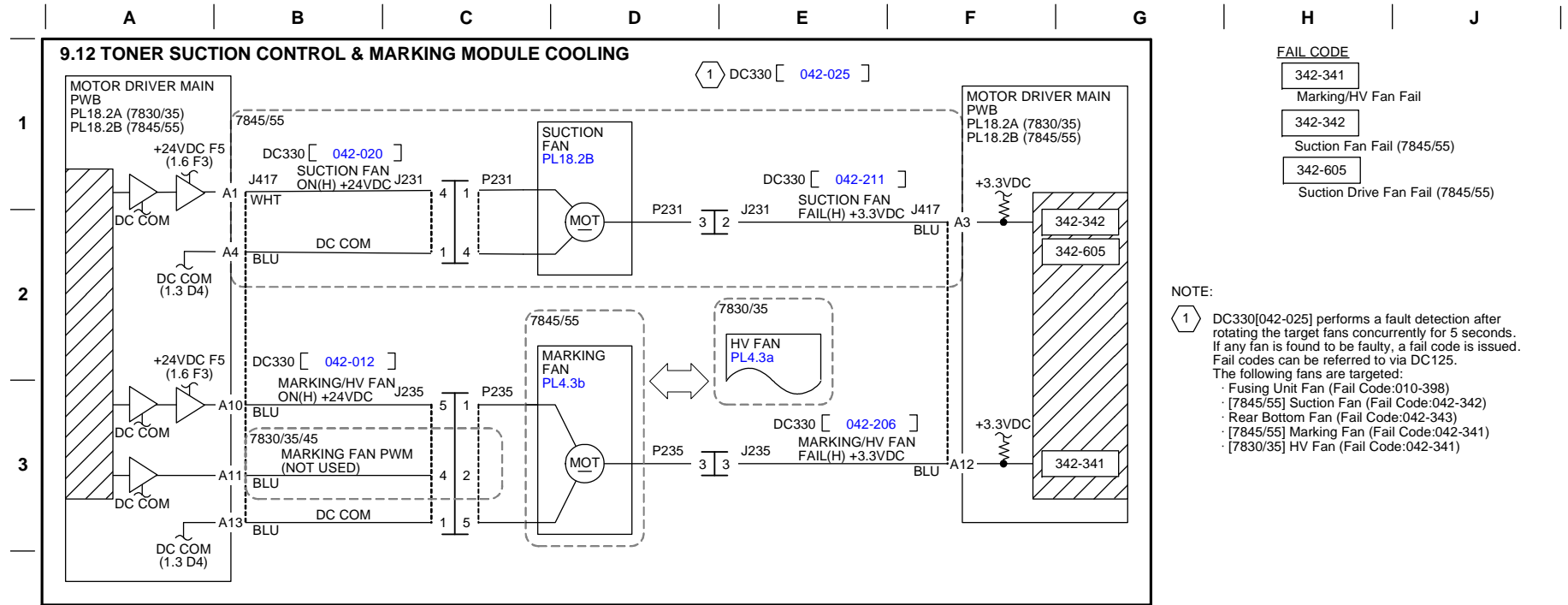
jok730911

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730911\_SPY.VSD

Figure 11 BSD 9.11 Developer Drive Control (Y,M,C) (7845/55)

# BSD 9.12 Toner Suction and Marking Module



**FAIL CODE**

342-341
Marking/HV Fan Fail
342-342
Suction Fan Fail (7845/55)
342-605
Suction Drive Fan Fail (7845/55)

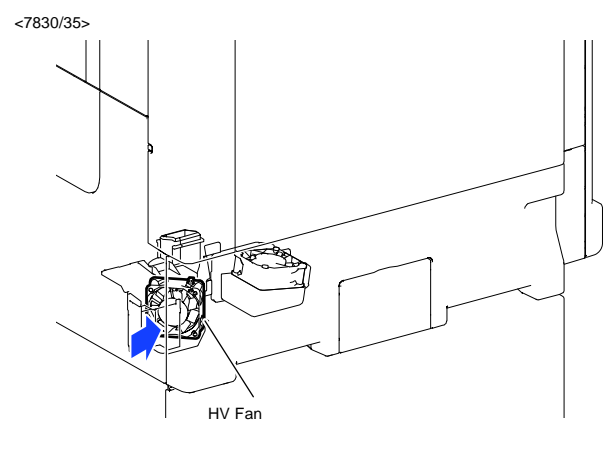
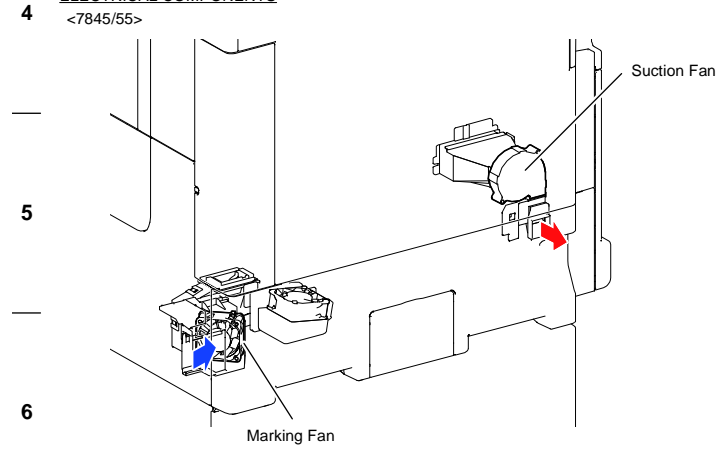
**NOTE:**

1 DC330[042-025] performs a fault detection after rotating the target fans concurrently for 5 seconds. If any fan is found to be faulty, a fail code is issued. Fail codes can be referred to via DC125.

The following fans are targeted:

- Fusing Unit Fan (Fail Code:010-398)
- [7845/55] Suction Fan (Fail Code:042-342)
- Rear Bottom Fan (Fail Code:042-343)
- [7845/55] Marking Fan (Fail Code:042-341)
- [7830/35] HV Fan (Fail Code:042-341)

**ELECTRICAL COMPONENTS**



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10/12/12 730912\_SPY.VSD

Figure 12 BSD 9.12 Toner Suction and Marking Module

# BSD 9.13 Development (Y)

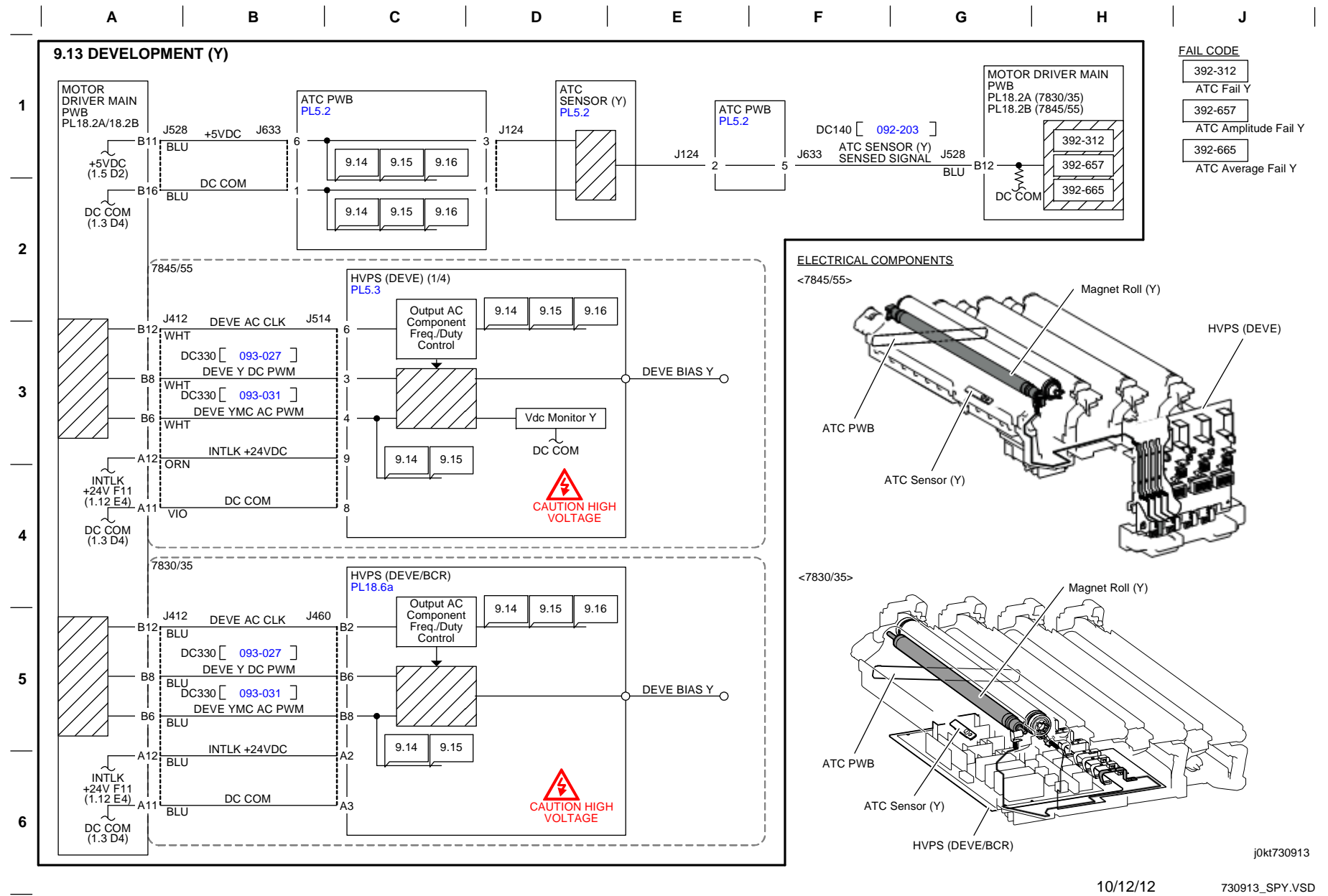


Figure 13 BSD 9.13 Development (Y)

# BSD 9.14 Development (M)

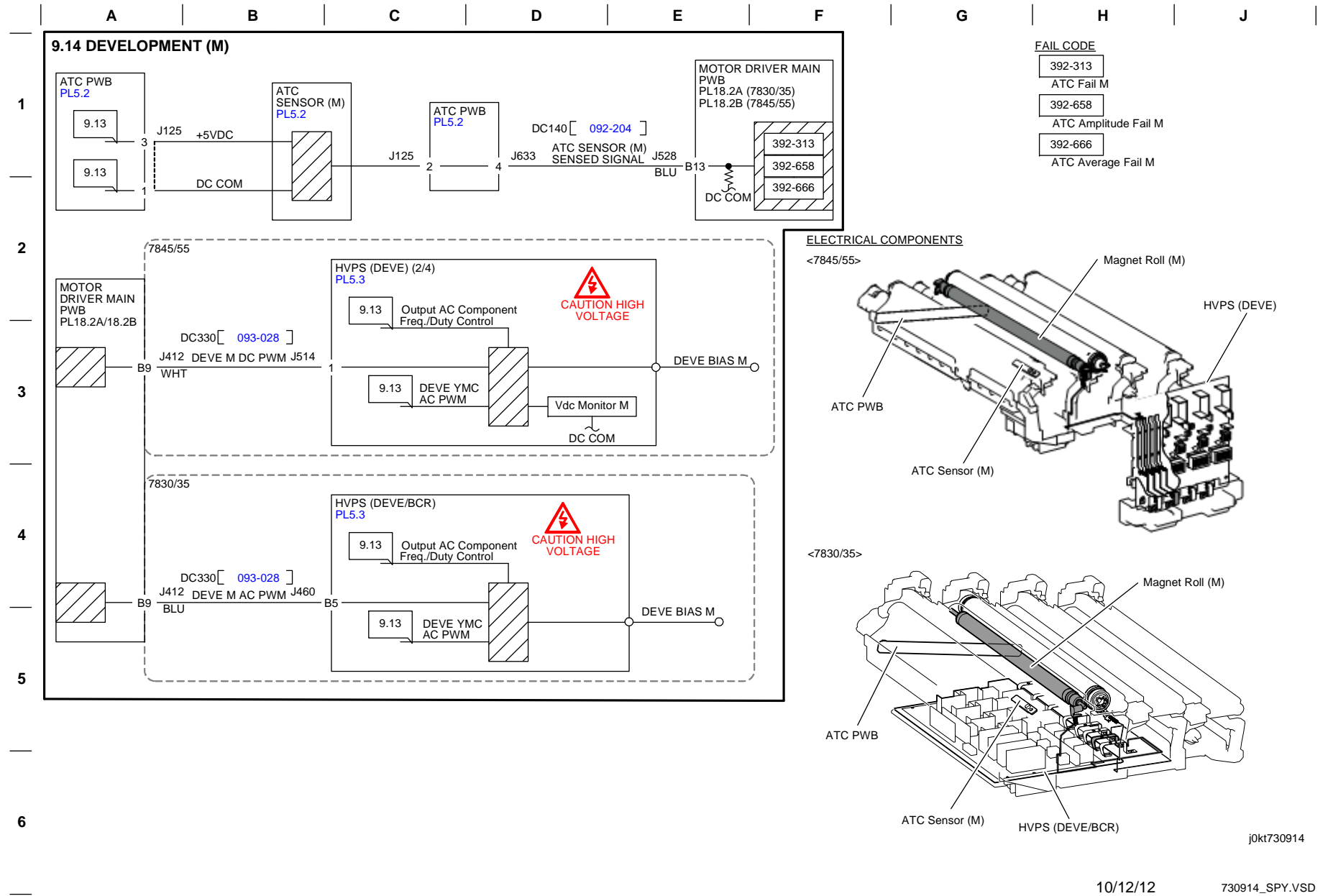


Figure 14 BSD 9.14 Development (M)

# BSD 9.15 Development (C)

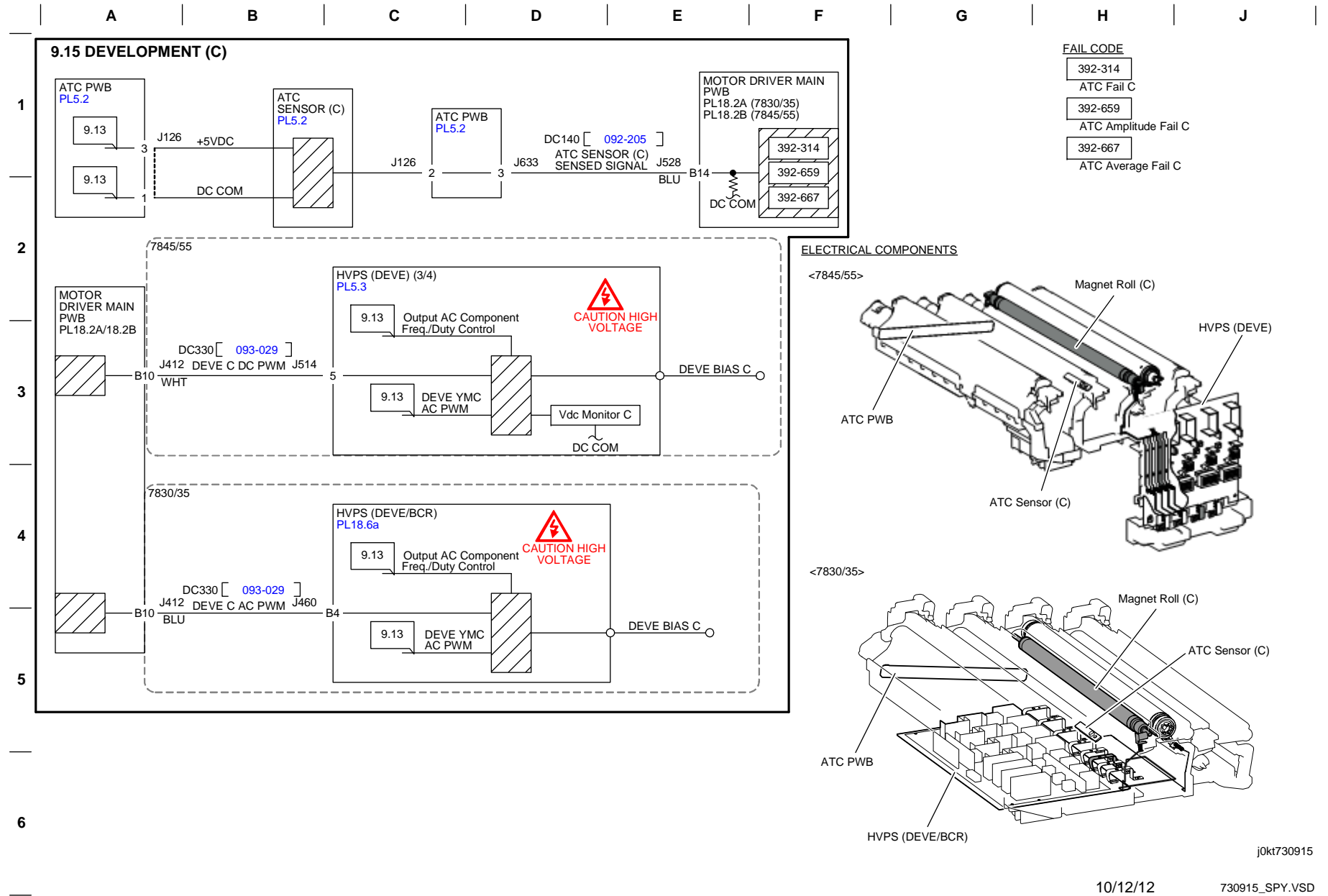


Figure 15 BSD 9.15 Development (C)

# BSD 9.16 Development (K)

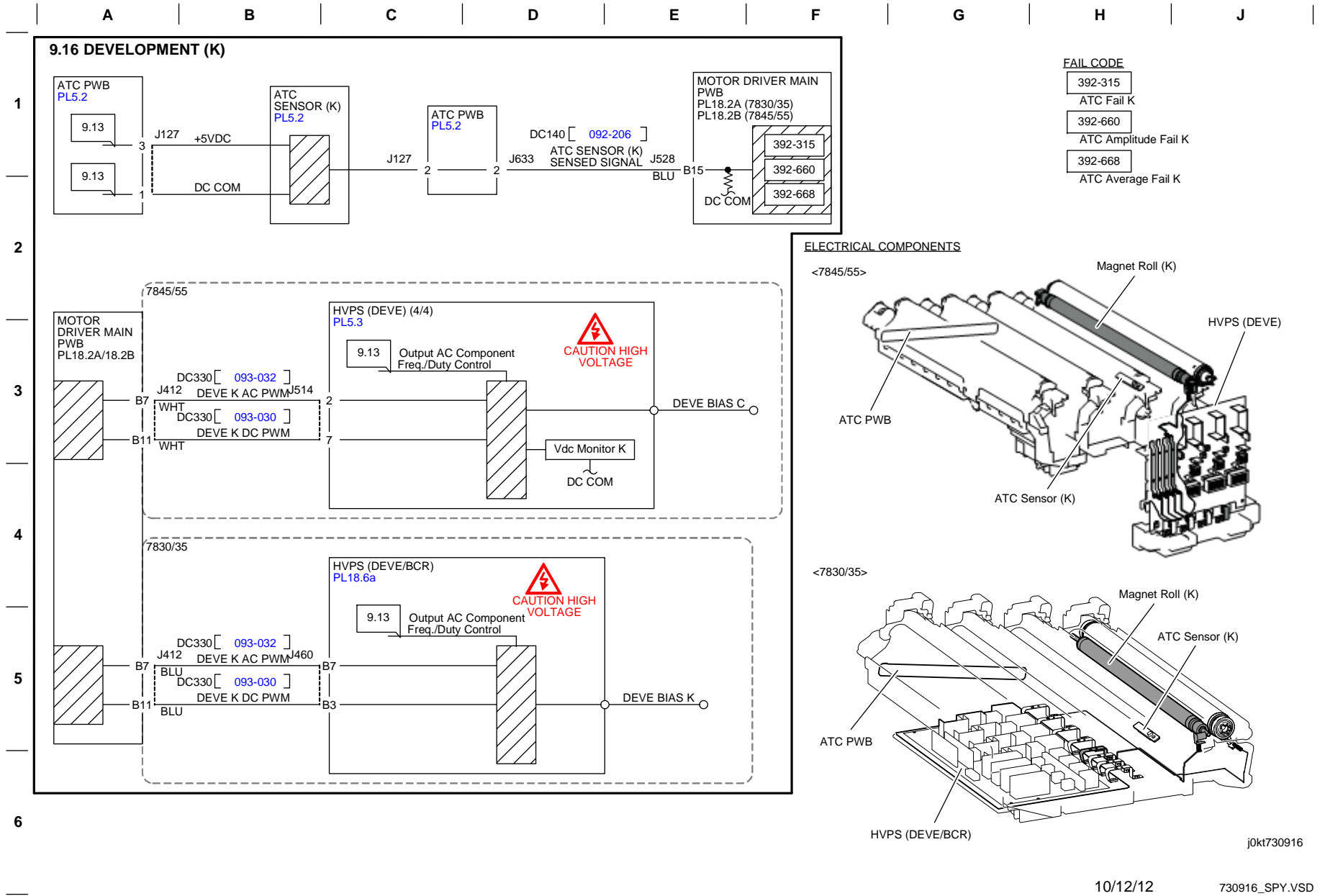
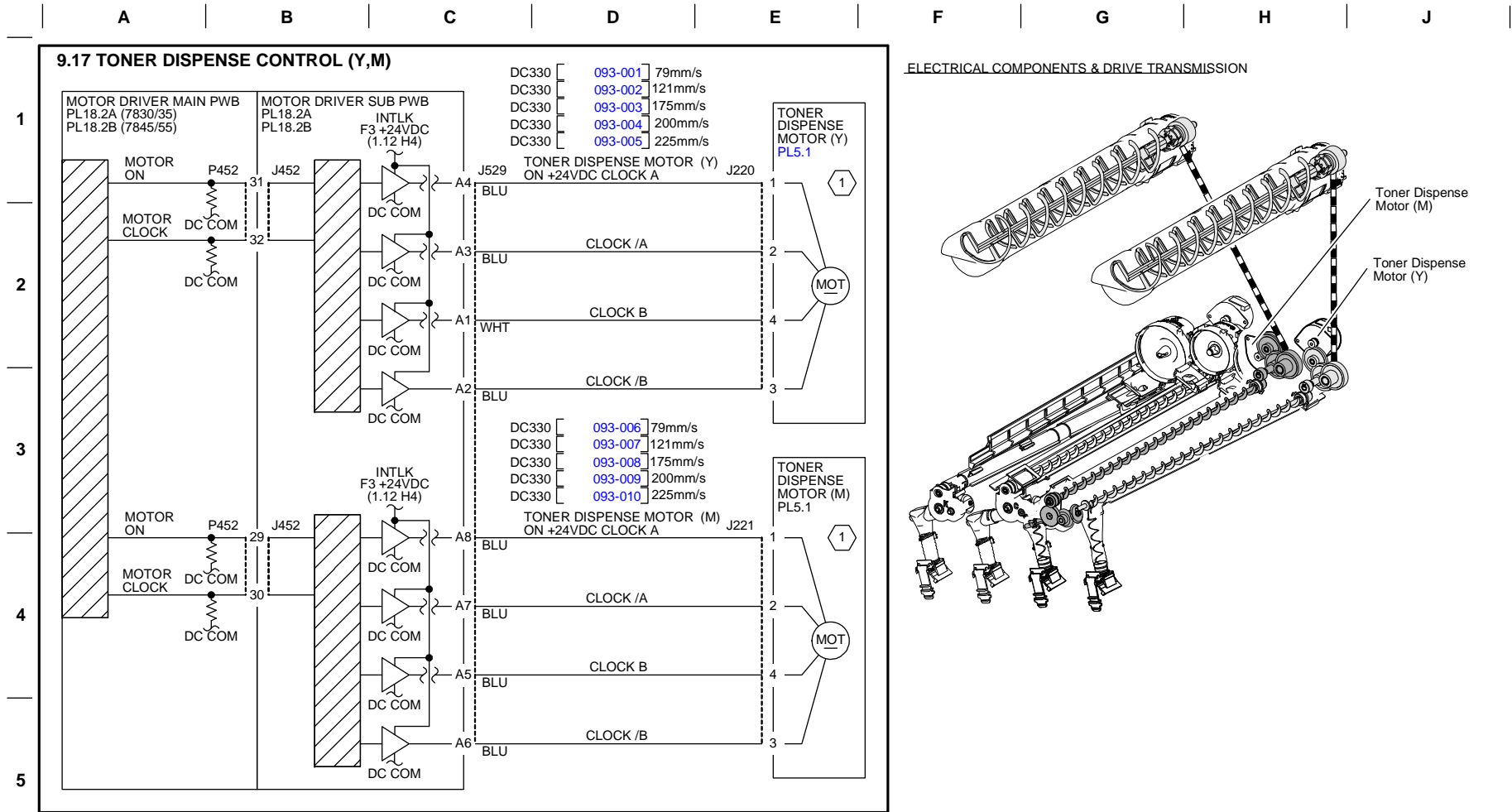
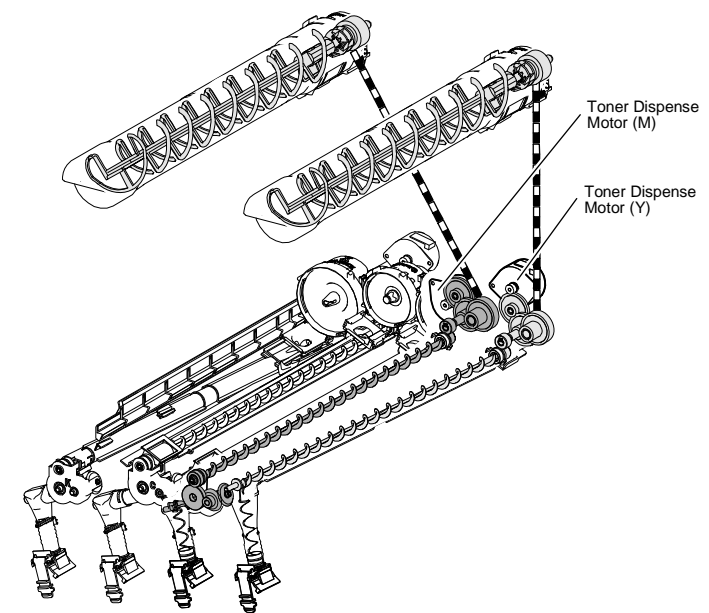


Figure 16 BSD 9.16 Development (K)

# BSD 9.17 Toner Dispense Control (Y,M)



## ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



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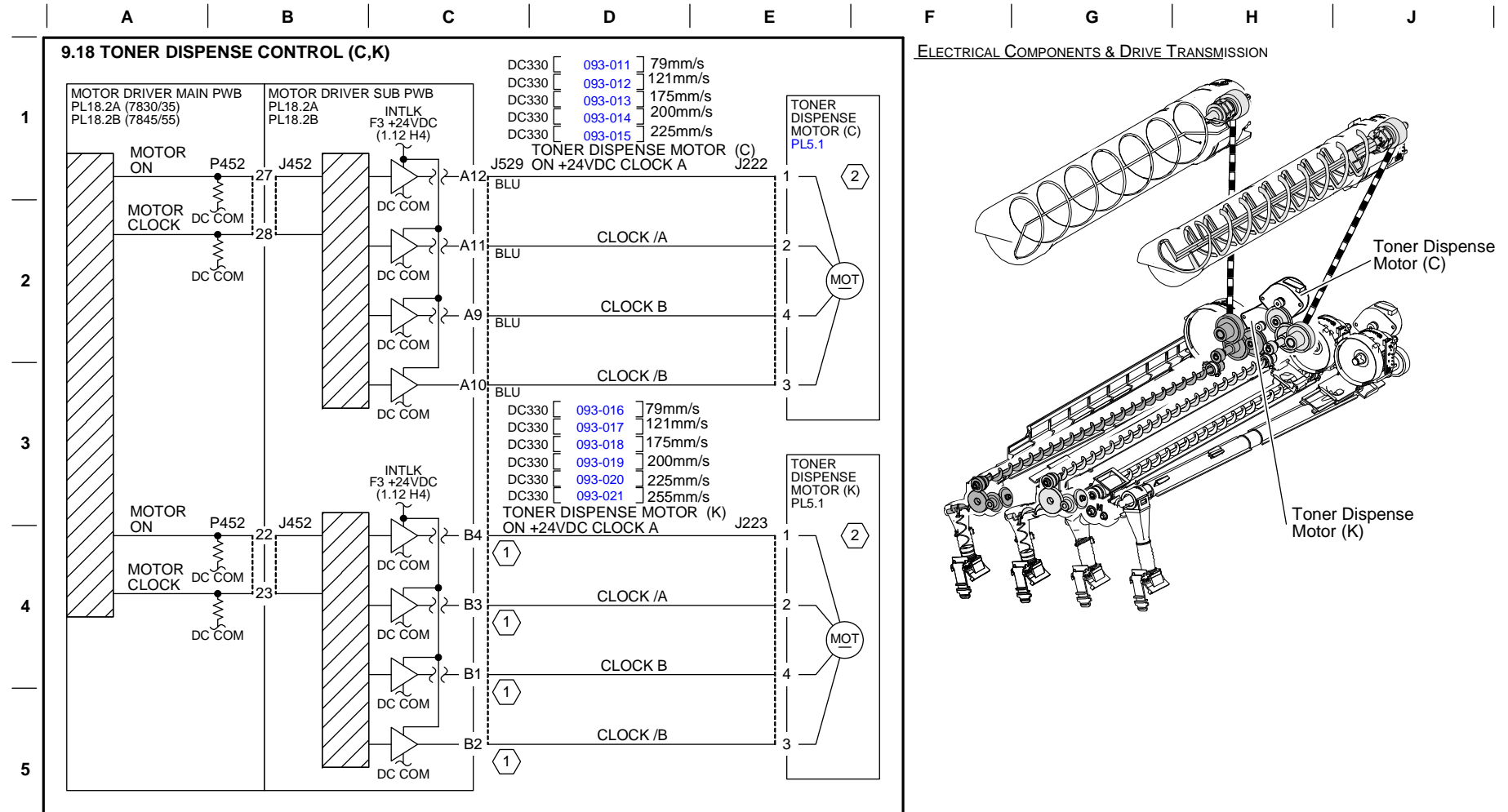
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730917\_SPY.VSD

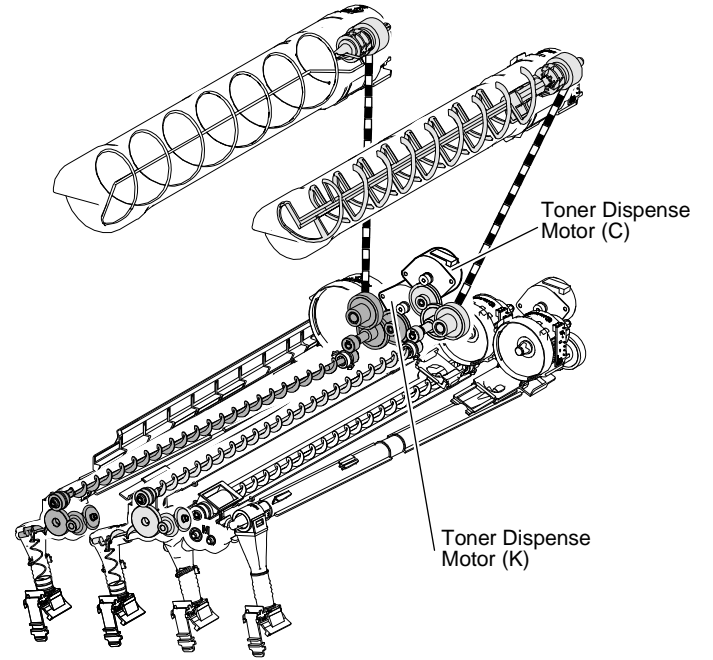
Figure 17 BSD 9.17 Toner Dispense Control (Y,M)



# BSD 9.18 Toner Dispense Control (C,K)



## ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



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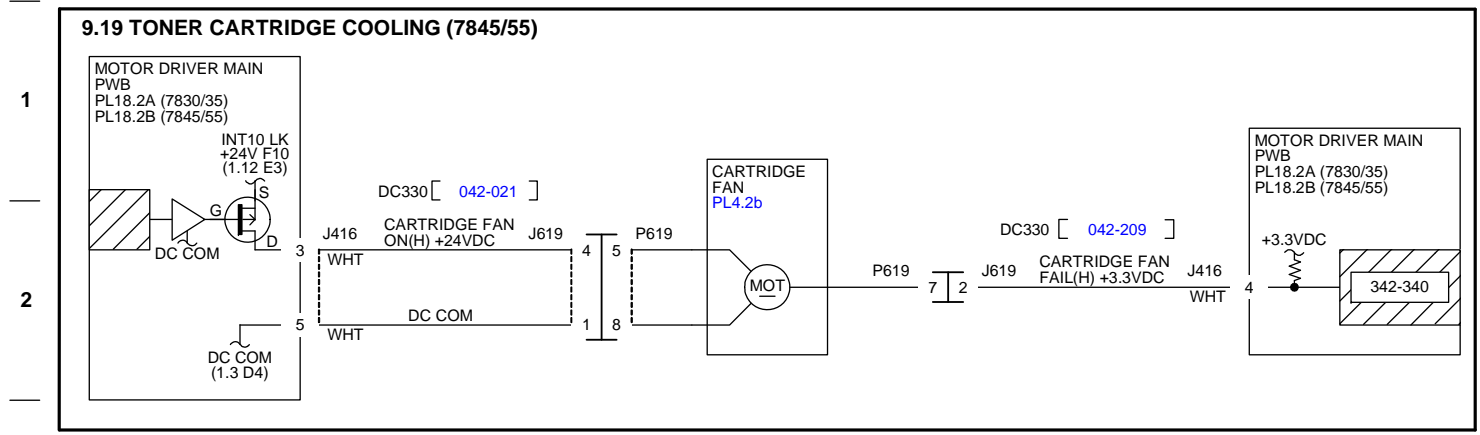
730918\_SPY.VSD

Figure 18 BSD 9.18 Toner Dispense Control (C,K)

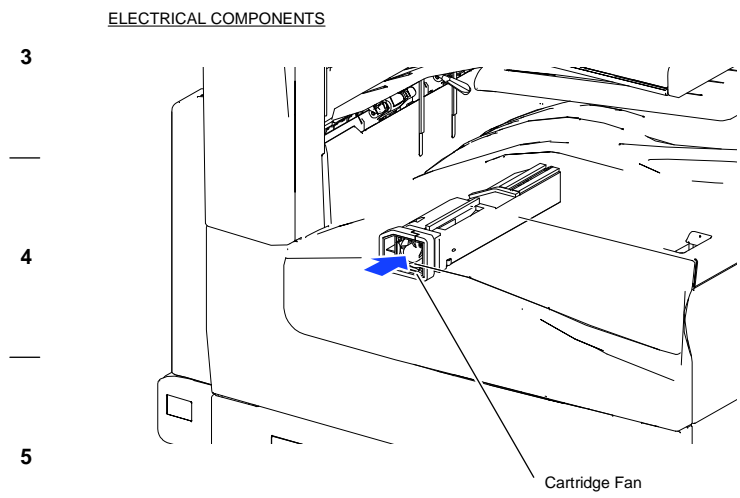


# BSD 9.19 Toner Cartridge Cooling (7845/55)

A | B | C | D | E | F | G | H | J



**FAIL CODE**  
 342-340  
 Cartridge Fan Fail  
 (7845/55)



j0kt730919

10/12/12 730919\_SPY.VSD

Figure 19 BSD 9.19 Toner Cartridge Cooling (7845/55)

# BSD 9.20 IBT Belt Drive Control

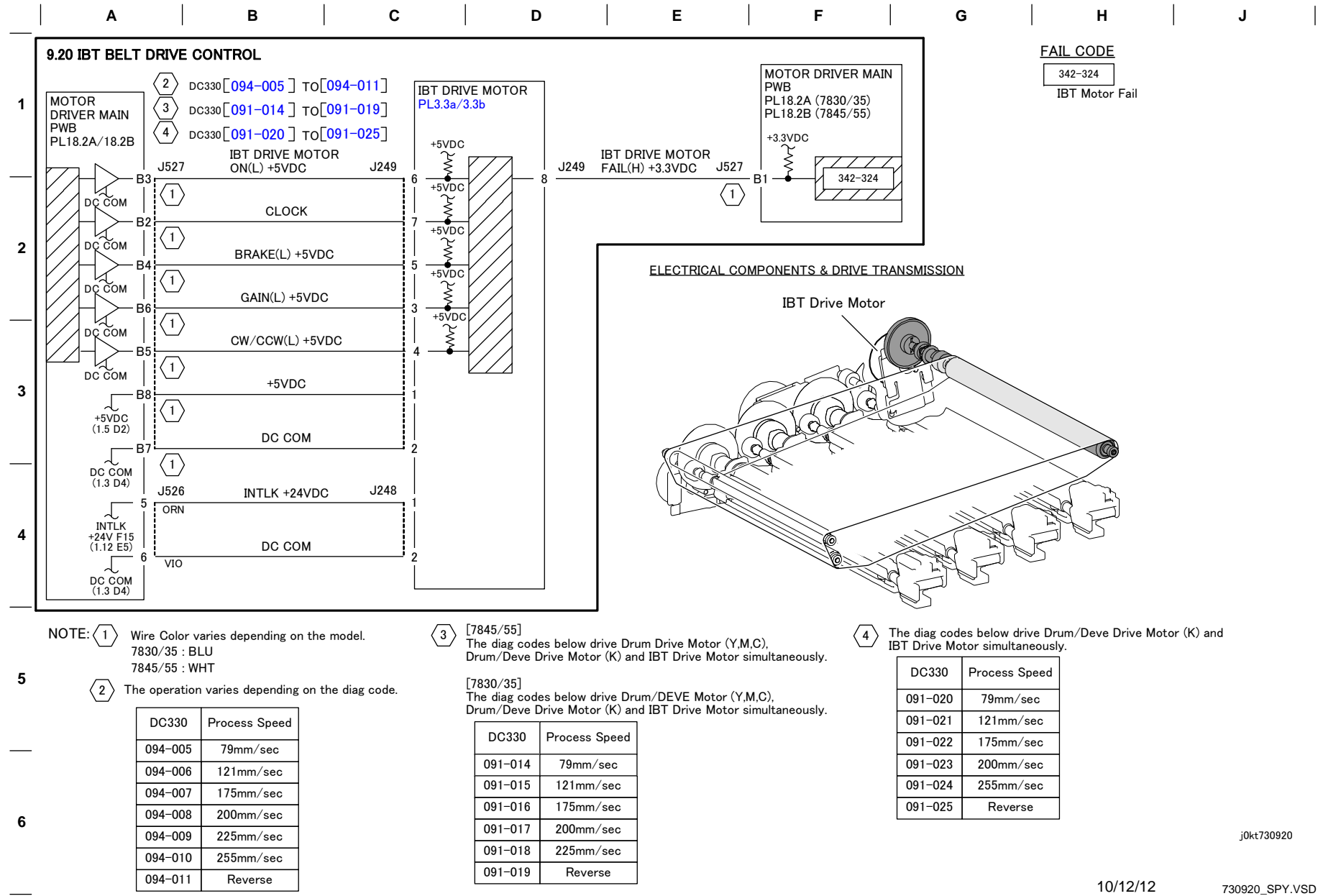
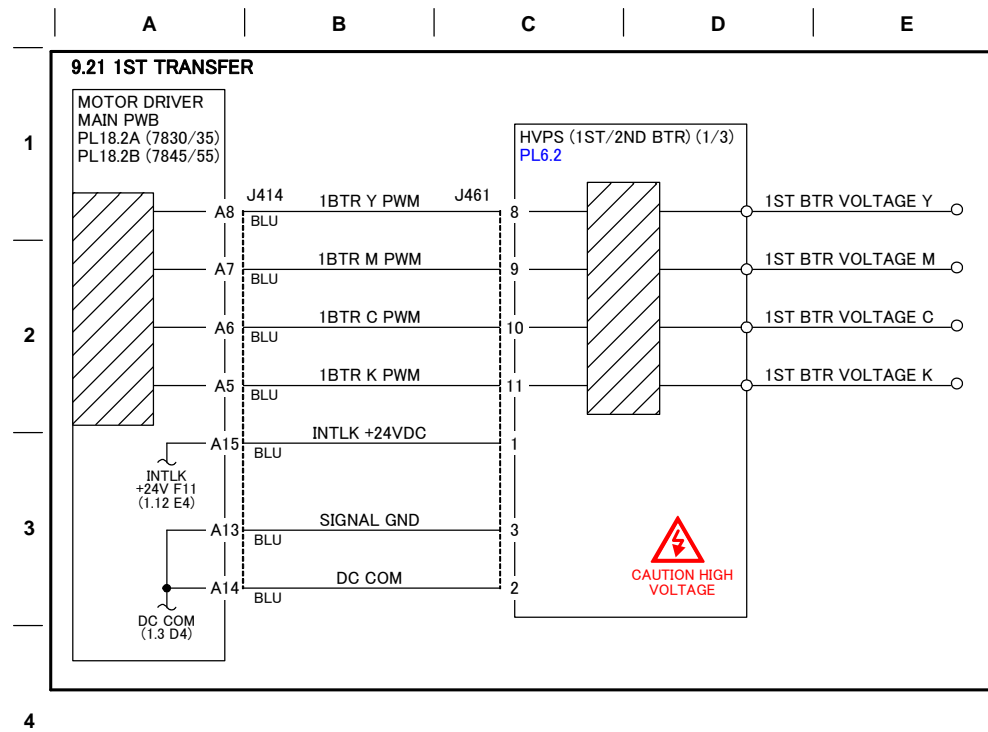
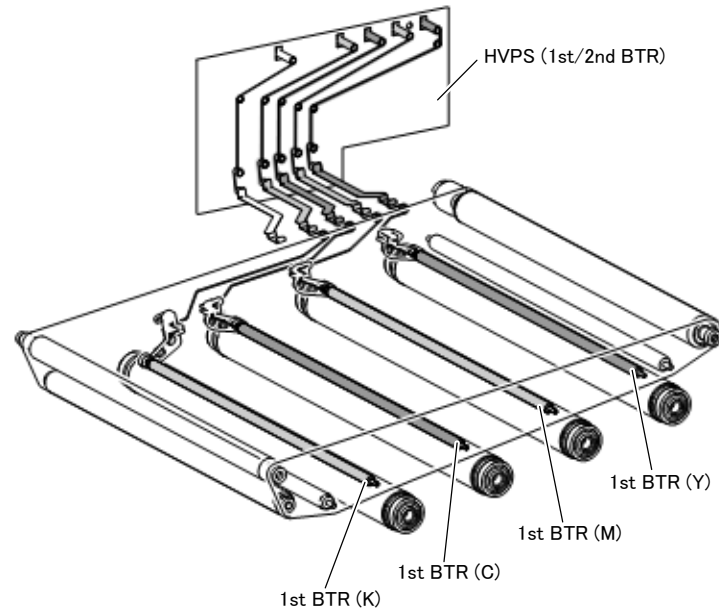


Figure 20 BSD 9.20 IBT Belt Drive Control

**BSD 9.21 First Transfer**



ELECTRICAL COMPONENTS



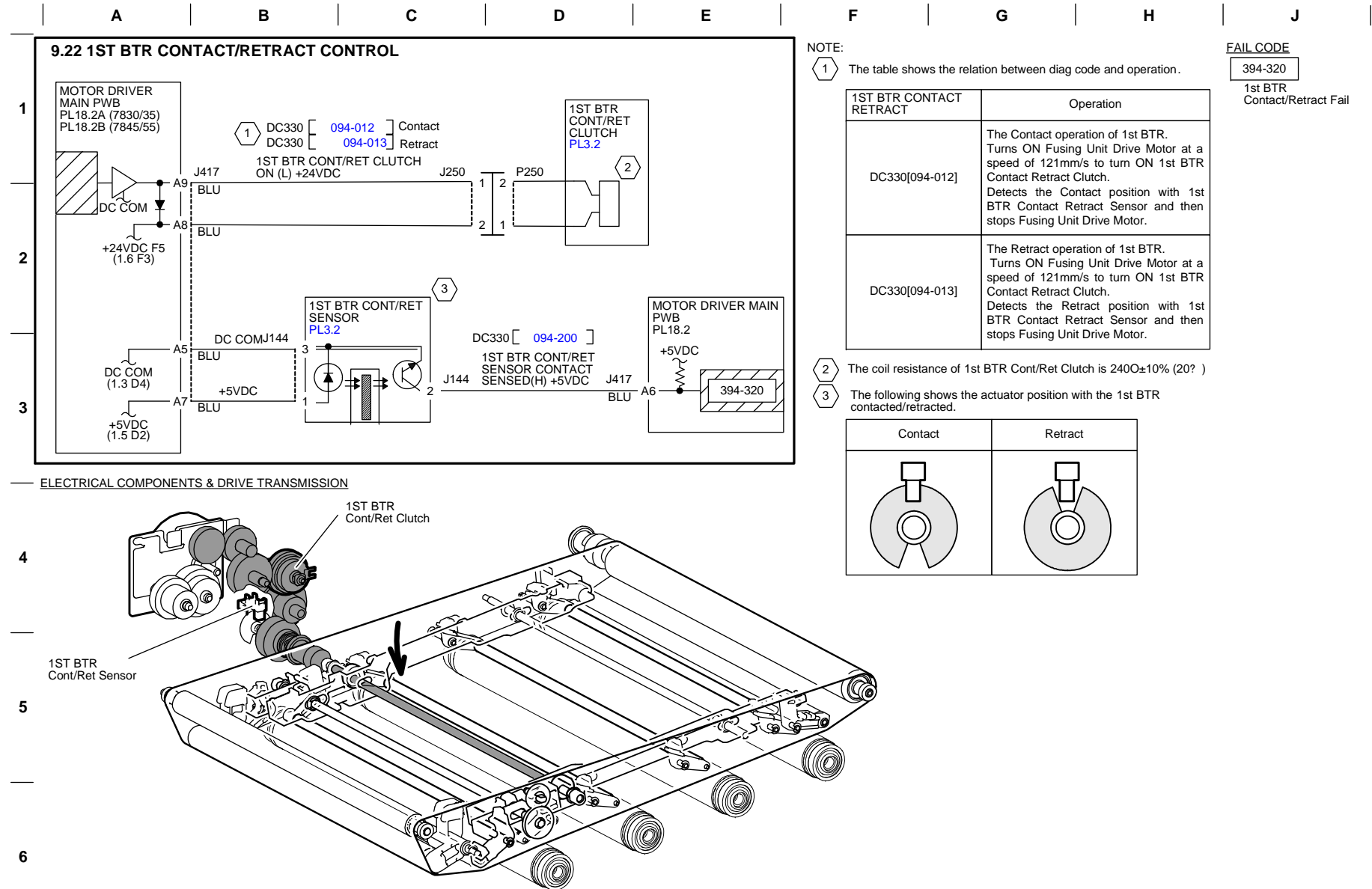
j0kt730921

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730921\_SPY.VSD

**Figure 21 BSD 9.21 First Transfer**

# BSD 9.22 First BTR Contact/Retract Control



**FAIL CODE**  
394-320  
1st BTR Contact/Retract Fail

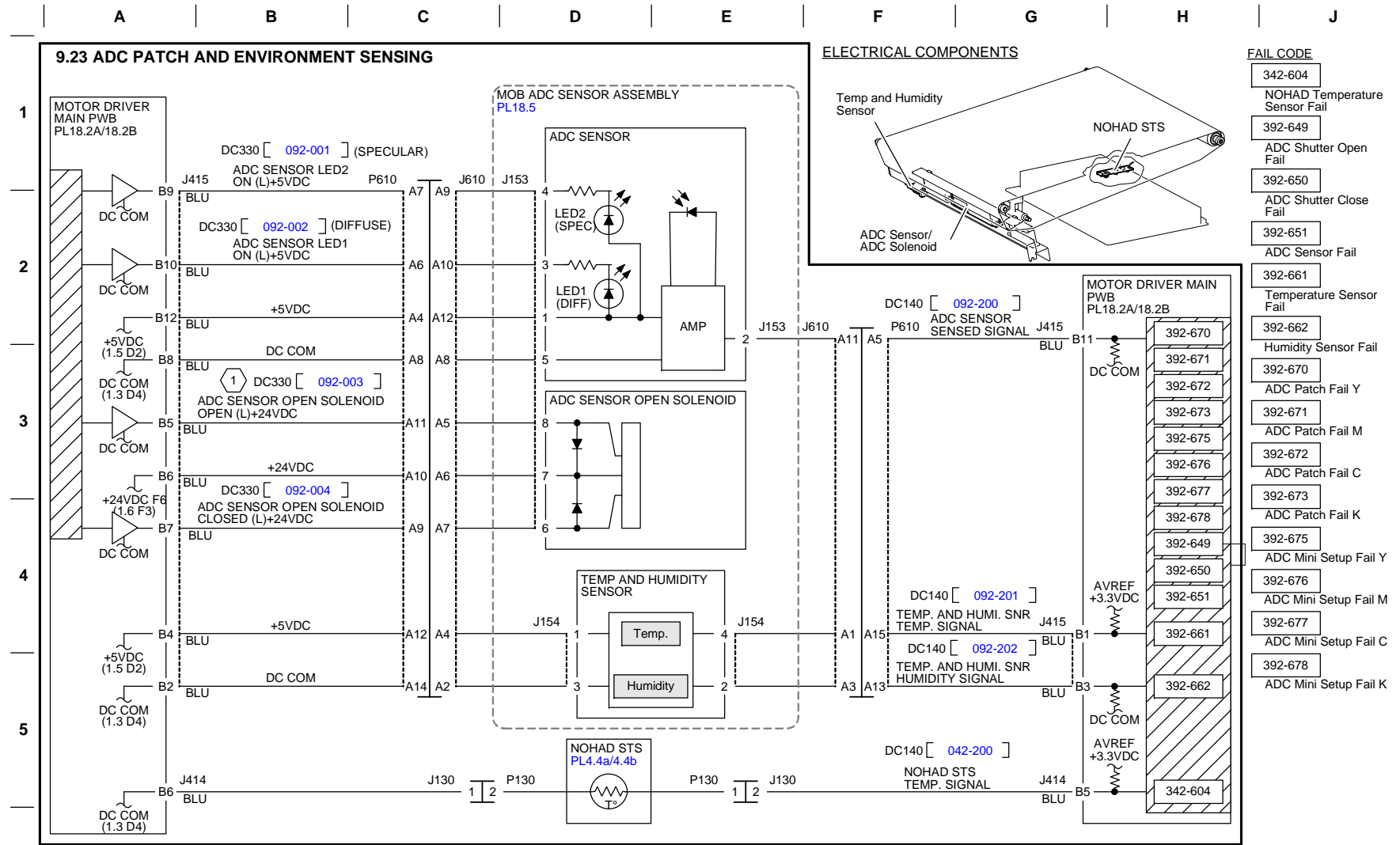
Figure 22 BSD 9.22 First BTR Contact/Retract Control

j0k730922

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730922\_SPY.VSD

# BSD 9.23 ADC Patch and Environment Sensing



FAIL CODE	Description
342-604	NOHAD Temperature Sensor Fail
392-649	ADC Shutter Open Fail
392-650	ADC Shutter Close Fail
392-651	ADC Sensor Fail
392-661	Temperature Sensor Fail
392-662	Humidity Sensor Fail
392-670	ADC Patch Fail Y
392-671	ADC Patch Fail M
392-672	ADC Patch Fail C
392-673	ADC Patch Fail K
392-675	ADC Mini Setup Fail Y
392-676	ADC Mini Setup Fail M
392-677	ADC Mini Setup Fail C
392-678	ADC Mini Setup Fail K

NOTE:  
 1 After performing this diag, make sure to perform DC330[092-004] to close the shutter. Unless the shutter is closed, the sensor within it may become contaminated. (Note that the shutter automatically closes when you perform printing.)

j0kt730923

10/12/12 730923\_SPY.VSD

Figure 23 BSD 9.23 ADC Patch and Environment Sensing

# BSD 9.24 Second Transfer

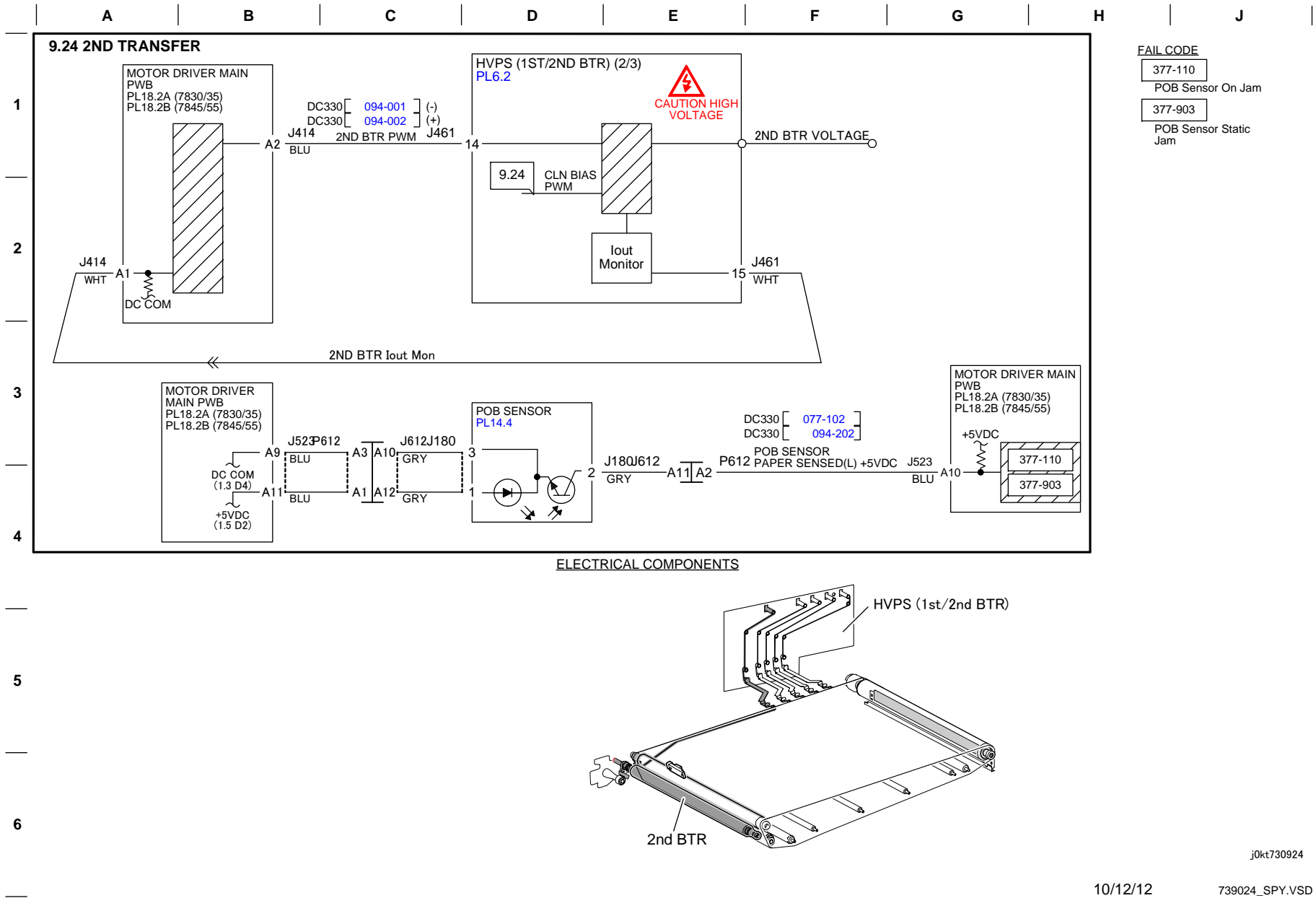
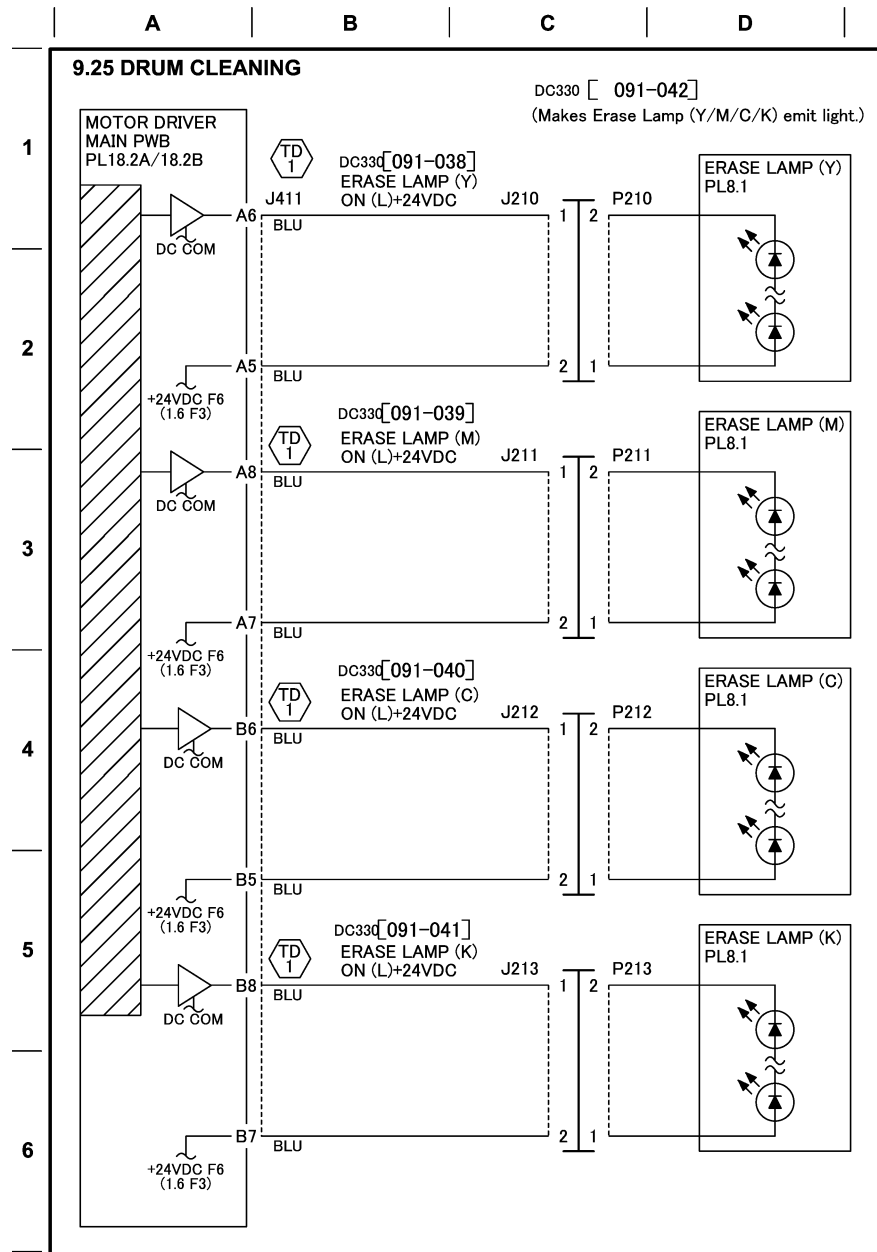
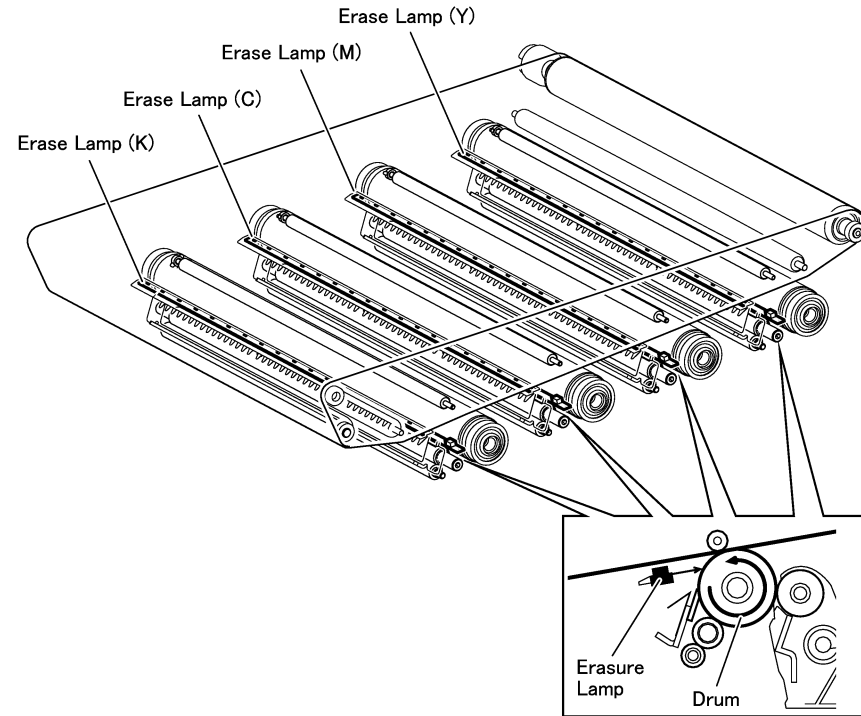


Figure 24 BSD 9.24 Second Transfer

# BSD 9.25 Drum Cleaning



## ELECTRICAL COMPONENTS



**TD 1** When diag is turned ON, +12VDC changes to 0VDC.

j0kt730925

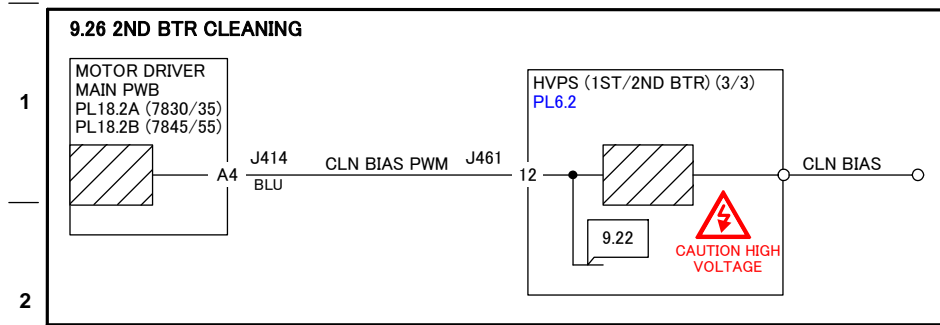
10/12/12

730925\_SPY.VSD

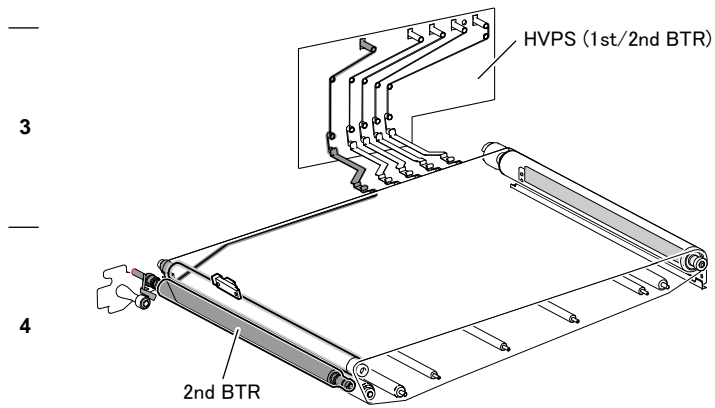
Figure 25 BSD 9.25 Drum Cleaning

# BSD 9.26 Second BTR Cleaning

A | B | C | D | E | F | G | H | J



## ELECTRICAL COMPONENTS



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730926\_SPY.VSD

Figure 26 BSD 9.26 Second BTR Cleaning



# BSD 9.27 Waste Toner Disposal (1 of 2)

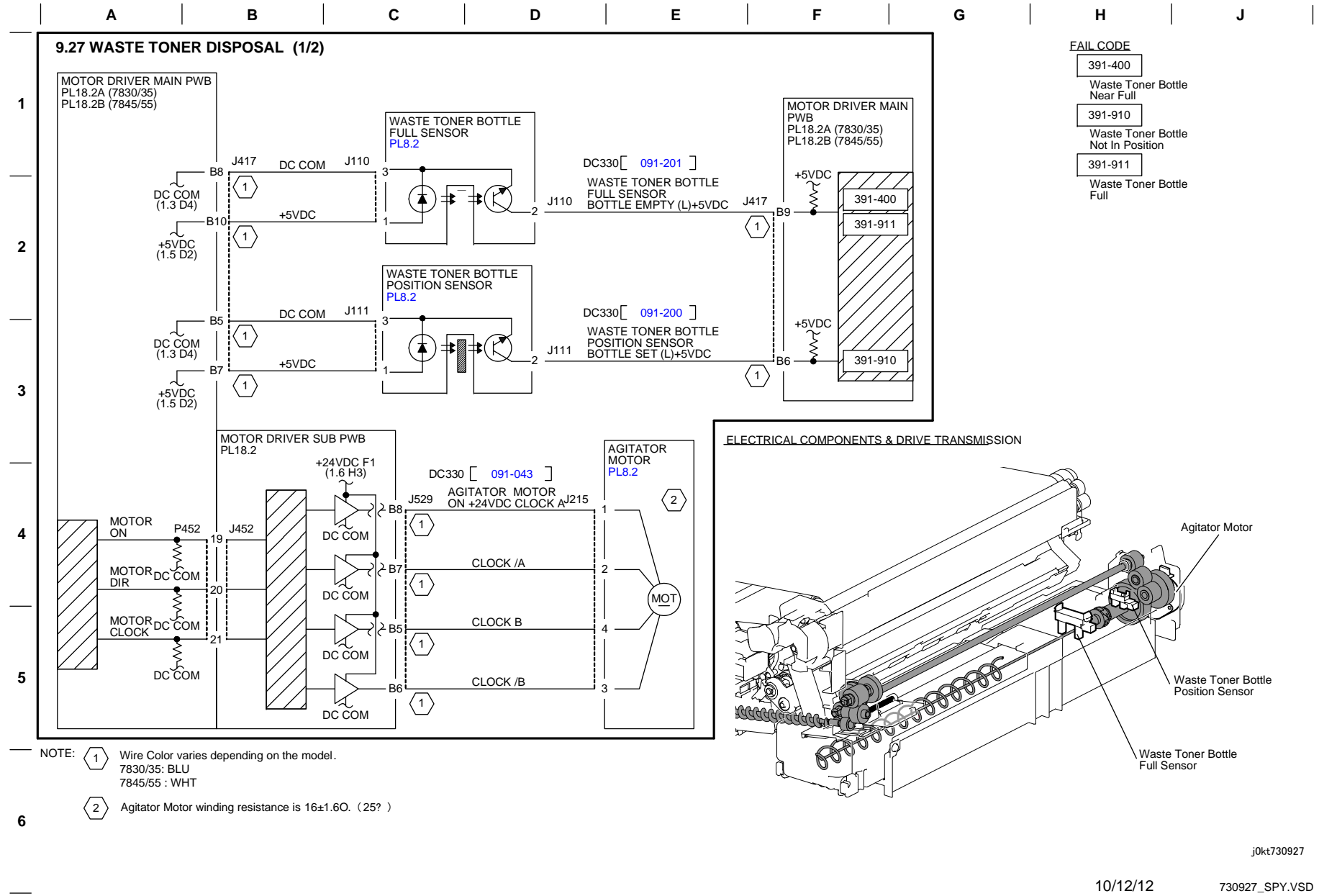
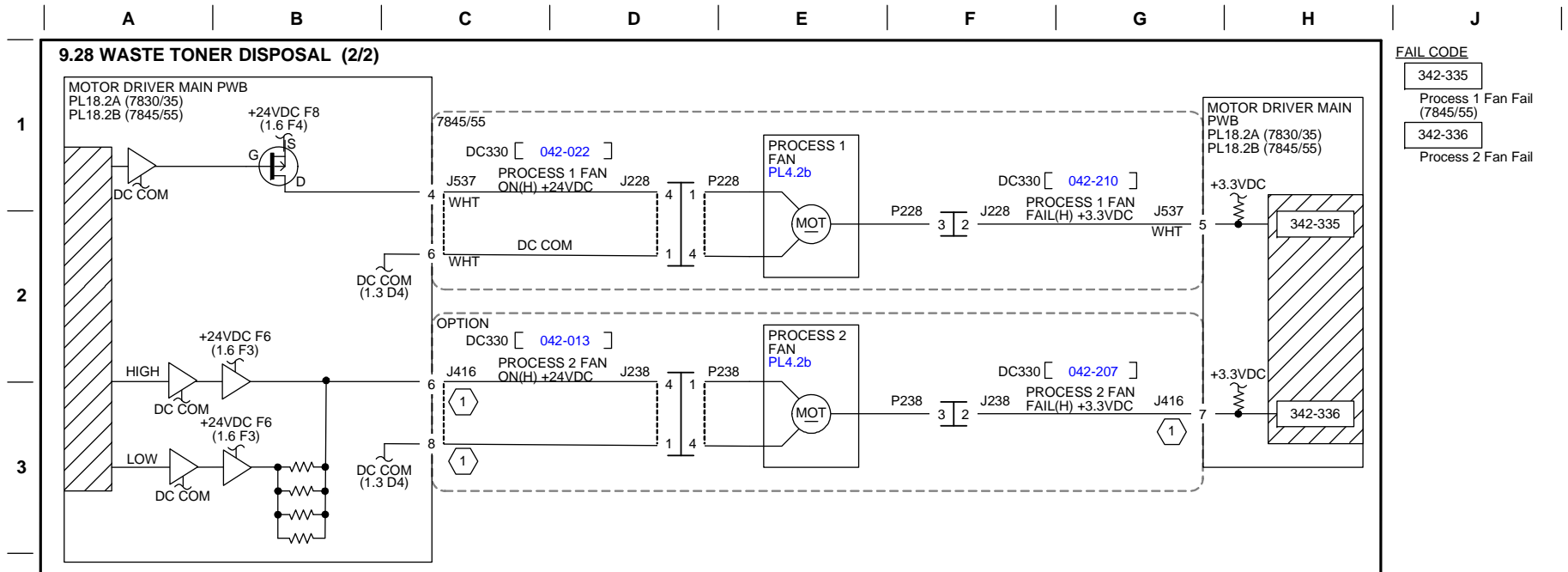


Figure 27 BSD 9.27 Waste Toner Disposal (1 of 2)

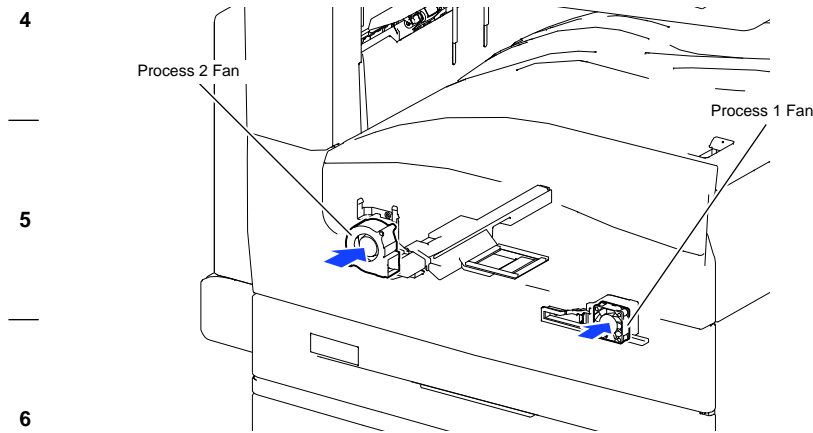
# BSD 9.28 Waste Toner Disposal (2 of 2)



**FAIL CODE**  
 342-335  
 Process 1 Fan Fail (7845/55)  
 342-336  
 Process 2 Fan Fail

**ELECTRICAL COMPONENTS**

NOTE: (1) Wire Color varies depending on the model.  
 7830/35: BLU  
 7845/55: WHT



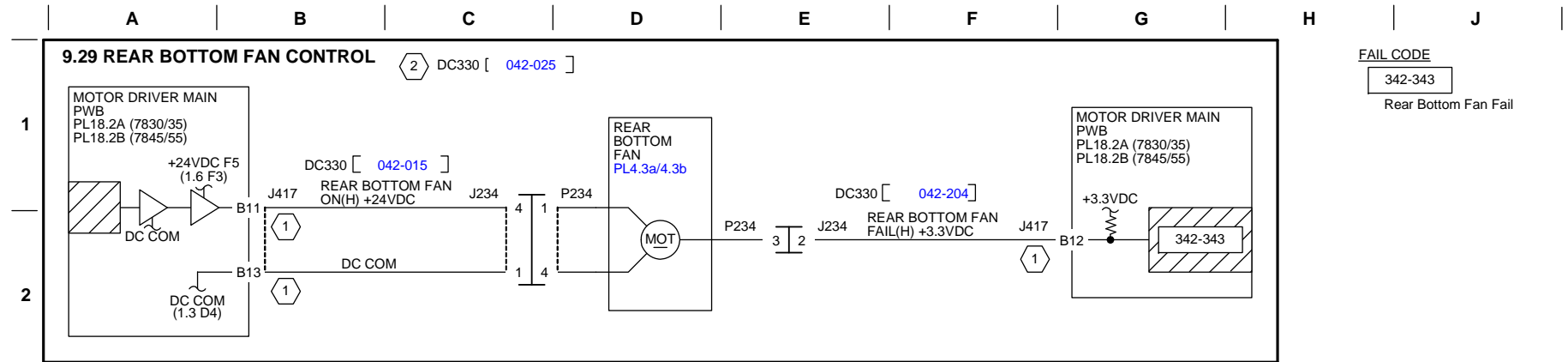
j0kt730928

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730928\_SPY.VSD

Figure 28 BSD 9.28 Waste Toner Disposal (2 of 2)

# BSD 9.29 Rear Bottom Fan Control



FAIL CODE

342-343

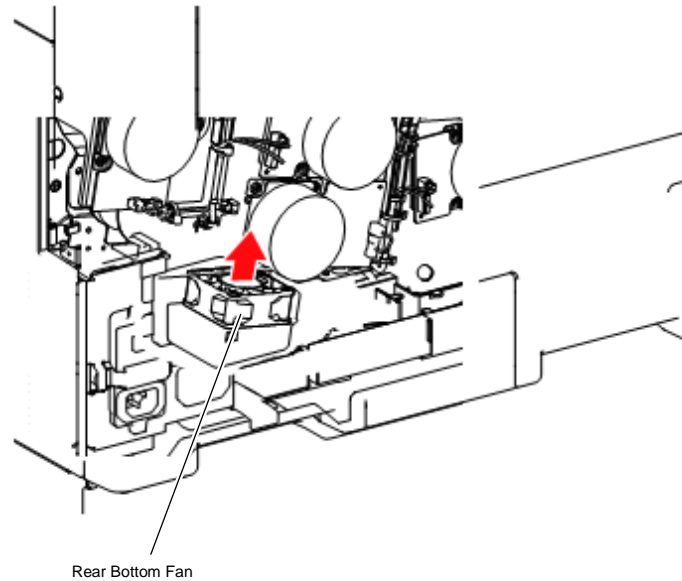
Rear Bottom Fan Fail

NOTE:

1 Wire Color varies depending on the model.  
7830/35 : BLU  
7845/55 : WHT

2 DC330[042-025] performs a fault detection after rotating the target fans concurrently for 5 seconds. If any fan is found to be faulty, a fail code is issued. Fail codes can be referred to via DC125. The following fans are targeted:  
: Fusing Unit Fan (Fail Code:010-398)  
: [7845/55] Suction Fan (Fail Code:042-342)  
: Rear Bottom Fan (Fail Code:042-343)  
: [7845/55] Marking Fan (Fail Code:042-341)  
: [7830/35] HV Fan (Fail Code:042-341)

### ELECTRICAL COMPONENTS



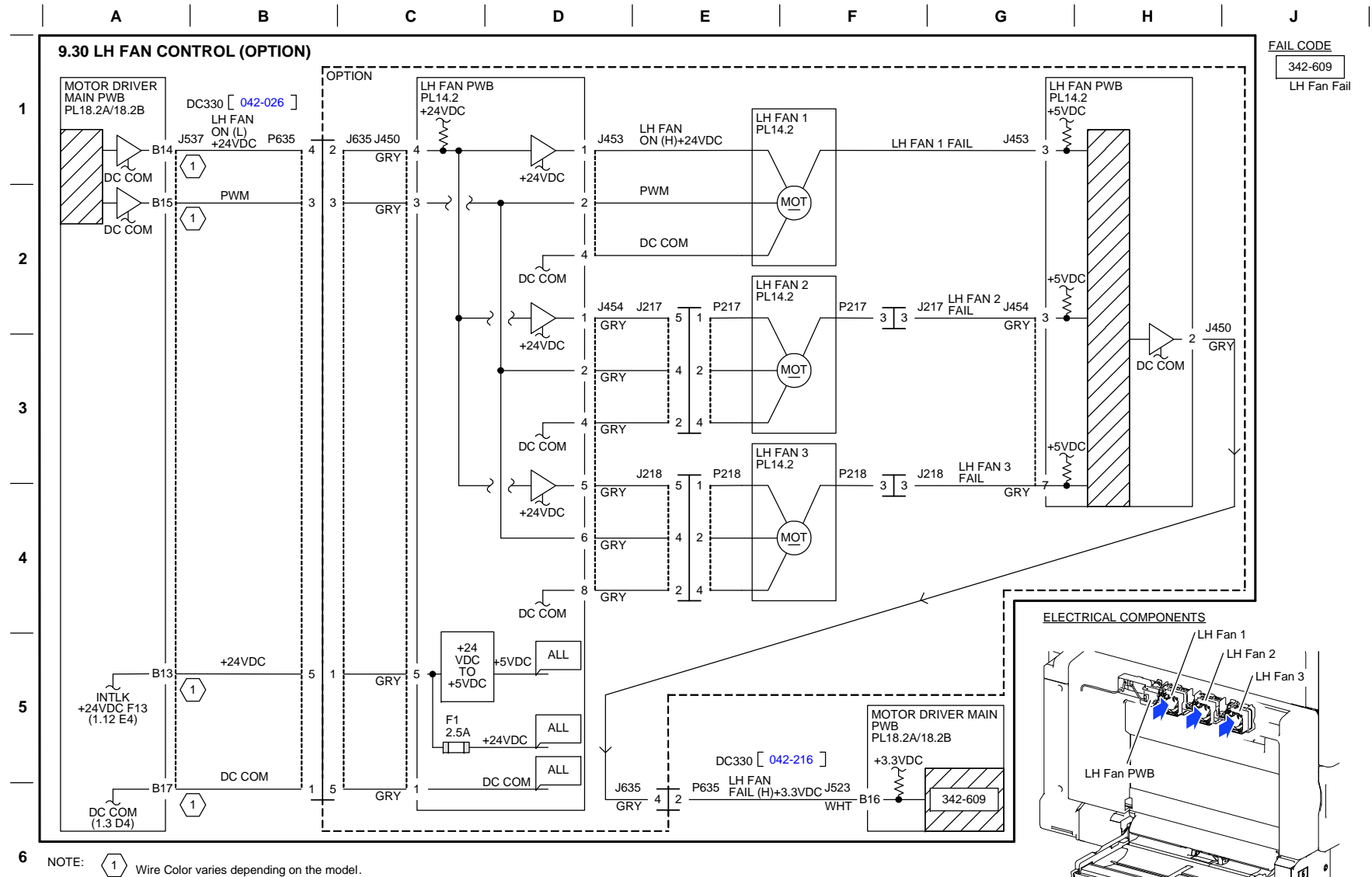
j0kt730929

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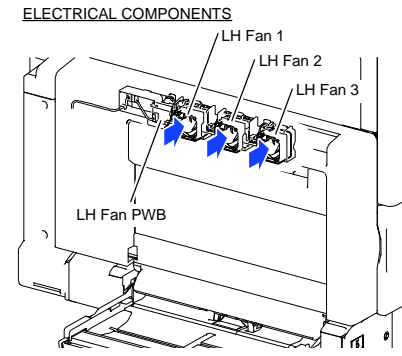
730929\_SPY.VSD

Figure 29 BSD 9.29 Rear Bottom Fan Control

# BSD 9.30 LH Fan Control (Option)



FAIL CODE  
342-609  
LH Fan Fail



j0kt730930

10/12/12

730930\_SPY.VSD

Figure 30 BSD 9.30 LH Fan Control (Option)

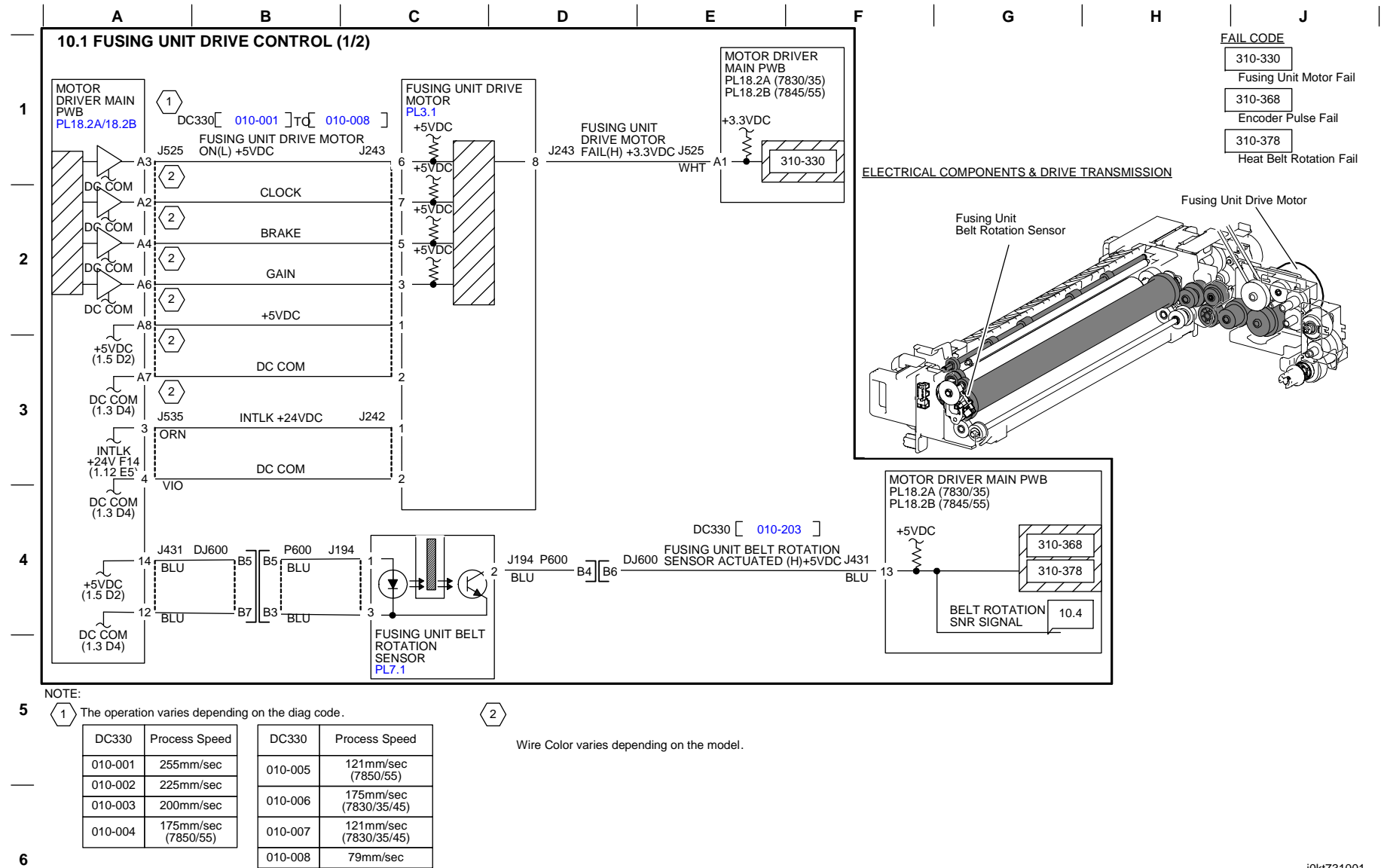
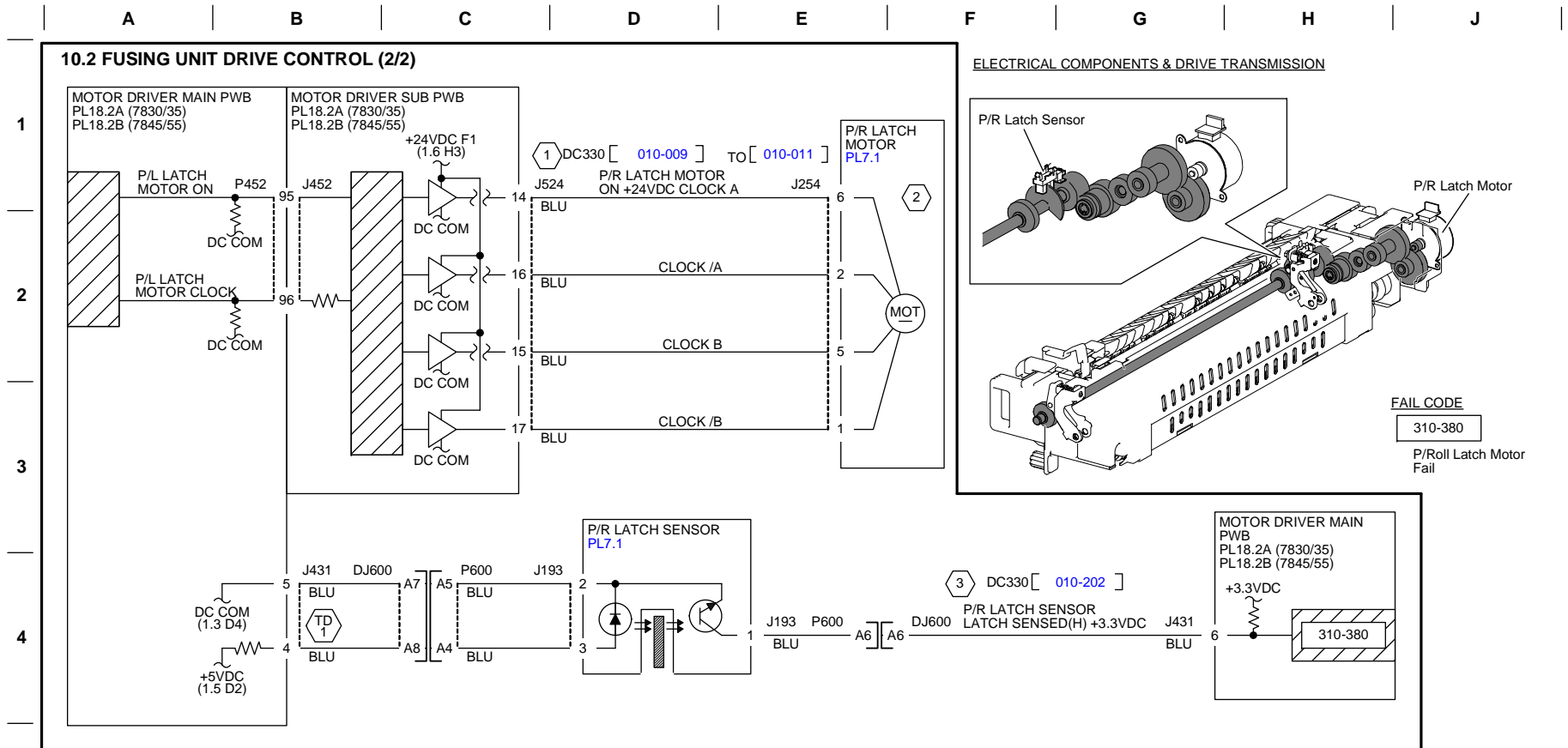


Figure 1 BSD 10.1 Fuser Drive Control (1 of 2)

# BSD 10.2 Fuser Drive Control (2 of 2)



NOTE:

1 The operation varies depending on the diag code.

TD 1 Test Point: Motor Driver Main PWB J431-4 (+) to GND (-)  
With sensor connected, approx. +1.19VDC

DC330	Operation
010-009	Latch Motor automatically stops at the P/Roll Latch ON position.
010-010	Latch Motor automatically stops at the P/Roll Latch OFF position.
010-011	Latch Motor automatically stops at the P/Roll Half-Latch position.

2 The winding resistance of P/R Latch Motor is 5.70±10%

6 3 H: P/Roll Latch On Position  
L: P/Roll Latch Off Position

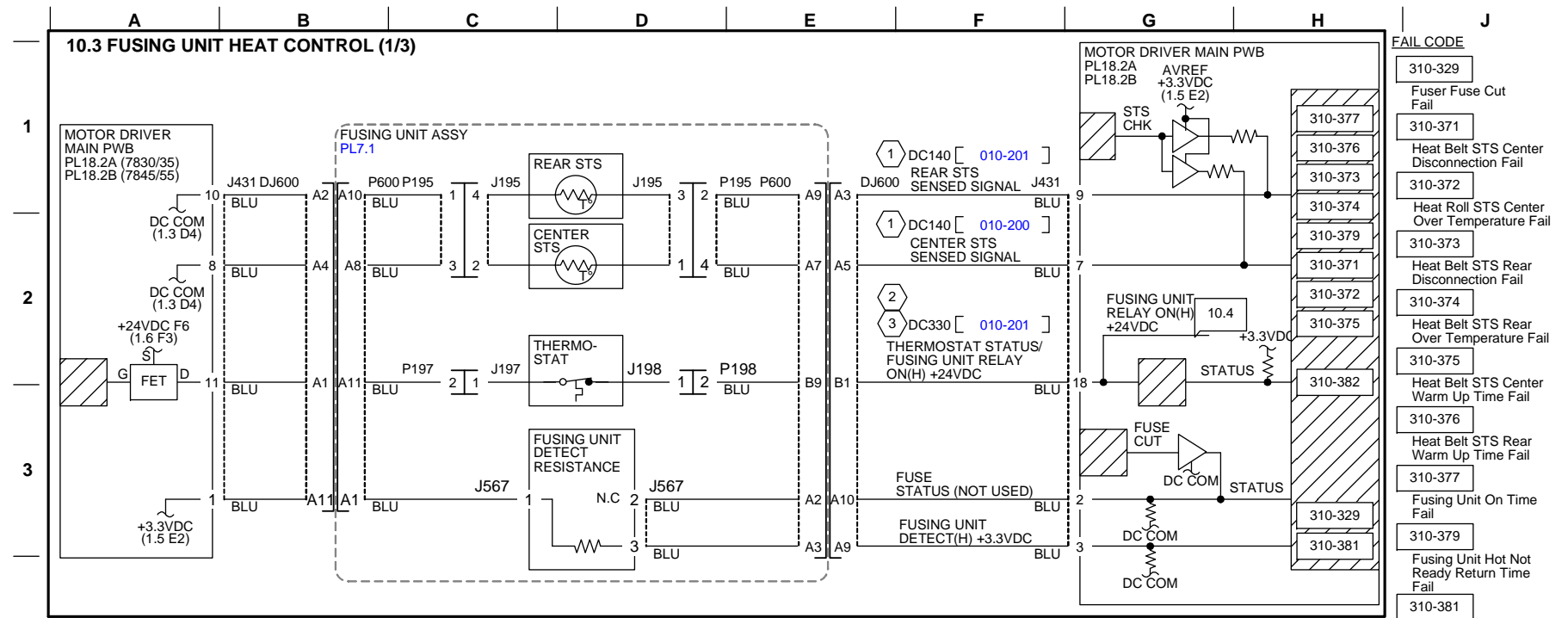
j0kt731002

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731002\_SPY.VSD

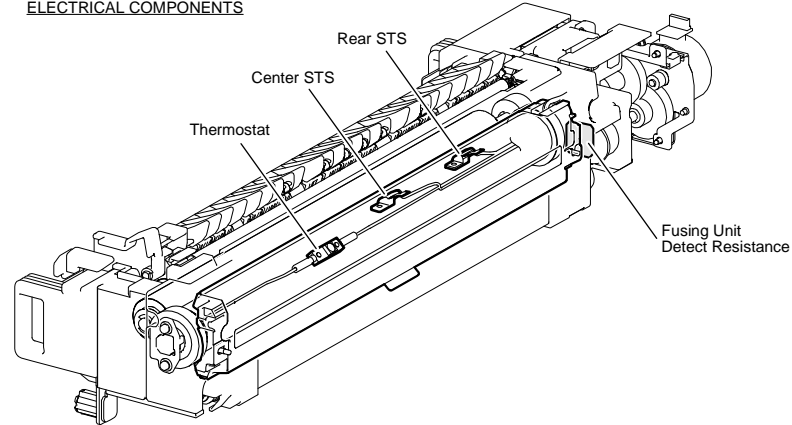
Figure 2 BSD 10.2 Fuser Drive Control (2 of 2)

# BSD 10.3 Fusing Heat Control (1 of 3)



- 4 NOTE:
- ① DC140[010-200,201] displays AD Value from H/R STS. Normally, the value is in the following output range:  
 · Normal output range : 1018(low temperature end) -120(high temperature end)
  - ② Displays the current status of Thermostat.  
 H: Thermostat OFF  
 L: Thermostat ON
  - ③ Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

**ELECTRICAL COMPONENTS**



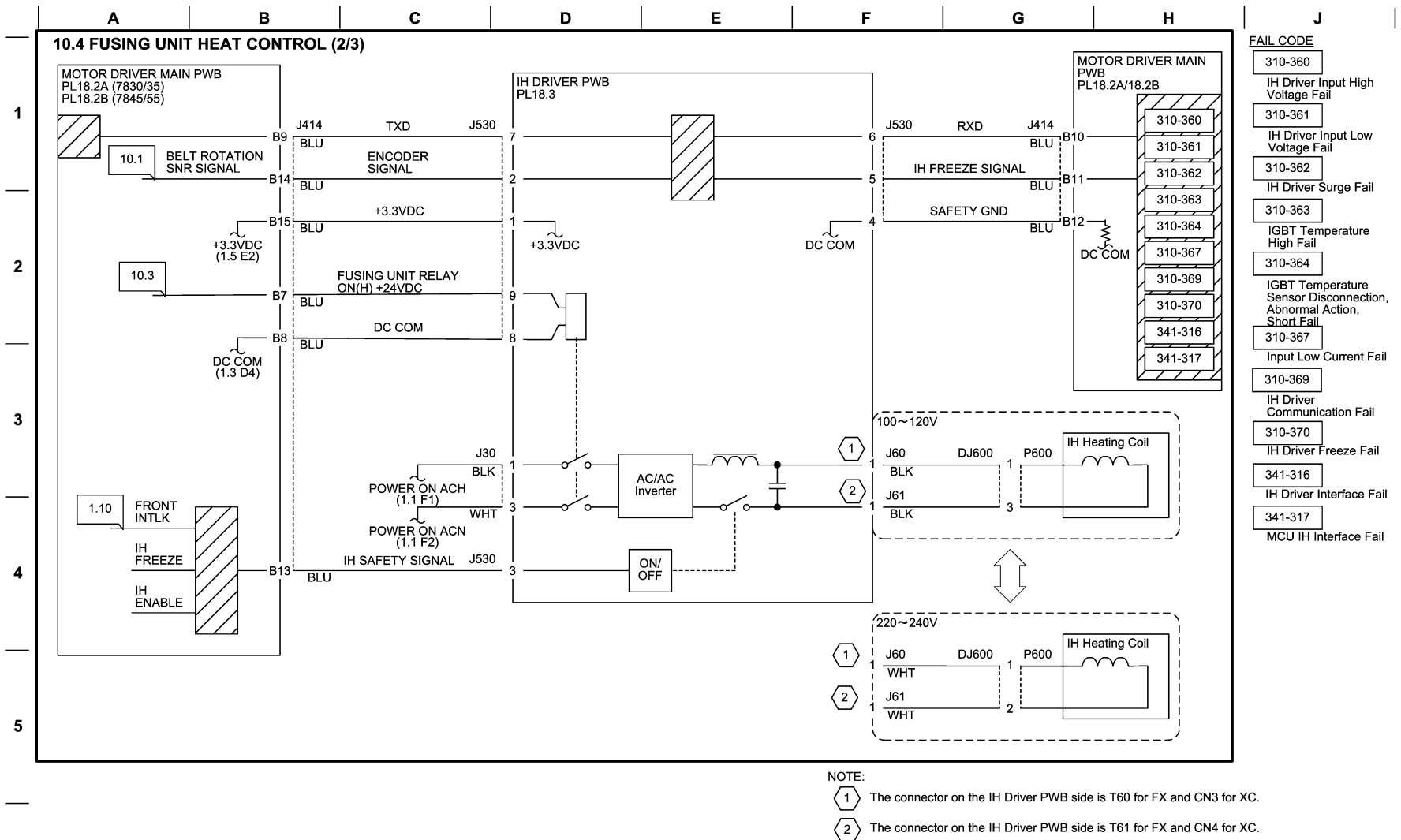
FAIL CODE	Description
310-329	Fuser Fuse Cut Fail
310-371	Heat Belt STS Center Disconnection Fail
310-372	Heat Roll STS Center Over Temperature Fail
310-373	Heat Belt STS Rear Disconnection Fail
310-374	Heat Belt STS Rear Over Temperature Fail
310-375	Heat Belt STS Center Warm Up Time Fail
310-376	Heat Belt STS Rear Warm Up Time Fail
310-377	Fusing Unit On Time Fail
310-379	Fusing Unit Hot Not Ready Return Time Fail
310-381	Fusing Unit Assy Illegal Fail
310-382	Fusing Unit Thermostat Fail

j0kt731003

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Figure 3 BSD 10.3 Fusing Heat Control (1 of 3)

BSD 10.4 Fusing Heat Control (2 of 3)



j0k731004

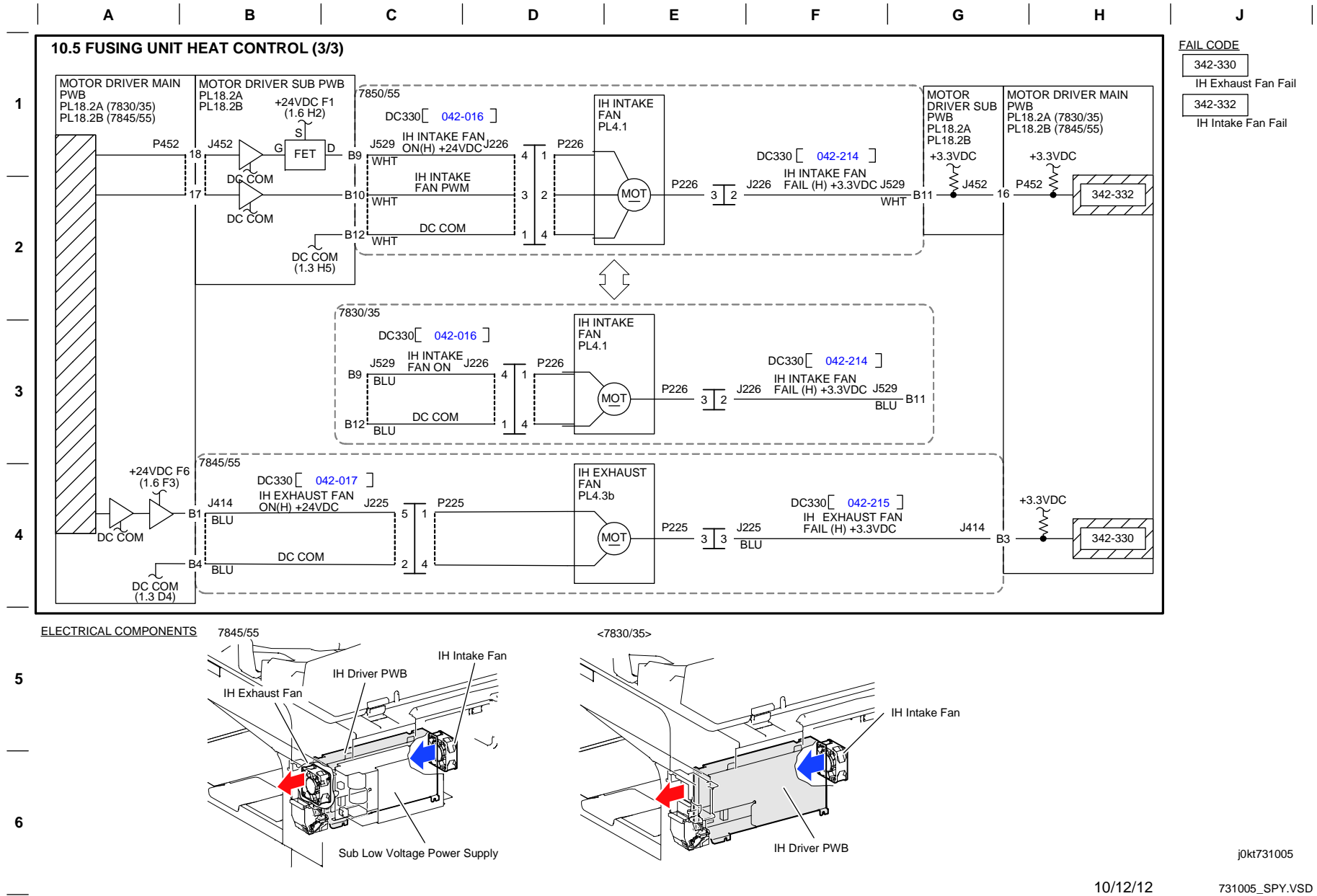
10/12/12

731004\_SPY.VSD

Figure 4 BSD 10.4 Fusing Heat Control (2 of 3)



**BSD 10.5 Fusing Heat Control (3 of 3)**



**Figure 5 BSD 10.5 Fusing heat Control (3 of 3)**

# BSD 10.6 Fusing

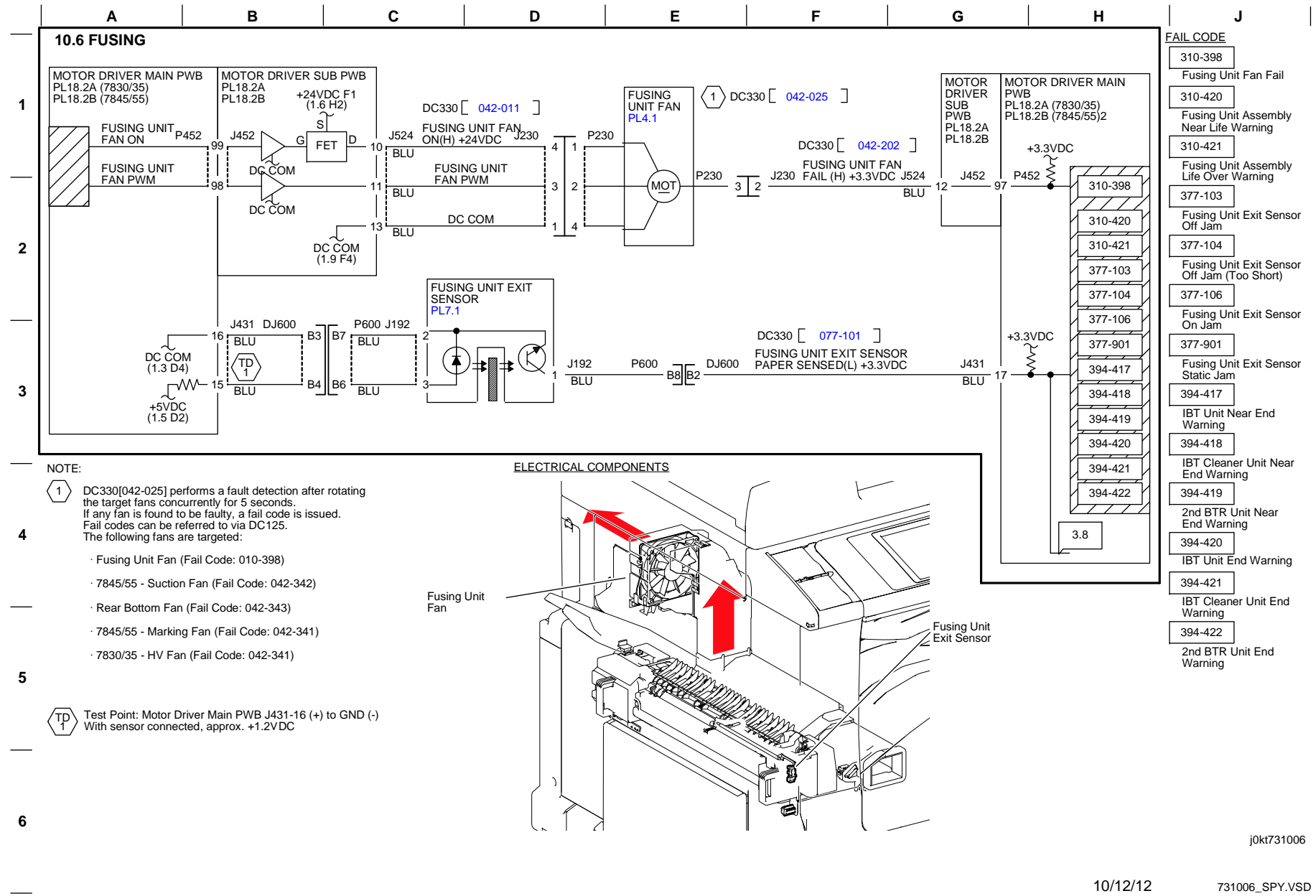


Figure 6 BSD 10.6 Fusing

# BSD 10.7 Fused Paper Exit 1

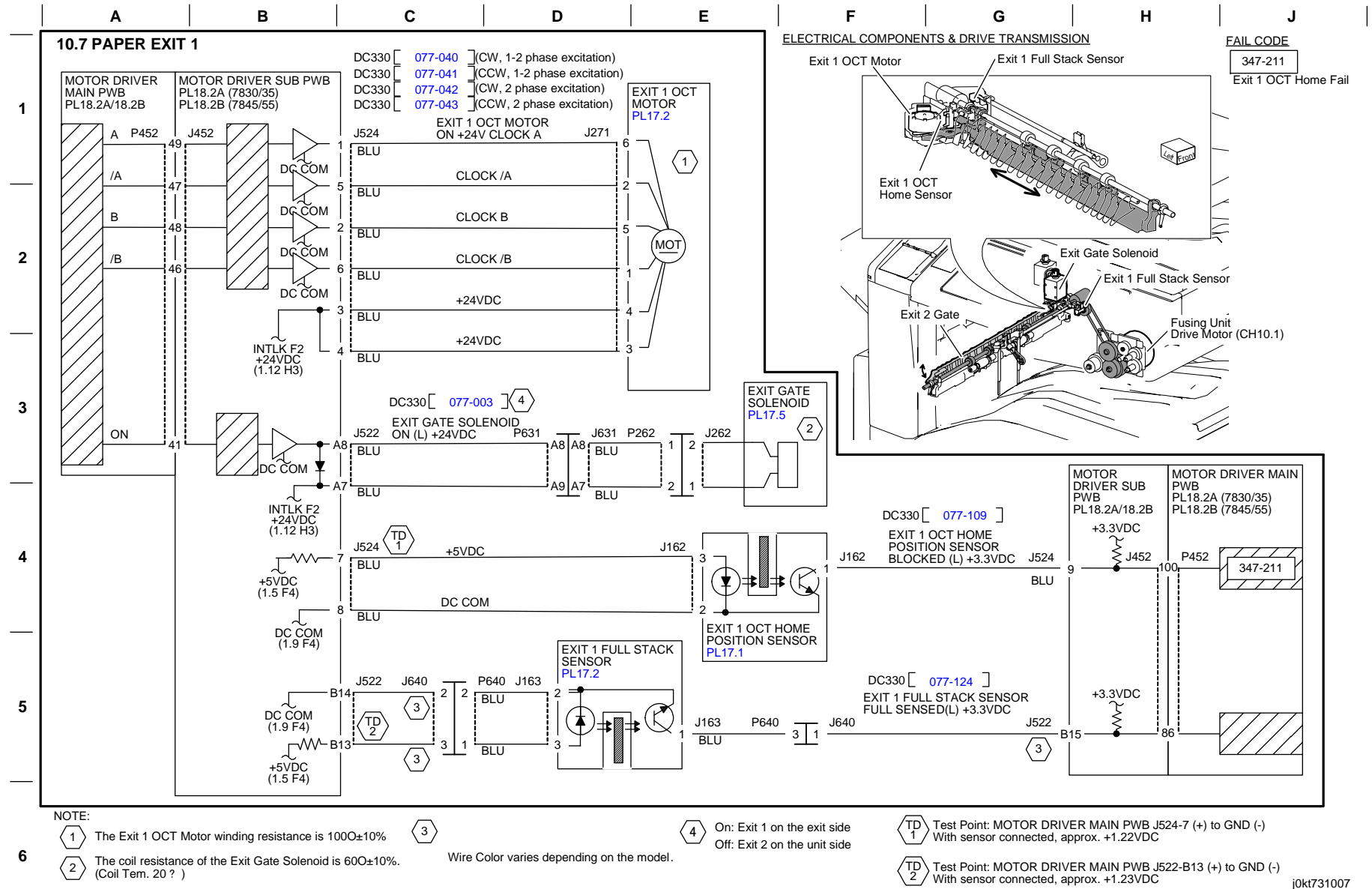
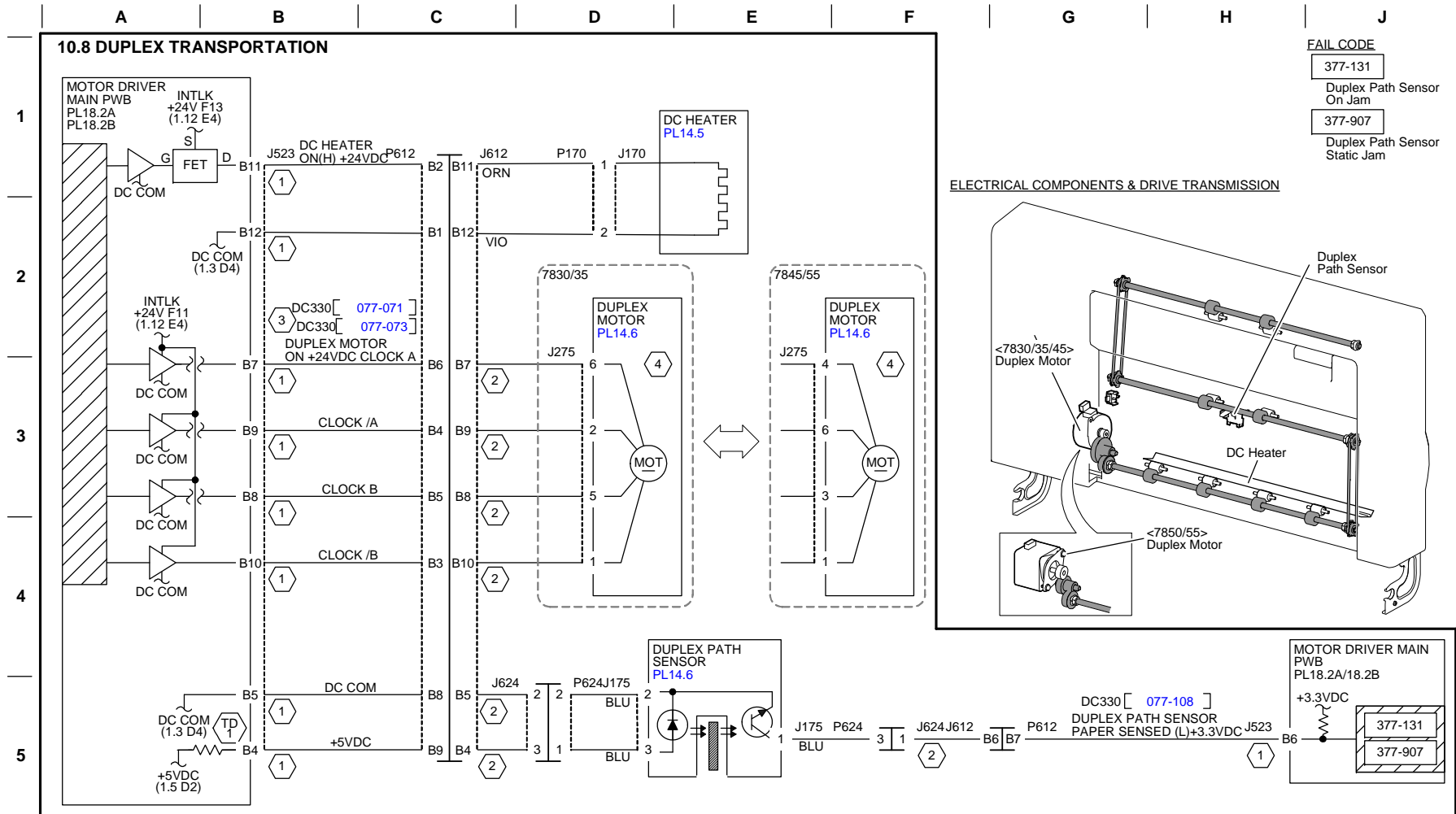


Figure 7 BSD 10.7 Fused Paper Exit 1

**BSD 10.8 Fused Paper Exit 2 (1 of 4)**



NOTE:

①

Wire Color varies depending on the model.

②

Wire Color varies depending on the model.

③

The operation varies depending on the diag code.

DUPLEX MOTOR	Operation
DC330[077-071]	Rotates the Motor reverse. (in the Pull-in Duplex direction. 1-2-phase excitation)
DC330[077-073]	Rotates the Motor reverse. (in the Pull-in Duplex direction. 2-phase excitation)

④

7830/35: The Duplex Motor winding resistance is  $5.70 \pm 10\%$   
7845/55: The Duplex Motor winding resistance is  $1.5 \pm 15\% (25^\circ)$

TD 1

Test Point: Motor Driver Main PWB J523-B5 (+) to GND (-)  
With sensor connected, approx. +1.22VDC

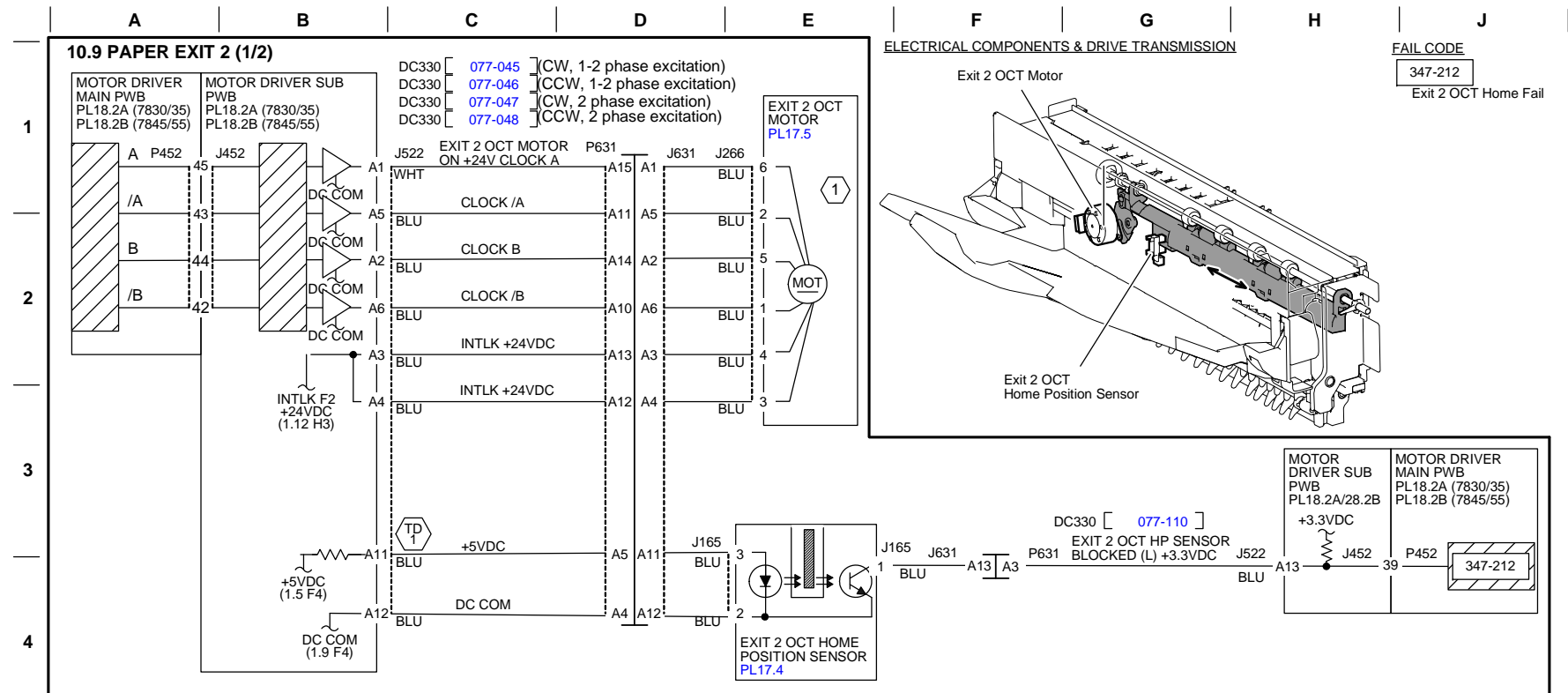
j0kt731008

731008\_SPY.VSD

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**Figure 8 BSD 10.8 Fused Paper Exit 2 (1 of 4)**

**BSD 10.9 Fused Paper Exit 2 (1 of 2)**



**NOTE**  
 ① The Exit 2 OCT Motor winding resistance is 100Ω±10%      TP1 Test Point: Motor Driver Main PWB J522-A11 (+) to GND (-)  
 With sensor connected, approx. +1.23VDC

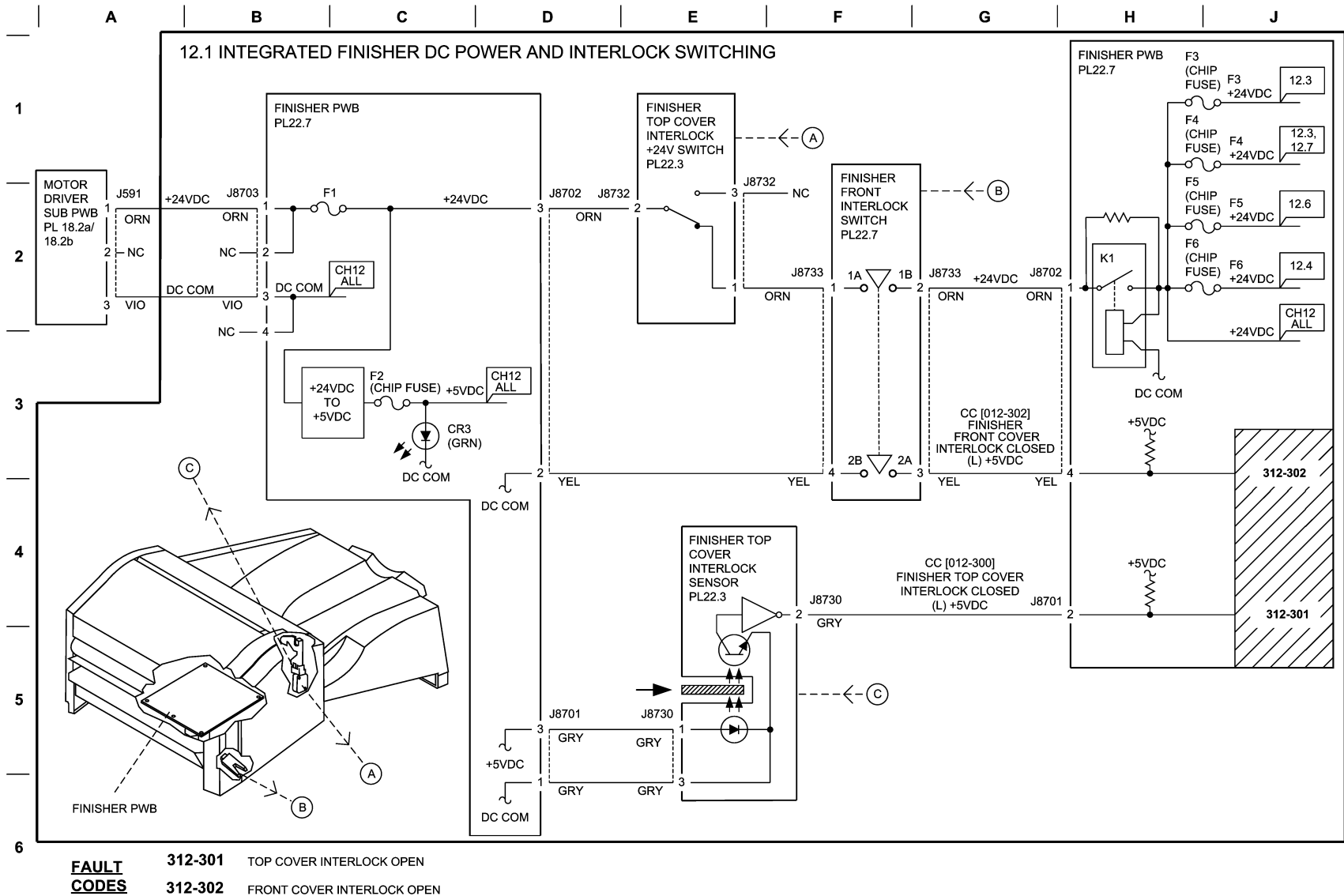
j0kt731009

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731009\_SPY.VSD

**Figure 9 BSD 10.9 Fused Paper Exit 2 (1 of 2)**

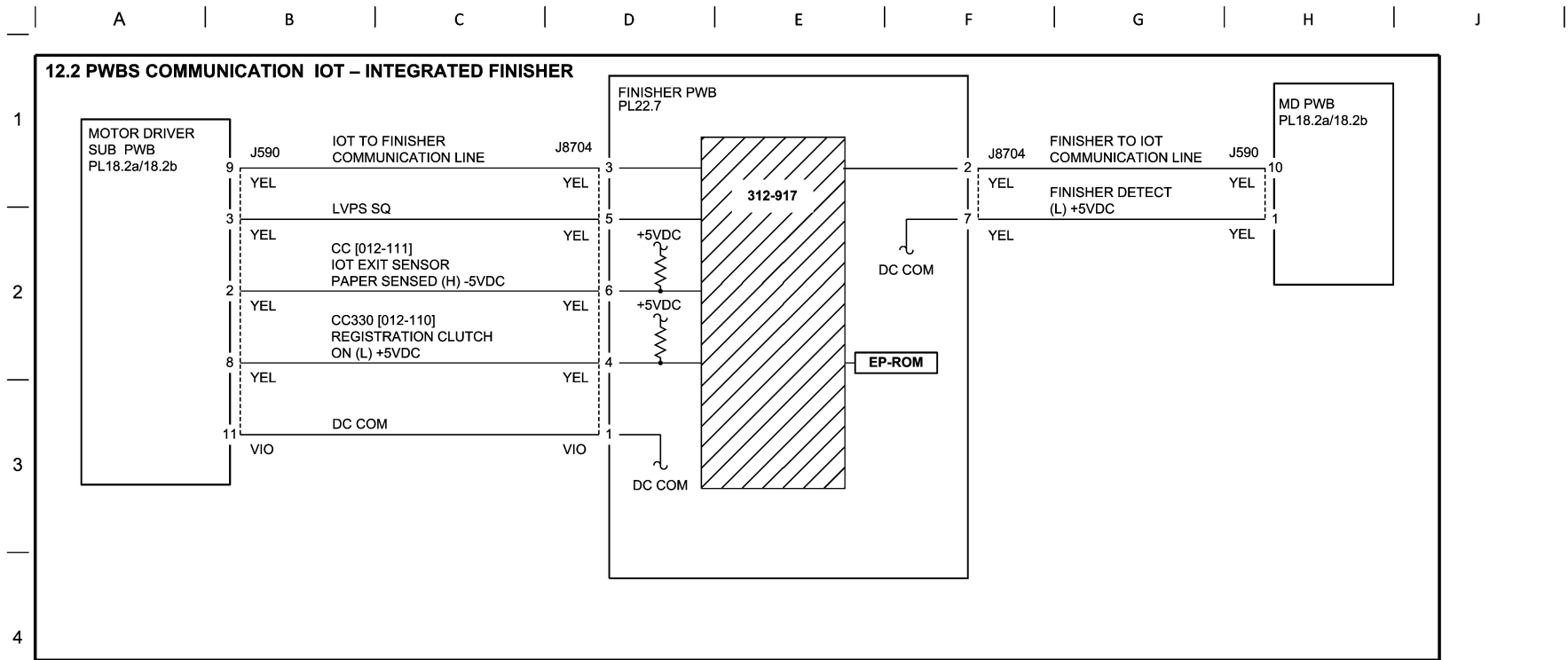




10/10/12 731201\_SPY.VSD

Figure 1 BSD 12.1 Integrated Finisher DC Power and Interlock Switching

**BSD 12.2 PWBS Communication IOT - Integrated Finisher**



**FAULT CODES**

**312-917** STACKER TRAY STAPLE SET OVER COUNT

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71202-SPY.vsd

**Figure 2 BSD 12.2 PWBS Communication IOT - Integrated Finisher**



BSD 12.3 Integrated Finisher Transportation

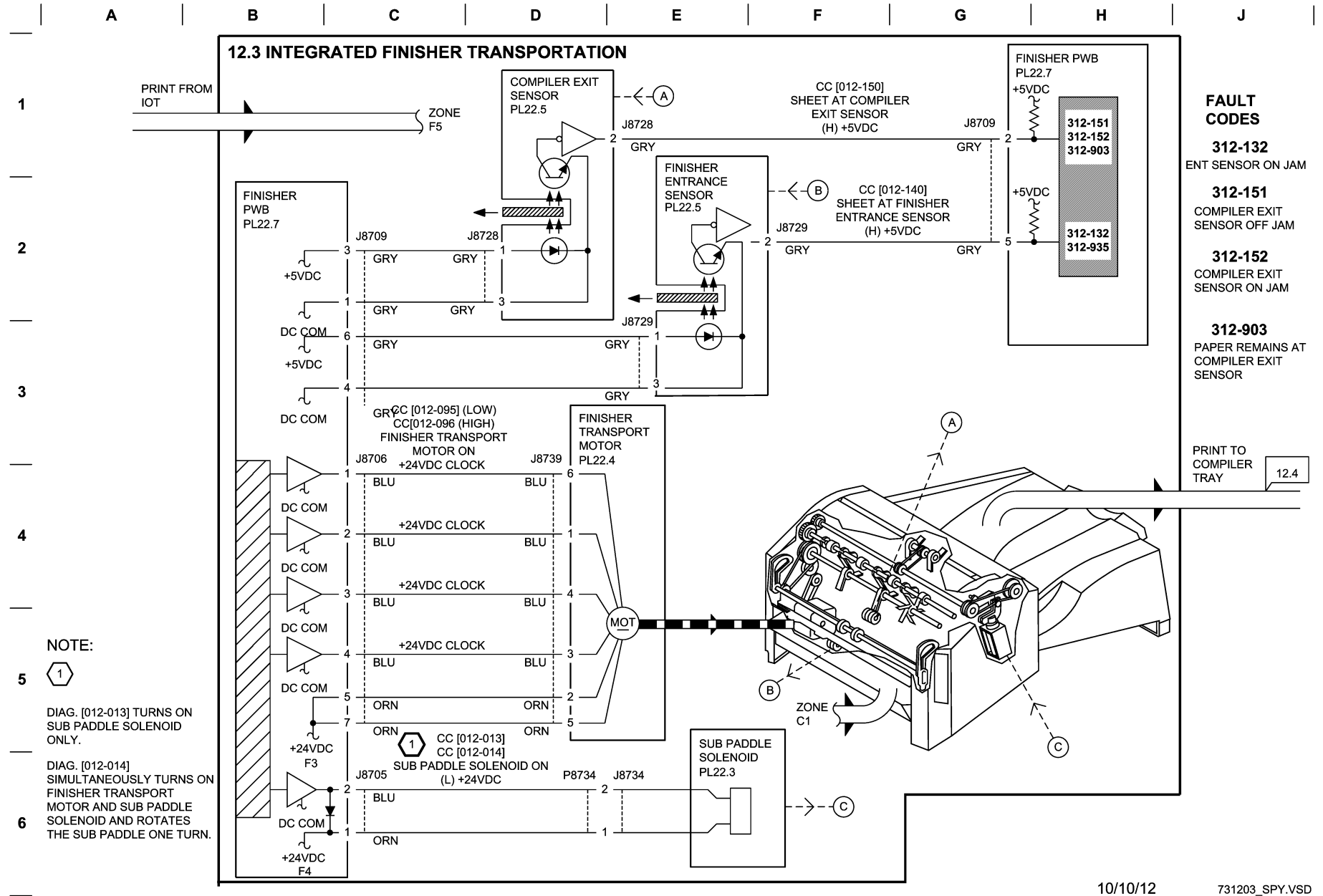


Figure 3 BSD 12.3 Integrated Finisher Transportation

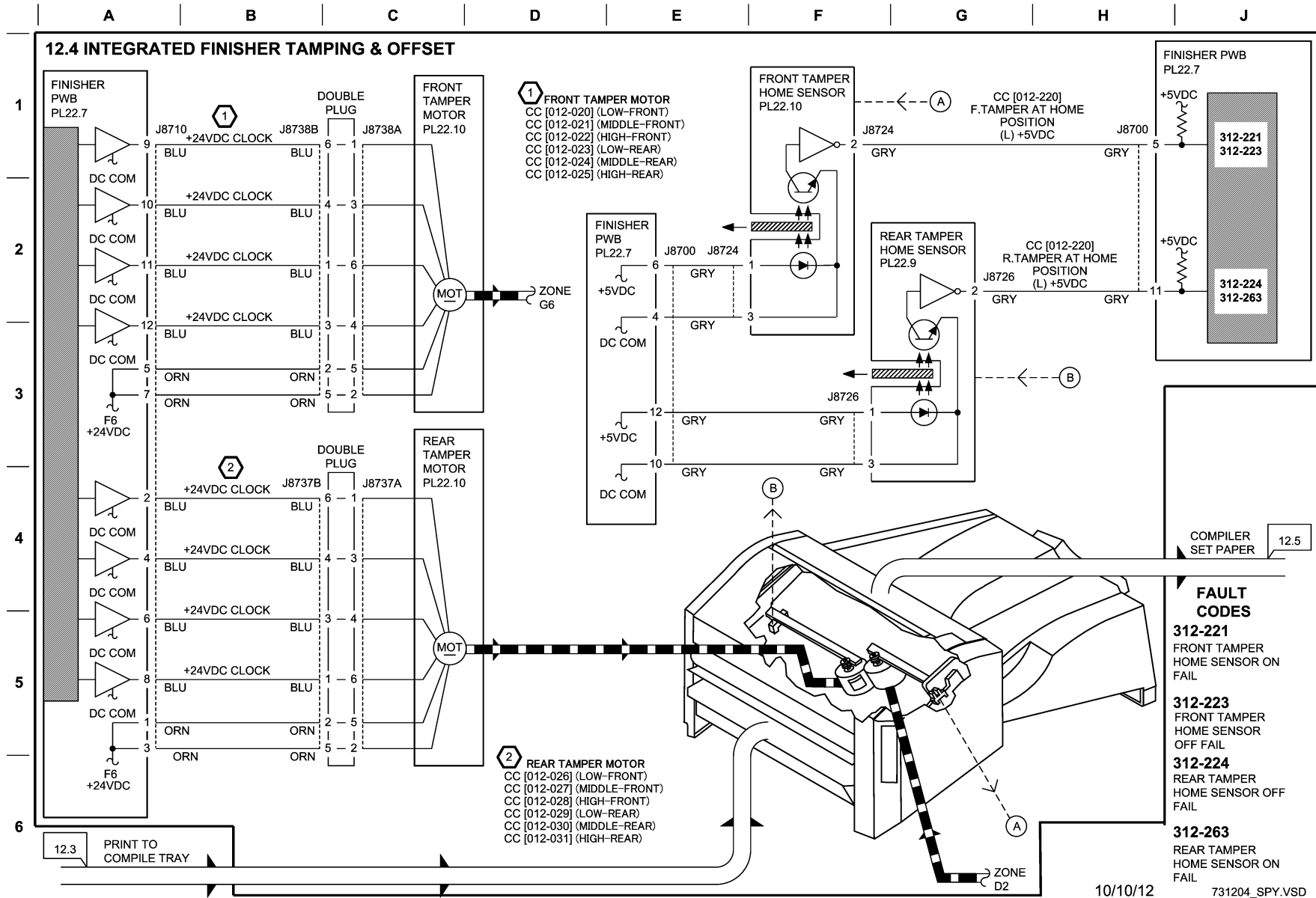


Figure 4 BSD 12.4 Integrated Finisher tamping and Offset

BSD 12.5 Integrated Finisher Staple Control

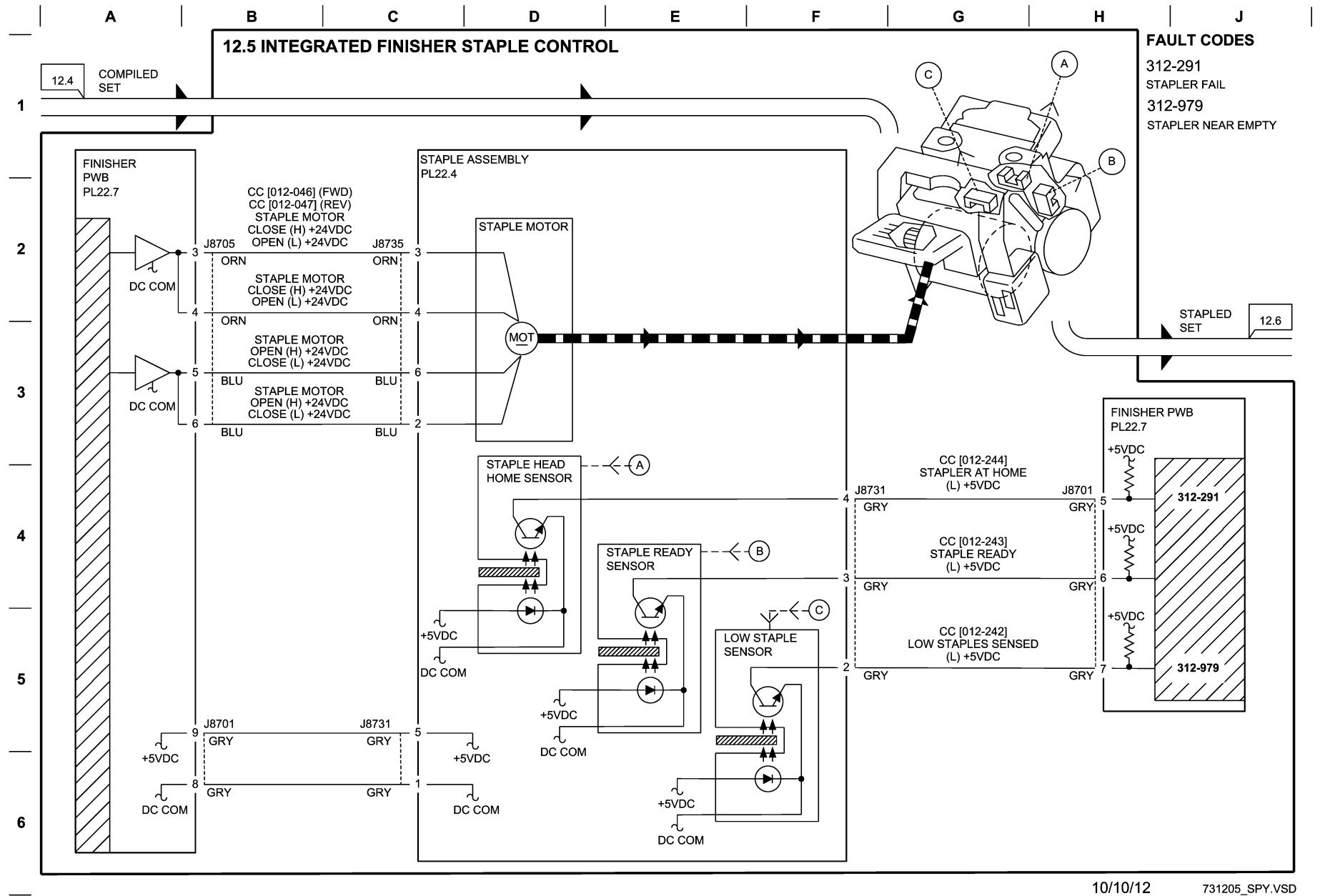
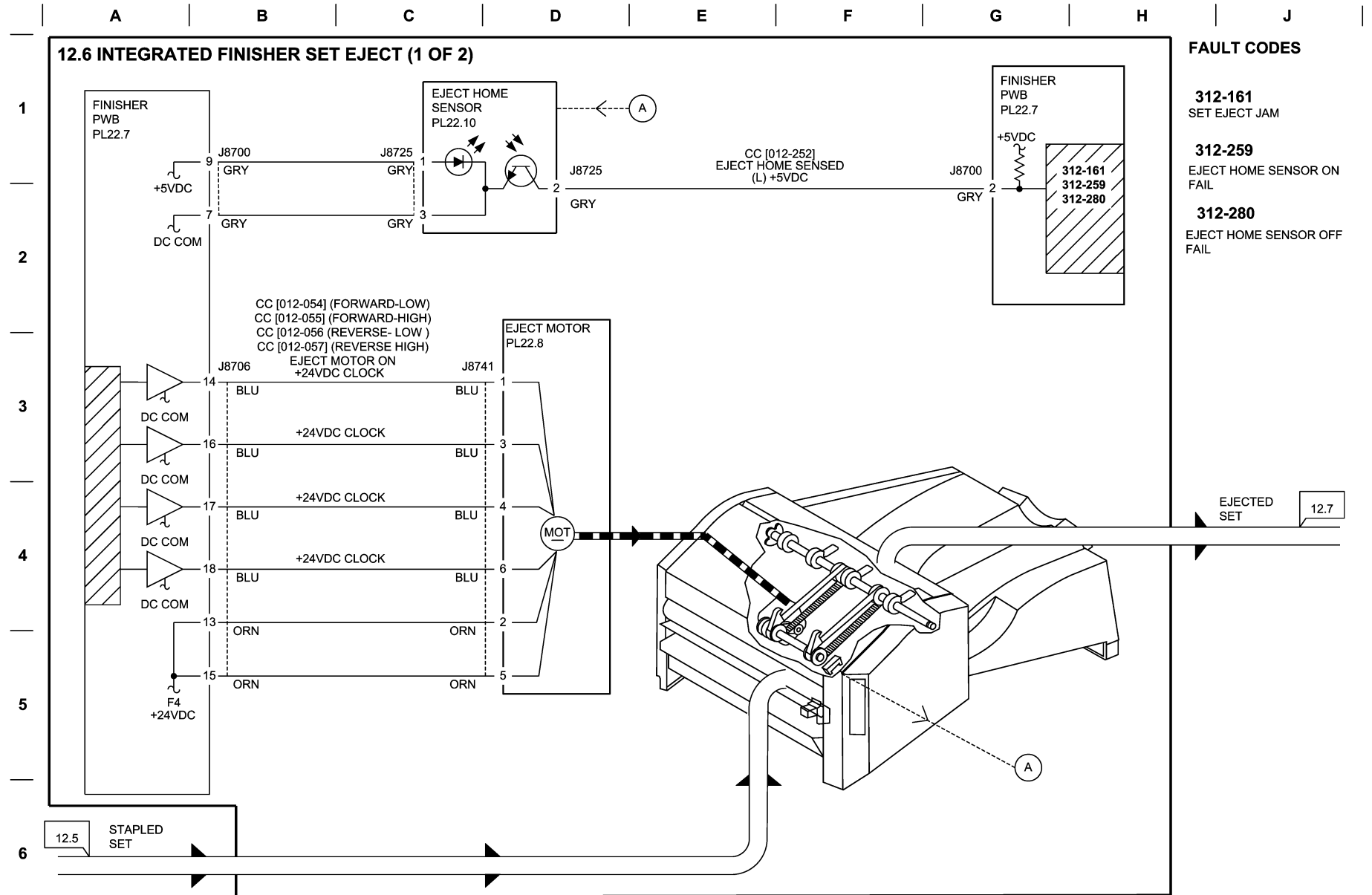


Figure 5 BSD 12.5 Integrated Finisher Staple Control



**FAULT CODES**

**312-161**  
SET EJECT JAM

**312-259**  
EJECT HOME SENSOR ON FAIL

**312-280**  
EJECT HOME SENSOR OFF FAIL

Figure 6 BSD 12.6 Integrated Finisher Set Eject (1 of 2)

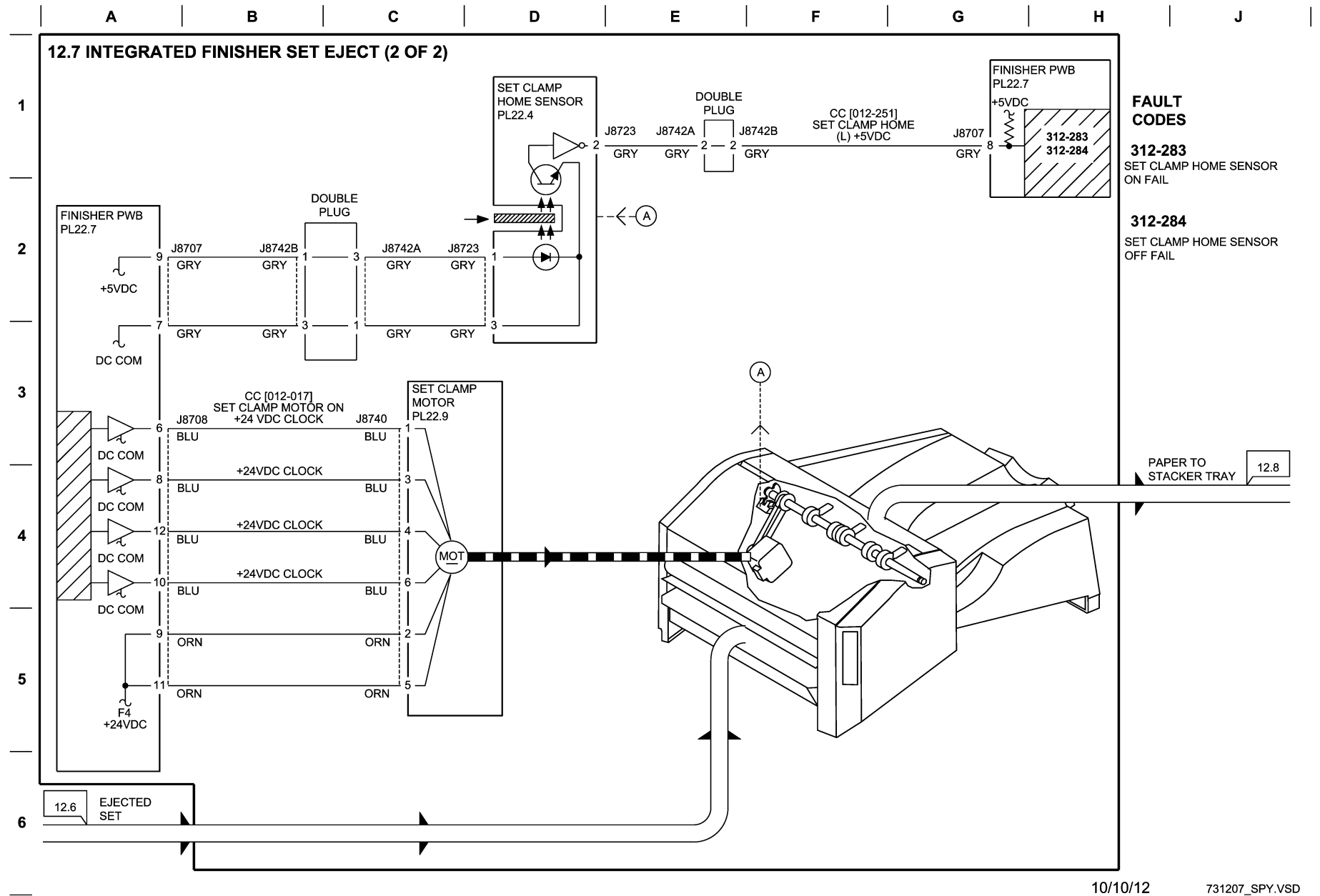


Figure 7 BSD 12.7 Integrated Finisher Set Eject (2 of 2)

BSD 12.8 Integrated Finisher Stacker Tray Control

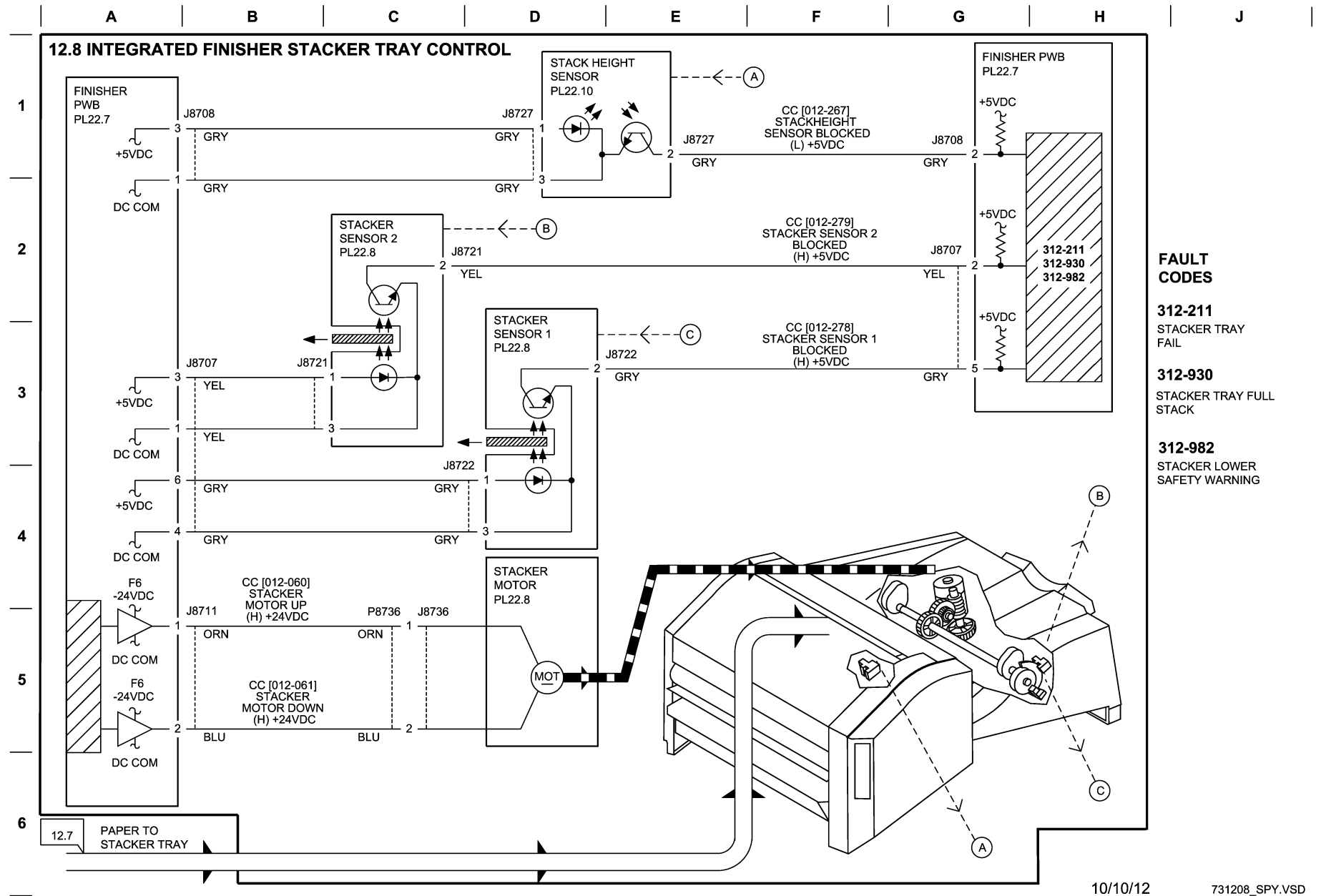


Figure 8 BSD 12.8 Integrated Finisher Stacker Tray Control

# Office Finisher LX

## BSD 12.9 Office Finisher LX Communication (IOT-Finisher)

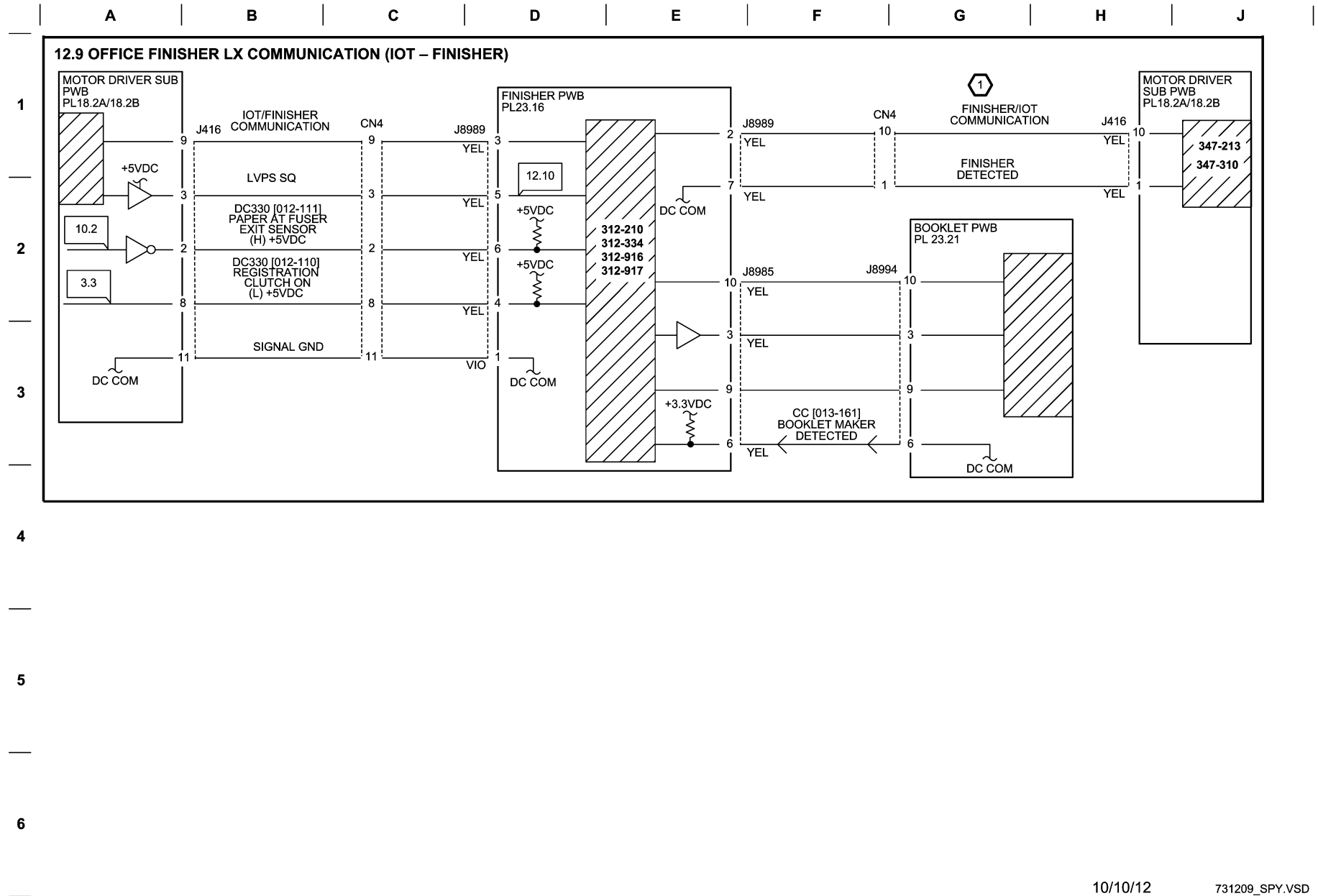
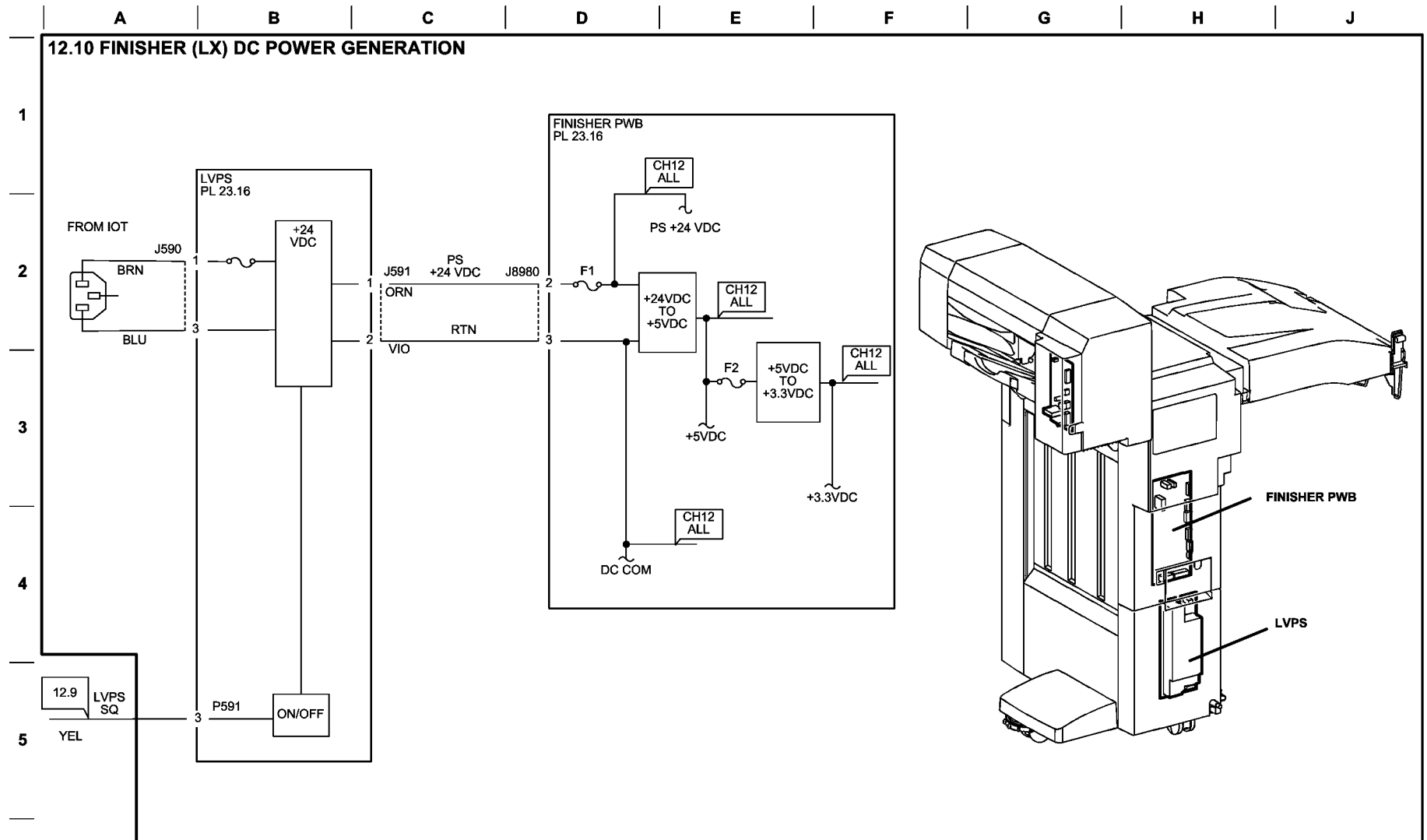


Figure 9 BSD 12.9 Office Finisher LX Communication (IOT-Finisher)

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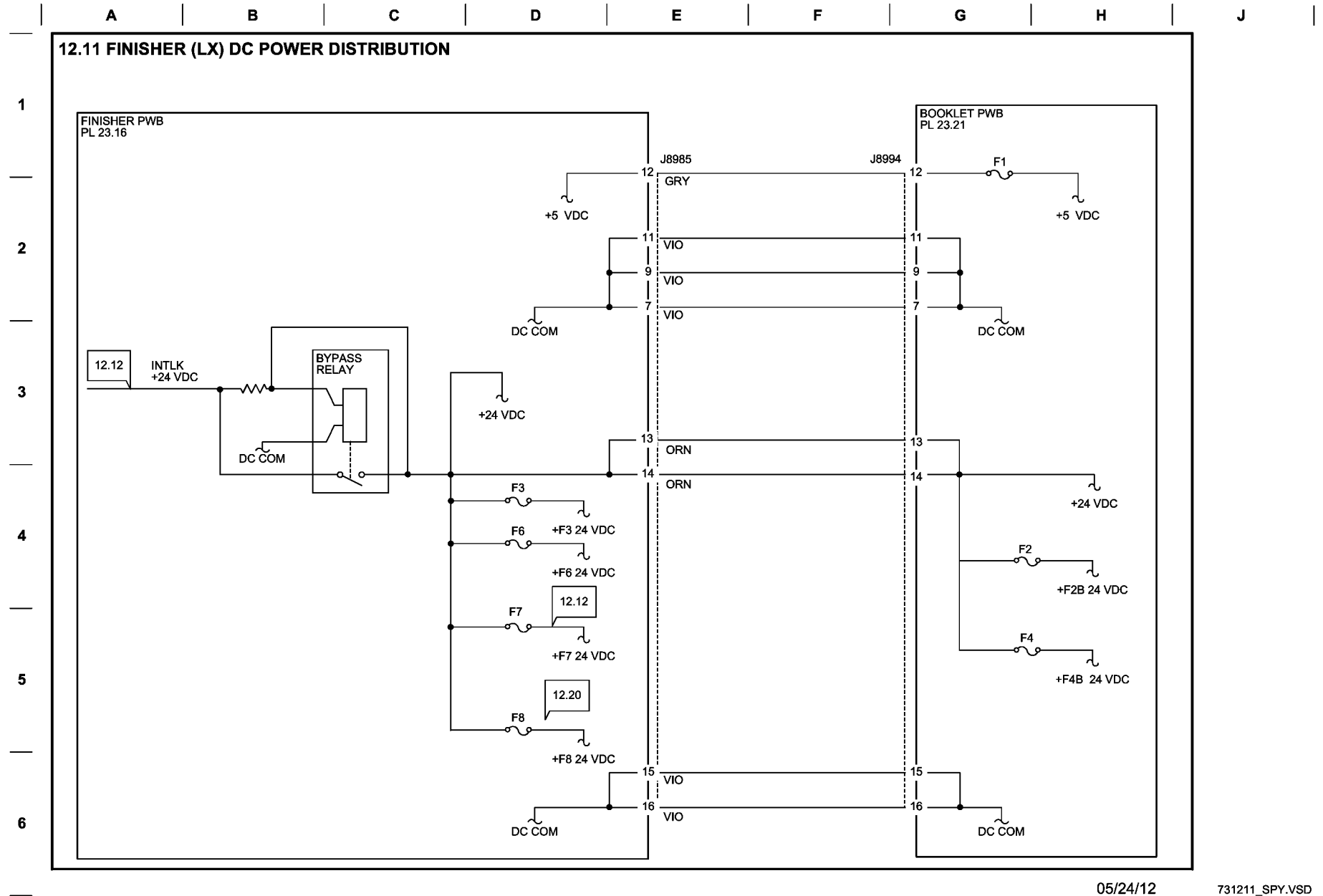


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731201\_SPY.VSD

Figure 10 BSD 12.10 Office Finisher LX DC Power Generation

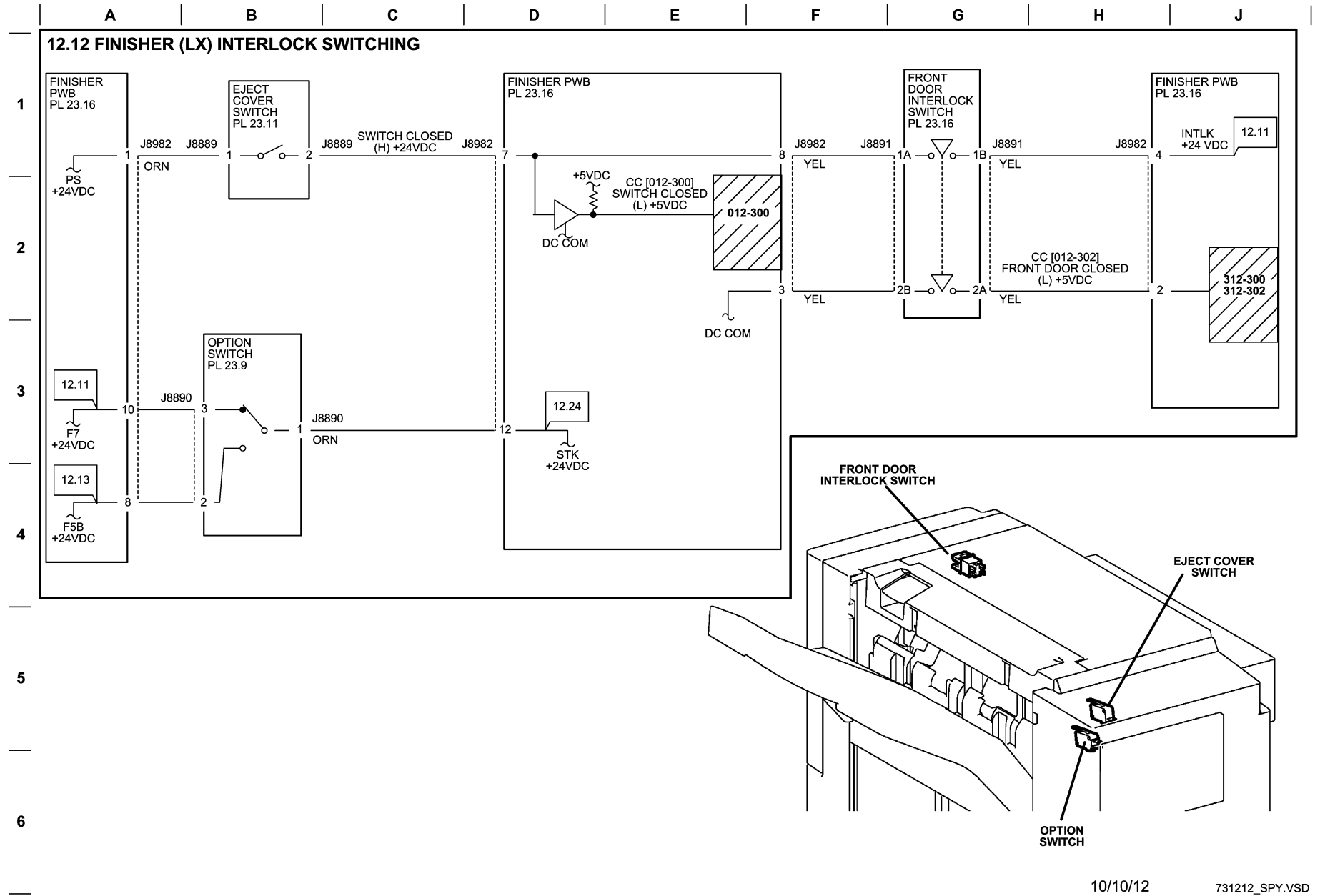




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731211\_SPY.VSD

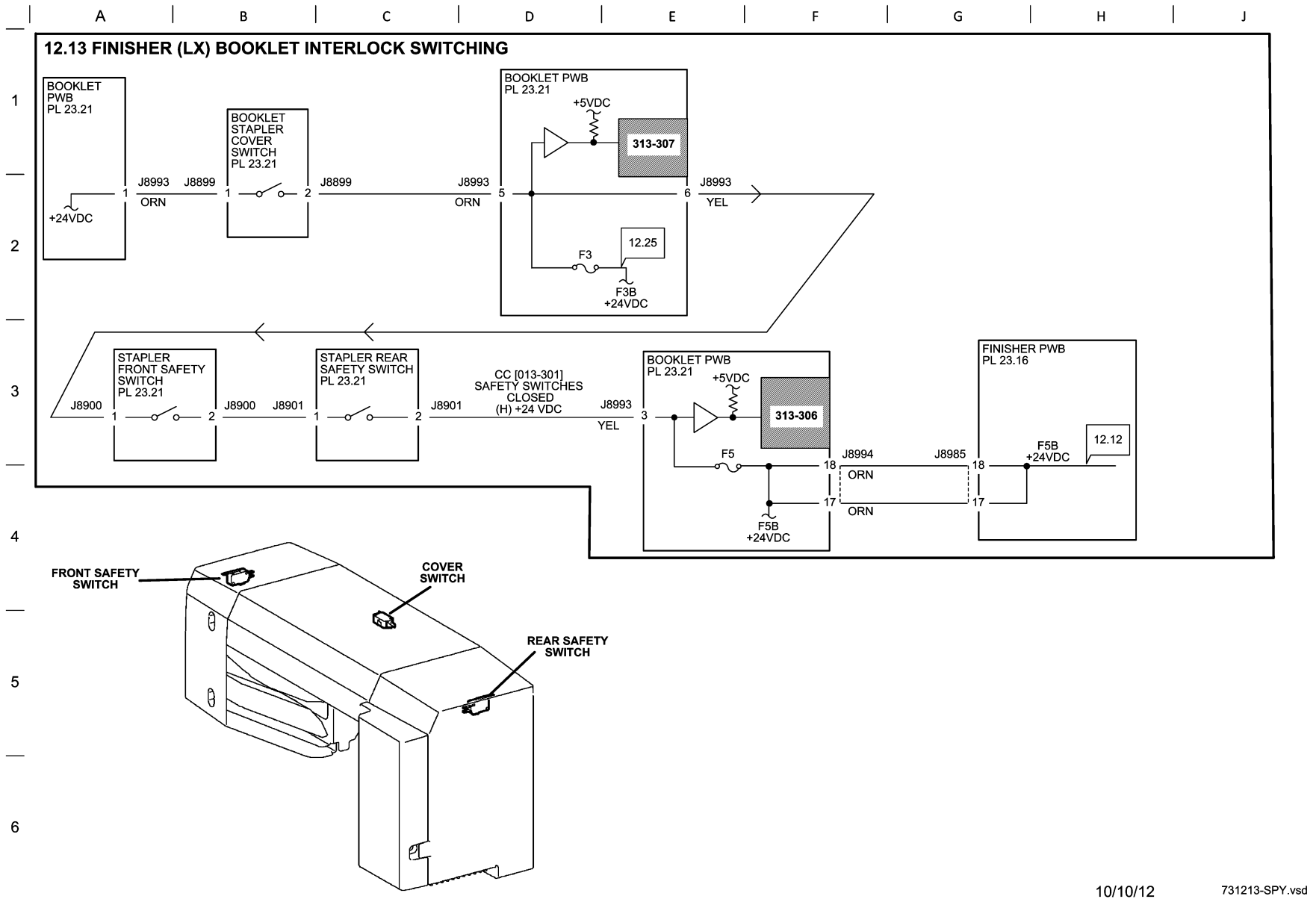
Figure 11 BSD 12.11 Office Finisher LX DC Power Distribution



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731212\_SPY.VSD

Figure 12 BSD 12.12 Office Finisher LX Interlock Switching



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731213-SPY.vsd

Figure 13 BSD 12.13 Office Finisher LX Booklet Interlock Switching

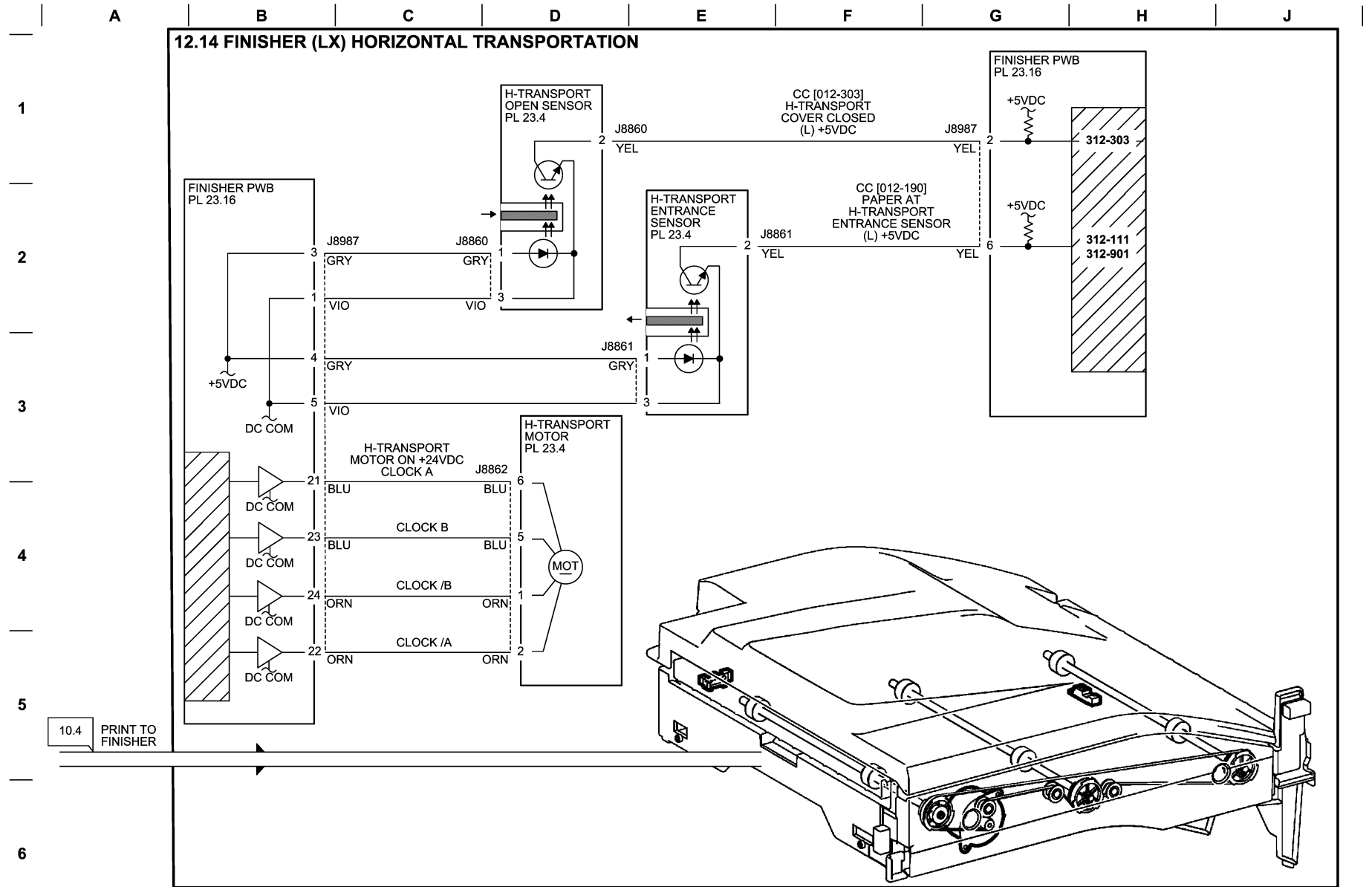
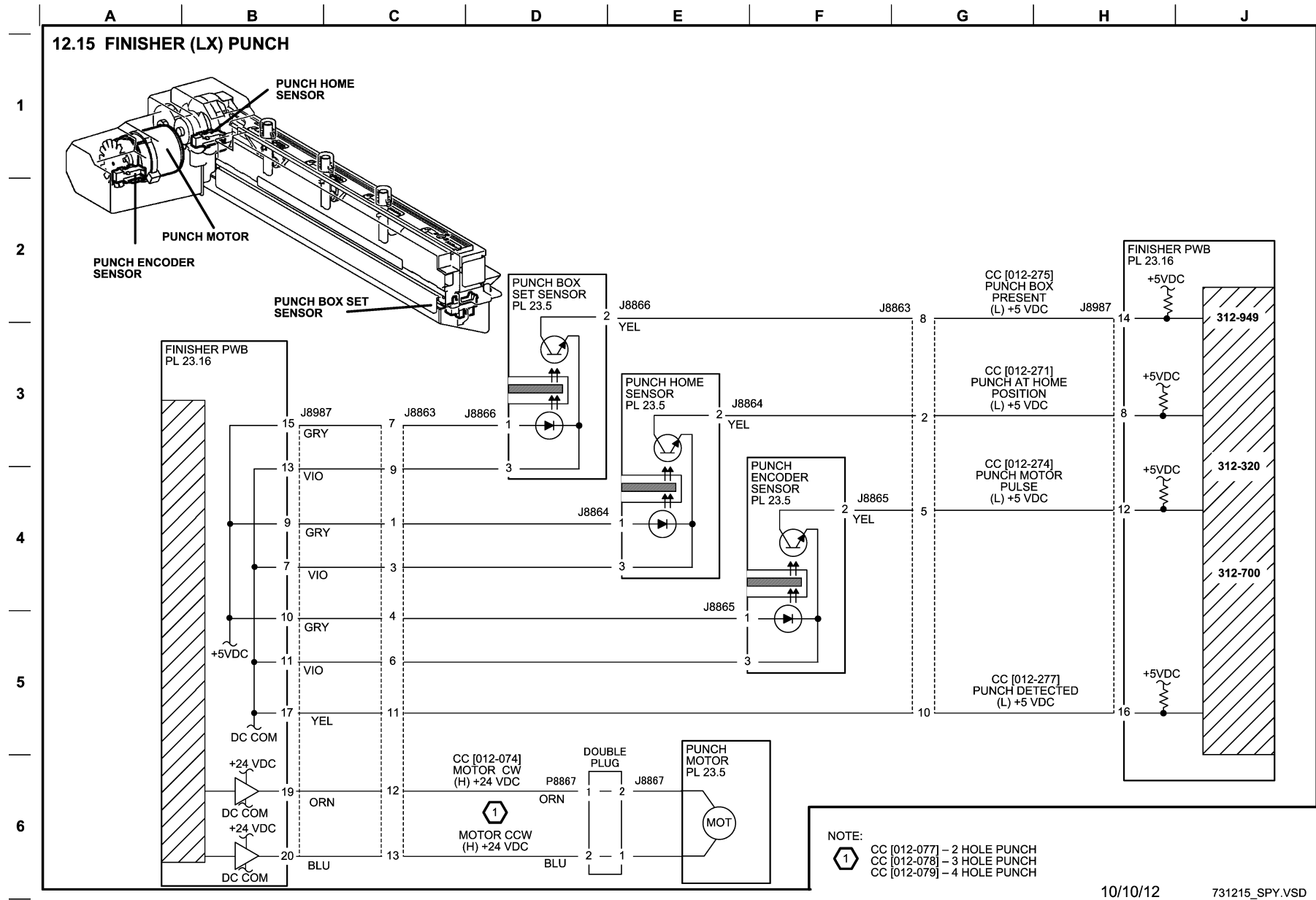


Figure 14 BSD 12.14 Office Finisher LX Horizontal Transportation



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731215\_SPY.VSD

Figure 15 BSD 12.15 Office Finisher LX Punch

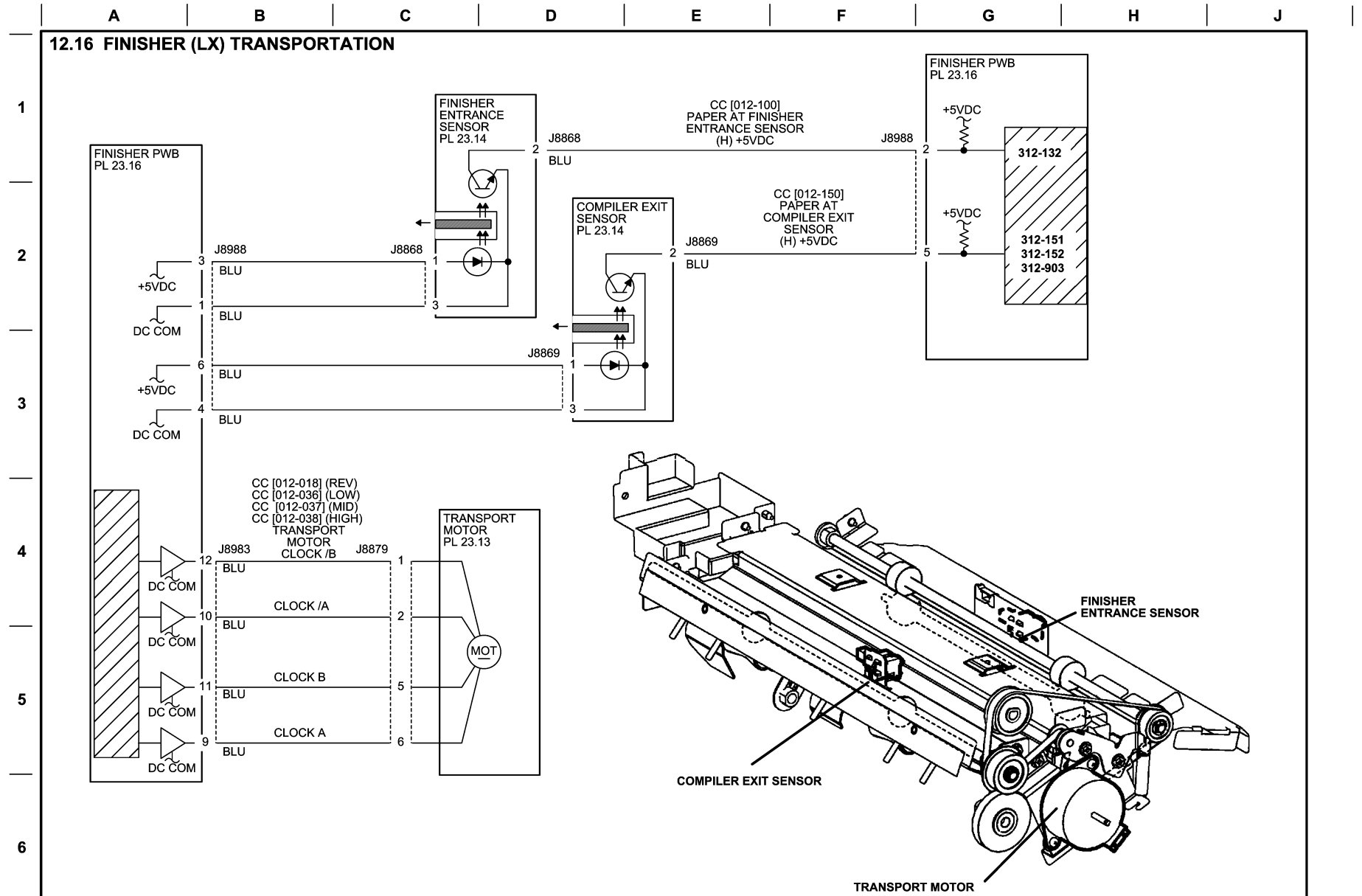


Figure 16 BSD 12.16 Office Finisher LX Transportation

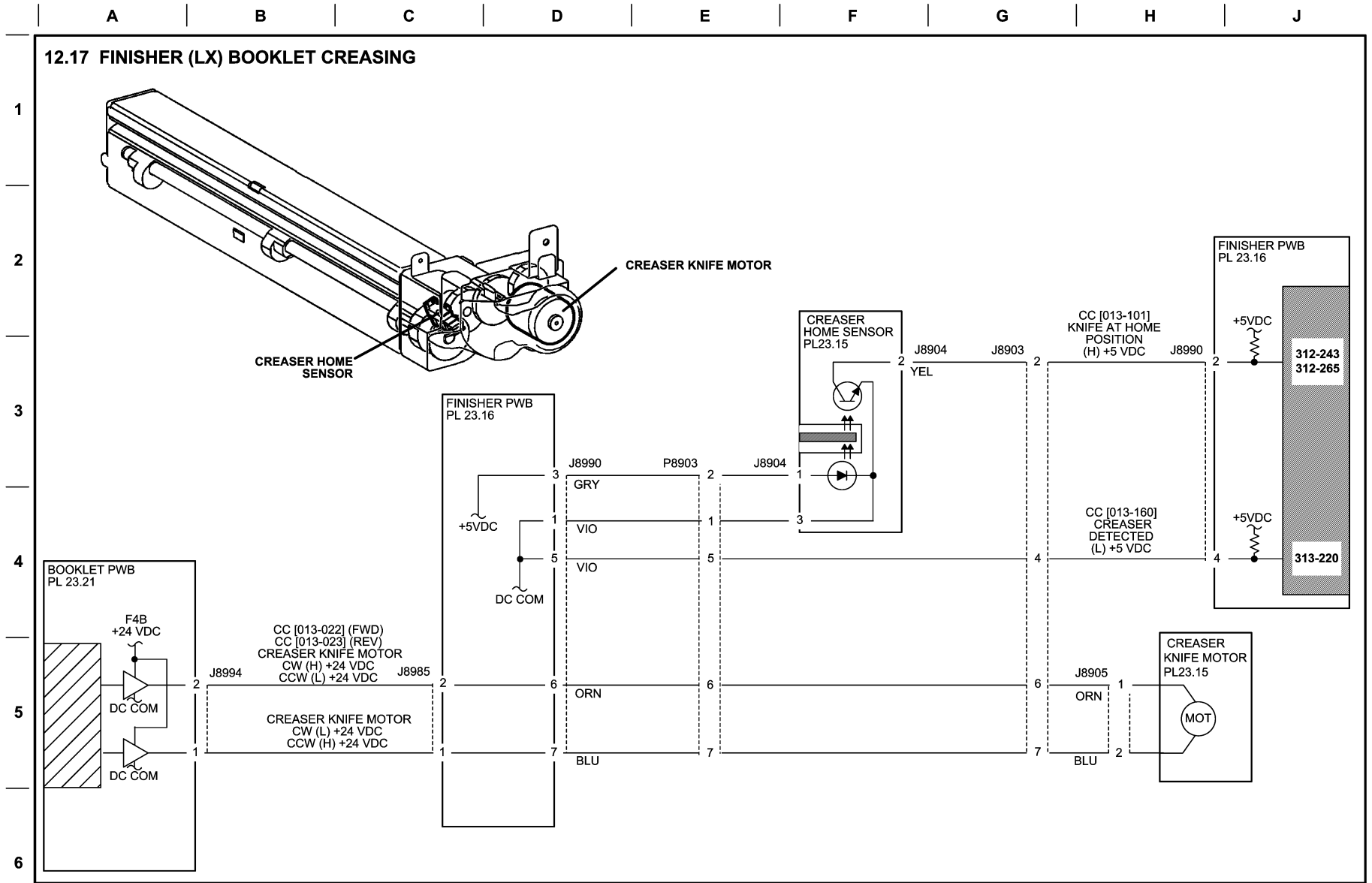


Figure 17 BSD 12.17 Office Finisher LX Folding

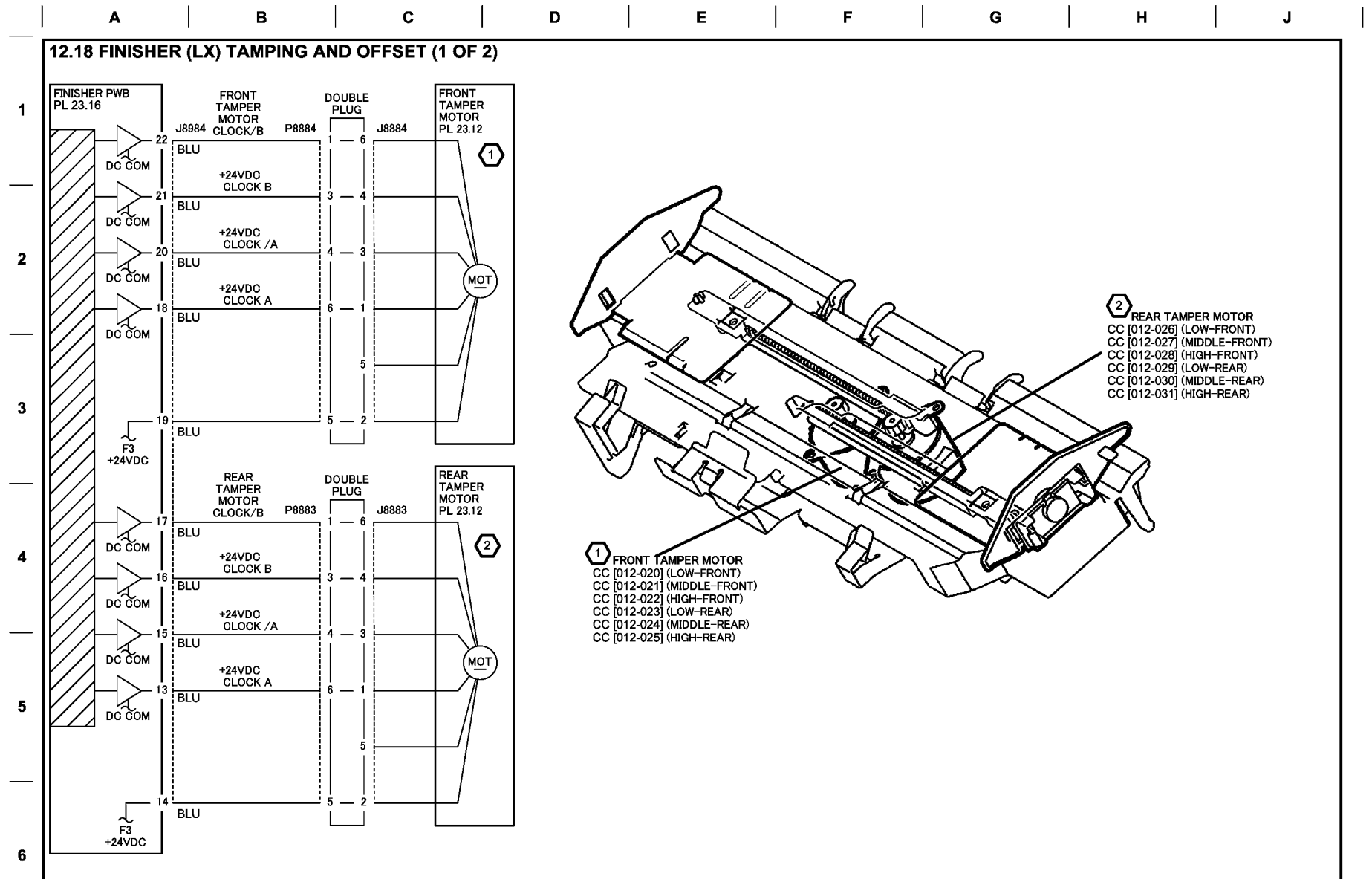
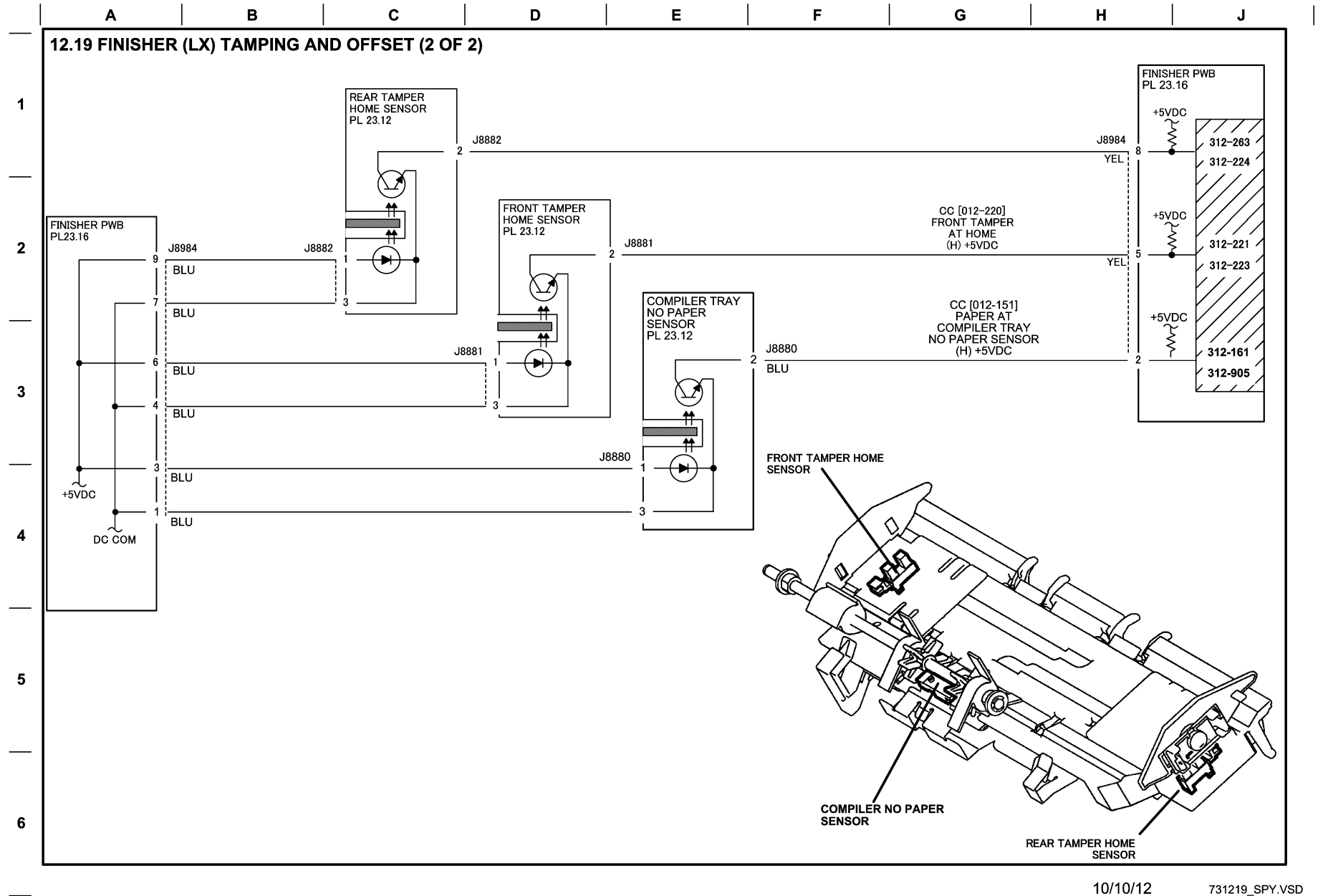


Figure 18 BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)





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Figure 19 BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

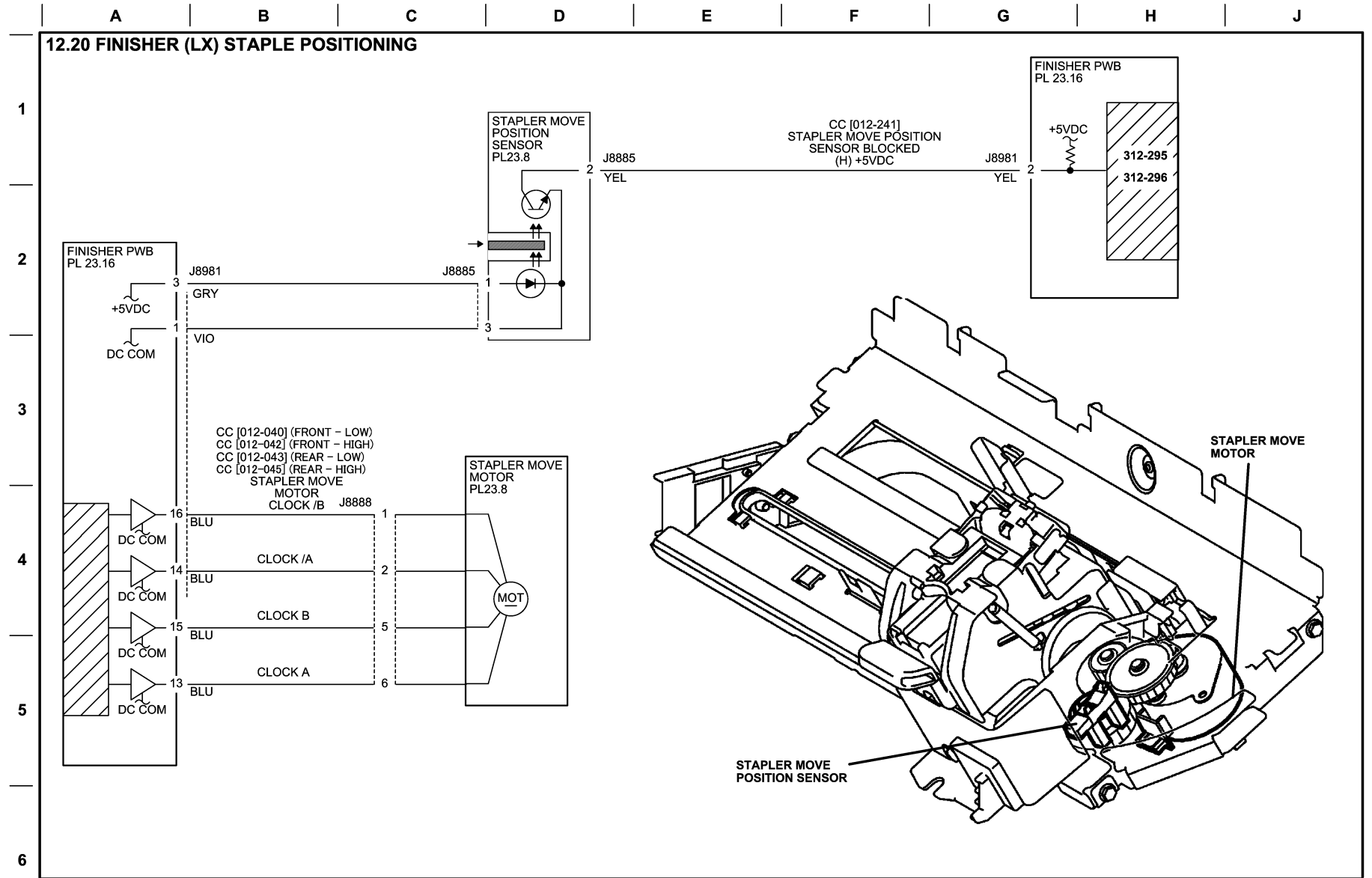


Figure 20 BSD 12.20 Office Finisher LX Staple Positioning

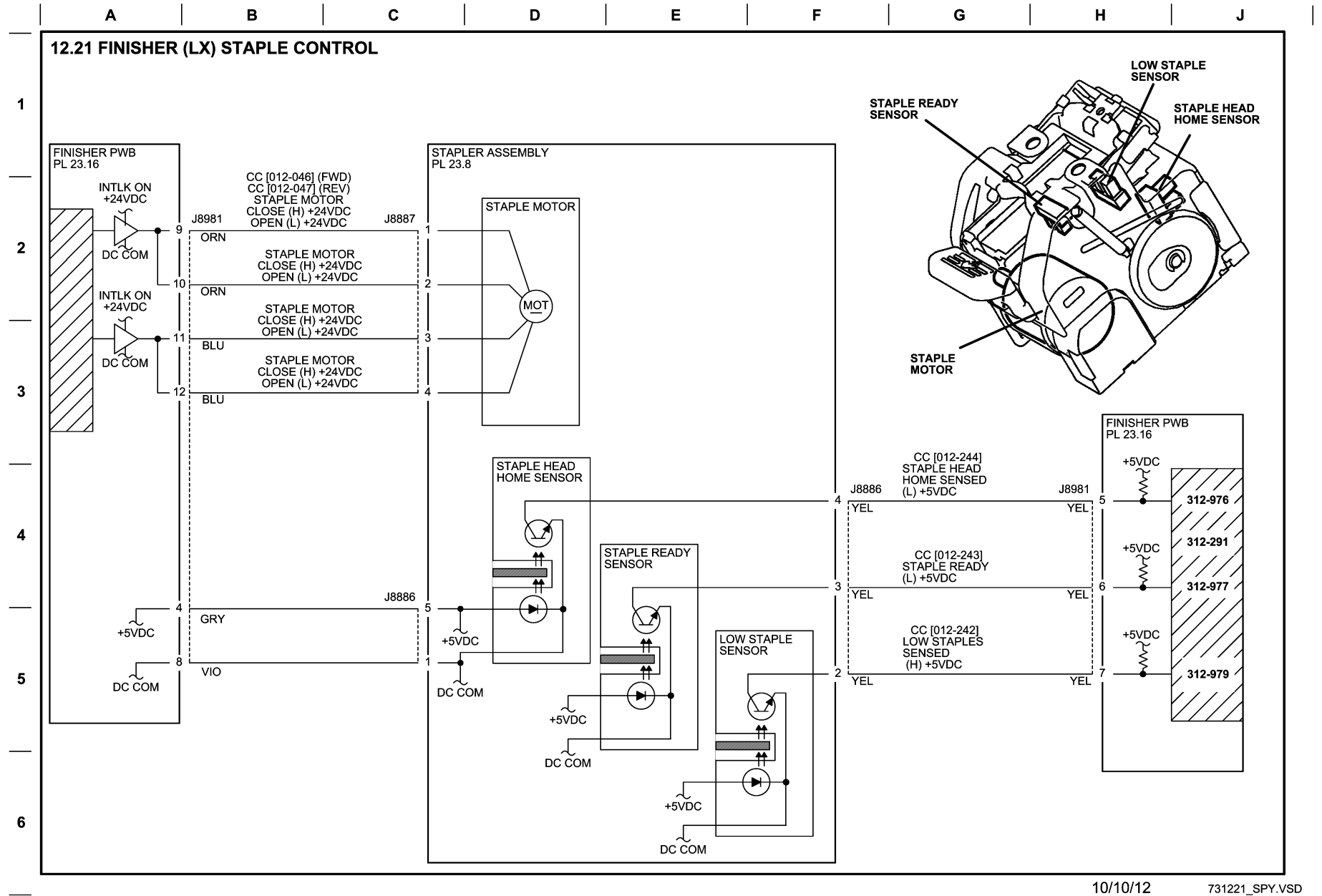


Figure 21 BSD 12.21 Office Finisher LX Staple Control

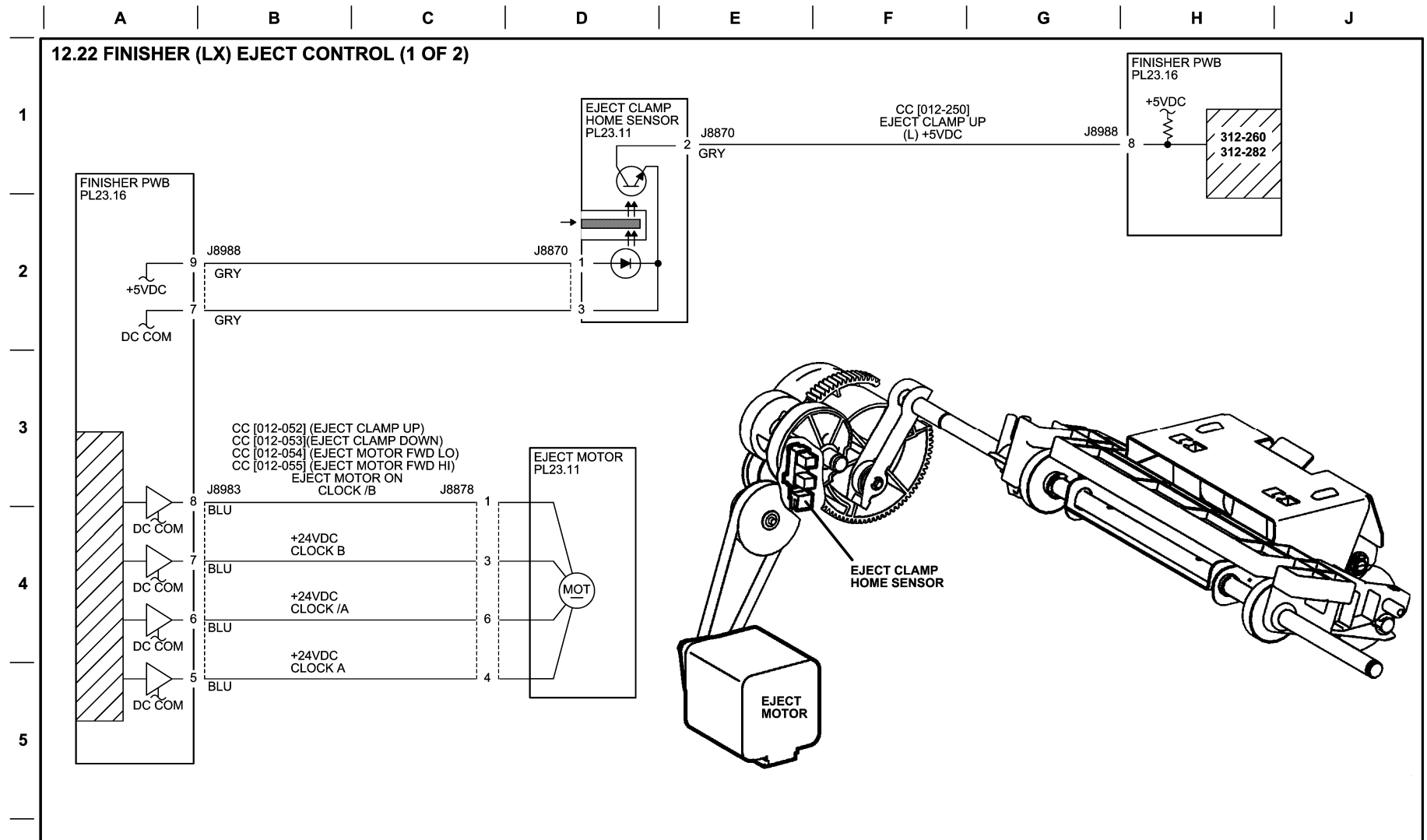


Figure 22 BSD 12.22 Office Finisher LX Eject Control (1 of 2)

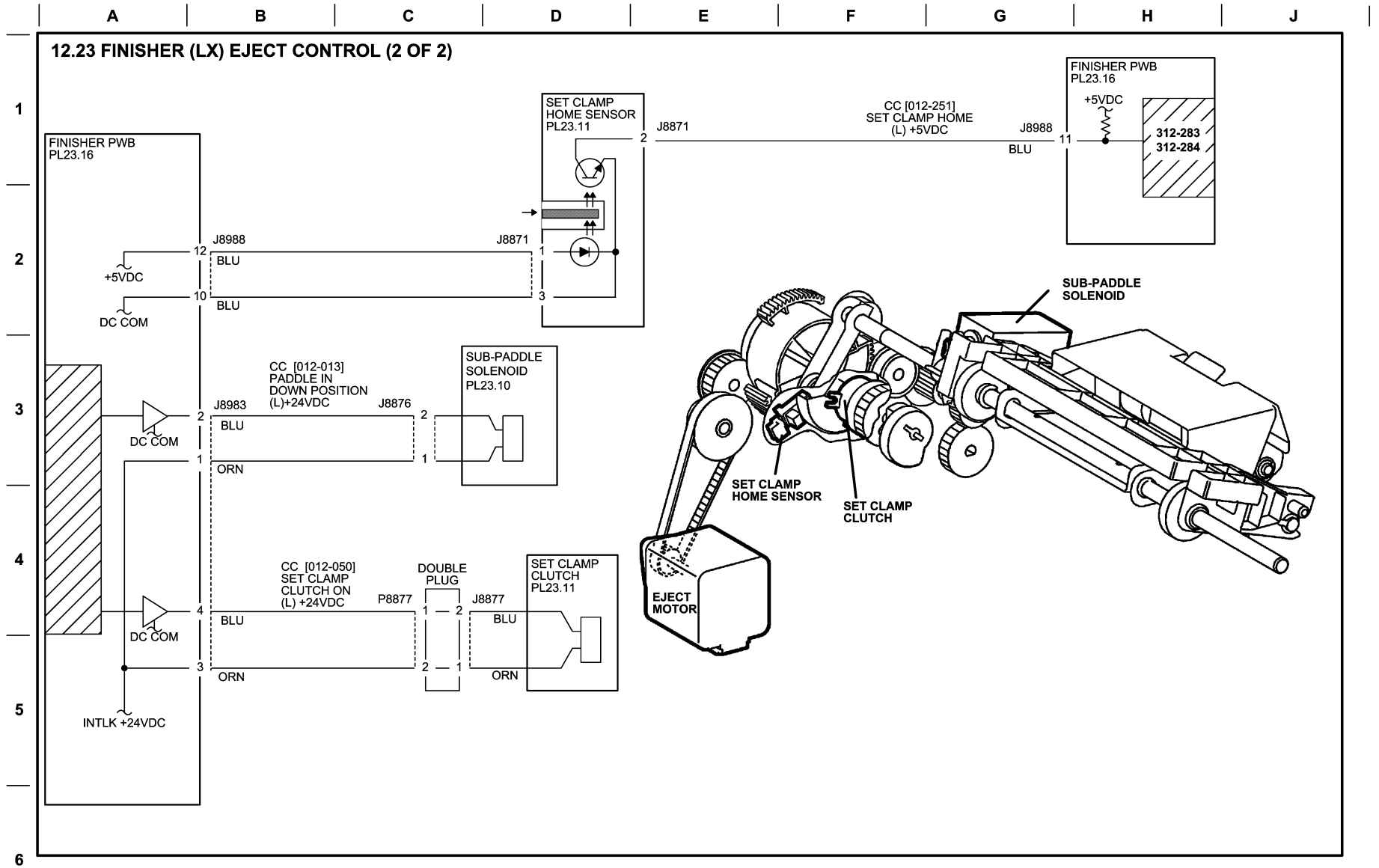


Figure 23 BSD 12.23 Office Finisher LX Eject Control (2 of 2)

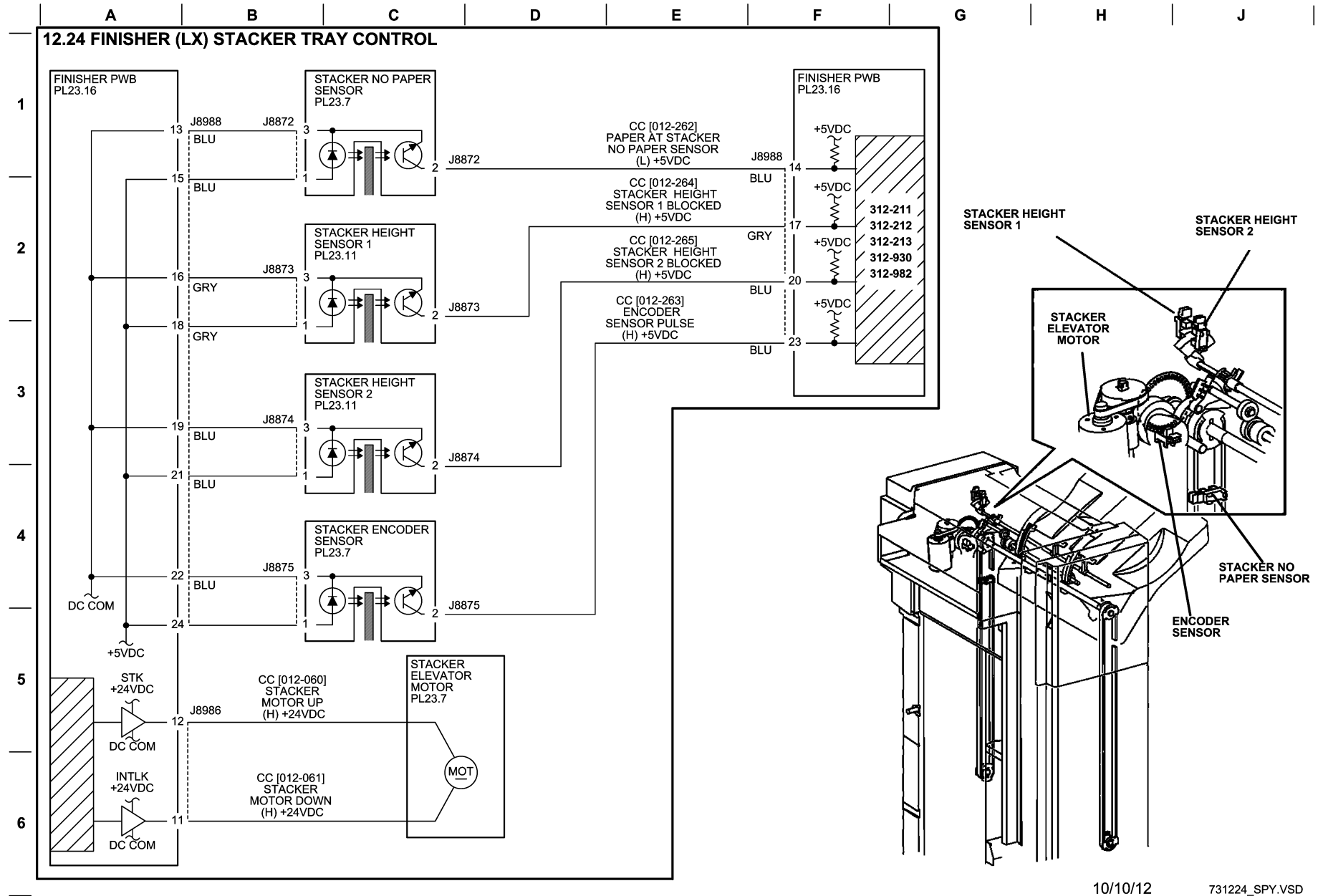
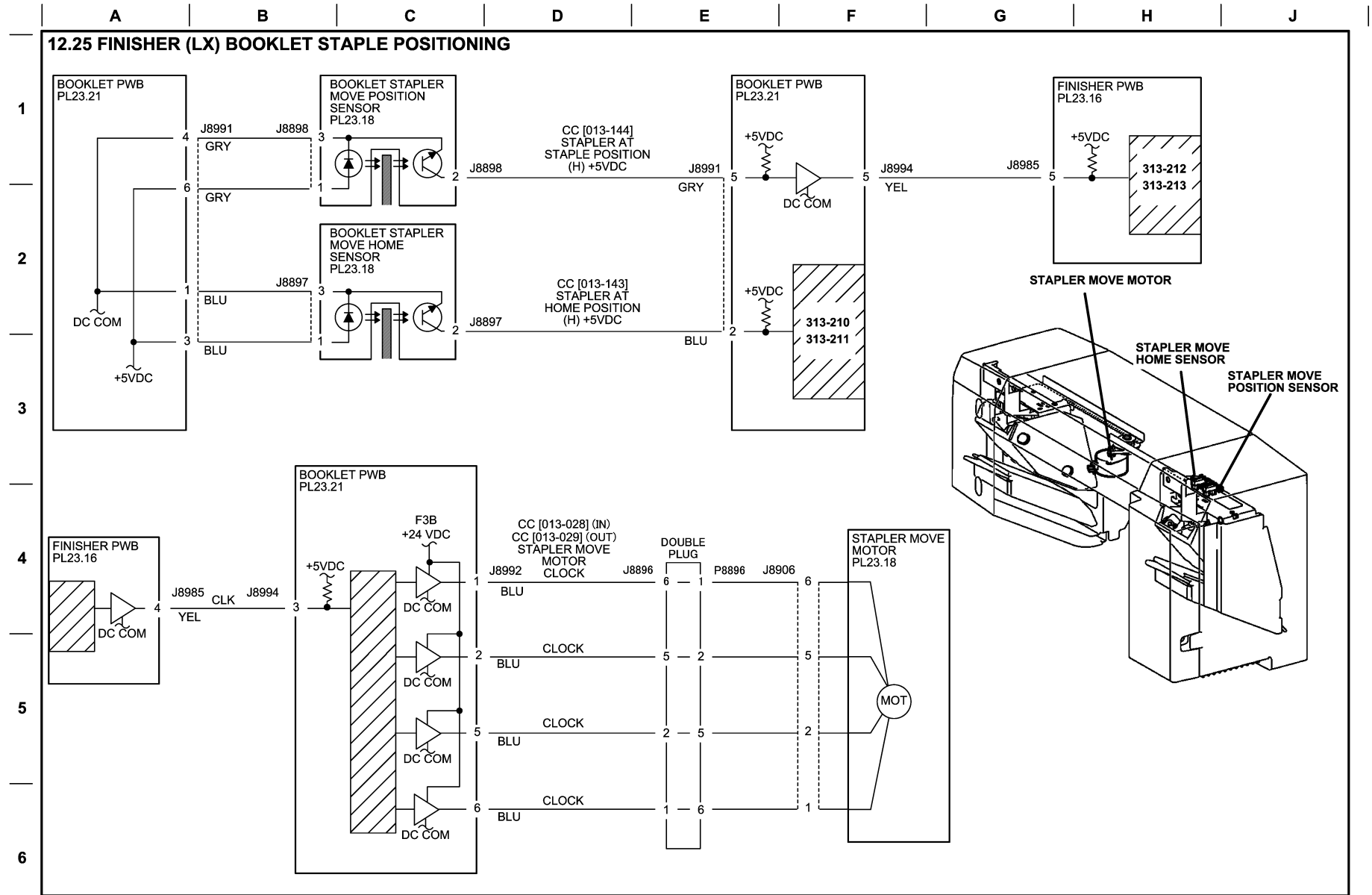


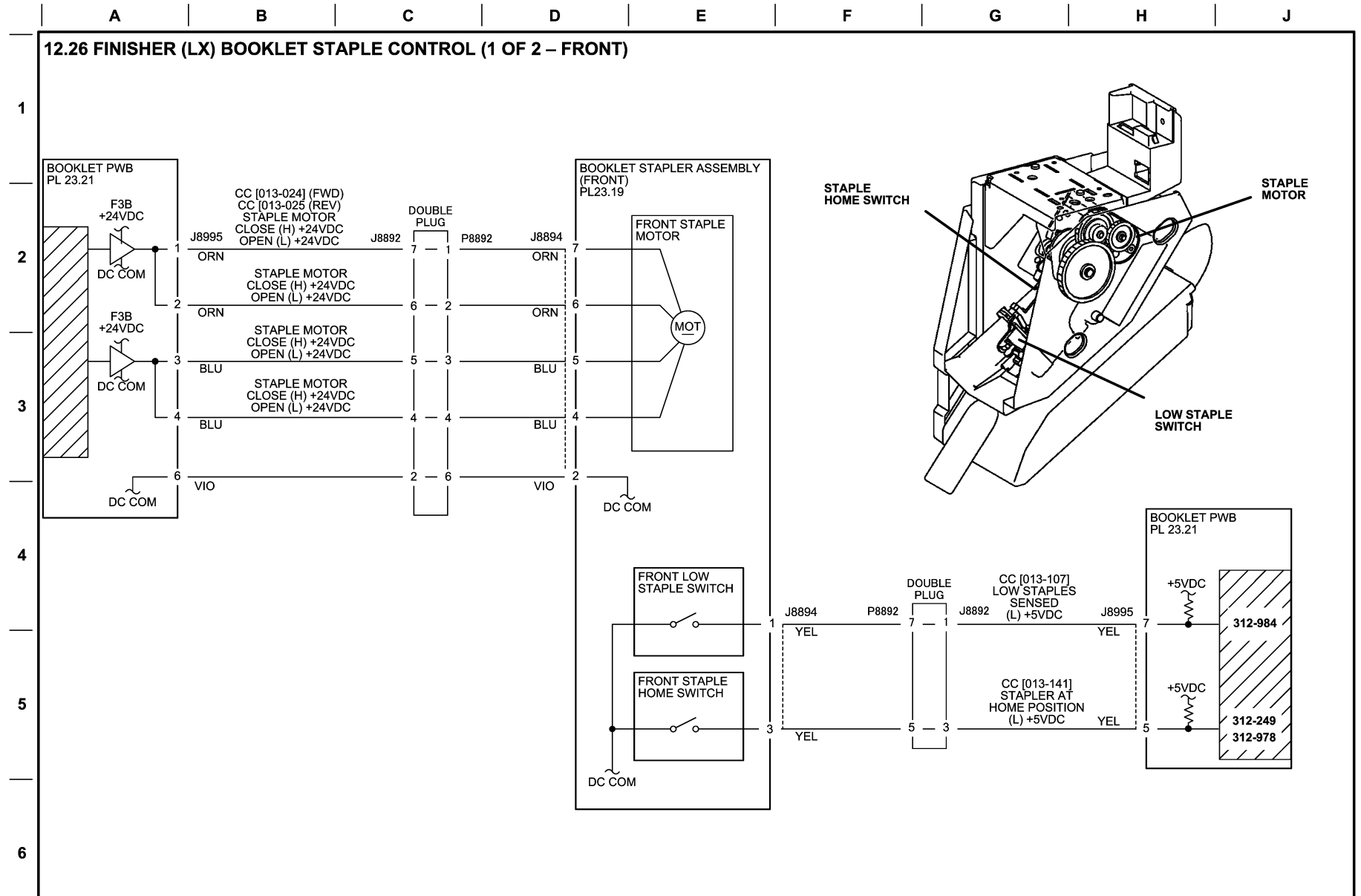
Figure 24 BSD 12.24 Office Finisher LX Stacker Tray Control



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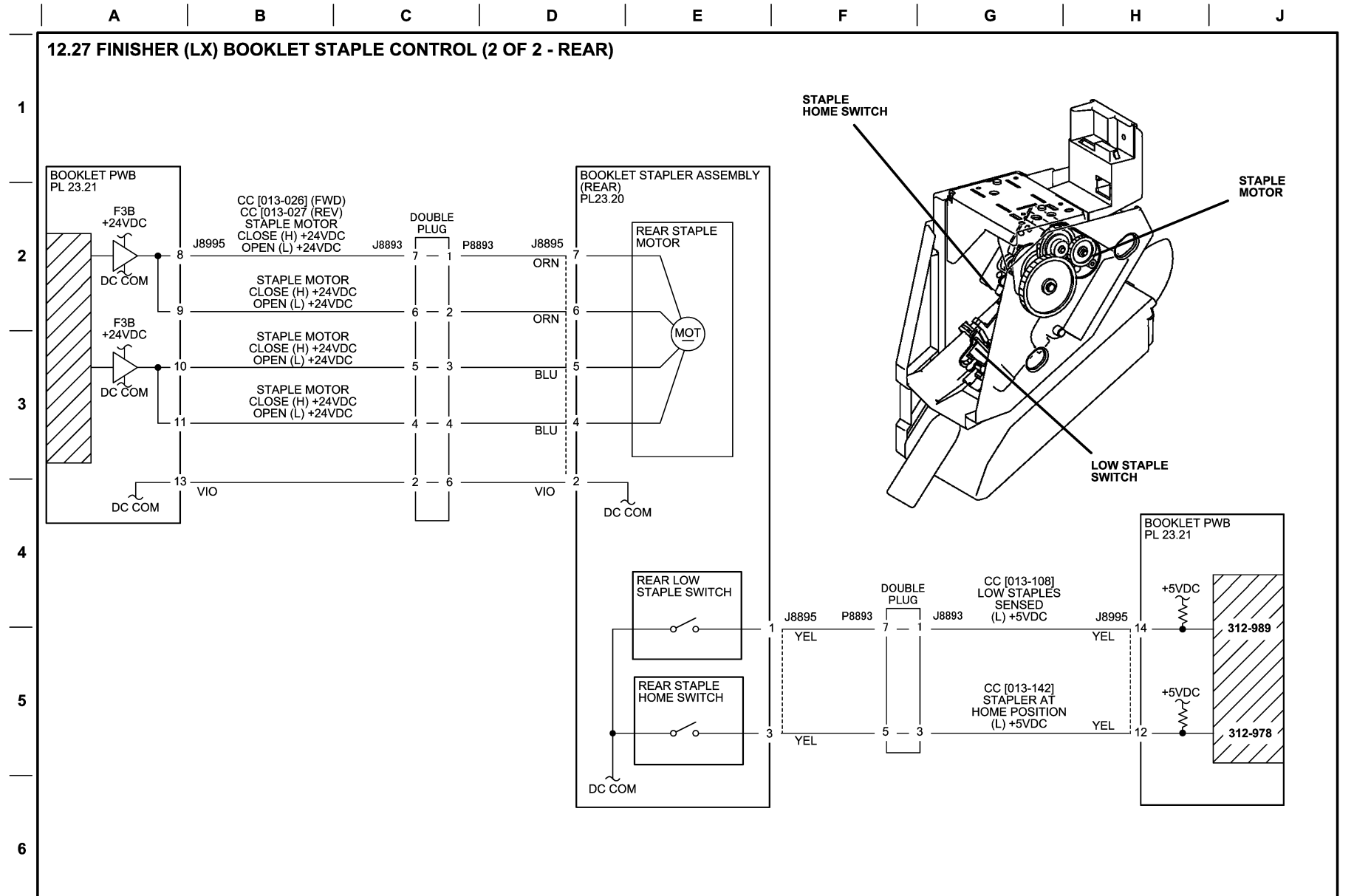
Figure 25 BSD 12.25 Office Finisher LX Booklet Staple Positioning



10/10/12 731226\_SPY.VSD

Figure 26 BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)



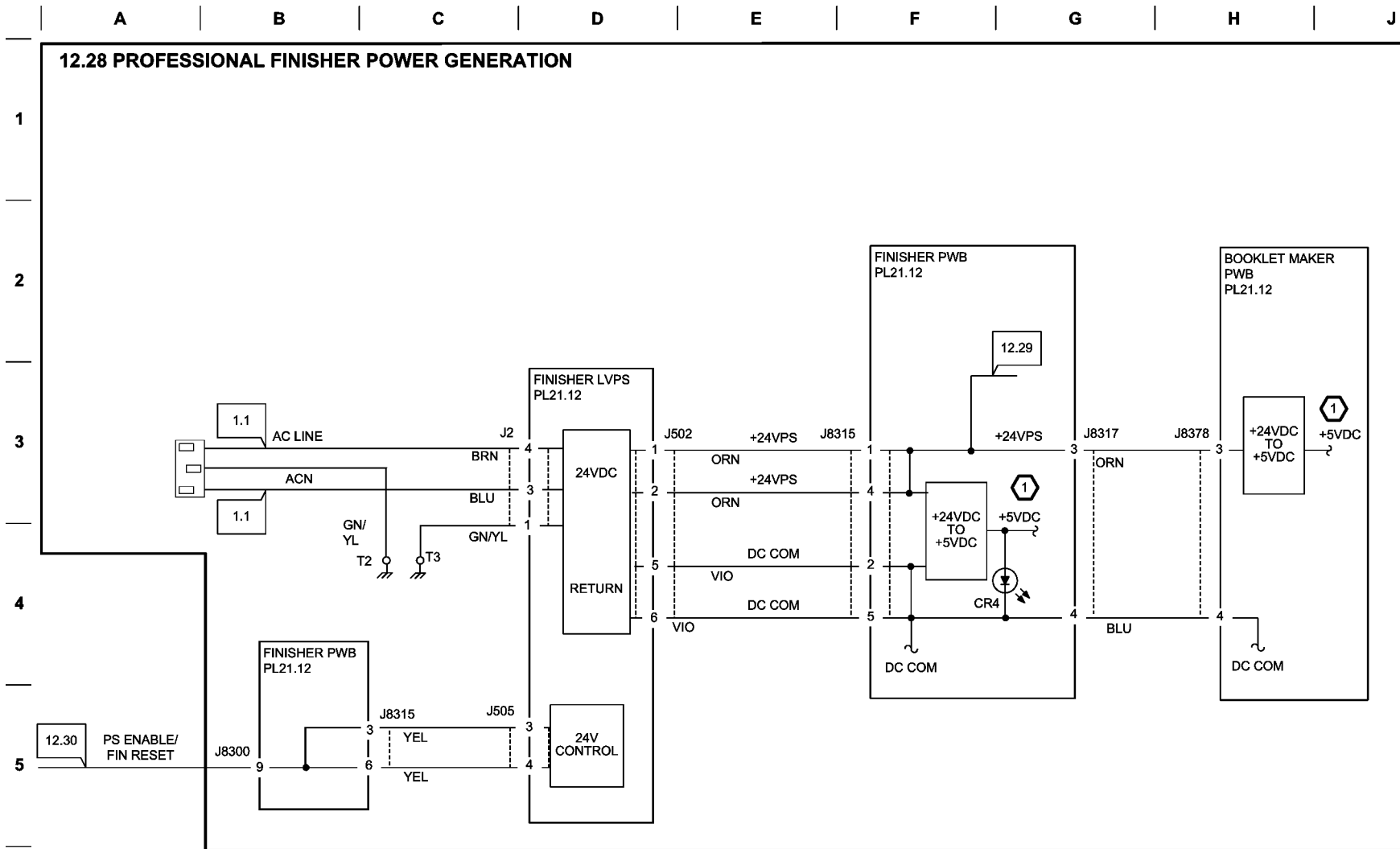


10/10/12 731227\_SPY.VSD

Figure 27 BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)

# Professional Finisher

## BSD 12.28 Professional Finisher Power Generation



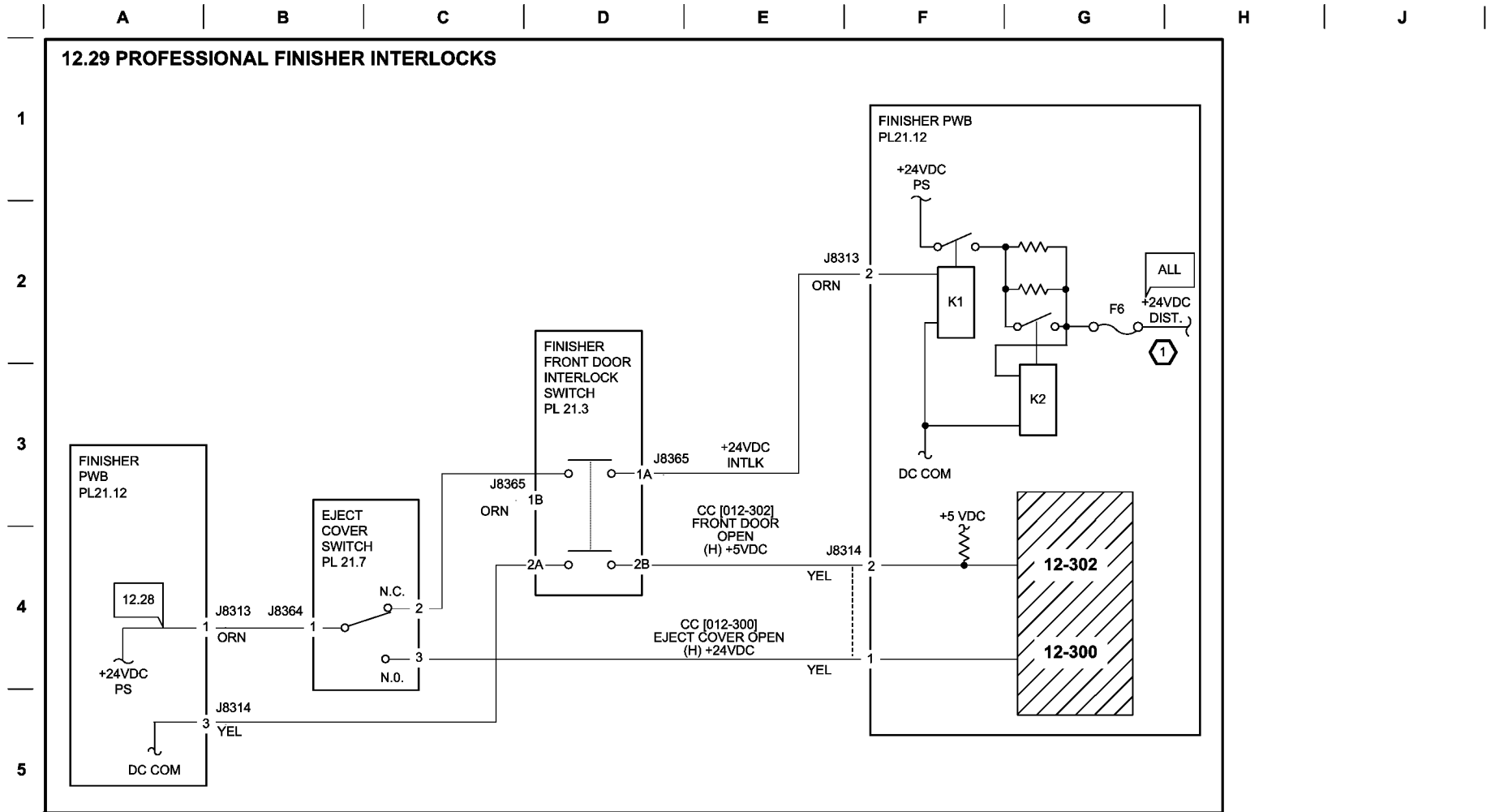
NOTES:

① REFER TO WIRENETS FOR DC POWER DISTRIBUTION

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731228\_SPY

Figure 28 BSD 12.28 Professional Finisher Power Generation



NOTES:

1 REFER TO WIRENETS FOR DC POWER DISTRIBUTION

Figure 29 BSD 12/29 Professional Finisher Interlocks

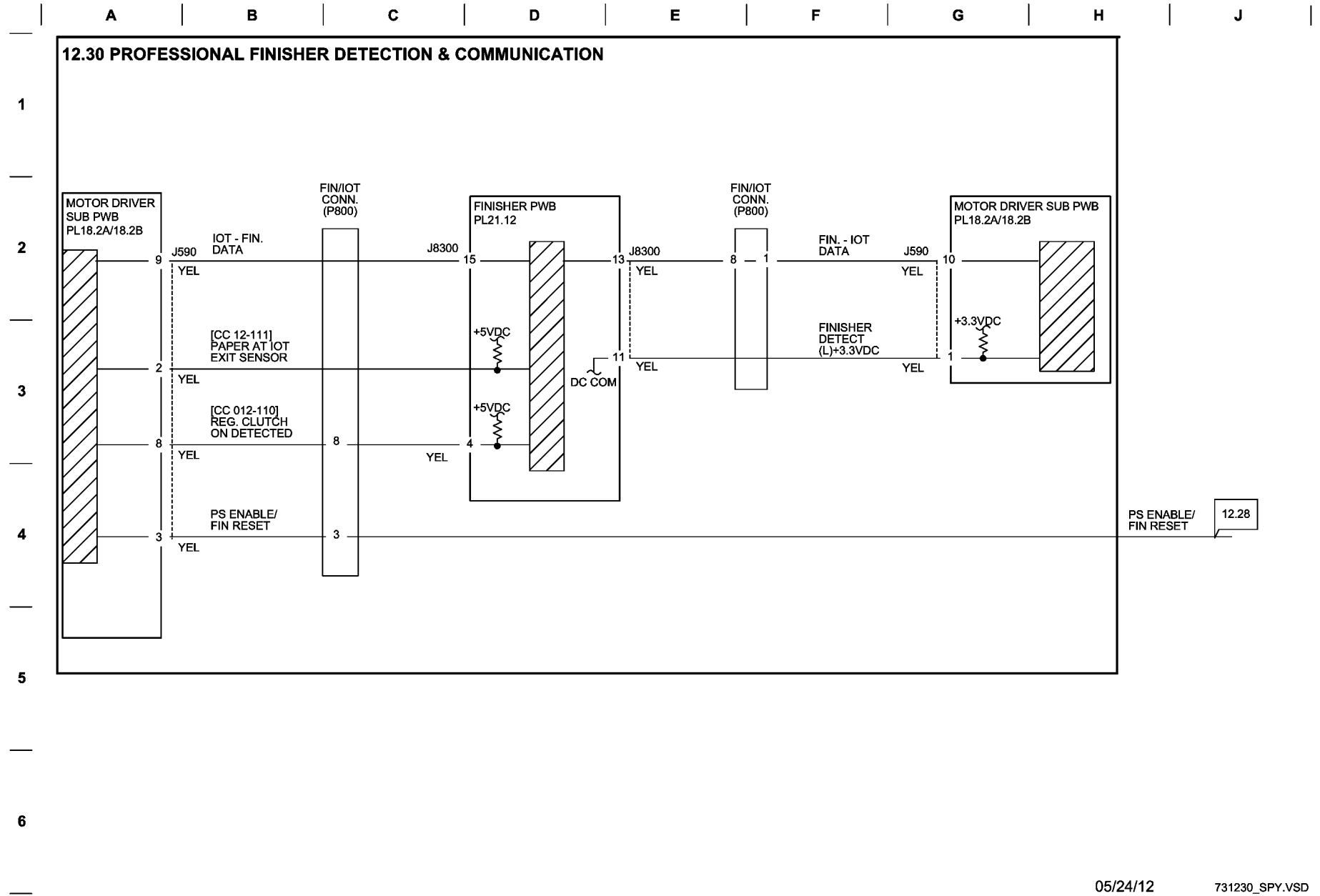


Figure 30 BSD 12.30 Professional Finisher Detection and Communication

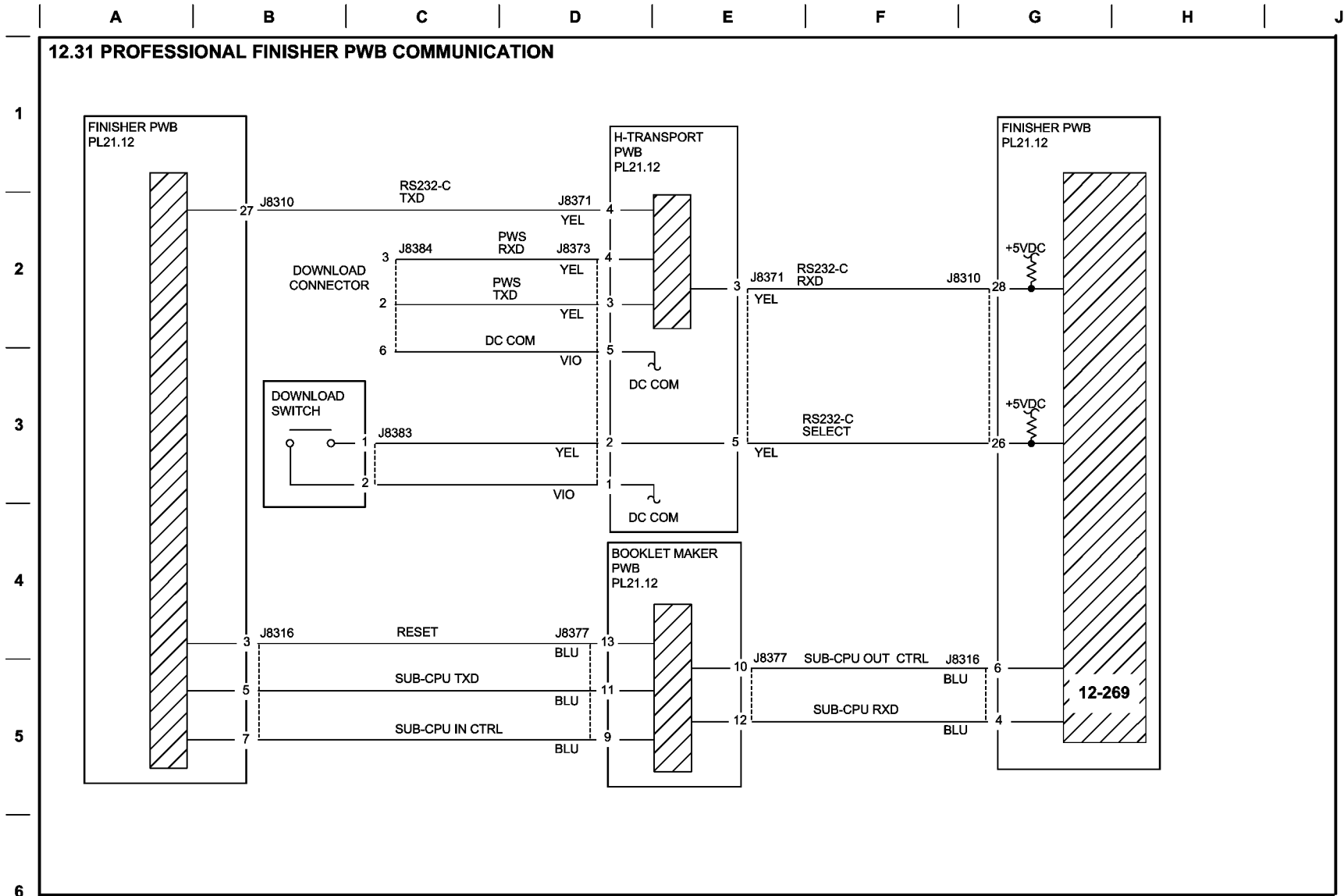
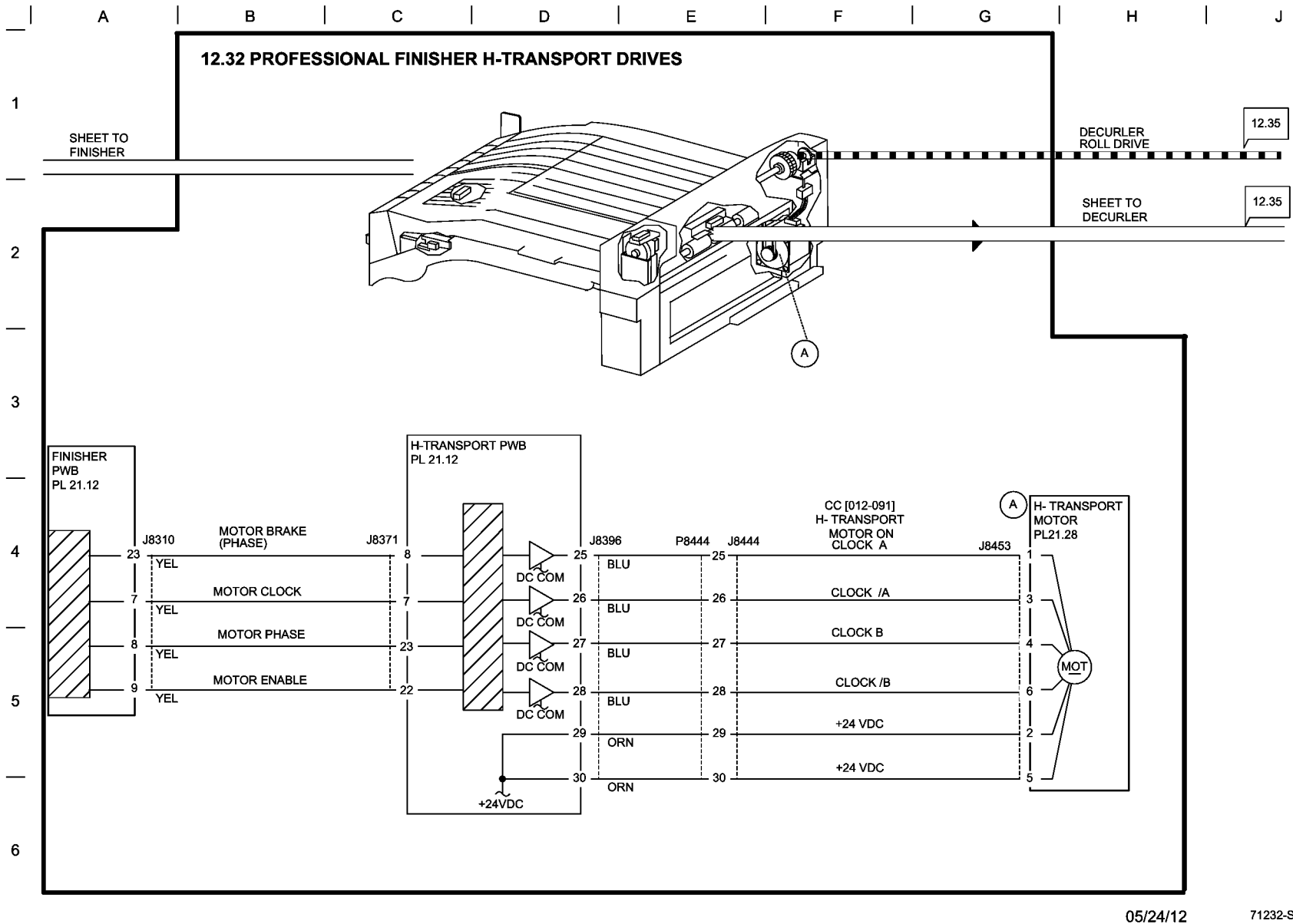
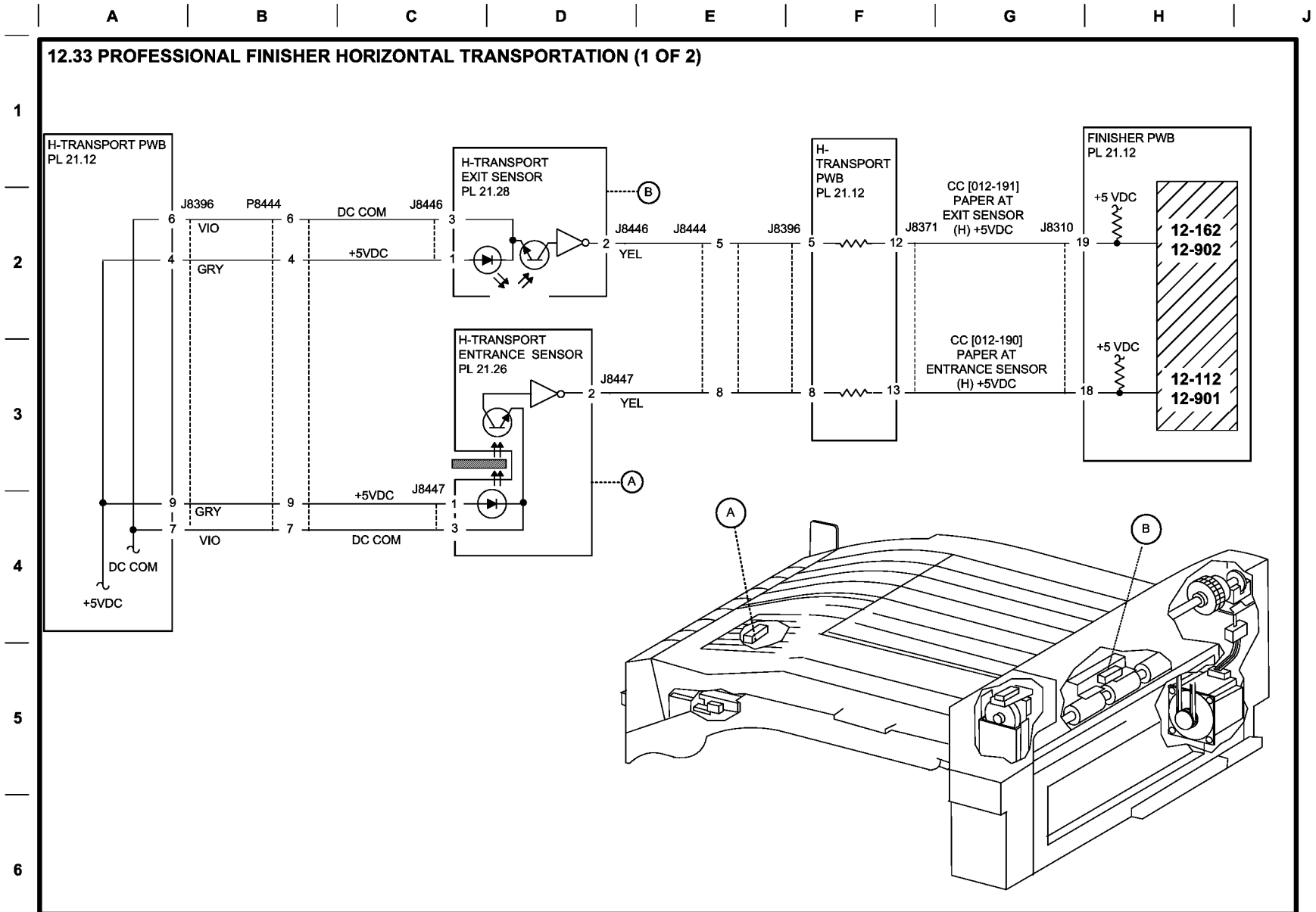


Figure 31 BSD 12.31 Professional Finisher PWB Communication

**BSD 12.32 H-Transport Drives**



**Figure 32 BSD 12.32 H-Transport Drives**



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Figure 33 BSD 12.33 Horizontal Transportation (1 of 2)

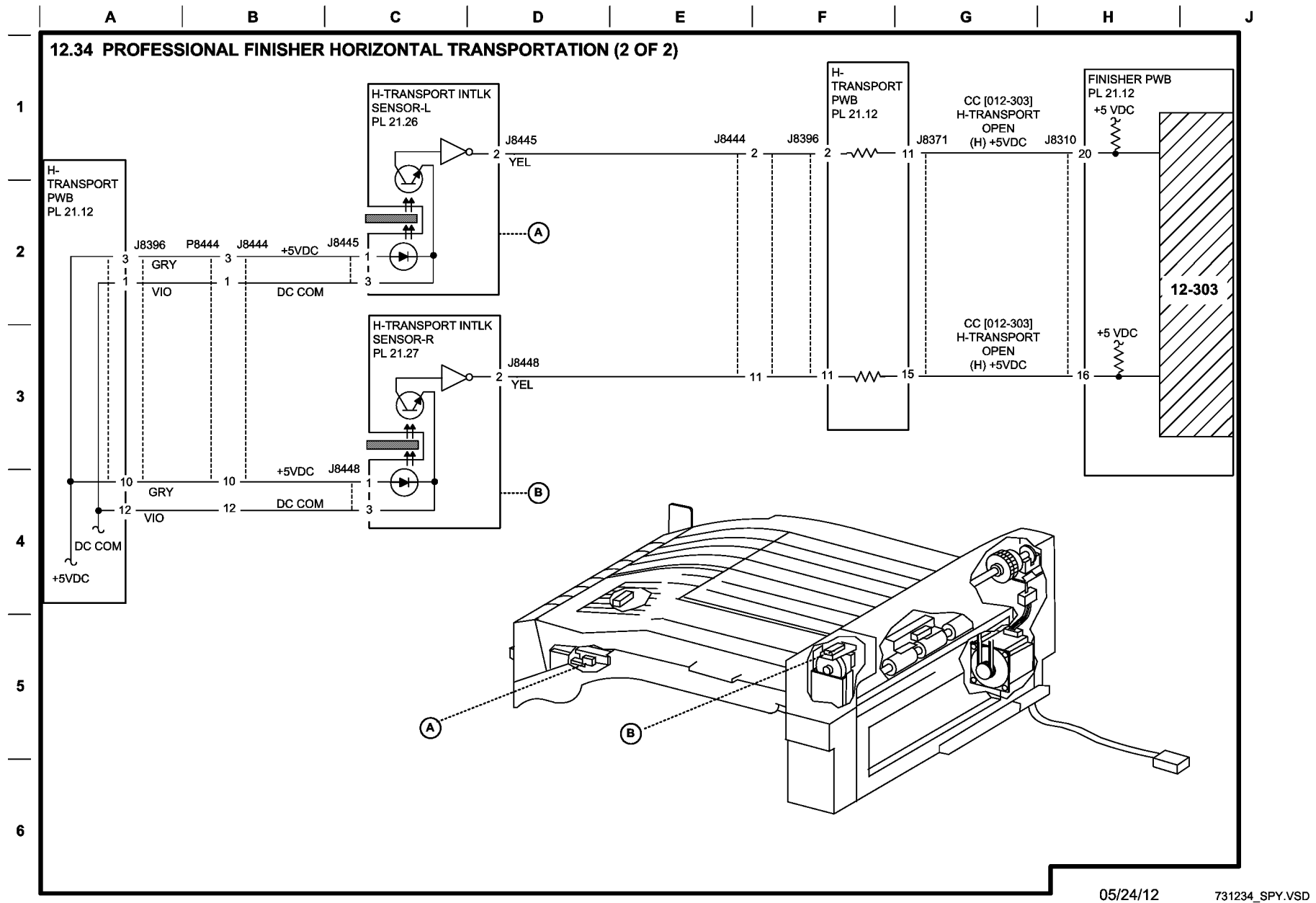


Figure 34 BSD 12.34 Horizontal Transportation (2 of 2)



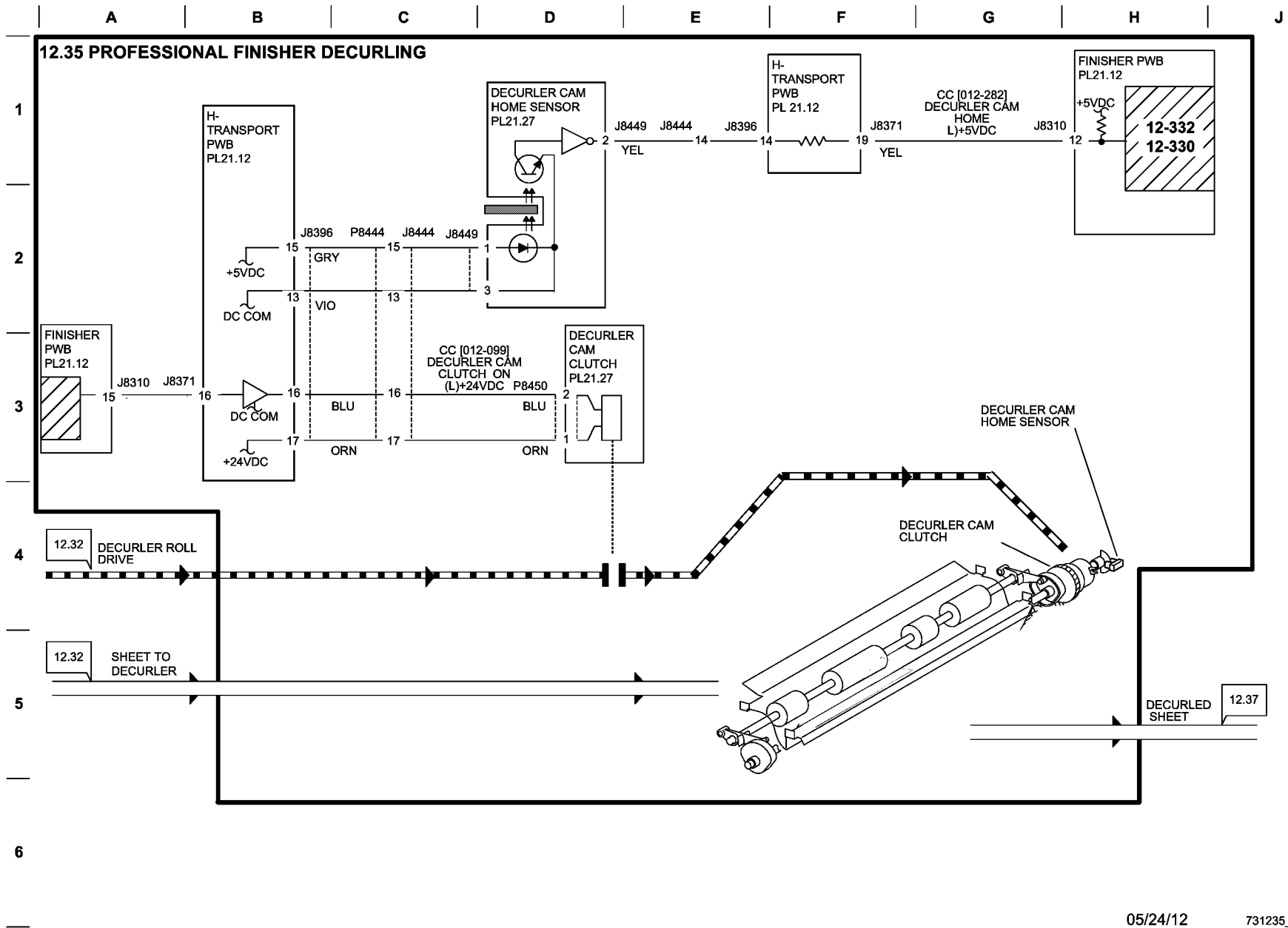
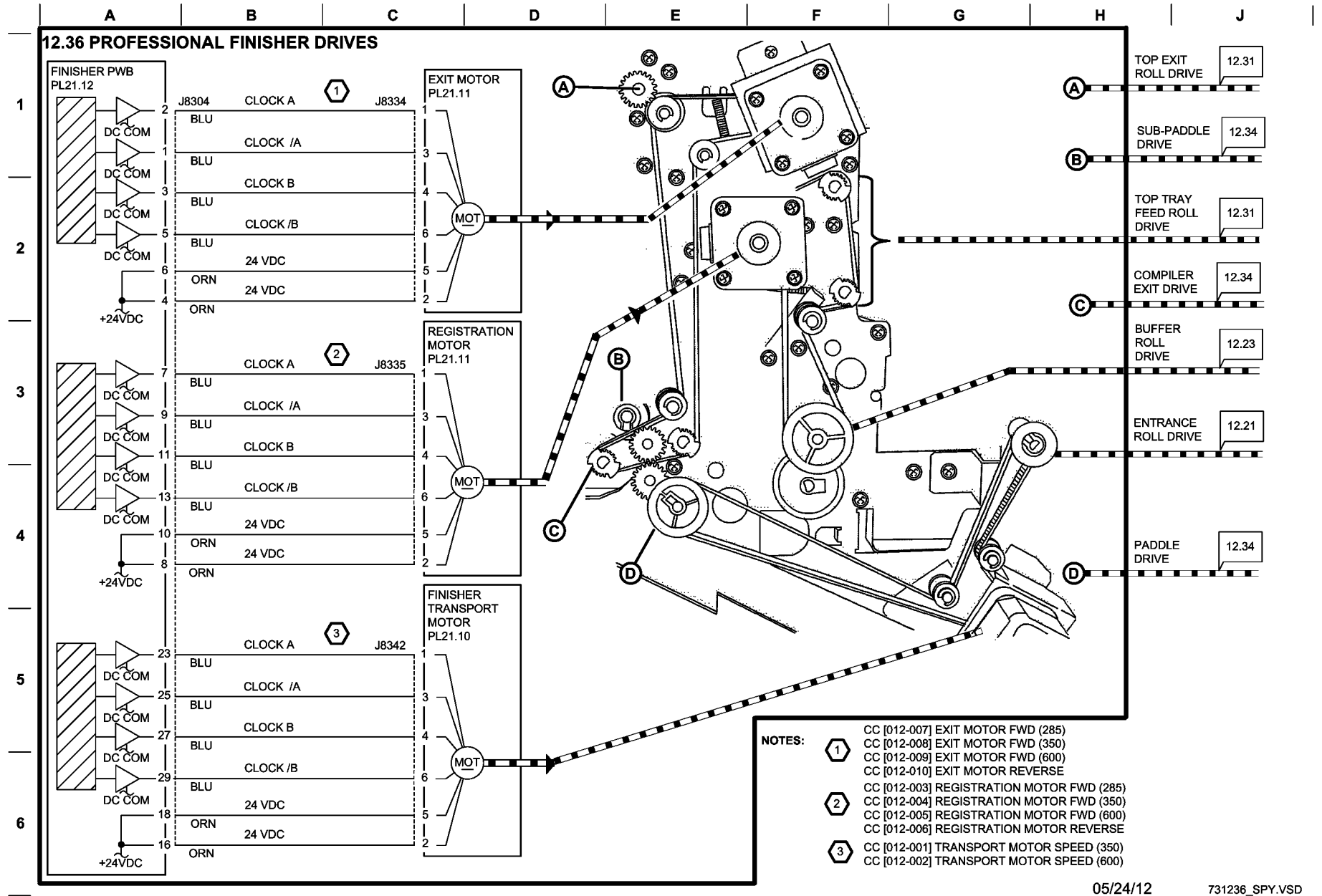


Figure 35 BSD 12.35 Professional Finisher Decurling

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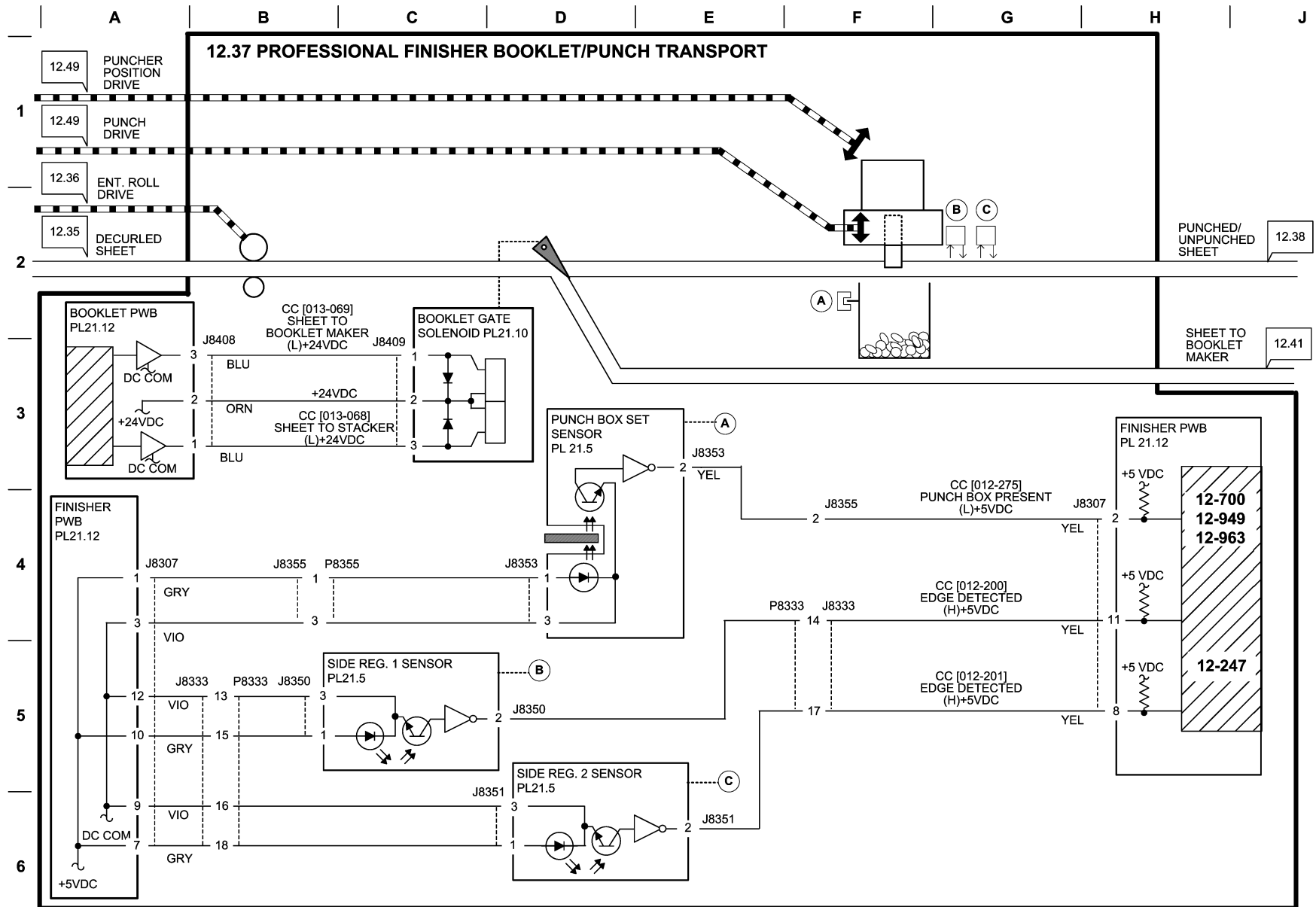
731235\_SPY.



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Figure 36 BSD 12.36 Professional Finisher Drives

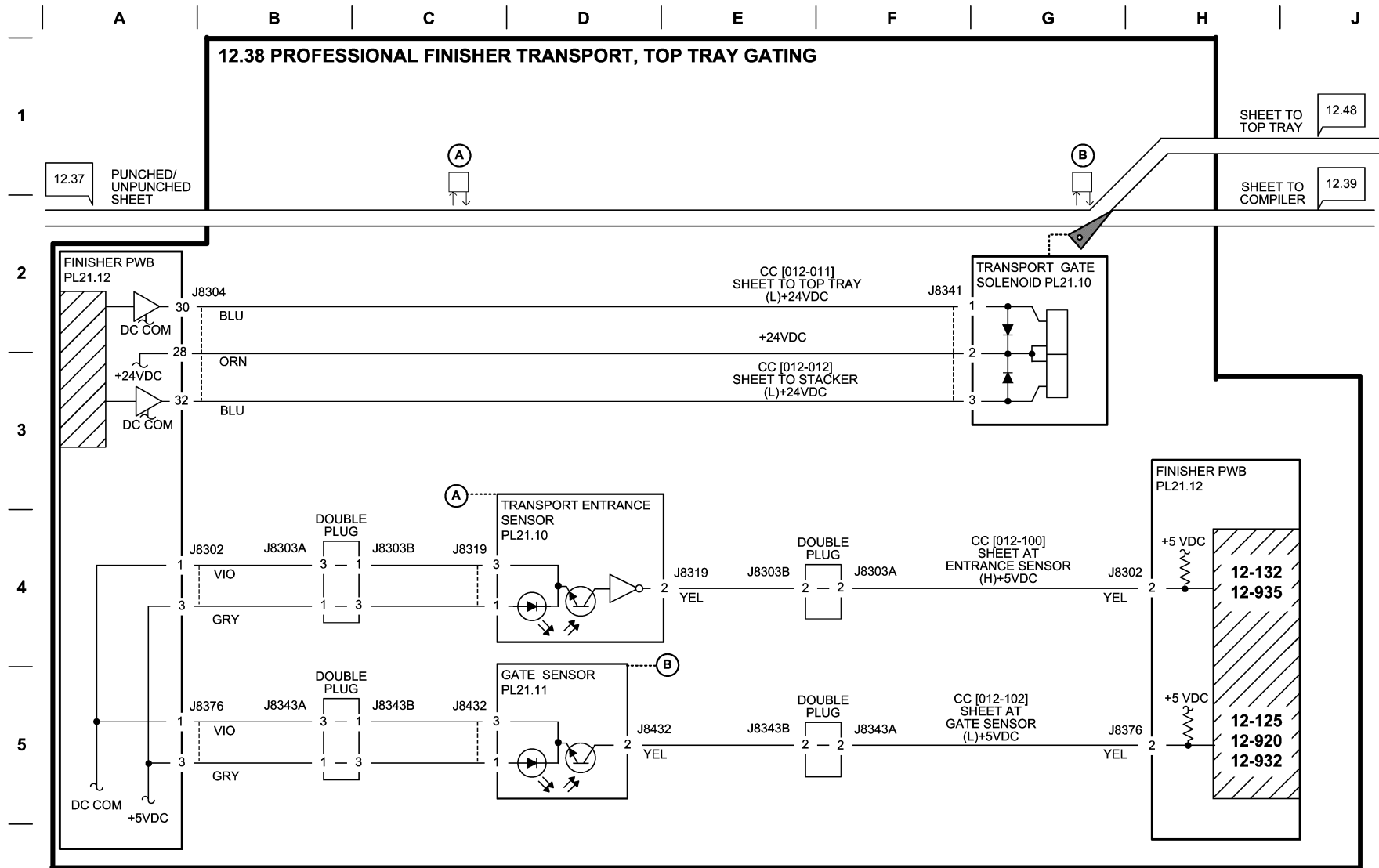
BSD 12.37 Professional Finisher Booklet/Punch Transport



10/10/12 731237\_SPY:

Figure 37 BSD 12.37 Professional Finisher Booklet/Punch Transport

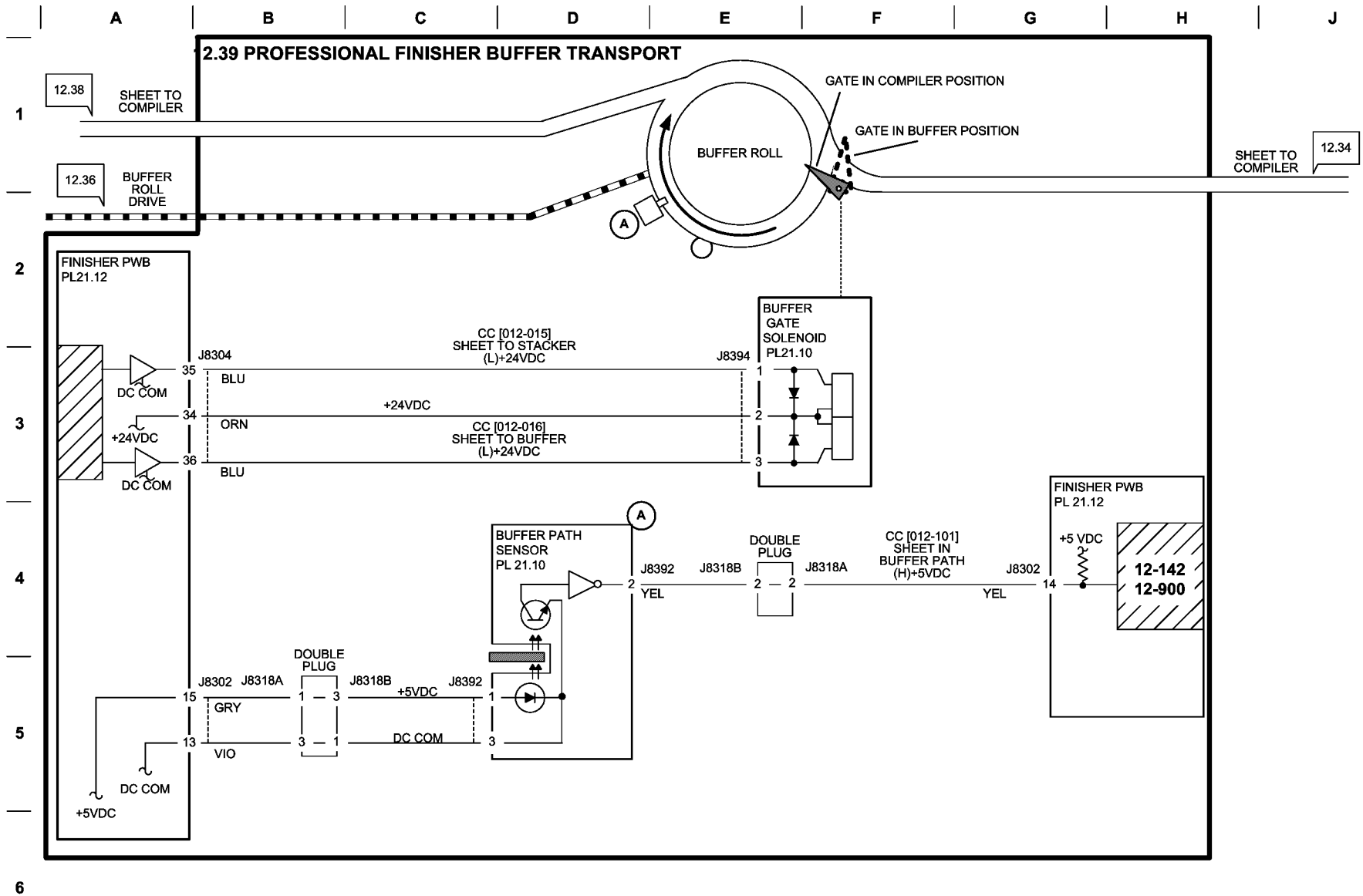
BSD 12.38 Professional Finisher Transport Top Tray Gating



10/10/12 731238\_SPY:

Figure 38 BSD 12.38 Professional Finisher Transport Top Tray Gating

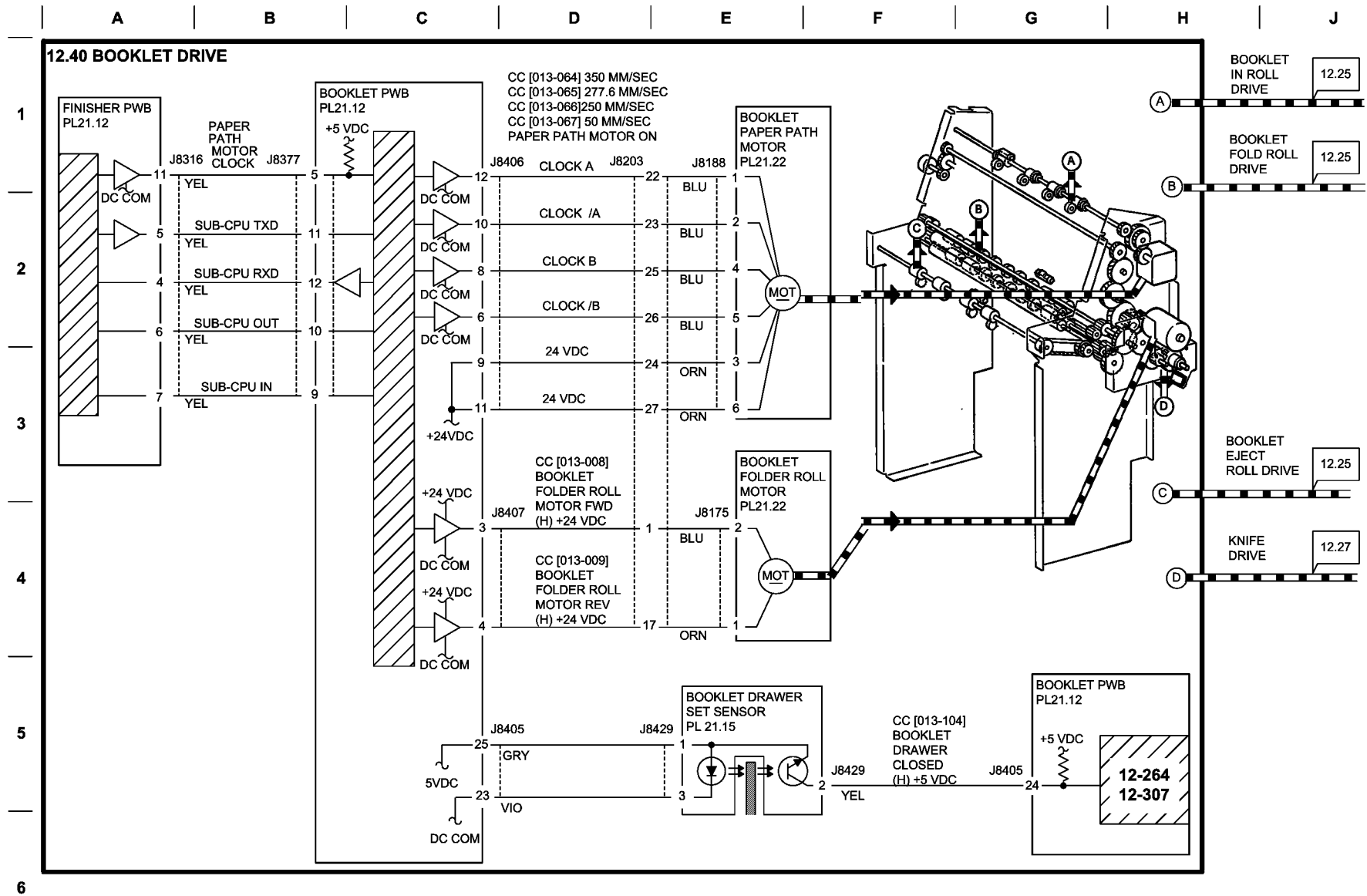
BSD 12.39 Professional Finisher Buffer Transport



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731239\_SPY:

Figure 39 BSD 12.39 Professional Finisher Buffer Transport



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731241\_SPY:

Figure 40 BSD 12.40 Booklet Drive

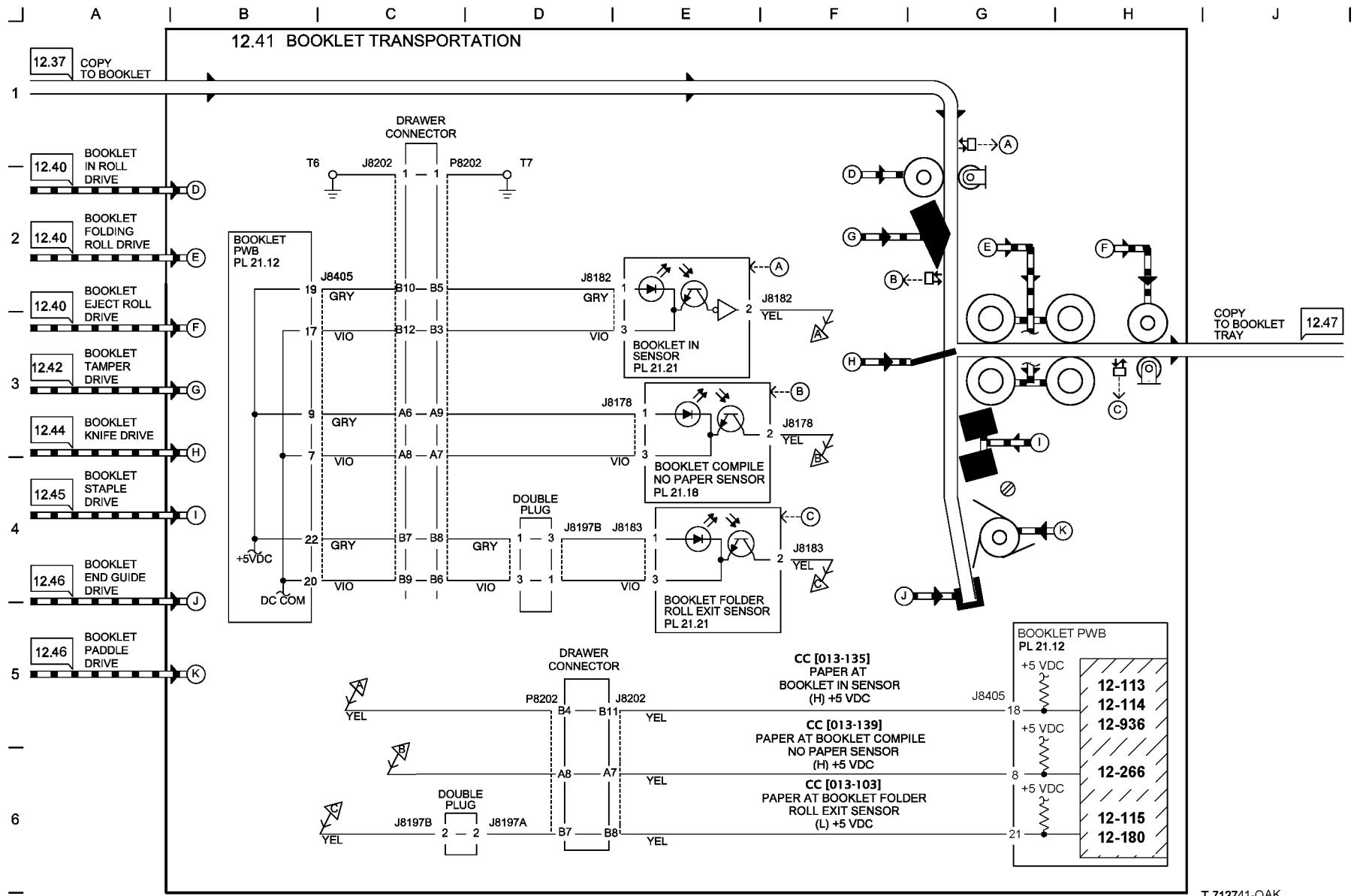
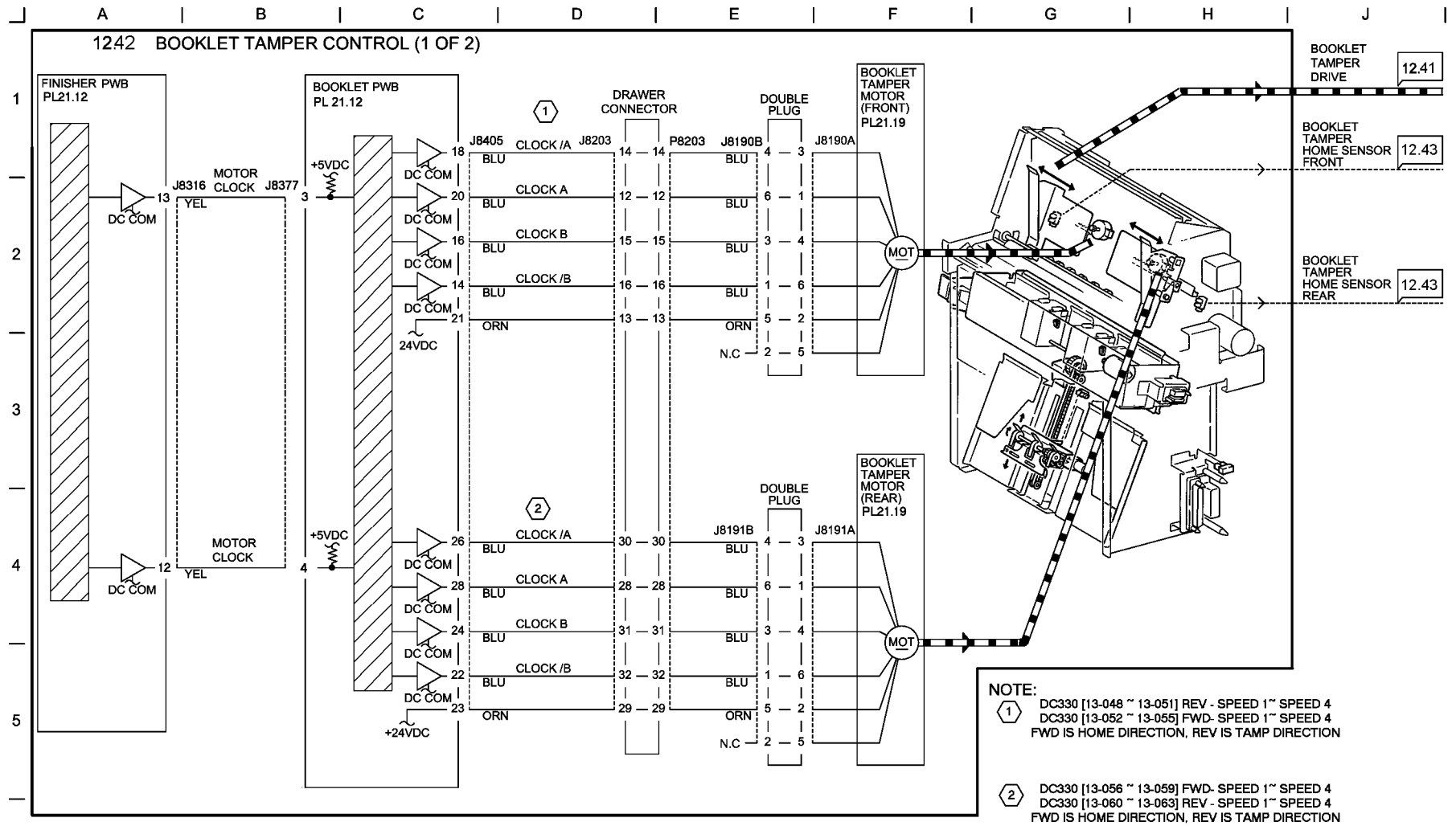


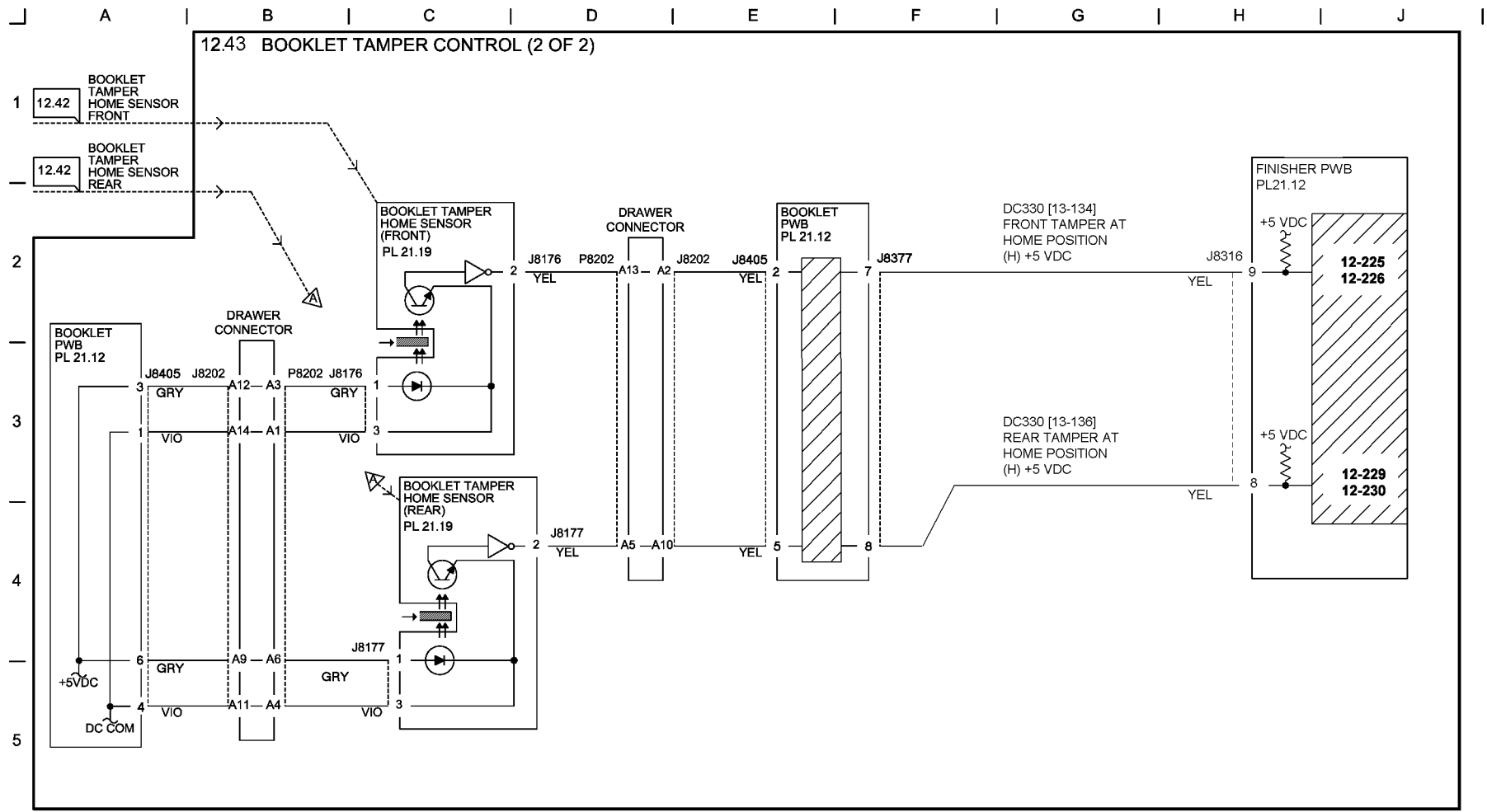
Figure 41 BSD 12.41 Booklet Transportation



T712742-OAK

Figure 42 BSD 12.42 Booklet Tamper Control (1 of 2)





T712743-OAK

Figure 43 BSD 12.43 Booklet Tamper Control (2 of 2)

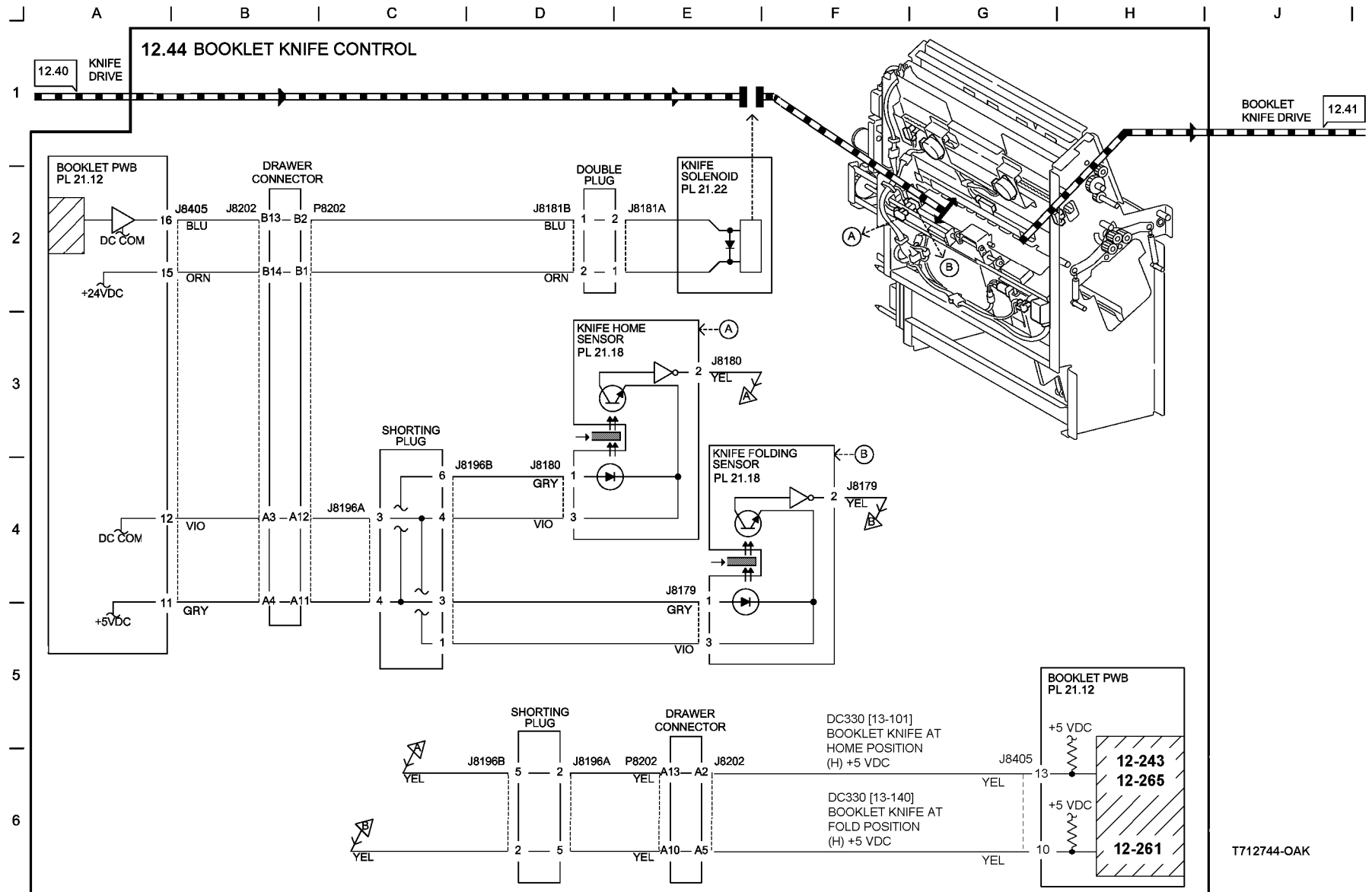


Figure 44 BSD 12.44 booklet Knife Control

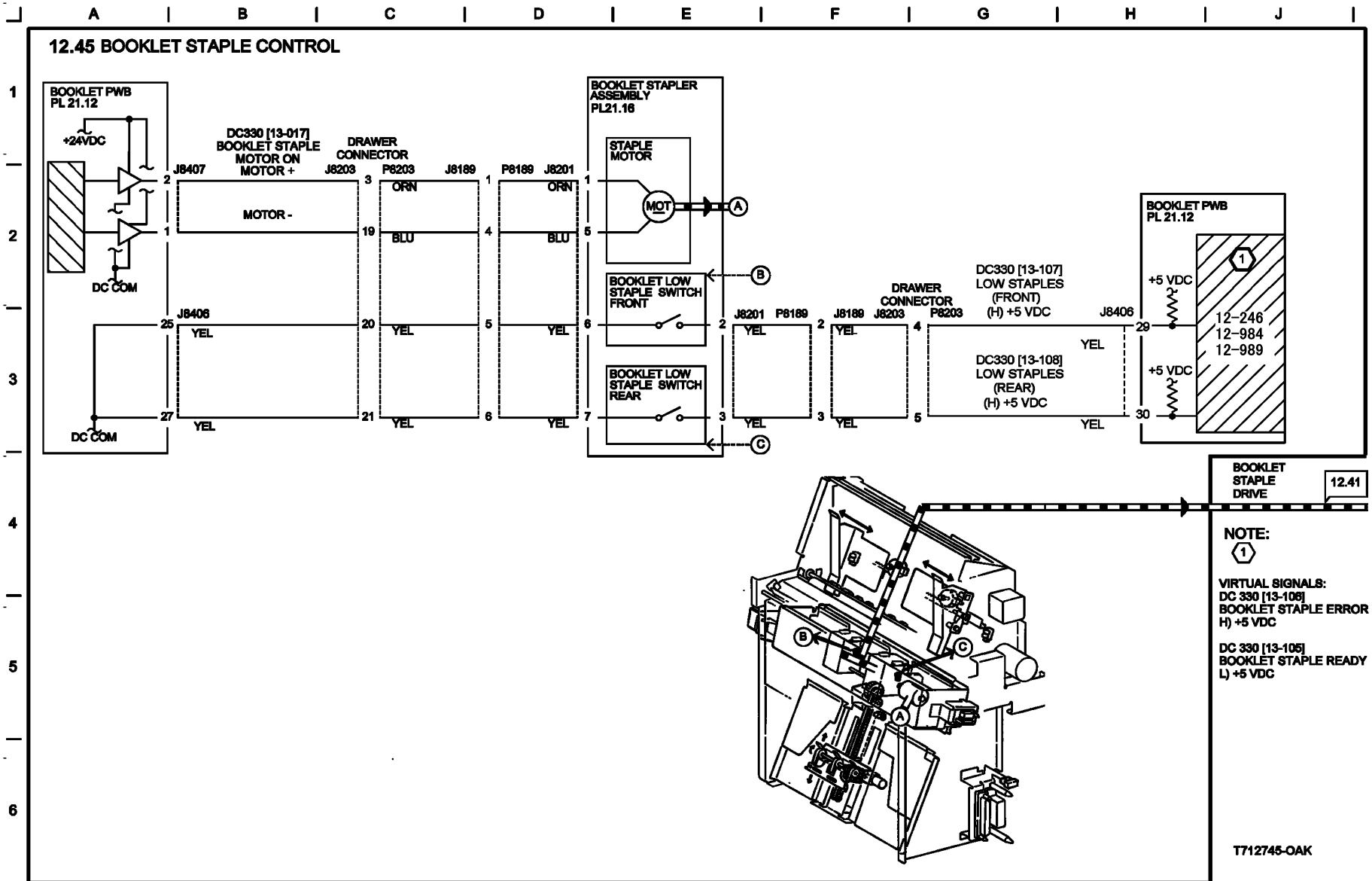


Figure 45 BSD 12.45 Booklet Staple Control

BSD 12.46 Booklet End Guide Control

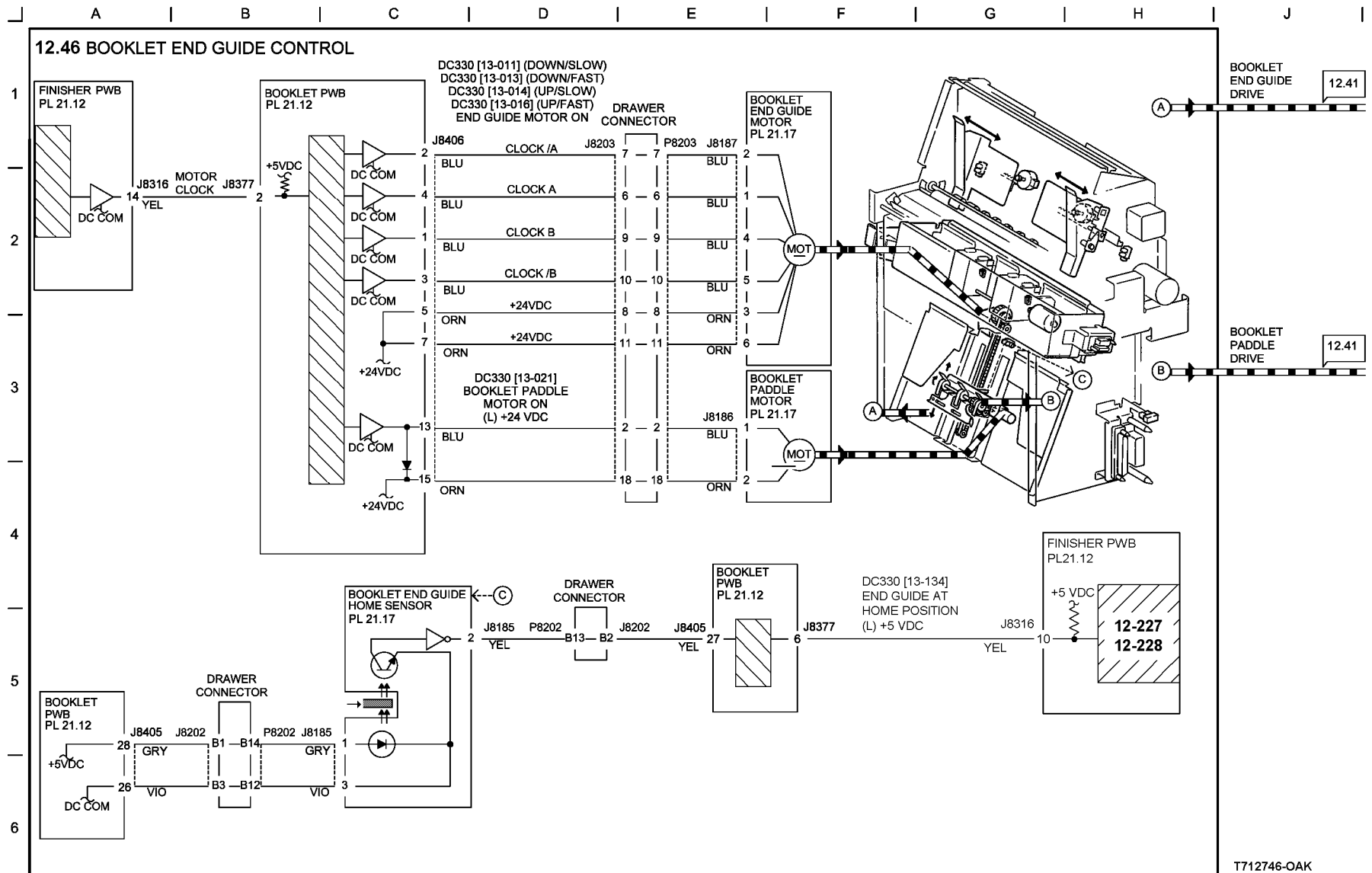


Figure 46 BSD 12.46 Booklet End Guide Control

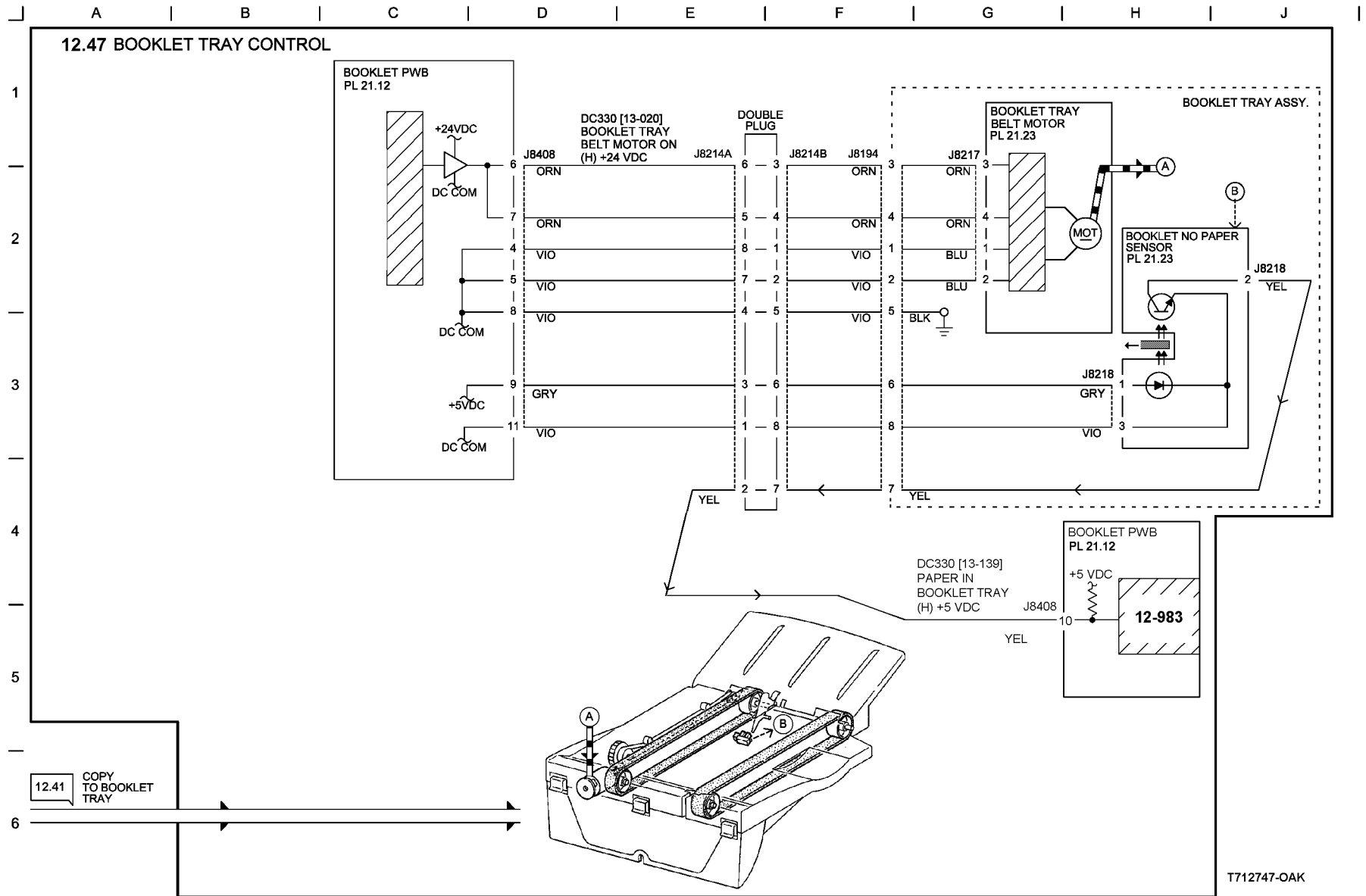
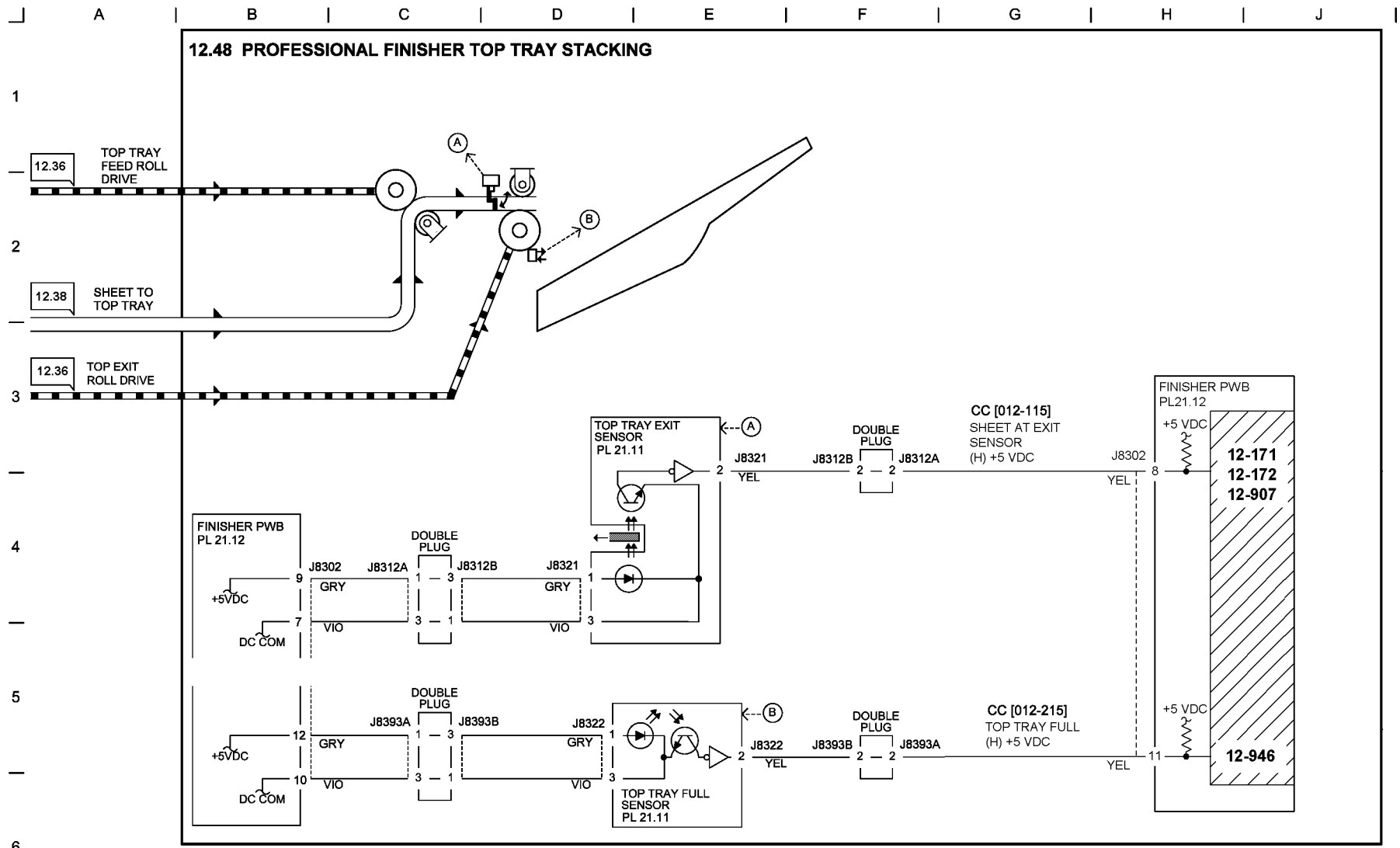
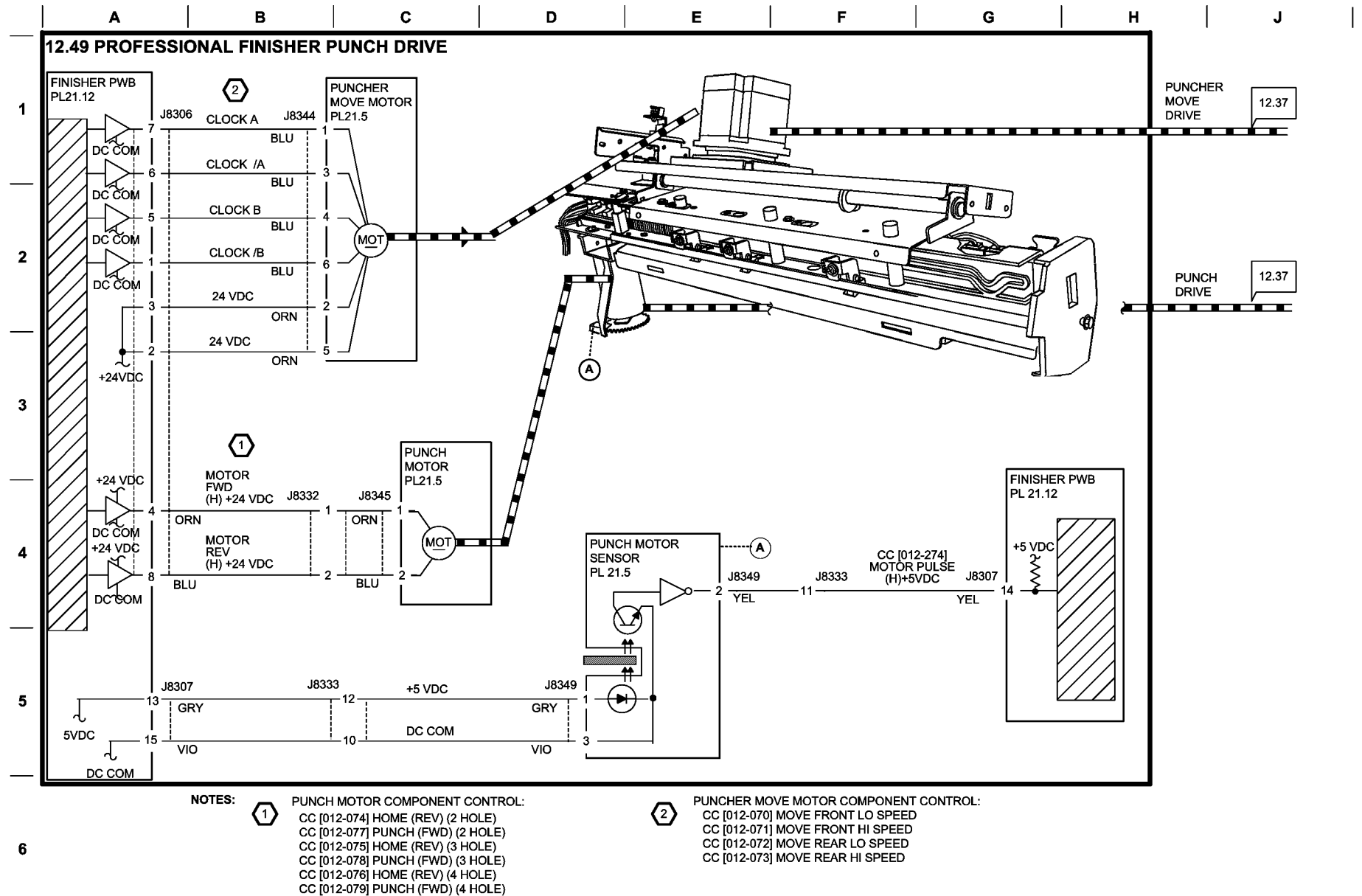


Figure 47 BSD 12.47 Booklet Tray Control



T712748-OAK

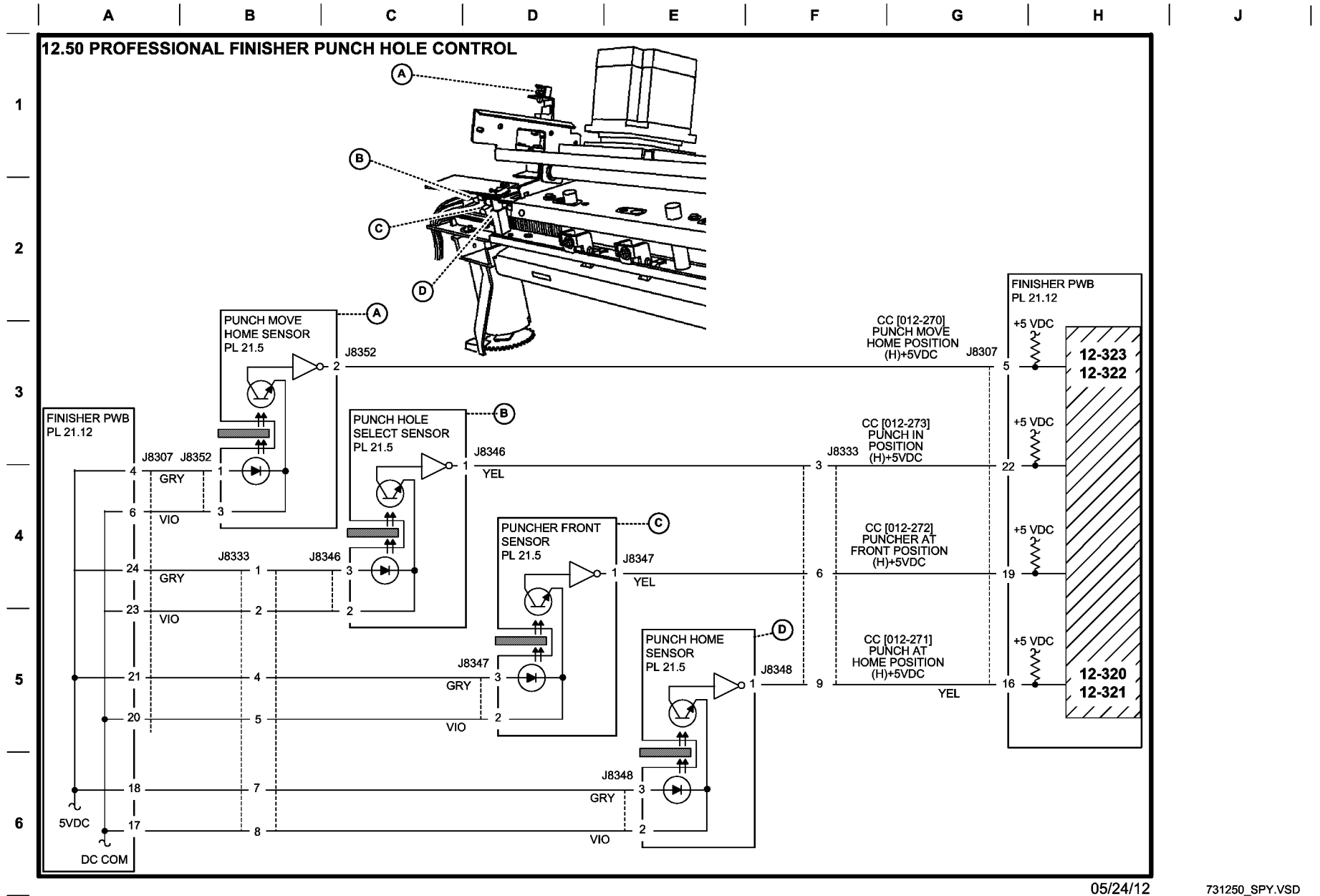
Figure 48 BSD 12.48 Professional Finisher Top Tray Stacking



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731249\_SPY.VSD

Figure 49 BSD 12.49 Professional Finisher Punch Drive

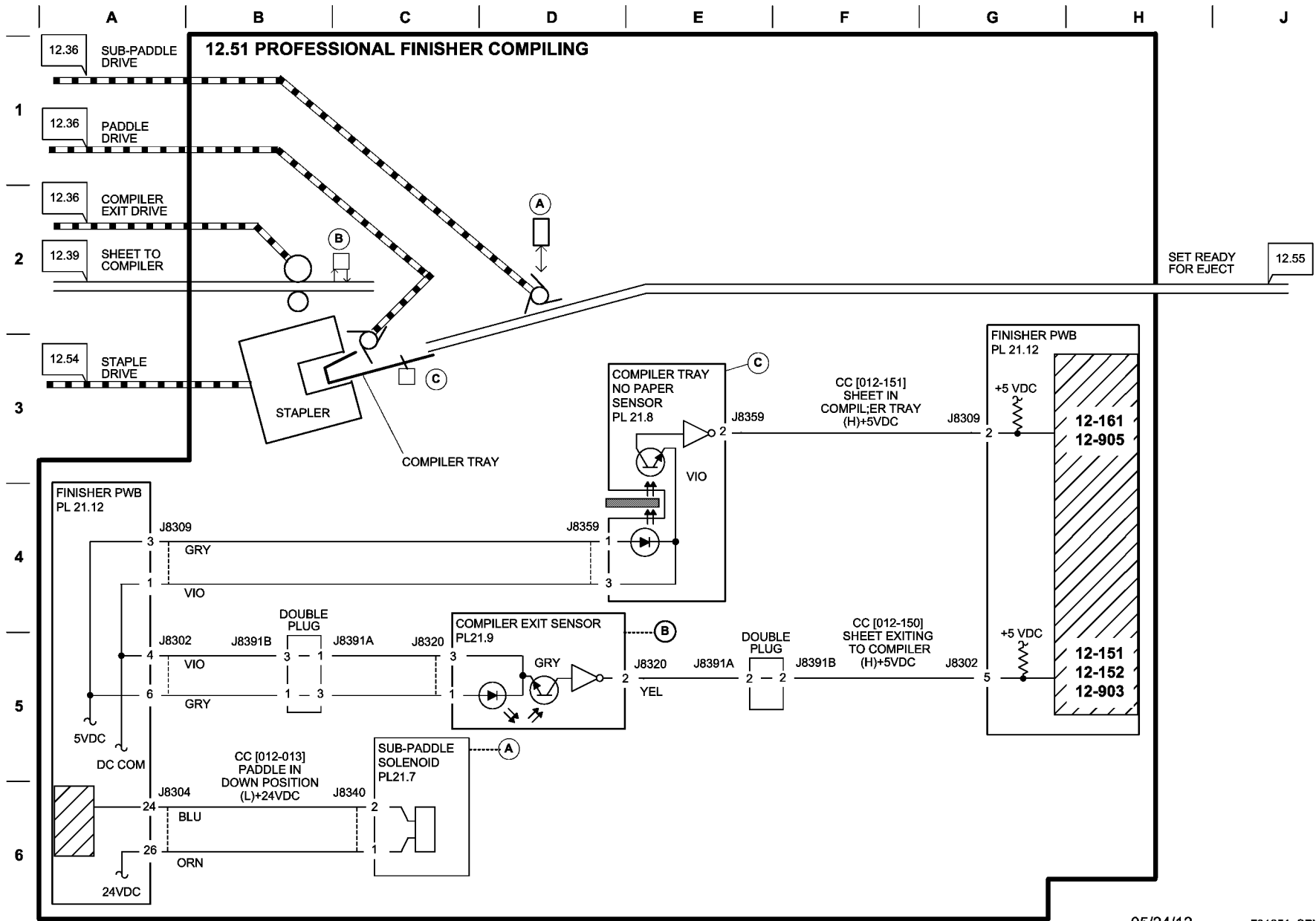


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731250\_SPY.VSD

Figure 50 BSD 12.50 Professional Finisher Punch Hole Control

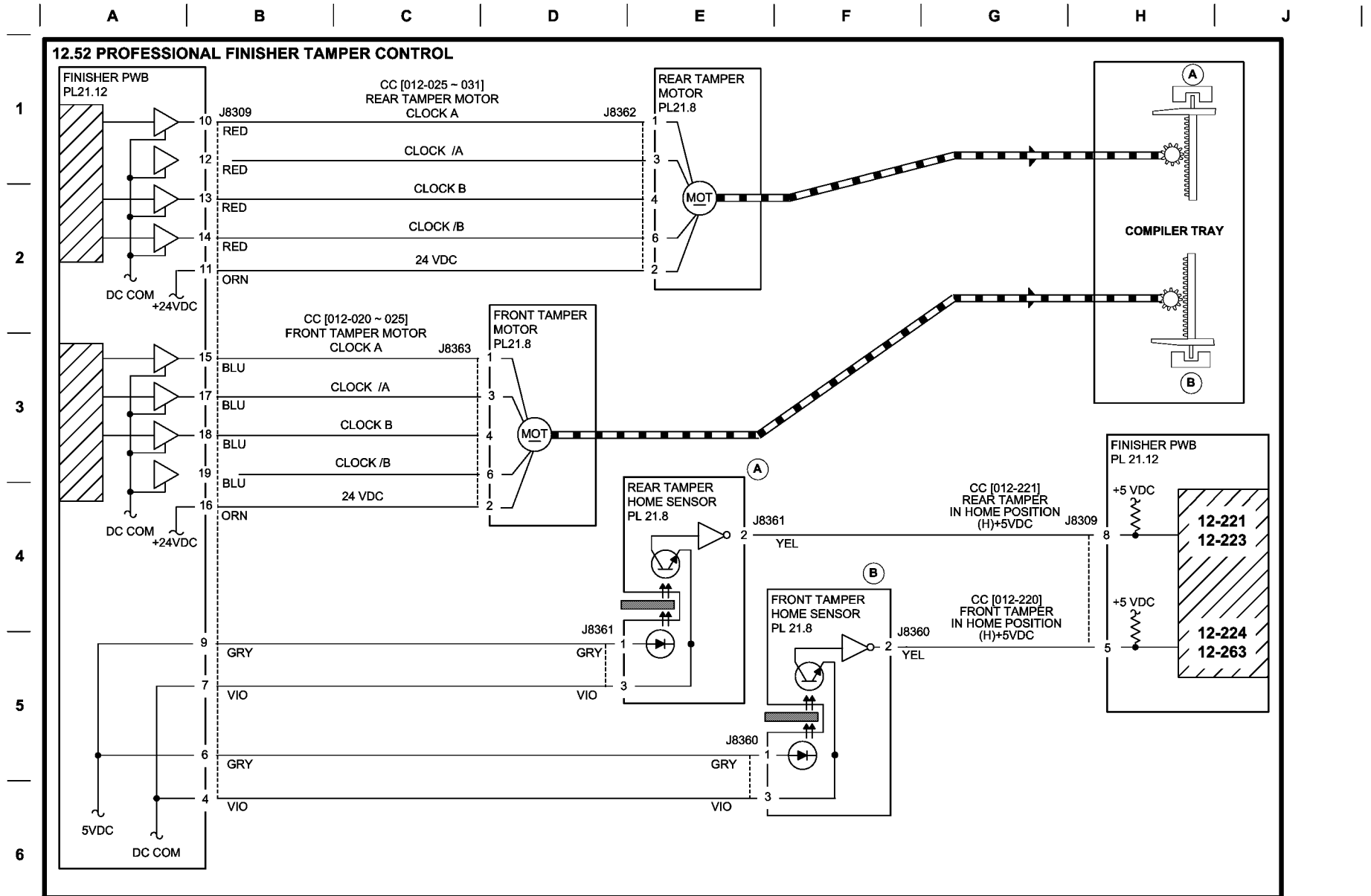




05/24/12

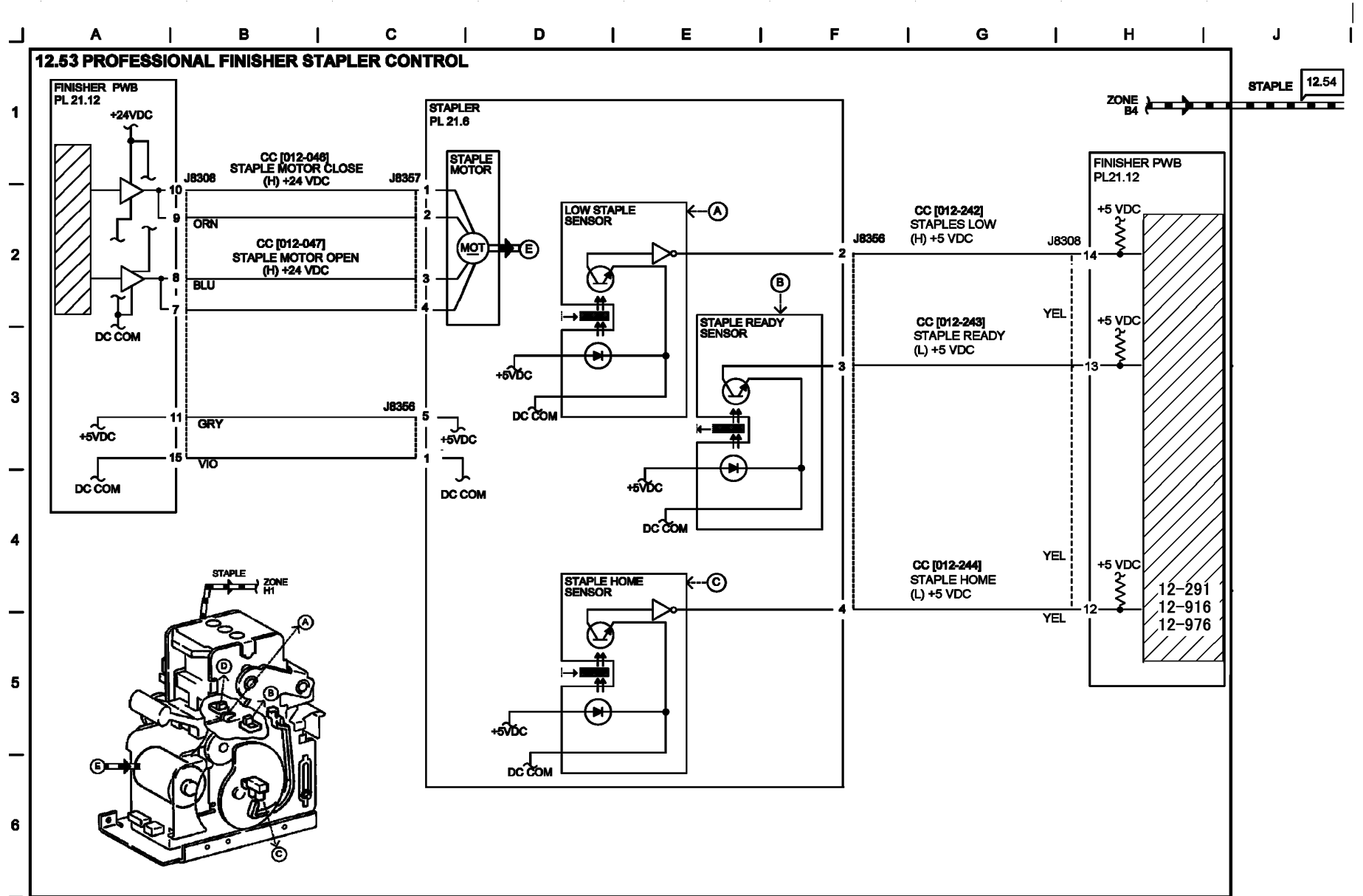
731251\_SPY:

Figure 51 BSD 12.51 Professional Finisher Compiling



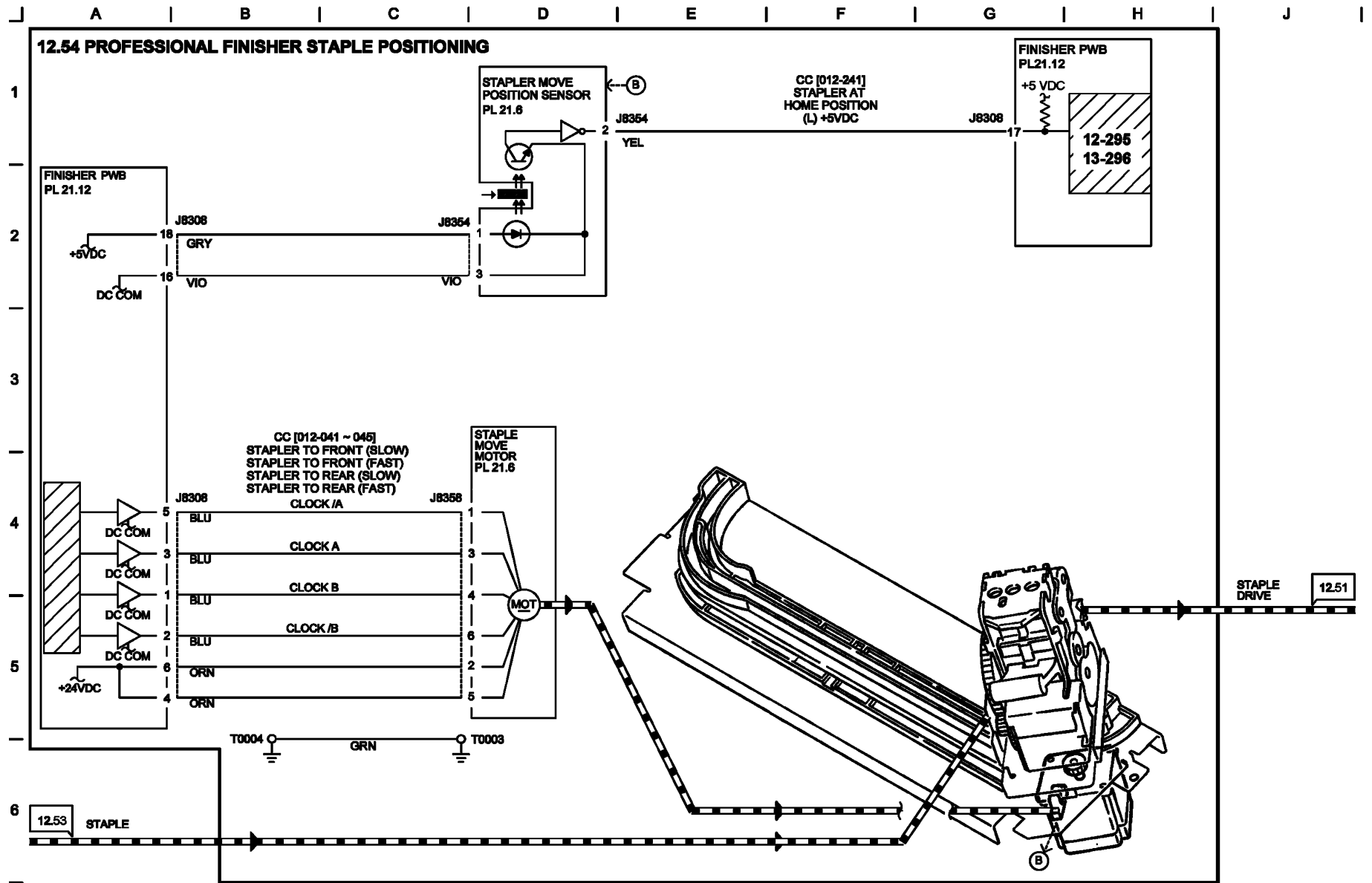
05/24/12 731252\_SPY.VSD

Figure 52 BSD 12.52 Professional Finisher Tamper Control



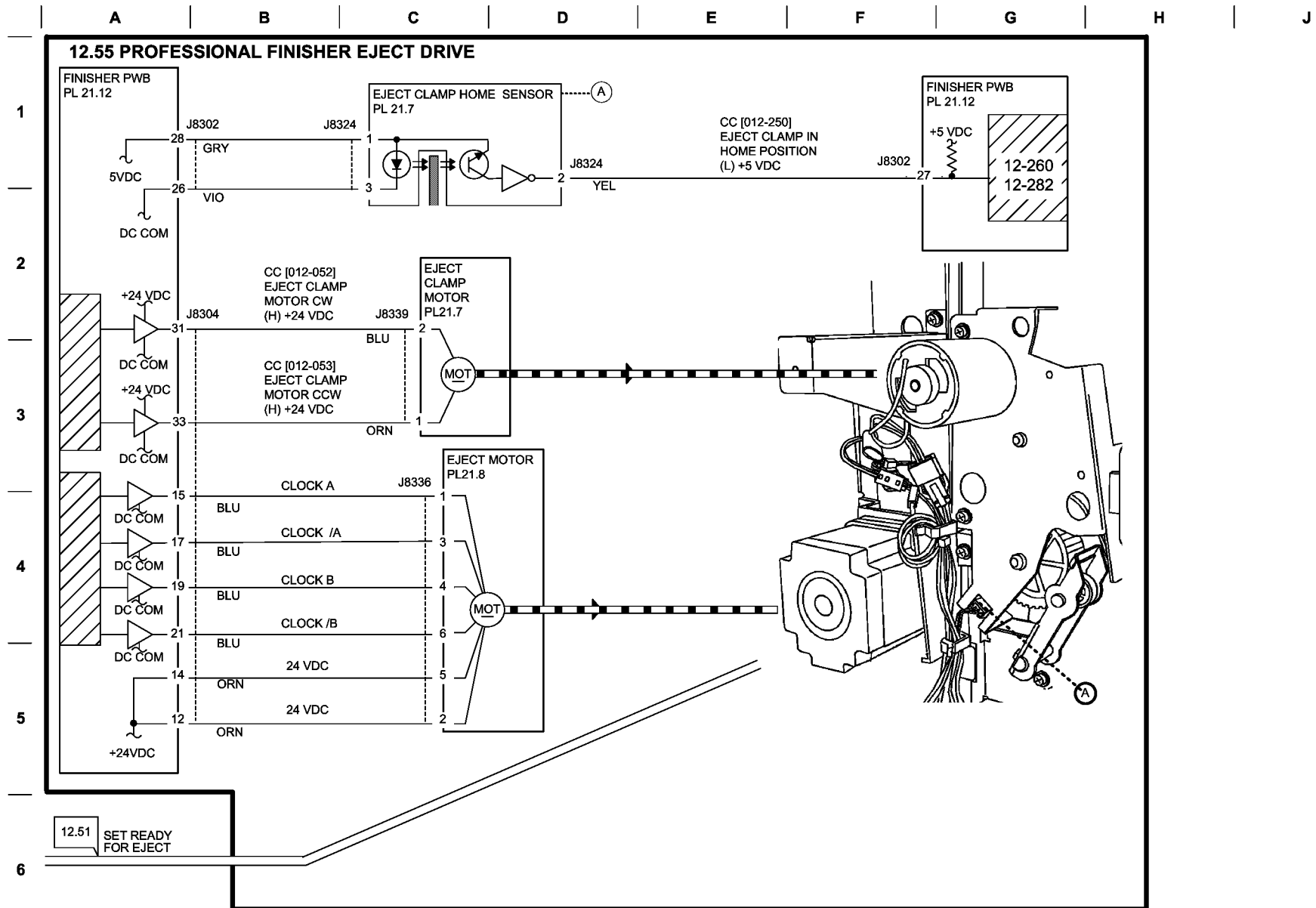
T712753-OAK

Figure 53 BSD 12.53 Professional Finisher Stapler Control



T712754-OAK

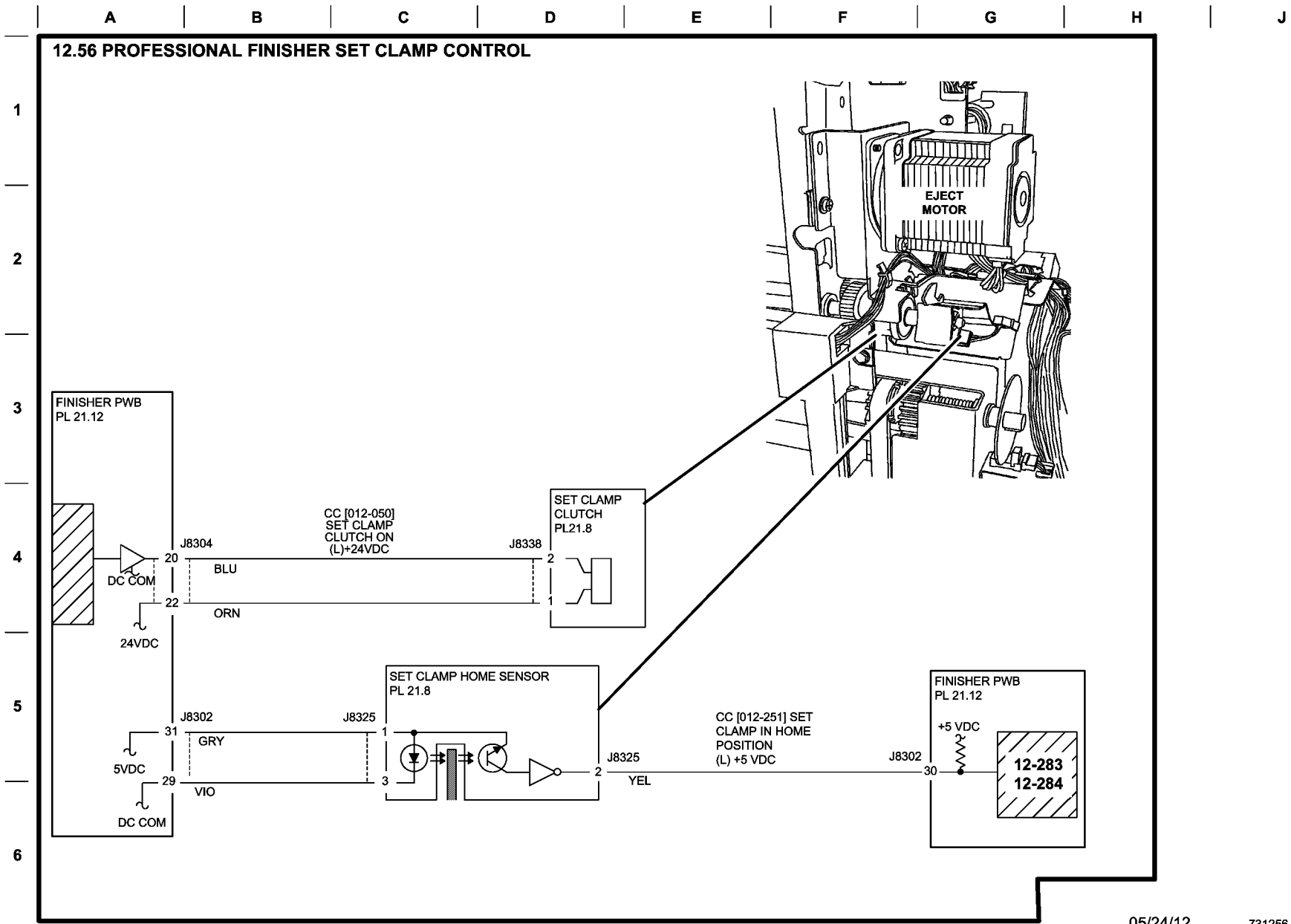
Figure 54 BSD 12.54 Professional Finisher Staple Positioning



05/24/12

731255\_SPY:

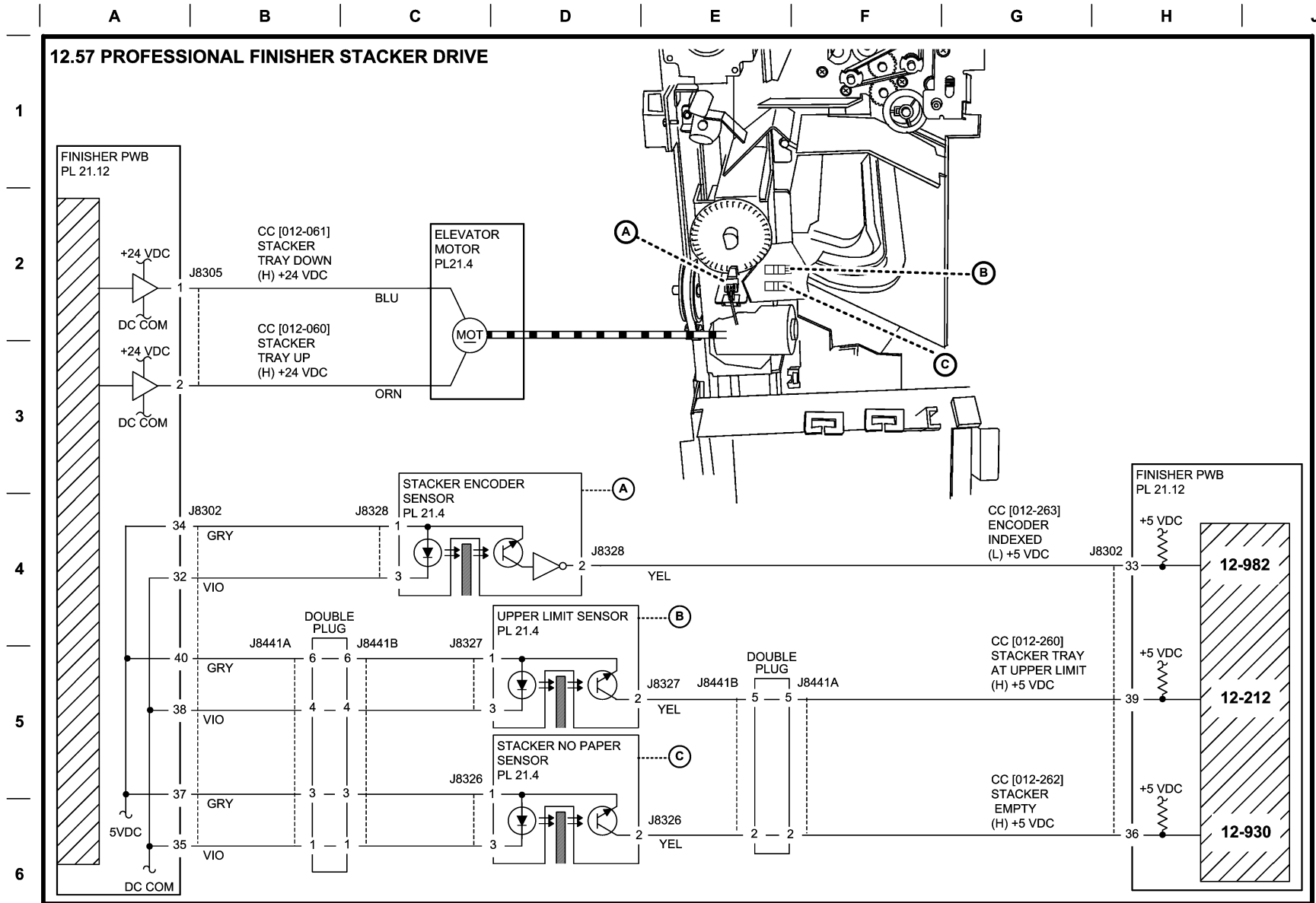
Figure 55 BSD 12.55 Professional Finisher Eject Drive



05/24/12

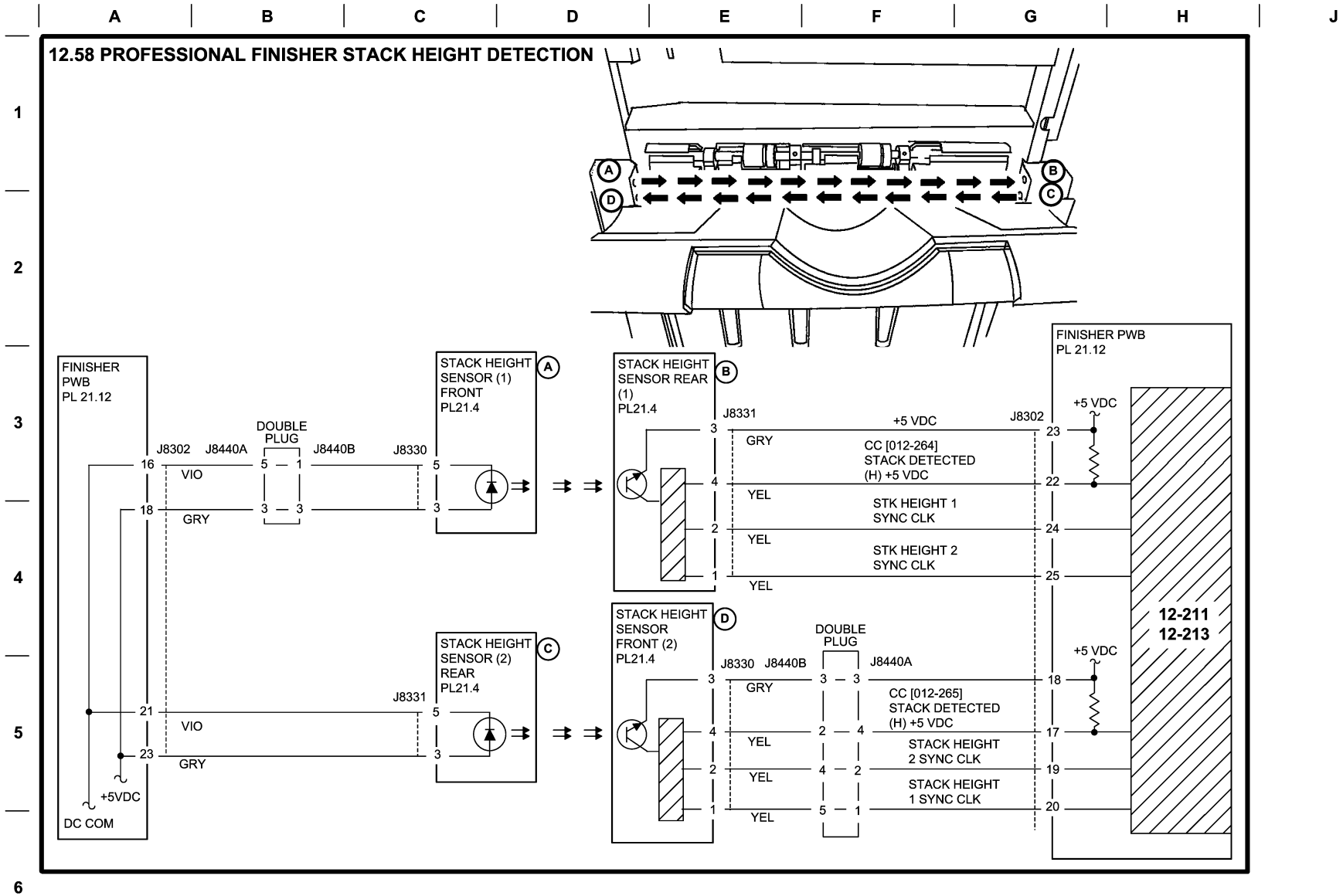
731256\_SPY:

Figure 56 BSD 12.56 Professional Finisher Set Clamp Control



10/10/12 731257\_SPY.

Figure 57 BSD 12.57 Professional Finisher Stacker Drive



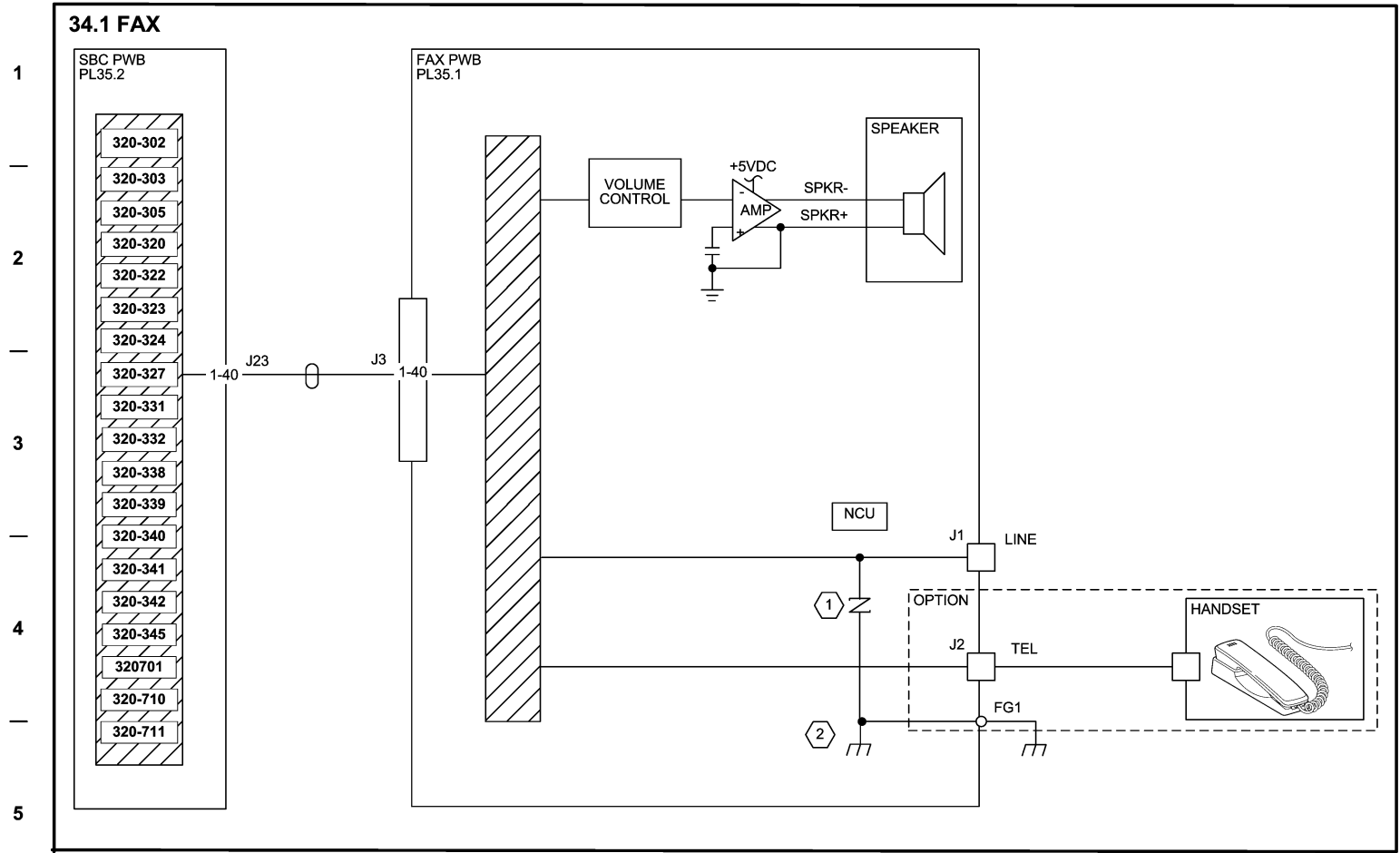
10/10/12

731258\_SPY:

Figure 58 BSD 12.58 Professional Finisher Stack Height Detection



A | B | C | D | E | F | G | H | J |



- FAULT CODES:**
- 320-302** Fax Card Hardware or Software Error
  - 320-303** Fax Card Hardware or Software Error
  - 320-305** Fax Card Hardware or Software Error
  - 320-320** 5 Instances of Unrecoverable FAX Fault
  - 320-322** NV Device not fitted to Basic Fax Card
  - 320-323** Fax System Memory is Low
  - 320-324** Not Enough Memory to Use Fax Service
  - 320-327** Registers Cannot Be Accessed on Extended Card
  - 320-331** No Comms via PSTN1 Port
  - 320-332** No Comms via PSTN2 Port
  - 320-338** Fax Comm Error at Power Up or Reboot
  - 320-339** Internal Fax Card Fault
  - 320-340** Fax Port 2 Modem Failure
  - 320-341** Misc Basic Card Problems
  - 320-342** Error Accessing File on an NV Device
  - 320-345** Fax Port 1 Modem Failure
  - 320-701** Fax Phonebook Download fault
  - 320-710** Fax Immediate Image Overwrite (IIO) Error
  - 320-711** Fax on Demand Image Overwrite (ODIO) Error

NOTE: (1) SURGE ABSORBER (2) THIS GND IS ON A REAR CORNER OF PWB.

Figure 1 BSD 34.1 FAX