

Xerox® WorkCentre 5022/5024 Service Manual

WC 5022/5024

Service Documentation

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702P02828

Version 1.0

06/2014

Published by Xerox. 800 Phillips Road, Webster, NY 14580

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WARNING

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 J 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.

Chapter 0 Introduction

0 Introduction

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0.1 Getting to know this Service Manual

This manual is used as the standard service manual for WorkCentre 5022/5024.

- Publication Comment Sheet
Enter any comments and/or corrections regarding this service manual into the Publication Comment Sheet, and send it to the following department.
Solution Service & Operational Management CS Dept.

0.2 How to use the Service Manual

This manual describes the standard procedures for the servicing this product. Refer to Chapter 1 Service Call Procedure for efficient and effective servicing during maintenance calls.

For more information on the options, refer to the options manual.

0.2.1 Contents of Manual

This manual is divided into 10 chapters as described below.

- Chapter 1 Service Call Procedure
This chapter describes the general work and servicing procedures for the maintenance of this product.
- Chapter 2 Troubleshooting
This chapter describes the troubleshooting procedures other than image quality troubleshooting for this product.
- Chapter 3 Image Quality Troubleshooting
This chapter describes the image quality troubleshooting procedures for this product.
- Chapter 4 Disassembly/Assembly and Adjustment
This chapter describes the disassembly, assembly, adjustment and replacement procedures for components of this product.
- Chapter 5 Parts List
This chapter contains the spare parts information for this product.
- Chapter 6 General
This chapter contains the following information.
 - 6.1 Specifications
 - 6.2 Tools/Service Consumables/Consumables
 - 6.3 Service Data
 - 6.5 Service Mode
 - 6.8 Fax-related Information
- Chapter 7 Wiring Data
This chapter contains the information about the Wiring Connector List/Locations, the Wiring Data, and the BSD for this machine.
- Chapter 8 Accessories (not yet issued)
- Chapter 9 Installation/Removal
This chapter contains the installation and removal procedures for this product and the options that are specific to it.
- Chapter 10 Mechanism & Functions Overview (not yet issued)

0.2.2 Information on Updating

This manual will be sent to each Service Center as specified below. Revisions must be incorporated correctly to keep the manual up-to-date.

Updating Procedure:

- When the manual is updated, the issue number 'Ver. 1' will be changed to Ver. 1.1, Ver. 1.2, and so on.

0.3 Description for Terminology And Symbols

The terms and symbols used throughout this manual are explained here.

- The terms and symbols used at the beginning of a text are defined as follows:

WARNING

Indicates an imminently hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

WARNING

Indicates a potentially hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

CAUTION

Indicates a potentially hazardous situation, such as injury or property damage if operators do not handle the machine correctly by disregarding the statement.

Instruction: Used to alert you to a procedure which, if not strictly observed, could result in damage to the machine or equipment.

NOTE: Used when work procedures and rules are emphasized.

Used when other explanations are given.

Used to describe the purposes of Adjustment and Troubleshooting.

REP: Indicates the disassembly/assembly procedure for reference.

ADJ: Indicates the adjustment procedure for reference.

PL: Indicates the parts list for reference.

Terminology

Table 1 Terminology

Terminology	Description
Assy	Means Assembly.
TEC Value	Abbreviation of Typical Electricity Consumption, which means the standard power consumption. Read as 'tec'.

Installation of any part other than the ones designated by Xerox shall be strictly prohibited because it cannot be guaranteed in quality and safety.

Important Information Stored Component (ISC)

This component stores all the important customer information that is input after the installation. When performing replacement, follow the procedures in 'Chapter 4 Disassembly/Assembly and Adjustment' to replace/discard. Make absolutely sure that no customer information gets leaked outside.

Chapter 1 Service Call Procedures

1 Service Call Procedures

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1.1 Before Starting the Servicing

1.1.1 Safety

To prevent any accident that may occur during a maintenance service, any warning or any caution regarding the servicing must be strictly observed. Do not perform any hazardous operation.

1. Power Supply

To prevent electrical shocks, burns, or injury, etc., be sure to switch OFF the machine and disconnect the plug before starting the maintenance service. If the machine has to be switched ON, such as when measuring the voltage, take extra care not to get an electrical shock.

2. Drive Area

Never inspect, clear or lubricate the drive area such as chain belts, chain wheel or gears during the machine operation.

3. Heavy Parts

Position your hip lower when removing or installing heavy parts.

4. Safety Device

See that safety devices for preventing mechanical accidents, such as fuses, circuit breakers, interlock switches, etc., and those for protecting customers from injury, such as panels and covers, function properly. Modifications that hinder the function of any safety devices are strictly prohibited.

5. Installing and Removing Parts

The edge of parts and covers may be sharp, take care not to touch them. Be careful not to touch those parts, and wipe off any oil that may have adhered to your fingers or hands before servicing. When removing parts, cables, and etc. do not pull them out by force but remove them slowly.

6. CAUTION:

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

7. Specified Tools

Follow the instruction when a tool is specified.

8. Cleaning the Toner and Developer

As the toner can be explosive, sweep or brush the spilled toner into a container for collecting the sweepings.

Clean away the remaining toner with a damp cloth or use a standard vacuum cleaner that is toner-tolerant. Never use the customer's vacuum cleaner.

Do the same when cleaning the Developer because it also contains some toner.

9. Organic Solvents

When using an organic solvent such as the Drum Cleaner or Machine Cleaner, pay attention to the following:

- Ensure good ventilation in the room to prevent too much inhalation of solvent fumes.
- Do not use heated solvent.
- Keep it away from fire.
- Wash your hands thoroughly after use.

10. Modifications to the Machine

Before altering the machine, submit the irregular use license application.

11. Harmful Laser

The customer or service personnel would not be exposed to any harmful laser during the usual copying or scanning of documents. However, if a customer finds that the lamp that is used for exposing documents is too bright when performing platen copy or scan, it is possible to block the light from the platen glass by covering the portion of the platen document area that is usually not used for copying or scanning documents.

1.1.2 Things to Take Note When Handling Customer Information

1. Handling of customer's electronic information - samples of copy/print/received fax (paper data), log files (Activity Report), and etc.

Before you bring back any samples for the purpose of investigation/analysis, always obtain permission from the customer. Make sure to assure them that the data will not be used for any other purpose. When requesting for a retrieval application from the customer, either use the [Data Security Regulations: Annex 15 - Confidential Information/Personal Information Request Form (IS-019)] or use a letterhead that has been specified by the customer after obtaining their agreement.

2. Handling of a PWB, etc. that contains customer information.

Data such as Fax Address Numbers and URLs that are registered in the customer's machine are all important customer information. These types of information are stored in the PWB, etc. within the machine. Take extra care when handling them.

- a. In case of replacements, transfer the data to the new PWB and make sure that all data in the old parts is thoroughly erased before disposing it. Make sure that no important customer information gets leaked. (For details, refer to the preface in Chapters 4 and 5)
 - b. If a component was replaced and it was not found to be the cause of the malfunction, return it to the machine it came from. (For components that were temporarily installed/removed for troubleshooting, etc. clear the data using the CE Mode, etc.)
3. Security related NVM values that were changed during maintenance.
If any security related NVM values, such as polling, were set for test purposes, make sure you return them to their original values after the test. (E.g.: for the details on polling that is common to all machine types, refer to FTO 2-202)
 4. When connecting our company machine to the customer's network during maintenance, make sure that you have gone through the person-in-charge to obtain permission from the customer's systems administrator (or person-in-charge) before proceeding.
 5. Follow the safety guidelines established within the OpCo and ensure that customer data do not get leaked out when servicing.

1.1.3 Other Precautions

Pay attention to the following when performing maintenance service to avoid wrong or redundant servicing:

1. Reference Materials
Before performing maintenance servicing, read all relevant technical materials such as SB, FTI, or FTO to make a systematic approach.
2. Disassembling
Make sure to check the assembled condition before removing parts or disassembling the machine.
3. Installation/Adjustment
After the installation or adjustment is complete, check that no parts or tools are left inside or on the assemblies before using the machine.
4. Handling of replaced parts/consumables
Make sure that the replaced parts or consumables as well as their packaging materials are collected back to the Service Center.
For the separation and processing methods for the collected items, refer to the Common Technical Information No. 2-027 for all machines.
 - Drum Cleaner

WARNING

Never discard the Drum Cleaner into a fire. Always keep it away from open flames to prevent it from catching and causing a fire. Always dispose of the Drum Cleaner after it is completely used up. For recyclable parts, fill the necessary items in the [U-TAG] and perform collection.

5. General Precautions
 - Take care not to disturb the customer's daily work.
 - Place a drop cloth or paper on the floor of the service area to keep the site clean.
 - Throw any trash generated during the maintenance service into a trash bag and bring them back to the Service Center.
 - Record clearly the service details and the consumables and parts replaced at visit in the Machine Service Log.

1.2.2 Service Call Procedure

1.2.2.1 Initial Actions

1. Ask the operator(s) about the machine condition.
2. Record the billing meter readings.
3. Inspect any error copies, then check the machine.
4. Check the Service Log.

1.2.2.2 When UM is requested, perform the following:

1. Check the problem status by performing the Level 1 Troubleshooting in [Chapter 2 Troubleshooting].
2. Perform the applicable Level 2 Troubleshooting FIP in [Chapter 2 Troubleshooting].
3. If there are no applicable items, troubleshoot by referring to [Chapter 7 BSD].
4. Check the copy quality.
Make several sheets of copies using the Test Chart (499T 00247), then check the quality of the copies for problems.
5. Output the following [Error History Report] and check the [System Fail History] and [Paper Jam History] in order to understand the machine status.
 - a. Press the <Machine Status> button.
 - b. Select [Print Report], then press the <OK> button.
 - c. Select the [Error History Report], then press the <OK> button.

NOTE: When replacing parts that will incur cost to the customer, obtain the customer's agreement before performing the replacement.

6. Repair all the secondary problems.
7. Perform TRIM Service.

1.2.2.3 When SM is requested, perform the following:

1. Check the copy quality.
Make several sheets of copies using the Test Chart (499T 00247), then check the quality of the copies for problems.
2. Output the [Error History Report] and check the [System Fail History] and [Paper Jam History] in order to understand the machine status.
 - For how to output the [Error History Report], refer to [1.2.2.2 When UM is requested, perform the following:].

NOTE: When replacing parts that will incur cost to the customer, obtain the customer's agreement before performing the replacement.

3. Perform TRIM Service.

1.2.2.4 Final Actions

1. Check overall operation/features.
2. Check the machine exterior and consumables.
3. Train the operator as required.
4. Complete the Service Log and Service Report.
5. Keep the copy samples with the Service Log.

1.3 Detailed Contents of the Service Call

1.3.1 Initial Actions

1. Ask the operator(s) about the machine condition.
 - How often and where do paper jams have been occurring recently
 - How is the copy quality
2. Record the copy meter readings.
3. Inspect any error copies, then check the machine.
4. Check the print samples from previous service calls and the Service Log.

1.3.2 Checking Reproducibility of Problem

1. Check the problem status by performing the Level 1 Troubleshooting in [Chapter 2 Troubleshooting].
2. Perform the applicable Level 2 Troubleshooting FIP in [Chapter 2 Troubleshooting].
3. If there are no applicable items, troubleshoot by referring to [Chapter 7 BSD].

1.3.3 Checking Copy Quality

1. Make several sheets of copies using the Test Chart (499T 00247), then check the quality of the copies.

1.3.4 TRIM Servicing

Perform TRIM servicing during a service call to maintain the machine performance.

1. Follow the TRIM Check List to perform the required TRIM items.
2. Check for parts that require periodical cleaning/replacement (consumables, parts) by referring to the TRIM Chec List, the Periodic Replacement Parts/Consumables List, and the Maintenance Report, and clean them if necessary. After a replacement, make sure that you enter the CE Mode and use [HFSI Read / Clear] to clear the applicable counter(s).

1.4 TRIM Check List

C: Perform checking. Clean, replace, or feed if necessary.

O: Always perform cleaning and checking.

*: Always perform replacement service at the specified interval.

Table 1

No.	Servicing Items	Every time	Service Details
1.1	Pre-servicing Check (Check the machine operation sound)	C	<ul style="list-style-type: none"> Activate the machine and check that abnormal noise is not heard.
1.2	Pre-servicing Check (Copy and print the Test Chart)	C	<ul style="list-style-type: none"> Make several sheets of copies using the Test Chart (499T 00247), then check the quality of the copies.
2	Clean the interior of the machine (Clean the paper transport system)	C	<ul style="list-style-type: none"> Clean any paper dust and toner residue in the paper path and on the jam sensor. Especially, clean the operation section of the operator carefully.
3	Cleaning the IIT	C	<ul style="list-style-type: none"> Clean the Platen Glass surface and the Platen Cushion with the optical cleaning cloth.
4	Clean the DADF	C	<ul style="list-style-type: none"> Clean the Feed Roll, Nudger Roll, and Retard Roll with a cloth that has been wrung dry. Clean the DADF Platen Glass with the optical cleaning cloth.
5	Safety Check	O	<ul style="list-style-type: none"> Make sure that the power plug is plugged in properly. Make sure that the power cords are not cracked and no wires are exposed. Make sure that no extension cord with insufficient length or power cord outside the specification, such as an off-the-shelf power strip, is being used. Make sure that a single socket does not have multiple power plugs plugged into it.
6.1	Post-servicing check (Copy Quality Check)	C	<ul style="list-style-type: none"> Make several sheets of copies using the Test Chart (499T 00247), then check if the quality satisfies the specification.
6.2	Post-servicing check (Check the machine operation)	C	<ul style="list-style-type: none"> Check the paper feed and abnormal noise.
6.3	Post-servicing check (Check the meter)	C	<ul style="list-style-type: none"> Create the Service Log and Service Report.

1.5 Periodic Replacement Parts/Consumables List

When servicing, check the number of copies and number of fed sheets for the consumables and parts that require periodical cleaning/replacement. Clean or replace them if necessary. The history can be checked by printing the Maintenance Report or by checking the appropriate counter in [HFSI Read / Clear] in CE Mode (6.4.2.9 HFSI Read / Clear).

For the items that cannot be checked in CE Mode, clean or replace them according to the replacement intervals (standard PV).

CAUTION

Do not place the imaging materials, such as the Toner and the Drum, in the car for a long time.

NOTE: *Clean the Platen Glass with a Platen Wax Cleaner 499D 00194 (194D) every 10K Feeds.*

Table 1

No	Parts/Consumables Name/ PL No.	HFSI [Chain- Link]	Replacement Interval	Check the counter
1	Tray 1 Feed No. Tray 1 Feed Roll / Retard Pad (PL 9.2)	950-803	50,000PV	1 Feed = 1 Count Up. Replace both at the same time.
2	Tray 2 Feed No. Tray 2 Feed Roll/Nudger Roll/Retard Roll (PL 10.3)	950-804	300,000PV	1 Feed = 1 Count Up. Replace all 3 at the same time.
3	Tray 3 Feed No. Tray 3 Feed Roll/Nudger Roll/Retard Roll (PL 11.3)	950-808	300,000PV	1 Feed = 1 Count Up. Replace all 3 at the same time.
4	Tray 4 Feed No. Tray 4 Feed Roll/Nudger Roll/Retard Roll (PL 11.3)	950-809	300,000PV	1 Feed = 1 Count Up. Replace all 3 at the same time.
5	MSI Feed Count MSI Feed Roll/MSI Nudger Roll/MSI Retard Pad (PL 13.3)	950-802	50,000PV	1 Feed = 1 Count Up. Replace all 3 at the same time.
6	Fusing Unit (PL 7.1)	950-801	175,000PV	1 pass through the Fusing Unit Exit Sensor = 1 Count Up.
7	BTR Unit (PL 6.1)	950-800	100,000PV	1 pass through the Fusing Unit Exit Sensor = 1 Count Up.

Table 1

No	Parts/Consumables Name/ PL No.	HFSI [Chain- Link]	Replacement Interval	Check the counter
8	Document Feed No. DADF Feed Roll/Nudger Roll (PL 56.5) DADF Retard Pad (PL 56.13)	955-806	200,000PV	Replace the Feed Roll, Nudger Roll, and Retard Pad at the same time. <i>NOTE: Clean the Platen Glass with a Platen Wax Cleaner 499D 00914 (194D) every 10K Feeds.</i>
9	Toner Cartridge (PL 8.1)	-	9,000PV	
10	Low Capacity Toner Car- tridge (PL 8.1)	-	5,000PV	
13	Drum Cartridge *1 (PL 8.1)	950-807	343k cycle 66,000PV (22PPM) 78,000PV (24PPM)	
15	Cartridge Guide (PL 8.2)	-	300,000PV	

*1 As the PV may differ greatly from the target value depending on the usage conditions, it should only be regarded as a reference value.

Chapter 2 Troubleshooting

2 Troubleshooting

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2.1.1 How to Troubleshoot

Level 1 Troubleshooting:

- Level 1 Troubleshooting (Level 1 FIP) is the first step to diagnose a problem. Level 1 FIP asks you whether any Fault Code and other problematic symptoms exist, guiding you to Level 2 Troubleshooting or BSD to resolve the problem.

Level 2 Troubleshooting:

- Level 2 Troubleshooting is a diagnostic procedure of separating a problem by Fault Code, document/paper jam and other problematic symptoms. Performing a FIP or an appropriate procedure in the Check Procedure enables you to discover causes of a problem in a short period of time.

How to proceed with troubleshooting and Cautions:

- First, perform Level 1 FIP to categorize a problem. Second, proceed to an appropriate Level 2 FIP or BSD to resolve the problem. To find the causes of the problem using FIP or Check Procedure etc., thoroughly read the instructions and follow the procedure properly. Sometimes, when two or more causes exist, they cannot be identified at once, so the same FIP should be repeated. In this case, pay attention to a different judgment made in the process of the same FIP.
- For source voltage related problems, such as being unable to power up the machine, refer to 'Other Failure FIP' to proceed with the troubleshooting.
- The Check Procedure for general electrical parts (Motor, Solenoid/Clutch, Switch, Sensor etc.) may not be shown in each troubleshooting for some cases. In such cases, proceed to troubleshoot by referring to 'Generic FIP'.

2.1.3 Glossary

The following terminology are used throughout the troubleshooting section. The meaning of these terminology must be fully understood when performing problem analysis.

Common terms:

- **Fault Code**
This 6-digit code appears when the machine has found problems.
- **Actuate (Deactuate)**
To mechanically push (release) the Actuator of the switch or the connected mechanical linkage.
- **Block**
To place a sheet of document or paper on the photo sensor surface for detection.
- **Check**
To visually check for operation failure of parts such as relay or mechanical linkage, and the failure status of the parts.
- **Enter the CE Mode**
To enter the CE Mode by following the procedure described in 'How to Enter/Exit the CE Mode' of Chapter 6.
- **Check the connection for short circuit**
Turn the power OFF. Measure the resistance between the wire and the frame using the ohm range of a tester.
- **Check the connection for open circuit**
Turn the power OFF. Measure the resistance between both ends of the wire using the ohm range of a tester.
- **Input Check [xxx-xxx]/Output Check [xxx-xxx]**
To enter the Component Check by following the procedure described in 'How to Use the CE Mode' of Chapter 6.
- **Analog Monitor [xxx-xxx]**
To enter the Analog Monitor by following the procedure described in 'How to Use the CE Mode' of Chapter 6.
- **Check the voltage level**

Table 1

Voltage	Level	Range
+3.3VDC	(H)	+3.2 to +3.6VDC
	(L)	0.0 to +1.0VDC
+5VDC	(H)	+4.8 to +5.4VDC
	(L)	0.0 to +1.0VDC
+24VDC	(H)	+23.3 to +25.7VDC
	(L)	0.0 to +3.0VDC

- **PL 4.2**
Refer to PL 4.2 in Chapter 5 Parts List.

- CH 6.2 Zone J4
Refer to Chain 6.2 Zone J4 in Chapter 7 BSD.
- REP 4.1.3
Refer to REP 4.1.3 in Chapter 4.
- ADJ 4.1.3
Refer to ADJ 4.1.3 in Chapter 4.
- Replace the parts in sequence
When it is impossible to analyze causes of a problem further, replace the parts in sequence. The part with a higher replacement frequency or higher possibility of causing a problem is listed first for replacement.

2.2.1.1 Level 1 FIP

Procedure

Ask the operator about the problem. **Did the operator operate the machine correctly?**

Y N

Explain the correct way to operate the machine to the operator.

Output all jobs that are stored in the memory. Turn the power OFF and ON. **Is the UI display normal?**

Y N

Refer to [BSD (CH2.1)] and [2.2.3 Other Failure FIP] to repair the malfunction in UI display.

Check the Shutdown History. Refer to [6.5.2.1 Shutdown History] to display the Fault Code on the UI. **Is the Fault Code displayed on the UI?**

Y N

Refer to [Troubleshooting] in the User Guide and repair the following errors.

- Problems With Hardware
- Problems With Image Quality
- Problems With Copy
- Problems With Printer
- Problems With Scanner
- Problems With Network
- In Case of Paper Jam
- In Case of Document Jam

Proceed to Level 2 Troubleshooting and perform the applicable FIP.

003-500 N-Up NG Out Of Range

BSD-ON:-

During 2-Up or 4-Up, the reduce/enlarge ration was not within the range of 25 to 400%.

Cause/Action

Press [Stop] on the UI Panel and change the settings.

003-754 IPS Overrun

BSD-ON:-

The IPS processing has overtook the Scan processing.

Cause/Action

This might be avoided by setting the R/E ratio to 99% or 101%. If this occurs frequently, obtain the document from the User and contact the Support Department for assistance.

003-795 AMS NG Out Of Range

BSD-ON:-

When [Reduce/Enlarge] is set to [Auto], the reduce/enlarge ratio was not within the range of 50 to 200%.

Cause/Action

Press [Stop] on the UI Panel and change the settings.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

003-942 Not-Supported Doc Size

BSD-ON:-

During DADF Scan of a Copy, Scan and Fax sending Job, an unsupported document size was detected.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check the setting of the document size group.
3. Check whether the document size is a supported size.
4. If the document size is a supported size, the DADF might have malfunctioned. Refer to following FIP to check the DADF.
 - 005-196 (Size Mismatch Jam on No Mix-size)
 - 005-948 (SS-Size Mismatch Jam on No Mix-size)

003-956 Not-Supported Doc Size

BSD-ON:-

During Platen Scan, an unsupported document size was detected.

Cause/Action

Press [Stop] on the UI Panel and change the document.

NOTE: *When performing the operation again, the same Fault will occur if the user had proceeded without changing the document.*

003-963 APS NG Out Of Range

BSD-ON:-

During Copy Job, when APS is selected, the image size obtained from document size x reduce/enlarge ratio was detected to be larger than the largest Standard Paper Size.

Cause/Action

Press [Stop] on the UI Panel and change the settings.

003-972 1Job Max Page Over

BSD-ON:-

During Copy Job or Scan Job, the number of pages that can be scanned has been exceeded.

Cause/Action

Press [Stop] on the UI Panel and reduce the number of document pages.

003-973 Auto Rotation NG Out Of Range

BSD-ON:-

During Copy Job, the following conditions were met.

- Rotation is required.
- The length of the image obtained by document x reduce/enlarge ratio is longer than 297 mm.

Cause/Action

Press [Stop] on the UI Panel and change the reduce/enlarge ratio.

004-345 HVPS Communication Error

BSD-ON: CH9.1

Communication failure between the ESS/MCU PWB and the HVPS was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connection between the HVPS J500 and the ESS/MCU PWB J402 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following parts in sequence:
 - HVPS (PL 18.3)
 - ESS/MCU PWB (PL 18.3)

005-122 DADF Simplex/Side 1 Pre Regi Sensor On Jam

BSD-ON: CH5.4

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

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Feed Roll and Nudger Roll for foreign substances.
- The surface of the Feed Roll and Nudger Roll for wear.
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF Feed Clutch (Output Check [005-062]) for operation failure. (PL 56.7)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-123 DADF Simplex/Side 1 Regi Sensor On Jam

BSD-ON: CH5.5, CH5.4

The DADF Regi Sensor does not turn ON within the specified time after the DADF Pre Regi Sensor On.

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Takeaway Roll and Regi Roll for foreign substances.
- The surface of the Takeaway Roll and Regi Roll for wear.
- The DADF Regi Sensor (Input Check [005-110]) for operation failure. (PL 56.14)
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF T/A Clutch (Output Check [005-098]) for operation failure. (PL 56.7)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-125/145 DADF Regi Sensor Off Jam/ DADF Regi Sensor Off Jam on Inverting

BSD-ON: CH5.5, CH5.4

[DADF Regi Sensor Off Jam]

After the DADF Pre Regi Sensor turned OFF at Scan operation, the DADF Regi Sensor did not turn OFF within the specified time.

[DADF Regi Sensor Off Jam on Inverting]

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

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Regi Roll, Out Roll, and Exit Roll for foreign substances.
- The surface of the Regi Roll, Out Roll, and Exit Roll for wear.
- The DADF Regi Sensor (Input Check [005-110]) for operation failure. (PL 56.14)
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-131/132 DADF Invert Sensor On Jam on Inverting/ DADF Invert Sensor On Jam

BSD-ON: CH5.5, CH5.4

[DADF Invert Sensor On Jam on Inverting]

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

[DADF Invert Sensor On Jam]

After the DADF Regi Sensor turned ON in the Scan operation, the DADF Invert Sensor did not turn ON within the specified time.

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Out Roll for foreign substances.
- The surface of the Out Roll for wear
- The DADF Invert Sensor (Input Check [005-211]) for operation failure. (PL 56.10)
- The DADF Regi Sensor (Input Check [005-110]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-134/139 DADF Invert Sensor Off Jam on Inverting/ DADF Invert Sensor Off Jam

BSD-ON: CH5.5, CH5.4

[DADF Invert Sensor Off Jam on Inverting]

During the Invert operation where there is a next document, after the DADF Regi Sensor turned OFF, the DADF Invert Sensor did not turn OFF within the specified time.

[DADF Invert Sensor Off Jam]

During the Simplex and Duplex Scan operation, after the DADF Regi Sensor turned OFF, the DADF Invert Sensor did not turn OFF within the specified time.

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Out Roll and Exit Roll for foreign substances.
- The surface of the Out Roll and Exit Roll for wear.
- The DADF Invert Sensor (Input Check [005-211]) for operation failure. (PL 56.10)
- The DADF Regi Sensor (Input Check [005-110]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The Exit Pinch Roll for operation failure (including for the operation failure of the Exit Nip Release Solenoid (Output Check [005-072])). (PL 56.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-135 DADF Side 2 Pre Regi Sensor On Jam

BSD-ON: CH5.5, CH5.4

After the DADF Feed Motor started the reverse rotation at Invert operation, the DADF Pre Regi Sensor did not turn ON within the specified time.

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Exit Roll for foreign substances.
- The surface of the Exit Roll for wear
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-048]) for operation failure. (PL 56.6)
- The Exit Pinch Roll for operation failure (including for the operation failure of the Exit Nip Release Solenoid (Output Check [005-072])). (PL 56.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-136 DADF Side 2 Regi Sensor On Jam

BSD-ON: CH5.5, CH5.4

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

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Exit Roll, Takeaway Roll, and Regi Roll for foreign substances.
- The surface of the Exit Roll, Takeaway Roll, and Regi Roll for wear.
- The DADF Regi Sensor (Input Check [005-110]) for operation failure. (PL 56.14)
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-008]) for operation failure. (PL 56.6)
- The DADF T/A Clutch (Output Check [005-098]) for operation failure. (PL 56.7)
- The Exit Pinch Roll for operation failure (including for the operation failure of the Exit Nip Release Solenoid (Output Check [005-072])). (PL 56.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-147 DADF Pre Regi Sensor Off Jam on Inverting

BSD-ON: CH5.5, CH5.4

After the DADF Feed Motor started the reverse rotation at Invert operation, the DADF Pre Regi Sensor did not turn OFF within the specified time.

Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the Exit Roll, Takeaway Roll, Regi Roll, and Out Roll for foreign substances.
- The surface of the Exit Roll, Takeaway Roll, Regi Roll, and Out Roll for wear.
- The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
- The DADF Feed Motor (Output Check [005-048/008] (CCW/CW)) for operation failure. (PL 56.6)
- The Exit Pinch Roll for operation failure (including for the operation failure of the Exit Nip Release Solenoid (Output Check [005-072])). (PL 56.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the DADF PWB. (PL 56.2)

005-196 Size Mismatch Jam on No Mix-Size

BSD-ON: CH5.4, CH5.2

The 2nd sheet or later of the document was detected to be of a different size compared to the 1st sheet (the length of the document's 2nd sheet or later in SS direction is longer).

Cause/Action

1. Check the size of the document that was fed by the User.
2. If the error is not cleared, check the following:
 - The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
 - The Document Tray Size Sensor 1/2 (Input Check [005-221/222]) for operation failure. (PL 56.11)
3. If no problem is found, replace the DADF PWB. (PL 56.2)

005-197 Prohibit Combine Size Jam

BSD-ON: CH5.4

A Mixed Size document was detected.

Cause/Action

Explain to the User that Mixed Size is not supported.

005-198/199 Too Short Size Jam/ Too Long Size Jam

BSD-ON: CH5.4, CH5.2

[Too Short Size Jam]

It was detected that the document length in Slow Scan direction is shorter than the specifications (Simpex: 85 mm, Duplex: 110 mm).

[Too Long Size Jam]

It was detected that the document length in Slow Scan direction is at the specifications (Simpex: 1275 mm, Duplex: 480.1 mm) or longer.

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 (Input Check [005-206]) for operation failure. (PL 56.14)
- The Document Tray Size Sensor 1/2 (Input Check [005-221/222]) for operation failure. (PL 56.11)

If no problem is found, replace the DADF PWB. (PL 56.2)

005-210 DADF Download Fail

BSD-ON: CH1.3

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

Cause/Action

Perform the DADF software download.

005-275/280 DADF RAM Test Fail/ DADF EEPROM Fail

BSD-ON: CH1.3

[DADF RAM Test Fail]

The DADF PWB RAM failed during the Read/Write operation. (At Power ON)

[DADF EEPROM Fail]

Write failure to DADF EEPROM or communication failure with EEPROM was detected.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the DADF PWB. (PL 56.2)

005-305 DADF Feeder Cover Interlock Open

BSD-ON: CH5.1

The DADF Feeder Cover Interlock Switch was opened during DADF operation.

Cause/Action

1. Check the DADF Feeder Cover for mismatch.
2. Check the DADF Feeder Cover Interlock Switch (Input Check [005-212]) for operation failure. (PL 56.6)
3. If no problem is found, replace the DADF PWB. (PL 56.2)

005-500 DADF Download Flash Write Error

BSD-ON: CH1.3

Failed to write into the Flash ROM during DADF Download.

Cause/Action

1. Turn the power OFF and ON.
 - If the device starts up normally
Check the FW Version of the DADF. If the FW Version is not the expected version, turn OFF the power, start up the device in Download Mode, and then try to download again. If the problem persists, replace the DADF PWB. (PL 56.2)
 - If the device does not start up normally
Turn OFF the power and start up the device in Download Mode. If the device can start up in Download Mode, try to download the FW again. If the problem persists, replace the DADF PWB. (PL 56.2)
If it cannot start up in Download Mode, replace the DADF PWB. (PL 56.2)

005-907/908/913 DADF Pre Regi Sensor/DADF Regi Sensor/DADF Invert Sensor Static Jam

BSD-ON: CH5.5, CH5.4

Paper was detected by the applicable sensor at Power ON, Feeder Cover Interlock Close, or DADF Open Sensor Close.

Cause/Action

1. Check the applicable sensor for remaining paper, the Actuator for return failure, contamination on sensor, and etc.
2. Check the applicable sensor for operation failure.
 - DADF Pre Regi Sensor (Input Check[005-206]) (PL 56.14)
 - DADF Regi Sensor (Input Check[005-110]) (PL 56.14)
 - DADF Invert Sensor (Input Check[005-211]) (PL 56.10)
3. If no problem is found, replace the DADF PWB. (PL 56.2)

005-940 DADF No Original Fail

BSD-ON: CH5.1

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

Cause/Action

Reload the document.

005-948 SS-Size Mismatch Jam on No Mix-size

BSD-ON: CH5.4, CH5.2

In No Mix mode, it was detected that a document with a shorter size in Slow Scan (SS) direction was transported from the DADF.

Cause/Action

1. Check the size of the document that was fed by the User.
2. If the error is not cleared, check the following:
 - The DADF Pre Regi Sensor (Input Check [005-206]) for operation failure. (PL 56.14)
 - The Document Tray Size Sensor 1/2 (Input Check [005-221/222]) for operation failure. (PL 56.11)
3. If no problem is found, replace the DADF PWB. (PL 56.2)

007-270 Tray 1 Paper Size Switch Broken

BSD-ON: CH7.1

The Tray 1 Size Sensor open circuit was detected. (The AD value is at its largest.)

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 Tray 1 Paper Size Switch J109 and the ESS/MCU PWB J414 for open circuit, short circuit, and poor contact.
- Tray 1 Paper Size Switch: Analog Monitor [072-050]/Input Check [072-114] (PL 9.1)
- The Tray 1 paper guide mechanism for damage and foreign substances.
- The Tray 1 Paper Size Switch for damage, improper installation, and Actuator operation failure.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

007-272 Tray 3 Paper Size Switch Broken

BSD-ON: CH7.3

The Tray 3 Size Sensor open circuit was detected. (The AD value is at its largest.)

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 Tray 3 Paper Size Switch J820 and the 2TM PWB J548 for open circuit, short circuit, and poor contact.
- Tray 3 Paper Size Switch: Analog Monitor [072-052]/Input Check [072-110] (PL 11.1)
- The Tray 3 paper guide mechanism for damage and foreign substances.
- The Tray 3 Paper Size Switch for damage, improper installation, and Actuator operation failure.

If no problems are found, replace the 2TM PWB (PL 11.6).

007-273 Tray 4 Paper Size Switch Broken

BSD-ON: CH7.4

The Tray 4 Size Sensor open circuit was detected. (The AD value is at its largest.)

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 Tray 4 Paper Size Switch J824 and the 2TM PWB J548 for open circuit, short circuit, and poor contact.
- Tray 4 Paper Size Switch: Analog Monitor [072-053]/Input Check [072-113] (PL 11.1)
- The Tray 4 paper guide mechanism for damage and foreign substances.
- The Tray 4 Paper Size Switch for damage, improper installation, and Actuator operation failure.

If no problems are found, replace the 2TM PWB (PL 11.6).

010-311 Fusing Unit Center Thermistor Defect

BSD-ON: CH10.2

An open circuit abnormality (the AD value of the STS is equivalent to the open circuit value) of the Heat Roll Center Thermistor was detected.

Procedure

Turn OFF the power and disconnect the Heat Roll Center Thermistor connector P/J600. Measure the resistance between the Heat Roll Center Thermistor J600 pin-1 and J600 pin-2. **Is the resistance infinite?**

Y N

Reconnect the connector P/J600 and measure the resistance between the ESS/MCU PWB J403 pin-1 and J403 pin-2. **Is the resistance infinite?**

Y N

Replace the ESS/MCU PWB (PL 18.3).

Check the following connections for open circuits and poor contacts.

- Between ESS/MCU PWB J403-1 and Heat Roll Center Thermistor P600-4
- Between ESS/MCU PWB J403-2 and Heat Roll Center Thermistor P600-3

Replace the Fusing Unit. (PL 7.1)

010-312 Fusing Unit Rear Thermistor Defect

BSD-ON: CH10.2

An open circuit abnormality (the AD value of the STS is equivalent to the open circuit value) of the Heat Roll Rear Thermistor was detected.

Procedure

Turn OFF the power and disconnect the Heat Roll Rear Thermistor connector P/J600. Measure the resistance between the Heat Roll Rear Thermistor J600 pin-3 and J600 pin-4. **Is the resistance infinite?**

Y N

Reconnect the connector P/J600 and measure the resistance between the ESS/MCU PWB J403 pin-3 and J403 pin-4. **Is the resistance infinite?**

Y N

Replace the ESS/MCU PWB (PL 18.3).

Check the following connections for open circuits and poor contacts.

- Between ESS/MCU PWB J403-3 and Heat Roll Rear Thermistor P600-2
- Between ESS/MCU PWB J403-4 and Heat Roll Rear Thermistor P600-1

Replace the Fusing Unit. (PL 7.1)

010-320 Over Heat Temperature Fail

BSD-ON: CH10.2, CH10.1

A high temperature error was detected at the Center Thermistor (245 degrees C or higher) or the Rear Thermistor (270 degrees C or higher).

NOTE: To clear this Fail, first remove the cause, next clear the value of NVM [744-040] (Over Heat Temp Fail) to '0', and then turn the power OFF then ON. The relationship between the displayed value and the Thermistor that detected the high temperature error is as follows:

- 0: Normal
- 1: High Temperature Error of Heat Roll Center Thermistor
- 2: High Temperature Error of Heat Roll Rear Thermistor

Cause/Action

Check the following:

- The Center Thermistor or the Rear Thermistor for dropped parts, sensor contamination, and foreign substances blocking the sensor.
- The Heat Roll for wound up, stuck paper.
- The Heat Roll Center Thermistor (Analog Monitor [010-050]) for operation failure.
- The Heat Roll Rear Thermistor (Analog Monitor [010-051]) for operation failure.
- The Heater Rod for operation failure.

If no problem is found, replace the following parts in sequence:

- Fusing Unit (PL 7.1)
- LVPS (PL 18.3)
- ESS/MCU PWB (PL 18.3)

010-327 Fusing Unit On Time Fail

BSD-ON: CH10.2, CH10.1

Any of the following was detected:

- The Heater Rod did not turn OFF within the specified time after the Heater Rod On.
- After power ON, the temperature of the Fusing Unit does not reach the specified value within the specified time.

Cause/Action

Check the following:

- The Heater Rod for operation failure.
- The connection between the LVPS J511 and the Fusing Unit P10 for open circuit and poor contact
- The Center Thermistor for dropped parts, sensor contamination, and foreign substances blocking the sensor.
- The Heat Roll for wound up, stuck paper.

If no problem is found, replace the following parts in sequence:

- Fusing Unit (PL 7.1)
- LVPS (PL 18.3)
- ESS/MCU PWB (PL 18.3)

010-379 Fusing Unit Hot Not Ready Return Time Fail

BSD-ON: CH10.2

The High Temperature Not Ready state is not cleared even after the Recovery Time (NVM) has passed.

Cause/Action

- Turn the power OFF and ON. If the problem persists, the Fusing Unit could be malfunctioning.
Replace the Fusing Unit. (PL 7.1)

010-392 NOHAD Fan Defect

BSD-ON: CH10.3

NOHAD Fan failure was detected. When the NOHAD Fan Fail signal indicating an abnormality of the Fan was monitored at the specified time interval, it was found to have failed the specified number of times or higher in a row.

Cause/Action

1. Check the NOHAD Fan (Output Check [042-002]) for operation failure. (PL 4.1)
2. Check the NOHAD Fan for foreign substances.
3. If no problem is found, replace the ESS/MCU PWB (PL 18.3).

010-602 Over Temp Cooling Mode

BSD-ON: CH10.2

Unable to print because the temperature in the machine has risen above the specification value.

Cause/Action

Wait until the temperature in the machine has dropped.

016-346 Fax Parameter Incorrect

BSD-ON:-

Parameter Error received from the Fax Board. Self Diagnostic: Parameter Error received.

Cause/Action

1. Turn the power OFF and ON.
2. Print out the Error Report and then replace the Fax PWB (PL 18.5).
3. Re-send the Fax or request for the customer to receive one.

016-372 File Access Error

BSD-ON:-

Unable to access the files that had been stored in the device for some reasons (access refused, etc.).

Cause/Action

1. Turn the power OFF and ON.
2. Install a firmware with the correct version.
3. If the problem persists, replace the ESS/MCU PWB. (PL 18.3)

016-500 Controller Download Flash Write Error

BSD-ON:-

Unable to write the Download File of Controller Main into the Flash ROM.

Cause/Action

1. Turn the power OFF and ON.
(If the contents of the Flash ROM is corrupted, the machine will boot up in Emergency Boot Download mode after Power ON.)
2. If the problem persists, replace the ESS/MCU PWB (PL 18.3).

016-501 Controller Boot Flash Write Error

BSD-ON:-

Unable to write the Download File of Controller Boot into the Flash ROM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the ESS/MCU PWB (PL 18.3).

016-502 UI Panel Download Flash Write Error

BSD-ON:-

Unable to write the Download File of UI Panel into the Flash ROM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the following parts in sequence:
 - ESS/MCU PWB (PL 18.3)
 - UI PWB (PL 1.10)

016-504 UI panel Font Download Flash Write Error

BSD-ON:-

Unable to write the Download File of UI Panel Font into the Flash ROM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the following parts in sequence:
 - Control Panel (PL 1.10)
 - ESS/MCU PWB (PL 18.3)

016-570 No Response from USB-Host for Scan Job

BSD-ON: CH3.3

When any of the following has occurred as Scan to PC (USB) is in progress.

- The command from the PC was disrupted for 5 seconds.
- The machine has detected a communication error with the USB Device.
- The sending of commands to the PC remained unsuccessful even when 500 ms has passed. (The time-out time is the time calculated from the size of the data being sent only when sending image data.)

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check the connection of the USB Cable between this machine and the PC.
3. Check the status (is it powered OFF, frozen, etc.) of the PC.

016-571 No Response from USB-Host for Print Job

BSD-ON: CH3.3

When any of the following has occurred as USB Print or Download data interpretation is in progress.

- The command from the PC was disrupted for 2 minutes.
- The machine has detected a communication error with the USB Device.
- The sending of commands to the PC remained unsuccessful even when 500 ms has passed.

NOTE: This Fault will clear automatically. (It will not be displayed on the UI Panel)

Cause/Action

1. Check the connection of the USB Cable between this machine and the PC.
2. Check the status (is it powered OFF, frozen, etc.) of the PC.

016-598 E-mail Message Size Over

BSD-ON:-

During Scan to E-mail, the maximum attachment size was exceeded at the 1st page.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Delete the contents of the attached data.
3. Enter the Diag and input NVM [840-167].
Adjust the limit value of attachment size for Scan to E-mail.
4. Lower the resolution setting.
5. Change the document type.
6. Change the output color.

016-742/744 Download File Error/ Download File Check Sum Error

BSD-ON:-

[Download File Error]

It was detected that there is an error with either the file format of the Download File, the Device Identifier, the Device Serial Number, or the Target Device Character String.

[Download File Check Sum Error]

The Download File checksum error was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Install a firmware with the correct version.

016-749/799 HBPL or XPJL Syntax Error/ Print Instruction Fail

BSD-ON:-

[HBPL or XPJL Syntax Error]

When the Print Job data interpretation is in progress, an illegal command that cannot be ignored was received from the Client driver.

[Print Instruction Fail]

During the Print Job, the Job cannot be executed with the specified combination of print parameters (Stored File Size, Paper Size, Paper Tray, Duplex Settings, Output Tray, and etc.).

NOTE: *During Continuous Print, this error will not occur until the paper that immediately precedes the paper where the applicable image is supposed to be printed on has been output successfully.*

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check whether the Printer Driver that is being used is the correct one.
3. Check whether the specified print parameters are correct.

016-759 Copy Counter Full

BSD-ON:-

During Multi Account Mode, any of the following has occurred:

- The general user that is logged in has reached the allotted maximum print count.
- A general user that has reached the allotted maximum print count has logged in.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Clear the count for the user.

016-764 SMTP Server Connection Fail

BSD-ON:-

Unable to continue the E-mail sending process due to some problems.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check the SMTP Server.

016-765 SMTP Server Disk Full

BSD-ON:-

The e-mail send/receive area of the SMTP Server (PC) is full.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Delete the contents of the e-mail data.

016-766 SMTP Server Limit Over

BSD-ON:-

The e-mail limit value of the SMTP Server (PC) has been exceeded.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Delete the contents of the e-mail data.

016-768 SMTP Sender Address Error

BSD-ON:-

When the device is performing a send for the very first time to the connected SMTP Server, an address-related error was notified.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Set the address at the device.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

016-776 Marker Code Detection Fail

BSD-ON:-

During Copy Job or Print Job, when expanding only up to the size that was specified at the expansion, the End Code cannot be found in the compressed data.

NOTE: Before the occurrence of this fail, there are cases where [045-310 Image Ready Error] would occur first.

NOTE: During Continuous Print, this error will not occur until the paper that immediately precedes the paper where the applicable image is supposed to be printed on has been output successfully.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem reoccurs, determine whether it is caused by the Copy document or the Print data and contact the Support Department for assistance.

016-781 SMTP Server Refusal

BSD-ON:-

The SMTP Server is refusing to send e-mails for some reasons.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Set the permission at the SMTP side.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

016-981 EPC Memory Full

BSD-ON:-

During Copy Job, the EPC memory is filled up.

Cause/Action

Perform any of the following and then turn the power OFF and ON.

- Press [OK] on the UI Panel. (Print out images that are currently in the EPC area.)
- Press [Stop] on the UI Panel. (Do not print out images that are currently in the EPC area.)

016-982 SCAN Memory Full

BSD-ON:-

During Scan Job (except for Scan to PC (USB)), memory full was detected at the 1st page.

Cause/Action

- Lower the resolution setting.
- Change the document type.
- Change the output color.

016-985 Max Attachment Size Over

BSD-ON:-

During Scan to E-mail, the maximum attachment size was exceeded at the 2nd page or later.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Enter the Diag and input NVM [840-167].
Adjust the limit value of attachment size for Scan to E-mail.
3. Lower the resolution setting.
4. Change the document type.
5. Change the output color.

017-745 SMB Size Over

BSD-ON:-

In Scan to PC (SMB) the upper limit of storage size was exceeded.

Cause/Action

1. Lower the resolution setting.
2. Change the document type.
3. Change the output color.

024-365 Image Output FIFO Error

BSD-ON:-

An image transfer underrun has occurred.

Cause/Action

As CE action, check the output copy and dispose of the paper with image error.

024-910/911/915 Tray 1/Tray 2/MSI Paper Length Mismatch

BSD-ON: CH8.4

The Paper Size for the applicable Tray is longer by 10.1 mm or more, or shorter by 13.1 mm or more than the setting.

Cause/Action

Check the following:

- Check whether the size of the paper loaded in the Tray is the same as the size of the Paper Guide.
- Transportation failure due to foreign substance on the document path.
- The surface of the Feed Roll, T/A Roll 2 (Tray 2), Regi Roll, and Idler Roll of the applicable Tray for foreign substances.
- The surface of the Feed Roll, T/A Roll 2 (Tray 2), Regi Roll, and Idler Roll of the applicable Tray for wear.
- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Regi Clutch (Output Check [071-001]) for operation failure. (PL 15.1)
- The MSI Feed Clutch (Output Check [072-014]) for operation failure. (MSI) (PL 13.3)
- The BTR for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

024-912 Tray 3 Paper Length Mismatch

BSD-ON: CH8.4

The Paper Size for the applicable Tray is longer by 10.1 mm or more, or shorter by 13.1 mm or more than the setting.

Cause/Action

Check the following:

- Check whether the size of the paper loaded in Tray 3 is the same as the size of the Paper Guide.
- Transportation failure due to foreign substance on the document path.
- The surface of the Feed Roll, T/A Roll (Tray 3), Regi Roll, and Idler Roll of the applicable Tray for foreign substances.
- The surface of the Feed Roll, T/A Roll (Tray 3), Regi Roll, and Idler Roll of the applicable Tray for wear.
- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Regi Clutch (Output Check [071-001]) for operation failure. (PL 15.1)
- The MSI Feed Clutch (Output Check [072-014]) for operation failure. (MSI) (PL 13.3)
- The BTR for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB. (PL 18.3)

024-913 Tray 4 Paper Length Mismatch

BSD-ON: CH8.4

The Paper Size for the applicable Tray is longer by 10.1 mm or more, or shorter by 13.1 mm or more than the setting.

Cause/Action

Check the following:

- Check whether the size of the paper loaded in Tray 4 is the same as the size of the Paper Guide.
- Transportation failure due to foreign substance on the document path.
- The surface of the Feed Roll, T/A Roll (Tray 4), Regi Roll, and Idler Roll of the applicable Tray for foreign substances.
- The surface of the Feed Roll, T/A Roll (Tray 4), Regi Roll, and Idler Roll of the applicable Tray for wear.
- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Regi Clutch (Output Check [071-001]) for operation failure. (PL 15.1)
- The MSI Feed Clutch (Output Check [072-014]) for operation failure. (MSI) (PL 13.3)
- The BTR for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB. (PL 18.3)

024-946 Tray 1 Unknown Paper Size

BSD-ON: CH7.1

One of the following errors was detected.

- During Copy Job and Diag Job, Tray 1 was selected but the paper guides in Tray 1 are in a configuration that is not supported by the System.
- During Copy Job and Diag Job, Tray 1 was selected but it has been pulled out.

Cause/Action

Press [Stop] on the UI Panel and either install Tray 1 or check the position of the paper guides and load the correct paper.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

If the problem persists, check the following:

- The Tray 1 paper guide mechanism for damage and foreign substances.
- The Tray 1 Paper Size Switch for damage, improper installation, and Actuator operation failure.
- Tray 1 Paper Size Switch: Analog Monitor [072-050]/Input Check [072-114] (PL 9.1)
- The connection between the Tray 1 Paper Size Switch J109 and the ESS/MCU PWB J412 for open circuit, short circuit, and poor contact.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

024-947 Tray 2 Unknown Paper Size

BSD-ON: CH7.2

One of the following errors was detected.

- During Copy Job and Diag Job, Tray 2 was selected but the paper guides in Tray 2 are in a configuration that is not supported by the System.
- During Copy Job and Diag Job, Tray 2 was selected but it has been pulled out.

Cause/Action

Press [Stop] on the UI Panel and either install Tray 2 or check the position of the paper guides and load the correct paper.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

If the problem persists, check the following:

- The Tray 2 paper guide mechanism for damage and foreign substances.
- The Tray 2 Paper Size Switch for damage, improper installation, and Actuator operation failure.
- Tray 2 Paper Size Switch: Analog Monitor [072-051]/Input Check [072-107] (PL 10.1)
- The connection between the Tray 2 Paper Size Switch J820C and the STM PWB J548C for open circuit, short circuit, and poor contact.

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

- STM PWB (PL 10.6)
- ESS/MCU PWB (PL 18.3)

024-948 Tray 3 Unknown Paper Size

BSD-ON: CH7.3

One of the following errors was detected.

- During Copy Job and Diag Job, Tray 3 was selected but the paper guides in Tray 3 are in a configuration that is not supported by the System.
- During Copy Job and Diag Job, Tray 3 was selected but it has been pulled out.

Cause/Action

Press [Stop] on the UI Panel and either install Tray 3 or check the position of the paper guides and load the correct paper.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

If the problem persists, check the following:

- The Tray 3 paper guide mechanism for damage and foreign substances.
- The Tray 3 Paper Size Switch for damage, improper installation, and Actuator operation failure.
- Tray 3 Paper Size Switch: Analog Monitor [072-052]/Input Check [072-110] (PL 11.1)
- The connection between the Tray 3 Paper Size Switch J820 and the 2TM PWB J548 for open circuit, short circuit, and poor contact.

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

024-949 Tray 4 Unknown Paper Size

BSD-ON: CH7.4

One of the following errors was detected.

- During Copy Job and Diag Job, Tray 4 was selected but the paper guides in Tray 4 are in a configuration that is not supported by the System.
- During Copy Job and Diag Job, Tray 4 was selected but it has been pulled out.

Cause/Action

Press [Stop] on the UI Panel and either install Tray 4 or check the position of the paper guides and load the correct paper.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

If the problem persists, check the following:

- The Tray 4 paper guide mechanism for damage and foreign substances.
- The Tray 4 Paper Size Switch for damage, improper installation, and Actuator operation failure.
- Tray 4 Paper Size Switch: Analog Monitor [072-053]/Input Check [072-113] (PL 11.1)
- The connection between the Tray 4 Paper Size Switch J824 and the 2TM PWB J548 for open circuit, short circuit, and poor contact.

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

024-950 Tray 1 No Paper

BSD-ON: CH7.5

Any of the following was detected:

- The paper in the Tray 1 has ran out. (When the ATS function of Tray 1 is disabled)
- Although the paper in the Tray 1 was detected to have ran out, paper is not supplied from another Tray. (When the ATS function of Tray 1 is enabled)

Cause/Action

1. Load paper into the Tray 1. (If this had occurred during ATS of Tray 1 or Tray 2, load paper with the same settings as for the applicable Tray into other than MSI.)
2. If the problem persists, check the following:
 - The paper supply mechanism of the applicable Tray for damage and foreign substances.
 - The No Paper Sensor of the Tray 1 (Input Check [072-100]) for operation failure. (PL 9.1)
 - The No Paper Sensor of the Tray 1 for contamination, improper installation, and Actuator operation failure.
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (PL 18.3)

024-951 Tray 2 No Paper

BSD-ON: CH7.6

Any of the following was detected:

- The paper in the Tray 2 has ran out. (When the ATS function of Tray 2 is disabled)
- Although the paper in the Tray 2 was detected to have ran out, paper is not supplied from another Tray. (When the ATS function of Tray 2 is enabled)

Cause/Action

1. Load paper into the Tray 2. (If this had occurred during ATS of Tray 1 or Tray 2, load paper with the same settings as for the applicable Tray into other than MSI.)
2. If the problem persists, check the following:
 - The paper supply mechanism of the applicable Tray for damage and foreign substances.
 - The No Paper Sensor of the Tray 2 (Input Check [072-101]) for operation failure. (PL 10.3)
 - The No Paper Sensor of the Tray 2 for contamination, improper installation, and Actuator operation failure.
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (PL 18.3)
 - STM PWB (Tray 2) (PL 10.6)

024-952 Tray 3 No Paper

BSD-ON: CH7.7

One of the following errors was detected. However, this is not detected until the paper is about to be fed.

- During Copy Job or Print Job, Tray 3 was selected but Tray 3 has run out of paper and the ATS function for Tray 3 is disabled. This also includes the cases where Tray 3 was selected by the System Controller due to APS result.
- During Copy Job or Print Job, Tray 3 was selected by the System due to APS result but it was detected that Tray 3 has run out of paper and the machine is unable to ATS to other Trays.

Cause/Action

Perform any of the following:

- Press [Stop] on the UI Panel.
- Load paper into Tray 3.
- If this had occurred during ATS, load paper with the same settings as for Tray 3 into other than MSI.

If the problem persists, check the following:

- The Tray 3 paper supply mechanism for damage and foreign substances.
- The Tray 3 No Paper Sensor for contamination, improper installation, and Actuator operation failure.
- Tray 3 No Paper Sensor: Input Check [072-102] (PL 11.3)
- The connection between the Tray 3 No Paper Sensor J102B and the 2TM PWB J549 for open circuit, short circuit, and poor contact.

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

024-953 Tray 4 No Paper

BSD-ON: CH7.8

One of the following errors was detected. However, this is not detected until the paper is about to be fed.

- During Copy Job or Print Job, Tray 4 was selected but Tray 4 has run out of paper and the ATS function for Tray 4 is disabled. This also includes the cases where Tray 4 was selected by the System Controller due to APS result.
- During Copy Job or Print Job, Tray 4 was selected by the System due to APS result but it was detected that Tray 4 has run out of paper and the machine is unable to ATS to other Trays.

Cause/Action

Perform any of the following:

- Press [Stop] on the UI Panel.
- Load paper into Tray 4.
- If this had occurred during ATS, load paper with the same settings as for Tray 4 into other than MSI.

If the problem persists, check the following:

- The Tray 4 paper supply mechanism for damage and foreign substances.
- The Tray 4 No Paper Sensor for contamination, improper installation, and Actuator operation failure.
- Tray 4 No Paper Sensor: Input Check [072-103] (PL 11.3)
- The connection between the Tray 4 No Paper Sensor J102A and the 2TM PWB J549 for open circuit, short circuit, and poor contact.

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

024-954 MSI No Paper

BSD-ON: CH7.9

Any of the following was detected:

- The paper in the MSI has ran out. (When the ATS function of MSI is disabled)
- Although the paper in the MSI was detected to have ran out, paper is not supplied from another Tray. (When the ATS function of MSI is enabled)

Cause/Action

1. Load paper into the MSI. (If this had occurred during ATS of Tray 1 or Tray 2, load paper with the same settings as for the applicable Tray into other than MSI.)
2. If the problem persists, check the following:
 - The paper supply mechanism of the MSI for damage and foreign substances.
 - The MSI No Paper Sensor (Input Check [072-104] for operation failure. (PL 13.3)
 - The MSI No Paper Sensor for contamination, improper installation, and Actuator operation failure.
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (PL 18.3)

024-958/959/960 MSI/Tray 1/Tray 2 Paper Size Mismatch

BSD-ON:-

During Print Job, the paper size settings of the selected Tray is different from the paper size specified for the Job.

Cause/Action

Change the paper settings of the selected Tray to the appropriate one.

024-961 Tray 3 Paper Size Mismatch

BSD-ON: CH7.3

During Print Job, the paper size settings of the selected Tray is different from the paper size specified for the Job.

Cause/Action

Change the paper settings of the selected Tray to the appropriate one.

024-962 Tray 4 Paper Size Mismatch

BSD-ON: CH7.4

During Print Job, the paper size settings of the selected Tray is different from the paper size specified for the Job.

Cause/Action

Change the paper settings of the selected Tray to the appropriate one.

024-965 APS NG Unselected

BSD-ON:-

During Copy Job, Print Job, and Report Job with APS settings, the Paper Size and paper orientation (SEF/LEF) settings specified by the Job are different from the settings at Tray 1, Tray 2, Tray 3, Tray 4 and MSI.

Cause/Action

Change the paper settings of the Tray to the appropriate one.

024-966 APS NG Permission Denied

BSD-ON:-

Although APS was selected during Copy Job or Print Job, all the Trays are either prohibited for APS or malfunctioning.

Cause/Action

- Repair any Tray that is malfunctioning.
- Release the APS prohibition setting.
 - NVM 780-61: STM
 - NVM 780-62: Tray 3
 - NVM 780-63: Tray 4
 - NVM 780-64: MSI

026-718 D-Fax Instruction Fail

BSD-ON:-

During D-Fax Job, the job cannot be performed using the specified combination of print parameters (stored image size, etc.).

Cause/Action

- Upgrade the Controller software
- Upgrade the Printer Driver
- If the problem persists, contact the Support Department

026-737 Network Error

BSD-ON:-

Unable to connect to the Server due to reasons such as there is a network failure, the Server is turned OFF, the specified protocol is not running in the Server etc.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check and change the settings of the various items that are required for the operation.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

027-518 Forwarding Login Error

BSD-ON:-

Unable to log in normally to the transfer destination.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Set the login permission at the transfer destination.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

027-520 SMB Forwarding Bad Volume

BSD-ON:-

One of the following errors was detected.

- A character string that cannot be set has been specified in volume (shared name, path, etc.).
- The specified path does not exist.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Review and set the volume or the specified path.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

027-522 Forwarding Access Error

BSD-ON:-

Write was refused even though the connection to the transfer destination is normal.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Set the write permission at the transfer destination.

NOTE: *When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.*

027-528 SMB Disk full

BSD-ON:-

Unable to write into the shared folder because the HDD of the PC is full.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Free up some space in the HDD of the PC.

027-543 SMB Forwarding Bad Address

BSD-ON:-

The Net BIOS name or the address specified at the FQDN is incorrect.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Review and set the specified address.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

027-779 SMTP Server Login Error

BSD-ON:-

A login error was returned at SMTP-AUTH.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Set the permission at the SMTP side.

NOTE: When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.

033-313 Fax Board Communication Fail

BSD-ON: CH34.1

Communication failure with Fax Board was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Check the connection of the Fax Board Cable.
3. If the problem persists, replace the following parts in sequence:
 - Fax Board Cable (PL 18.5)
 - Fax PWB (PL 18.5)

033-316 Fax Box NVM Data Defect

BSD-ON:-

The NVM data of the Fax Board is corrupted.

Cause/Action

1. Turn the power OFF and ON.
2. Perform NVM Initialize in the CE Mode. For details on the NVM Initialize, refer to '6.5.2.4 NVM Initialize'.

033-325 Modem No Response

BSD-ON:-

0x80 4: Warning T30_MODEM_HANG_UP_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-326 Fax Controller File Broken

BSD-ON:-

When printing received Fax, the Controller File is damaged.

Cause/Action

Turn the power OFF and ON.

033-503 Receive T1 Time Out

BSD-ON:-

0x49 4: Warning T30_EOM_T1_TIMEOUT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-504 T2 Time Out

BSD-ON:-

0x43 4: Warning T30_T2_TIMEOUT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-505 T5 Time Out

BSD-ON:-

0x65 4: Warning T30_T5_TIMEOUT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-506 DCN Receive

BSD-ON:-

0x6A 4: Warning T30_RXD_NULEOR_AFTER_DCN.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-507 Unable to receive by remote

BSD-ON:-

0x46 4: Warning T30_RXB_RESP_RCV_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-509 DIS DCS Illegal Command Receive

BSD-ON:-

0x40 4: Warning T30_DCS_RETRY_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-510 Fallback Error

BSD-ON:-

0x41 4: Warning T30_TCF_FAIL_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-517 Timeout ECM Between Frame

BSD-ON:-

0x69 4: Warning T30_TXD_RESP_RCV_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-526 ECM Send EOR-Q Send

BSD-ON:-

0x51 4: Warning ECM Data Error COMM_RESULTCODE_ECM_DATA_ERROR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-529 RTN Receive

BSD-ON:-

0x66 4: Warning T30_RTN_FAIL_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-531 DM Prevention Function Receive Refuse

BSD-ON:-

0x4A 4: Warning DM Receive Refuse COMM_RESULTCODE_RX_DM_ERROR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-532 Illegal Command Received

BSD-ON:-

0x67 4: Warning T30_RXD_INVALID_CMD_RCV_ERR

0x47 4: Warning T30_TXB_INVALID_CMD_RCV_ERR

Cause/Action

Clears automatically (concluded within the Fax Board).

033-541 No Destination Specified

BSD-ON:-

'Off-hook' was selected from the service menu when there is no external line connected and then manual sending was executed.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Change the 'Off-hook' setting.

033-547 Cancel

BSD-ON:-

0x01 4: Warning User Cancellation COMM_RESULTCODE_ABORT.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-548 No Manual Send Line Job Cancel

BSD-ON:-

[Off-hook] was selected from the service menu to perform manual receive when no external phone is installed.

Cause/Action

Install the external phone line.

033-549 Fax Service Disabled

BSD-ON:-

There is a Polling Job from the Fax Board.

Cause/Action

1. Press any button on the UI Panel.
2. Wait for a while, then perform the operation again.

033-550 Phone Book Disabled

BSD-ON:-

Any of the following was received:

- Unable to register Telephone Book: Memory transfer setting in progress
- Unable to register Telephone Book: DM refusal setting in progress

Cause/Action

1. Press any button on the UI Panel.
2. Wait for a while, then perform the operation again.

033-567 Fax AddressInfo Sum Check Fail

BSD-ON:-

Mismatched Telephone Book Data received from the Fax Board.

Cause/Action

1. Press any button on the UI Panel.
2. Re-register the Telephone Book.

033-572 Fax Communication Management Report Full

BSD-ON:-

Communication Management Report Full received from the Fax Board.

Cause/Action

1. Press any button on the UI Panel.
2. Print out the current report.

033-577 Control Channel Synchronization Error

BSD-ON:-

0x82 4: Warning T30_MODEM_CONTCH_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-578 Primary Channel Off Time Out

BSD-ON:-

0x83 4: Warning T30_MODEM_PRIMCH_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-711 Fax File System Error

BSD-ON:-

File System Error received from the Fax Board.

Cause/Action

1. Turn the power OFF and ON.
2. Print out the Error Report and then replace the Fax PWB (PL 18.5).
3. Re-send the Fax or request for the customer to receive one.

033-712 Fax Flash Full

BSD-ON:-

One of the following errors was detected.

- During sequential broadcast send, memory full has occurred when the image is being stored.
- During delayed send, memory full has occurred when the image is being stored.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Delete the contents of the Fax sending data.

033-725 In receive, memory full (under THRESH_MEMRX)

BSD-ON:-

0x14 4: Warning Receiving Memory Full COMM_RESULTCODE_MEMORY_FULL.

Cause/Action

Clears automatically (concluded within the Fax Board).

033-753 Fax Scan Page Full

BSD-ON:-

During Fax Job, the Controller detected Page Full at the DADF/Platen.

Cause/Action

Press any button on the UI Panel. (The Fault will be cleared when Auto Reset is in operation and when the Job is started.)

034-522 No manual send Line

BSD-ON:-

One of the following errors was detected.

- Although an external line is connected, receiving was performed manually with no address (the telephone is not dialed).
- 'Off-hook' was selected from the service menu when there is no external line connected and then manual sending was executed.

Cause/Action

Press any button on the UI Panel.

034-550 Fax Board Loader Download Fail

BSD-ON:-

When the Controller starts up (including at Power ON/Sleep recovery), it was detected that the Fax Board Loader is in Download Mode. There was an error in Fax Board Loader download; the ROM is corrupted. (This includes cases where the power was turned ON while being replaced with a half-burned ROM in the market.)

Cause/Action

1. Turn the power OFF and ON.
2. Install a Fax Firmware with the correct version.

034-711 Fax Send Count Limit

BSD-ON:-

0x23 4: Warning Redial Error COMM_RESULTCODE_ALL_REDIAL_FAIL.

Cause/Action

Clears automatically (concluded within the Fax Board).

034-726 Fax Calling Table Full

BSD-ON:-

Communication Job Full received from the Fax Board.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Re-send the Fax and wait for it to complete or wait for the received output.

034-746 Line Connection Fail

BSD-ON:-

0x21 4: Warning Unable to Connect to Line T30_NO_LINE_CONNECT_ERR.

Cause/Action

Press [Stop] on the UI Panel. Clears automatically during memory send (concluded within the Fax Board).

034-752 Dial Busy

BSD-ON:-

0x22 4: Warning Busy T30_DIAL_BUSY (Including the case where although an external line is connected, sensing was performed manually with no address (the telephone is not dialed)).

Cause/Action

Press [Stop] on the UI Panel. Clears automatically during memory send (concluded within the Fax Board).

034-757 Fax Document Does Not Delete

BSD-ON:-

Unable to delete the specified file received from the Fax Board.

Cause/Action

Clears automatically.

034-761 Fax Invalid Address book Data are Registered

BSD-ON:-

Incorrect Address Book content registration (Telephone Book Data Error) received from the Fax Board.

Cause/Action

1. Initialize the Address Book and then turn the power OFF and ON.
2. Re-register the Telephone Book.

034-765 Fax Report Disabled

BSD-ON:-

Report Notification setting of OFF is received from the Fax Board.

Cause/Action

1. This Fault will clear automatically.
2. Change the Report Notification setting to ON.

035-550 FAX Board Download Flash Write Error

BSD-ON: CH34.1

Unable to write the Download File of Fax Board into the Flash ROM (SD Card). Or, the Fax Board Communication Fail (033-313) has occurred.

Cause/Action

1. Turn the power OFF and ON.
 - If the device starts up normally
Check the FW Version of the Fax Box. If the FW Version is not the expected version, turn OFF the power, start up the device in Download Mode, and then try to download again. If the problem persists, replace the Fax PWB. (PL 18.5)
 - If the device does not start up normally
Turn OFF the power and start up the device in Download Mode. If the device can start up in Download Mode, try to download the FW again. If the problem persists, replace the Fax PWB. (PL 18.5)
If it cannot start up in Download Mode, replace the Fax PWB. (PL 18.5)

035-703 DCN Received at Phase B

BSD-ON:-

0x45 4: Warning T30_RXB_CMD_RCV_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

035-704 Not Send Ability

BSD-ON:-

0x48 4: Warning Other Party is Unable to Send T30_TRANSMIT_DENY_ERR.

Cause/Action

Press [Stop] on the UI Panel. Clears automatically during memory send (concluded within the Fax Board).

035-708 Post Message Resend Over

BSD-ON:-

0x60 4: Warning T30_EOP_RETRY_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

035-728 G3 EOL Not Receive

BSD-ON:-

0x52 4: Warning T30_RXC_NOEOL_DETECT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

035-741 ECM Phase Timeout

BSD-ON:-

0x84 4: Warning MODEM_TXTIMEOUT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

035-748 Fax Card Stopped

BSD-ON:-

0xFE 4: Warning Forced Stop received from the Fax Board FAX ERROR_ABOR.

Cause/Action

Clears automatically.

035-758 Fax Document does not exist

BSD-ON:-

No specified file received from the Fax Board.

Cause/Action

Clears automatically.

035-759 Fax Unable to Cancel Operation

BSD-ON:-

No Polling Job and Unable to Cancel Job received from the Fax Board.

Cause/Action

Clears automatically.

035-761 Fax File Open Error

BSD-ON:-

Fail Error received from the Fax Board.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Print out the Error Report and then replace the Fax PWB (PL 18.5).
3. Re-send the Fax or request for the customer to receive one.

036-506 V8 Error

BSD-ON:-

0x32 4: Warning V8 Negotiation T30_NO_V34_JM_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

036-550 FAX Board Loader Download Flash Write Error

BSD-ON:-

Unable to write the Download File of Fax Board Loader into the Flash ROM (SD Card). Or, the Fax Board Communication Fail (033-313) has occurred.

Cause/Action

1. Turn the power OFF and ON.
 - If the device starts up normally
Check the FW Version of the Fax Box. If the FW Version is not the expected version, turn OFF the power, start up the device in Download Mode, and then try to download again. If the problem persists, replace the Fax PWB. (PL 18.5)
 - If the device does not start up normally
Turn OFF the power and start up the device in Download Mode. If the device can start up in Download Mode, try to download the FW again. If the problem persists, replace the Fax PWB. (PL 18.5)
If it cannot start up in Download Mode, replace the Fax PWB. (PL 18.5)

036-700 Fax Board Unable Communication

BSD-ON:-

Unable to do fax operations (machine setting in progress, Diag Mode in progress) received from the Fax Board.

Cause/Action

Clears automatically.

036-740 Fax Board Busy

BSD-ON:-

The Fax Board is communicating (receiving, etc.).

Cause/Action

1. Press [Stop] on the UI Panel.
2. Wait for a while, then perform the operation again.

036-777 Control Channel Off Time Out

BSD-ON:-

0x81 4: Warning T30_MODEM_ABORT_ERR.

Cause/Action

Clears automatically (concluded within the Fax Board).

036-796 Fax Document Mix Fail

BSD-ON:-

When memory transfer is in progress, this occurs when the Fax Box is performing mixed (mixed document) receive.

Cause/Action

Clears automatically (concluded within the Fax Board).

041-210/211 STM NVM Out-Of-Order/ STM NVM R/W Error

BSD-ON: CH3.2

[STM NVM Out-Of-Order]

The NVM of the STM is malfunctioning.

[STM NVM R/W Error]

Unable to perform NVM Read / Write for the STM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the STM PWB. (PL 10.6)

042-325/614 Main Motor Rotation Error/ Main Motor Rotation Warning

BSD-ON: CH4.1

[Main Motor Rotation Error]

The Main Drive Motor revolution failure was detected. When the Lock Up (Main Drive Motor Fail) signal of the Motor Drive output was monitored at the specified time interval after a certain time has passed since the Main Drive Motor operation had started, it was found to have failed 5 times in a row.

[Main Motor Rotation Warning]

The Main Drive Motor revolution failure was detected. When the Lock Up (Main Drive Motor Fail) signal of the Motor Drive output was monitored at the specified time interval after a certain time has passed since the Main Drive Motor operation had started, it was found to have failed 2 times in a row.

Procedure

Enter the CE Mode and turn ON the Output Check [042-001] (Main Drive Motor). **Does the Main Drive Motor rotate?**

Y N

Check the power supply line (+24VDC, +5VDC) of the Main Drive Motor. **Is the power supply of the Main Drive Motor normal?**

Y N

Check the power supply circuit to the Main Drive Motor.

Turn OFF the power and check the following:

- The connection between the Main Drive Motor J202 and the ESS/MCU PWB J403 for open circuit, short circuit, and poor contact.
- The Drive Gear for wear, damage, and bearing blockage.
- The Main Drive Motor for loading.

If no problem is found, replace the following parts in sequence:

- Main Drive Motor (PL 3.1)
- ESS/MCU PWB (PL 18.3)

Press [Stop] and turn OFF the power. Check the connection between the Main Drive Motor J202-8 and the ESS/MCU PWB J403-5 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- ESS/MCU PWB (PL 18.3)
- Main Drive Motor (PL 3.1)

042-400 Smell Life Over

BSD-ON:

The Odor Filter is due for replacement.

Cause/Action

- Replace the Odor Filter and clear the VOC Filter HFSI Counter (950-805: FCOUNT_SMELL_HFSI_COUNTER).

042-608 Voc Life Over

BSD-ON:

The Voc Filter is due for replacement.

Cause/Action

- Replace the Voc Filter and clear the VOC Filter HFSI Counter (950-806: COUNT_VOC_HFSI_COUNTER).

045-310 Image Ready Error

BSD-ON: CH3.3

Unable to send the Image-valid signal cannot within the specified time.

NOTE: When the attempt to expand the image has failed, [016-776 Marker Code Detection Fail] occurs after the recover operation.

Cause/Action

1. Check the following:
 - The Net Cable for poor connection.
 - The USB Cable (Local) for poor connection.
 - The connector (P/J425) between the ESS/MCU PWB and the NET I/F PWB for poor contact.
2. Upgrade the Controller Firmware.
ADJ 18.2.3
3. If no problem is found, replace the ESS/MCU PWB. (PL 18.3)

045-313 IOT Logic Fail

BSD-ON:-

The IOT Software error was detected.

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 ESS/MCU PWB. (PL 18.3)

047-218 MCU-2TM Communication Error

BSD-ON: CH3.2

Communication failure between ESS/MCU PWB and 2TM PWB was detected.

Cause/Action

1. Check the connections of the following connectors:
 - ESS/MCU PWB J413
 - STM PWB J541C/ J413C
 - 2TM PWB J541
2. Check the following harnesses for open circuits and poor contacts:
 - Between ESS/MCU PWB and STM PWB
 - Between STM PWB and 2TM PWB
3. If no problem is found at 1 and 2, replace the following parts in sequence:
 - 2TM PWB (PL 11.6)
 - STM PWB (PL 10.6)
 - ESS/MCU PWB (PL 18.3)

061-321 ROS Motor Fail

BSD-ON: CH6.5

The number of rotation of the ROS Motor did not come within the standard range within the specified time (5 s) after the ROS Motor On.

Cause/Action

1. Turn the power OFF and ON.
2. Check whether the Drum Cartridge is installed.
3. Check the ROS Motor (Output Check [061-001]) for operation failure.
4. Check the LD +5VDC power supply of the LD PWB J140 pin-8.
5. If no problem is found, replace the following parts in sequence:
 - ROS Assembly (PL 2.1)
 - ESS/MCU PWB (PL 18.3)

061-325 No SOS Fail

BSD-ON: CH6.5

After the detection of ROS Motor Ready (steady rotation), the SOS interval was detected to be longer than the reference value 5 times in a row.

Cause/Action

1. Turn the power OFF and ON.
2. Check whether the Drum Cartridge is installed.
3. Turn OFF the power and check the connections between the ESS/MCU PWB J410, J411 and the LD PWB J140, J160 for open circuits, short circuits, and poor contacts.
4. If no problem is found, replace the following parts in sequence:
 - ROS Assembly (PL 2.1)
 - ESS/MCU PWB (PL 18.3)

062-277 DADF Communication Fail

BSD-ON: CH3.1

Transmission cannot be established between the ESS/MCU PWB and the DADF PWB.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connections between the ESS/MCU PWB J421 and the DADF PWB J751, J752 for open circuits, short circuits, and poor contacts.
3. If no problem is found, replace the following parts in sequence:
 - DADF PWB (PL 56.2)
 - ESS/MCU PWB (PL 18.3)

062-300 Platen I/L Open

BSD-ON: CH6.1

- The DADF was opened when there is a document inserted in the DADF.
- A document is inserted into the DADF when the DADF is open.

Cause/Action

1. Check whether the DADF is mechanically closed properly.
2. Check the actuator of the Platen Angle Sensor for operation failure and damage. (PL 1.9)
3. Check the following sensors:
 - Platen Open Sensor (Input Check [062-300])
 - Platen Angle Sensor (Input Check [062-301])
 - DADF Document Set Sensor (Input Check [005-102])
4. If no problem is found, replace the following parts in sequence:
 - Platen Open Sensor (PL 1.9)
 - Platen Angle Sensor (PL 1.9)
 - DADF Document Set Sensor (PL 56.6)
 - ESS/MCU PWB (PL 18.3)

062-311 IIT Software Logic Fail

BSD-ON:-

A software error was detected at the ESS/MCU PWB.

Cause/Action

1. Turn the power OFF and ON.
2. Update the software version to the latest one.
3. If no problem is found, replace the ESS/MCU PWB. (PL 18.3)

062-360 Carriage Position Fail

BSD-ON: CH6.3

Any of the following was detected:

- An error with the count value of the Carriage Position Control.
- There is no IIT Regi Sensor input during Carriage initialization.
- An error with the IIT Regi Sensor detection position.

Cause/Action

Check the following:

- The IIT Regi Sensor (Input Check [062-212]) for operation failure. (PL 1.9)
- The Carriage Motor (Output Check [062-005/006] (Scan/Return)) for operation failure. (PL 1.9)
- The Drive Belt and Drive Wire for slack and wear.
- The Carriage operation for mechanical loading.

If no problems are found, replace the ESS/MCU PWB. (PL 18.3)

062-371/380 Lamp Illumination Fail/ AGC Fail

BSD-ON: CH6.4

[Lamp Illumination Fail]

Insufficient light from Lamp detected in CCD. (During white gradation correction/AGC before Scan starts)

[AGC Fail]

Insufficient lamp brightness was detected when performing AGC.

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

1. Turn ON the power and enter the Diag mode. Change the value for NVM [715-030] to '1' and then perform [NVM Write].
2. A 3 or 4-digit number is displayed in the current value column.
3. Check the upper 1 or 2 digits, or the lower 2 digits using the following table and replace the appropriate parts.

Sample Display

- 110 (3-digit display):
LED Lamp failure and LED Lamp Wire Harness is damaged or has poor contact.
(The first digit "1" in "110" is the upper digit, which indicates the LED Lamp ("0" in "01" is not displayed). The lower 2 digits "10" indicates the LED Lamp Wire Harness.)
- 1000 (4-digit display):
The LED Lamp Wire Harness is damaged or has poor contact.
(The first 2 digits "10" in "1000" are the upper digits, which indicates the LED Lamp Wire Harness. The lower 2 digits "00" indicates that nothing is applicable (no failures).)

NOTE: Perform IIT diagnostic and then call NVM [715-030] again (press the Change Settings button) to check the value (diagnostic result).

Table 1

Current value	Component Name	PL No.
06	This value is not displayed	-
07	This value is not displayed	-
08	This value is not displayed	-
09	This value is not displayed	-
10	LED Lamp Wire Harness	PL 1.5

4. After replacing the appropriate parts, again change the value for NVM [715-030] to '1' and then perform "NVM Write".
5. Check that the current value column becomes '0'.
6. If the problem persists after performing the above procedure, check the following:
 - Check for burnt out LED Lamp (DC330 [062-002]). (PL 1.5)
 - Check the Flat Cable between the LED Lamp PWB J7002 and the CCD PWB J7001 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 PWB J700 and the ESS/MCU PWB J420 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
7. If no problem is found, replace the ESS/MCU PWB (PL 18.3)

Table 1

Current value	Component Name	PL No.
00	Not applicable (No errors)	-
01	LED Lamp (LED Lamp PWB)	PL 1.5
02	IIT Carriage	PL 1.3
03	CCD Flexible Flat Cable	PL 1.3 (PL 1.9)
04	This value is not displayed	-
05	This value is not displayed	-

062-386 AOC Fail

BSD-ON: CH6.4

A CCD output error was detected when performing AOC.

Cause/Action

1. Turn ON the power and enter the Diag mode. Change the value for NVM [715-030] to '1' and then perform [NVM Write].
2. A 3 or 4-digit number is displayed in the current value column.
3. Check the upper 1 or 2 digits, or the lower 2 digits and replace the appropriate parts. (For more information on display example and part selection, refer to Procedure 3 in 062-371 FIP.)

NOTE: Perform IIT diagnostic and then call NVM [715-030] again (press the Change Settings button) to check the value (diagnostic result).

4. After replacing the appropriate parts, again change the value for NVM [715-030] to '1' and then perform "NVM Write".
5. Check that the current value column becomes '0'.
6. If the problem persists after performing the above procedure, check the Flat Cable between the CCD PWB J700 and the ESS/MCU PWB J420 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
7. If no problem is found, replace the ESS/MCU PWB (PL 18.3)

062-389 Carriage Over Run Fail (Scan End Side)

BSD-ON: CH6.3

The Carriage has overrun at the Scan End.

Cause/Action

Check the following:

- The Drive Belt and Drive Wire for slack and wear.
- The Carriage operation for mechanical loading.
- The Carriage Motor (Output Check [062-005/006] (Scan/Return)) for operation failure. (PL 1.4)
- The IIT Regi. Sensor (Input Check [062-212]) for operation failure. (PL 1.9)

If no problems are found, replace the ESS/MCU PWB (PL 18.3)

062-396 CCD Cable Connection Fail

BSD-ON: CH3.1

A CCD Flat Cable connection error was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Flat Cable between the CCD PWB J700 and the ESS/MCU PWB J420 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
3. If no problem is found, replace the following parts in sequence:
 - CCD Flexible Flat Cable (PL 1.9)
 - ESS/MCU PWB (PL 18.3)

071-105 Regi Sensor On Jam (Tray 1)

BSD-ON: CH8.4, CH4.1, CH8.1

During paper feed from Tray 1, the Regi Sensor did not turn ON within the specified time after the Tray 1 Feed Clutch On.

Cause/Action

Check the following:

- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Tray 1 Feed Clutch (Output Check [072-001]) for operation failure. (PL 9.1)
- The Feed Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3)

072-102 Feed Out Sensor 2 On Jam

BSD-ON: CH8.2, CH7.6

During paper feed from Tray 2, the Feed Out Sensor 2 did not turn ON within the specified time after the Tray 2 Feed Motor On.

Cause/Action

Check the following:

- The Feed Out Sensor 2 (Input Check [072-106] for operation failure. (PL 10.5)
- The STM Take Away Motor (Output Check [072-007] for operation failure. (PL 10.6)
- The STM Take Away Roll Clutch (Output Check [072-005] for operation failure. (PL 10.6)
- The Tray 2 Feed/Lift Up Motor (Output Check [072-002] (Feed)) for operation failure. (PL 10.3)
- The T/A Roll 2, Feed Roll, Nudger Roll, and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The LH Cover for improper latching.
- The Drive Gear for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the STM PWB. (PL 10.6)

072-105 Regi Sensor On Jam (Tray 2)

BSD-ON: CH8.4, CH8.2

During paper feed from Tray 2, the Regi Sensor did not turn ON within the specified time after the Feed Out Sensor 2 On.

Cause/Action

Check the following:

- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The STM Take Away Motor (Output Check [072-007] for operation failure. (PL 10.6)
- The STM Take Away Roll Clutch (Output Check [072-005] for operation failure. (PL 10.6)
- The T/A Roll 2, Feed Roll, and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence:

- ESS/MCU PWB (PL 18.3)
- STM PWB (PL 10.6)

072-210 Tray 2 Lift Up Fail

BSD-ON: CH7.6

Any of the following was detected:

- A Tray 2 Lifter error.
- A Tray 2 Paper Size detector component malfunction.

Cause/Action

Check the following:

- The Tray 2 Nudger Level Sensor (Input Check [072-105] for operation failure. (PL 10.3)
- The Tray 2 Feed/Lift Motor (Output Check [072-009] (Lift Up) for operation failure. (PL 10.3)
- The drive system between the Bottom Plate and the Tray 2 Feed/Lift Motor for operation failure.
- The Tray for Paper misload
- The Tray for existence of objects other than Paper.

If no problem is found, replace the STM PWB. (PL 10.6)

072-212 Tray 2 Size Sensor Broken

BSD-ON: CH7.2

Abnormal output AD value from Tray 2 Paper Size Switch was detected.

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 2 Paper Size Switch (Analog Monitor [072-051], Output Check [072-107] for operation failure. (PL 10.1)
- The Tray for Paper misload
- The Tray for existence of objects other than Paper.

If no problem is found, replace the STM PWB. (PL 10.6)

072-215 MCU-STM Communication Fail

BSD-ON: CH3.2

Communication failure between the ESS/MCU PWB and the STM PWB was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connection between the ESS/MCU PWB J413 and the STM PWB J541C for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following parts in sequence:
 - STM PWB (PL 10.6)
 - ESS/MCU PWB (PL 18.3)

072-461 STM NVM Out-Of-Order

BSD-ON: CH3.2

The NVM of the STM is malfunctioning.

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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. If the problem persists, replace the STM PWB (PL 10.6).

072-470 STM NVM R/W Error

BSD-ON: CH3.2

The NVM of the STM cannot be read or written.

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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. If the problem persists, replace the STM PWB (PL 10.6).

073-102 Feed Out Sensor 3 On Jam (Tray 3)

BSD-ON: CH8.3

The Feed Out Sensor 3 did not turn ON within the specified time after the Paper had been fed from Tray 3.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 3 Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and transportation failure due to deterioration.
- The Tray 3 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Feed Out Sensor 3: Input Check [072-109] (PL 11.5)
- Tray 3 Feed/Lift Up Motor: Output Check [072-003] (Feed) (PL 11.3)
- 2TM Takeaway Motor: Output Check [072-008] (PL 11.6)
- 2TM Takeaway Roll Clutch: Output Check [072-006] (PL 11.6)

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

073-104 Feed Out Sensor 2 On Jam (Tray 3)

BSD-ON: CH8.2

The Feed Out Sensor 2 did not turn ON within the specified time after the Feed Out Sensor 3 is On during paper feed from Tray 3.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 2 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Tray 3 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Feed Out Sensor 2: Input Check [072-106] (PL 10.5)
- Feed Out Sensor 3: Input Check [072-109] (PL 11.5)
- STM Takeaway Motor: Output Check [072-007] (PL 10.6)
- STM Takeaway Roll Clutch: Output Check [072-005] (PL 10.6)
- 2TM Takeaway Motor: Output Check [072-008] (PL 11.6)
- 2TM Takeaway Roll Clutch: Output Check [072-006] (PL 11.6)

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

- STM PWB (PL 10.6)
- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

073-105 Regi Sensor On Jam (Tray 3)

BSD-ON: CH8.4

The Regi Sensor did not turn ON within the specified time after the Feed Out Sensor 2 is On during paper feed from Tray 3.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 2 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Regi Sensor: Input Check [071-105] (PL 15.1)
- Feed Out Sensor 2: Input Check [072-106] (PL 10.5)
- STM Takeaway Motor: Output Check [072-007] (PL 10.6)
- STM Takeaway Roll Clutch: Output Check [072-005] (PL 10.6)

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

- STM PWB (PL 10.6)
- ESS/MCU PWB (PL 18.3)

073-210 Tray 3 Lift Up Fail

BSD-ON: CH7.7

One of the following errors was detected.

- The Tray 3 Lifter error was detected.
- The Tray 3 Paper Size detector component malfunction was detected.

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 Tray 3 paper supply mechanism for damage and foreign substances.
- Usage of out of spec paper.
- Tray 3 Nudger Level Sensor: Input Check [072-108] (PL 11.3)
- Tray 3 Feed/Lift Up Motor: Output Check [072-010] (Lift Up) (PL 11.3)
- Tray 3 Paper Size Switch: Analog Monitor [072-052]/Input Check [072-110] (PL 11.1)

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

074-101 Feed Out Sensor 4 On Jam (Tray 4)

BSD-ON: CH8.3

The Feed Out Sensor 4 did not turn ON within the specified time after the Paper had been fed from Tray 4.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 4 Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and transportation failure due to deterioration.
- The Tray 4 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Feed Out Sensor 4: Input Check [072-112] (PL 11.5)
- Tray 4 Feed/Lift Up Motor: Output Check [072-011] (Feed) (PL 11.3)
- 2TM Takeaway Motor: Output Check [072-008] (PL 11.6)
- 2TM Takeaway Roll Clutch: Output Check [072-006] (PL 11.6)

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

074-102 Feed Out Sensor 3 On Jam (Tray 4)

BSD-ON: CH8.3

The Feed Out Sensor 3 did not turn ON within the specified time after the Feed Out Sensor 4 is On during paper feed from Tray 4.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 4 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Tray 3 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Feed Out Sensor 4: Input Check [072-112] (PL 11.5)
- Feed Out Sensor 3: Input Check [072-109] (PL 11.5)
- 2TM Takeaway Motor: Output Check [072-008] (PL 11.6)
- 2TM Takeaway Roll Clutch: Output Check [072-006] (PL 11.6)

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

074-104 Feed Out Sensor 2 On Jam (Tray 4)

BSD-ON: CH8.2

The Feed Out Sensor 2 did not turn ON within the specified time after the Feed Out Sensor 3 is On during paper feed from Tray 4.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 2 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Tray 3 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Feed Out Sensor 2: Input Check [072-106] (PL 10.5)
- Feed Out Sensor 3: Input Check [072-109] (PL 11.5)
- STM Takeaway Motor: Output Check [072-007] (PL 10.6)
- STM Takeaway Roll Clutch: Output Check [072-005] (PL 10.6)
- 2TM Takeaway Motor: Output Check [072-008] (PL 11.6)
- 2TM Takeaway Roll Clutch: Output Check [072-006] (PL 11.6)

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

- STM PWB (PL 10.6)
- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

074-105 Regi. Sensor On Jam (Tray 4)

BSD-ON: CH8.4

The Regi Sensor did not turn ON within the specified time after the Feed Out Sensor 2 is On during paper feed from Tray 4.

Initial Actions

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

Cause/Action

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path.
- Usage of out of spec paper.
- The Drive Gear for wear and damage.
- The Tray 2 Takeaway Roll and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- Regi Sensor: Input Check [071-105] (PL 15.1)
- Feed Out Sensor 2: Input Check [072-106] (PL 10.5)
- STM Takeaway Motor: Output Check [072-007] (PL 10.6)
- STM Takeaway Roll Clutch: Output Check [072-005] (PL 10.6)

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

- STM PWB (PL 10.6)
- ESS/MCU PWB (PL 18.3)

074-210 Tray 4 Lift Up Fail

BSD-ON: CH7.8

One of the following errors was detected.

- The Tray 4 Lifter error was detected.
- The Tray 4 Paper Size detector component malfunction was detected.

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 Tray 4 paper supply mechanism for damage and foreign substances.
- Usage of out of spec paper.
- Tray 4 Nudger Level Sensor: Input Check [072-111] (PL 11.3)
- Tray 4 Feed/Lift Up Motor: Output Check [072-011] (Lift Up) (PL 11.3)
- Tray 4 Paper Size Switch: Analog Monitor [072-053]/Input Check [072-113] (PL 11.1)

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

- 2TM PWB (PL 11.6)
- ESS/MCU PWB (PL 18.3)

075-135 Regi Sensor On Jam (MSI)

BSD-ON: CH8.4, CH4.1, CH8.1

During paper feed from the MSI, the Regi Sensor did not turn ON within the specified time after the MSI Feed Clutch On.

Cause/Action

Check the following:

- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The MSI Feed Clutch (Output Check [072-014]) for operation failure. (PL 13.3)
- The MSI Feed Roll and the MSI Nudger Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-101 Regi Sensor Off Jam

BSD-ON: CH8.4, CH4.1

The Regi Sensor did not turn OFF within the specified time after the Regi Clutch On.

Cause/Action

Check the following:

- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Regi Clutch (Output Check [071-001]) for operation failure. (PL 15.1)
- The Regi Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Transfer Unit for a decrease in the transportation force.
- The Drive Gear for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-103 Fusing Unit Exit Sensor Off Jam (Long)

BSD-ON: CH10.3, CH4.1, CH10.4

After the Regi Sensor Off, the Fusing Unit Exit Sensor did not turn OFF within the specified time.

Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (Input Check [071-106]) for operation failure. (PL 7.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Invert Motor (Output Check [071-003] (Exit)) for operation failure. (When Duplex is installed) (PL 17.1)
- The Exit Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Transfer Unit for a decrease in the transportation force.
- The Heat Roll for wound up, stuck paper.
- The Drive Gear for wear and damage.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-104 Fusing Unit Exit Sensor Off Jam (Short)

BSD-ON: CH10.3, CH4.1, CH10.4

The time taken for the Fusing Unit Exit Sensor to turn from ON to OFF is shorter than the specified time.

Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (Input Check [071-106]) for operation failure. (PL 7.1)
- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Invert Motor (Output Check [071-003] (Exit)) for operation failure. (When Duplex is installed) (PL 17.1)
- The Heat Roll for wound up, stuck paper.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-106 Fusing Unit Exit Sensor On Jam

BSD-ON: CH10.3, CH4.1

The Fusing Unit Exit Sensor did not turn ON within the specified time after the Regi Clutch On.

Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (Input Check [071-106]) for operation failure. (PL 7.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Regi Clutch (Output Check [071-001]) for operation failure. (PL 15.1)
- The Fusing Unit Exit Chute for improper installation and deformation.
- The Transfer Unit for a decrease in the transportation force.
- The Drive Gear for wear and damage.
- The Heat Roll for wound up, stuck paper.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.
- Check that the width of the lead edge of the fed paper is more than 190 mm (the distance between 2 fingers of the ERU).
- If the width of the fed paper is equal to or less than 190 mm and the jam occurs continuously, add the Finger Assy (019K 12750) to the center of the ERU. (See the photo.)

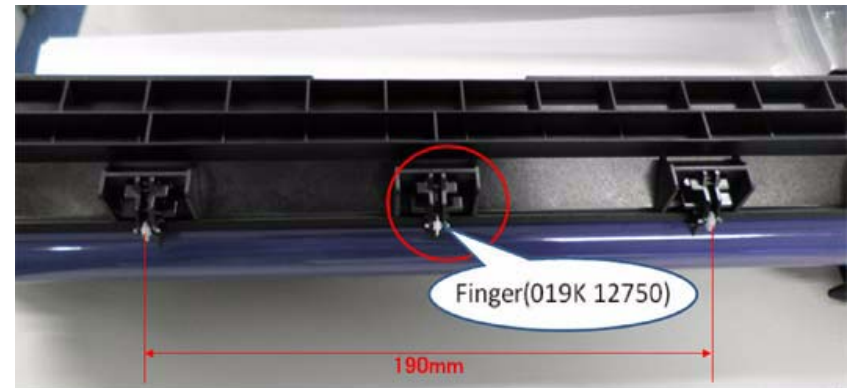


Figure 1 j0mg22001

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-129 Regi Sensor On Jam (Duplex Wait)

BSD-ON: CH8.4, CH4.1, CH10.4

During the paper stop at the invert wait position at Duplex print, the Regi Sensor did not turn ON within the specified time after the Duplex Clutch On.

Cause/Action

Check the following:

- The Regi Sensor (Input Check [071-105]) for operation failure. (PL 15.1)
- The Main Drive Motor (Output Check [042-001]) for operation failure. (PL 3.1)
- The Invert Motor (Output Check [071-005] (Dup)) for operation failure. (PL 17.1)
- The Duplex Clutch (Output Check [071-002]) for operation failure. (PL 14.4)
- The Exit Roll, Duplex Roll 1, 2, and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear and Belt for wear and damage.
- A paper transportation failure due to foreign substances on the paper path.
- Usage of out of spec paper.

If no problems are found, replace the ESS/MCU PWB (PL 18.3).

077-211 2TM Type Error

BSD-ON: CH3.2

An unsupported 2TM was detected to be connected.

NOTE: *If this is already detected, it will be displayed on the UI Panel when a Job is being performed.*

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 DIP Switch setting on the 2TM PWB
 - The connection between the 2TM PWB J541 and the STM PWB J413C for open circuit, short circuit, and poor contact
 - The connection between the STM PWB J541C and the ESS/MCU PWB J413 for open circuit, short circuit, and poor contact

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

- 2TM PWB (PL 11.6)
- STM PWB (PL 10.6)
- ESS/MCU PWB (PL 18.3)

077-212 Tray Module Reset Fail

BSD-ON: CH3.2

The Tray Module was detected to be reset.

Cause/Action

1. Turn the power OFF and ON.
2. Check voltages of the following pins:
 - STM PWB J541C-5 (+5VDC)
 - STM PWB J541C-8 (+24VDC)
3. Turn OFF the power and check the connection between the ESS/MCU PWB J413 and the STM PWB J541C for open circuit, short circuit, and poor contact.
4. If no problem is found, replace the following parts in sequence:
 - STM PWB (PL 10.6)
 - ESS/MCU PWB (PL 18.3)

077-300 Front Cover Open

BSD-ON: CH1.4

The Front Cover Switch was detected to be open.

Cause/Action

1. Check the Front Cover Switch for operation failure.
 - Front Cover Switch (Input Check [071-301]) (PL 19.1)
2. Check the Front Cover Switch for damage and mismatch.
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (PL 18.3)

077-301 Left Hand Cover Open

BSD-ON: CH1.4

The Left Hand Cover Switch was detected to be open.

Cause/Action

1. Check the Left Hand Cover Switch for operation failure.
 - Left Hand Cover Interlock Switch (Input Check [071-300]) (PL 14.1)
2. Check the Left Hand Cover Switch for damage and mismatch.
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (PL 18.3)

077-305 2TM Cover Open

BSD-ON: CH1.4

The 2TM Left Cover Switch was detected to be open.

Cause/Action

1. Check the 2TM Left Cover Switch for operation failure.
 - 2TM Left Cover Switch (Input Check [072-301]) (PL 11.4)
2. Check the 2TM Left Cover Switch for damage and mismatch.
3. If no problem is found, replace the following parts:
 - 2TM PWB (PL 11.6)

077-309 STM Cover Open

BSD-ON: CH1.4

The STM Left Cover Switch was detected to be open.

Cause/Action

1. Check the STM Left Cover Switch for operation failure.
 - STM Left Cover Switch (Input Check[072-300]) (PL 10.4)
2. Check the STM Left Cover Switch for damage and mismatch.
3. If no problem is found, replace the following parts:
 - STM PWB (PL 10.6)

077-900/901/904 Regi Sensor/Fusing Unit Exit Sensor/ Feed Out Sensor 2 Static Jam

BSD-ON: CH8.4, CH10.3, CH8.2

BSD-ON:

Paper was detected by the applicable sensor at Power ON, M/C Stop, or Interlock Close.

Cause/Action

1. Check the applicable sensor for remaining paper, the Actuator for return failure, contamination on sensor, and etc.
2. Check the applicable sensor for operation failure.
 - Regi Sensor (Input Check [071-105]) (PL 15.1)
 - Fusing Unit Exit Sensor (Input Check [071-106]) (PL 7.1)
 - Feed Out Sensor 2 (Input Check [072-106]) (PL 10.5)
3. If no problem is found, replace the following parts:
 - ESS/MCU PWB (Regi Sensor, Fusing Unit Exit Sensor) (PL 18.3)
 - STM PWB (Feed Out Sensor 2) (PL 10.6)

077-905 Feed Out Sensor 3 Static Jam

BSD-ON: CH8.3

Feed Out Sensor 3 On was detected during Standby.

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 Feed Out Sensor 3 for remaining paper, Actuator return failure, foreign substances, contamination on sensor, and etc.
- Feed Out Sensor 3: Input Check [072-109] (PL 11.5)

If no problems are found, replace the 2TM PWB (PL 11.6).

077-906 Feed Out Sensor 4 Static Jam

BSD-ON: CH8.3

Feed Out Sensor 4 On was detected during Standby.

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 Feed Out Sensor 4 for remaining paper, Actuator return failure, foreign substances, contamination on sensor, and etc.
- Feed Out Sensor 4: Input Check [072-112] (PL 11.5)

If no problems are found, replace the 2TM PWB (PL 11.6).

091-401/402 Drum Cartridge Quality Life Over/ Drum Cartridge Life Over

BSD-ON: CH4.1

[Drum Cartridge Quality Life Over]

The image quality guarantee period for the Drum Cartridge has ended. (When Drum Hard Stop-less is enabled)

[Drum Cartridge Life Over]

When in Life Extension Mode, the Drum Cartridge was detected to be near the end of its life span.

Cause/Action

Replace the Drum Cartridge. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

091-406/424 Drum Cartridge Normal Life Over/ Drum Cartridge Abnormal Life Over

BSD-ON: CH4.1

[Drum Cartridge Normal Life Over]

The operation guarantee period for the Drum Cartridge has ended. (When Drum Hard Stop-less is enabled)

[Drum Cartridge Abnormal Life Over]

The Drum Cartridge is out of warranty and this could result in a malfunction of the machine. (When Drum Hard Stop-less is enabled)

Cause/Action

Replace the Drum Cartridge. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

091-430 Drum Cartridge Life End

BSD-ON: CH4.1

The Drum Cartridge must be replaced.

Cause/Action

Replace the Drum Cartridge. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

091-440 Drum Cartridge Pre Near End

BSD-ON: CH4.1

Preparation for replacing the Drum Cartridge is required.

Cause/Action

The Drum Cartridge needs to be replaced soon. Prepare a new Drum Cartridge. Replace the Drum Cartridge as required. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

091-441 Drum Cartridge Near End

BSD-ON: CH4.1

The Drum Cartridge needs to be replaced soon.

Cause/Action

The Drum Cartridge needs to be replaced soon. Replace the Drum Cartridge as required. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

092-660/668 ATC Amplitude Fail/ ATC Average Fail

BSD-ON: CH9.2

[ATC Amplitude Fail]

The output amplitude of the ATC Sensor in the ATC (Automatic Toner Control) measurement is small.

[ATC Average Fail]

The average output value is not within the specified range in the ATC (Automatic Toner Control) measurement.

Cause/Action

1. Install a Toner Cartridge that contains Toner. Copy a Test Chart (499T247), etc. and check whether the density has recovered.
2. Check the Toner Dispense Motor (Output Check [092-001]) for operation failure. (PL 8.2)
3. Check the Toner transport path for Toner blockage.
4. Check the connection between the ATC Sensor P615 and the ESS/MCU PWB J409 for open circuit, short circuit, and poor contact.
5. If no problem is found, replace the following parts in sequence:
 - ATC Sensor (PL 8.6)
 - Developer Unit (PL 8.4)
 - Drum Cartridge (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

- ESS/MCU PWB (PL 18.3)

092-661 Temperature Sensor Fail

BSD-ON: CH9.3

The output value of the Temperature Sensor is not within the specification range.

Cause/Action

1. Turn the power OFF and ON.
2. Check the connection between the HVPS J500-1 and the ESS/MCU PWB J402-14 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following parts in sequence:
 - HVPS (PL 18.3)
 - ESS/MCU PWB (PL 18.3)

092-910 ATC Sensor Fail

BSD-ON: CH9.2

The frequency at which the ATC Average Fail or the ATC Amplitude Fail has been occurring is at the threshold value or higher.

NOTE: To clear this Fail, clear the value of NVM [752-036] (ATC Fail) or NVM [752-038] (ATC Fail Continuous Count) to '0'. If the machine is not repaired back to normal status, this Fail will occur again during the operation.

NOTE: Setting the NVM [752-322] (Dispense Mode) to '0' (Timer Disp) or '2' (ICDC Disp) will prevent ATC related fail from occurring and enable you to use the M/C. However, this means that the Toner density will not be controlled.

Cause/Action

1. Install a Toner Cartridge that contains Toner. Copy a Test Chart (499T247), etc. and check whether the density has recovered.
2. Check the Toner Dispense Motor (Output Check [092-001]) for operation failure. (PL 8.2)
3. Check the Toner transport path for Toner blockage.
4. Check the connection between the ATC Sensor P615 and the ESS/MCU PWB J409 for open circuit, short circuit, and poor contact.
5. Check for toner blockage within the Developer Unit.
6. If no problem is found, replace the following parts in sequence:
 - ATC Sensor (PL 8.6)
 - Developer Unit (PL 8.4)
 - Drum Cartridge (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

 - ESS/MCU PWB (PL 18.3)

093-312 Toner Dispense Motor Rotation Fail

BSD-ON: CH9.2

Regardless of low usage of toner from Toner Cartridge, it was detected to be empty.

Cause/Action

Check the following:

- The Toner Cartridge for improper installation
- The Toner Dispense Motor (Output Check [092-001]) for operation failure. (PL 8.2)
- The Toner transport path for Toner blockage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence:

- Toner Cartridge (PL 8.1)
- ESS/MCU PWB (PL 18.3)

093-400 Toner Near Empty

BSD-ON: CH9.2

The Toner Cartridge needs to be replaced soon.

Cause/Action

The Toner Cartridge needs to be replaced soon. Replace the Toner Cartridge as required. (PL 8.1)

093-406 Toner Pre Near Empty

BSD-ON: CH9.2

Preparation for replacing the Toner Cartridge is required.

Cause/Action

The Toner Cartridge needs to be replaced soon. Prepare a new Toner Cartridge. Replace the Toner Cartridge as required. (PL 8.1)

093-912 Toner Empty

BSD-ON: CH9.2

The toner must to be replaced as it has ran out.

Cause/Action

Replace the Toner Cartridge. (PL 8.1)

093-956 Drum New CRU Installation Fail

BSD-ON: CH9.2

During the developing powder installation mode after installing the Drum Cartridge, the ATC Measured Value is found to be abnormal. (Seal not removed)

Cause/Action

1. Remove the developing powder seal from the Drum Cartridge.
2. If the problem persists after removing the seal, replace the ATC Sensor. (PL 8.6)
3. If the problem persists, replace the Drum Cartridge. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

093-959 Drum New CRU Installation Fail Exceeds Thresholding Times

BSD-ON:-

The number of developing powder installation mode executions has exceeded the upper limit.

Cause/Action

Replace it with the correct Drum Cartridge. (PL 8.1)

NOTE: After replacing the Drum Cartridge, clear the HFSI [950-807] (Drum Cycle Counter) to '0'.

116-317 Configuration NG

BSD-ON:

The device was started up with a run prohibited Controller Firmware.

Cause/Action

Upgrade the Controller software or contact the Support Department.

116-321 Controller Logic Fail

BSD-ON:-

- A software defect that cannot be ignored was found in the Controller software.
- The CPU has rebooted due to the occurrence of an exception.

Cause/Action

1. Turn the power OFF and ON.
2. Install a Controller Firmware with the correct version.

116-323 Controller NVM Data Defect

BSD-ON:-

Any of the following was detected:

- The On Board NVM data of the Controller is corrupted.
- The On Board NVM of the Controller is not installed.
- Any one of the Print Counter has reached its maximum value.
- The number of times the NVM can be changed has reached its limit.

NOTE: *If this Fault reoccurs after performing Data Backup/Restore, perform Data Restore again. (Perform NVM Matching (NVM [621-400]) in the CE Mode.)*

Cause/Action

1. Turn the power OFF and ON.
2. Perform NVM Initialize in the CE Mode. (Refer to 6.5.2.4 NVM Initialize)

116-324 Exception Fail

BSD-ON:-

The CPU has rebooted due to the occurrence of an exception.

Cause/Action

Upgrade the Controller software or contact the Support Department.

116-334 NVM Data Mismatch

BSD-ON:-

The verification result between the On Board NVM and the Backup NVM of the Controller is mismatched. (This includes cases where one of the NVM is Blank)

Cause/Action

1. Turn the power OFF and ON.
2. Perform NVM Matching (NVM [621-400]) in the CE Mode.

116-377 IIT Interrupt Timeout

BSD-ON: CH6.4

The DMA start trigger when scanning documents cannot be detected for a specified time.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Flat Cable between the IIT Carriage J700 and the ESS/MCU PWB J420 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
3. Check the ESS/MCU PWB for improper installation (loose screw).
4. Upgrade the Controller Firmware.
ADJ 18.2.3
5. If no problem is found, replace the ESS/MCU PWB (PL 18.3).

116-386 USB Host Terminal Unknown Device Connection Fail

BSD-ON: CH34.1

It was detected that something other than a Fax Board is inserted into the USB Host Terminal.

Cause/Action

1. Turn the power OFF and ON.
2. Connect the correct Fax PWB (PL 18.5).

116-747 Invalid Page Margin

BSD-ON:-

During Copy Job, subtracting the amount of edge erase from the section that should have been scanned resulted in a negative value.

Cause/Action

Change the value for NVM [790-301] (Document Edge Erase Amount) or NVM [790-302] (Document Edge Erase Amount (for ID Card Copy)).

117-327 Controller Extension Card NVM Data Defect

BSD-ON: CH3.3

Any of the following was detected:

- The NVM data of the NET I/F Card is corrupted.
- The NVM of the NET I/F Card is not installed.

Cause/Action

1. Turn the power OFF and ON.
2. Check whether the EEPROM is installed.
3. Check the EEPROM for poor contact with the socket.
4. Check the connector (P/J425) between the ESS/MCU PWB and the NET I/F PWB for poor contact.
5. If no problem is found, replace the following parts in sequence:
 - NET I/F PWB (PL 18.3)
 - ESS/MCU PWB (PL 18.3)

123-314 UI Panel Communication Fail

BSD-ON: CH2.1

Communication failure between the ESS/MCU PWB and the UI Panel was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the Flat Cable between the UI PWB J740 and the ESS/MCU PWB J422 for open circuits, short circuits, and poor contacts.
3. If no problem is found, replace the following parts in sequence:
 - UI PWB (PL 1.10)
 - ESS/MCU PWB (PL 18.3)

124-311 Serial Number Fail

BSD-ON: CH3.4

The device was turned ON after it was installed with a new ESS/MCU PWB.

Cause/Action

1. Remove the EEP ROM from the old ESS/MCU PWB, install the removed EEPROM to the new ESS/MCU PWB, and then turn ON the power.
2. Enter the Diag, input [621-400] in the Chain-Link, and set the value to '1'.
3. Press <Start>.

127-396 E-mail Generate Fail

BSD-ON:-

Unable to generate the e-mail data for some reasons. Example: Failed to secure resources, error during input of header field, error during Base 64 conversion, etc.

Cause/Action

1. Press [Stop] on the UI Panel.
2. Check and change the settings of the various items that are required for the operation.

NOTE: *When performing the operation again, the same Fault will occur if the user had proceeded without changing the settings.*

3. Upgrade the Controller Firmware.
ADJ 18.2.3

133-226 Fax Country or Clock Not Set

BSD-ON:-

When activating Fax at power ON, the country code setting is 'Unknown' or the clock is not set.

Cause/Action

Set the country code to any option other than 'Unknown' and set the clock.

Enter the Key Ope Tools Mode.

- Country Code: Fax Setting > Region > Select Country > Apply Settings (Yes) > Auto-Reboot
- Time: System Settings > Clock > >Date & Time > Select Time Zone > Date Settings > Time Settings > Save

134-210 Fax Data Parameter Error

BSD-ON:-

Any one of Parameter Type Error, Parameter Data Error, or Parameter Length Error received from the Fax Board.

Cause/Action

1. Turn the power OFF and ON.
2. Perform NVM Initialize in the CE Mode. For details on the NVM Initialize, refer to '6.5.2.4 NVM Initialize'.
3. If the problem persists, replace the Fax PWB (PL 18.5).

134-211 Fax Board Failure

BSD-ON:-

Fax Board malfunction (Memory Error, Hardware Error) received from the Fax Board.

Cause/Action

1. Turn the power OFF and ON.
2. Print out the Error Report and then replace the Fax PWB (PL 18.5).
3. Re-send the Fax or request for the customer to receive one.

2.2.3.1 AC Power FIP

BSD-ON: CH1.1

Procedure

Turn OFF the Main Power Switch. **Is the voltage between the Main Power Switch J3 and J4 220 to 240VAC?**

Y N
|
| **Is the voltage between the AC Inlet J1 and J2 220 to 240VAC?**
| Y N
| | Unplug the Power Cord from the outlet. **Is 220-240VAC measured at the outlet?**
| | Y N
| | | Check the customer's Breaker, etc.
| | |
| | | Check the Power Cord for open circuit and poor contact. If no problems are found, replace the AC Inlet. (PL 18.3)
| | |
| | | Check the connections between the AC Inlet J1, J2 and the Main Power Switch J3, J4 for open circuits and poor contacts.

Turn ON the Main Power Switch. **Is the voltage between the LVPS J510-1 and J510-3 220 to 240VAC?**

Y N
|
| Turn OFF the power and unplug the Power Cord from the outlet. Check the connections between the Main Power Switch J5, J6 and the LVPS J510 pin-1 and pin-3 for open circuits and poor contacts.
| If no problems are found, replace the Main Power Switch. (PL 18.3)

Check the AC circuit to each component by referring to Chapter 7 Wiring Data.

2.2.3.2 +5VDC Power FIP

BSD-ON: CH1.2, CH1.1

Procedure

Turn ON the power. **Is the voltage between the LVPS J512-1 (+) and the GND (-) +5VDC?**

Y N
|
| **Is the voltage between the LVPS J510-1 and J510-3 220 to 240VAC?**
| Y N
| | Go to "4 AC Power FIP".
|
| Turn OFF the power and disconnect the LVPS J512. After 15 s or longer has passed, turn ON the machine. **Is the voltage between the LVPS P512-1 (+) and the GND (-) +5VDC?**
| Y N
| | Replace the LVPS. (PL 18.3)
|
| Check the +5VDC circuit for a short circuit in the frame by referring to Chapter 7 Wiring Data.

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

2.2.3.3 +24VDC Power FIP

BSD-ON: CH1.1, CH1.2

Procedure

Turn ON the power. **Is the voltage between the LVPS J512-1 (+) and the GND (-) +5VDC?**

Y N

Go to 2.2.3.2 +5VDC Power FIP.

Are the voltages between the LVPS J512-3/6 (+) and the GND (-) +24VDC?

Y N

Is the voltage between the LVPS J513-4 (+) and the GND (-) +3.3VDC?

Y N

Check the circuit to the LVPS J513 pin-4.

Turn OFF the power and disconnect the LVPS J512. After 15 s or longer has passed, turn ON the machine. **Are the voltages between the LVPS P512-3/6 (+) and the GND (-) +24VDC?**

Y N

Replace the LVPS. (PL 18.3)

Check the +24VDC circuit for a short circuit in the frame by referring to Chapter 7 Wiring Data.

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

2.2.4.1 Reflective Sensor Failure FIP

Procedure

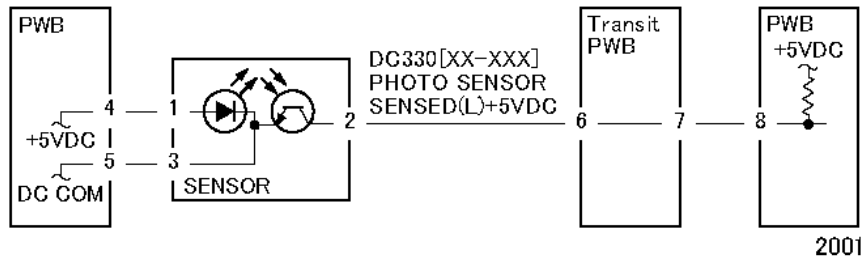


Figure 1 2001

Enter DC330[XXXX-XXX]. Block the sensor with a sheet of blank paper. Is [LOW] displayed?

- Y N
- Is +5VDC measured between the sensor pin-2 (+) and the GND (-)?
- Y N
- Check the connection between the sensor pin-2 and the PWB pin-8 for an open circuit and poor contact.
If no problem is found, replace the PWB.
- Is +5VDC measured between the sensor pin-1 (+) and pin-3 (-)?
- Y N
- Is +5VDC measured between the PWB pin-4 (+) and pin-5 (-)?
- Y N
- Replace the PWB.
- Check the connection between the PWB pin-4 and the sensor pin-1, as well as between the PWB pin-5 and the sensor pin-3 for open circuits and poor contacts.
- Check the sensor for contamination and improper installation.
If no problems are found, replace the sensor.

Remove the sheet of paper blocking the sensor. Is [HIGH] displayed?

- Y N
- Disconnect the sensor connector. Does the display change to [HIGH]?
- Y N
- Check the connection between the sensor pin-2 and the PWB pin-8 for a short circuit.
If no problem is found, replace the PWB.
- Check the sensor for improper installation and incident light diffraction. If no problems are found, replace the sensor.

Check the installation of the sensor. If no problems are found, replace the sensor.

2.2.4.2 Permeable Sensor Failure FIP

Procedure

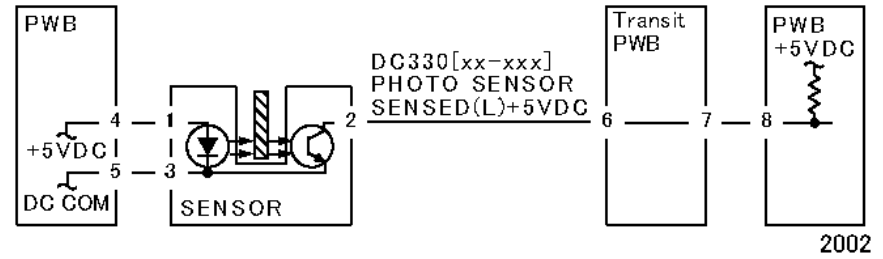


Figure 1 2002

Enter DC330[XXX-XXX]. Block the sensor. Is [HIGH] displayed?

- Y N
- Disconnect the sensor connector. Does the display change to [HIGH]?
- Y N
- Check the connection between the sensor pin-2 and the PWB pin-8 for a short circuit. If no problem is found, replace the PWB.
- Replace the sensor.

Remove any obstruction on the sensor light path. Does the display change to [LOW]?

- Y N
- Is +5VDC measured between the sensor pin-2 (+) and the GND (-)?
- Y N
- Check the connection between the sensor pin-2 and the PWB pin-8 for an open circuit and poor contact.
If no problem is found, replace the PWB.
- Is +5VDC measured between the sensor pin-1 (+) and pin-3 (-)?
- Y N
- Check the connection between the PWB pin-4 and the sensor pin-1, as well as between the PWB pin-5 and the sensor pin-3 for open circuits and poor contacts.
If no problem is found, replace the PWB.
- Check the sensor for contamination.

Check the sensor for improper installation and the Actuator for bending or failure.

If no problems are found, replace the sensor.

2.2.4.3 Switch (Normal/Open) Failure FIP

Procedure

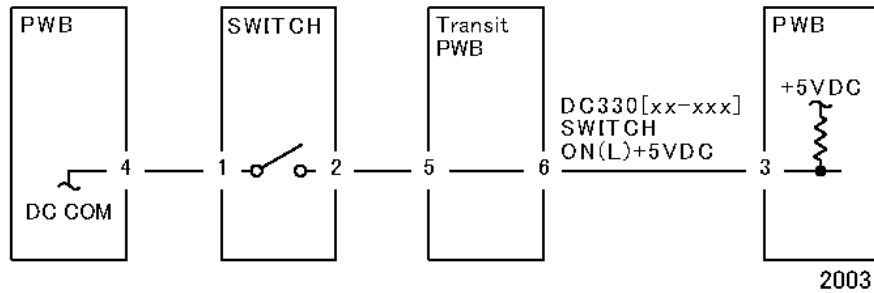


Figure 1 2003

Enter DC330[XXX-XXX]. Turn the switch ON. Is [LOW] displayed?

- Y N
 Is +5VDC measured between the switch pin-2 (+) and the GND (-) ?
 Y N
 Check the connection between the switch pin-2 and the PWB pin-3 for an open circuit and poor contact.
 If no problem is found, replace the PWB.
 Is +5VDC measured between the switch pin-1 (+) and the GND (-) ?
 Y N
 Replace the switch.
 Check the connection between the switch pin-1 and the PWB pin-4 for an open circuit and poor contact.
 If no problem is found, replace the PWB.

Turn the switch OFF. Is [HIGH] displayed?

- Y N
 Disconnect the switch connector. Is [HIGH] displayed?
 Y N
 Check the connection between the switch pin-2 and the PWB pin-3 for a short circuit.
 If no problem is found, replace the PWB.
 Replace the switch.

Check the installation of the switch.
 If no problems are found, replace the switch.

2.2.4.4 Solenoid/Clutch Not Energized Failure FIP

Procedure

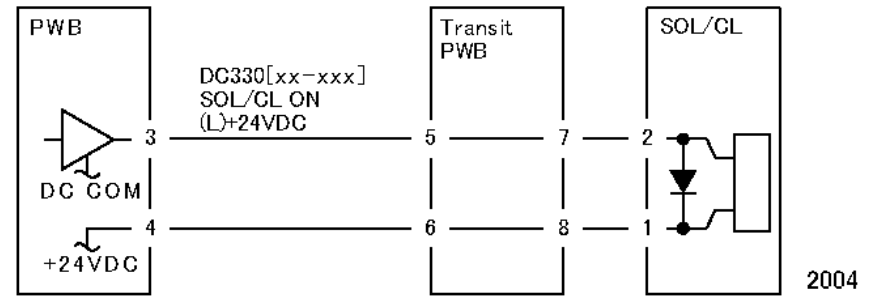


Figure 1 2004

NOTE: Before performing this FIP, ensure that there is no (mechanical) operation failure with the solenoid and the clutch.

Enter DC330[XXX-XXX] and turn it ON. Is +24VDC measured between the PWB pin-3 (+) and the GND (-)?

- Y N
 Is +24VDC measured between the solenoid/clutch pin-2 (+) and the GND (-) ?
 Y N
 Is +24VDC measured between the solenoid/clutch pin-1 (+) and the GND (-) ?
 Y N
 Check the connection between the PWB pin-4 and the solenoid/clutch pin-1 for an open circuit and poor contact.
 If no problem is found, replace the PWB.
 Replace the solenoid/clutch.
 Check the connection between the PWB pin-3 and the solenoid/clutch pin-2 for an open circuit and poor contact.
 Replace the PWB.

2.2.4.5 Solenoid/Clutch Left Energized Failure FIP

Procedure

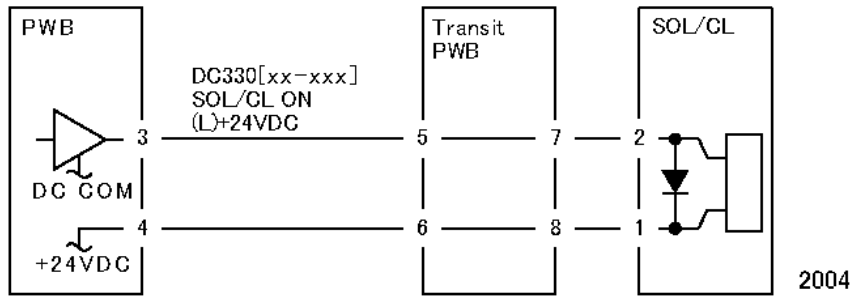


Figure 1 2004

Turn OFF the power.

Disconnect the PWB connector. **Is the resistance between the connector pin-3 and the frame 100hm or less?**

Y N
Replace the PWB.

Check the connection between the connector pin-3 and the solenoid/clutch pin-2 for a short circuit.

If no problems are found, replace the solenoid/clutch.

2.2.4.6 Motor Does Not Rotate Failure FIP

Procedure

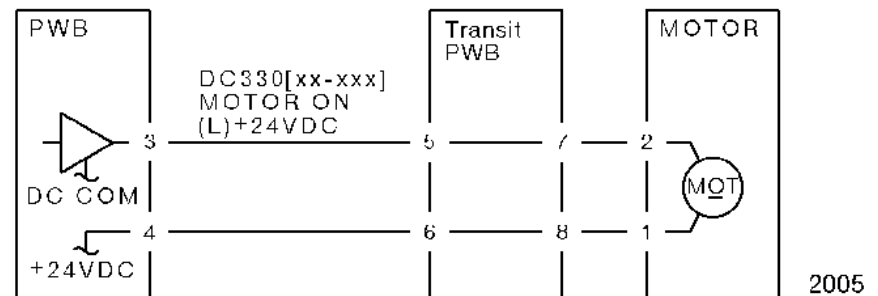


Figure 1 2005

NOTE: Before performing this FIP, ensure that the motor is not locked or loaded.

Enter DC330[XXX-XXX] and turn it ON.

Is +24VDC measured between the PWB pin-3 (+) and the GND (-) ?

Y N
Is +24VDC measured between the motor pin-2 (+) and the GND (-) ?

Y N
Is +24VDC measured between the motor pin-1 (+) and the GND (-) ?

Y N
Is +24VDC measured between the PWB pin-4 (+) and the GND (-) ?

Y N
Replace the PWB.

Check the connection between the PWB pin-4 and the motor pin-1 for an open circuit and poor contact.

Replace the motor.

Check the connection between the PWB pin-3 and the motor pin-2 for an open circuit and poor contact.

Replace the PWB.

2.2.4.7 Motor Left Running Failure FIP

Procedure

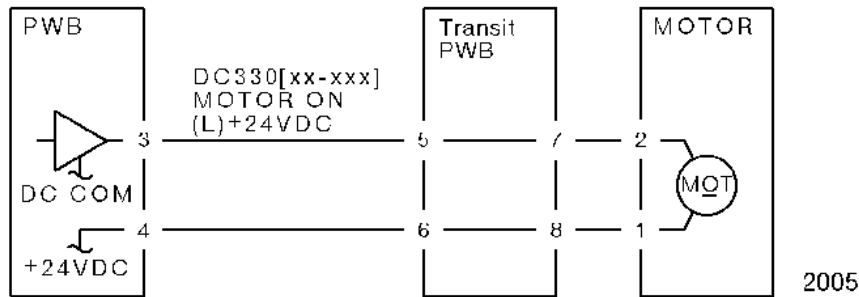


Figure 1 2005

Turn OFF the power. Disconnect the PWB connector. Is the resistance between the connector pin-3 and the frame 100hm or less?

Y N
 | Replace the PWB.

Check the connection between the connector pin-3 and the motor pin-2 for a short circuit. If no problems are found, replace the motor.

2.2.4.8 NIP/RELEASE SOLENOID Not Energized Failure FIP

Procedure

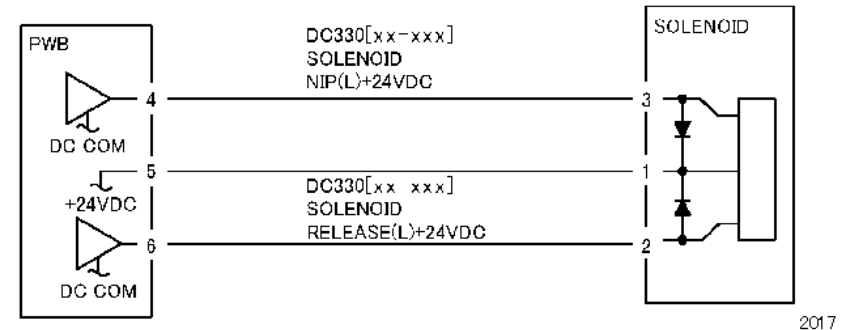


Figure 1 2017

NOTE: Before performing this FIP, ensure that there is no (mechanical) operation failure with the solenoid.

Is +24VDC measured between the NIP/RELEASE SOLENOID pin-1 (+) and the GND (-)?

Y N
 | Is +24VDC measured between the PWB pin-5 (+) and the GND (-)?
 Y N
 | Check the +24VDC inputs of the PWB. If no problem is found, replace the PWB.

Check the connection between the PWB pin-5 and the NIP/RELEASE SOLENOID pin-1 for an open circuit and poor contact.

Use the following FIP when there is a problem with the NIP.

Enter DC330[XXX-XXX] and turn the SOL NIP ON. Is +24VDC measured between the PWB pin-4 (+) and the GND (-)?

Y N
 | Enter DC330[XXX-XXX] and turn the SOL NIP ON. Is +24VDC measured between the NIP/RELEASE SOLENOID pin-3 (+) and the GND (-)?
 Y N
 | Replace the NIP/RELEASE SOLENOID.

Check the connection between the PWB pin-4 and the NIP/RELEASE SOLENOID pin-3 for an open circuit and poor contact.

Use the following FIP when there is a problem with the RELEASE.

Enter DC330[XXX-XXX] and turn the SOL RELEASE ON. Is +24VDC measured between the PWB pin-6 (+) and the GND (-)?

Y N
 | Enter DC330[XXX-XXX] and turn the SOL RELEASE ON. Is +24VDC measured between the NIP/RELEASE SOLENOID pin-2 (+) and the GND (-)?

A

Y

N

Replace the NIP/RELEASE SOLENOID.

Check the connection between the PWB pin-6 and the NIP/RELEASE SOLENOID pin-2 for an open circuit and poor contact.

Replace the PWB.

2.3.1 Interface (Physical/Logical)

1. Physical Interface Description

The following physical interfaces are supported.

- a. USB 2.0
- b. Ethernet (10BaseT, 100BaseTX) *1

*1: Has the features to automatically detect and switch the transmission speed (10Mbps, 100Mbps). Also, the transmission speed can be fixed by settings.

2. Logical Interface Description

It is possible to set whether to activate the system for each of the following logical interfaces.

Supported for receiving print jobs

- a. USB
- b. LPD
- c. Port9100

Supported for management interface

- a. SNMP
- b. CWIS

2.3.2 'Cannot connect to the network' or 'Print is not found from the PC'

Get 'NET Connection Diagram' and take actions by following the instructions in '2.3.5 Network-Related Details Check Flow' in this document, and then collect the following information:

- System Settings List
- Check the client settings (Output Port)
- Physical interface check
- Logical interface check
- Other connection environment check
 - Printer switching machine
 - Availability of printer buffer, etc.
 - HUB (Switch, Hub) used, etc.
- Network Capture Log

2.3.3 No output is available, no data is printed

Check whether or not the Controller Firmware and Printer Driver are the latest version. If it is not the latest, always upgrade the software. (See 2.4.1 Software Download.)

After checking the above items, check whether the Indicator is blinking and take the corrective actions accordingly.

1. When the Indicator (Panel Send/Receive Lamp) is blinking

It is highly possible that print data cannot be decomposed in the Printer main processor.

Perform the corrective actions according to '2.3.5 Network-Related Details Check Flow' in this document, and then collect the following information:

- System Settings Report
- Check the panel message (error message, etc).
- Error History Report
- Service Settings Report
- Job History Report
- Maintenance Report (CE)
- Check the Printer Driver name and version.
- Check the Printer Driver settings in details.
- Network Capture Log
- Create Print files on the PC and collect them on CD-R.

[How to Create Print file]

Method 1)

- a. Select [Print] from File menu in the target document.
- b. In [Print] screen, select the [Output to File] check box and click [OK].
If there is no [Output to File] check box displayed in the [Print] screen, create the file in Method 2.
- c. Enter a descriptive file name in 'File Name' using a customer name and date, and click [OK] to create a Print file in the specified destination.

Method 2)

- a. Open the Printer Driver Properties and select the [Ports] tab.
- b. In [Ports], select [FILE:] in the list and click [OK] to close the Properties screen.
Take note of the port setting before it was changed in [FILE:] in order to restore the port to original setting after creating a Print file.
- c. Select [Print] from File menu in the target document.
- d. The [Output to File] screen appears. Specify a storage destination and file name, and click [OK] to create a Print file in the specified destination.
- e. Restore the port to the original setting in the procedures a and b shown above.

2. When the Indicator (Panel Send/Receive Lamp) is not blinking

It is highly possible that connection is not established and hence print data has not reached the Printer main processor.

Obtain the information relevant to the items described in '2.3.2 Cannot connect to the network'.

2.3.4 Printing can be performed but abnormally

1. Check whether the Controller Firmware and Printer Driver are the latest version.
If it is not the latest, always upgrade the software. (See 2.4.1 Software Download.)
2. Ask a customer about the status of unavailable printing and collect information based on it.
 - System Settings List
 - Service Settings Report
 - Job History Report
 - Maintenance Report (CE)
 - Check the Printer Driver name and version.
 - Check the Printer Driver settings in details.
 - Print sample that has been printed improperly.
 - Print sample that has been printed properly (including the samples from other machines).
 - Create Print files on the PC and collect them on CD-R.

2.3.5 Network-Related Details Check Flow

2.3.5.1 Check Flow at TCP/IP (LPD) Failure

The following describes the possible causes and actions to take when a failure, such as being unable to obtain the desired printout or not being able to print at all, occurs when using TCP/IP (LPD).

For WindowsXP, Windows Server 2003, WindowsVista, Windows Server 2008, Windows7, and Windows Server 2008R2

Table 1

Cause	Check Method	Corrective Action
Incorrect IP address is set.	Ask the Network Administrator to check if the IP address set in this machine is correct.	Set a correct IP address in the machine.
A failure that cannot be repaired has occurred during printing.	Check if an error is displayed on the Operation Panel display.	Turn the power OFF then ON. Wait for the display to light off and turn ON the power again.
The printer driver attached to the machine is not used (a printer driver from other manufacturers is used).	Check if the printer driver that was provided with this machine has been selected.	Select the printer driver that was provided with this machine. If it is not found in the selection items, install and select the printer driver that was provided with this machine.

Precautions and Limitations

The following describes the precautions and limitations for TCP/IP (LPD).

1. Machine Settings
 - IP addresses are managed in a whole system. Consult with the Network Administrator thoroughly before perform setting.
 - Depending on the network environment, perform the subnet mask and gateway settings if necessary. Consult with the Network Administrator to set necessary settings.
2. Computer Settings
 - IP addresses are managed in a whole system. Consult with the Network Administrator thoroughly before perform setting.
 - To perform network settings (such as IP address), etc. on the host used under NIS (Network Information Service) management, consult with the NIS Administrator.

2.4.1 Software Download

Follow 'ADJ 18.2.3 Firmware Version Upgrade' in Service Manual to upgrade the Controller software to the latest version.

Chapter 3 Image Quality Troubleshooting

3 Image Quality Troubleshooting

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3.1.1 Composition of Chapter 3 Image Quality Troubleshooting

1. Chapter 3 Image Quality Troubleshooting is mainly composed of two sections: Test Pattern and Image Quality Troubleshooting.
2. The Test Pattern section contains the method to output the Built-in Test Patterns for the copy quality check.
3. The Image Quality Specifications section also contains [6.1.22 Alignment Specifications].
4. The Image Quality Troubleshooting section describes the causes of image quality failures and the troubleshooting procedure for them.

3.1.2 Test Pattern

The following are the test patterns that are used.

1. The copy quality check mainly uses the Test Pattern (Mono A3) (499T 00247).
2. For copy quality check, Standard paper is used.
3. The Built-in Test Patterns are stored in the following locations.
 - a. IOT ESS/MCU PWB
4. For the Test Patterns, refer to the following.
 - 6.5.2.9 Test Pattern Print

3.1.3 Things to Note when Replacing the Drum Cartridge

- This chapter contains the actions to take for resolving image quality problems as well as [Replacement of Drum Cartridge (PL 8.1) (REP 8.1.1)].

However, for this product, the child parts of the [Drum Cartridge] comprises the following spare parts.

1. Developer Unit (PL 8.4)
2. Drum (PL 8.5)

- If it had been determined from the problem symptom that it can be solved by changing a child parts, replace the child parts.

3.1.4 Image Quality Troubleshooting

Check the Defect Sample that is obtained during visit or the one that is provided by the customer and proceed with the appropriate IQ-FIP.

IQ1 IOT Image Quality Entry RAP

Initial Actions

Determine whether the image quality problem occurs in Copy Mode or Printer Mode. If the problem occurs in Copy Mode, go to [IQ2 IIT Image Quality Entry RAP].

Procedure

Determine the image quality problem and go to the relevant RAP.

Table 1

Image Quality Problem	Symptoms	RAP
Low Image Density	Overall low density of images.	IQ3 RAP
Wrinkled Image	The printed paper is creased, folded or torn.	IQ4 RAP
Residual Image (Ghosting)	Ghost images appear on the paper. Parts of the previous page or current page appear as ghost images on the paper.	IQ5 RAP
Background	The whole page or part of the page is contaminated by toner. The contamination appears as very light grayish color.	IQ6 RAP
Deletion	Part of the image is missing.	IQ7 RAP
Skew/Misregistration	Printed images are not parallel to the edges of the paper.	IQ8 RAP
Process Direction Bands, Streaks, and Smears	Black lines or blank areas running along the paper in vertical direction.	IQ9 RAP
Unfused Copy/Toner Off-set	Printed images are not properly fused onto the paper. When rubbed, the image comes off easily.	IQ10 RAP
Repeating Bands, Streaks, Spots, and Smear	Black lines or blank areas running along the paper in h.horizontal direction.	IQ11RAP
Mottle	Uneven printed image density.	IQ12 RAP
Spots	Toner spots and blank areas are spread irregularly over the whole page.	IQ13 RAP
Black Prints	Paper is printed completely black.	IQ14 RAP
Blank Image	Paper is printed completely white.	IQ15 RAP

IQ2 IIT Image Quality Entry RAP

Initial Actions

Clean the Platen Glass.

Procedure

Determine the image quality problem and go to the relevant RAP.

Table 1

Image Quality Problem	Symptoms	RAP
Low Image Density	Overall low density of images.	IQ3 RAP
Background	The whole page or part of the page is contaminated by toner. The contamination appears as very light grayish color.	IQ6 RAP
Process Direction Bands, Streaks, and Smears	Black lines or blank areas running along the paper in vertical direction.	IQ9 RAP
Repeating Bands, Streaks, Spots, and Smear	Black lines or blank areas running along the paper in h.horizontal direction.	IQ11RAP
Spots	Toner spots and blank areas are spread irregularly over the whole page.	IQ13 RAP
Black Prints	Paper is printed completely black.	IQ14 RAP

IQ3 Low Image Density RAP

Overall low density of images.

Procedure

Check for contamination on the Platen Glass. **The Platen Glass is clean.**

Y N
Clean any contamination on the Platen. If it is very dirty, replace the Top Cover (PL 1.2) (REP 1.2.1).

Check the drum ground contact point for contamination and distortion. **The drum ground contact point is clean and there is no distortion.**

Y N
Clean the drum ground contact point. Correct the distortion.

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Enter the Diag Mode and set '30' into Chain-Link 752-350. Then, set '10' into Chain-Link 752-230. Exit from the Diag Mode and make a printout.

If the problem reoccurs, enter the Diag Mode again, set '20' into Chain-Link 752-230, and make another printout. (The maximum value that can be set for 752-230 is '30').

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Print a page that is entirely black. During the print cycle, turn OFF the power after the feeding sound is heard. (i.e. forcing to stop the transfer in mid-progress). Check the surface of the Drum. **There is a considerable amount of toner left on the surface of the drum.**

Y N
Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

Replace the BTR Roll (PL 6.1) (REP 4.1.1), followed by the HVPS (PL 18.3) (REP 18.1.2) and the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ4 Wrinkled Image RAP

The printed paper is creased, folded or torn.

Procedure

Check the paper type. **Paper used is within specifications.**

Y N
Use paper within specifications.

Use paper from a freshly opened packet. **The problem reoccurs.**

Y N
End

Remove the Fusing Unit (PL 7.1) (REP 7.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Check for foreign substances and distortion in the paper transport path. **No distortion or foreign substances are found in the paper transport path.**

Y N
Remove the foreign substances. Correct the distortion.

Replace the Fusing Unit (PL 7.1) (REP 7.1.1).

IQ5 Residual Image(Ghosting)RAP

Ghost images appear on the paper. Parts of the previous page or current page appear as ghost images on the paper.

Procedure

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Remove the Fusing Unit (PL 7.1) (REP 7.1.1) and check the surface of the Heat Roll for contamination. **The surface of the Heat Roll is clean.**

Y N
| Clean away the contamination. If there is difficulty in removing the contamination, replace the Fusing Unit (PL 7.1) (REP 7.1.1).

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ6 Background RAP

The whole page or part of the page is contaminated by toner. The contamination appears as very light grayish color.

Procedure

Check for contamination on the Platen Glass. **The Platen Glass is clean.**

Y N
| Clean any contamination on the Platen. If it is very dirty, replace the Top Cover (PL 1.2) (REP 1.2.1).

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N
| Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Remove the HVPS and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ7 Deletion RAP

Part of the image is missing.

Procedure

Check the paper type. **Paper used is within specifications.**

Y N
| Use paper within specifications.

Use paper from a freshly opened packet. **The problem reoccurs.**

Y N
| End

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Check the surface of the BTR for distortion. **There is no distortion on the surface of the BTR.**

Y N
| Replace the BTR Roll (PL 6.1) (REP 4.1.1).

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ8 Skew/Misregistration RAP

Printed images are not parallel to the edges of the paper.

Procedure

Check the location where the machine is installed. **The machine is installed on a stable level surface.**

Y N
| Install the machine on a stable level surface.

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Check the installation of the Paper Cassette. **The Paper Cassette is installed correctly.**

Y N
| Install the Paper Cassette properly.

Check for distortion in the paper transport path. **There is no distortion in the paper transport path.**

Y N
| Correct the distortion or replace the distorted part.

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ9 Process Direction Bands,Streaks,and Smears RAP

Black lines or blank areas running along the paper in vertical direction.

Procedure

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N
| Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Check for contamination in the paper transport path. **The paper transport path is clean.**

Y N
| Clean away the contamination.

Remove the Fusing Unit (PL 7.1) (REP 7.1.1) and check the surface of the Heat Roll for contamination. **The surface of the Heat Roll is clean.**

Y N
| Clean away the contamination. If there is difficulty in removing the contamination, replace the Fusing Unit (PL 7.1) (REP 7.1.1).

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N
| Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Check the IIT Carriage. **There are no damages on the IIT Carriage.**

Y N
| Replace the IIT Carriage (PL 1.3) (REP 1.3.2).

Check the ROS Window for scratches and contamination. **The ROS Window is clean and there are no scratches.**

Y N
| Clean the ROS Window. If there are scratches, replace the ROS Window.

Replace the ROS Assembly (PL 2.1) (REP 2.1.1) and the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ10 Unfused Copy/Toner Offset RAP

Printed images are not properly fused onto the paper. When rubbed, the image comes off easily.

Procedure

Check the paper type. **Paper used is within specifications.**

Y N
| Use paper within specifications.

Use paper stored under room conditions. **The problem reoccurs.**

Y N
| End

Check the power supply voltage. **The voltage is within the specified range.**

Y N
| Connect a power supply with voltage within the specified range.

Remove the Fusing Unit (PL 7.1) (REP 7.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
| End

Check the fusing temperature using the Diagnostics. **A normal fusing temperature is set.**

Y N
| Set a normal fusing temperature.

Replace the Fusing Unit (PL 7.1) (REP 7.1.1).

IQ11 Repeating Bands,Streaks,Spots,and Smears RAP

Black lines or blank areas running along the paper in h.horizontal direction.

Procedure

Check the operating parts of the IIT Carriage for foreign substances and distortion. **No distortion or foreign substances are found in the operating parts of the carriage.**

Y N

Remove the foreign substances. If the Pulley, Shaft, IIT Carriage Belt (PL 1.3) (REP 1.3.2), etc. is deformed, replace it.

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N

Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Check the pitch of the black lines or blank areas. **The pitch of the black lines is approx. 78 mm (Heat Roll circumference).**

Y N

Clean the Heat Roll. If there is difficulty in removing the contamination, replace the Fusing Unit (PL 7.1) (REP 7.1.1).

Replace the ROS Assembly (PL 2.1) (REP 2.1.1), followed by the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ12 Mottle RAP

A phenomenon where an uneven density is occurring in the high density patch image.

Procedure

Check the paper type. **Paper used is within specifications.**

Y N

Use paper within specifications.

Use paper from a freshly opened packet. **The problem reoccurs.**

Y N

End

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N

Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Remove the HVPS and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ13 Spots RAP

Toner spots and blank areas are spread irregularly over the whole page.

Procedure

Check for contamination on the Platen Glass. **The Platen Glass is clean.**

Y N
Clean any contamination on the Platen. If it is very dirty, replace the Top Cover (PL 1.2) (REP 1.2.1).

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Check the surface of the BTR for contamination and distortion. **The surface of the BTR is clean and there is no distortion.**

Y N
Clean the BTR. If there is distortion, replace the BTR Roll (PL 6.1) (REP 4.1.1).

Check for contamination in the paper transport path. **The paper transport path is clean.**

Y N
Clean away the contamination.

Remove the Fusing Unit (PL 7.1) (REP 7.1.1) and check the surface of the Heat Roll for contamination. **The surface of the Heat Roll is clean.**

Y N
Clean away the contamination. If there is difficulty in removing the contamination, replace the Fusing Unit (PL 7.1) (REP 7.1.1).

Check the paper type. **Paper used is within specifications.**

Y N
Use paper within specifications.

Use paper from a freshly opened packet. **The problem reoccurs.**

Y N
End

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ14 Black Prints RAP

Paper is printed completely black.

Procedure

Check the operating parts of the IIT Carriage for foreign substances and distortion. **No distortion or foreign substances are found in the operating parts of the carriage.**

Y N
Remove the foreign substances. If the IIT Carriage (PL 1.3) (REP 1.3.2), IIT Carriage Belt (PL 1.3) (REP 1.3.2), etc. is deformed, replace it.

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Remove the HVPS (PL 18.3) (REP 18.1.2) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N
End

Check the connection of the HVPS P/J500 and ESS/MCU PWB P/J402 connectors. **The connectors are connected correctly.**

Y N
Connect the connector cable securely.

Check the connection between J500-7 and J402-8 for open circuit and short circuit. **The connection between J500-7 and J402-8 is conducting normally with no open circuit and no short circuit.**

Y N
Repair the open circuit or short circuit.

Check the connection between the ROS Assembly (PL 2.1) (REP 2.1.1) and the ESS/MCU PWB (PL 18.3) (REP 18.3.2) for open circuit and short circuit. The connections between the ROS J140 and the ESS/MCU PWB J410, as well as **between the ROS J130 and the ESS/MCU J410 are conducting normally with no open circuits and no short circuits.**

Y N
Repair the open circuit or short circuit.

Replace the ROS Assembly (PL 2.1) (REP 2.1.1), followed by the HVPS (PL 18.3) (REP 18.1.2) and the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

IQ15 Blank Image RAP

Paper is printed completely white.

Procedure

Check the installation of the ROS Assembly. **The ROS Unit is installed correctly.**

Y N

Install the ROS Assembly (PL 2.1) (REP 2.1.1) correctly.

Check the drum ground contact point for contamination and distortion. **The drum ground contact point is clean and there is no distortion.**

Y N

Clean the drum ground contact point. Correct the distortion.

Remove the Drum Cartridge (PL 8.1) (REP 8.1.1) and reinstall it. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Install the new Drum Cartridge (PL 8.1) (REP 8.1.1) securely. Turn the power OFF then ON and print. **The problem reoccurs.**

Y N

End

Print a page that is entirely black. During the print cycle, turn OFF the power after the feeding sound is heard. (i.e. forcing to stop the transfer in mid-progress). Check the surface of the Drum. **There is a considerable amount of toner left on the surface of the drum.**

Y N

Check the connection of the P/J140, P/J410, P/J160, and P/J411 connectors. **The connectors are connected correctly.**

Y N

Connect the connector cable securely.

Check the installation of the ROS Assembly (PL 2.1) (REP 2.1.1). **The ROS Assembly is installed securely.**

Y N

Install the ROS Assembly (PL 2.1) (REP 2.1.1) securely.

Measure the voltage between the ESS/MCU PWB (PL 18.3) (REP 18.3.2) P410 pin-1 and pin-2. **The voltage is +5VDC.**

Y N

Replace the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

Check the connection between J140 and J410 for open circuit and short circuit. **The connection between J140 and J410 is conducting normally with no open circuit and no short circuit.**

Y N

Repair the open circuit or short circuit.

Replace the ROS Assembly (PL 2.1) (REP 2.1.1), followed by the ESS/MCU PWB (PL 18.3) (REP 18.3.2).

A

Replace the BTR Roll (PL 6.1) (REP 4.1.1), followed by the HVPS (PL 18.3) (REP 18.1.2) and the ESS/MCU PWB (PL 18.3) (REP 18.3.2)).

A

3.3.1 IOT Image Defect Sample

This section describes some Defect Samples and the actions to be taken in case of the following IOT problems:

- IDS1 Auger Mark
- IDS2 Strobing (27 mm or 13.5 mm Pitch Density)
- IDS3 White Streaks (Process Direction)
- IDS4 Black Bands
- IDS5 Toner Contamination
- IDS6 Toner Splattering
- IDS7 White Spots (Irregular)
- IDS8 Regular Blank Areas in Process Direction (Spots, Streaks, Bands etc.)
- IDS9 Regular Toner Contamination in Process Direction (Spots, Streaks, Bands etc.)
- IDS10 Regular Toner Contamination in Process Direction (Side 2)

3.3.2 IIT Image Defect Sample

This section describes some Defect Samples and the actions to be taken in case of the following IIT problems:

- IDS11 Moire Due to Interference With Copy Documents
- IDS12 Light Background Due to Background Suppression in Copies of Documents With Frames
- IDS13 Background Smear When Using Platen Copy With Non-Standard Documents
- IDS14 Fluctuation In Background Suppression Values for Copies of Documents With Medium Density
- IDS15 Defects Related To Scan Print
- IDS16 Cold Start Dew
- IDS17 Static Electricity Offset [occurs after approx. 80 mm (the Heat Roll cycle)]

IDS1 Auger Mark

NOTE: This may occur immediately after a new CRU is installed.-> Correct this by feeding a few sheets of paper.

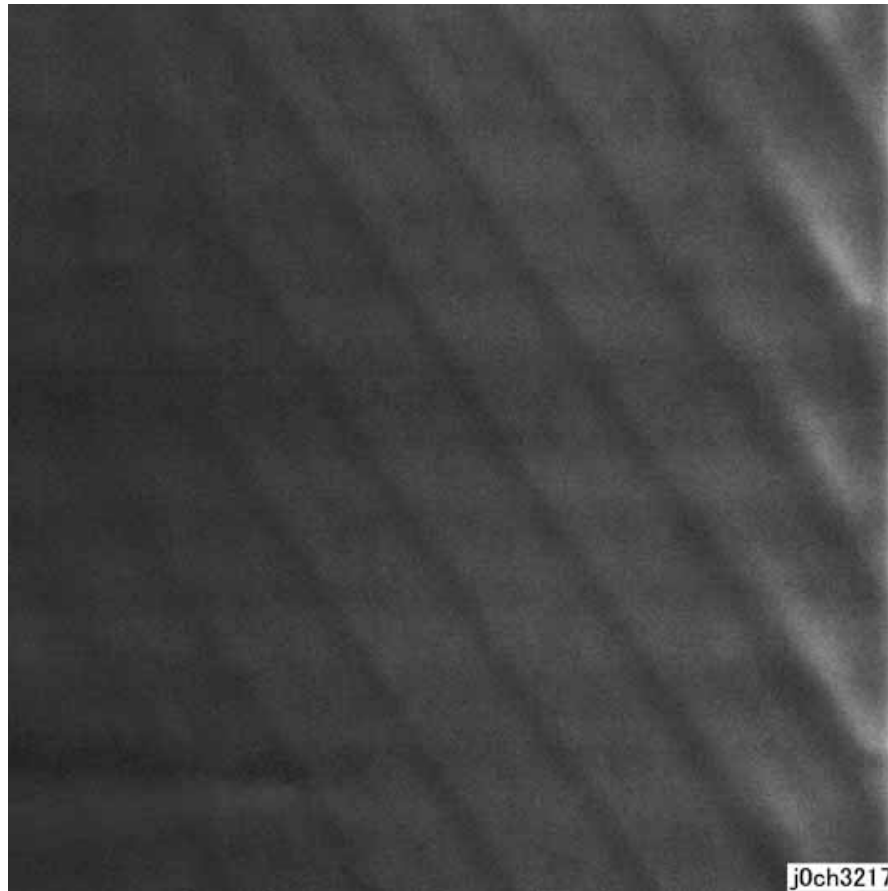


Figure 1 Auger Mark Defect Sample (j0ch3217)

Cause

1. The Developer Magnetic Roll magnetic field failed.
2. There was a drop in the level of developing powder.

Action

1. Replenish the Developer (PL 8.6)

NOTE: Approx. 10 g (the maximum is 30 g)

2. Replace the Developer (PL 8.6)
3. Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)

IDS2 Strobing (27mm or 13.5mm Pitch Density)

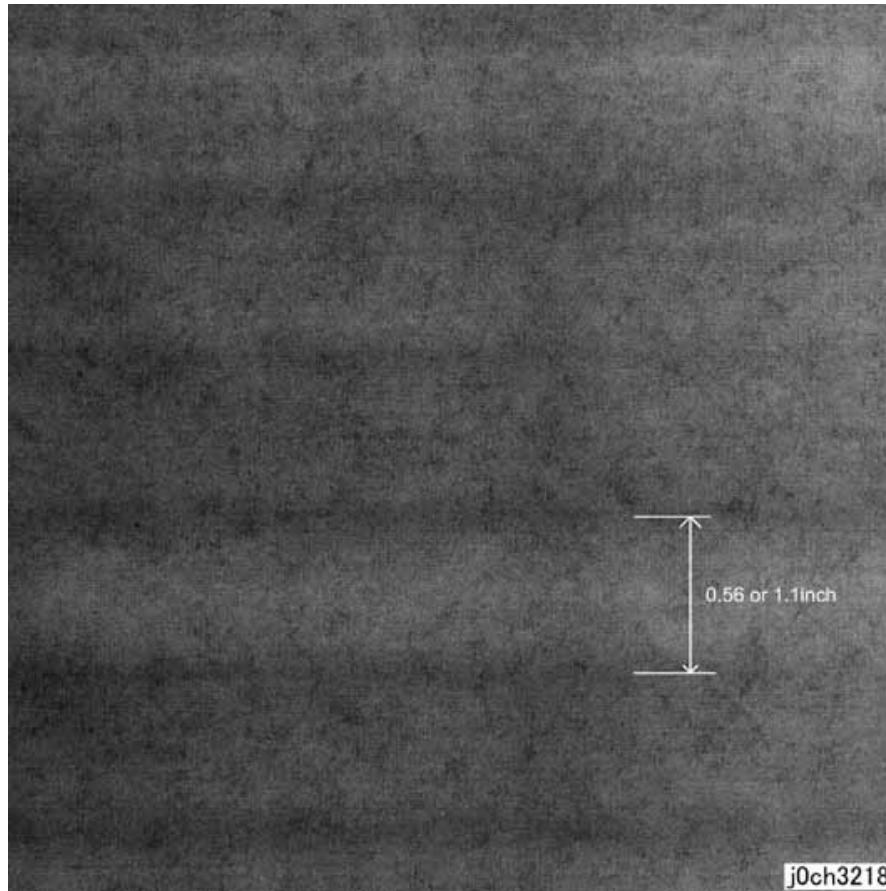


Figure 1 Strobing (27 mm or 13.5 mm Pitch Density) Defect Sample (j0ch3218)

Cause

1. Developer Magnetic Roll bias.

Action

1. Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)

IDS3 White Streaks (Process Direction)

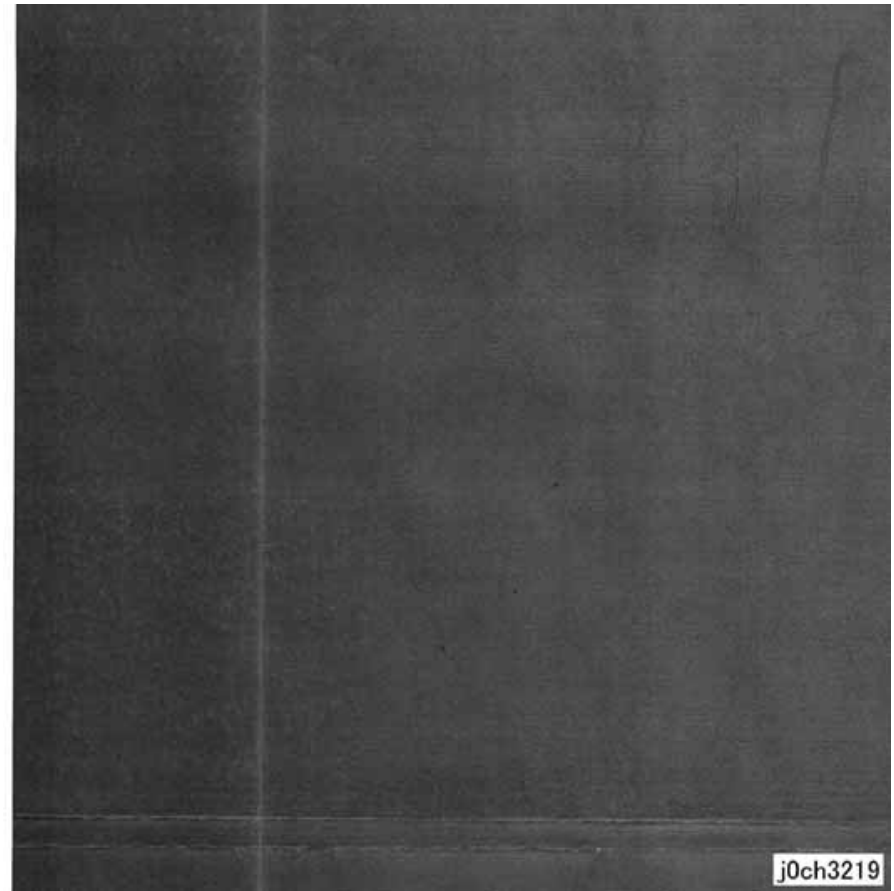


Figure 1 White Streaks (Process Direction) Defect Sample (j0ch3219)

Cause

1. Foreign substances are blocking the ROS Laser.
2. Developing powder clogging on the Developer Magnetic Roll due to foreign substances.

Action

1. Clean the light path and the seal glass between the ROS Assembly (PL 2.1) (REP 2.1.1) and the Drum Cartridge (PL 8.1) (REP 8.1.1).
2. Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)

IDS4 Black Bands

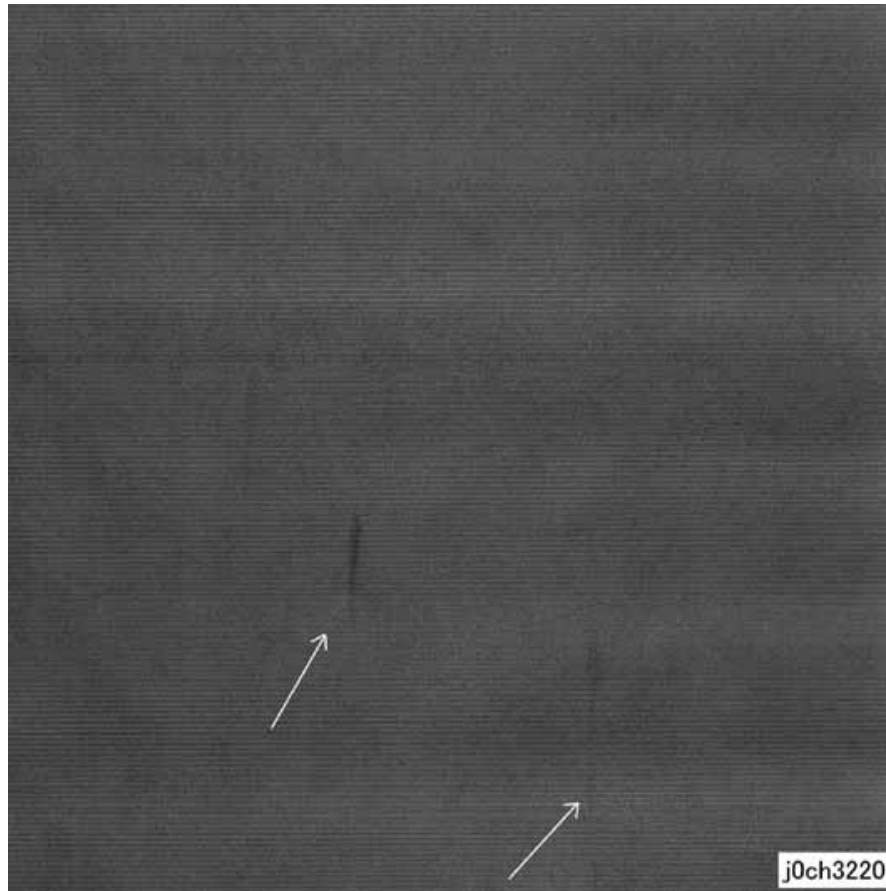


Figure 1 Black Bands Defect Sample (j0ch3220)

Cause

1. The developing powder is not well mixed.

Action

1. Mix the developing powder by processing blank paper.

IDS5 Toner Contamination

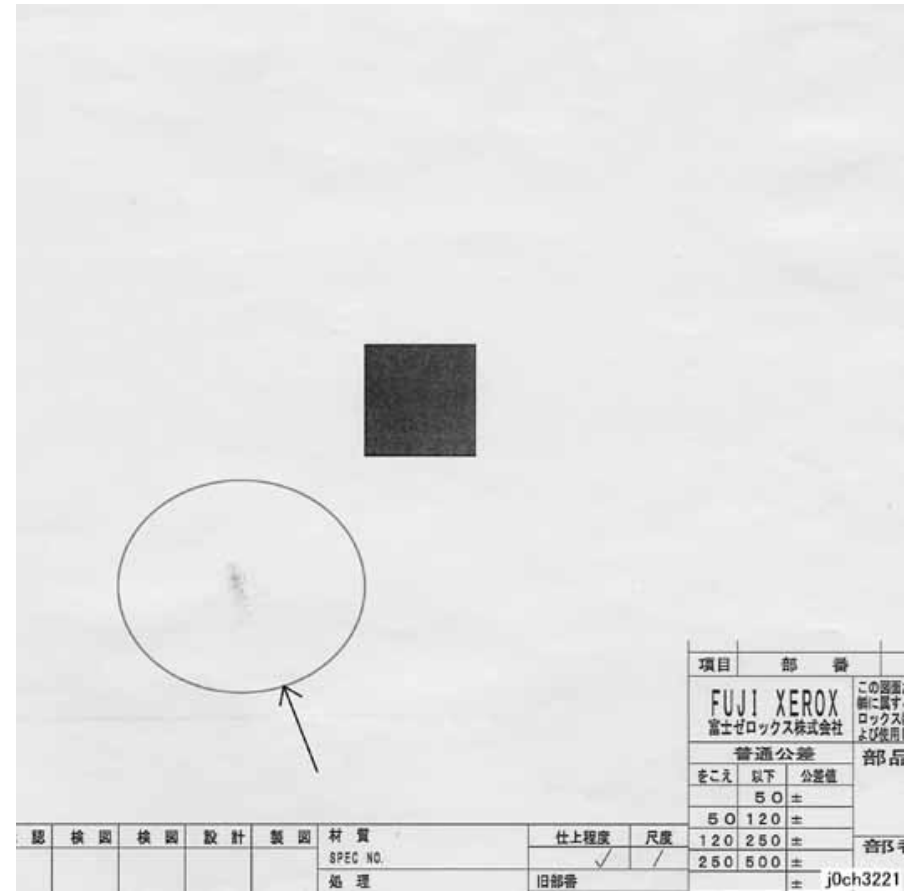


Figure 1 Toner Contamination Defect Sample (j0ch3221)

Cause

1. Cloud toner dropped from the XERO/DEVE Cartridge.

Action

1. Mix the developing powder by feeding blank paper.
2. Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)

IDS6 Toner Splattering



Figure 1 Toner Splattering Defect Sample (j0ch3222)

Cause

1. Paper size mismatch occurred (tray settings and paper size are different).
2. The resistance of the paper increased under dry conditions.

Action

1. Check the tray settings.
2. Use paper from a freshly opened packet.

IDS7 White Spots (Irregular)

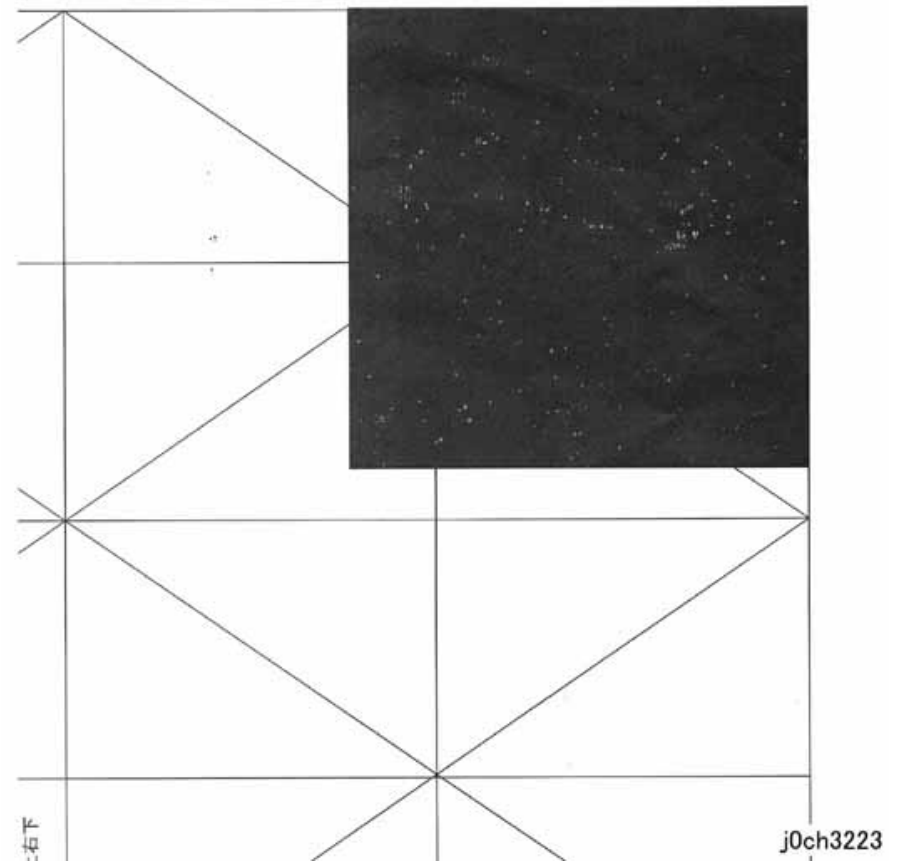


Figure 1 White Spots (Irregular) Defect Sample (j0ch3223)

Cause

1. The resistance of the paper increased under dry conditions.

Action

1. Use paper from a freshly opened packet.

IDS8 Regular Blank Areas In Process Direction (Spots, Streaks, Bands etc.)

- 2,3: Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)

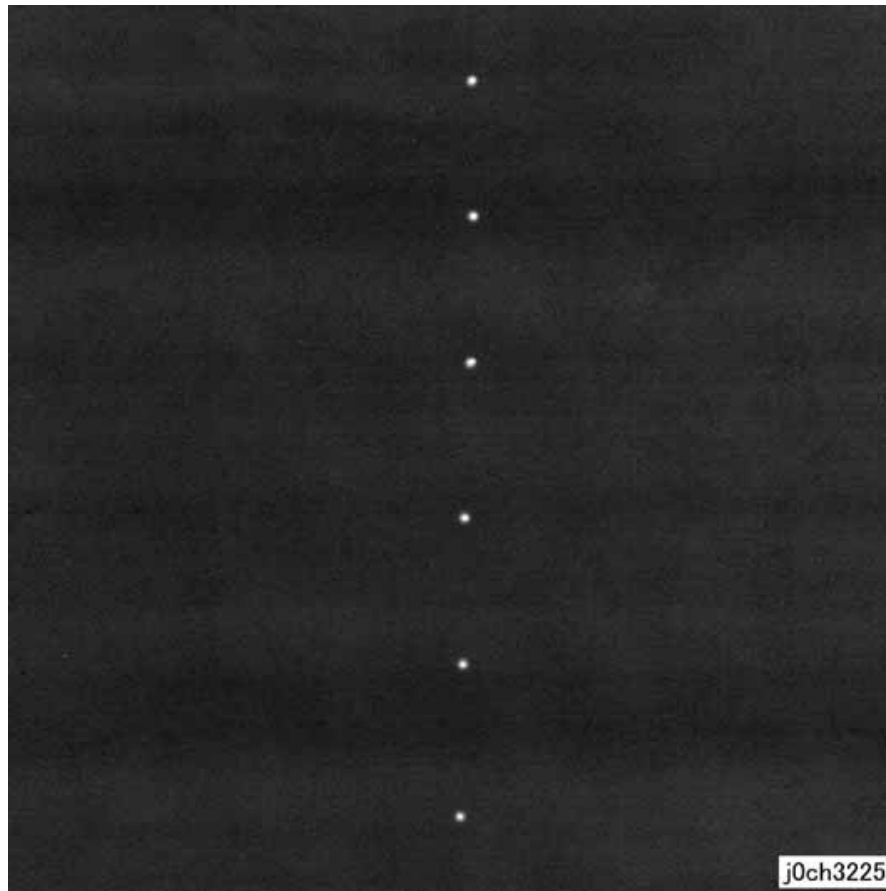


Figure 1 Regular Blank Areas In Process Direction (Spots, Streaks, Bands etc.) Defect Sample (j0ch3225)

Cause

- 94 mm pitch -> Drum: Scratches or foreign substances
- 27 mm pitch -> Magnetic Roll: Developing powder stuck on the Magnetic Roll
- 44 mm pitch -> BCR: Scratches or foreign substances
- 80 mm pitch -> Heat Roll: Scratches or foreign substances

Action

- 1,4: Clean or replace the Drum Cartridge (PL 8.1) (REP 8.1.1)/Fusing Unit (PL 7.1) (REP 7.1.1)

IDS9 Regular Toner Contamination In Process Direction (Spots, Streaks, Bands etc.)

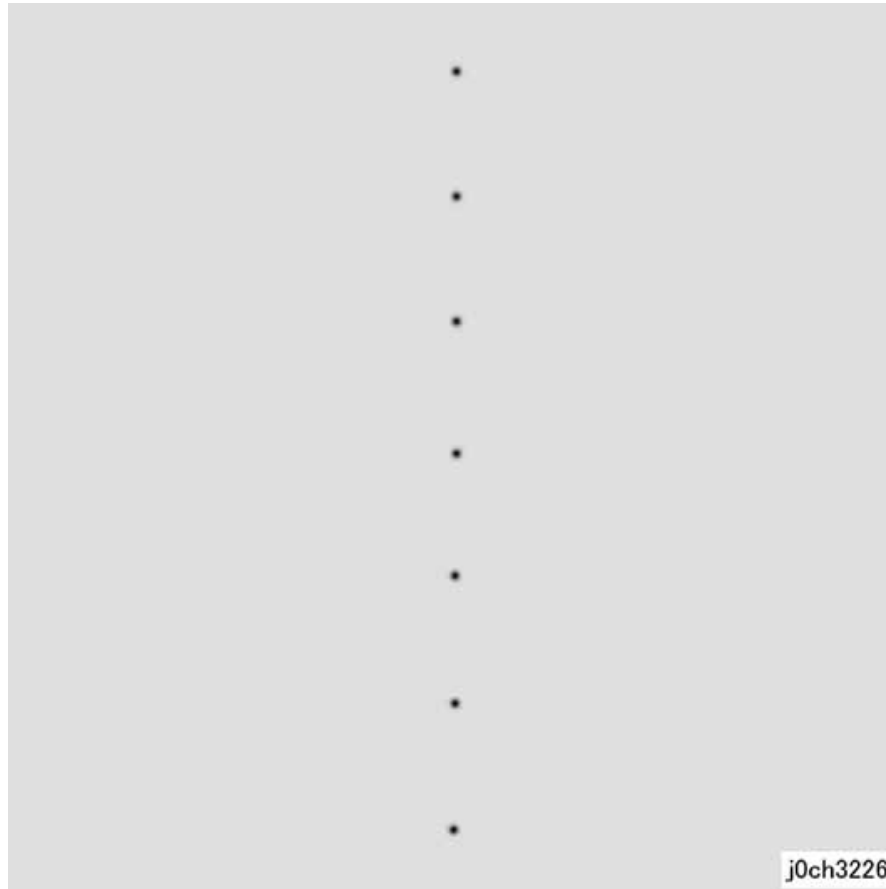


Figure 1 Regular Toner Contamination In Process Direction (Spots, Streaks, Bands etc.)
Defect Sample (j0ch3226)

Cause

1. 94 mm pitch -> Drum: Scratches or foreign substances
2. 27 mm pitch -> Magnetic Roll: Developing powder stuck on the Magnetic Roll
3. 38 mm pitch -> BCR: Scratches or foreign substances
4. 79 mm pitch -> Heat Roll: Scratches or foreign substances
5. 47 mm pitch -> Heat Roll (Fusing Unit): Contamination
6. 63 mm pitch -> Registration Roll: Contamination
7. 47 mm pitch -> If this occurs during Duplex feed - Duplex Roll 1, Duplex Roll 2: Contamination

Action

1. 1,4,5,6: Clean or replace the Drum Cartridge (PL 8.1) (REP 8.1.1)/Fusing Unit (PL 7.1) (REP 7.1.1)
2. 2,3: Replace the Drum Cartridge (PL 8.1) (REP 8.1.1)
3. 7: Clean or replace the Duplex Roll1, Duplex Roll 2 (PL 14.4)

IDS10 Regular Toner Contamination In Process Direction (Side 2)



j0ch3227

Figure 1 Regular Toner Contamination In Process Direction (Side 2) Defect Sample
(j0ch3227)

Cause

1. 94 mm pitch -> Pressure Roll (Fusing Unit): Scratches or foreign substances
2. 50 mm pitch -> BTR: Contamination, scratches or paper size mismatch
3. 38 mm pitch -> BCR: Contamination

Action

1. 1,2,3: Clean or replace the relevant parts.
2. 2: Paper Tray Settings

IDS11 Moire Due to Interference With Copy Documents

Cause

When copying, interference with the document may cause moire. Combinations of certain angles of screen ruling near 150 dpi and Reduce/Enlarge ratio may cause moire. Moire is more likely to occur during reduction rather than enlargement.

Action

1. Reduce sharpness.
 - a. Use KO to change the Sharpness of Copy Settings from '2' (default) to '1' or '0'.

NOTE: Secondary defect: Text is blurred.

2. Make copies at a different Reduce/Enlarge ratio.
3. Change the orientation of the document.
4. The moire occurrence frequency for each of the Document Mode are ranked as follows.
 - Text > Photo & Text > Photo Mode

NOTE: However, changing the screen of Photo Mode to dither will increase its moire occurrence frequency.

To change the screen of Photo Mode:

Chain-Link: 680-425

0 : Error Diffusion (Default)

1 : Dither

IDS12 Light Background Due to Background Suppression in Copies of Documents With Frames

For documents with dark frames along the Lead Registration Edge, the suppression value is set so large such that areas of medium density appear extremely light.

Action

1. Use KO to change the Background Suppression of Copy Settings to OFF.

extremely light



Figure 1 Light Background Due to Background Suppression in Copies of Documents With Frames Defect Sample (j0lj3229)

Cause

Background Suppression performs background detection of images at a distance of up to 10 mm from the Lead Registration Edge. As there were dark frames along the Lead Registration Edge, it could not detect the original background density, which resulted in the Background Suppression being performed based on the density of the frames.

IDS13 Background Smear When Using Platen Copy With Non-Standard Documents

When the document size is non-standard and the specified scan size is larger than the document size, smear might be generated depending on the background density of the document.

Cause

For cases where the document size is smaller than the scan size, the density of the back of the platen is detected as the background density of the document as the actual scan area includes the back of the platen.

Action

- This can be improved by performing density adjustment.

IDS14 Fluctuation In Background Suppression Values for Copies of Documents With Medium Density

When Automatic Exposure is enabled for documents with medium density background (0.5G), the effectiveness fluctuates for each job.

Cause

As medium density (0.5G) is near the upper limit value for background detection, the Background Suppression value fluctuates according to the result of background detection that varies according to the variations in the density of the document and how the document is placed.

Action

1. Use KO to change the Background Suppression of Copy Settings to OFF.

IDS15 Defects Related To Scan Print

Moire may occur when printing out the scanned images.

Cause

This occurs due to interference between the document, as well as the printer screen and the printer driver resolution conversion process.

Action

1. Reduce sharpness.
 - a. Use KO to change the Sharpness of Copy Settings from '2' (default) to '1' or '0'.

NOTE: Secondary defect: Text is blurred.
2. If the Scan resolution is 600 dpi, change it to a lower resolution (200 dpi or 300 dpi).
3. This is the same for FC Scan.
However, as the Output Color selection consists of 200 dpi and 300 dpi only, change it to 200 dpi if the moire occurs at 300 dpi.

IDS16 Cold Start Dew

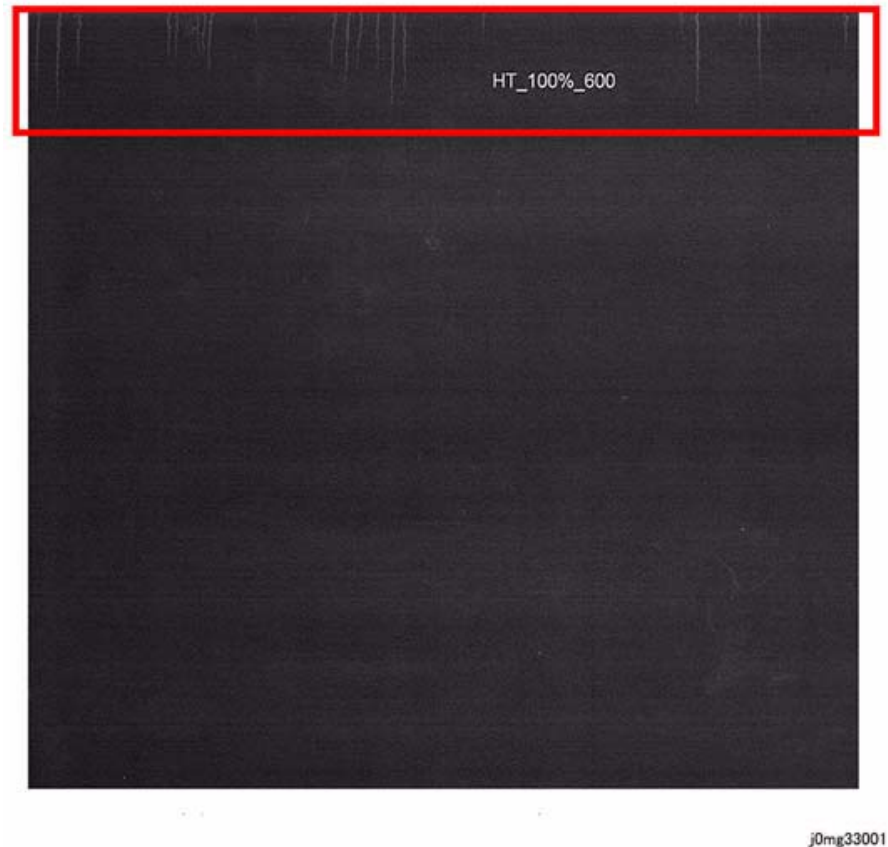


Figure 1 Cold Start Dew (jomg33001)

Cause

1. Cold Start Dew

Action

1. Change the NVM: 744-029 from "0" to "99" only.

IDS17 Static Electricity Offset

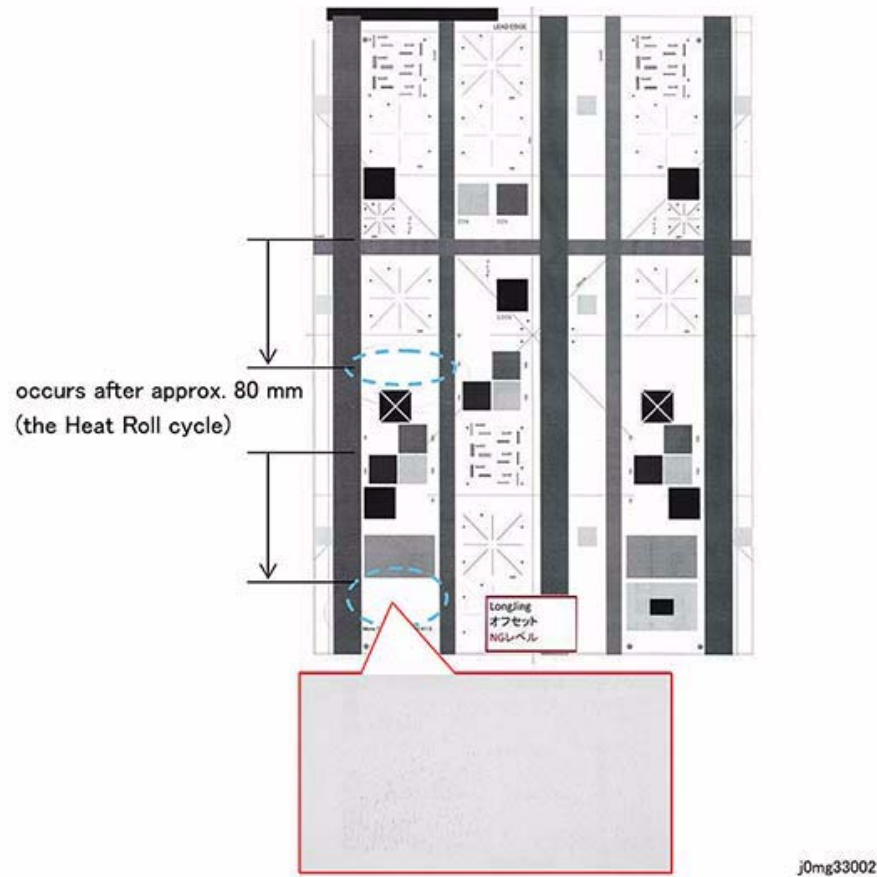


Figure 1 Static Electricity Offset (j0mg33002)

Cause

1. When the [paper with low moisture content] is about to be inserted into the [Fusing Unit] for Side 2, the offset will deteriorate.

Action

1. Adjust the NVM 744-079.

NOTE:

NVM 744-079 is [Paper Type Duplex All Temperature Reduction Control Application Switch].

- '0' is OFF, '1' is ON
- bit 0: Plain 1, bit 1: Plain 2, bit 2: Heavyweight, bit 3: Extra Heavyweight, bit 4: Lightweight
- The default is '0' (All OFF)

Example:

- When the NVM [Apply Offset Countermeasure to Paper Type] is '00011' (binary).
(Plain 1: ON, Plain 2: ON, Heavyweight: OFF, Extra Heavyweight: OFF, Lightweight: OFF)
It converts to '3' in decimal notation.

Hence, setting the NVM [Apply Offset Countermeasure to Paper Type] to '3' results in:

- a. The [Duplex All Temperature Reduction Control] will only be applied during a Duplex print that uses Plain 1 or Plain 2.
- b. This [Duplex All Temperature Reduction Control] will not be applied for Heavyweight, Extra Heavyweight, or Lightweight.

3.4 Fusing Unit Paper Wrinkle Alignment Adjustment

[Procedure]

1. Installation/removal of Adjustment Bracket
 - a. Remove the Fusing Unit.
 - b. Remove the front screw of the Adjustment Bracket at the front.

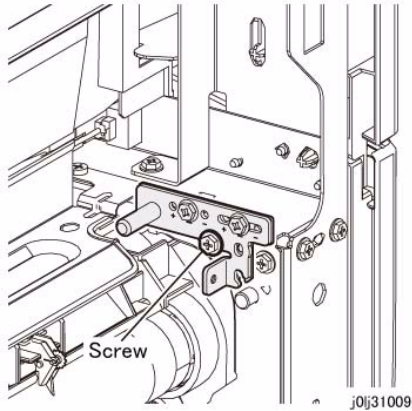


Figure 1 j0lj31009

2. Assembly of Adjustment Bracket
 - a. Parts Configuration
 - At shipment (+/- 0 mm): Triangle mark

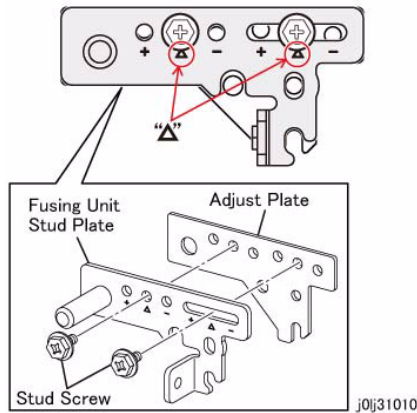


Figure 2 j0lj31010

- b. Depending on the case, assemble the Fusing Unit Stud Plate and the Adjust Plate such that the surface with the triangle marks (+, -) is at the top.
 - Plus (+0.5 mm) state: '+' mark

Minus (-0.5 mm) state: '-' mark

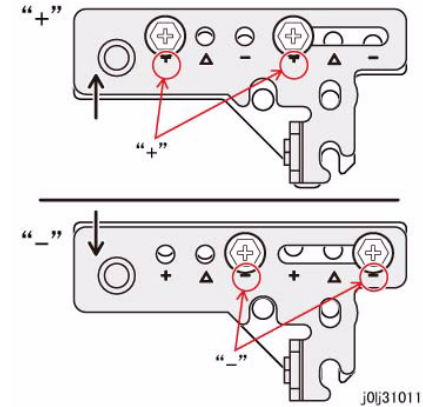
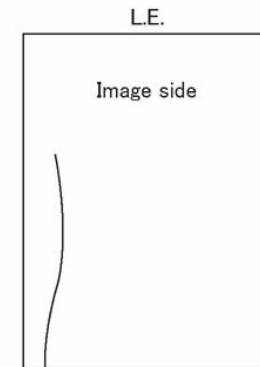


Figure 3 j0lj31011

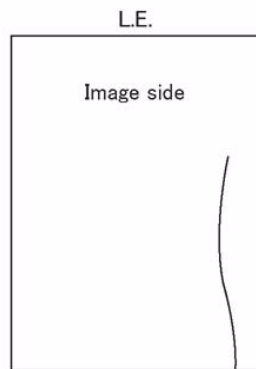
3. Adjustment Method
 - a. If the wrinkle is at the front, use '-'



j0rk31012

Figure 4 j0rk31012

- b. If the wrinkle is at the rear, use '+'.



j0rk31013

Figure 5 j0rk31013

4. Usage flow of the Alignment Adjustment Bracket

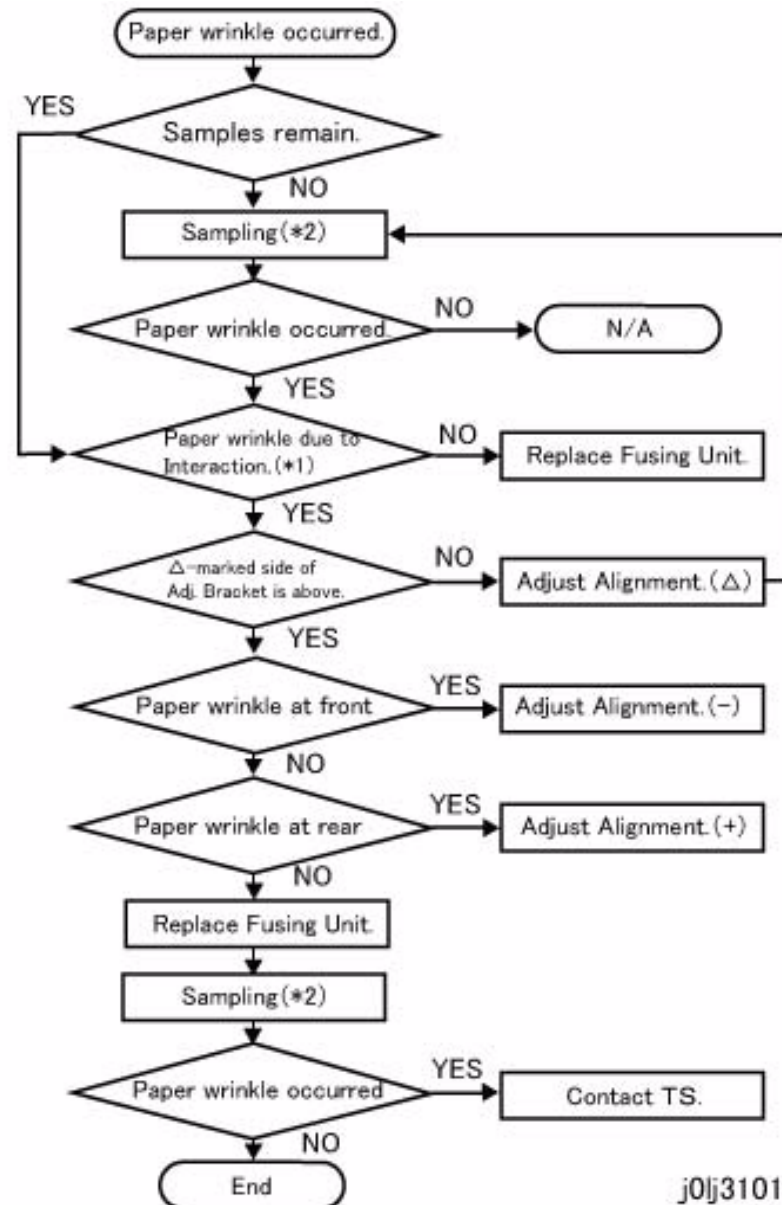
NOTE: Use this when paper wrinkles (*1) has been generated due to interaction.

a. Paper wrinkle due to interaction

- Paper wrinkle due to interaction between the Fusing Unit, Transfer, and Regi
- Cause: The positional relation between the various Sub Rolls is wrong, which degenerates the transport form of the paper and results in wrinkles being generated in the Fusing Unit.

b. *2: Sampling

- Paper: A3 SEF
- Pattern: Half Tone K50%
- No. of sheets: Simp 5 sheets



j0lj31014

Figure 6 j0lj31014

3.5 Cycle Table

Table 1

Item	Module	Name	Diameter (mm)	Pitch (mm)
1	PH	Regi Roll	20	63
2	DEVE	Mag Roll	16	27*1 13.5 (half-pitch)
3	XERO	BCR	12	38
4		DRUM(OPC)	30	94
5		BTR	16	50
6	Fusing Unit	Heat Roll	25	79
7		Pressure Roll	30	94
8		Exit Roll	15	47

*1: This is $50.24/1.86=27$ mm because the rotation is at 1.86 times the peripheral speed.

Chapter 4 Repairs and Adjustments

4 Repairs and Adjustments

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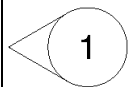
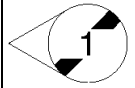
4.1 Introduction

This section contains procedures required for parts disassembly, assembly, replacement and adjustment in the field service.

4.1.1 How to Use the Disassembly/Assembly and Adjustment

1. For installation procedures, only NOTES are described here since installation procedures are the reverse of removal ones.
2. (Figure X) at the beginning of a procedure indicates that its detailed steps are shown in illustration. Numbers in the illustration indicate the sequence of the steps.
3. (REP X.X.X) at the end of a procedure indicates the replacement procedure to be referred to.
4. Item numbers of disassembly/assembly and adjustment procedures (i.e. REP/ADJ No.) correlate to PL No. in Chapter 5 Parts List. Therefore, an appropriate replacement or adjustment procedure can easily be referred to a PL No. or vice versa. E.g. The replacement or adjustment procedure of Component PL 1.1 is REP 1.1.X or ADJ 1.1.X.
5. When replacement/adjustment procedures or title items vary by modification or model, the modification number or the model are indicated at the beginning or the end of the respective titles or procedures.
 - E.g. 1) REP X.X.X Main PWB [Models with 1V]
 - *Indicates that the entire procedure under this title applies to machines with Tag 1V.
 - E.g. 2)

Table 1

Symbol	Description
 <p>Figure 1 400 1</p>	Illustration 1: Indicates that a specific part has been modified by the tag number within the circle.
 <p>Figure 2 400 2</p>	Illustration 2: Indicates that the configuration of the part shown is the configuration before the part was modified by the number within the circle.

6. Positions or directions of the machine and directions inside the machine used in the procedure are defined as listed below.
 - a. Front: Front of the machine
 - b. Right: Right-hand side when facing the front of the machine.

- c. Left: Left-hand side when facing the front of the machine.
- d. Rear: Rear when facing the front of the machine.

4.1.2 Terms and Symbols

The terms and symbols used throughout this manual are explained here.

WARNING

Indicates an imminently hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

WARNING

Indicates a potentially hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

CAUTION

Indicates a potentially hazardous situation, such as injury if operators do not handle the machine correctly by disregarding the statement.

- Note: Used when work procedures and rules are emphasized.
Used to alert you to a procedure, if not strictly observed, could result in damage to the machine or equipment.
- Refer: Used when other explanations are given.
- Purpose: Used to explain the purpose of adjustment.
- Important Information Stored Component (ISC)
This component stores all the important customer information that is input after the installation. When performing replacement, follow the procedures in 'Chapter 4 Adjustment' to replace/discard. Make absolutely sure that no customer information gets leaked outside.

REP 1.2.1 IIT Top Cover

Parts List on PL 1.8

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Platen Cover or the DADF. (REP 56.1.1)
2. Remove the IIT Top Cover. (Figure 1)
 - a. Remove the screw (x7).
 - b. Remove the IIT Top Cover.

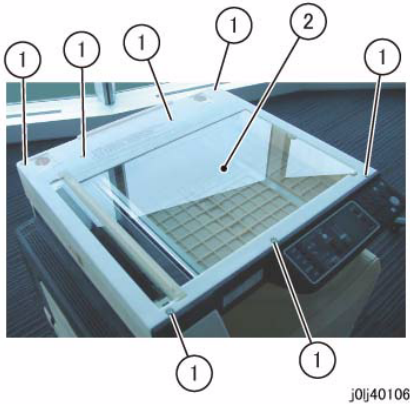


Figure 1 j0lj40106

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.3.1 IIT Carriage

Parts List on PL 1.5

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Platen Cover or the DADF. (REP 56.1.1)
2. Remove the IIT Top Cover. (REP 1.2.1)
3. Move the IIT Carriage to the opening of the Frame. (Figure 1)
 - a. Rotate the gear in the direction of the arrow.
 - b. Move the IIT Carriage to the opening (Arrow A) of the Frame.

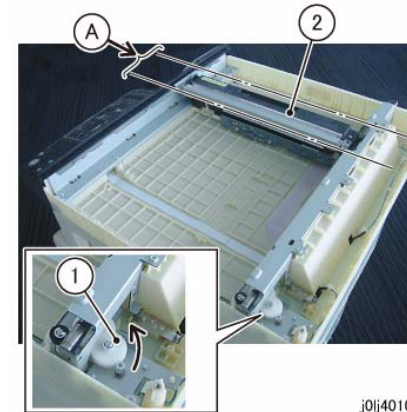


Figure 1 j0lj40107

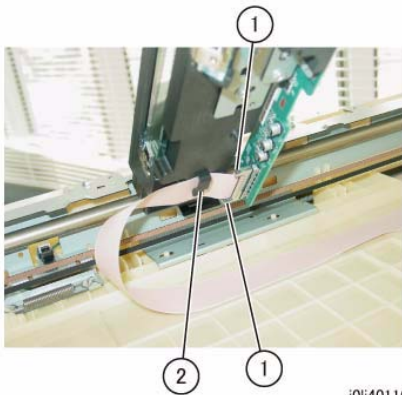
4. Remove the IIT Carriage Belt from the IIT Carriage. (Figure 2)
 - a. Remove the IIT Carriage Belt in the direction of the arrow.



j0lj40115

Figure 2 j0lj40115

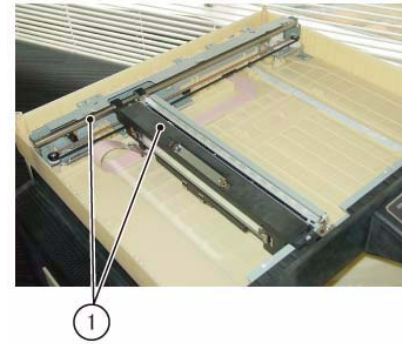
5. Disconnect the connector at the bottom of the IIT Carriage. (Figure 3)
 - a. Release the hook (x2) and disconnect the connector.
 - Use one hand to hold the CCD PWB firmly in place so that it does not move (does not warp) and disconnect the connector.
 - b. Remove the CCD Cable from the clamp.



j0lj40116

Figure 3 j0lj40116

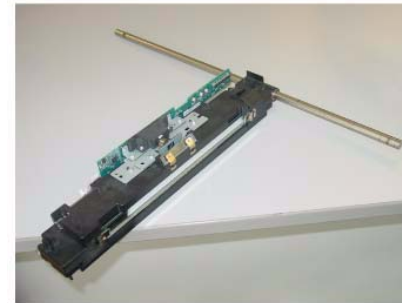
6. Remove the IIT Carriage and Shaft. (Figure 4)
 - a. Remove the IIT Carriage and Shaft.



j0lj40117

Figure 4 j0lj40117

7. Place the removed IIT Carriage and Shaft upside down and separate the IIT Carriage from the Shaft. (Figure 5)



j0lj40118

Figure 5 j0lj40118

Replacement

1. To install, carry out the removal steps in reverse order.
2. When connecting the connector to the CCD PWB, use one hand to hold the CCD PWB firmly in place so that it does not move (does not warp).
3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 956-804"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 1.3.2 IIT Carriage Belt

Parts List on PL 1.9

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Platen Cover or the DADF. (REP 56.1.1)
2. Remove the IIT Top Cover. (REP 1.2.1)
3. Move the IIT Carriage to the opening of the Frame. (Figure 1)
 - a. Rotate the gear in the direction of the arrow.
 - b. Move the IIT Carriage to the opening (Arrow A) of the Frame.

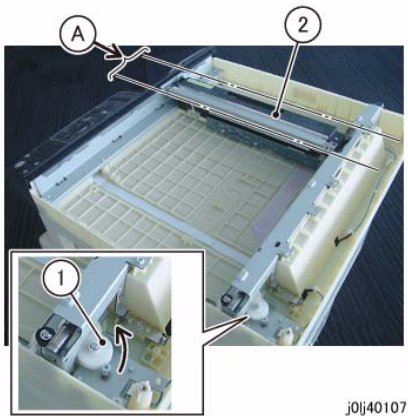


Figure 1 j0lj40107

4. Relax the tension of the IIT Carriage Belt. (Figure 2)
 - a. Remove the spring.
 - b. Loosen the screw.

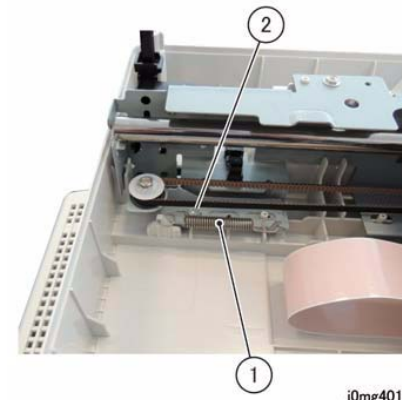


Figure 2 j0mg40114

5. Remove the IIT Carriage Belt from the IIT Carriage. (Figure 3)
 - a. Remove the IIT Carriage Belt in the direction of the arrow.

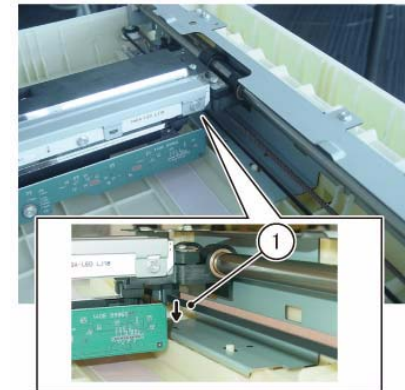
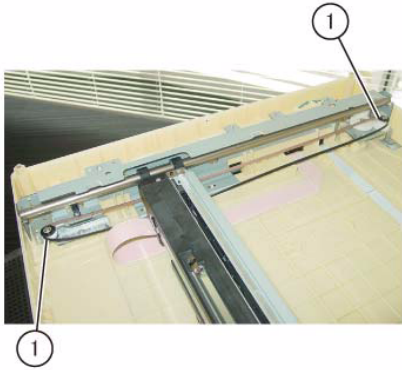


Figure 3 j0lj40115

6. Remove the IIT Carriage Belt. (Figure 4)
 - a. Remove the IIT Carriage Belt from the pulley (x2).



j0lj40120

Figure 4 j0lj40120

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.4.1 Carriage Motor

Parts List on PL 1.4

Removal

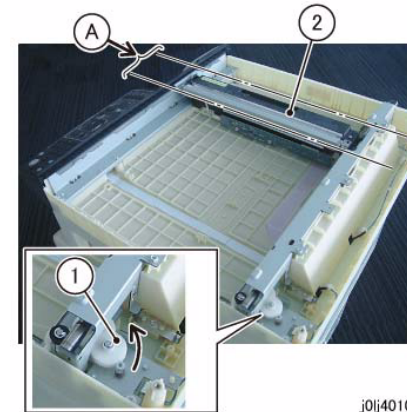
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Platen Cover or the DADF. (REP 56.1.1)
2. Remove the IIT Top Cover. (REP 1.2.1)
3. Move the IIT Carriage to the opening of the Frame. (Figure 1)
 - a. Rotate the gear in the direction of the arrow.
 - b. Move the IIT Carriage to the opening (Arrow A) of the Frame.



j0lj40107

Figure 1 j0lj40107

4. Relax the tension of the IIT Carriage Belt. (Figure 2)
 - a. Remove the spring.
 - b. Loosen the screw.

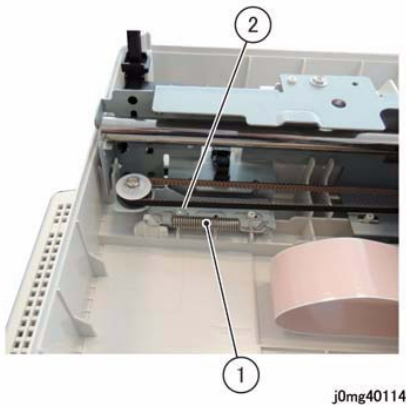


Figure 2 j0mg40114

5. Remove the IIT Carriage Belt from the pulley. (Figure 3)
 - a. Remove the IIT Carriage Belt from the pulley.

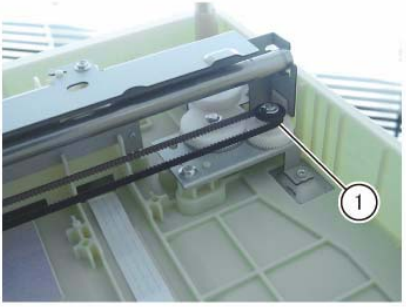


Figure 3 j0lj40121

6. Remove the Carriage Drive and Motor. (Figure 4)
 - a. Remove the Tapping Screw (x2). (Separate Display - 1)
 - b. The Shaft is shifted and loosen the screw. (Separate Display - 2)
 - c. Remove the screw. (Separate Display - 2)
 - d. Remove the Carriage Drive and Motor.
 - e. Disconnect the connector.
 - f. Remove the cable band.

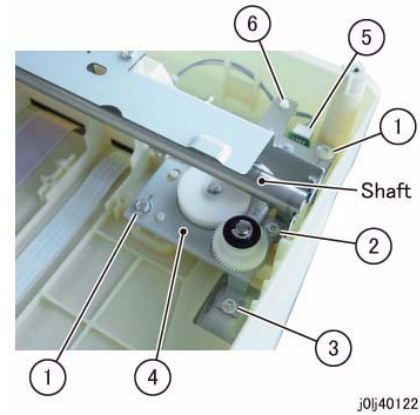


Figure 4 j0lj40122

7. Remove the Carriage Motor. (Figure 5)
 - a. Remove the screw (x2).
 - b. Remove the Carriage Motor.

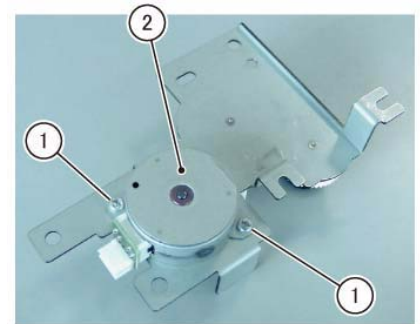


Figure 5 j0lj40123

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 956-802"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 1.5.1 LED Lamp PWB

Parts List on PL 1.5

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Platen Cover or the DADF. (REP 56.1.1)
2. Remove the IIT Top Cover. (REP 1.2.1)
3. Move the IIT Carriage to the opening of the Frame. (Figure 1)
 - a. Rotate the gear in the direction of the arrow.
 - b. Move the IIT Carriage to the opening (Arrow A) of the Frame.

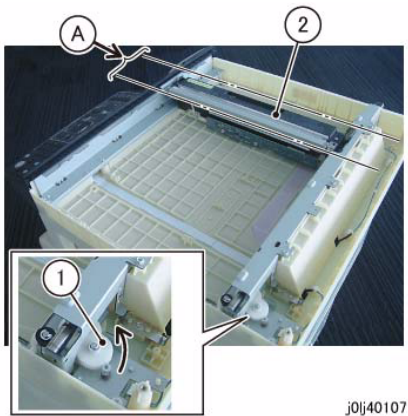


Figure 1 j0lj40107

4. Disconnect the connector of the LED Housing. (Figure 2)
 - a. Lower the block of the Connector Housing in the direction of the arrow.
 - b. Pull out and remove the LED Cable in the direction of the arrow.

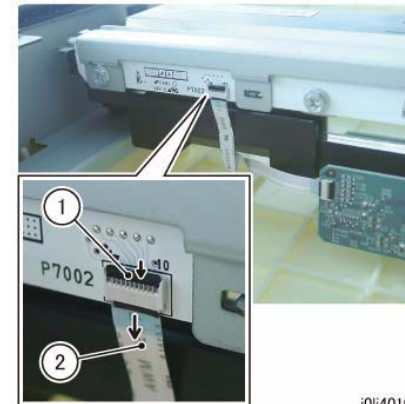


Figure 2 j0lj40108

5. Remove the LED Bracket. (Figure 3)
 - a. Remove the screw (short: x3).
 - b. Remove the LED Bracket.

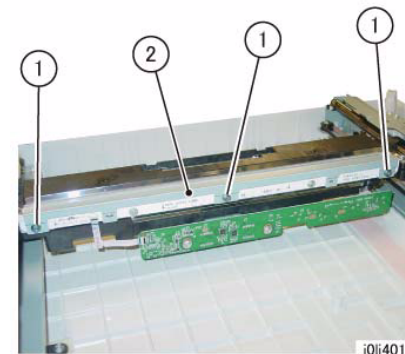


Figure 3 j0lj40125

6. Remove the LED Lamp PWB. (Figure 4)
 - a. Remove the screw (short: x2).
 - b. Remove the LED Lamp PWB.

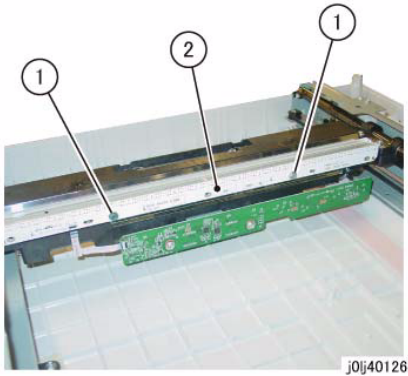


Figure 4 j0lj40126

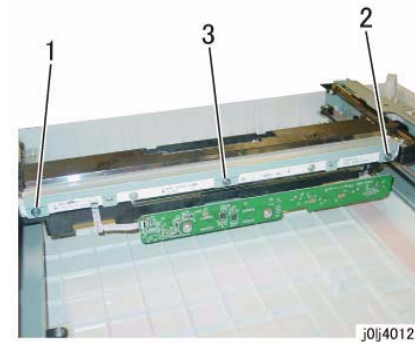


Figure 6 j0lj40128

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the LEB Lamp PWB, tighten the screw of the LED Lamp PWB in the order of 1 then 2. (Figure 5)

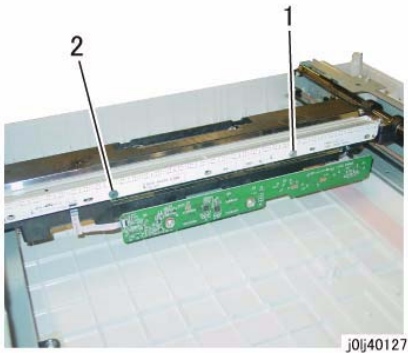


Figure 5 j0lj40127

3. When installing the LEB Bracket, tighten the screw of the LED Bracket in the order of 1 to 3. (Figure 6)

4. When connecting the connector of the LED Housing, insert it into the Connector Housing until the Line Mark of the LED Cable is at the position indicated in the figure. (Figure 7)



Figure 7 j0lj40114

5. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 956-804"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 1.10.1 LCD Display

Parts List on PL 1.6

Removal

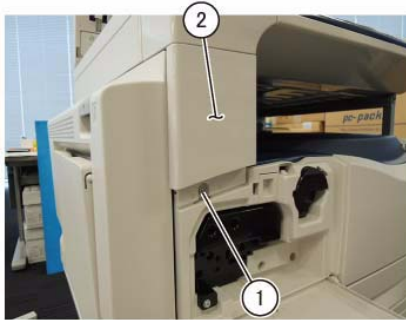
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Open the Front Toner Cover.
2. Remove the Fusing Unit Cover. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Fusing Unit Cover.



j0mg40101

Figure 1 j0mg40101

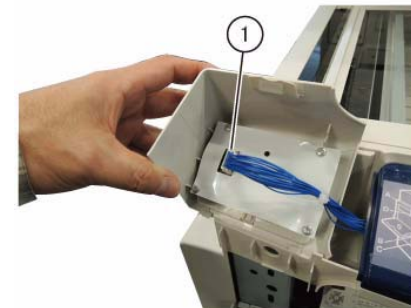
3. Remove the Clip Cover or One Touch Panel. (Figure 2)
 - a. Press the tab in the direction of the arrow to release the hook behind the tab and remove the Clip Cover or One Touch Panel.



j0mg40102

Figure 2 j0mg40102

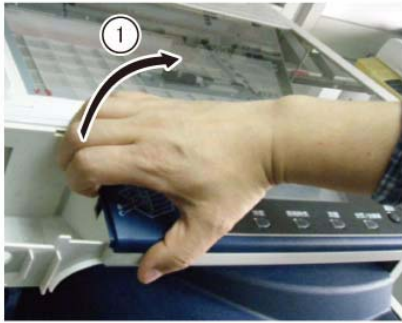
4. [One Touch Panel]: Disconnect the connector of the One Touch Panel. (Figure 3)
 - a. Disconnect the connector.



j0mg40103

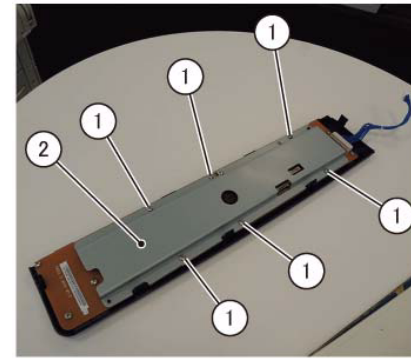
Figure 3 j0mg40103

5. Remove the Control Panel. (Figure 4)
 - a. Open the Control Panel in the direction of the arrow.



j0mg40104

Figure 4 j0mg40104

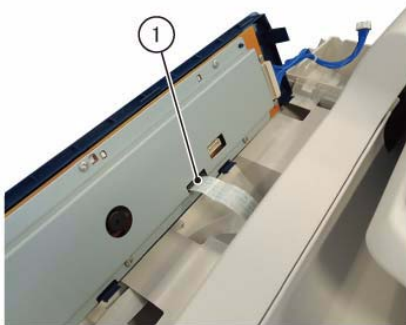


j0mg40108

Figure 6 j0mg40108

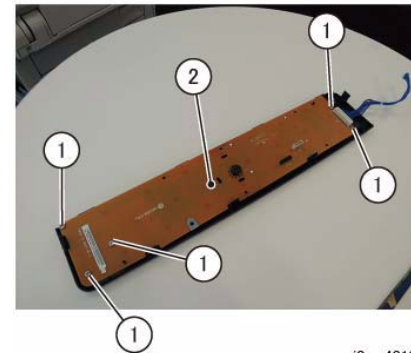
6. Pull out and remove the UI Cable from the Connector Housing and disconnect the connector. (Figure 5)
 - a. Pull out and remove the UI Cable from the Connector Housing.

8. Remove the UI PWB. (Figure 7)
 - a. Remove the Tapping Screw (x5).
 - b. Remove the UI PWB.



j0mg40105

Figure 5 j0mg40105



j0mg40107

Figure 7 j0mg40107

7. Remove the UI Bracket. (Figure 6)
 - a. Remove the Tapping Screw (x6).
 - b. Remove the UI Bracket.

9. Move the LCD Display. (Figure 8)
 - a. Release the hook (x4).
 - b. Release the tab of the Ground Plate.
 - c. Move the LCD Display in the direction of the arrow.

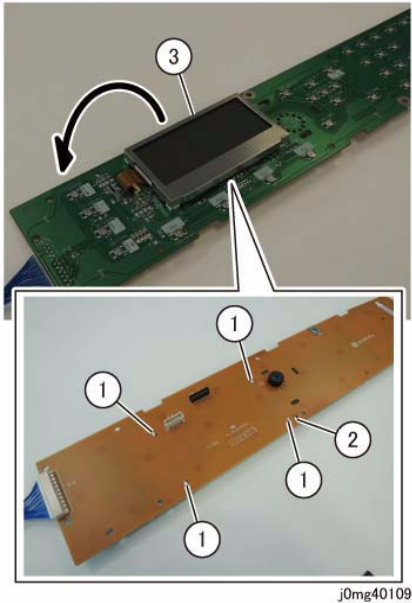


Figure 8 j0mg40109

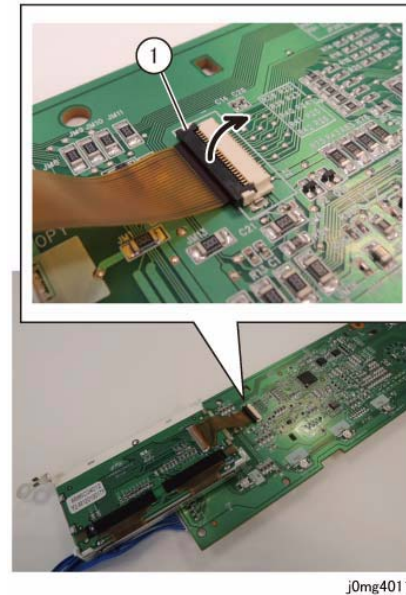


Figure 9 j0mg40110

10. Disconnect the connector of the LCD Display. (Figure 9)
 - a. Open the block of the Connector Housing in the direction of the arrow and disconnect the Flat Cable.

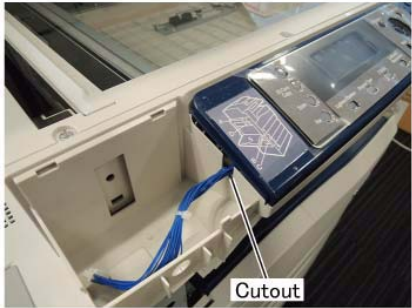
Replacement

1. To install, carry out the removal steps in reverse order.
2. When connecting the UI Cable, insert it into the Connector Housing until the Line Mark of the UI Cable is at the position indicated in the figure. (Figure 10)



Figure 10 j0mg40106

3. [One Touch Panel]: When installing the Control Panel, pull out the wire harness of the One Touch Panel through the cutout of IIT Front Cover. (Figure 11)



j0mg40111

Figure 11 j0mg40111

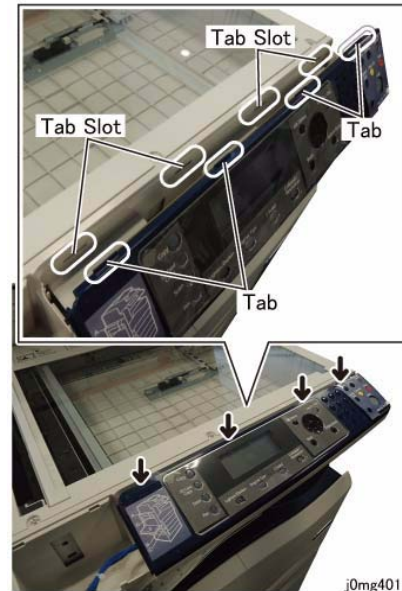
4. Install the Control Panel by the following procedure. (Figure 12) (Figure 13)
 - a. At the front, align the Control Panel to the surface IIT Front Cover.



j0mg40112

Figure 12 j0mg40112

- b. At the rear, press the tab (x4) of the Control Panel at the indicated positions to secure the Control Panel.



j0mg40113

Figure 13 j0mg40113

REP 2.1.1 ROS Assembly

Parts List on PL 2.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Remove the Top Cover. (REP 19.1.2)
5. Disconnect the connector of the ROS Assembly. (Figure 1)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.
 - c. Disconnect the connector (x2).

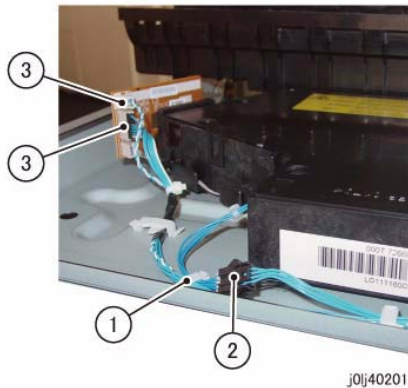


Figure 1 j0lj40201

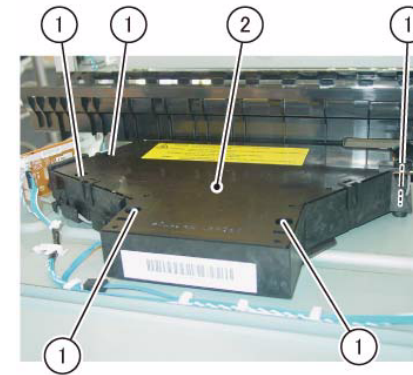


Figure 2 j0lj40202

Replacement

WARNING

When servicing an installed ROS Assembly with the power turned ON, read the Warning Label pasted on the top of the ROS Assembly carefully before proceeding.

1. To install, carry out the removal steps in reverse order.

6. Remove the ROS Assembly. (Figure 2)
 - a. Remove the screw (x5).
 - b. Remove the ROS Assembly.

REP 3.1.1 Main Drive Motor

Parts List on PL 3.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Rear Cover. (REP 19.4.1)
2. Remove the Main Drive Motor. (Figure 1)
 - a. Disconnect the connector (x2).
 - b. Remove the screw (x2).
 - c. Remove the Main Drive Motor.

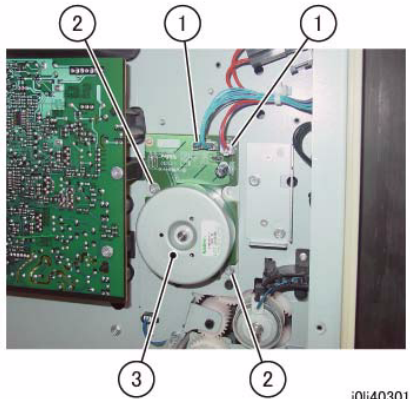


Figure 1 j0lj40301

Replacement

1. To install, carry out the removal steps in reverse order.

REP 3.1.2 Main Drive Housing

Parts List on PL 3.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Remove the Top Cover. (REP 19.1.2)
5. Remove the Cartridge Guide. (REP 8.2.1)
6. Remove the Fusing Unit. (REP 7.1.1)
7. Remove the MSI. (REP 13.1.1)
8. Remove the L/H Cover. (REP 14.1.1)
9. Remove the Registration Chute. (REP 15.1.1)
10. Remove the Rear Cover. (REP 19.4.1)
11. Remove the Registration Roll. (REP 15.1.2)
12. Remove the HVPS. (REP 18.1.2)
13. Remove the Fusing Unit Plate. (Figure 1)
 - a. Remove the Bind Screw.
 - b. Remove the Fusing Unit Plate from the stud.

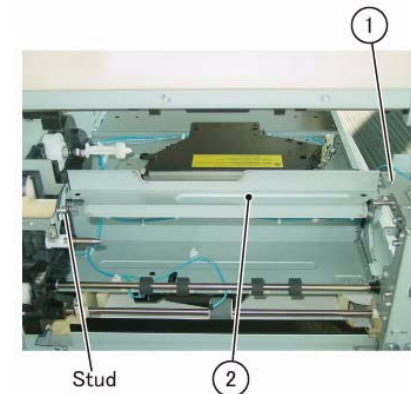


Figure 1 j0lj40302

14. Remove the Fusing Unit Rear Bracket. (Figure 2)
 - a. Remove the screw (x2).
 - b. Remove the Fusing Unit Rear Bracket from the stud.

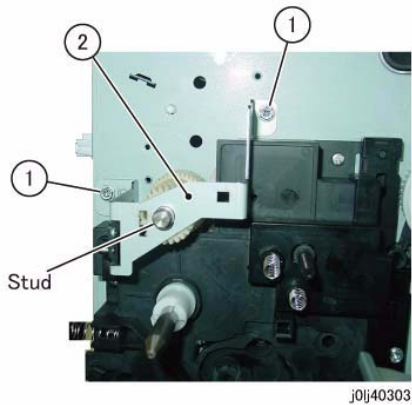


Figure 2 j0lj40303

15. Remove the gear. (Figure 3)
 - a. Remove the gear.

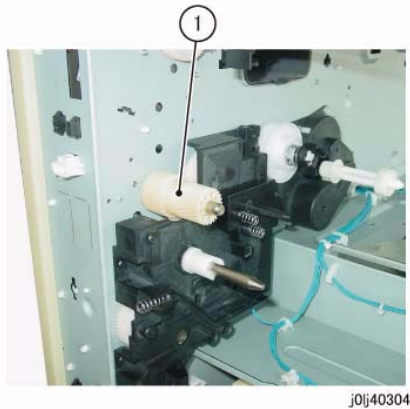


Figure 3 j0lj40304

16. Remove the Stud Bracket. (Figure 4)
 - a. Remove the screw (x2).
 - b. Remove the Stud Bracket.

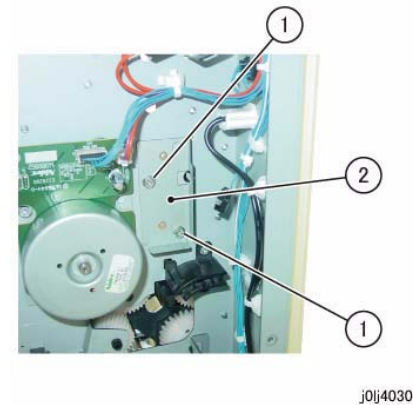


Figure 4 j0lj40305

17. Remove the Main Drive Housing. (Figure 5)
 - a. Remove the screw (x4).
 - b. Remove the Main Drive Housing.

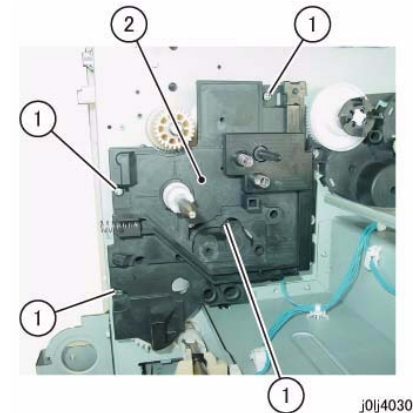


Figure 5 j0lj40306

Replacement

1. To install, carry out the removal steps in reverse order.

REP 4.1.1 NOHAD Fan

Parts List on PL 4.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Rear Cover. (REP 19.4.1)
2. Remove the NOHAD Fan. (Figure 1)
 - a. Release the wire harness from the clamp (x2).
 - b. Disconnect the connector.
 - c. Remove the wire harness from the guide (x2).
 - d. Release the hook (x2) and remove the NOHAD Fan.

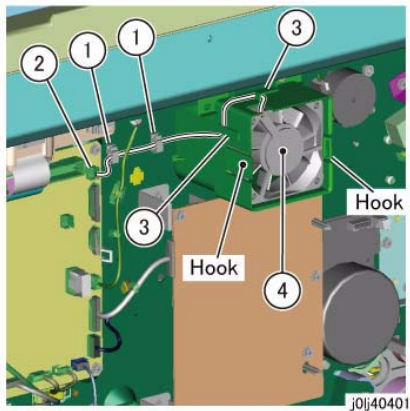


Figure 1 j0lj40401

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.1.1 BTR Roll

Parts List on PL 6.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Open the L/H Cover.
2. Remove the BTR Roll. (Figure 1)
 - a. Release the hook (x4) of the bearing.
 - b. Remove the BTR Roll.

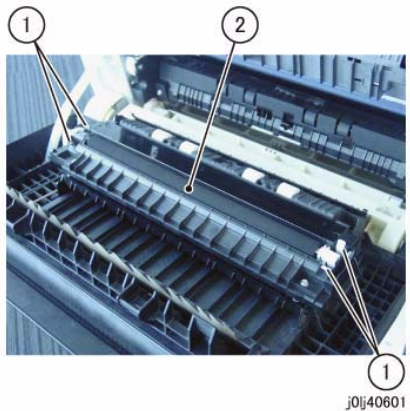


Figure 1 j0lj40601

Reference: This shows the removed BTR Roll. (Figure 2)

NOTE: As the bearing is not secured to the BTR Roll, be careful so as not to allow it to drop.



Figure 2 j0lj40602

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 950-800"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 7.1.1 Fusing Unit

Parts List on PL 7.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

1. Open the L/H Cover.
2. Remove the Connector Cover. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Connector Cover.

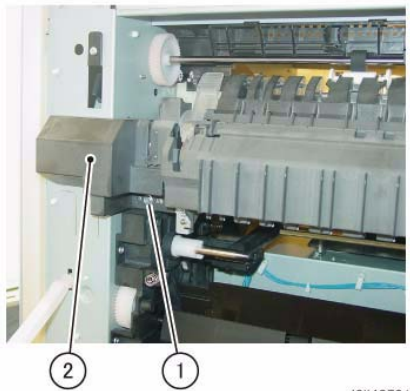


Figure 1 j0lj40701

3. Disconnect the connector. (Figure 2)
 - a. Disconnect the connector (x3).

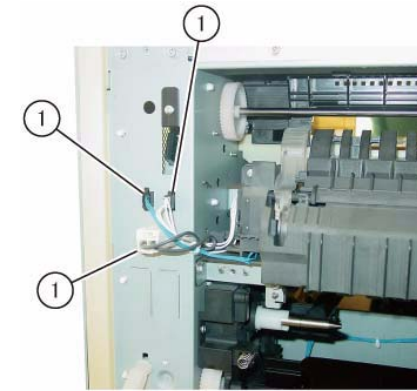


Figure 2 j0lj40702

4. Remove the Fusing Unit. (Figure 3)
 - a. Remove the screw (x2).
 - b. Remove the Fusing Unit.

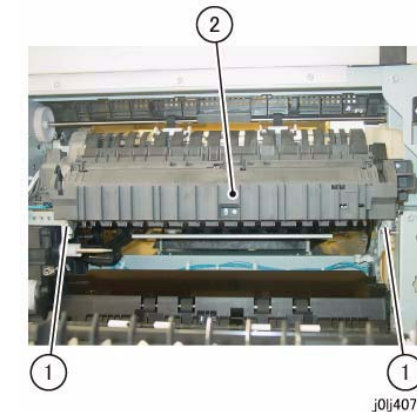


Figure 3 j0lj40703

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 950-801"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 8.1.1 Drum Cartridge

Parts List on PL 8.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

To prevent light fatigue, either wrap the removed Drum Cartridge by using a sheet of black paper or store it in a black bag.

1. Prepare a sheet of black paper or a black bag.
2. Open the L/H Cover.
3. Open the Front Toner Cover.
4. Remove the Connector Cover. (Figure 1)
 - a. Remove the screw (long).
 - b. Remove the Connector Cover.

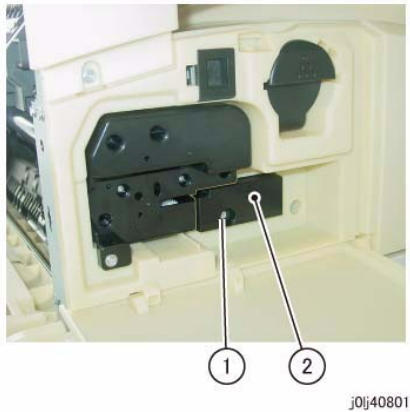


Figure 1 j0lj40801

5. Remove the Drum Cartridge. (Figure 2)
 - a. Disconnect the connector.
 - b. Remove the screw (long).
 - c. Hold onto the handle and pull out the Drum Cartridge.

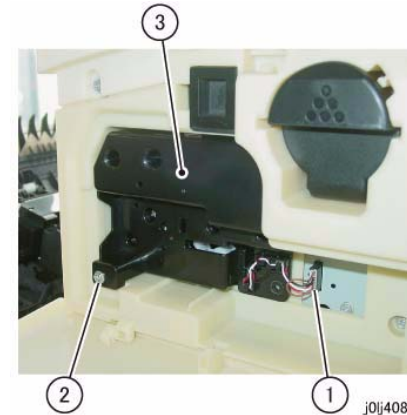


Figure 2 j0lj40802

6. Wrap the removed Drum Cartridge by using a sheet of black paper or store it in a black bag. (Figure 3)

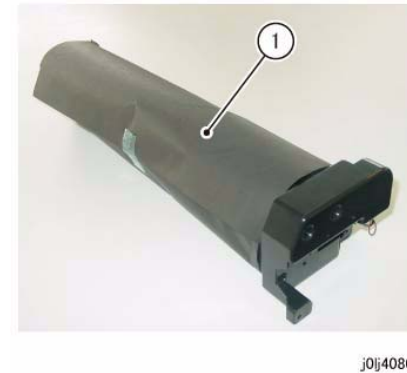


Figure 3 j0lj40803

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Drum Cartridge, align the Lower Plate of the Drum Cartridge to the Guide of the Frame. (Figure 4)



j0lj40804

Figure 4 j0lj40804

3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 950-807"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

NOTE: Make sure you initialize the HFSI Counter. If the HFSI Counter is not initialized, it may result in poor image quality and even a malfunction of the machine.

REP 8.2.1 Cartridge Guide

Parts List on PL 8.2

Removal

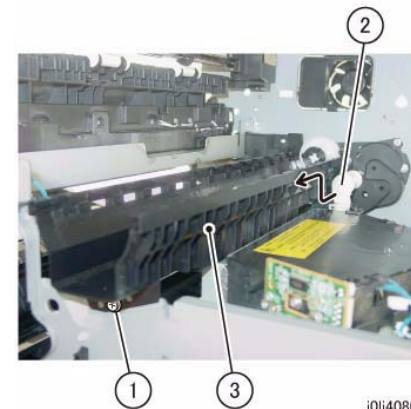
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Remove the Top Cover. (REP 19.1.2)
5. Remove the Cartridge Guide. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Cartridge Guide from the shaft.
 - c. Remove the Cartridge Guide in the direction of the arrow.



j0lj40805

Figure 1 j0lj40805

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Cartridge Guide, insert the boss of the Cartridge Guide into the hole for the boss. (Figure 2)

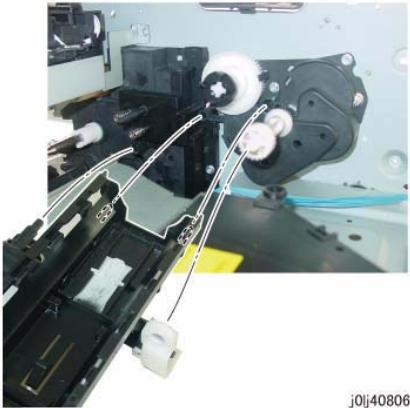


Figure 2 j0lj40806

j0lj40806

REP 8.2.2 Dispense Drive

Parts List on PL 8.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Remove the Top Cover. (REP 19.1.2)
5. Remove the Cartridge Guide. (REP 8.2.1)
6. Remove the Dispense Drive. (Figure 1)
 - a. Remove the gear.
 - b. Remove the screw (x3).
 - c. Remove the Dispense Drive.

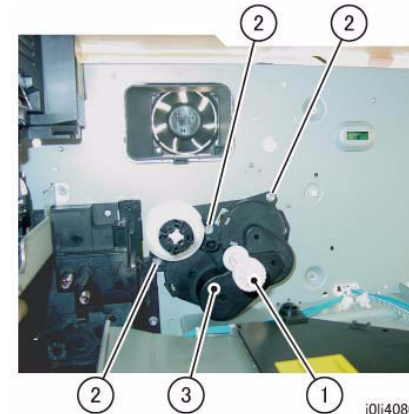


Figure 1 j0lj40807

j0lj40807

Replacement

1. To install, carry out the removal steps in reverse order.

REP 9.1.1 Tray 1 Feed Clutch

Parts List on PL 9.1

Removal

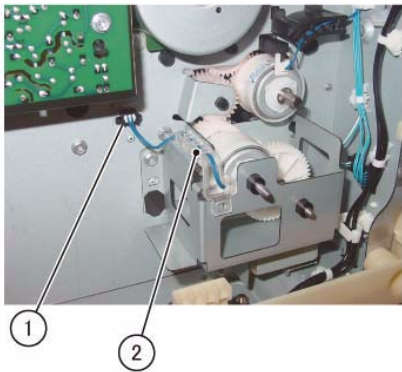
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

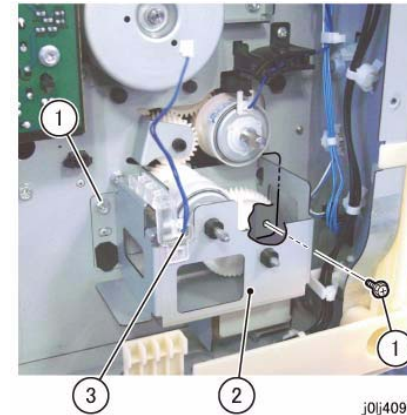
1. Remove the Rear Cover. (REP 19.4.1)
2. Disconnect the connector of the Tray 1 Feed Clutch. (Figure 1)
 - a. Disconnect the connector.
 - b. Remove the wire harness from the Harness Guide.



j0lj40901

Figure 1 j0lj40901

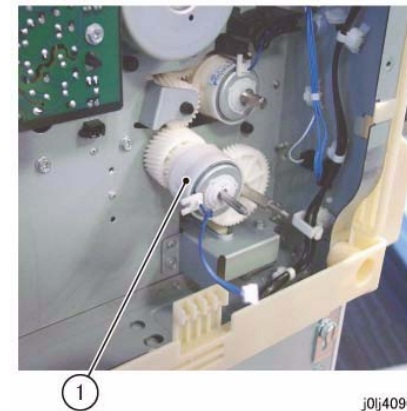
3. Remove the Drive Bracket. (Figure 2)
 - a. Remove the screw (x2).
 - b. Remove the Drive Bracket.
 - c. Remove the wire harness of the Tray 1 Feed Clutch.



j0lj40902

Figure 2 j0lj40902

4. Remove the Tray 1 Feed Clutch. (Figure 3)
 - a. Remove the Tray 1 Feed Clutch.

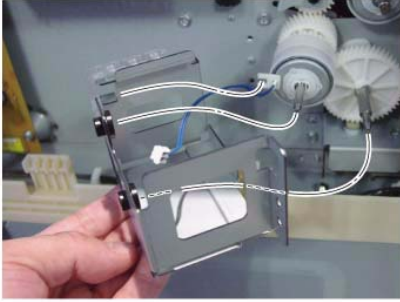


j0lj40903

Figure 3 j0lj40903

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Drive Bracket, align the Tab of the Drive Bracket to the Cutout of the Tray 1 Feed Clutch. (Figure 4)



j0lj40904

Figure 4 j0lj40904

REP 9.1.2 Tray 1

Parts List on PL 9.1

Removal

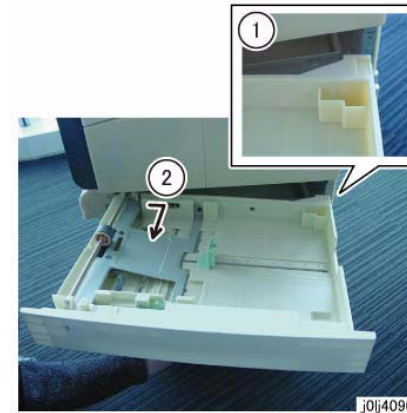
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the paper from Tray 1.
2. Pull out Tray 1 until the position where it is stopped by the stopper.
3. Remove Tray 1. (Figure 1)
 - a. Lift up the front of Tray 1 and free the rear right side of Tray 1.
 - b. Free the rear left side of Tray 1 in the direction of the arrow.



j0lj40905

Figure 1 j0lj40905

Replacement

1. To install, carry out the removal steps in reverse order.

REP 9.1.3 Tray 1 Size Sensor

Parts List on PL 9.1

Removal

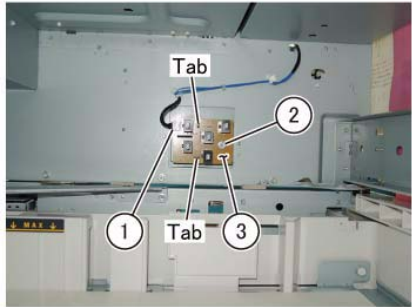
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove Tray 1. (REP 9.1.2)
2. Remove the Tray 1 Size Sensor. (Figure 1)
 - a. Disconnect the connector.
 - b. Remove the screw.
 - c. Remove the Tray 1 Size Sensor.



j0mg40901

Figure 1 j0mg40901

Replacement

1. To install, carry out the removal steps in reverse order.

REP 9.2.1 Tray 1 Feed Roll and Tray 1 Retard Pad

Parts List on PL 9.3

Removal

WARNING

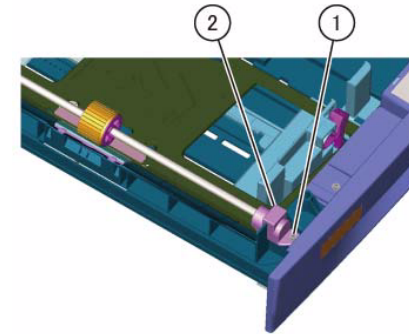
When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The Tray 1 Feed Roll and the Tray 1 Retard Pad must be replaced at the same time.

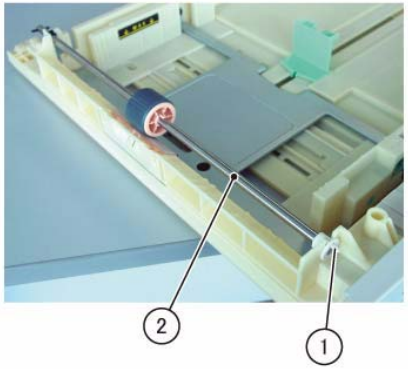
1. Remove Tray 1. (REP 9.1.2)
2. Remove the Bearing Cover. (Figure 1)
 - a. Remove the Tapping Screw.
 - b. Remove the Bearing Cover.



j0lj40909

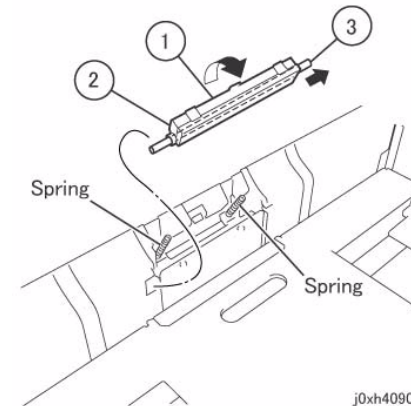
Figure 1 j0lj40909

3. Remove the Tray 1 Feed Roll and Shaft. (Figure 2)
 - a. Release the hook to remove the bearing.
 - b. Remove the Tray 1 Feed Roll and Shaft.



j0lj40906

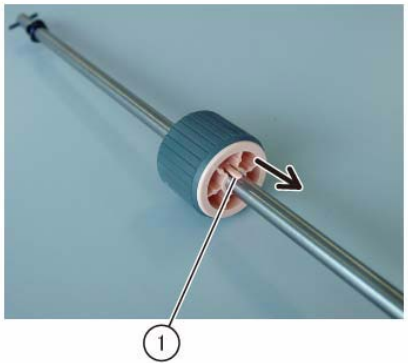
Figure 2 j0lj40906



j0xh40902

Figure 4 j0xh40902

4. Remove the Tray 1 Feed Roll. (Figure 3)
 - a. Release the hook and remove the Tray 1 Feed Roll in the direction of the arrow.



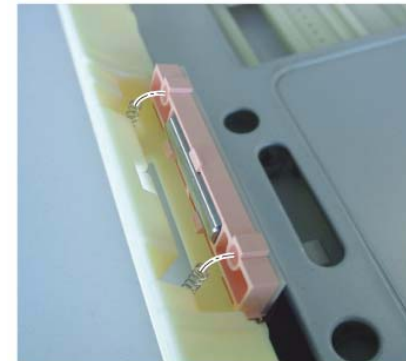
j0lj40907

Figure 3 j0lj40907

5. Remove the Tray 1 Retard Pad. (Figure 4)
 - a. Release the hook and open the Tray 1 Retard Pad.
 - b. Remove the Tray 1 Retard Pad.
 - c. Pull out and remove the shaft.

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Tray 1 Retard Pad, attach the spring (x2) to the hole (x2) of the Tray 1 Retard Pad. (Figure 5)



j0lj40908

Figure 5 j0lj40908

3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 950-803"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 10.1.1 Tray 2 Feeder

Parts List on PL 10.1

Removal

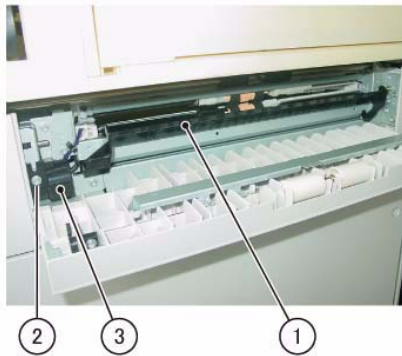
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

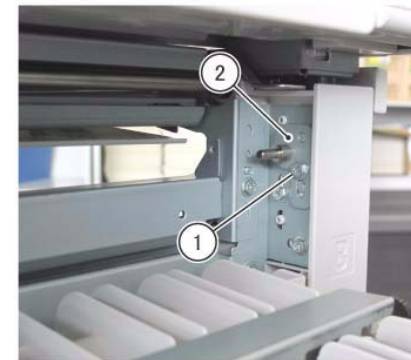
1. Remove Tray 2.
2. Open the Left Cover Assembly of the One Tray Module.
3. Remove the Feed Out Chute and the Connector Cover. (Figure 1)
 - a. Remove the Feed Out Chute.
 - b. Remove the screw.
 - c. Remove the Connector Cover.



j0lj41001

Figure 1 j0lj41001

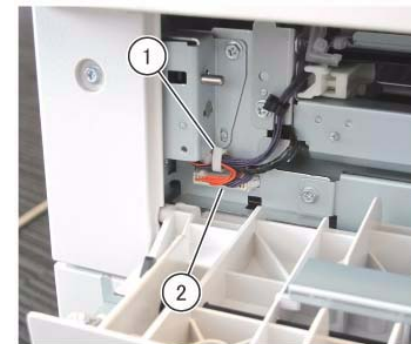
4. Remove the Stud Assembly. (Figure 2)
 - a. Remove the screw.
 - b. Remove the Stud Assembly.



j0xh41002

Figure 2 j0xh41002

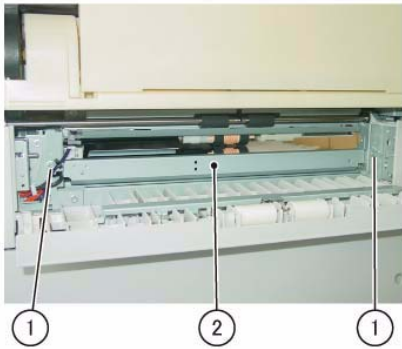
5. Disconnect the connector. (Figure 3)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.



j0xh41003

Figure 3 j0xh41003

6. Remove the Tray 2 Feeder. (Figure 4)
 - a. Remove the screw (x2).
 - b. Remove the Tray 2 Feeder.



j0lj41002

Figure 4 j0lj41002

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 950-804"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 10.3.1 Tray 2 Feed/Retard/Nudger Roll

Parts List on PL 10.3

Removal

WARNING

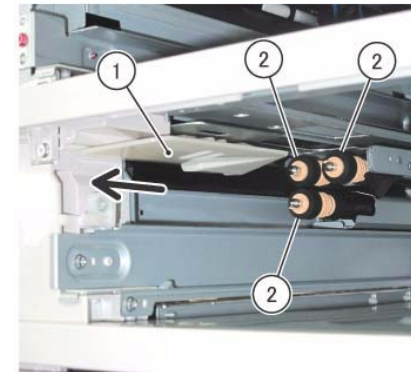
When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The Feed/Retard/Nudger Rolls must be replaced at the same time.

1. Remove Tray 1/2.
2. Remove the Tray 2 Feed/Retard/Nudger Roll. (Figure 1)
 - a. Slide the Front Chute towards you.
 - b. Remove the Tray 2 Feed/Retard/Nudger Roll.



j0xh41005

Figure 1 j0xh41005

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - "Chain Link : 950-804"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 10.6.1 STM PWB

Parts List on PL 10.6

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

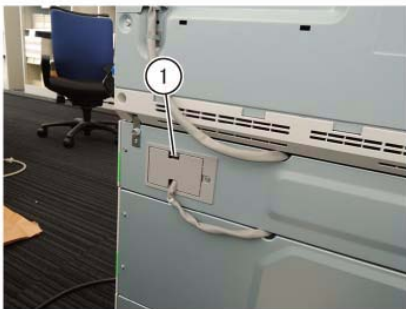
Check that the power switch is OFF and unplug the power plug.

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.

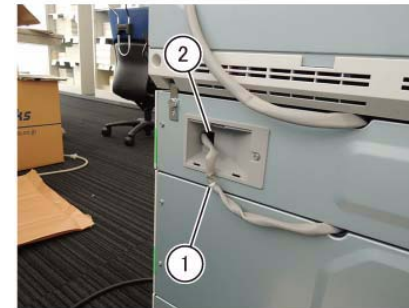
1. [Two Tray Module]
 - Remove the Cap. (Figure 1)
 - a. Release the hook to remove the Cap.



j0mg41001

Figure 1 j0mg41001

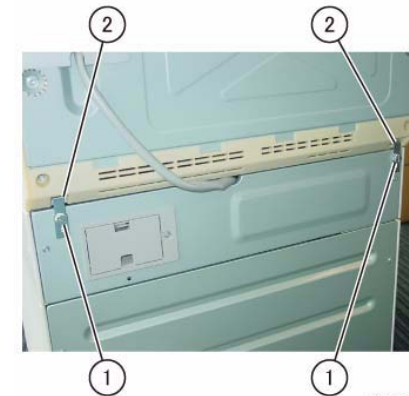
2. [Two Tray Module]
 - Disconnect the connector. (Figure 2)
 - a. Remove the cable band.
 - b. Disconnect the connector.



j0mg41002

Figure 2 j0mg41002

3. Remove the Docking Bracket (x2). (Figure 3)
 - a. Remove the Docking Screw (x2).
 - b. Remove the Docking Bracket (x2).



j0lj41003

Figure 3 j0lj41003

4. Remove the Rear Cover of the One Tray Module. (Figure 4)
 - a. Remove the screw (x2).
 - b. Remove the Rear Cover.

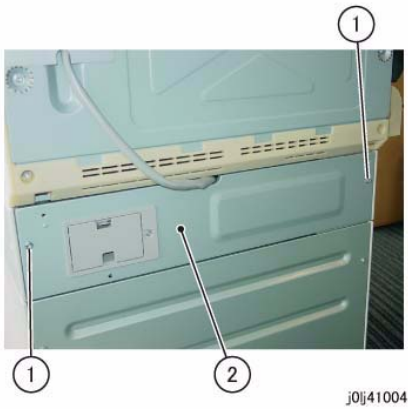


Figure 4 j0lj41004

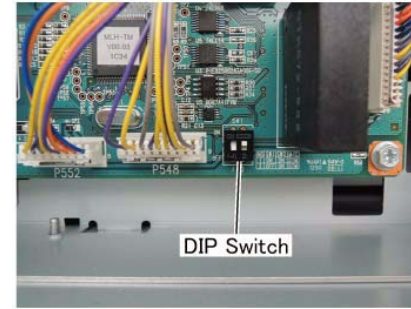


Figure 6 j0mg41004

5. Remove the STM PWB. (Figure 5)
 - a. Disconnect the connector (x4).
 - b. Remove the screw (x4).
 - c. Remove the STM PWB.

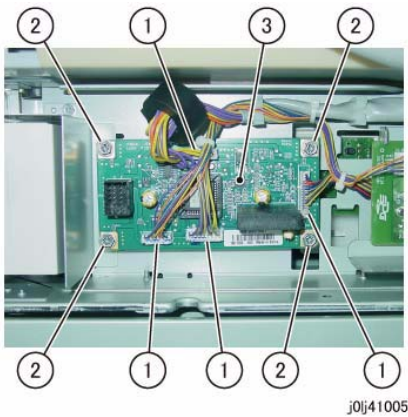


Figure 5 j0lj41005

Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the STM PWB, check the setting of the DIP Switch. (Figure 6)
 - SW 1: OFF
 - SW 2: ON

REP 10.6.2 STM Takeaway Motor

Parts List on PL 10.6

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

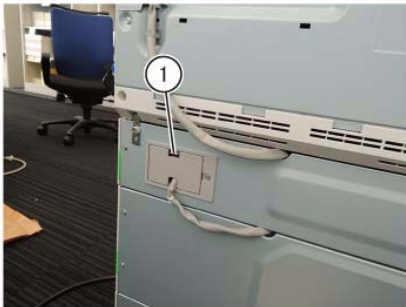
Check that the power switch is OFF and unplug the power plug.

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.

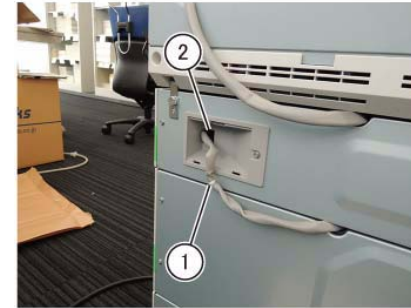
1. [Two Tray Module]
Remove the Cap. (Figure 1)
 - a. Release the hook to remove the Cap.



j0mg41001

Figure 1 j0mg41001

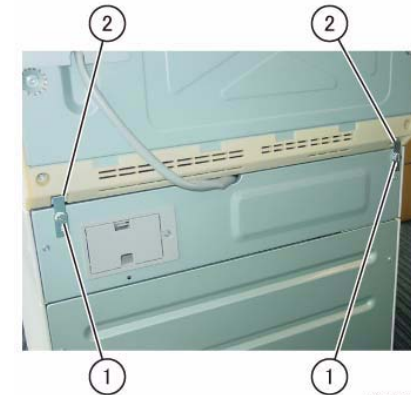
2. [Two Tray Module]
Disconnect the connector. (Figure 2)
 - a. Remove the cable band.
 - b. Disconnect the connector.



j0mg41002

Figure 2 j0mg41002

3. Remove the Docking Bracket (x2). (Figure 3)
 - a. Remove the Docking Screw (x2).
 - b. Remove the Docking Bracket (x2).



j0lj41003

Figure 3 j0lj41003

4. Remove the Rear Cover of the One Tray Module. (Figure 4)
 - a. Remove the screw (x2).
 - b. Remove the Rear Cover.

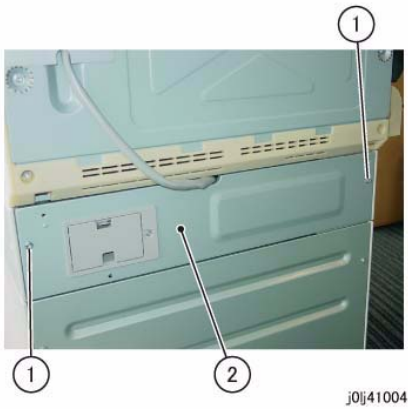


Figure 4 j0lj41004

5. Remove the STM Takeaway Motor. (Figure 5)
 - a. Disconnect the connector.
 - b. Remove the screw (x2).
 - c. Remove the STM Takeaway Motor.

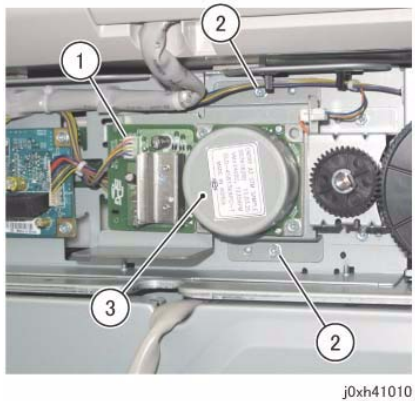


Figure 5 j0xh41010

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.1.1 Tray 3 Feeder

Parts List on PL 11.1

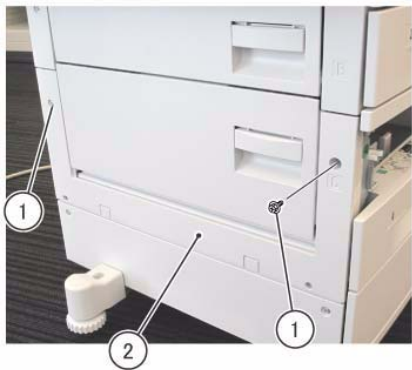
Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

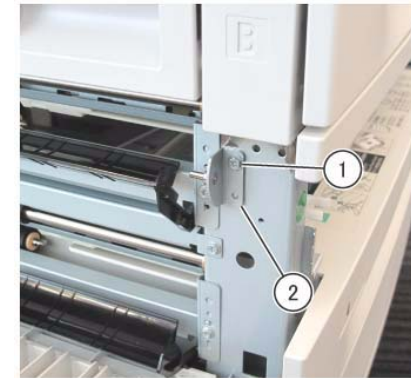
1. Remove Tray 3.
2. Remove the Left Upper Cover. (Figure 1)
 - a. Remove the screw (x2).
 - b. Remove the Left Upper Cover.



j0xh41101

Figure 1 j0xh41101

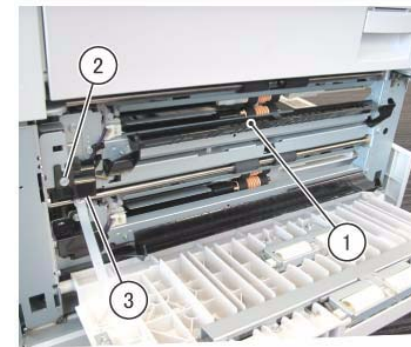
3. Remove the Stud Assembly. (Figure 2)
 - a. Remove the screw.
 - b. Remove the Stud Assembly.



j0xh41102

Figure 2 j0xh41102

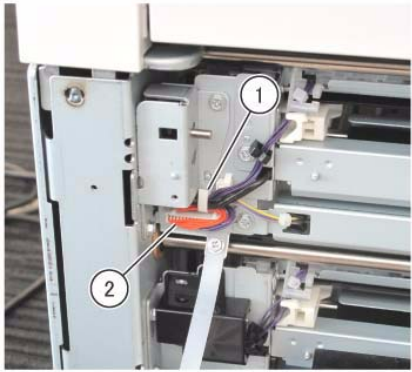
4. Remove the Feed Out Chute and the Harness Cover. (Figure 3)
 - a. Remove the Feed Out Chute.
 - b. Remove the screw.
 - c. Remove the Harness Cover.



j0xh41103

Figure 3 j0xh41103

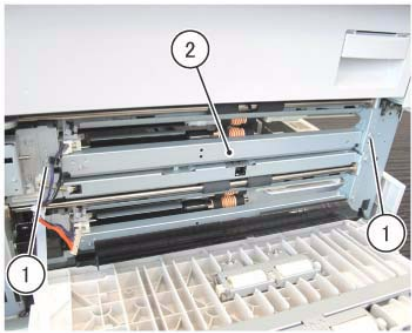
5. Disconnect the connector. (Figure 4)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.



j0xh41104

Figure 4 j0xh41104

6. Remove the Tray 3 Feeder. (Figure 5)
 - a. Remove the screw (x2).
 - b. Remove the Tray 3 Feeder.



j0xh41105

Figure 5 j0xh41105

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - 'Chain Link: 950-808'
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 11.1.2 Tray 4 Feeder

Parts List on PL 11.1

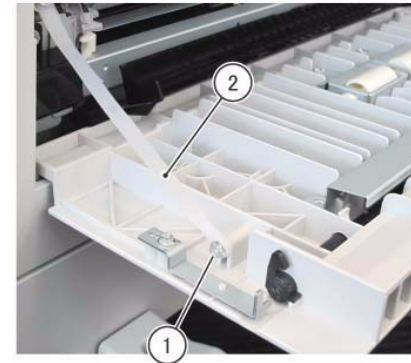
Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

1. Remove Tray 4.
2. Open the Left Cover Assembly of the 2TM.
3. Remove the support. (Figure 1)
 - a. Remove the Tapping Screw.
 - b. Remove the support.



j0xh41106

Figure 1 j0xh41106

4. Remove the Feed Out Chute and the Harness Cover. (Figure 2)
 - a. Remove the Feed Out Chute.
 - b. Remove the screw.
 - c. Remove the Harness Cover.

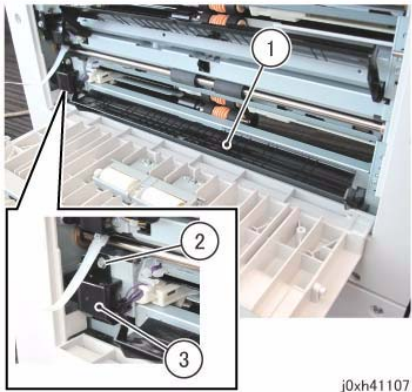


Figure 2 j0xh41107

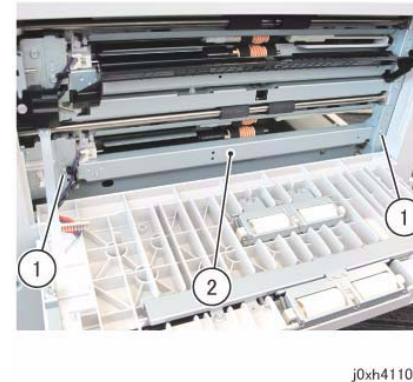


Figure 4 j0xh41109

5. Disconnect the connector. (Figure 3)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.

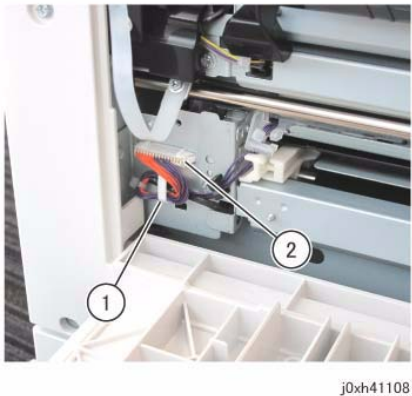


Figure 3 j0xh41108

6. Remove the Tray 4 Feeder. (Figure 4)
 - a. Remove the screw (x2).
 - b. Remove the Tray 4 Feeder.

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - 'Chain Link: 950-809'
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 11.3.1 Tray 3 Feed/Retard/Nudger Roll

Parts List on PL 11.3

Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

NOTE: The Feed/Retard/Nudger Rolls must be replaced at the same time.

1. Remove Tray 3 and Tray 4.
2. Remove the Tray 3 Feed/Retard/Nudger Roll. (Figure 1)
 - a. Slide the Front Chute towards you.
 - b. Remove the Tray 3 Feed/Retard/Nudger Roll.

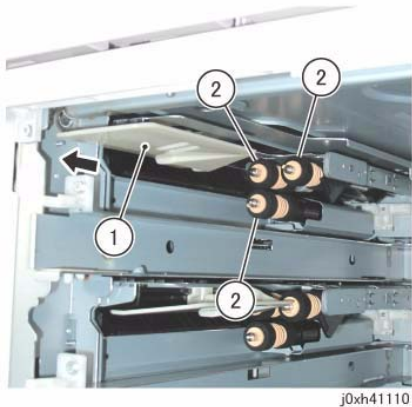


Figure 1 j0xh41110

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - 'Chain Link: 950-808'
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 11.3.2 Tray 4 Feed/Retard/Nudger Roll

Parts List on PL 11.3

Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

NOTE: The Feed/Retard/Nudger Rolls must be replaced at the same time.

1. Remove Tray 3 and Tray 4.
2. Remove the Tray 4 Feed/Retard/Nudger Roll. (Figure 1)
 - a. Slide the Front Chute towards you.
 - b. Remove the Tray 4 Feed/Retard/Nudger Roll.

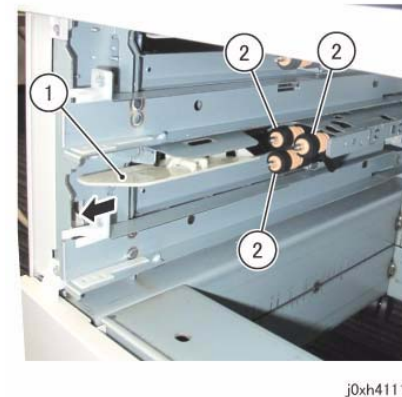


Figure 1 j0xh41111

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the CE Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - 'Chain Link: 950-809'
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 11.6.1 2TM PWB

Parts List on PL 11.6

Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

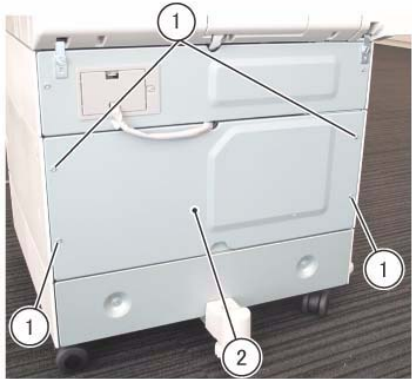
CAUTION

Always wear a wrist band to protect electrical parts from static damage. 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 Rear Upper Cover of the 2 Tray Module. (Figure 1)
 - a. Remove the screw (x4).
 - b. Remove the Rear Upper Cover.



j0xh41112

Figure 1 j0xh41112

2. Remove the 2TM PWB. (Figure 2)
 - a. Disconnect the connector (x5).
 - b. Remove the screw (x4).
 - c. Remove the 2TM PWB.

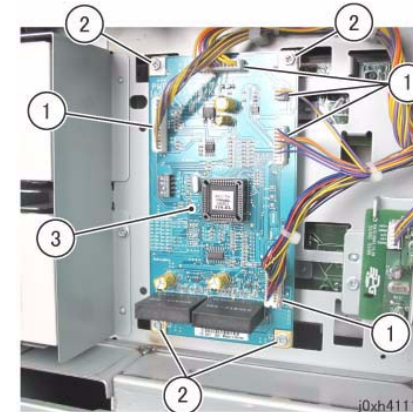


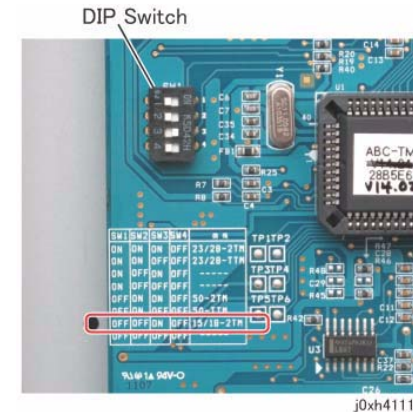
Figure 2 j0xh41113

Replacement

1. To install, carry out the removal steps in reverse order. During a replacement, take note of the following:

NOTE: Check the position of the DIP Switch on the 2TM PWB. (Figure 3)

SW 1: OFF / SW 2: OFF / SW 3: ON / SW 4: OFF



j0xh41114

Figure 3 j0xh41114

REP 11.6.2 2TM Takeaway Motor

Parts List on PL 11.6

Removal

WARNING

When turning OFF the power switch, check 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.

Check that the power switch is OFF and unplug the power plug.

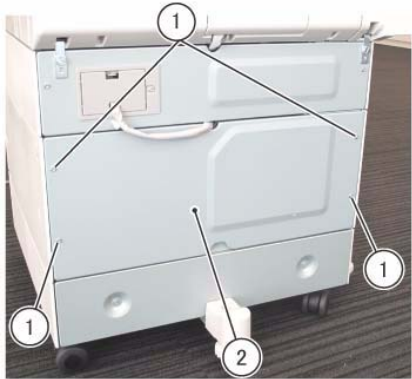
CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

CAUTION

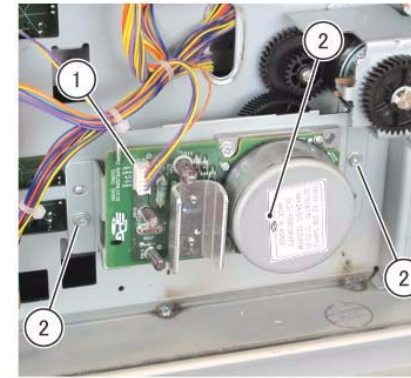
Do not get yourself hurt by a soldered part on the back of the PWB.

1. Remove the Rear Upper Cover of the 2 Tray Module. (Figure 1)
 - a. Remove the screw (x4).
 - b. Remove the Rear Upper Cover.



j0xh41112

Figure 1 j0xh41112



j0xh41115

Figure 2 j0xh41115

Replacement

1. To install, carry out the removal steps in reverse order.

2. Remove the 2TM Takeaway Motor. (Figure 2)
 - a. Disconnect the connector.
 - b. Remove the screw (x2).
 - c. Remove the 2TM Takeaway Motor.

REP 13.1.1 MSI

Parts List on PL 13.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Hinge Rear Cover. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Hinge Rear Cover.

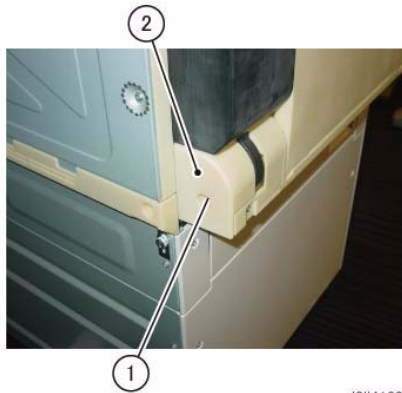


Figure 1 j0lj41301

2. Disconnect the connector. (Figure 2)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.
 - c. Remove the cable band.

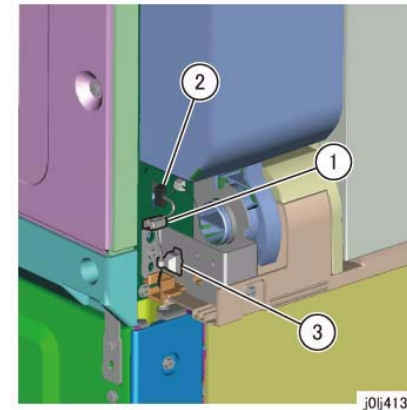


Figure 2 j0lj41302

3. Remove the MSI. (Figure 3)
 - a. Remove the screw (x2).
 - b. Remove the MSI.

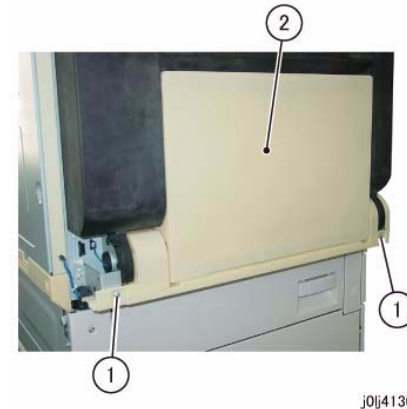
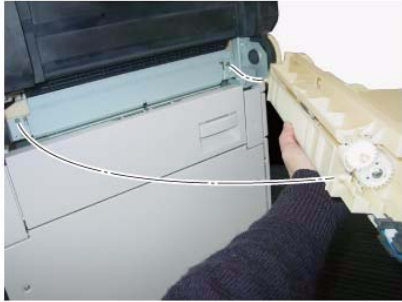


Figure 3 j0lj41303

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the MSI, insert the boss (x2) of the MSI into the holes for the boss. (Figure 4)



j0lj41304

Figure 4 j0lj41304

3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 950-802"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 13.3.1 MSI Nudger/Feed Roll

Parts List on PL 13.3

Removal

WARNING

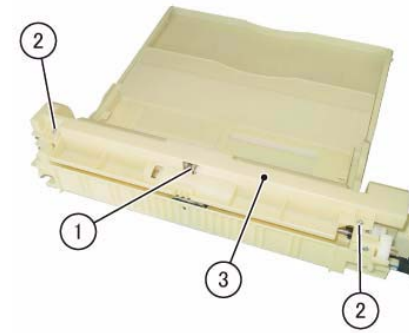
When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The MSI Nudger Roll, the MSI Feed Roll, and the MSI Retard Pad must be replaced at the same time.

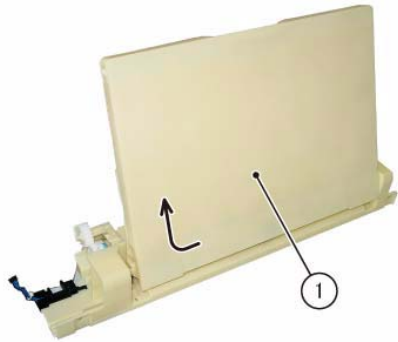
1. Remove the MSI. (REP 13.1.1)
2. Remove the MSI Top Cover. (Figure 1)
 - a. Remove the spring.
 - b. Remove the Tapping Screw (x2).
 - c. Remove the MSI Top Cover.



j0lj41305

Figure 1 j0lj41305

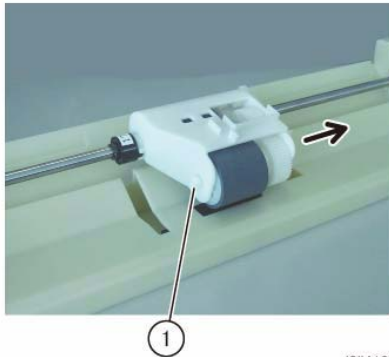
3. Remove the MSI Tray. (Figure 2)
 - a. Remove the MSI Tray in the direction of the arrow.



j0lj41306

Figure 2 j0lj41306

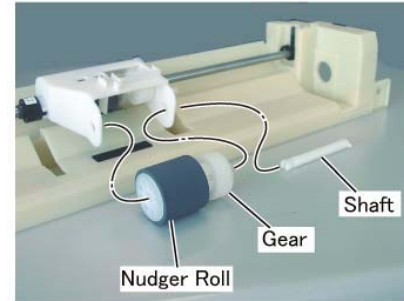
4. Remove the shaft of the MSI Nudger Roll. (Figure 3)
 - a. Release the hook of the shaft and remove the shaft in the direction of the arrow.



j0lj41307

Figure 3 j0lj41307

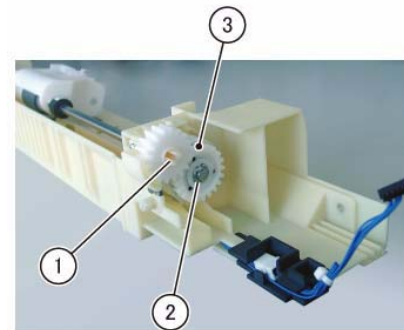
5. Remove the MSI Nudger Roll. (Figure 4)



j0lj41308

Figure 4 j0lj41308

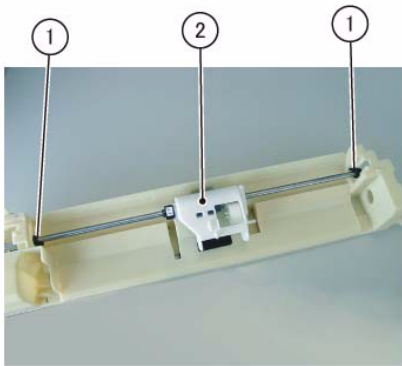
6. Shift the MSI Feed Clutch from the shaft. (Figure 5)
 - a. Release the hook to remove the gear.
 - b. Remove the E-Clip.
 - c. Shift the MSI Feed Clutch from the shaft.



j0lj41309

Figure 5 j0lj41309

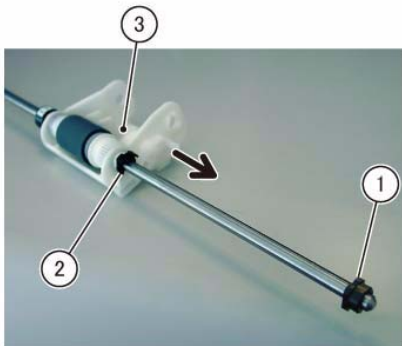
7. Remove the MSI Feed Roll Assembly. (Figure 6)
 - a. Remove the KL-Clip (x2).
 - b. Remove the MSI Feed Roll Assembly.



j0lj41310

Figure 6 j0lj41310

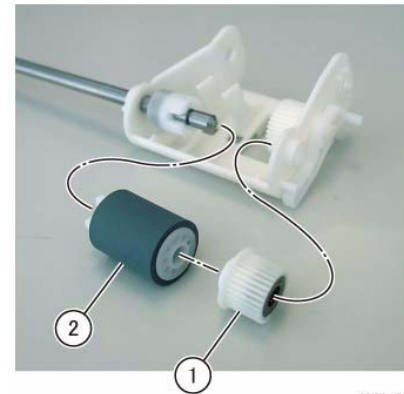
8. Move the housing to the tip of the shaft. (Figure 7)
 - a. Remove the Bearing.
 - b. Remove the KL-Clip.
 - c. Move the housing in the direction of the arrow until it is at the tip of the shaft.



j0lj41311

Figure 7 j0lj41311

9. Remove the MSI Feed Roll. (Figure 8)
 - a. Remove the gear.
 - b. Remove the MSI Feed Roll.

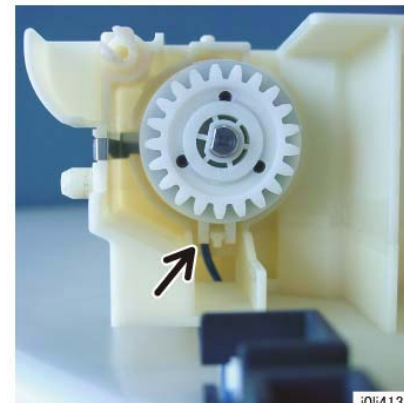


j0lj41312

Figure 8 j0lj41312

Replacement

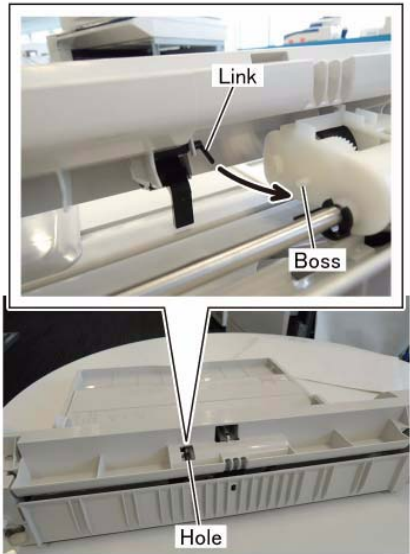
1. To install, carry out the removal steps in reverse order.
2. When installing the MSI Feed Clutch, align the Cutout of the MSI Feed Clutch to the Tab. (Figure 9)



j0lj41313

Figure 9 j0lj41313

3. When installing the MSI Top Cover, store the Link of the Paper Stopper Lock underneath the Boss of the MSI Feed Roll Housing. (Figure 10)
 - After installing the MSI Top Cover, check from the hole of the MSI Top Cover to make sure that the Link is underneath the Boss..



j0mg41301

Figure 10 j0mg41301

4. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 950-802"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 13.3.2 MSI Retard Pad

Parts List on PL 13.3

Removal

WARNING

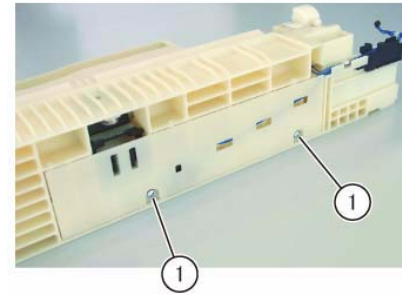
When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The MSI Nudger Roll, the MSI Feed Roll, and the MSI Retard Pad must be replaced at the same time.

1. Remove the MSI. (REP 13.1.1)
2. Remove the screws that secure the MSI Lower Cover at the bottom of the MSI. (Figure 1)
 - a. Remove the Tapping Screw (x2).



j0lj41315

Figure 1 j0lj41315

3. Release the hook (x3) and release the boss (x3) from the installation holes to remove the MSI Lower Cover.
 (Figure 2)

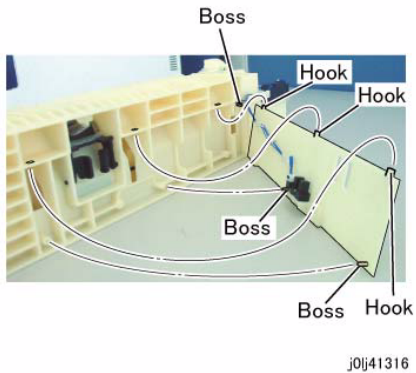


Figure 2 j0lj41316

4. Remove the MSI Retard Pad. (Figure 3)
 - a. Remove the spring.
 - b. Release the boss (x2) from the installation holes and remove the MSI Retard Pad.

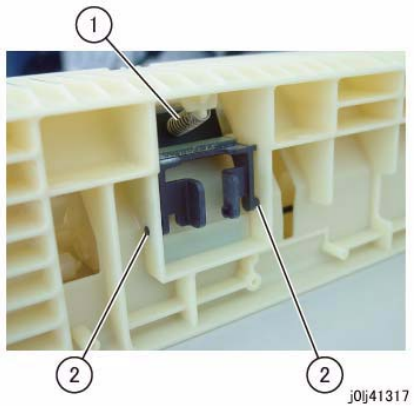


Figure 3 j0lj41317

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 950-802"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 14.1.1 L/H Cover

Parts List on PL 14.1

Removal

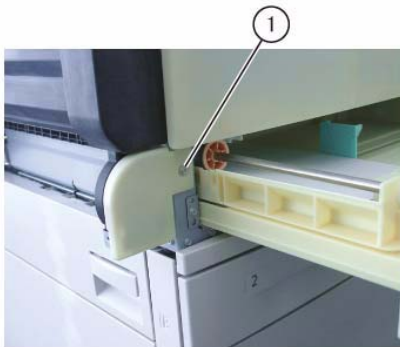
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

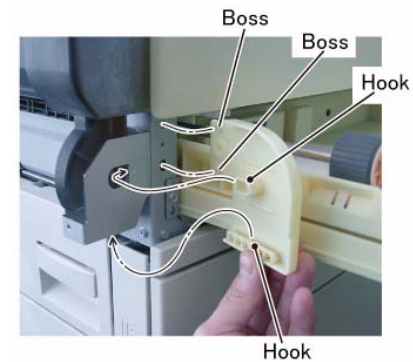
1. Remove the MSI. (REP 13.1.1)
2. Pull out Tray 1 slightly and remove the screw that secures the Hinge Front Cover. (Figure 1)
 - a. Remove the screw.



j0lj41401

Figure 1 j0lj41401

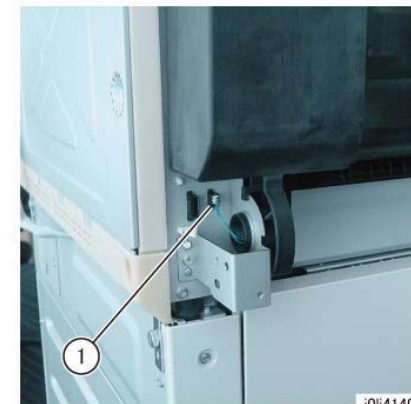
3. Release the hook (x2) and release the boss (x2) from the installation holes to remove the Hinge Front Cover. (Figure 2)



j0lj41402

Figure 2 j0lj41402

4. [Duplex Type]: Disconnect the connector. (Figure 3)
 - a. Disconnect the connector.



j0lj41403

Figure 3 j0lj41403

5. Remove the L/H Cover. (Figure 4)
 - a. Rotate by 90 degrees and remove the L/H Cover Support.
 - b. With the L/H Cover in 90 degrees opened state, align the Tab of the L/H Cover to the Cutout of the Right Hinge and release the boss (x2) of the L/H Cover in the direction of the arrow.

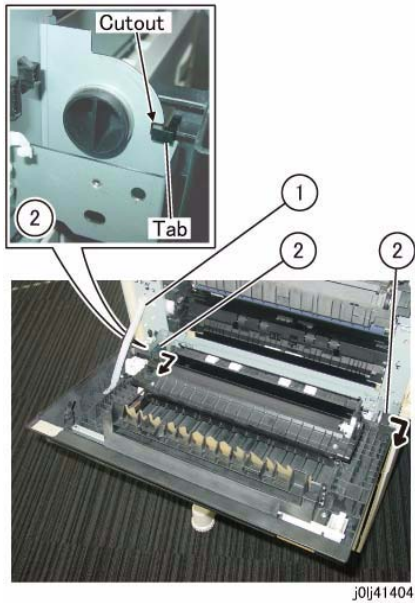


Figure 4 j0lj41404

Replacement

1. To install, carry out the removal steps in reverse order.

REP 15.1.1 Registration Chute

Parts List on PL 15.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Front Cover. (REP 19.1.1)
3. Remove the MSI. (REP 13.1.1)
4. Remove the L/H Cover. (REP 14.1.1)
5. Remove the Drum Cartridge Guide. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Drum Cartridge Guide.

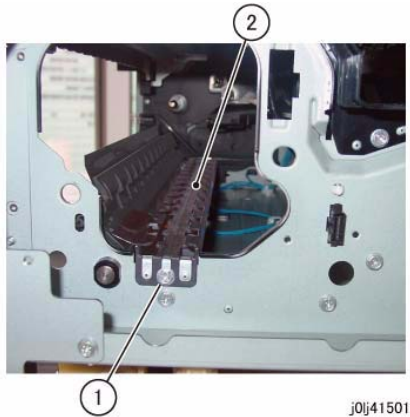
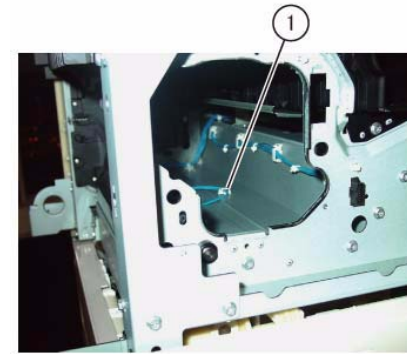


Figure 1 j0lj41501

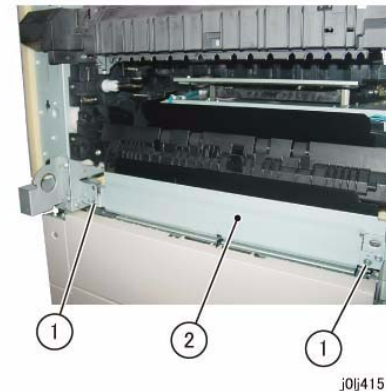
6. Release the wire harness from the clamp. (Figure 2)
 - a. Release the wire harness from the clamp.



j0lj41502

Figure 2 j0lj41502

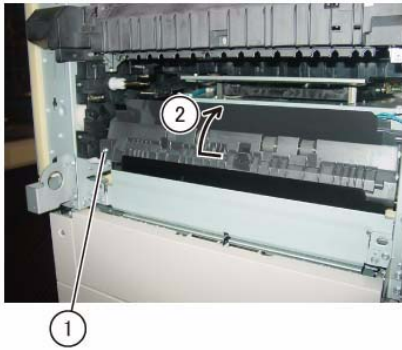
7. Remove the L/H Chute. (Figure 3)
 - a. Remove the screw (x2).
 - b. Remove the L/H Chute.



j0lj41511

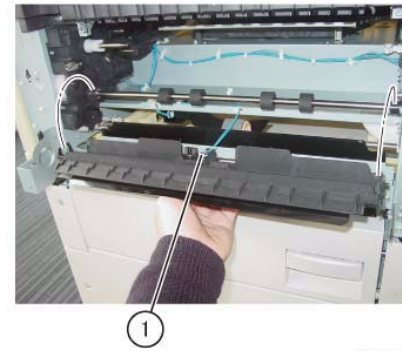
Figure 3 j0lj41511

8. Rotate the Registration Chute. (Figure 4)
 - a. Remove the Tapping Screw.
 - b. Move the Registration Chute slightly to the rear and rotate it in the direction of the arrow.



j0lj41503

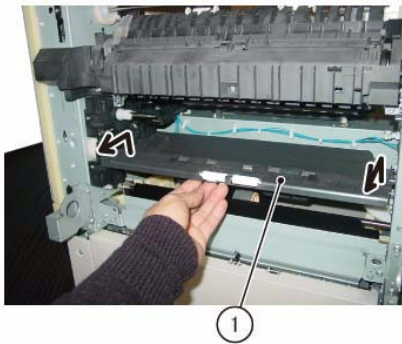
Figure 4 j0lj41503



j0lj41505

Figure 6 j0lj41505

9. Remove the Registration Chute from the bearing (x2) of the Registration Roll. (Figure 5)
 - a. Remove the Registration Chute.



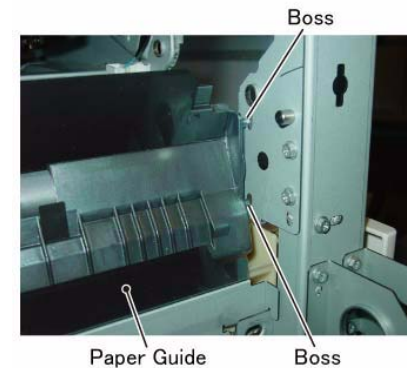
j0lj41504

Figure 5 j0lj41504

10. Disconnect the connector and remove the Registration Chute. (Figure 6)
 - a. Disconnect the connector and remove the Registration Chute.

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Registration Chute, insert the boss (x2) of the Registration Chute into the holes for the boss. (Figure 7)
3. When installing the Registration Chute, install the Registration Chute to the inner side of the Paper Guide. (Figure 7)



j0lj41506

Figure 7 j0lj41506

4. When installing the Drum Cartridge Guide, insert the boss (x2) of the Drum Cartridge Guide into the holes for the boss. (Figure 8)

REP 15.1.2 Registration Roll

Parts List on PL 15.1

Removal

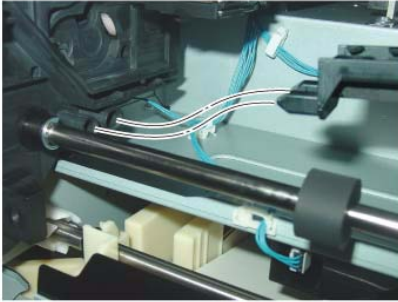
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

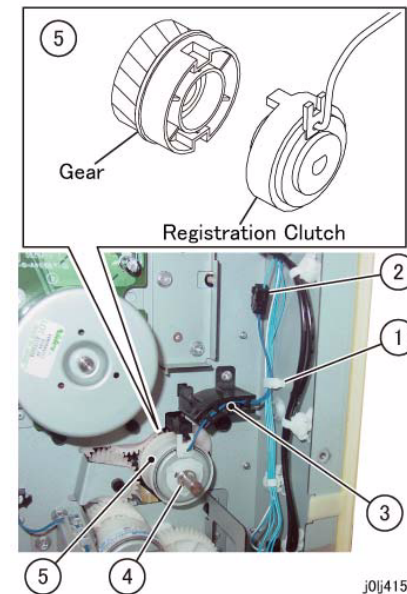
Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Front Cover. (REP 19.1.1)
3. Remove the MSI. (REP 13.1.1)
4. Remove the L/H Cover. (REP 14.1.1)
5. Remove the Registration Chute. (REP 15.1.1)
6. Remove the Rear Cover. (REP 19.4.1)
7. Remove the Registration Clutch. (Figure 1)
 - a. Release the wire harness from the clamp.
 - b. Disconnect the connector.
 - c. Remove the wire harness from the Harness Guide.
 - d. Remove the E-Clip.
 - e. Remove the Registration Clutch and the gear.



j0lj41507

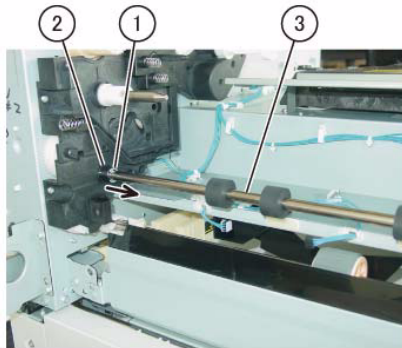
Figure 8 j0lj41507



j0lj41508

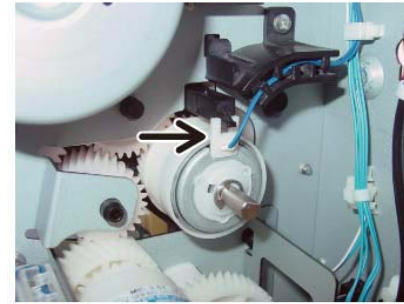
Figure 1 j0lj41508

8. Remove the Registration Roll. (Figure 2)
 - a. Remove the E-Clip.
 - b. Move the bearing in the direction of the arrow.
 - c. Remove the Registration Roll.



j0lj41509

Figure 2 j0lj41509

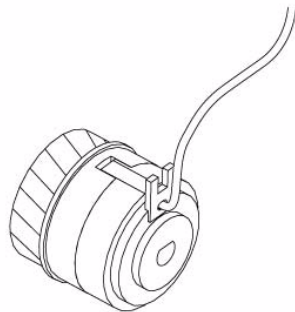


j0lj41510

Figure 4 j0lj41510

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Registration Clutch, align the Tab (x2, top and bottom) of the Registration Clutch to the Cutout (x2, top and bottom) of the gear. (Figure 3)



j0lj41512

Figure 3 j0lj41512

3. When installing the Registration Clutch, align the Cutout of the Registration Clutch to the Tab. (Figure 4)

REP 17.1.1 Exit Cover

Parts List on PL 17.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Remove the Fusing Unit. (REP 7.1.1)
5. Remove the Top Cover. (REP 19.1.2)
6. Remove the Exit Cover. (Figure 1)
 - a. Remove the screw.
 - b. Release the hook (x6).
 - c. Remove the Exit Cover.

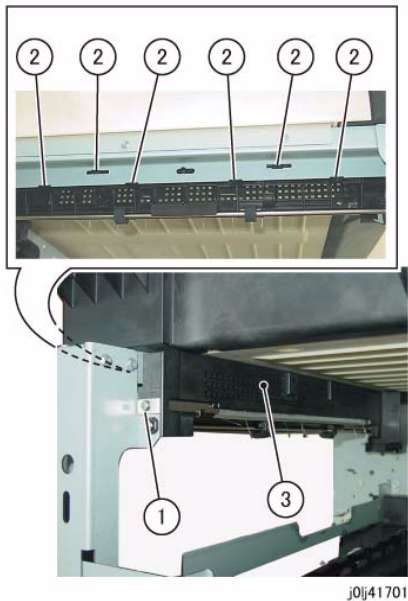


Figure 1 j0lj41701

Reference: This shows the removed Exit Cover. (Figure 2)

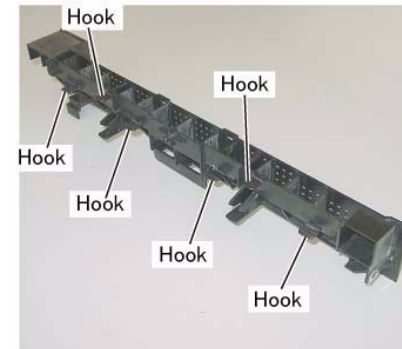


Figure 2 j0lj41702

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Exit Cover, insert the boss of the Exit Cover into the hole of the Frame. (Figure 3)

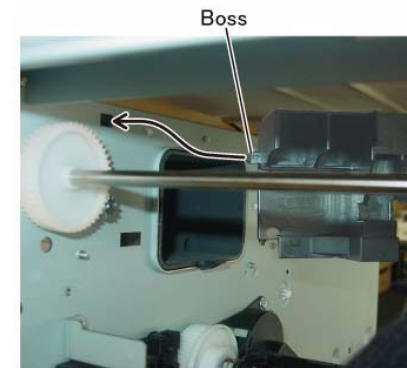


Figure 3 j0lj41705

REP 17.1.2 Exit Roll

Parts List on PL 17.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Fusing Unit. (REP 7.1.1)
2. Remove the MSI. (REP 13.1.1)
3. Remove the L/H Cover. (REP 14.1.1)
4. Remove the Fusing Unit Cover. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Fusing Unit Cover.

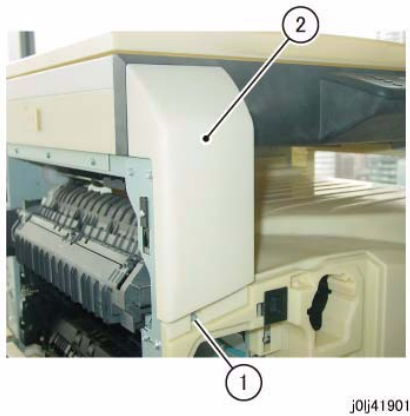


Figure 1 j0lj41901

CAUTION

When removing the Exit Roll, be careful so as not to drop the bearing at the rear of the Exit Roll into the machine. (Figure 3)

5. Remove the Exit Roll. (Figure 2)
 - a. Remove the E-Clip or the KL-Clip.
 - b. Move the bearing in the direction of the arrow.
 - c. Remove the Exit Roll.

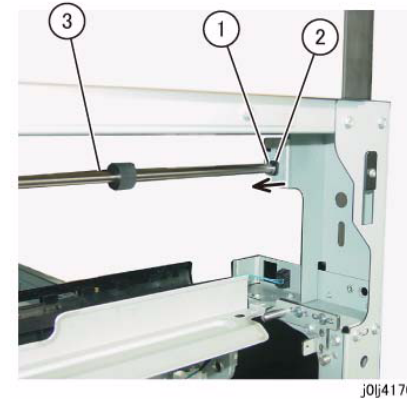


Figure 2 j0lj41703

Reference: This shows the removed Exit Roll. (Figure 3)

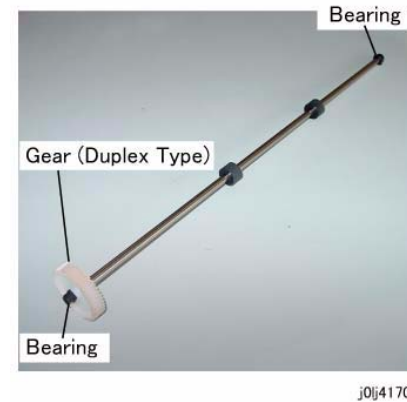


Figure 3 j0lj41704

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.1.2 HVPS

Parts List on PL 18.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

Static electricity may damage electrical parts.

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 portion on the back of the PWB.

1. Remove the Rear Cover. (REP 19.4.1)
2. Remove the HVPS. (Figure 1)
 - a. Disconnect the connector.
 - b. Remove the screw (x4).
 - c. Remove the HVPS.

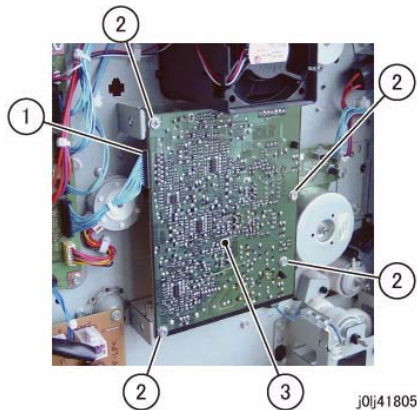


Figure 1 j0lj41805

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.1.3 LVPS

Parts List on PL 18.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

Static electricity may damage electrical parts.

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 portion on the back of the PWB.

1. Remove the Rear Cover. (REP 19.4.1)
2. Remove the Docking Bracket. (Figure 1)
 - a. Remove the Docking Screw.
 - b. Remove the Docking Bracket.

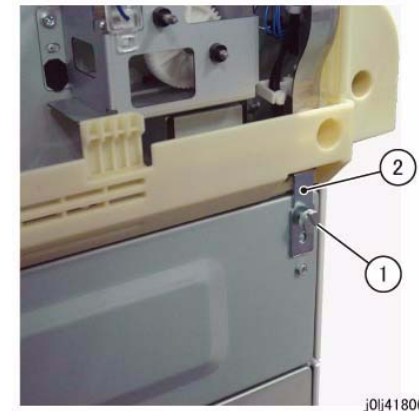
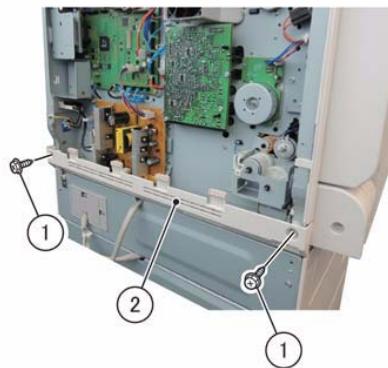


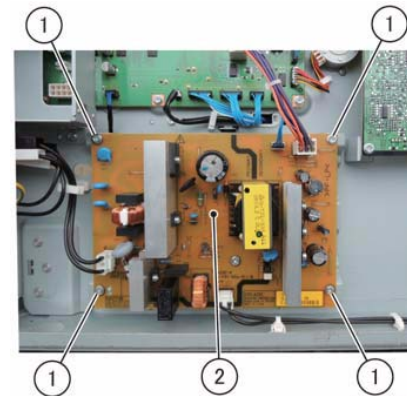
Figure 1 j0lj41806

3. Remove the Rear Lower Cover.
 - a. Remove the screw (x2).
 - b. Remove the Rear Lower Cover.



j0mg41857

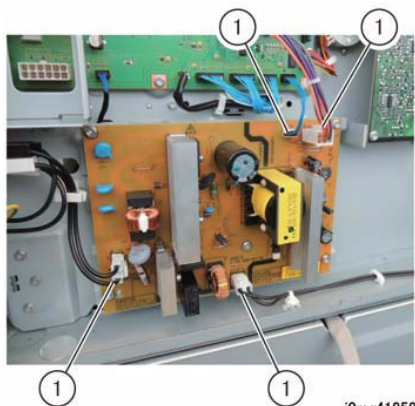
Figure 2 j0mg41857



j0mg41859

Figure 4 j0mg41859

4. Disconnect the connector of the LVPS.
 - a. Disconnect the connector (x4).



j0mg41858

Figure 3 j0mg41858

5. Remove the LVPS.
 - a. Remove the screw (x5).
 - b. Remove LVPS.

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.3.1 Net I/F PWB

Parts List on PL 18.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

Static electricity may damage electrical parts.

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 portion on the back of the PWB.

1. Remove the Rear Cover. (REP 19.4.1)
2. Remove the Bracket. (Figure 1)
 - a. Remove the screw (x2).
 - b. Remove the Bracket.

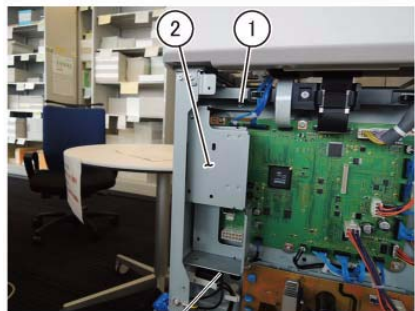
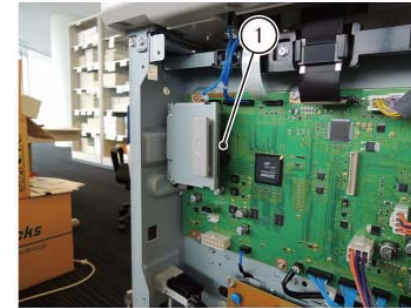


Figure 1 j0mg41851

j0mg41851



j0mg41852

Figure 2 j0mg41852

Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the Net I/F PWB, remove the ROM from the old Net I/F PWB, and install it to the new one. (Figure 3)



j0mg41853

Figure 3 j0mg41853

3. Remove the Net I/F PWB. (Figure 2)
 - a. Disconnect the connector and remove the Net I/F PWB.

REP 18.3.2 ESS/MCU PWB

Parts List on PL 18.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

Static electricity may damage electrical parts.

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 portion on the back of the PWB.

1. [Net I/F PWB Type]
Remove the Net I/F PWB. (REP 18.3.1)
2. Remove the Rear Cover. (REP 19.4.1)
3. Disconnect the connector. (Figure 1)
 - a. Disconnect the connector (x19).

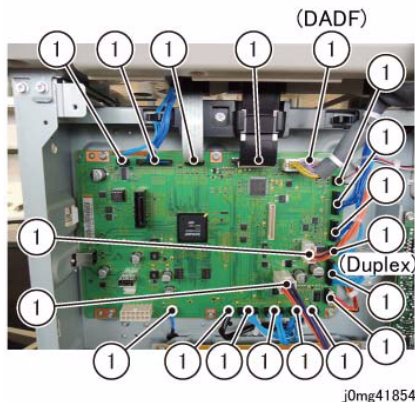


Figure 1 j0mg41854

4. Remove the ESS/MCU PWB. (Figure 2)
 - a. Remove the screw (x6).
 - b. Release the hook and remove the ESS/MCU PWB.

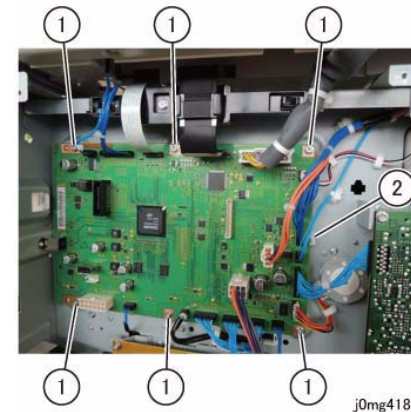


Figure 2 j0mg41855

Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the ESS/MCU PWB, remove the EEP ROM from the old ESS/MCU PWB, and install it to the new one. (Figure 3)



Figure 3 j0mg41856

3. Turning ON the power switch will cause 016-334 (NVM Data Mismatch) to be displayed. (The Billing/Meter is stored in the EEP ROM at 2 locations. Since the ESS/MCU PWB is a new one, it contains a different value.)
To take corrective action, enter the Diag Mode and input Clain-Link number "621-400" to perform NVM matching.
For more details on the procedure, refer to [6.4.2.15 Checking and Repairing the Billing Counter (621-400)].

REP 19.1.1 Front Cover

Parts List on PL 19.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Fusing Unit Cover. (Figure 1)
 - a. Remove the screw.
 - b. Remove the Fusing Unit Cover.

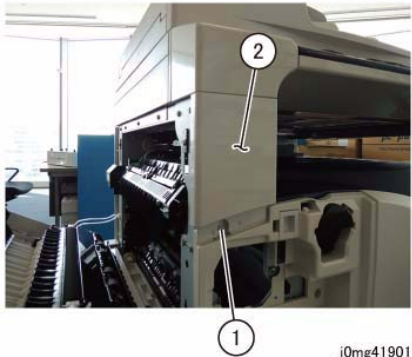
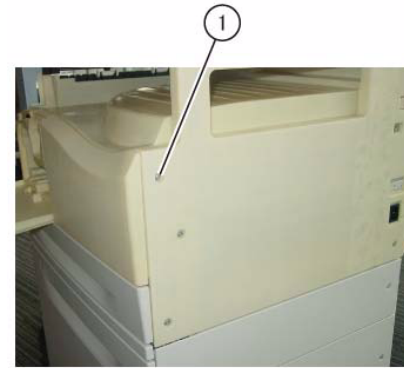


Figure 1 j0mg41901

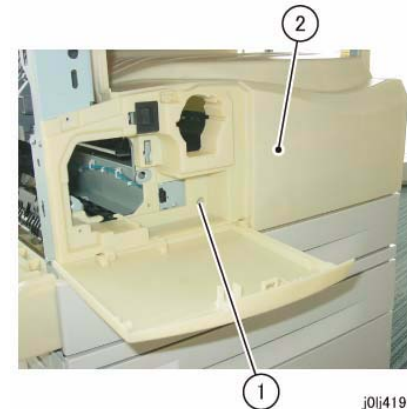
4. Remove the screw that secures the Front Cover at the right. (Figure 2)
 - a. Remove the screw.



j0lj41902

Figure 2 j0lj41902

5. Remove the Front Cover. (Figure 3)
 - a. Remove the screw.
 - b. Remove the Front Cover.



j0lj41903

Figure 3 j0lj41903

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Front Cover, attach the hook (x3) of the Front Cover to the Frame. (Figure 4)
 - There are also hooks at the left of the Front Cover.

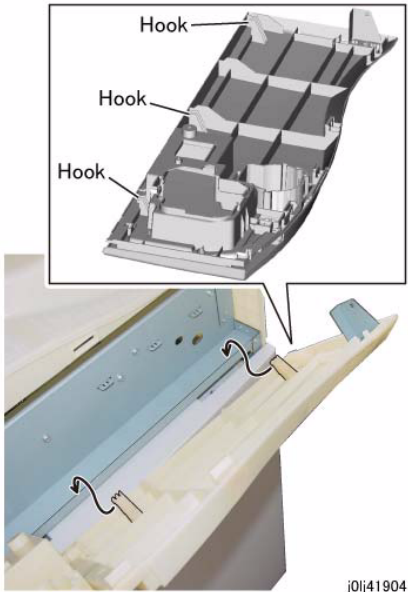


Figure 4 j0lj41904

j0lj41904

REP 19.1.2 Top Cover

Parts List on PL 19.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Drum Cartridge. (REP 8.1.1)
2. Remove the Toner Cartridge. (PL 8.1)
3. Remove the Front Cover. (REP 19.1.1)
4. Pull out Tray 1 slightly.
5. Remove the Right Cover. (Figure 1)
 - a. Remove the screw (x3).
 - b. Remove the Right Cover.

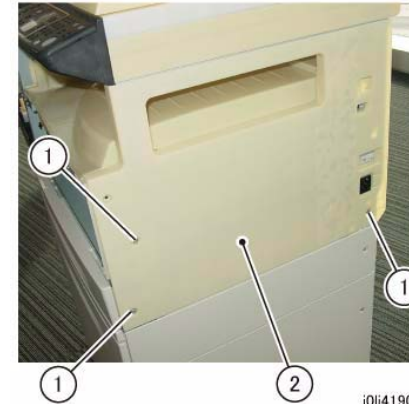


Figure 1 j0lj41905

j0lj41905

6. Remove the Top Cover. (Figure 2)
 - a. Remove the Top Cover.

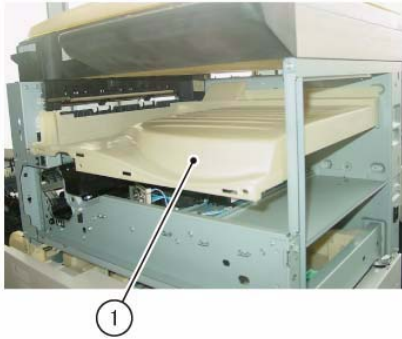


Figure 2 j0lj41906

j0lj41906

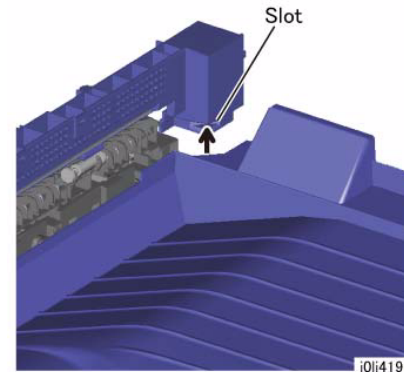


Figure 4 j0lj41914

j0lj41914

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Top Cover, insert the Tab (x3) of the Top Cover to the Tab Slot (x3) of the Frame. (Figure 3)

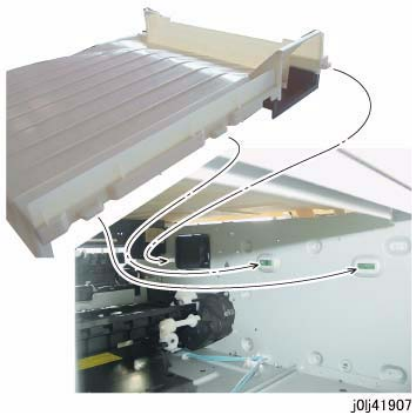


Figure 3 j0lj41907

j0lj41907

3. When installing the Top Cover, insert the portion of the Top Cover that is shown in the figure into the Slot of the Exit Cover. (Figure 4)

4. Install the Top Cover with its front left side positioned as shown in the figure. (Figure 5)



Figure 5 j0lj41908

j0lj41908

5. When installing the Right Cover, insert the hook (x2) of the Right Cover to the hole (x2) of the Frame. (Figure 6)

REP 19.4.1 Rear Cover

Parts List on PL 19.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

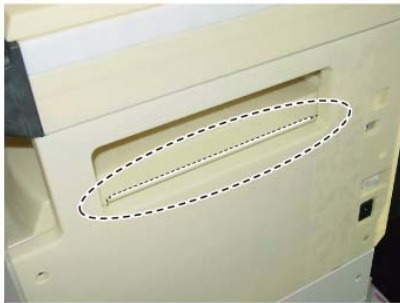
1. [Machines with One Tray Module]: Remove the STM Connector Cover. (Figure 1)
 - a. Remove the screw (x2).
 - b. Remove the STM Connector Cover.



j0lj41909

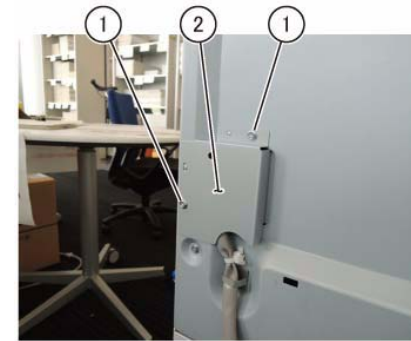
Figure 6 j0lj41909

6. Install the Right Cover as shown in the figure. (Figure 7)



j0lj41910

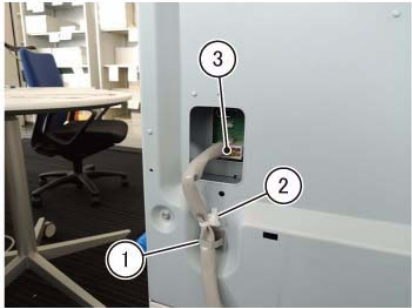
Figure 7 j0lj41910



j0mg41902

Figure 1 j0mg41902

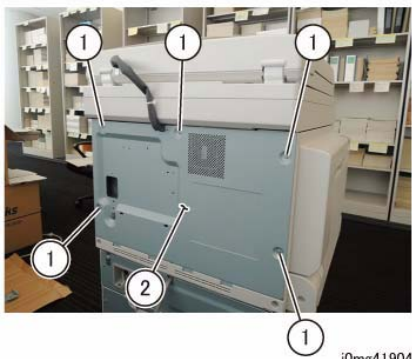
2. [Machines with One Tray Module]: Disconnect the connector. (Figure 2)
 - a. Release the Wire Harness from the clamp.
 - b. Remove the cable band.
 - c. Disconnect the connector.



j0mg41903

Figure 2 j0mg41903

3. Remove the Rear Cover. (Figure 3)
 - a. Remove the screw (x5).
 - b. Remove the Rear Cover.



j0mg41904

Figure 3 j0mg41904

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.1.1 DADF

Parts List on PL 56.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the Rear Cover. (REP 19.4.1)
2. Disconnect the connector. (Figure 1)
 - a. Remove the cable band (x2).
 - b. Disconnect the connector.

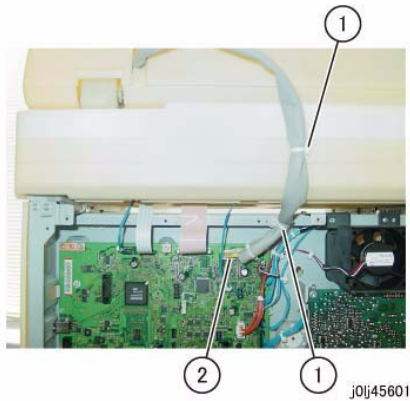


Figure 1 j0lj45601

3. Remove the DADF. (Figure 2)
 - a. Slant the Counter Balance in the direction of the arrow and remove it.

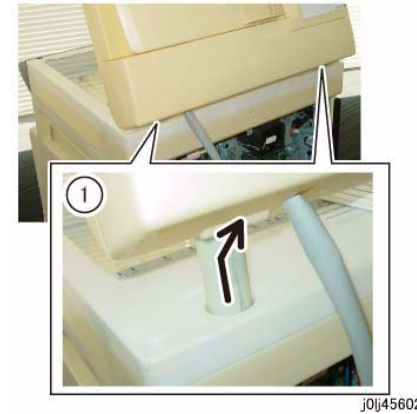


Figure 2 j0lj45602

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.

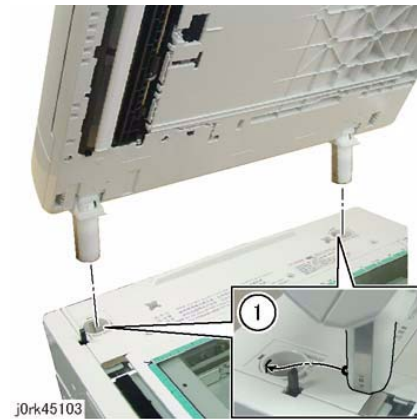


Figure 3 j0rk45103

3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 - "Chain Link : 955-806"
 - "Chain Link : 955-807"
 - "Chain Link : 955-808"
 - "Chain Link : 955-810"
 - "Chain Link : 955-812"
 - "Chain Link : 955-826"

"Chain Link : 955-828"

Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 56.1.2 DADF Platen Cushion

Parts List on PL 56.1

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The DADF Platen Cushion is pasted on with double sided adhesive tapes.

1. Peel off the DADF Platen Cushion. (Figure 1)
 - a. Peel off the DADF Platen Cushion.

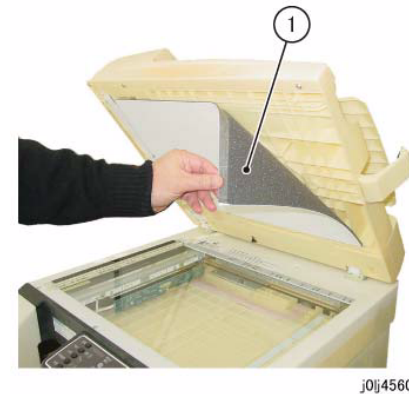


Figure 1 j0j45603

Replacement

1. Paste on the DADF Platen Cushion. (Figure 2)
 - a. Place the DADF Platen Cushion on the Platen Glass.
 - b. Set up the gap between the Regi Guide and Platen Guide.
 - c. Slowly lower the DADF to paste the DADF Platen Cushion to it.

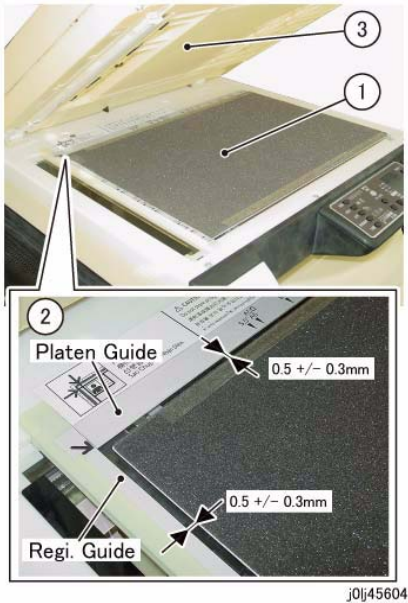


Figure 2 j0lj45604

REP 56.2.1 DADF Front Cover

Parts List on PL 56.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Open the Upper Feeder.
2. Open the DADF.
3. Remove the DADF Front Cover. (Figure 1)
 - a. Remove the Tapping Screw (x4).
 - b. Remove the DADF Front Cover in the direction of the arrow.

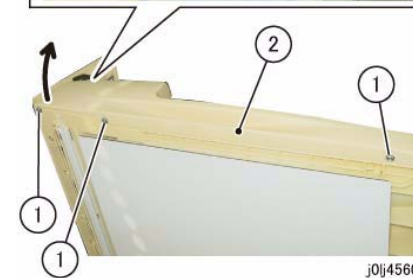
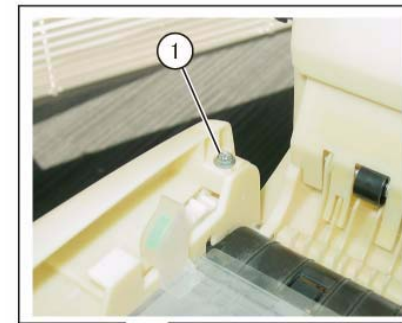


Figure 1 j0lj45605

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.2.2 DADF Rear Cover

Parts List on PL 56.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the screws that secure the DADF Rear Cover. (Figure 1)
 - a. Open the Upper Feeder.
 - b. Remove the Tapping Screw.

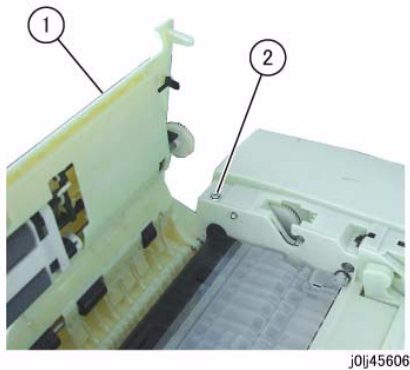


Figure 1 j0lj45606

2. Remove the screws that secure the DADF Rear Cover. (Figure 2)
 - a. Open the Document Tray.
 - b. Remove the Tapping Screw.

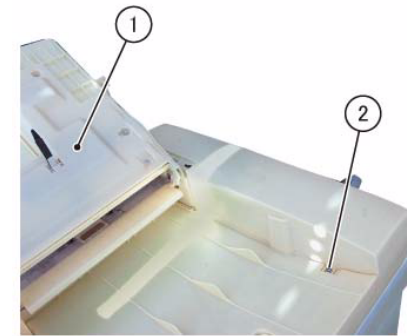


Figure 2 j0lj45607

3. Release the hook (x3) of the DADF Rear Cover. (Figure 3)
 - a. Release the hook (x3).

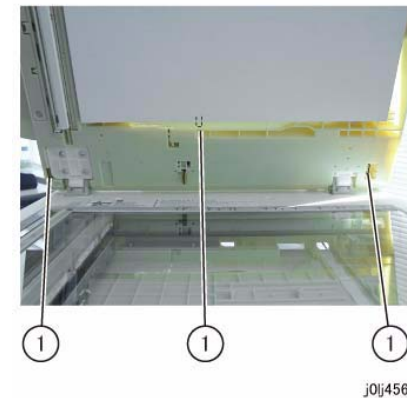
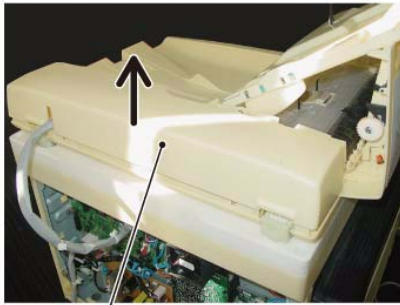


Figure 3 j0lj45608

4. Remove the DADF Rear Cover. (Figure 4)
 - a. Remove the DADF Rear Cover in the direction of the arrow.



1

j0lj45609

Figure 4 j0lj45609

Replacement

- To install, carry out the removal steps in reverse order.

REP 56.2.3 DADF PWB

Parts List on PL 56.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

CAUTION

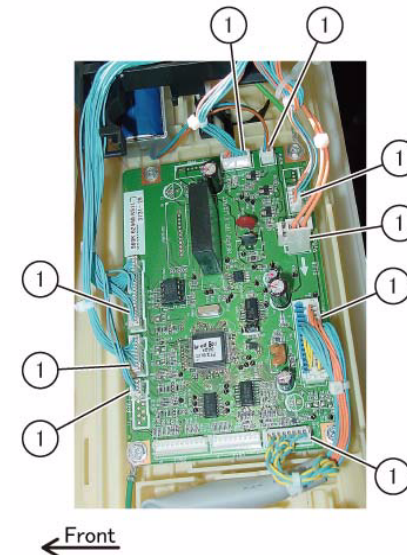
Static electricity may damage electrical parts.

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 portion on the back of the PWB.

- Remove the DADF Rear Cover. (REP 56.2.2)
- Disconnect the connector. (Figure 1)
 - Disconnect the connector (x9).



j0lj45610

Figure 1 j0lj45610

- Remove the DADF PWB. (Figure 2)
 - Remove the Tapping Screw (x2) and the Ground Wire (x2).

- b. Remove the Tapping Screw (x2).
- c. Remove the DADF PWB.

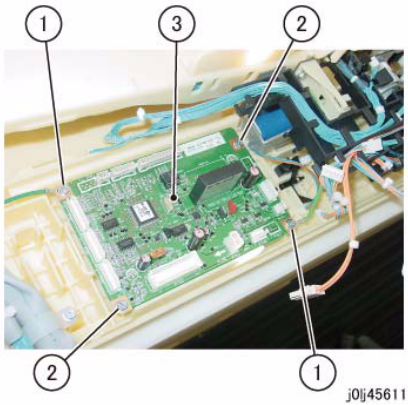


Figure 2 j0lj45611

Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When replacing the DADF PWB, remove the ROM from the old DADF PWB, and install it to the new one. (Figure 3)

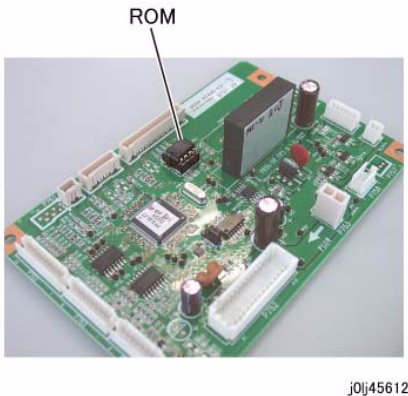


Figure 3 j0lj45612

REP 56.2.4 Upper Feeder

Parts List on PL 56.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

- 1. Remove the DADF Front Cover. (REP 56.2.1)
- 2. Remove the DADF Rear Cover. (REP 56.2.2)
- 3. Remove the Hinge Bracket at the front. (Figure 1)
 - a. Remove the Tapping Screw.
 - b. Remove the Hinge Bracket.

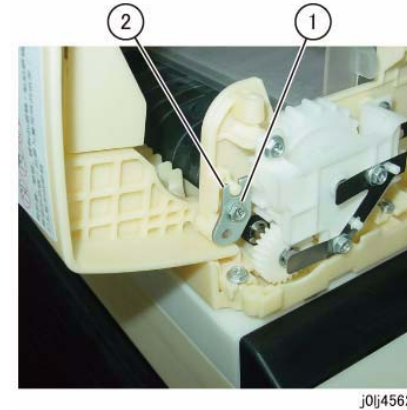


Figure 1 j0lj45626

- 4. Remove the Hinge Bracket at the rear and remove the Upper Feeder. (Figure 2)
 - a. Remove the Tapping Screw.
 - b. Remove the Hinge Bracket.
 - c. Remove the Upper Feeder.

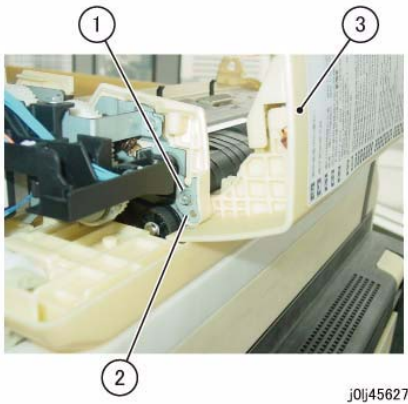


Figure 2 j0lj45627

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 955-806"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 56.2.5 DADF Feeder Assembly

Parts List on PL 56.2

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Remove the Harness Guide and the wire harness. (REP 56.6.1)
5. Remove the Upper Feeder. (REP 56.2.4)
6. Disconnect the connector of the Exit Nip Release Solenoid. (Figure 1)
 - a. Disconnect the connector.

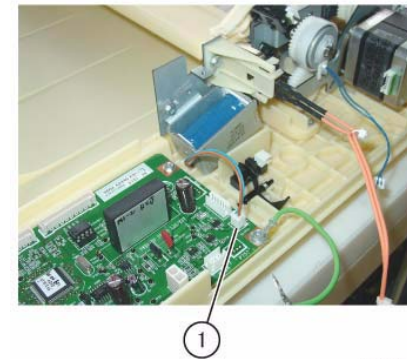


Figure 1 j0lj45643

7. Remove the screws that secure the DADF Feeder Assembly at the rear. (Figure 2)
 - a. Remove the Tapping Screw (x3).

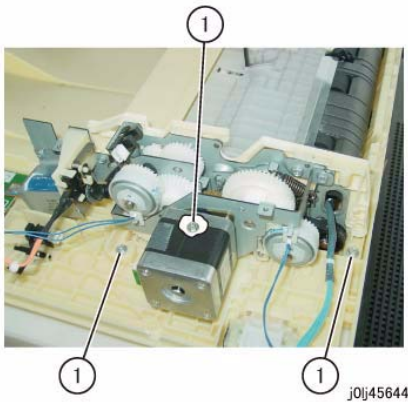


Figure 2 j0lj45644

8. Remove the DADF Feeder Assembly. (Figure 3)
 - a. Remove the Tapping Screw (x3).
 - b. Remove the DADF Feeder Assembly.

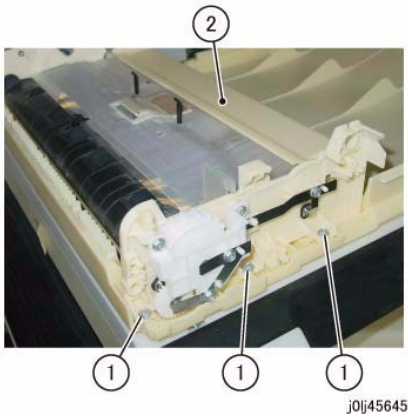


Figure 3 j0lj45645

Reference: This shows the removed DADF Feeder Assembly. (Figure 4)

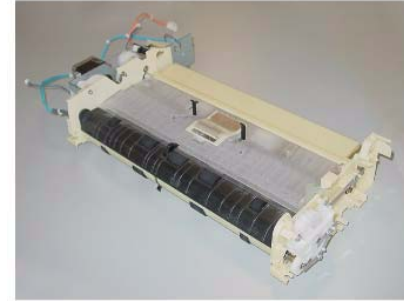


Figure 4 j0lj45646

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 955-806"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 56.3.1 Left Counter Balance

Parts List on PL 56.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF. (REP 56.1.1)
2. Turn the DADF upside down.
3. Remove the Left Counter Balance. (Figure 1)
 - a. Remove the Tapping Screw (x4).
 - b. Remove the Left Counter Balance.

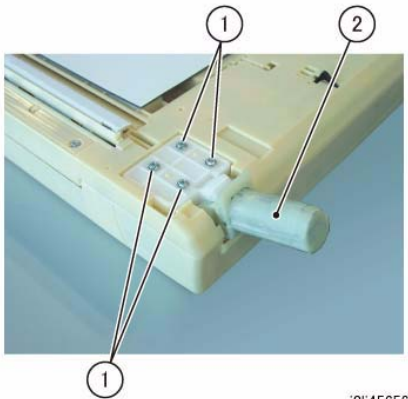


Figure 1 j0lj45656

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.3.2 Right Counter Balance

Parts List on PL 56.3

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF Rear Cover. (REP 56.2.2)
2. Remove the DADF. (REP 56.1.1)
3. Record the position of the scale for the Right Counter Balance. (Figure 1)

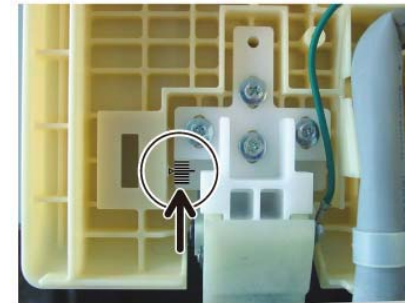


Figure 1 j0lj45657

4. Remove the Right Counter Balance. (Figure 2)
 - a. Remove the Tapping Screws that secure the Ground Wire.
 - b. Remove the Tapping Screw (x4).
 - c. Remove the Right Counter Balance.

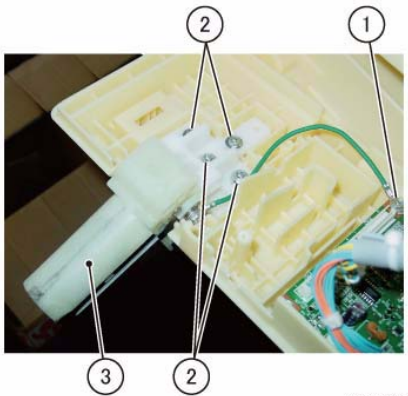


Figure 2 j0lj45658

j0lj45658

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.5.1 DADF Feed/Nudger Roll

Parts List on PL 56.5

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

NOTE: The DADF Feed Roll, the DADF Nudger Roll, and the DADF Retard Pad must be replaced at the same time.

1. Open the Upper Feeder.
2. Remove the Upper Feeder Chute. (Figure 1)
 - a. Remove the screw (x2).
 - b. Remove the Upper Feeder Chute.

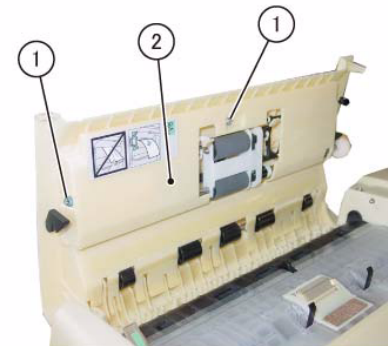


Figure 1 j0lj45652

j0lj45652

3. Remove the Feed Roll Nudger Roll Assembly. (Figure 2)
 - a. Remove the KL-Clip.
 - b. Move the bearing in the direction of the arrow.
 - c. Remove the Feed Roll Nudger Roll Assembly.

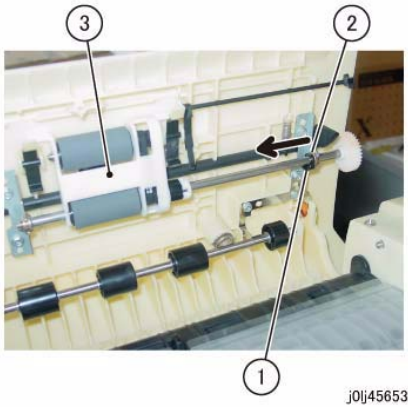


Figure 2 j0lj45653

4. Remove the Feed Roll and the Nudger Roll. (Figure 3)
 - a. Remove the Bearing.
 - b. Remove the KL-Clip.
 - c. Release the hook to remove the housing.
 - d. Remove the Feed Roll.
 - e. Remove the Nudger Roll.

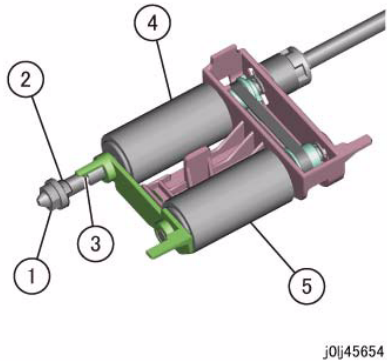


Figure 3 j0lj45654

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Feed Roll and the Nudger Roll, install them such that they are rotating in the clockwise direction.

3. When installing the Feed Roll Nudger Roll Assembly, install it such that the Tab (x2) of the Feed Roll Nudger Roll Assembly are at the inner side of the Set Link. (Figure 4)

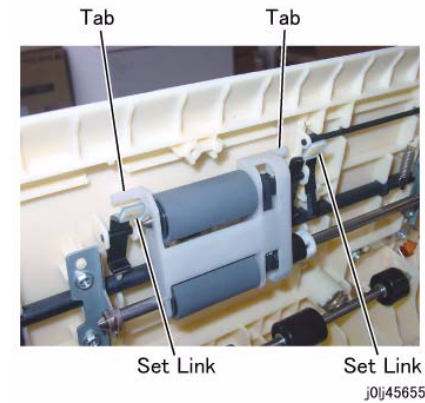


Figure 4 j0lj45655

4. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
 "Chain Link : 955-806"
 Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 56.6.1 Harness Guide and Wire Harness

Parts List on PL 56.6

Removal

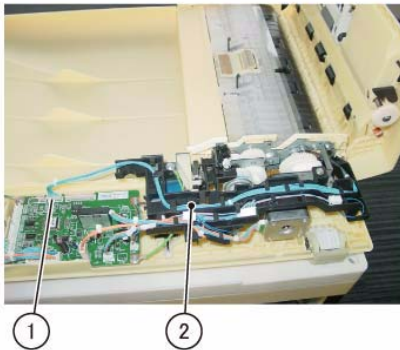
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

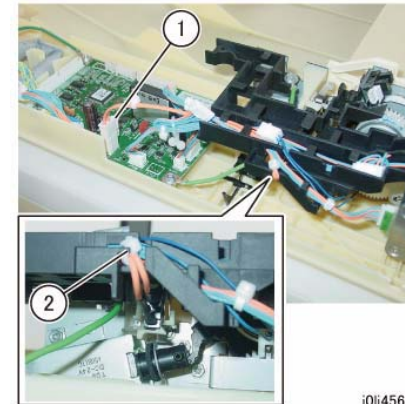
1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Disconnect P760 and remove the wire harness from the Harness Guide. (Figure 1)
 - a. Disconnect the connector.
 - b. Remove the wire harness from the Harness Guide.



j0lj45618

Figure 1 j0lj45618

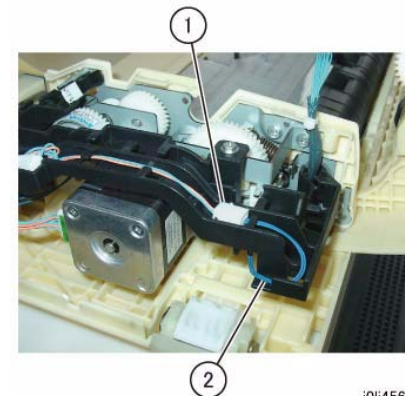
5. Disconnect P753 and remove the wire harness from the Harness Guide. (Figure 2)
 - a. Disconnect the connector.
 - b. Remove the wire harness from the Harness Guide.



j0lj45619

Figure 2 j0lj45619

6. Disconnect the connector of the DADF Takeaway Clutch and remove the wire harness from the Harness Guide. (Figure 3)
 - a. Disconnect the connector.
 - b. Remove the wire harness from the Harness Guide.



j0lj45620

Figure 3 j0lj45620

7. Disconnect the DADF PWB connectors. (Figure 4)
 - a. Disconnect the connector (x2).

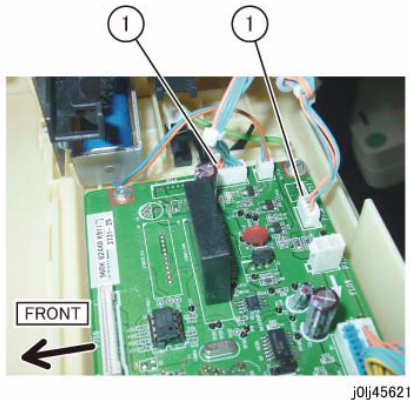


Figure 4 j0lj45621

8. Disconnect the connector of the DADF Feed Clutch and remove the wire harness from the Harness Guide. (Figure 5)
 - a. Disconnect the connector.
 - b. Remove the wire harness from the Harness Guide.

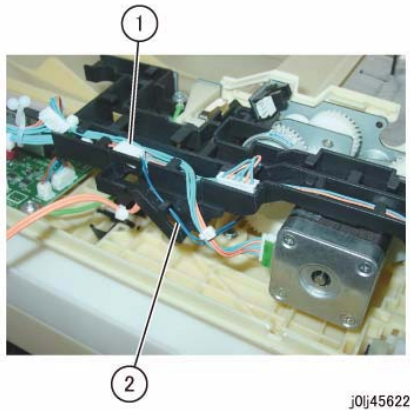


Figure 5 j0lj45622

9. Disconnect the connector of the DADF Feed Motor. (Figure 6)
 - a. Disconnect the connector.

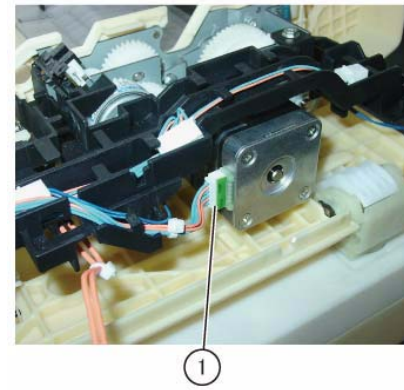


Figure 6 j0lj45623

10. Remove the Harness Guide and the wire harness. (Figure 7)
 - a. Remove the screw and the Ground Wire.
 - b. Remove the screw.
 - c. Remove the Harness Guide and the wire harness.

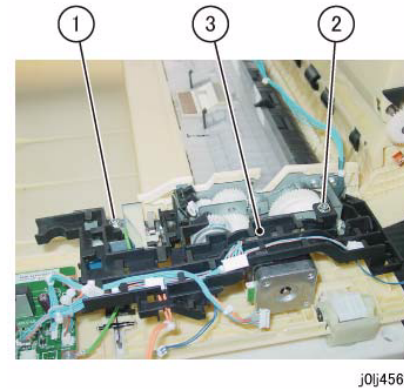
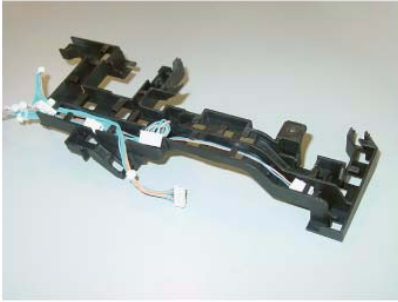


Figure 7 j0lj45624

Reference: This shows the removed Harness Guide and wire harness. (Figure 8)



j0lj45625

Figure 8 j0lj45625

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.6.2 DADF Feed Motor

Parts List on PL 56.6

Removal

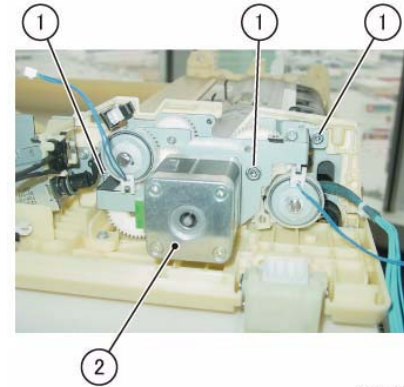
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Remove the Harness Guide and the wire harness. (REP 56.6.1)
5. Remove the DADF Feed Motor. (Figure 1)
 - a. Remove the screw (x3).
 - b. Remove the DADF Feed Motor.



j0lj45628

Figure 1 j0lj45628

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the DADF Feed Motor, align the Tab (x2) of the DADF Feed Motor Bracket to the Cutout (x2) of the DADF Feed Clutch and DADF Takeaway Clutch. (Figure 2)

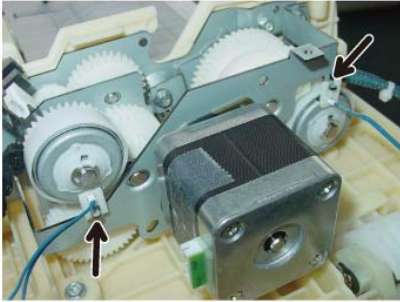


Figure 2 j0lj45630

j0lj45630

REP 56.7.1 DADF Drive Belt

Parts List on PL 56.7

Removal

WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Remove the Harness Guide and the wire harness. (REP 56.6.1)
5. Remove the DADF Feed Motor. (REP 56.6.2)
6. Remove the link. (Figure 1)
 - a. Remove the link.

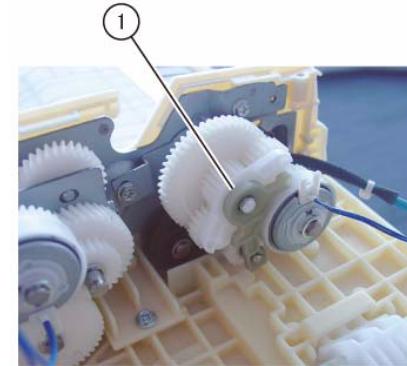
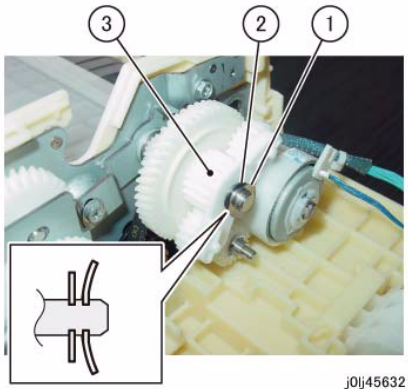


Figure 1 j0lj45631

j0lj45631

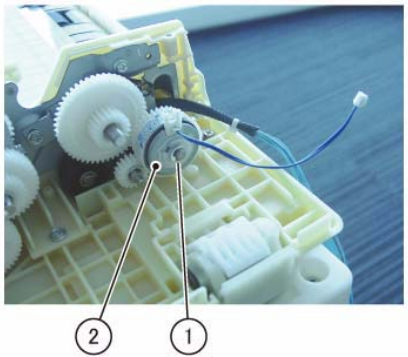
7. Remove the gear and bracket. (Figure 2)
 - a. Remove the washer (large: thin).
 - b. Remove the washer (small: thick).
 - c. Remove the gear and bracket.



j0lj45632

Figure 2 j0lj45632

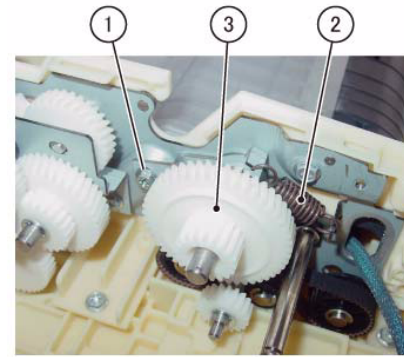
8. Remove the DADF Takeaway Clutch. (Figure 3)
 - a. Remove the E-Clip.
 - b. Remove the DADF Takeaway Clutch.



j0lj45633

Figure 3 j0lj45633

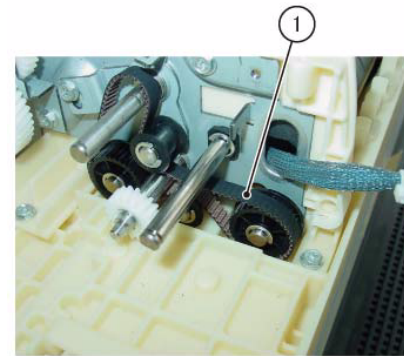
9. Remove the gear. (Figure 4)
 - a. Loosen the screw.
 - b. Remove the spring.
 - c. Remove the gear.



j0lj45634

Figure 4 j0lj45634

10. Remove the DADF Drive Belt. (Figure 5)
 - a. Remove the DADF Drive Belt.



j0lj45635

Figure 5 j0lj45635

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.9.1 Document Tray

Parts List on PL 56.9

Removal

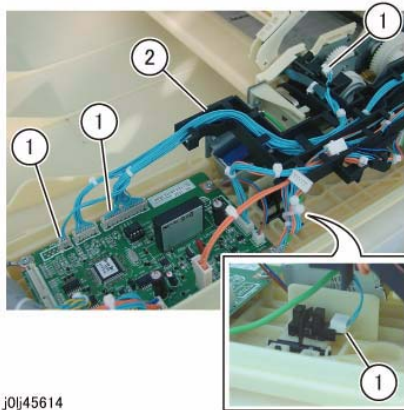
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the wire harness of the Document Tray from the Harness Guide. (Figure 1)
 - a. Disconnect the connector (x4).
 - For the type that comes with DADF Open Sensor, disconnect the connector of the DADF Open Sensor.
 - b. Remove the wire harness from the Harness Guide.



j0lj45614

Figure 1 j0lj45614

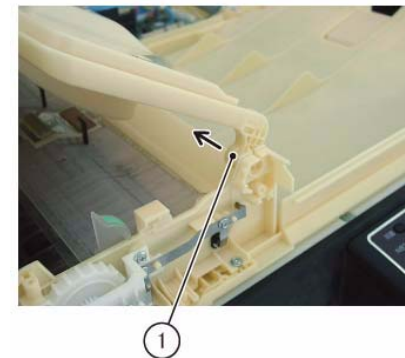
Reference: This shows the removed wire harness of the Document Tray. (Figure 2)



j0lj45615

Figure 2 j0lj45615

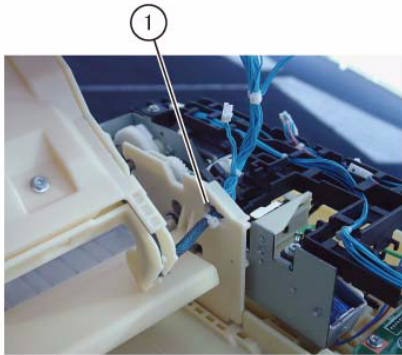
4. Remove the boss of the Document Tray at the front. (Figure 3)
 - a. Squeeze the boss of the Document Tray in the direction of the arrow and remove it from the hole.



j0lj45616

Figure 3 j0lj45616

5. Remove the wire harness through the hole at the rear. (Figure 4)
 - a. Remove the wire harness through the hole.



j0lj45617

Figure 4 j0lj45617

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.9.2 Retard Chute

Parts List on PL 56.9

Removal

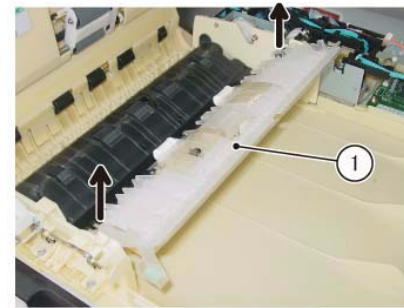
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

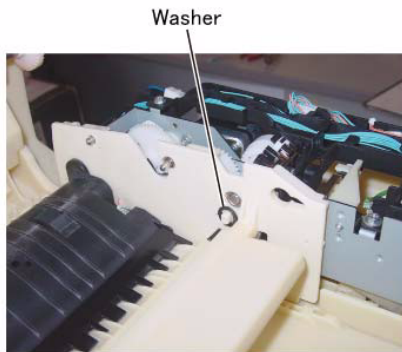
1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Open the Retard Chute.
5. Remove the Retard Chute. (Figure 1)
 - a. Remove the Retard Chute in the direction of the arrow.



j0lj45647

Figure 1 j0lj45647

NOTE: For the type that comes with washer attached to the boss at the rear, be careful so as to not lose the washer. (Figure 2)



j0lj45648

Figure 2 j0lj45648

Replacement

1. To install, carry out the removal steps in reverse order.
2. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.

"Chain Link : 955-806"

Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

REP 56.9.3 Invert Chute

Parts List on PL 56.9

Removal

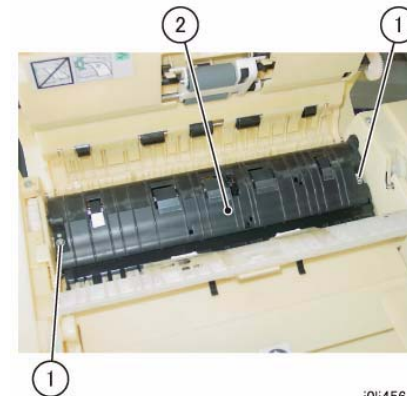
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

1. Open the Upper Feeder.
2. Open the Retard Chute.
3. Remove the Invert Chute. (Figure 1)
 - a. Remove the Tapping Screw (x2).
 - b. Remove the Invert Chute.



j0lj45649

Figure 1 j0lj45649

Replacement

1. To install, carry out the removal steps in reverse order.

REP 56.10.1 DADF Takeaway Roll

Parts List on PL 56.10

Removal

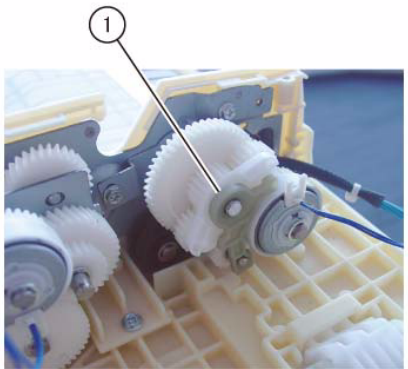
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

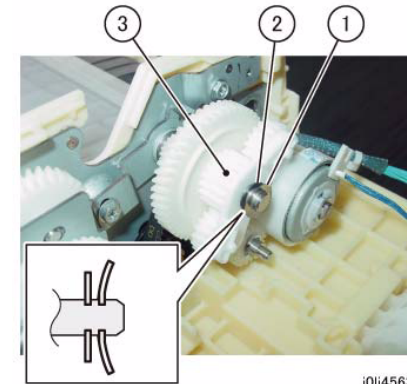
1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Document Tray. (REP 56.9.1)
4. Remove the Harness Guide and the wire harness. (REP 56.6.1)
5. Remove the Upper Feeder. (REP 56.2.4)
6. Remove the Invert Chute. (REP 56.9.3)
7. Remove the DADF Feed Motor. (REP 56.6.2)
8. Remove the link. (Figure 1)
 - a. Remove the link.



j0lj45631

Figure 1 j0lj45631

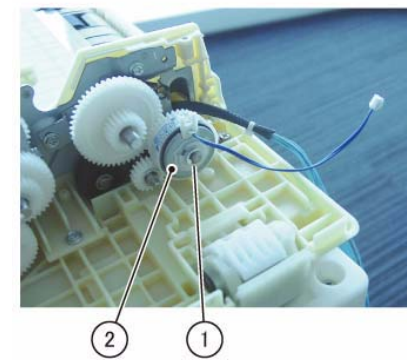
9. Remove the gear and bracket. (Figure 2)
 - a. Remove the washer (large: thin).
 - b. Remove the washer (small: thick).
 - c. Remove the gear and bracket.



j0lj45632

Figure 2 j0lj45632

10. Remove the DADF Takeaway Clutch. (Figure 3)
 - a. Remove the E-Clip.
 - b. Remove the DADF Takeaway Clutch.

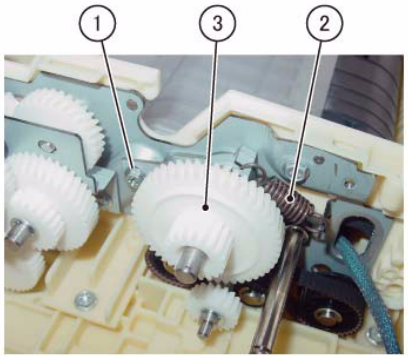


j0lj45633

Figure 3 j0lj45633

11. Remove the gear. (Figure 4)
 - a. Loosen the screw.
 - b. Remove the spring.
 - c. Remove the gear.

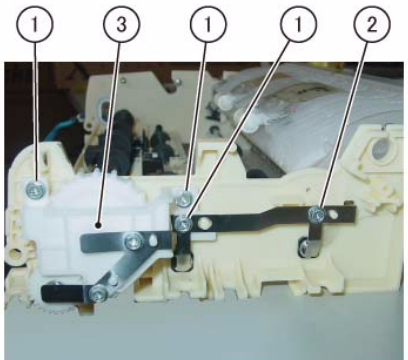
NOTE: Be careful so as to not lose the gear under the Bracket and Ground Plate. (Figure 6)



j0lj45634

Figure 4 j0lj45634

12. Remove the Bracket and Ground Plate at the front. (Figure 5)
 - a. Remove the Tapping Screw (x3).
 - b. Loosen the screw.
 - c. Remove the Bracket and Ground Plate.



j0lj45636

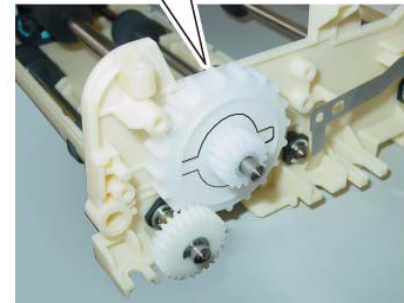
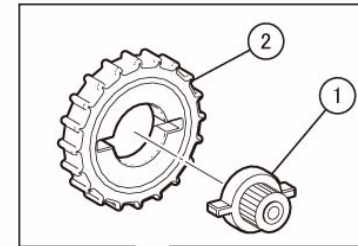
Figure 5 j0lj45636



j0lj45641

Figure 6 j0lj45641

13. Remove the Knob Handle. (Figure 7)
 - a. Remove the gear.
 - b. Remove the Knob Handle.



j0lj45637

Figure 7 j0lj45637

14. Remove the bearing at the front. (Figure 8)

- a. Remove the KL-Clip.
- b. Remove the Bearing.

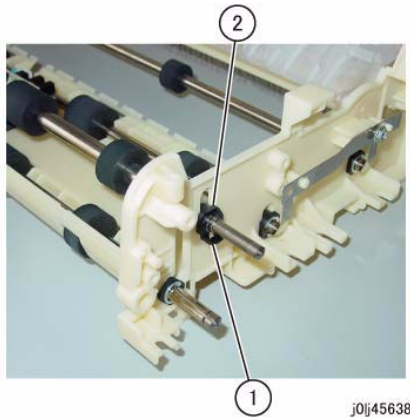


Figure 8 j0lj45638

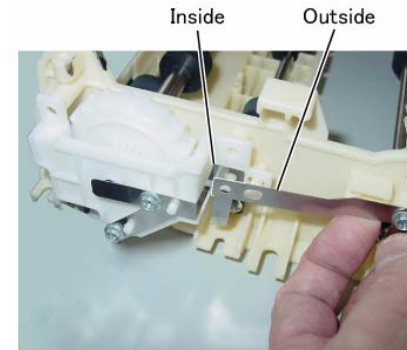


Figure 10 j0lj45640

15. Remove the bearing at the rear and remove the DADF Takeaway Roll. (Figure 9)
 - a. Remove the E-Clip.
 - b. Remove the Bearing.
 - c. Remove the DADF Takeaway Roll.

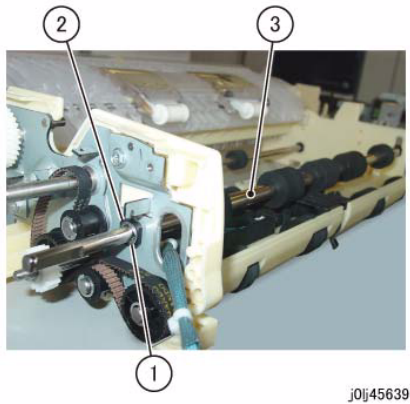


Figure 9 j0lj45639

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Bracket and Ground Plate, install the Ground Plate as shown in the figure. (Figure 10)

REP 56.10.2 Sensor Bracket

Parts List on PL 56.10

Removal

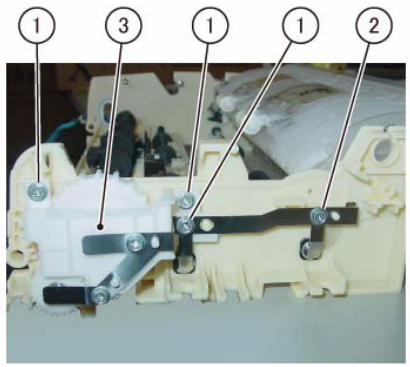
WARNING

When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

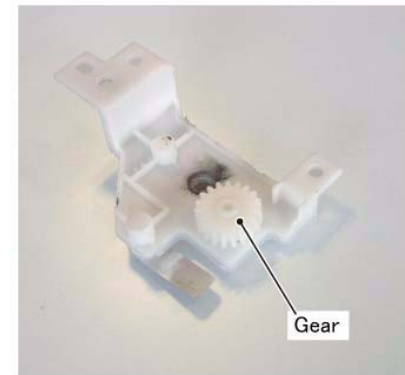
1. Remove the DADF Front Cover. (REP 56.2.1)
2. Remove the DADF Rear Cover. (REP 56.2.2)
3. Remove the Invert Chute. (REP 56.9.3)
4. Remove the Bracket and Ground Plate at the front. (Figure 1)
 - a. Remove the Tapping Screw (x3).
 - b. Loosen the screw.
 - c. Remove the Bracket and Ground Plate.



j0lj45636

Figure 1 j0lj45636

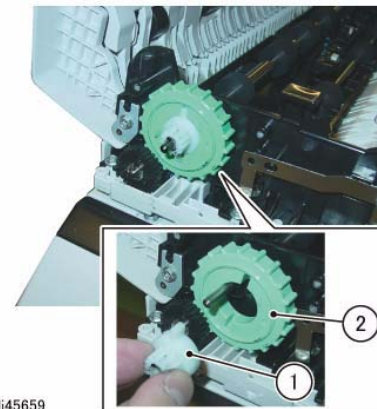
NOTE: Be careful so as to not lose the gear under the Bracket and Ground Plate. (Figure 2)



j0lj45641

Figure 2 j0lj45641

5. Remove the Knob Handle. (Figure 3)
 - a. Remove the gear.
 - b. Remove the Knob Handle.



j0lj45659

Figure 3 j0lj45659

6. Remove the Bearing of the DADF Takeaway Roll. (Figure 4)
 - a. Remove the KL-Clip.
 - b. Remove the Bearing.

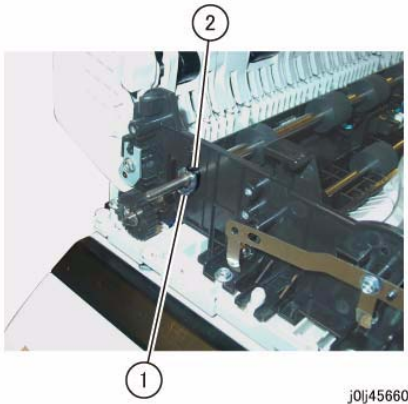


Figure 4 j0lj45660

7. Remove the screws that secure the Sensor Bracket. (Figure 5)
 - a. Disconnect the connector.
 - b. Remove the Tapping Screw (x2).

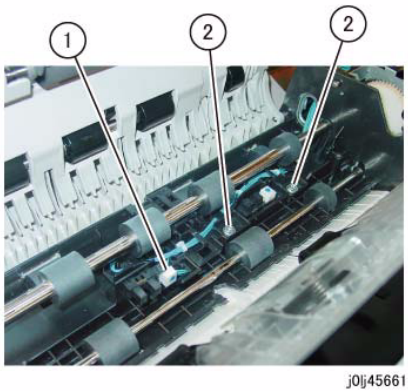


Figure 5 j0lj45661

8. Remove the Sensor Bracket from underneath the DADF Takeaway Roll. (Figure 6)
 - a. Lift up the Front side of the DADF Takeaway Roll.
 - b. Remove the Sensor Bracket.

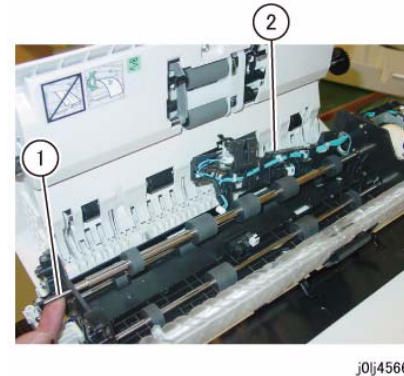


Figure 6 j0lj45662

9. Remove the DADF Pre Regi Sensor. (Figure 7)
 - a. Release the hook to remove the DADF Pre Regi Sensor.
 - b. Disconnect the connector.

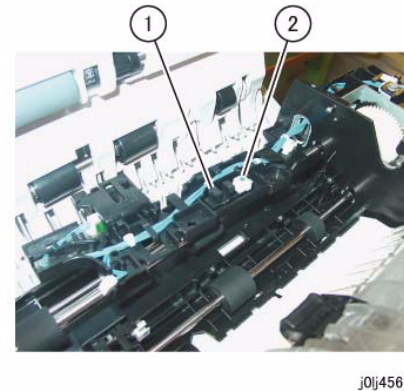
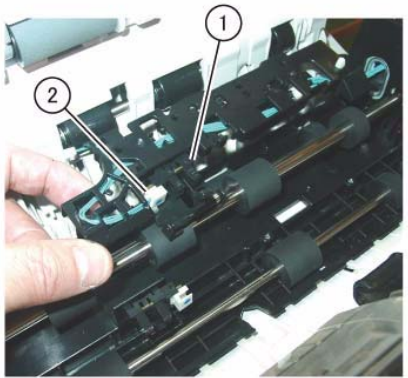


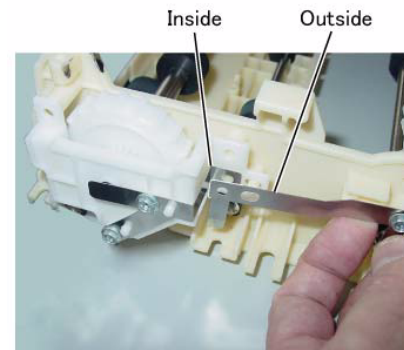
Figure 7 j0lj45663

10. Remove the DADF Regi Sensor at the back of the Sensor Bracket. (Figure 8)
 - a. Release the hook to remove the DADF Regi Sensor.
 - b. Disconnect the connector.



j0lj455664

Figure 8 j0lj45664

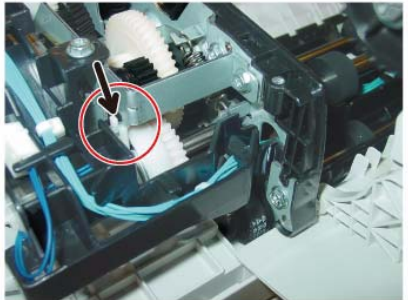


j0lj45640

Figure 10 j0lj45640

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the Bearing of the DADF Takeaway Roll, align the Cutout of the DADF Takeaway Clutch at the Rear side to the Tab of the Bracket of the DADF Feed Motor. (Figure 9)



j0lj45665

Figure 9 j0lj45665

3. When installing the Bracket and Ground Plate, install the Ground Plate as shown in the figure. (Figure 10)

REP 56.13.1 DADF Retard Pad

Parts List on PL 56.13

Removal

WARNING

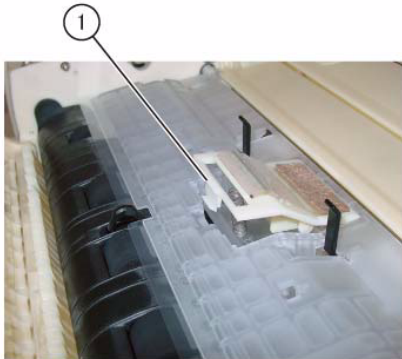
When turning OFF the power switch, check that the 'Data' lamp is OFF and that there is no Job in progress.

Turn OFF the power switch and make sure that the screen display turns OFF.

Check that the power switch is OFF and unplug the power plug.

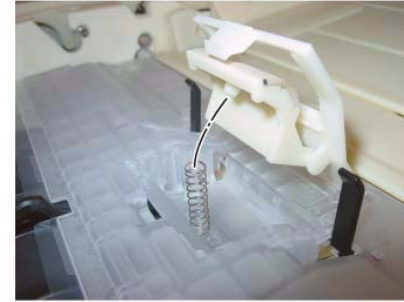
NOTE: The DADF Retard Pad, the DADF Feed Roll, and the DADF Nudger Roll must be replaced at the same time.

1. Open the Upper Feeder.
2. Remove the DADF Retard Pad. (Figure 1)
 - a. Release the hook, open the DADF Retard Pad, and then remove the DADF Retard Pad.



j0lj45650

Figure 1 j0lj45650



j0lj45651

Figure 2 j0lj45651

3. After a replacement, enter the Diag Mode and use [Initialize HFSI Counter] to clear the HFSI counter.
"Chain Link : 955-806"
Refer to [6.5.2.7 HFSI Counter Clear / Initialize].

Replacement

1. To install, carry out the removal steps in reverse order.
2. When installing the DADF Retard Pad, attach the spring to the boss of the DADF Retard Pad. (Figure 2)

ADJ 1.3.1 IIT Lead Edge Registration

Purpose

To adjust the IIT scan timing in the Slow Scan direction and to correct the copy position.

CAUTION

Avoid using this procedure when performing the adjustment of the Lead Edge Registration. This procedure should be performed only when the actual IIT Regi is not appropriate. This is because the IIT Lead Edge Registration affects the precision of the document size detection, etc.

NOTE: Before performing this procedure, make sure that the IOT Lead Edge Registration is appropriate. (Refer to ADJ 18.1.2 IOT Side/Lead Edge Registration.)

Check

- Place the Test Chart (499T283) on the Platen Glass correctly and make a copy in the following copy mode:
 - Copy Mode: "Black"
 - Paper Size: "A3"
 - Reduce / Enlarge: "100%"
 - No. of Copies: "2"
- Check that the distance between the lead edge of the 2nd copy and the reference line is 10.0 +/-1.6 mm or the same as the dimension on the Test Chart. (Figure 1)

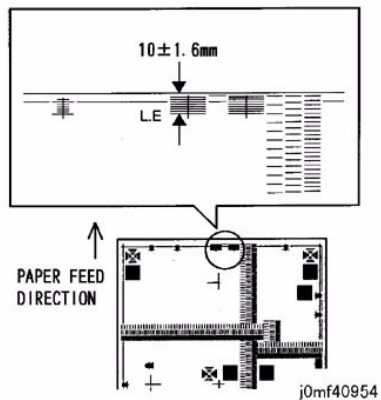


Figure 1 j0mf40954

- If the value is not within the specified range, adjust it as follows:

Adjustment

- Enter NVM [715-050] Platen SS Registration Adjustment.
- Change the value.
 - Change amount for 1 step: 2 pulse
 - Increment of the value: The image moves towards the Tail Edge.
 - Decrement of the value: The image moves towards the Lead Edge.

ADJ 1.3.2 IIT Side Registration

Purpose

To adjust the IIT scan timing in the Fast Scan direction and to correct the copy position.

CAUTION

Avoid using this procedure when performing the adjustment of the Side Registration. This procedure should be performed only when the actual IIT Regi is not appropriate. This is because the IIT Side Registration affects the precision of the document size detection, etc.

NOTE: Before performing this procedure, make sure that the IOT Lead Edge Registration is appropriate. (Refer to ADJ 18.1.2 IOT Side/Lead Edge Registration.)

Check

- Load A3 paper into Tray 1.
- Place the Test Chart (499T283) on the Platen Glass correctly and make a copy in the following copy mode:
 - Copy Mode: "Black"
 - Paper Tray: Tray 1
 - Reduce / Enlarge: "100%"
 - No. of Copies: "2"
- Check that the distance between the side edge of the 2nd copy and the specified value is 10.0 +/-2.1 mm or the same as the dimension on the Test Chart. (Figure 1)

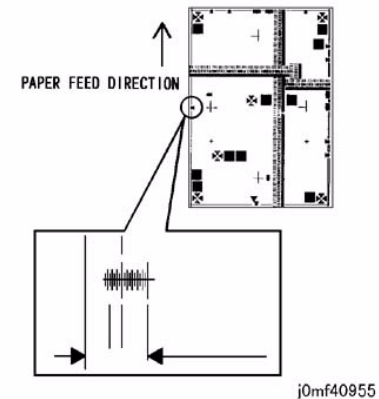


Figure 1 j0mf40955

- If the value is not within the specified range, adjust it as follows:

Adjustment

- Enter NVM [715-053] Platen FS Registration Adjustment.
- Change the value.
 - Change amount for 1 step: 1 dot
 - Increment of the value: The image moves towards the IN side.
 - Decrement of the value: The image moves towards the OUT side.

ADJ 8.1.1 ATC Sensor Read & Tone Up/Down

Purpose

To judge the status of the current TC (toner density) in the Developer Housing Assy based on the output value of the ATC Sensor. Tone Up / Down will be performed depending on that status.

Overview

1. ATC Sensor Read
 - This function uses the ATC Sensor to detect the TC (toner density) in the Developer Housing Assy and, at the same time, calculate and display the ATC Target Value.
To be more specific, when the specified time after the Developer Housing Assy drive had started and agitation had been performed, the ATC Sensor output is sampled (by the specified number of times) and the samples are run through filtering and sectional averaging to compute the ATC Output Value.
2. Tone Up/Down
 - This function adjusts the toner density based on the that quantity was entered.
3. Adjustment Guideline
 - The difference between [ATC Correction Target Value] and [ATC Average Value] must be within 60 and the toner density is of 2% part equivalent.
 - The adjustment amount is such that the difference between [ATC Correction Target Value] and [ATC Average Value] must be within 30 for both Tone Up / Down and the output is equivalent to A4L_7 sheets.
4. Image Quality Restrictions
 - As the Tray to be used is Tray 1, only standard paper types that are supported for use with the Tray 1 can be selected.
 - The maximum number of sheets for each Tone Up / Down is 20 sheets.

Adjustment

- For the adjustment procedure, refer to the following:
 1. 6.5.2.10 ATC Check
 2. 6.5.2.11 Tone Up/Down

ADJ 18.1.2 IOT Lead Edge/Side Edge Registration

Purpose

To align the image on the drum with the proper position (Lead/Side Edge) of the paper.

Check

- Load A4 paper into the Tray in SEF orientation.
- Enter the CE Mode and input 999-980 (Maintenance Report) in the Chain-Link.
- Pressing <Start> prints the Maintenance Report.
- Measure the Lead and Side Edges of the print pattern.
 - Lead Edge: Part A of the pattern
 - Side Edge: Part B of the pattern

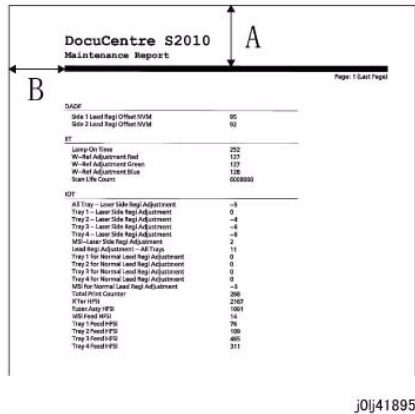


Figure 1 j0lj41895

- Check that the measured values of the Lead Edge (A) and Side Edge (B) fall within the corresponding specifications.

NOTE: To perform measurement for the Lead Edge (A) and Side Edge (B) of Duplex printouts, load the Maintenance Report that was output on the Platen, and make a 1 -> 2 Sided copy to perform the measurement.

Table 1 IOT Lead Edge/Side Edge

Item	Simplex	Duplex	MSI	STM (TTM)
Lead Edge (A)	30 +/-2.4 mm	30 +/-3.4 mm	30 +/-3.1 mm	30 +/-3.1 mm
Side Edge (B)	30 +/-3.0 mm	30 +/-3.4 mm	30 +/-3.2 mm	30 +/-3.0 mm

Adjustment

- Enter the CE Mode.
- Adjust the NVM until each measured value of the Lead Edge (A) and Side Edge (B) fall within the specifications of the corresponding mode.

- If the measured value is short: Set a larger value.
- If the measured value is long: Set a smaller value.

Table 2 NVM List

Chain-Link	Name	Min	Initial	Max	Step
742-001	PH_LEAD_REGI_ALL_TRAY	-50	0	50	2 ms
742-002	PH_LEAD_REGI_TRAY1	-50	0	50	2 ms
742-003	PH_LEAD_REGI_TRAY2	-50	0	50	2 ms
742-004	PH_LEAD_REGI_TRAY3	-50	0	50	2 ms
742-005	PH_LEAD_REGI_TRAY4	-50	0	50	2 ms
742-006	PH_LEAD_REGI_MSI	-50	0	50	2 ms
742-007	PH_LEAD_REGI_DUPLEX	-50	0	50	2 ms
749-001	ROS_LASER_SIDE_REGI_ADJUSTMENT_ALL_TRAY	-50	0	50	0.254 mm
749-002	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY 1	-50	0	50	0.254 mm
749-003	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY 2	-49	0	49	0.254 mm
749-004	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY 3	-49	0	49	0.254 mm
749-005	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY 4	-49	0	49	0.254 mm
749-006	ROS_LASER_SIDE_REGI_ADJUSTMENT_MSI	-50	0	50	0.254 mm
749-007	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_ALL_TRAY	-50	0	50	0.254 mm
749-008	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY 1	-50	0	50	0.254 mm
749-009	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY 2	-50	0	50	0.254 mm
749-010	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY 3	-50	0	50	0.254 mm
749-011	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY 4	-50	0	50	0.254 mm
749-012	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_MSI	-50	0	50	0.254 mm

- After adjustment, print the Maintenance Report in the same mode again.
- Repeat the procedure until the measured values of the Lead Edge (A) and Side Edge (B) fall within the specifications.

ADJ 18.1.3 Edge Erase Value Adjustment

Purpose

To correct both (Rear/Front) sides, Lead Edge and Tail Edge erase values of the image.

NOTE: The IOT Lead Edge/Side Edge Registration must be adjusted.

Check

1. Specify a Tray loaded with paper. Make a black copy without using any originals and leaving the Platen Cover open.
2. Check that the white sections of the Lead Edge, Tail Edge, and both Side Edges are 4 mm.

Adjustment

1. Enter the CE Mode.
2. Adjust the NVM until the white sections of the Lead Edge, Tail Edge, and both Side Edges are 4 mm.

Increasing the setting value increases the amount of edge erase for the Lead Edge, Tail Edge, and both Sides.

This setting affect all 4 sides equally and it is not possible to perform individual setting for the Lead Edge only, etc.

Table 1 NVM List

Chain-Link	Name	Min	Initial	Max	Step
780-066	Edge Erase Copy Job	0	40	500	0.1 mm

3. After adjustment, make another black copy without using any originals and leaving the Platen Cover open.
4. Adjust until the white sections of the Lead Edge, Tail Edge, and both Side Edges are 4 mm.

ADJ 18.2.1 Things to take note when replacing Important Information Stored Components (ISC)

Purpose

After installation, any data that the customer has registered are very important. To lose or leak the data would be an unforgivable offence. To gain the trust of customers, it is essential for CE to be knowledgeable about the name of components that store these data. The CE must also have full understanding on how to handle these components when replacing them.

Adjustment

This product stores important data in the following components. Perform the operation according to the following procedures.

NOTE: IBG) Collect/discard components according to the separately pre-determined procedures.

Table 1

	Component Name	Stored Information	Pre-replacement operation	Post-replacement operation
1	EEP ROM (ESS/MCU PWB)	<ul style="list-style-type: none"> • Product Code • Serial Number • Copy Counter/ Print Counter • HFSI Counter (IIT/IOT) • Machine System Parameter 	To restore the settings later, print the reports. When replacing the PWB, remove the EEP ROM from the old PWB, and install it to the new one.	Restore all settings by using the reports, etc. When replacing the PWB, remove the EEP ROM from the old PWB, and install it to the new one.
2	EEP ROM (NET I/F PWB)	<ul style="list-style-type: none"> • MAC Address • IP Address • Network System Parameter 	To restore the settings later, print the reports. When replacing the PWB, remove the EEP ROM from the old PWB, and install it to the new one.	Restore all settings by using the reports, etc. When replacing the PWB, remove the EEP ROM from the old PWB, and install it to the new one.

ADJ 18.2.3 Firmware Version Upgrade

Purpose

Perform this procedure to upgrade the machine firmware (Controller, DADF, Fax Board, UI), or when reinstallation of the machine firmware is required due to failure of some sort.

NOTE: The version upgrade method for 1TM and 2TM is only for the PWB replacement.

NOTE: Fax Firmware version upgrade

When upgrading the Fax Firmware version, the Activity Report information stored in the Fax PWB will be initialized. Therefore, print the Activity Report before upgrading the version. After performing the upgrade, pass the Activity Report to the customer.

<How to obtain the Firmware>

Download the Firmware Version Upgrade Tool (FWDLMgr.exe) and the machine Firmware from the country-specific download sites when upgrading the machine Firmware version.

NOTE: Downloading the machine Firmware from the web site may take some time (depending on the environment) because of the file size. Hence, download the machine Firmware into the PC (PSW) in advance before visiting the customer.

NOTE: Required installation environment

- OS: Windows XP
- CPU: Pentium (100MHz) or higher
- Memory: 32MB or higher
- Hard disk capacity available: 200MB or higher

NOTE: Connection Cables

- 499T7776: USB Cable (2 m)

NOTE: Precautions during installation

The downloaded data is a compressed file. Extract the data and perform the Firmware upgrade.

<How to check the machine Firmware version>

The following are the 2 ways to check the machine Firmware version. Check the version before and after performing the Firmware upgrade.

- Check by printing the report
 1. Load one of A4 SEF, A4 LEF, Letter SEF, and Letter LEF into the Tray.
 2. Press <Machine Status>.
 3. Select [Print Report] and select [OK].
 4. Select [System Settings] and select [OK] to print a System Settings report.
 5. Check the version on the printed System Settings report.
- Check on the UI screen
 1. Press and hold down <Log In / Out> for 4 seconds or longer.
 2. When the Enter System Admin. Password screen appears, enter '11111' (press the numeric keypad <1> 5 times) and select [OK].

3. Select [Device Information...] and select [OK].
4. Select [Firmware Version] and select [OK] to display the various version on the UI screen.
5. Check the version on the UI screen display.

Adjustment

For the method of machine Firmware upgrade, only DLD method (USB 2.0) is supported. P.JL method (Port 9100: Network) is not supported.

1. Turn ON the PC (PSW).
2. After the PC has started up, use a USB Cable to connect the PC to the machine. (Figure 1)

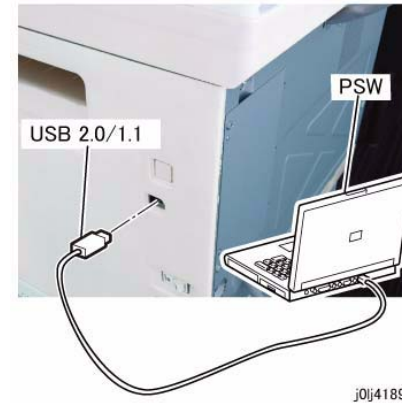
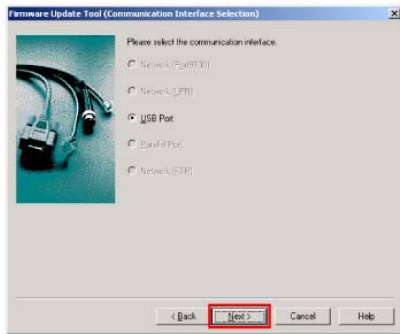


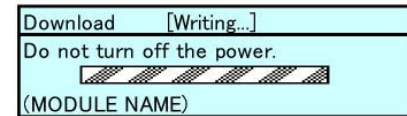
Figure 1 j0lj41891

3. Set the machine to Download Mode.
 - a. Turn ON the machine while pressing down <Energy Saver>.
 - b. Once the machine has transitioned to the Download Mode, [Ready] will appear on the UI screen.



j0mg41825

Figure 6 j0mg41825



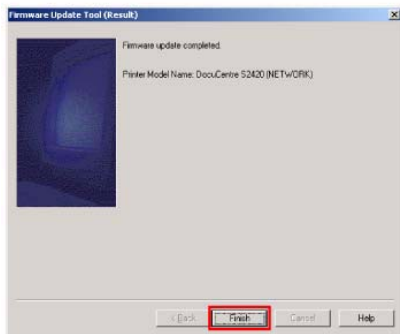
j0mg41827

Figure 8 j0mg41827

- f. The Firmware upgrade status appears on the [Updating] screen. After it has completed, the following result screen will be displayed and the transfer is ended. Click [Finish].

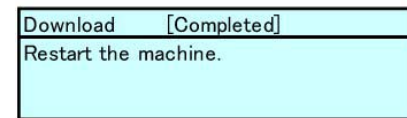
NOTE: However, you cannot turn OFF the machine immediately after this.

6. When the download has completed successfully, the following will be displayed, and then the machine will Auto-Reboot.



j0mg41826

Figure 7 j0mg41826



j0mg41828

Figure 9 j0mg41828

5. After the download data is transferred, the Flash ROM in the machine will be overwritten.
- At this time, the UI display will be as follows.

ADJ 56.1.1 DADF Lead-Skew Adjustment

Parts List on PL 56.1

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 (499T283) on the DADF.
2. Make a copy using the following settings in Copy mode.
 - Color Mode: "Black"
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "3"
3. Check that the difference in the distance (A and B) from the side edges of the 3 copies is within 0 +/-0.5 mm. (Figure 1)

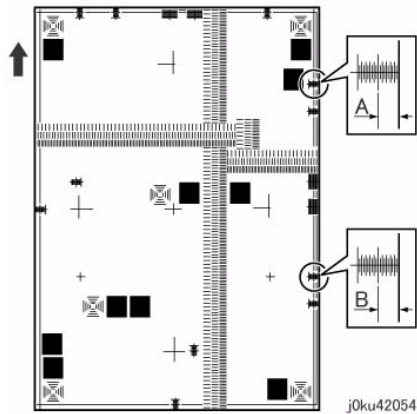


Figure 1 j0ku42054

Adjustment

1. Remove the DADF Rear Cover. (REP 56.2.2)
2. Adjust the position of the DADF by moving the DADF in direction A or B. (Figure 2)
 - a. Loosen the screw (x3).
 - b. Move the DADF in direction A or B.
 - c. Tighten the screw (x3).

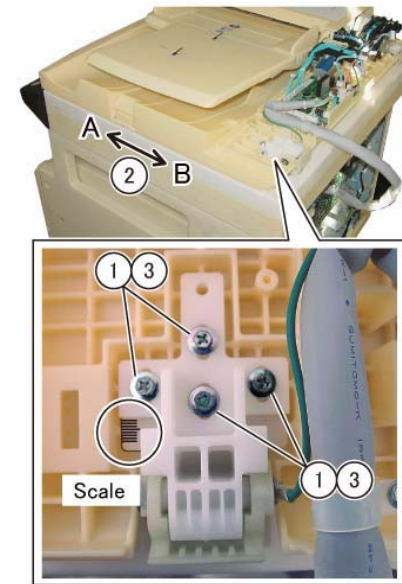


Figure 2 j0j45613

- The DADF moved in direction A. (Figure 3)

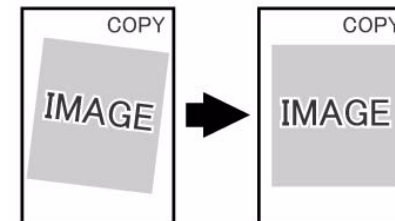


Figure 3 j0ku42044

- The DADF moved in direction B. (Figure 4)

ADJ 56.1.2 DADF Side Registration

Purpose

To adjust the original to the proper position (drum shaft direction) on the Platen.

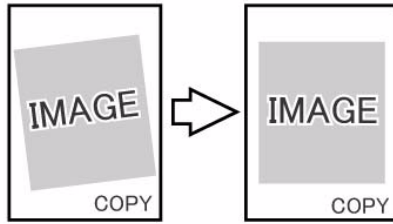
NOTE: The following adjustments must be made before carrying out checking and adjustment.

- IOT Lead Edge/Side Edge Registration (ADJ 18.1.2)
- IIT Side Registration (ADJ 1.3.2)
- DADF Lead-Skew Adjustment (ADJ 56.1.1)

NOTE: DADF Side Registration is adjusted using the NVM for every paper width.

Check

3. Reinstall the DADF Rear Cover.
4. After adjustment, perform DADF Side Regi (ADJ 56.1.2) and DADF Lead Edge Regi. (ADJ 56.1.3).



j0ku42043

Figure 4 j0ku42043

1. Place the Test Chart (499T283) such that there is no gap between the chart and the DADF Guide.
2. Make a copy using the following settings in Copy mode. Take this copy as the original.
 - 1 to 1 Sided mode
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "2"
3. Mark the output copies as '1' and '2' in the order of their output.
4. Make a Single Fold on the second copy. Check the fold line with the reference line on the Test Chart. (Figure 1)

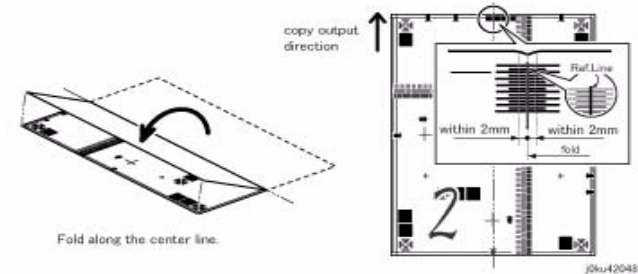


Figure 1 j0ku42048

5. Check that the fold line is within 2.0mm from the reference line.
If the value is not specified, carry out the following adjustment procedure.
6. Place the Test Chart (499T283) on the DADF facing down with the Test Chart fed from the lead edge.
7. Make a copy using the following settings in Copy mode.
 - 2 to 1 Sided mode
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "2"
8. Make a Single Fold on the two copies. Check the fold line with the reference line on the Test Chart. (Figure 2)

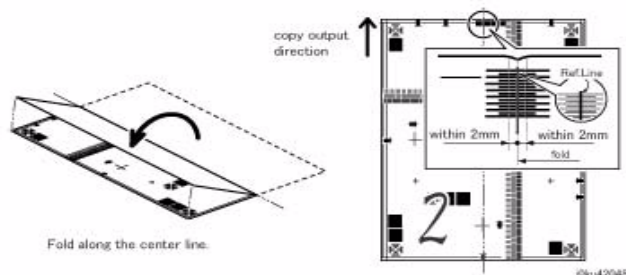


Figure 2 j0ku42048

9. Check that the fold line is within 2.0mm from the reference line.
If the value is not specified, carry out the following adjustment procedure.

Adjustment

- Side 1 Adjustment
 1. Enter the CE Mode to perform correction for all sizes.
Enter the value to perform correction for all sizes in the NVM [711-272].

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	139.7~148mm	A5 SEF, 5.5x8.5" SEF
3	715-058	182~194mm	B5 SEF
4	715-060	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-062	210mm	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	254~257mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-068	266.7~267mm	8x10.5" LEF
9	715-070	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
1 0	715-072	297mm	A4 LEF, A3 SEF

2. Enter the value to perform correction for each size in the NVM [715-056 to 072].
3. If it is not within the specified range in Check Step 5, change the NVM value.
 - By increasing the NVM value, the image moves towards the right.
(an increment of 1 in NVM = 0.1 mm)
4. Repeat Check Steps 1 to 5 and Adjustment Steps 1 to 3 until the measurement is within the specified range.

- Side 2 Adjustment

1. After adjusting for 1 Sided copies, place Side 1 of the Test Chart face down and make copies using the following settings to check the Side Registration for 2 Sided copies.
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "2"
 - 2 Sided: 2 -> 1 Sided
2. Check the Side Regi of the 2 copies with the above-mentioned items in "Check".
3. If adjustment is required, enter the CE Mode to perform correction for all sizes, and then adjust each document size width using the following NVM.
Enter the value to perform correction for all sizes in the NVM [711-274].

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	139.7~148mm	A5 SEF, 5.5x8.5" SEF
3	715-059	182~194mm	B5 SEF
4	715-061	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-063	210mm	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	254~257mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-069	266.7~267mm	8x10.5" LEF
9	715-071	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
1 0	715-073	297mm	A4 LEF, A3 SEF

4. Enter the value to perform correction for each size in the NVM [715-057 to 073].

ADJ 56.1.3 DADF Lead Edge Registration

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 18.1.2)
- IIT Lead Registration (ADJ 1.3.1)
- DADF Lead-Skew Adjustment (ADJ 56.1.1)

NOTE: If there is a black line at the Tail Edge for non-standard sizes after Regi adjustment of the Lead Edge for Side 1 and Side 2, adjust the Tail Edge using the NVM [711-142] (Side 1) and NVM [711-143] (Side 2).

[1 Sided mode]

Check

1. Place the Test Chart (499T283) such that there is no gap between the chart and the DADF Guide.
2. Make a copy using the following settings in Copy mode.
 - Color Mode: "Black"
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "2"
 - 1 to 1 Sided mode
3. Check that the distance between the Lead Edge and the reference value in the second copy is 10 +/-1.5 mm.

If it is not within the specified range, adjust to the specified range using the following procedure. (Figure 1)

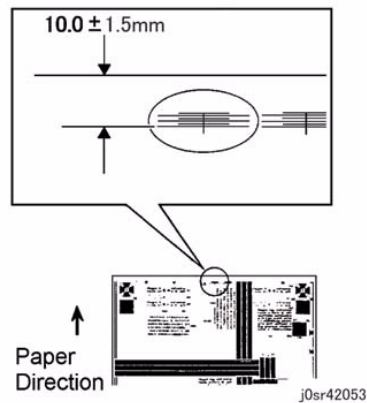


Figure 1 j0sr42053

Adjustment

1. Input the NVM [711-140].

2. If the specified value is
 - 11.5 mm or higher, increase the NVM value.
 - 8.5 mm or lower, decrease the NVM value.
 (an increment of 1 in NVM = 0.1 mm)
3. Repeat the procedure until the value is within the specified range (10 +/-1.5 mm).
As there will be differences in the Regi according to the ratio, adjust the following NVM.

Table 1

NVM	Basic Scan Speed [mm/s]	Reduce / Enlarge
NVM [711-002]	165.0	100.0%
NVM [711-004]	82.5	Other than 100.0%

[2 Sided Mode]

Check

1. Place the Test Chart (499T283) on the DADF with Side 1 facing down with the Test Chart fed from the tail edge.
2. Make a copy in the following mode:
 - Color Mode: "Black"
 - Paper Tray: "A3"
 - Reduce/Enlarge: "100%"
 - No. of Copies: "2"
 - Mode: "2 to 1 Sided"
3. Check that the distance between the Lead Edge and the reference value in the second copy is 10 +/-1.9 mm.

If it is not within the specified range, adjust to the specified range using the following procedure. (Figure 2)

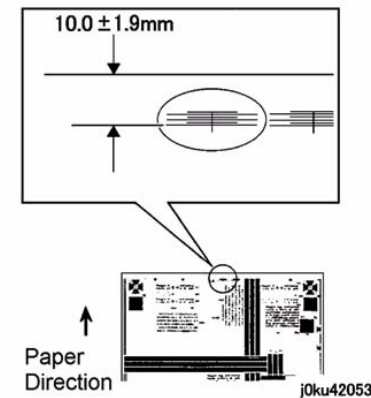


Figure 2 j0ku42053

Adjustment

1. Input the NVM [711-141].

2. Adjust to the specified range (10 +/-1.9 mm).

If the distance between the Lead Edge and the reference value is

- 12.0 mm or higher, increase the NVM value.
- 8.0 mm or lower, decrease the NVM value.

(NVM1Step=0.1mm)

3. Repeat the procedure until the value is within the specified range (10 +/-1.9 mm).

As there will be differences in the Regi according to the ratio, adjust the following NVM.

Table 2

NVM	Basic Scan Speed [mm/s]	Reduce / Enlarge
NVM [711-022]	165.0	100.0%
NVM [711-024]	82.5	Other than 100.0%

Chapter 5 Parts List

5 Parts List

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5.1.1 How to Use the Parts List

Chapter 5 Parts List contains information on spare parts.

The parts list is used to order replacement parts and enter area codes. To use the parts list correctly, read the description below carefully.

<How to find out parts No needed>

To shorten the time searching for a Parts No., a navigation screen (illustration) is provided to search for the relevant parts in the illustration. When you have already identified a parts to be checked, search for the relevant parts on this screen (illustration) to perform servicing efficiently. For how to use the navigation, refer to '5.1.5 Using Parts Navigation'.

5.1.2 Precautions

- To make the illustration easy to see, hardware such as screws are shown in alphabets. Their shapes are not shown.
- Read notes in the Description column carefully before ordering and replacing parts.
- Handling Safety Critical Components shall conform to Xerox-stipulated rules and regulations on Safety Critical Components.

As to replacement of any component designated SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced.

Installation of any part other than the ones designated by Xerox shall be strictly prohibited because it cannot be guaranteed in quality and safety.

- ISC followed by part name in the DESCRIPTION column represents Important Information Stored Component that stores important customer information. To replace and discard an ISC, follow the procedure for it described in chapter 4.
- The area codes are shown on plates each. The area codes (such as toner and Current Adjustment values) which cannot be shown as parts on plates are listed on the list of area codes at the end of this chapter.

5.1.3 Plate Composition

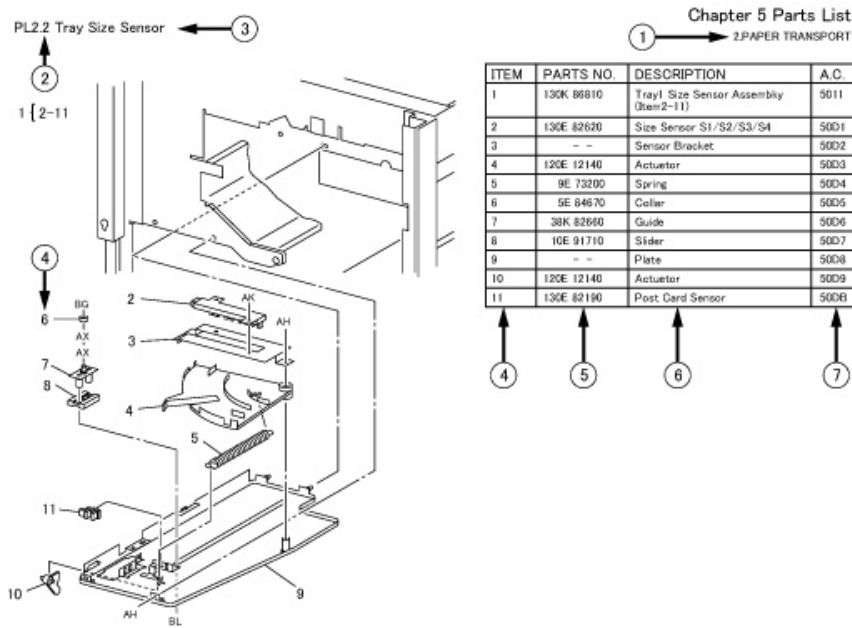


Figure 1 j0mf50001

Table 1


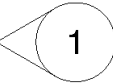
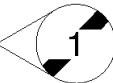
	Section Name	Chapter 5 Section Name
(1)	Sub System Name	the name of the subsystem
(2)	PLATE NO.	Parts List Reference No. shown in each chapter
(3)	PLATE NAME	Title name of the illustration, which shows the mechanism of the sub system
(4)	ITEM	Matches the number in the illustration.
(5)	PART NO.	The number to be used for ordering parts and filling in the service report.
(6)	DESCRIPTION	Provides the part name, V(MOD) Code and notes, etc.
(7)	AREA CODE	The code to be entered in the failure column of the service report.

5.1.4 Terminology and Symbols

Table 1

Terminology and Symbols	Description
 Figure 1 5002	Informs you that the adjustment procedure for the part is described in Chapter 4 Repair and Adjustment.
 Figure 2 5001	Informs you that the removal, installation and replacement procedures for the part are described in Chapter 4 Repair and Adjustment.
 Figure 3 5003	Informs you that the removal, installation, replacement and adjustment procedures for the part are described in Chapter 4 Repair and Adjustment.
3 (4-10)	This is indicated on the upper left or upper right of the illustration to show the item represents the assembly including the part. The example shows Item 3 is the assembly of Item 4 through 10.
(1/4PCS)	Informs you that four identical parts are installed but that only one of them is shown in the illustration.
--	This symbol in the PART NO. column shows the part is not managed as a spare part.
(P/O Item 5)	This symbol in the DESCRIPTION column shows the part is not managed as a single piece of spare part, but as a part of the assembly. The example shows the part is a part of Assembly Item 5.
(New) (Old)	This term in the DESCRIPTION column shows the new part is interchangeable with the old one. Unless otherwise specified or there are no particular reasons, order the old part.
(Alternate)	This term in the DESCRIPTION column shows either one of the parts can be used.
 Figure 4 5005	This symbol shows the whole area of the framed illustration is modified by the number in the circle. The area has the modified configuration.

Table 1

Terminology and Symbols	Description
 Figure 5 5006	This symbol shows the whole area of the framed illustration has not been modified by the number in the circle. The area still has the previous configuration.
 Figure 6 4001	The Item pointed to by this symbol in the illustration is modified by the number in the circle. The item has the modified configuration.
 Figure 7 4002	The Item pointed to by this symbol in the illustration has not been modified by the number in the circle. The item still has the previous configuration.
with 5V	This symbol in the DESCRIPTION column shows the part is modified by the number. The part has the modified configuration.
(w/o 5V)	This symbol in the DESCRIPTION column shows the part has not been modified by the number. The part still has the previous configuration.
Fusing Unit	Handling Safety Critical Components shall conform to Xerox-stipulated rules and regulations on Safety Critical Components. As to replacement of any component designated SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced. Installation of any part other than the ones designated by Xerox shall be strictly prohibited because it cannot be guaranteed in quality and safety.
(ISC) MCU/ESS PWB	ISC followed by part name in the DESCRIPTION column represents Important Information Stored Component that stores important customer information. To replace and discard an ISC, follow the procedure for it described in chapter 4.

5.1.5 Using Parts Navigation

This section describes how to use the Navigation screen (illustrated)

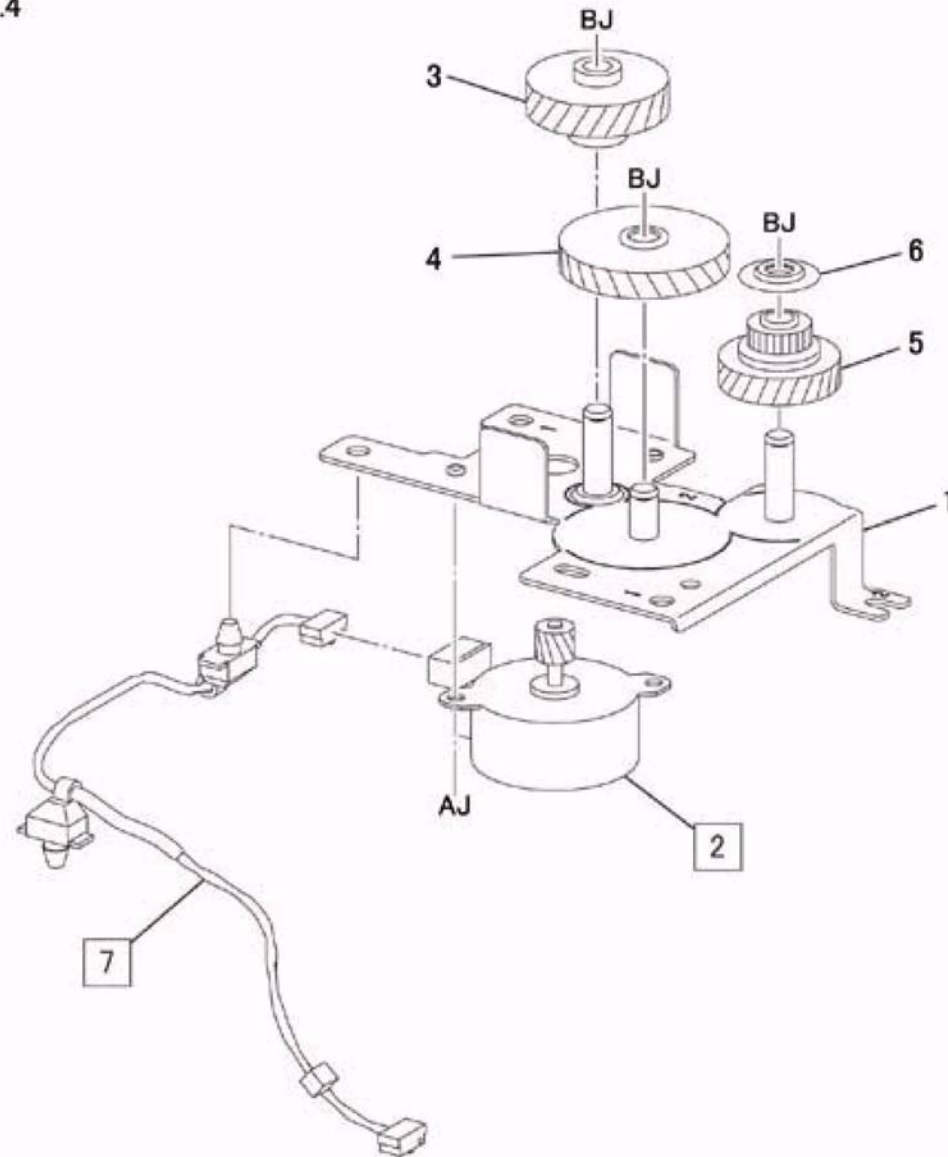
The Navigation screen is divided into two layers, under which there is another layer of PLs.

- The first (top) layer
 - Navi 1.1 (Processor + Option)
 - The whole processor including DADF and Finisher is illustrated each for good understanding. Find the module which includes the desired part and click on Navi 2.X or PL shown at the end of the call out. Navi 2.X shows there is a more detailed illustration of the module. Otherwise, you will be directly linked to the applicable PL.
- The second layer
 - Navi 2.1 to 2.5
 - The module found in Navi 1.1 is divided into more modules, which link to the related PLs. The screen here uses PLXX to show all the parts in the detailed module. Click on the applicable item, and you will see the illustration of the applicable PL. Find the desired part in the PL illustration to learn the part's item no. After that, obtain the appropriate part no. from the list.
On E-DOC, clicking on the item no. makes the List screen displayed. Then the appropriate part no. can be found.
- The third (bottom) layer has PLXXs.
 - <Returning from the lower layers to the higher layer>
 - Clicking on Navi 2.X or PLXX on the upper left of the illustration makes you return to Navi 1.1 for Processor parts.

PL 1.4 Carriage Motor

Item	Part	Description
1	-	Drive Bracket
2	127K66721	Carriage Motor (REP 1.4.1)
3	807E40871	Helical Gear
4	807E40880	Helical Gear
5	807E40890	Gear Pulley
6	005E33441	Flange
7	952K08120	Motor Wire Harness

PL1.4

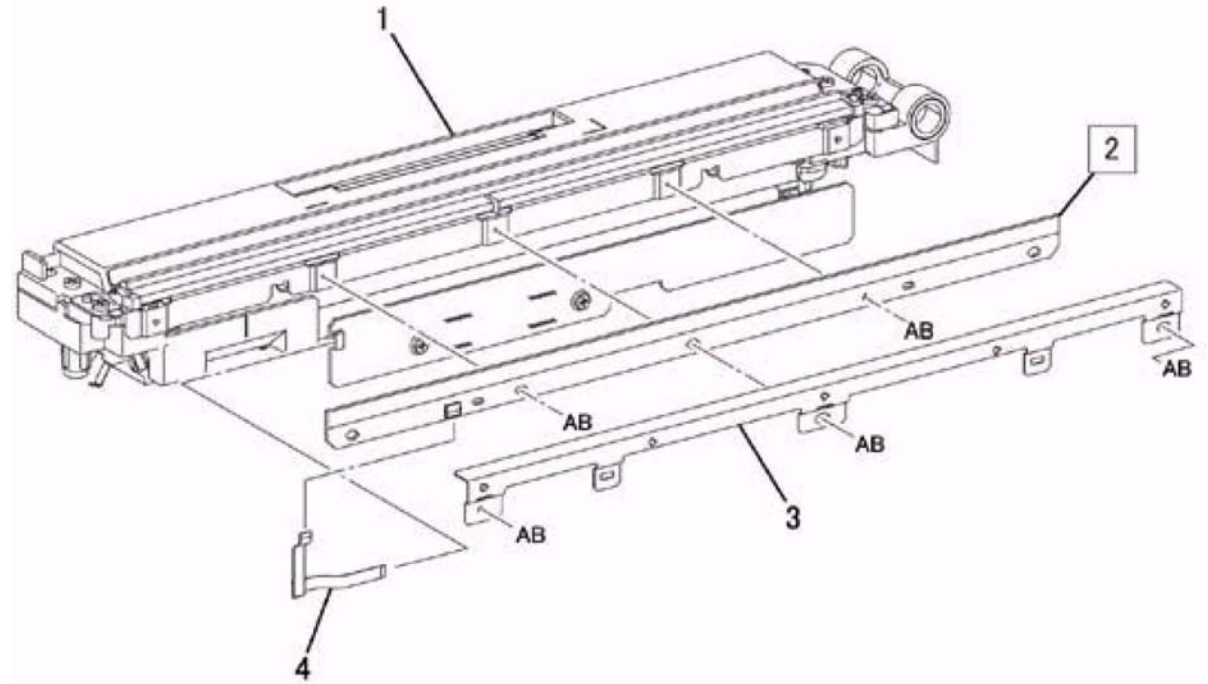


Left Front
j0lj50104

PL 1.5 IIT Carriage

Item	Part	Description
1	-	Lens Housing
2	960K68380	LED Lamp PWB (REP 1.5.1)
3	-	LED Bracket
4	117K47742	LED Cable

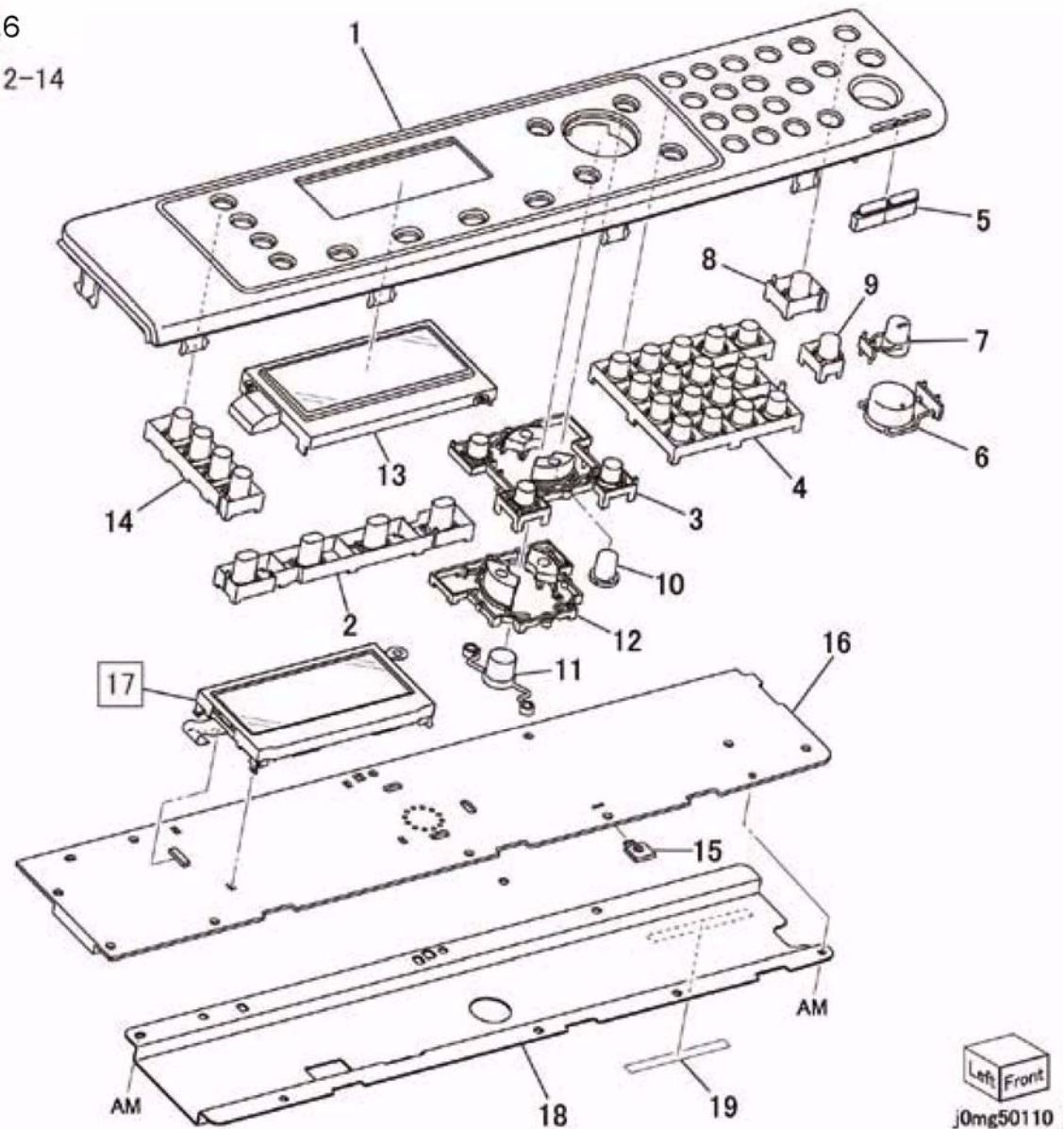
PL1.5



PL 1.6 Control Panel

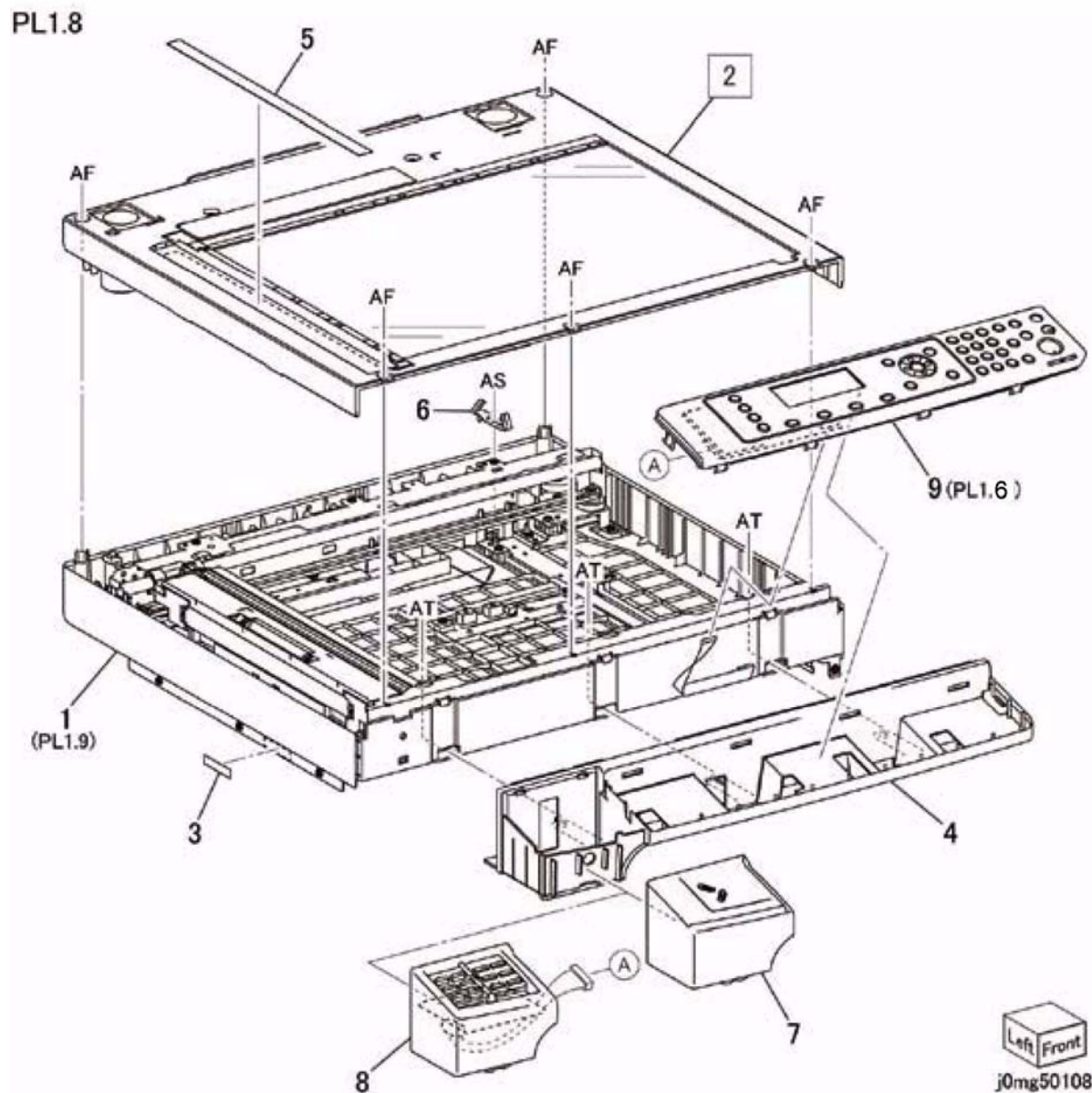
Item	Part	Description
1	848K91750	Control Panel
2	-	Service Key (P/O Item 20)
3	-	Up/Down Key (P/O Item 20)
4	-	Sixteen Key (P/O Item 20)
5	-	LED Key (P/O Item 20)
6	803E16660	Start Key (P/O Item 20)
7	-	Stop Key (P/O Item 20)
8	-	Energy Saver Key (P/O Item 20)
9	-	Reset Key (P/O Item 20)
10	-	Login Key (P/O Item 20)
11	-	OK Key (P/O Item 20)
12	-	Right/Left Key (P/O Item 20)
13	-	LCD Cover (P/O Item 20)
14	-	Function Key (P/O Item 20)
15	803E17620	Terminal Earth
16	960K76800	UI PWB
17	123K09500	LCD Display (REP 1.10.1)
18	868E94540	UI Bracket
19	-	UI Label
20	604K87280	Console Key Kit (Item 2-14)

PL1.6
20 { 2-14



PL 1.8 Top Cover (with Platen Glass), Front Cover

Item	Part	Description
1	–	IIT Base Frame (PL 1.9)
2	848K81890	Top Cover (with Platen Glass) (REP 1.2.1)
3	–	Data Plate
4	–	IIT Front Cover
5	–	CVT Plate
6	868E80610	Conductor
7	848E93840	Clip Cover
8	848K76930	One Touch Panel (Option)
9	848K91750	Control Panel (PL 1.6)



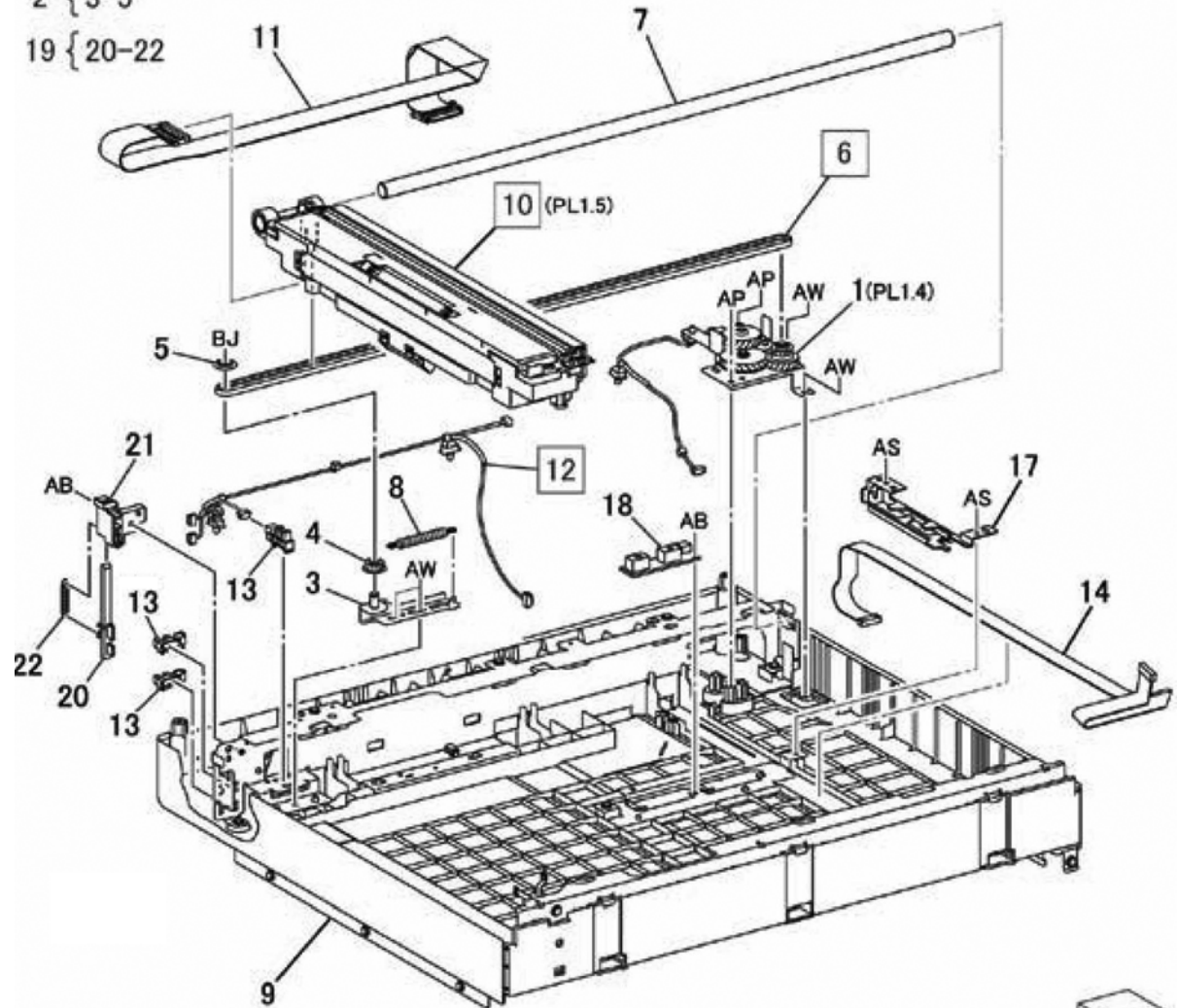
PL 1.9 IIT Base Frame Component

Item	Part	Description
1	-	Carriage Drive and Motor (PL 1.4)
2	-	Pulley Assembly (Item 3-5)
3	049K17900	Pulley Bracket
4	020E49550	Pulley
5	005E33441	Flange
6	023E27860	IIT Carriage Belt (REP 1.3.2)
7	-	Shaft
8	809E58300	Spring
9	-	IIT Base Frame
10	848K81862	IIT Carriage (PL 1.5) (REP 1.3.1)
11	117K47330	CCD Cable
12	952K11130	Sensor Wire Harness
13	930W00123	IIT Registration Sensor,Platen Angle Sensor, Platen Open Sensor
14	117K47880	UI Cable
17	-	Harness Guide
18	130K79500	APS Sensor
19	120K92900	Actuator Assembly (Item 20-22)
20	-	Actuator (P/O Item 19)
21	-	Actuator Support (P/O Item 19)
22	-	Spring (P/O Item 19)

PL1.9

2 { 3-5

19 { 20-22

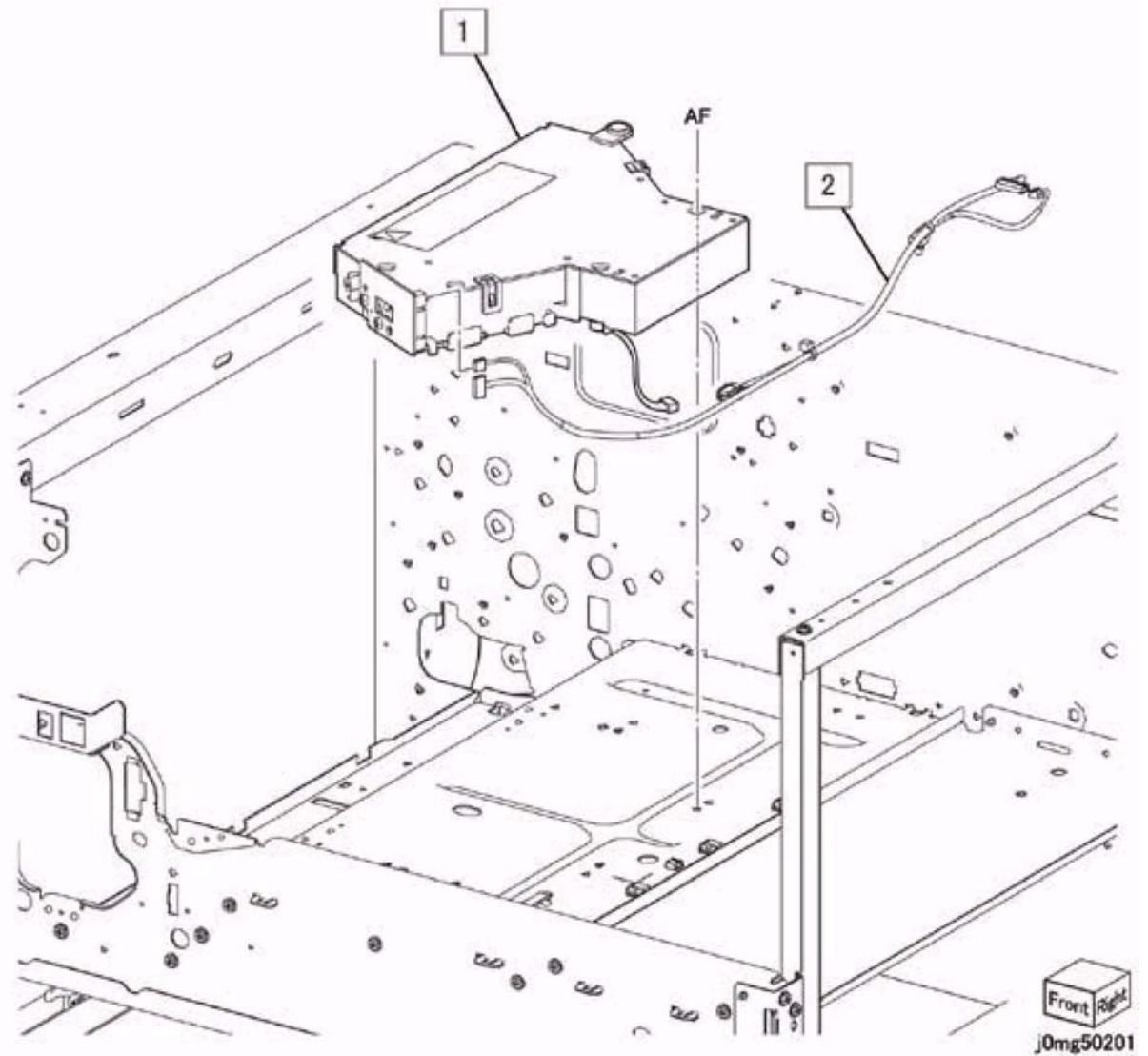


Left Front
j0mg50109

PL 2.1 ROS

Item	Part	Description
1	062K25290	ROS Assembly (REP 2.1.1)
2	952K01240	ROS Wire Harness

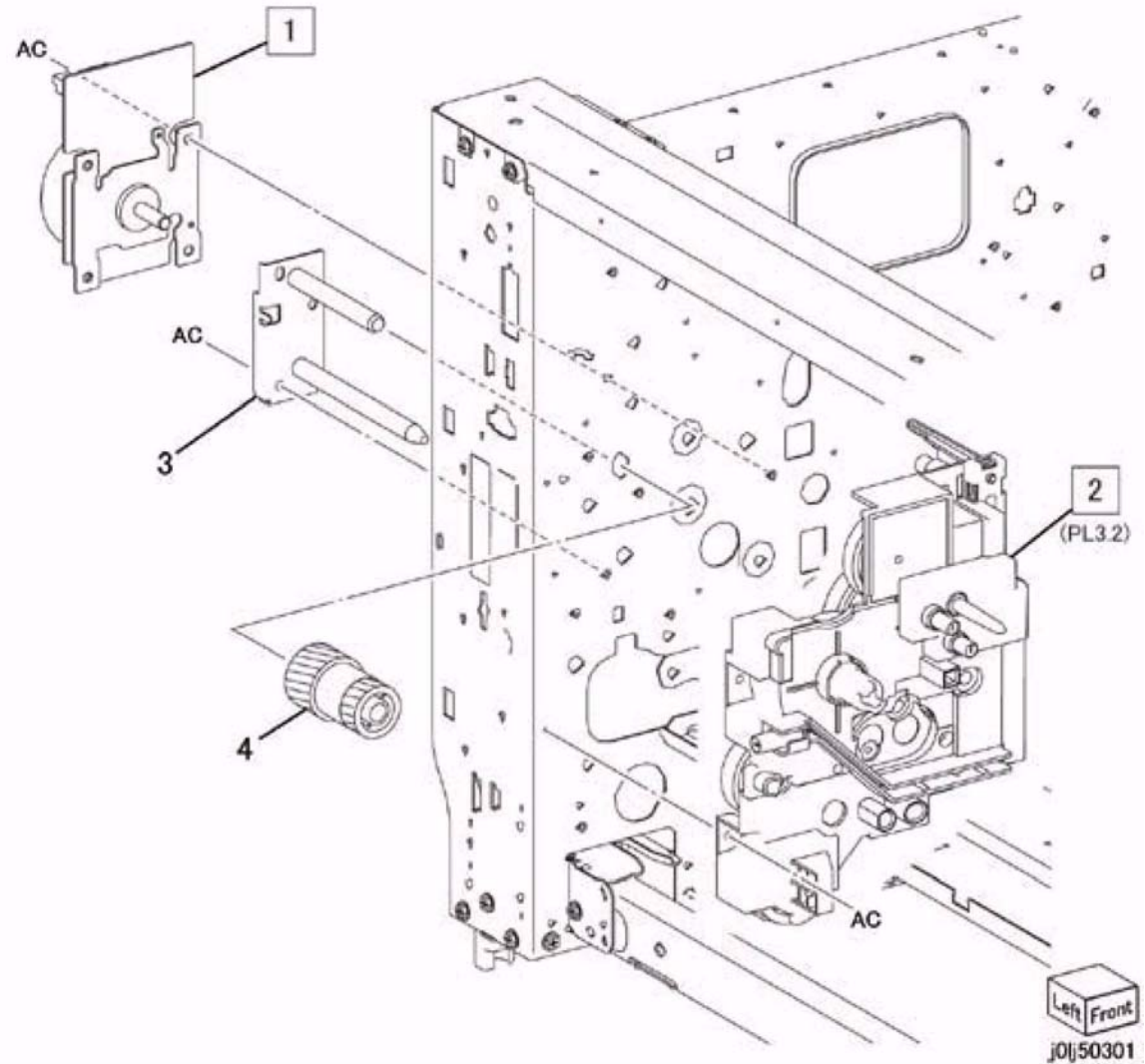
PL2.1



PL 3.1 Main Drive Motor

Item	Part	Description
1	127K66290	Main Drive Motor (REP 3.1.1)
2	007K98390	Main Drive Housing (PL 3.2) (REP 3.1.2)
3	049K17710	Stud Bracket
4	807E39260	Helical Gear

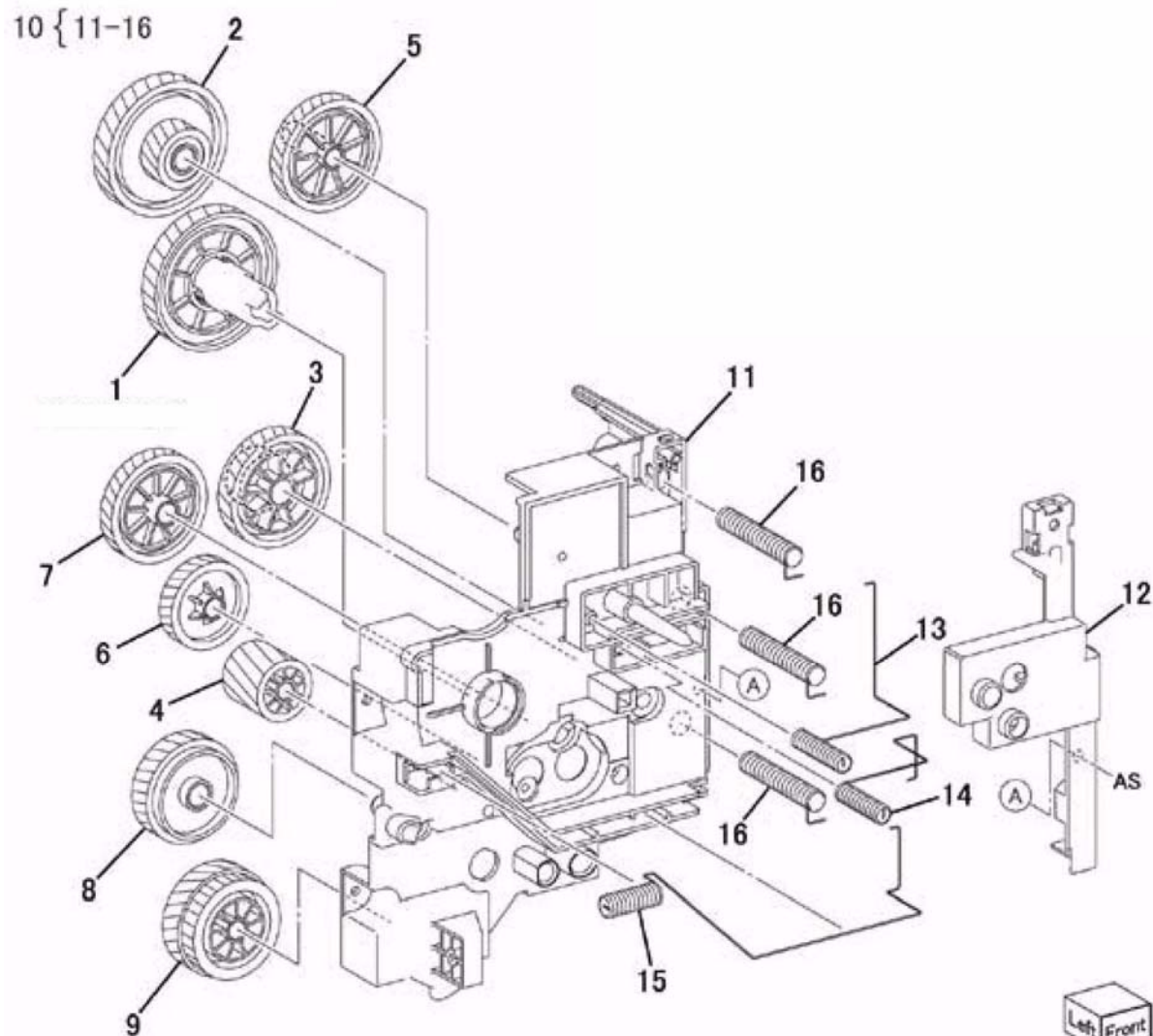
PL3.1



PL 3.2 Main Drive Housing

Item	Part	Description
1	005K83930	Drum Coupling and Gear Assembly
2	807E39180	Helical Gear (76/33T)
3	807E39200	Helical Gear (63/18T)
4	807E39230	Helical Gear (25T)
5	807E39250	Helical Gear (63T)
6	807E39220	Helical Gear (36T)
7	807E39210	Helical Gear (45T)
8	807E39240	Helical Gear (43T)
9	807E39580	Helical Gear (44/27T)
10	848K67531	Main Drive Housing (Item 11-16)
11	-	Main Drive Housing (P/O Item 10)
12	848E84830	Conductor Cover
13	130E16130	BCR Conductor
14	130E16140	Deve. Conductor
15	130E16150	BTR Conductor
16	130E16160	HV Conductor

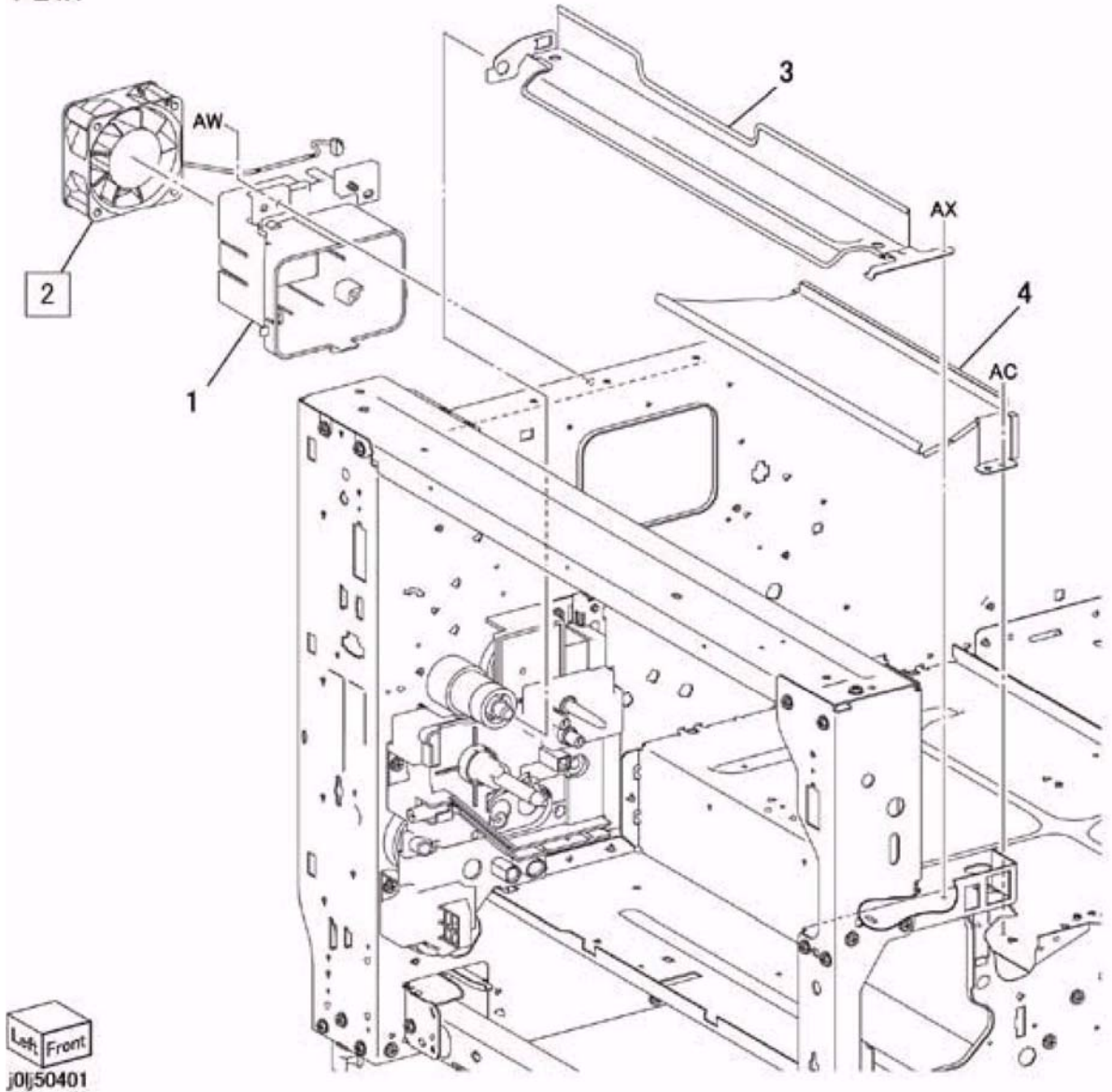
PL3.2



PL 4.1 NOHAD

Item	Part	Description
1	054E50272	NOHAD Duct
2	127E86170	NOHAD Fan (REP 4.1.1)
3	-	Fusing Unit Plate
4	-	Laser Housing

PL4.1

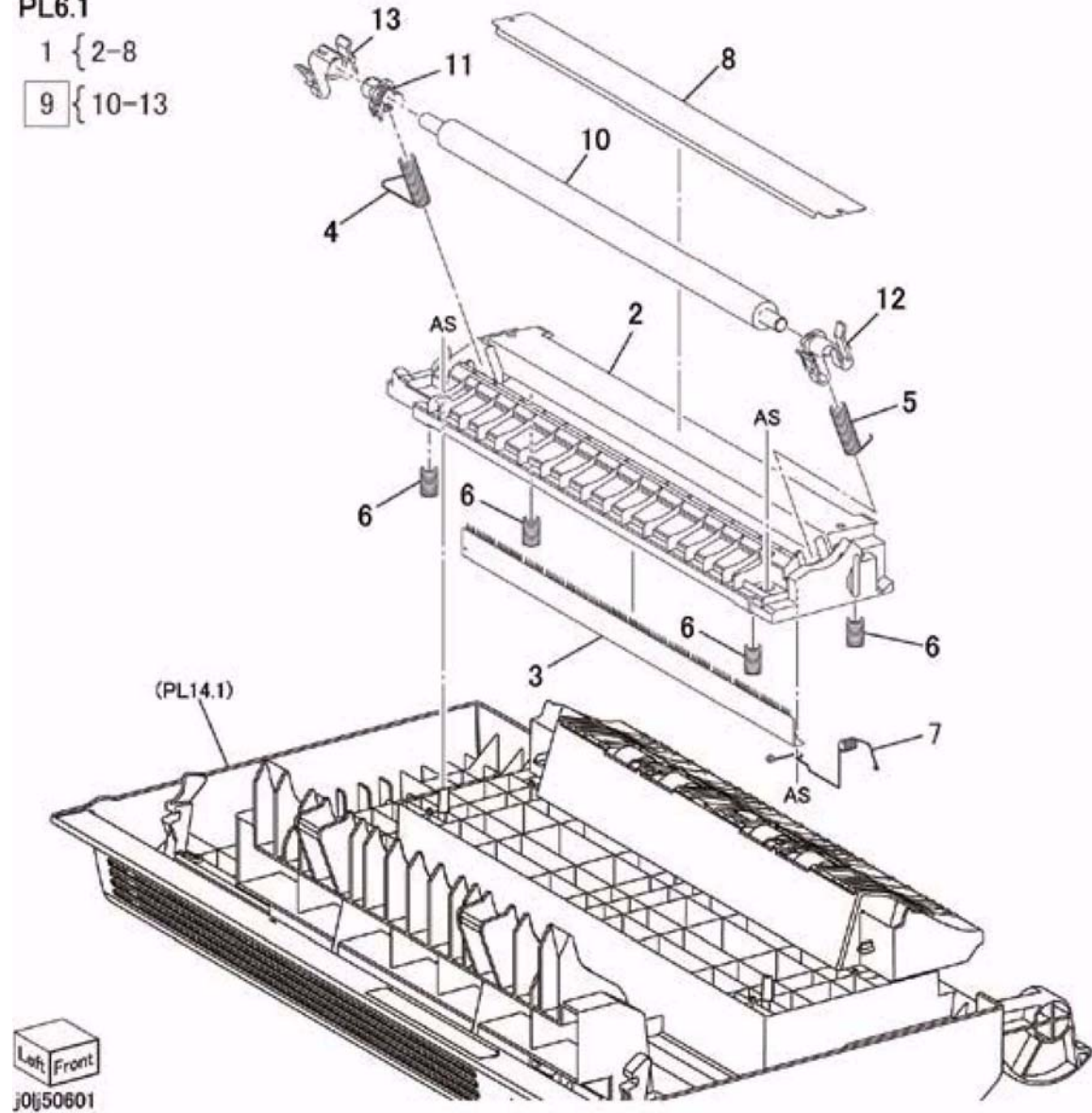


PL 6.1 Transfer

Item	Part	Description
1	054K48391	BTR Chute (Item 2-8)
2	-	BTR Chute (P/O Item 1)
3	-	DTS Eliminator (P/O Item 1)
4	809E99862	BTR Spring (Rear)
5	809E99871	BTR Spring (Front)
6	-	Float Spring (P/O Item 1)
7	-	DTS Conductor (P/O Item 1)
8	-	Film Chute (P/O Item 1)
9	059K79560	BTR Roll Assembly (REP 6.1.1)
10	-	BTR Roll
11	-	BTR Bearing (Rear)
12	-	BTR Bearing (Front)
13	-	BTR Lever

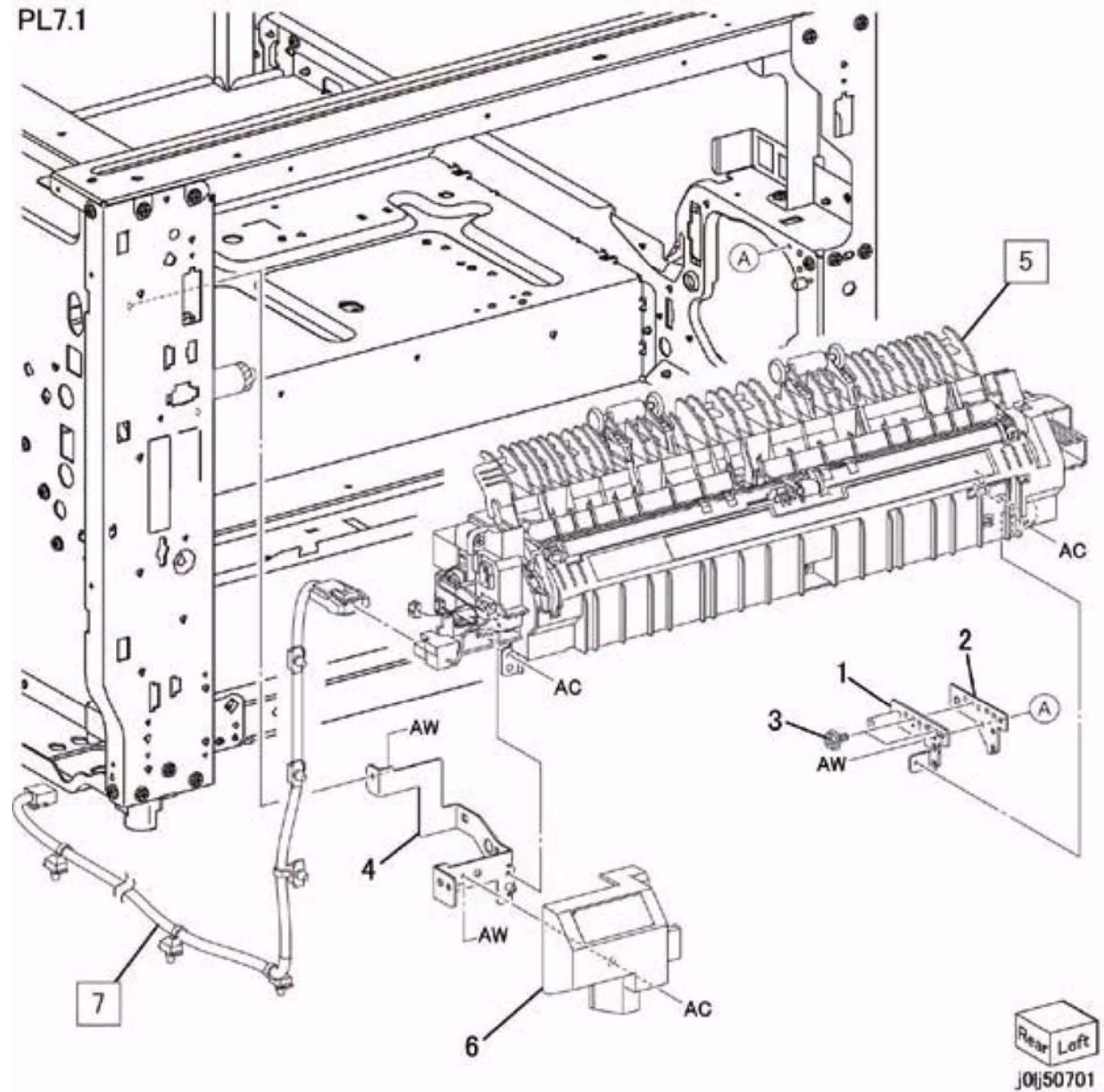
PL6.1

1 { 2-8
 9 { 10-13



PL 7.1 Fusing Unit

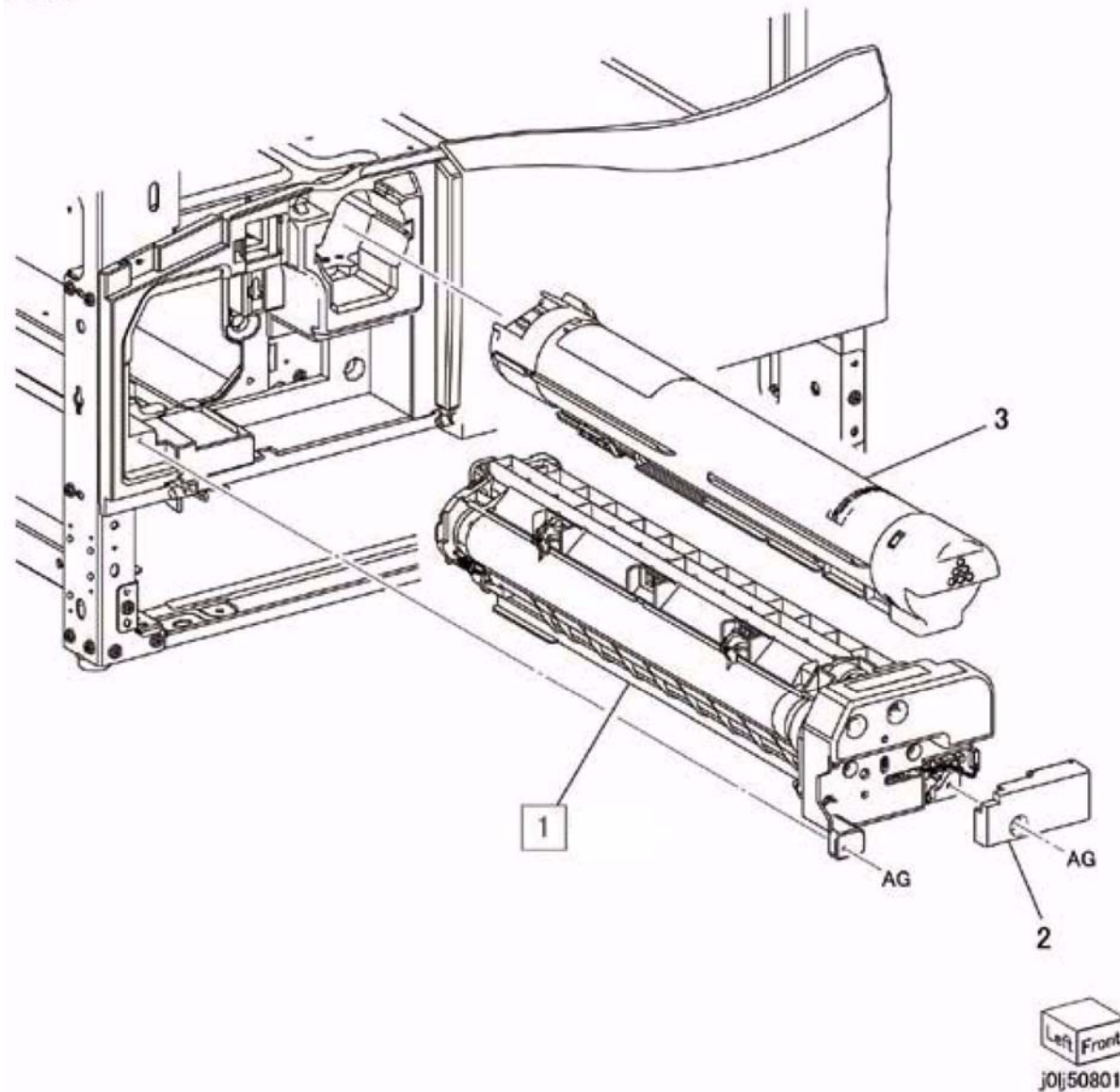
Item	Part	Description
1	-	Fusing Unit Stud Plate
2	-	Adjust Plate
3	-	Stud Screw
4	-	Fusing Unit Rear Bracket
5	126K30556	220V-Fusing Unit (REP 7.1.1)
-	126K31733	120V-Fusing Unit (REP 7.1.1)
6	848E83411	Connector Cover
7	952K01221	220V-Fusing Unit Wire Harness
-	962K69061	120V-Fusing Unit Wire Harness



PL 8.1 Drum Cartridge, Toner Cartridge

Item	Part	Description
1	013R00670	Drum Cartridge (REP 8.1.1)
2	-	Connector Cover
3	006R01573	Toner Cartridge

PL8.1

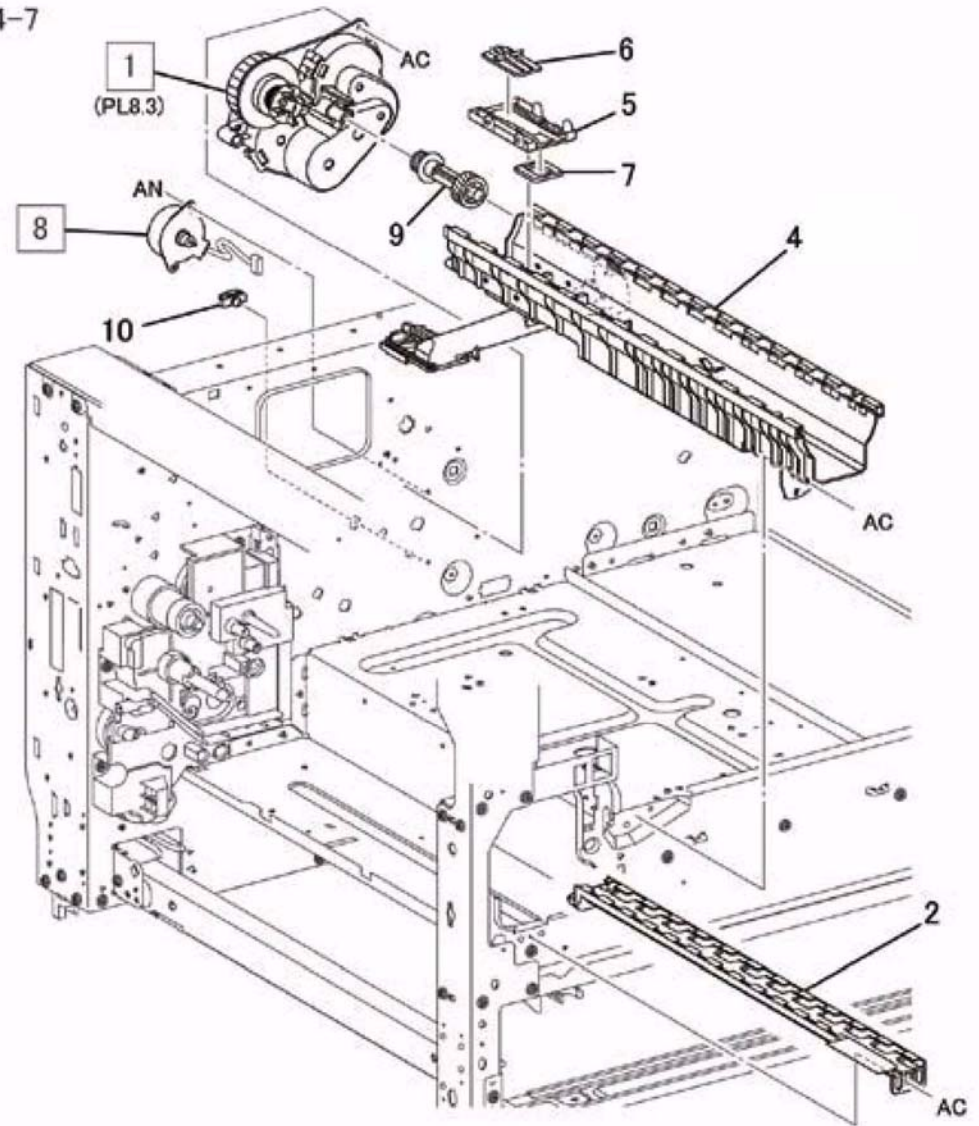


PL 8.2 Toner System

Item	Part	Description
1	007K18750	Dispense Drive (PL 8.3) (REP 8.2.2)
2	032K08100	Drum Cartridge Guide
3	094K93270	Cartridge Guide (Item 4-7) (REP 8.2.1)
4	032K08082	Cartridge Guide
5	032E35503	Shutter Guide
6	055E58451	Dispenser Shutter
7	-	Guide Seal (P/O Item 3)
8	127K66870	Toner Dispense Motor
9	807E39410	Gear (21/21T)
10	-	Clamp

PL8.2

3 { 4-7

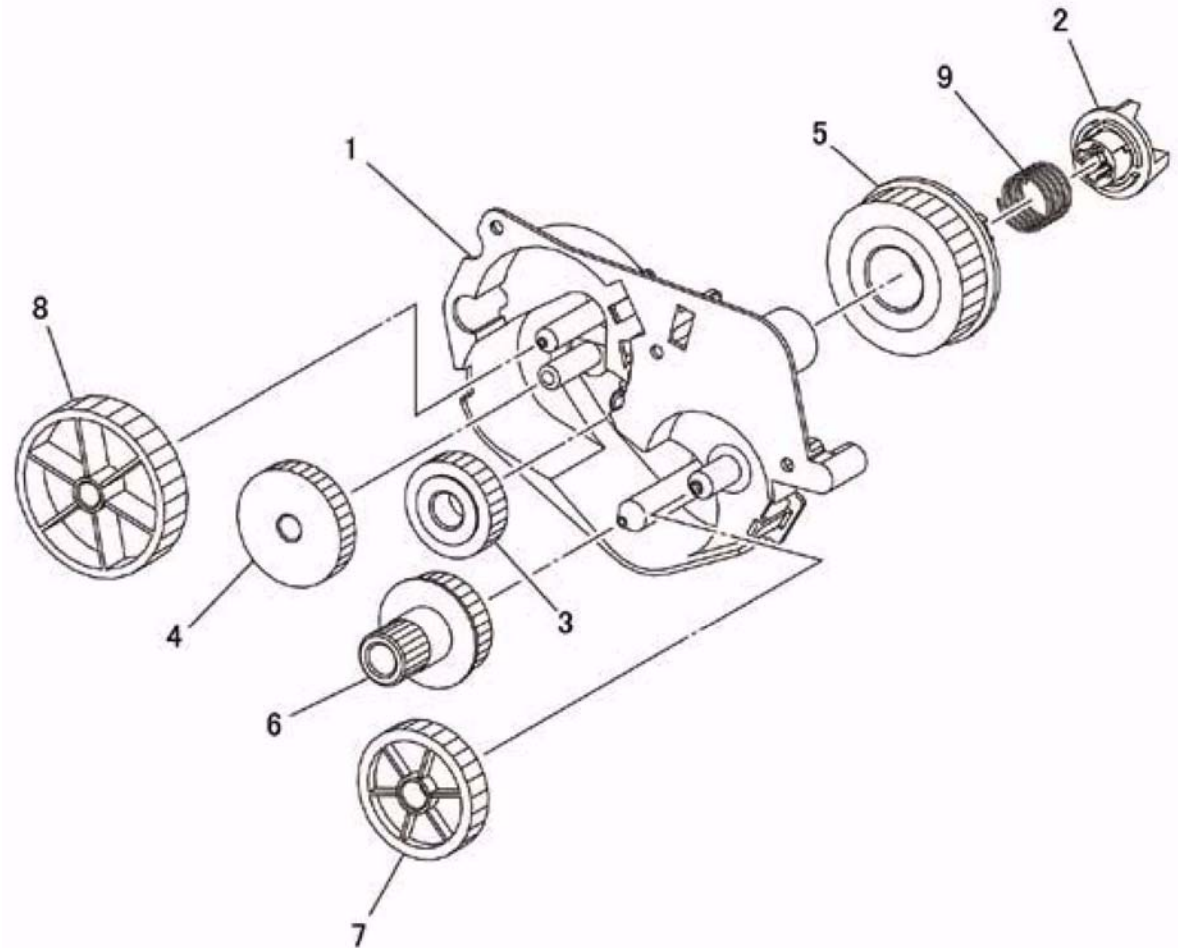


Left Front
J0650802

PL 8.3 Dispense Drive

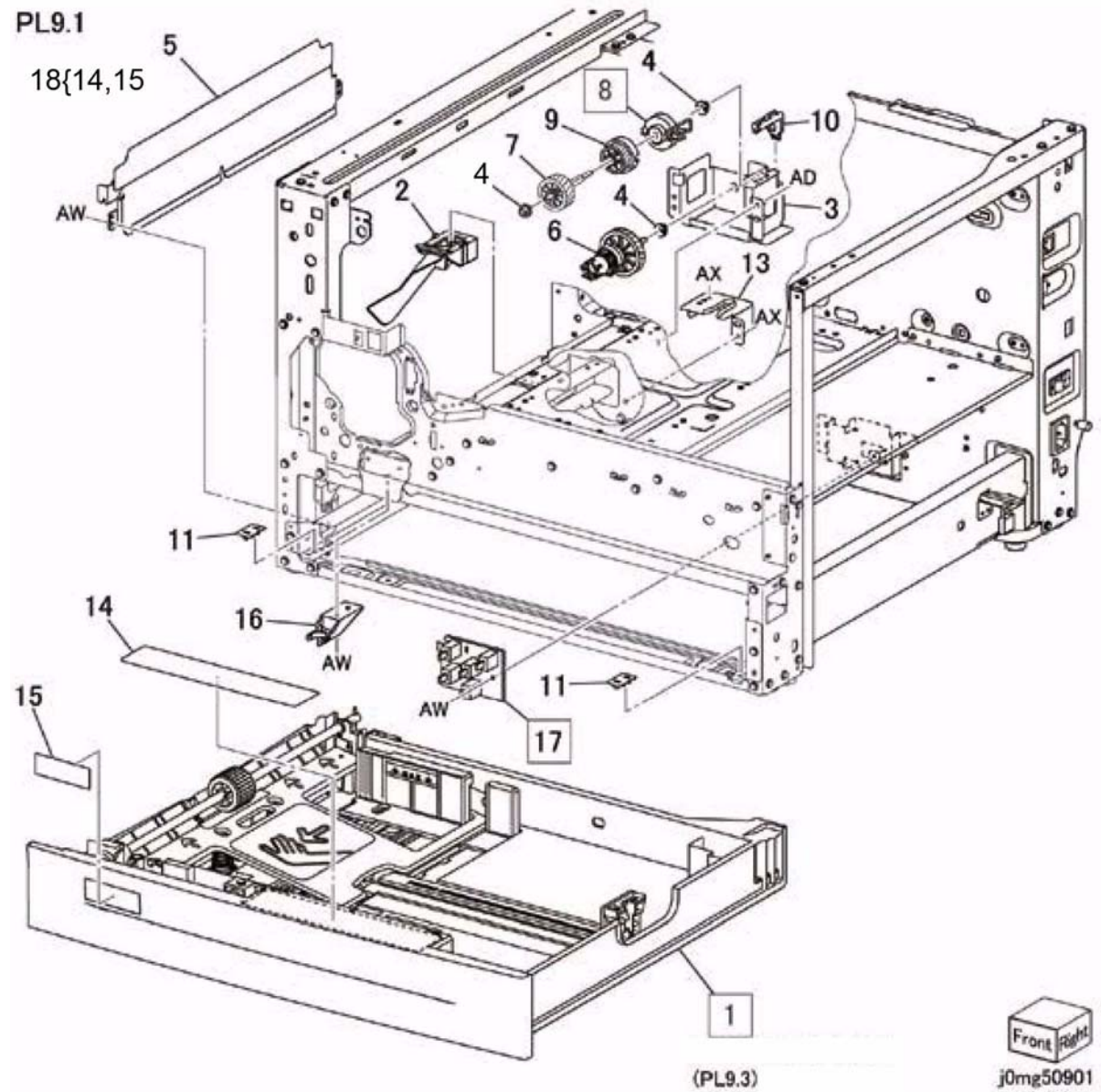
Item	Part	Description
1	-	Dispense Drive Housing
2	005E25160	Dispenser Coupling
3	-	Gear (45T)
4	-	Gear (55/19T)
5	807E31531	Gear (54T)
6	-	Gear (47/17T)
7	-	Gear (45T)
8	-	Gear (96/20T)
9	809E79130	Spring

PL8.3



PL 9.1 Tray 1, Tray Drive

Item	Part	Description
1	050K70180	Tray 1 (PL 9.3) (REP 9.1.2)
2	848K85390	Tray 1 No Paper Sensor
3	-	Drive Bracket
4	013E41230	Bearing
5	054K48460	L/H Chute
6	005K83551	Tray 1 Coupling and Gear
7	006K89940	Shaft and Gear
8	121K52340	Tray 1 Feed Clutch (REP 9.1.1)
9	807E40920	Helical Gear (28T)
10	032E40350	Harness Guide
11	014E45350	Spacer
13	-	Tray Support Bracket
14	-	Instruction Label
15	-	Label (No.1)
16	003E60952	Tray Front Stopper
17	110K11680	Tray 1 Size Sensor (REP 9.1.3)
18	604K90800	Tray Label Kit (Item 14-15)



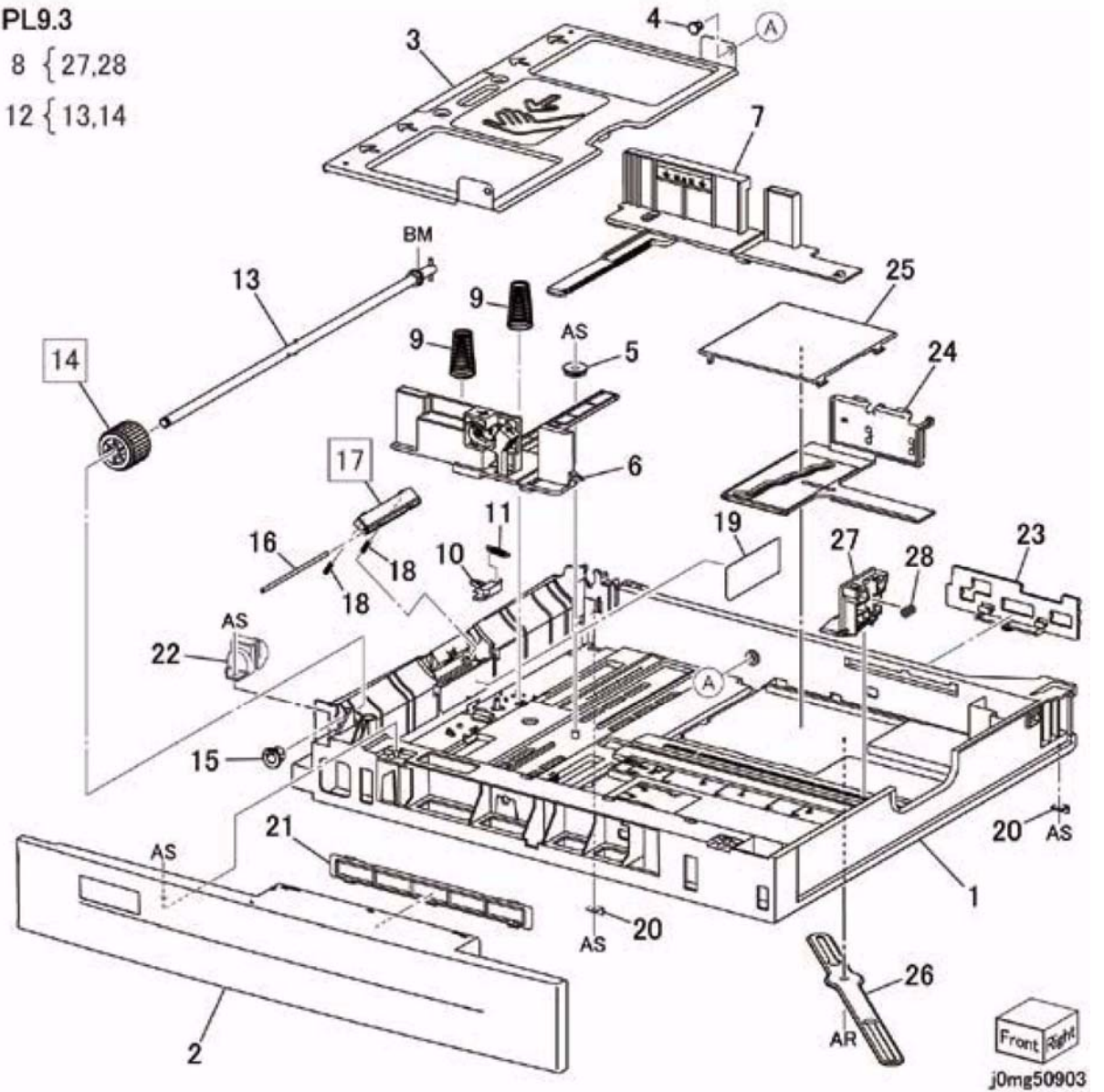
PL 9.3 Tray 1 Component

Item	Part	Description
1	-	Tray Housing
2	848E84353	Tray Cover
3	815K09820	Bottom Plate
4	029E32810	Pivot
5	807E41440	Pinion Gear
6	038K21332	Side Front Guide
7	038K21980	Side Rear Guide
8	038K21640	End Guide Assembly (Item 27,28)
9	809E54160	Spring
10	003E60941	Stopper
11	809E54170	Spring
12	059K33051	Tray 1 Feed Roll and Shaft (Item 13,14)
13	-	Shaft (P/O Item 12)
14	059K32773	Tray 1 Feed Roll (REP 9.2.1)
15	013E25881	Bearing
16	006E79021	Retard Shaft
17	019K09420	Tray 1 Retard Pad (REP 9.2.1)
18	809E27650	Spring
19	-	Paper Guide
20	803E15701	Stopper
21	848E85990	Inner Cover
22	-	Bearing Cover
23	120E23764	End Guide Actuator
24	120K92011	Side Actuator
25	802E62310	Actuator Cover
26	012E11810	End Link
27	038E27124	End Guide
28	809E47091	Spring

PL9.3

8 { 27,28

12 { 13,14

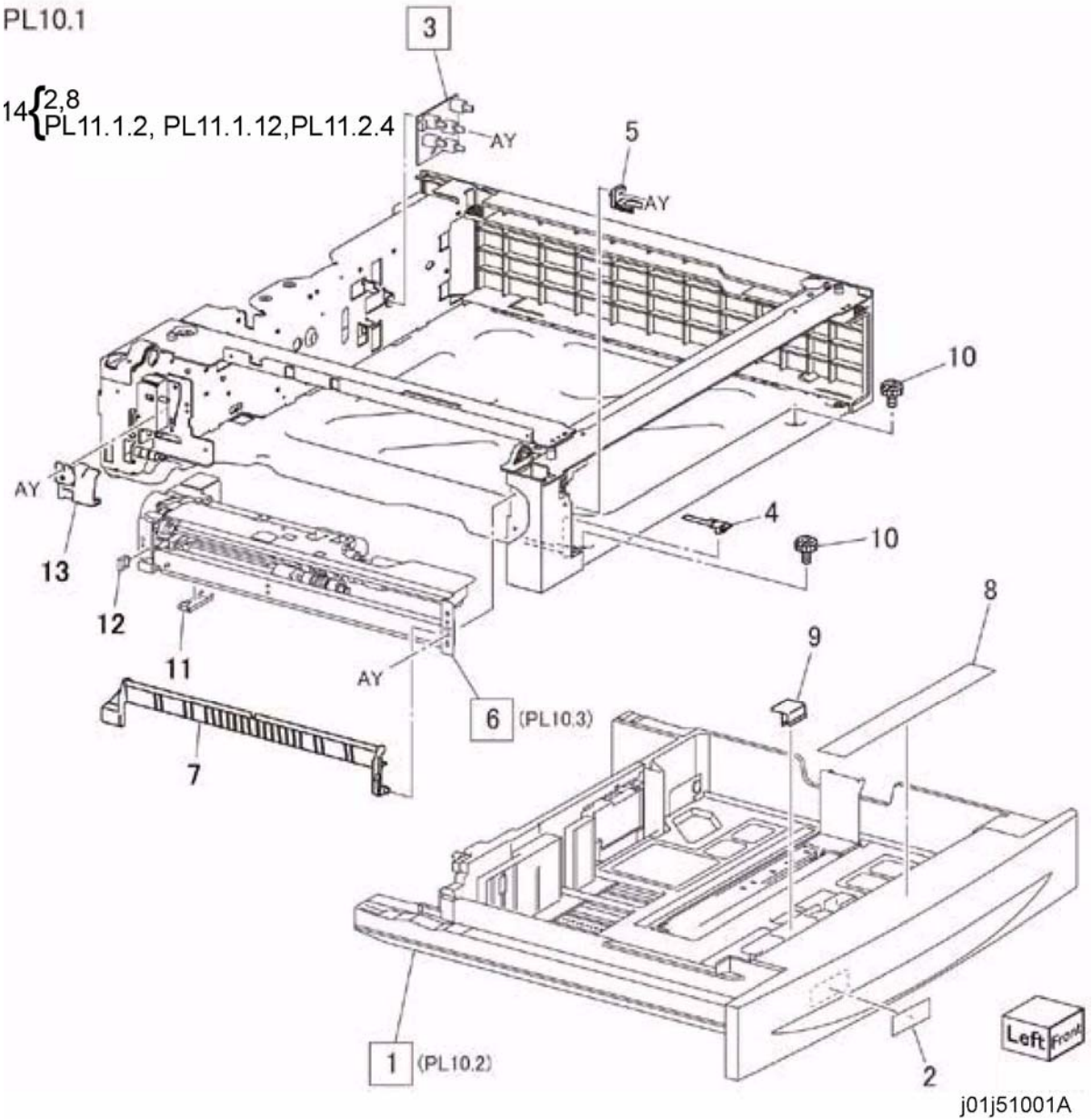


PL 10.1 Tray 2 ,Feeder

Item	Part	Description
1	050K64424	Tray 2 (PL 10.2)
2	-	Label (No.2) (P/O Item14)
3	110K11680	Tray 2 Paper Size Switch
4	014E51110	Tray Spacer
5	003E61510	Tray Stopper
6	059K79621	Tray 2 Feeder (PL 10.3) (REP 10.1.1)
7	054K27520	Feed Out Chute
8	-	Label (Instruction) (P/O Item14)
9	014E59990	Slide Lock
10	826E07210	Docking Screw
11	-	Cover
12	-	Holder
13	-	Feeder Connector Cover
14	604K90810	Tray 2,3,4 Label Kit

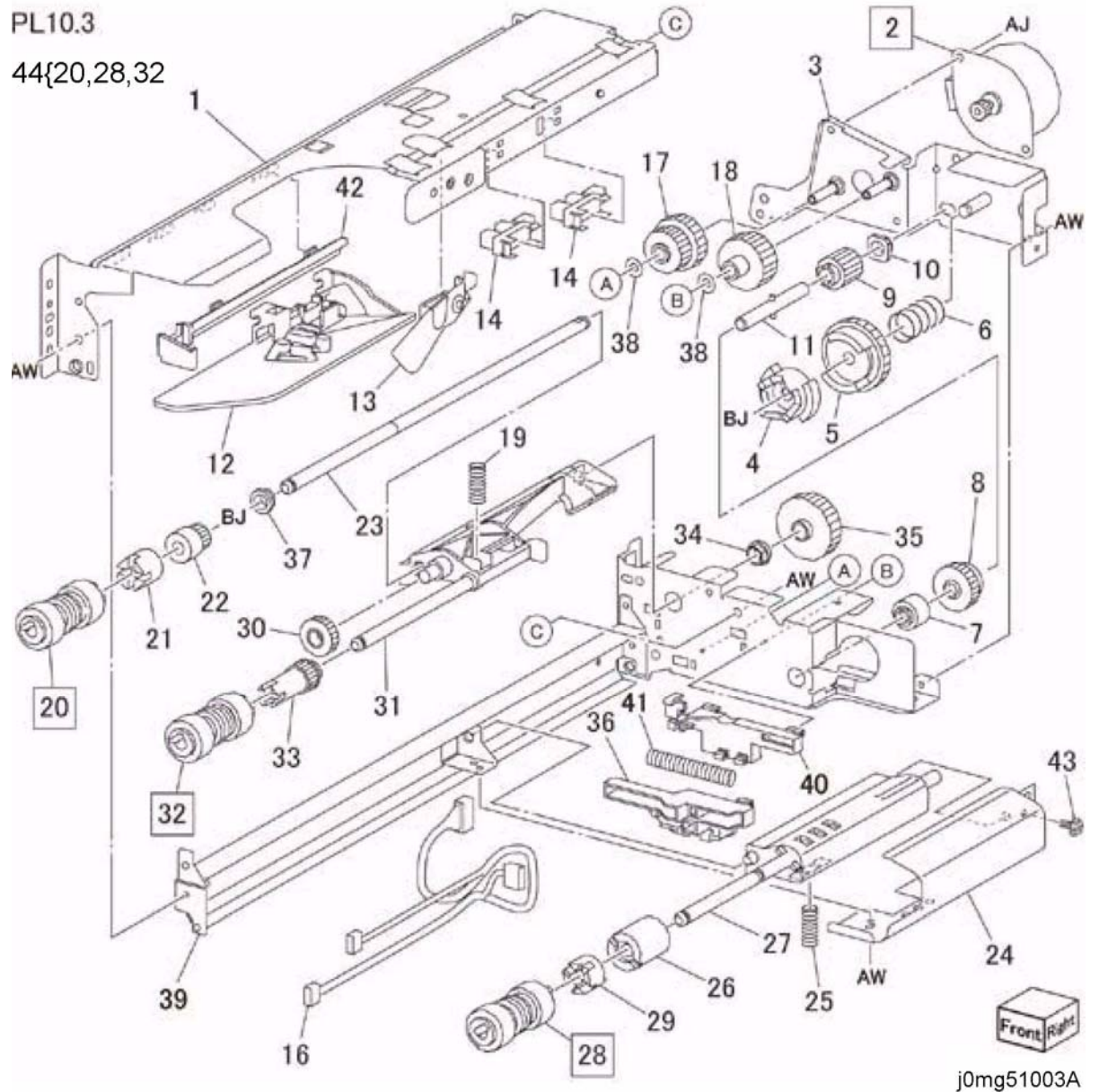
PL10.1

14 { 2,8
PL11.1.2, PL11.1.12, PL11.2.4



PL 10.3 Tray 2 Feeder

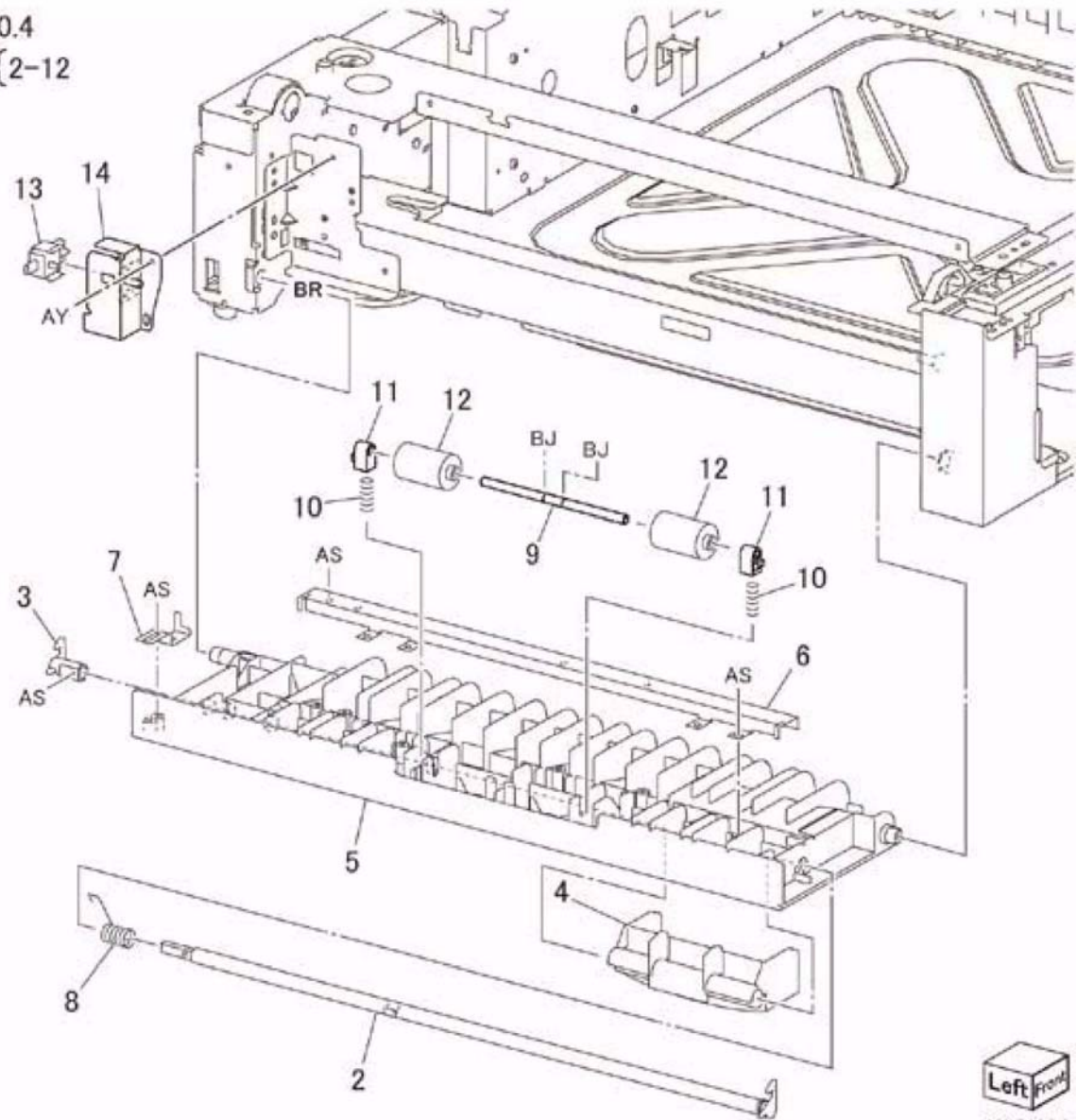
Item	Part	Description
1	-	Upper Frame
2	127K38171	Tray 2 Feed/Lift Up Motor
3	-	Bracket
4	014E44770	Spacer
5	807E00390	Gear (31T)
6	809E50531	Spring
7	005K83081	Oneway Clutch
8	007K85730	Oneway Gear
9	807E00800	Gear (13T)
10	013E26530	Bearing
11	-	Shaft
12	054E23461	Front Chute
13	120E22481	Actuator
14	930W00123	Tray 2 Nudger Level Sensor, Tray 2 No Paper Sensor
16	962K19692	Wire Harness
17	-	Gear (28T/21T)
18	007E78900	Gear (29T)
19	809E51070	Spring
20	-	Tray 2 Feed Roll (P/O Item 44) (REP 10.3.1)
21	005K05890	Oneway Clutch
22	005K06760	Oneway Gear (22T)
23	-	Shaft
24	054E23170	Chute
25	809E42531	Spring
26	005K81880	Friction Clutch
-	005K07010	Friction Clutch (Alternate)
27	-	Support Assembly
28	-	Tray 2 Retard Roll (P/O Item 44) (REP 10.3.1)
29	014E45030	Spacer
30	007E79380	Gear (33T)
31	-	Support Assembly
32	-	Tray 2 Nudger Roll (P/O Item 44) (REP 10.3.1)
33	807E00070	Gear (25T)
34	413W11660	Bearing
35	807E00410	Gear (34T)
36	011E14771	Lever
37	013E92890	Bearing
38	028E94160	Washer
39	-	Lower Frame
40	019E56680	Holder
41	809E51080	Spring
42	-	Rail
43	-	Screw
44	604K75331	Feed Roll Kit



PL 10.4 Left Cover

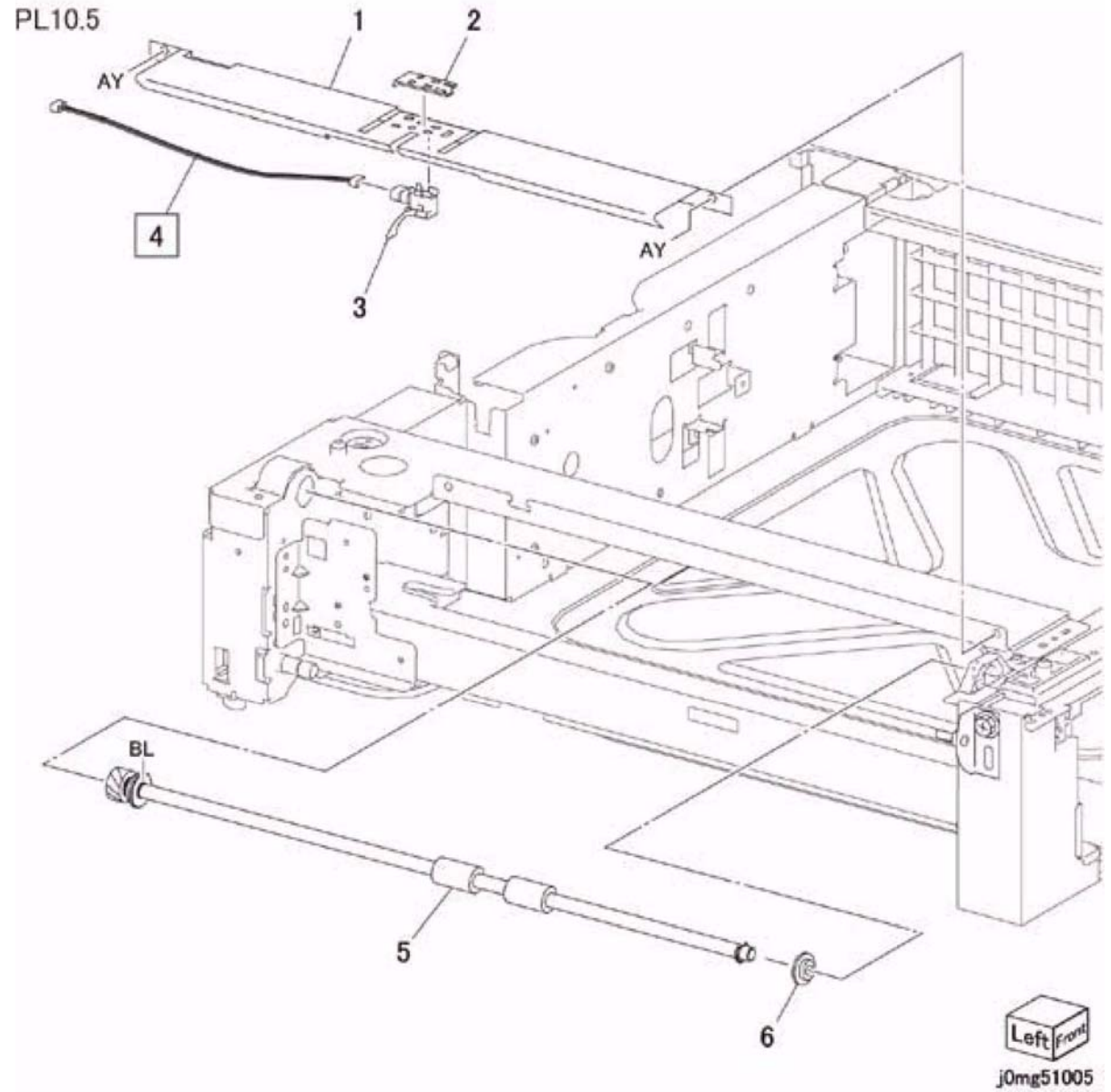
Item	Part	Description
1	802K57026	Left Cover Assembly (Item 2-12)
2	003E59630	Latch
3	003E59640	Hook
4	011E14481	Handle
5	-	Left Cover (P/O Item 1)
6	054E23421	Chute
7	120E22240	Actuator
8	809E54501	Spring
9	-	Shaft (P/O Item 1)
10	809E54590	Spring
11	013E26100	Bearing
12	059E99241	Pinch Roll
13	110E12220	STM Left Cover Switch
14	030K75511	Bracket Assembly

PL10.4
1 {2-12



PL 10.5 Takeaway Roll

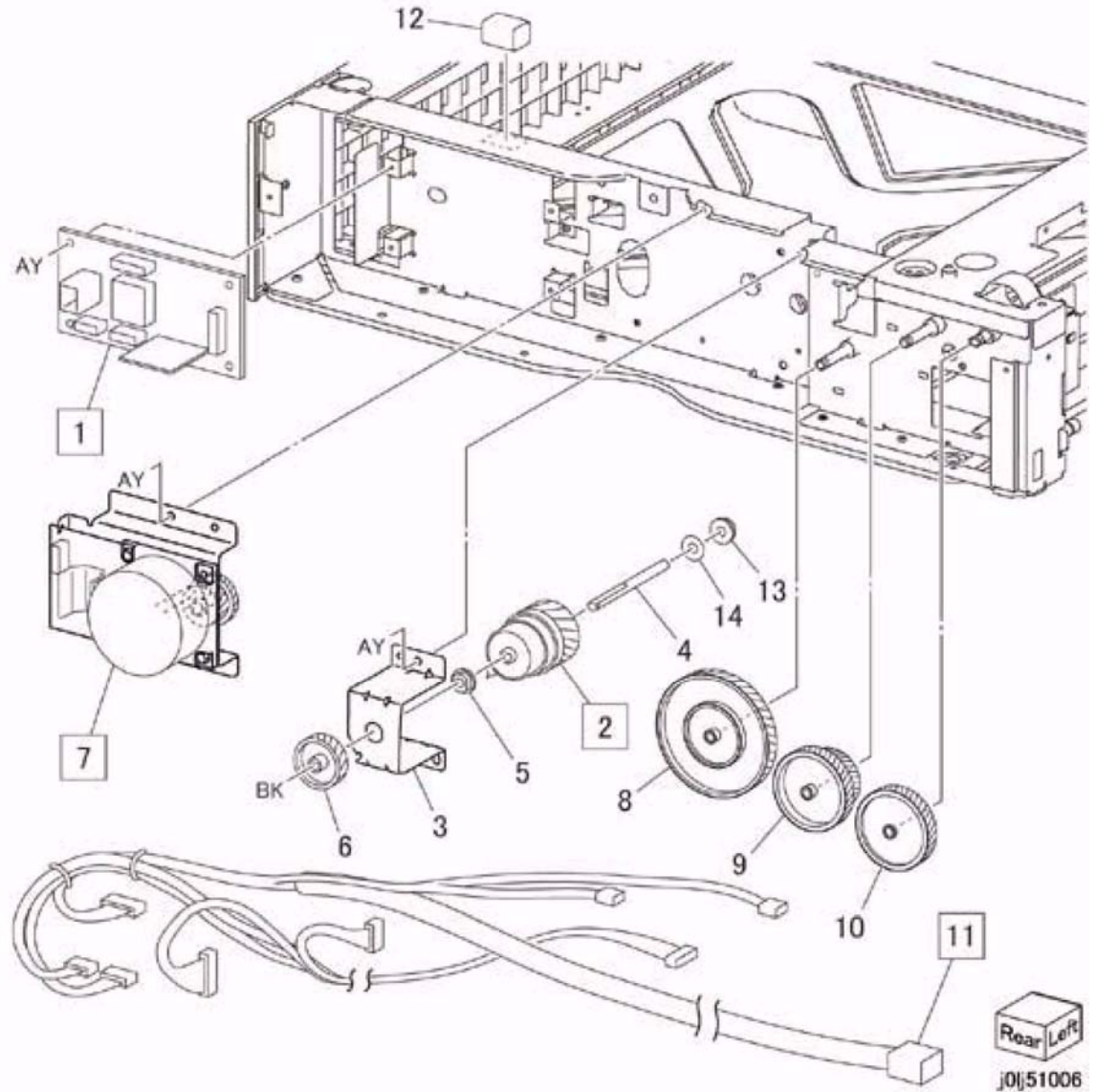
Item	Part	Description
1	-	Chute
2	802E54672	Cover
3	130K64121	Feed Out Sensor 2
4	952K08150	Wire Harness
5	059K26251	Takeaway Roll
6	413W11860	Bearing



PL 10.6 Electrical

Item	Part	Description
1	960K68560	STM PWB (REP 10.6.1)
2	121K31530	STM Takeaway Roll Clutch
3	-	Bracket
4	006E78490	Shaft
5	413W77359	Bearing
6	007E78260	Gear (38T)
7	007K19210	STM Takeaway Motor (REP 10.6.2)
8	007E79830	Gear (94T)
9	007E79840	Gear (33T/60T)
10	007E79850	Gear (60T)
11	952K08490	Wire Harness
12	-	Gasket
13	413W11860	Bearing
14	252W29450	Nylon Washer

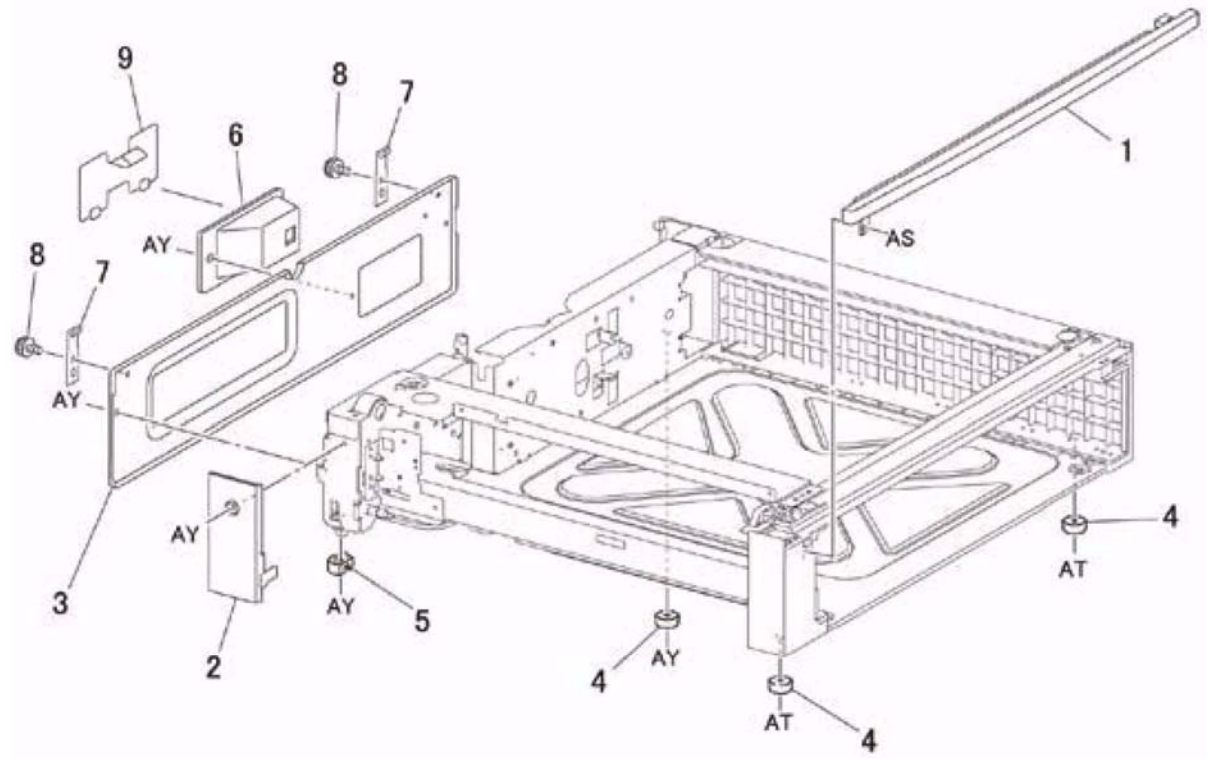
PL10.6



PL 10.7 Cover

Item	Part	Description
1	802E54731	Top Cover
2	802E86971	Left Cover
3	802E56601	Rear Cover
4	-	Foot
5	-	Foot (Rear Left)
6	-	Cover
7	849E34880	Docking Bracket
8	826E07210	Docking Screw
9	032E38920	Cap

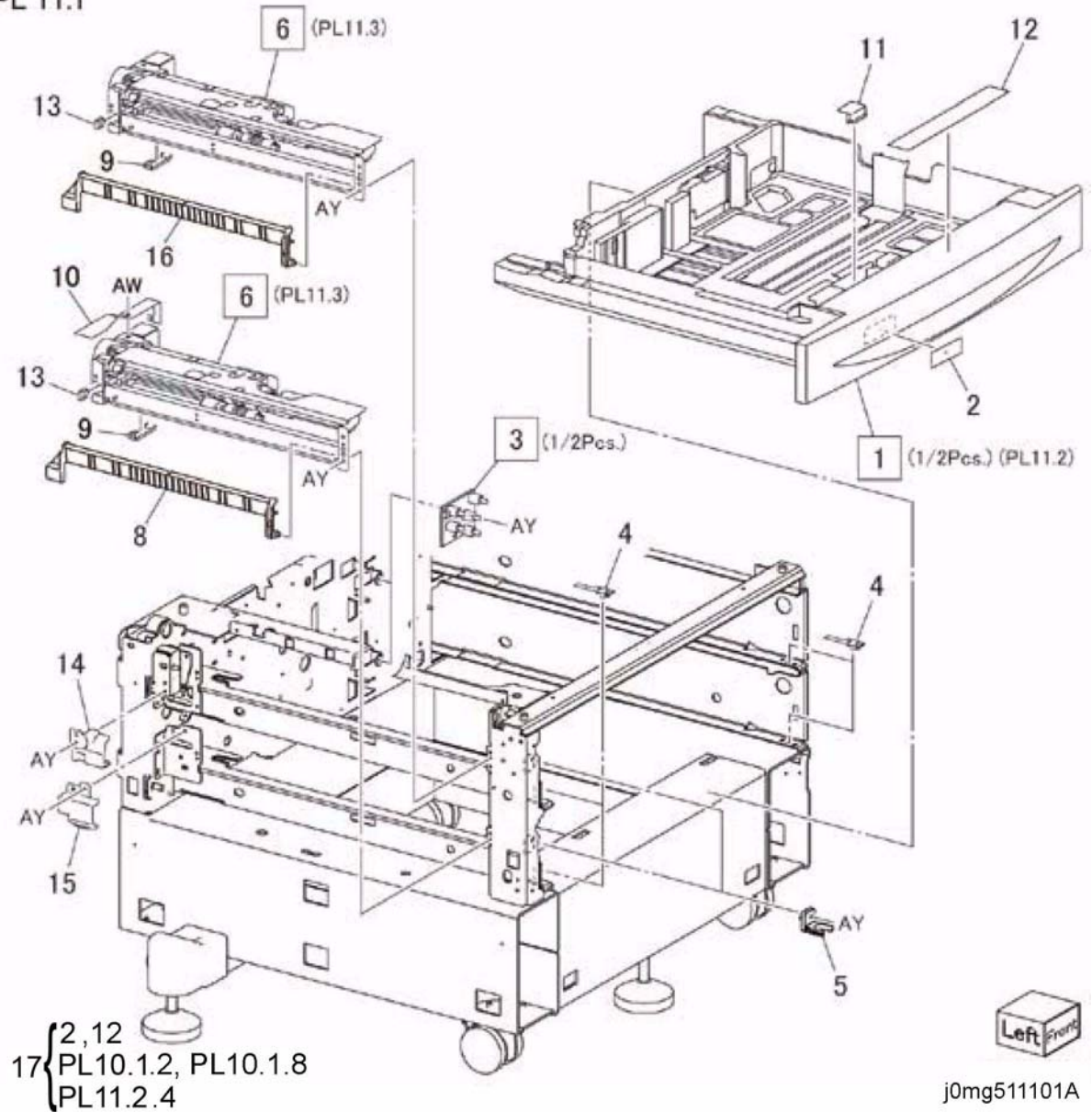
PL10.7



PL 11.1 Tray 3/4, Feeder

Item	Part	Description
1	050K64424	Tray 3/4 (PL 11.2)
2	-	Label (No.3), Label (No.4) (P/O Item 17)
3	110K11680	Tray 3/4 Paper Size Switch
4	014E51110	Tray Spacer
5	003E61510	Tray Stopper
6	059K79621	Tray 3 Feeder (PL 11.3) (REP 11.1.1), Tray 4 Feeder (PL 11.3) (REP 11.1.2)
8	054E22622	Feed Out Chute
9	802E54672	Sensor Cover
10	-	Cover
11	014E59990	Slide Lock
12	-	Label (instruction) (P/O Item 17)
13	-	Holder
14	-	Feeder Connector Cover
15	-	Feeder Connector Cover
16	054K27520	Feed Out Chute
17	604K90810	Tray Label Kit

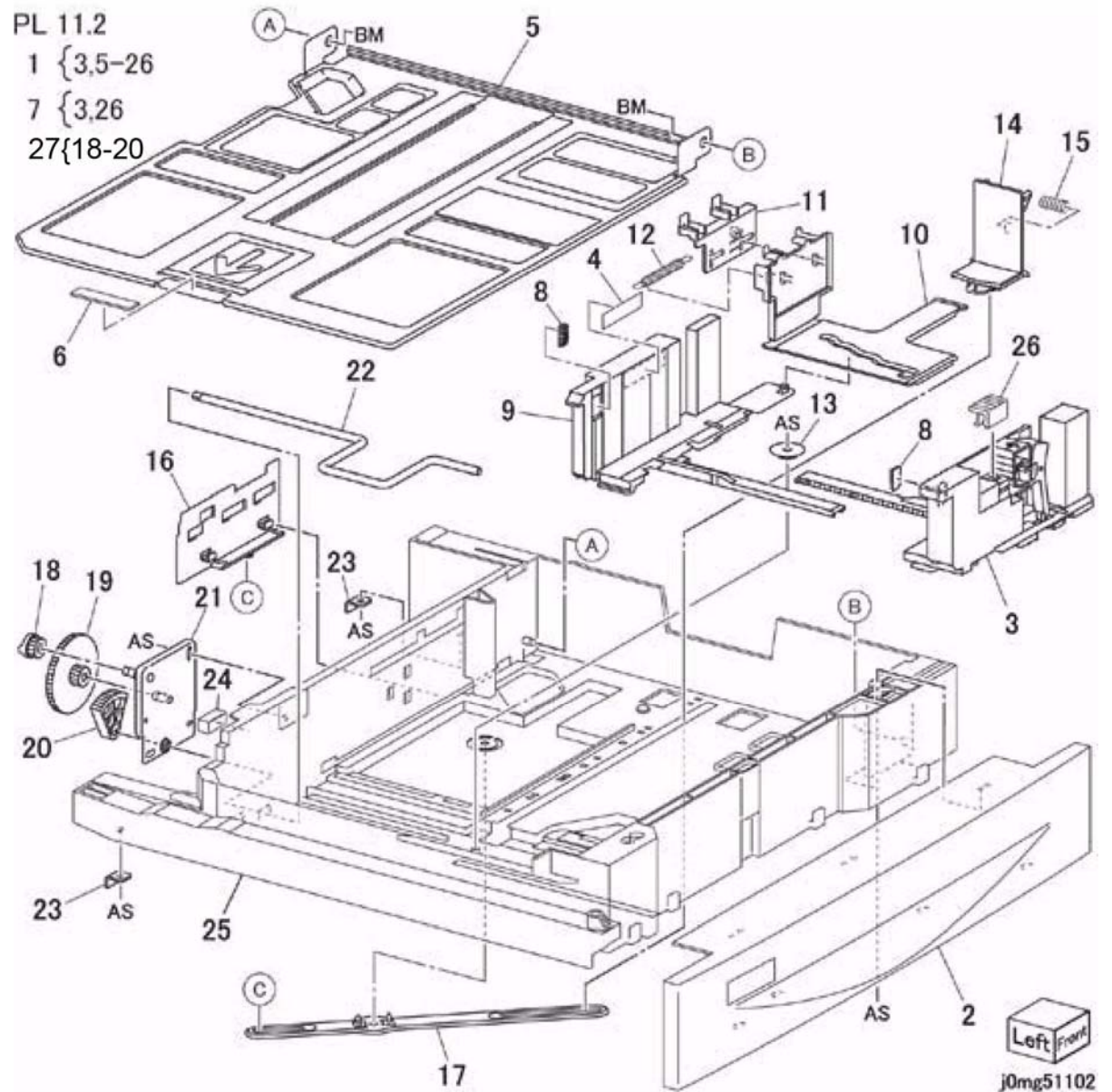
PL 11.1



Left Front
j0mg511101A

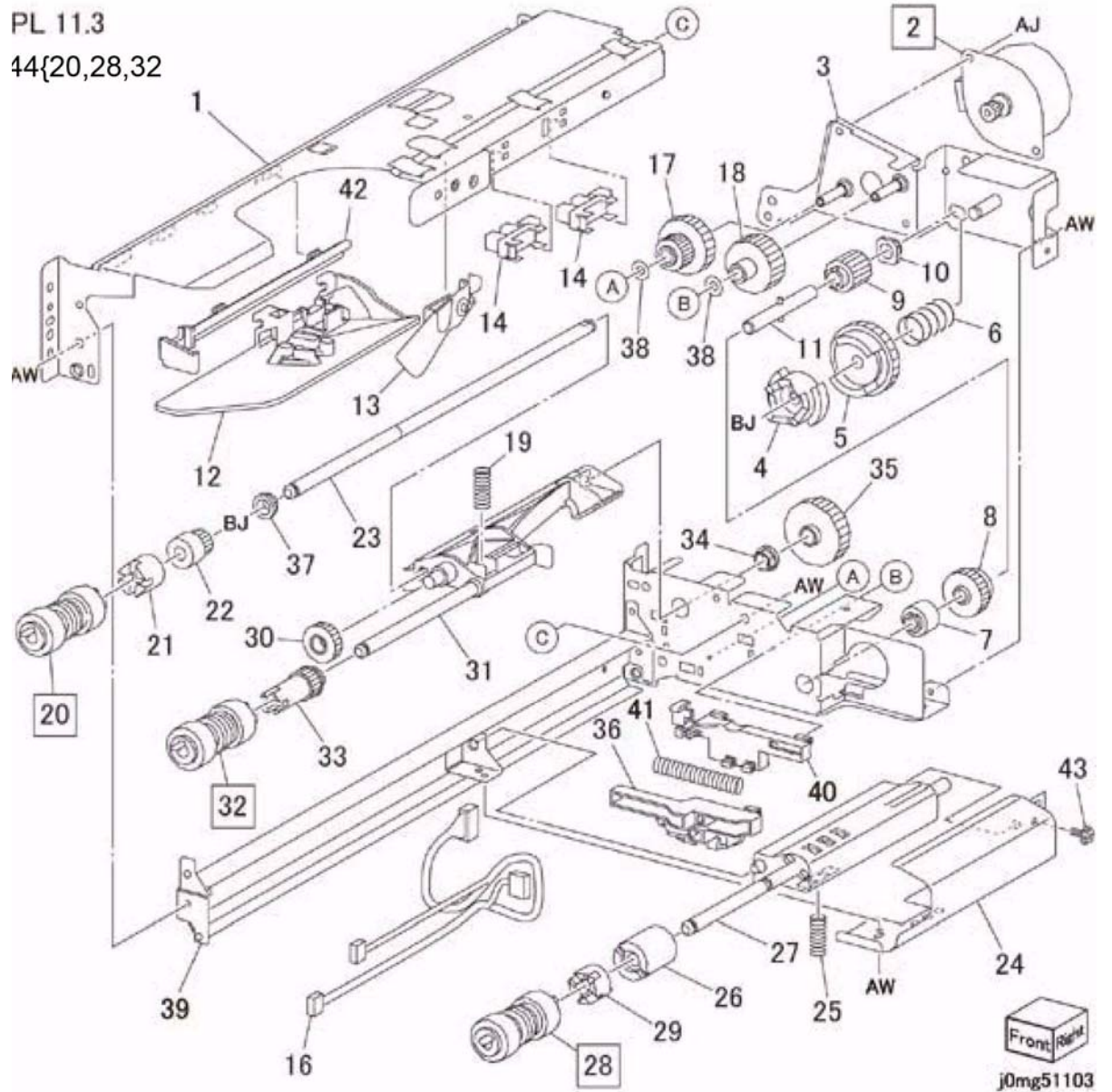
PL 11.2 Tray 3/4 Component

Item	Part	Description
1	-	Tray 3/4 (Item 3,5-26)
2	802E54721	Tray Cover
3	-	Front Side Guide (P/O Item 7)
4	-	Label (Max) (P/O PL 11.1.17)
5	849E06322	Bottom Plate
6	019K07150	Bottom Pad
7	038K87114	Front Side Guide Assembly (Item 3, 26)
8	019E71680	Tray Pad
9	038E26550	Rear Side Guide
10	120E22040	Side Guide Actuator
11	120E22081	Guide Actuator
12	809E41880	Spring
13	807E13521	Pinion Gear
14	038E26533	End Guide
15	809E47091	Spring
16	120E22051	End Guide Actuator
17	012E11090	Link
18	-	Coupling Gear (13T) (P/O Item 27)
19	-	Gear (13T/60T) (P/O Item 27)
20	-	Sector Gear (60T) (P/O Item 27)
21	-	Bracket
22	-	Lift Up Shaft
23	-	Stopper
24	-	Seal
25	-	Tray (P/O Item 1)
26	-	Slide Lock (P/O Item 7)
27	604K20541	Gear Kit



PL 11.3 Tray 3/4 Feeder

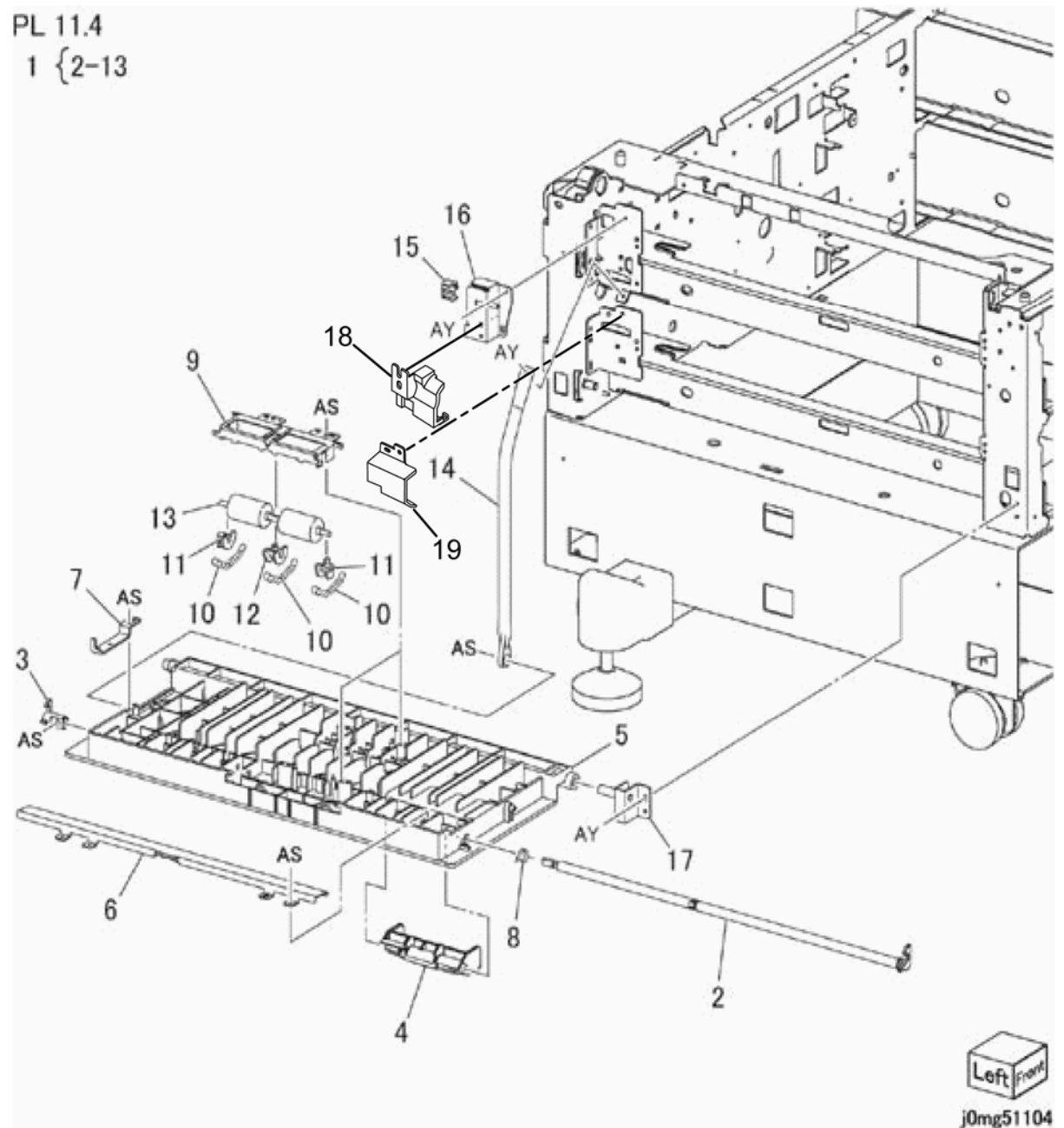
Item	Part	Description
1	-	Upper Frame
2	127K38171	Tray 3/4 Feed/Lift Up Motor
3	-	Bracket
4	014E44770	Spacer
5	807E00390	Gear (31T)
6	809E50531	Spring
7	005K83081	One Way Clutch
8	007K85730	One Way Gear
9	807E00800	Gear (13T)
10	013E26530	Bearing
11	-	Shaft
12	054E23461	Front Chute
13	120E22481	Actuator
14	930W00123	Tray 3/4 Nudger Level Sensor, Tray 3/4 No Paper Sensor
16	962K19692	Wire Harness
17	-	Gear (32T/15T)
18	007E78900	Gear (29T)
19	809E51070	Spring
20	-	Tray 3 Feed Roll (REP 11.3.1), Tray 4 Feed Roll (REP 11.3.2) (P/O Item 44)
21	005K05890	One Way Clutch
22	005K06760	One Way Gear (22T)
23	-	Shaft
24	054E23170	Chute
25	809E42531	Spring
26	005K07010	Friction Clutch
27	-	Support Assembly
28	-	Tray 3 Retard Roll (REP 11.3.1), Tray 4 Retard Roll (REP 11.3.2) (P/O Item 44)
29	014E45030	Spacer
30	007E79380	Gear (33T)
31	-	Support Assembly
32	-	Tray 3 Nudger Roll (REP 11.3.1), Tray 4 Nudger Roll (REP 11.3.2) (P/O Item 44)
33	807E00070	Gear (25T)
34	413W11660	Bearing
35	807E00410	Gear (34T)
36	011E14771	Lever
37	013E92890	Bearing
38	028E94160	Washer
39	-	Lower Frame
40	019E56680	Holder
41	809E51080	Spring
42	-	Rail
43	-	Screw
44	604K75331	Feed Roll Kit



PL 11.4 Left Cover

Item	Part	Description
1	802K70856	Left Cover Assembly (Item 2-13)
2	003E59630	Latch
3	003E59640	Hook
4	011E14481	Handle
5	-	Left Cover (P/O Item 1)
6	054E23421	Chute
7	-	Actuator (P/O Item 1)
8	809E54501	Spring
9	-	Bracket (P/O Item 1)
10	-	Spring (P/O Item 1)
11	-	Bearing (P/O Item 1)
12	-	Bearing (P/O Item 1)
13	059E98190	Pinch Roll
14	830E45710	Support
15	110E12220	2 Tray Module Left Cover Switch
16	030K75511	Bracket Assembly
17	-	Bracket
18	-	Cover-FDR
19	-	Cover-FDR 2T

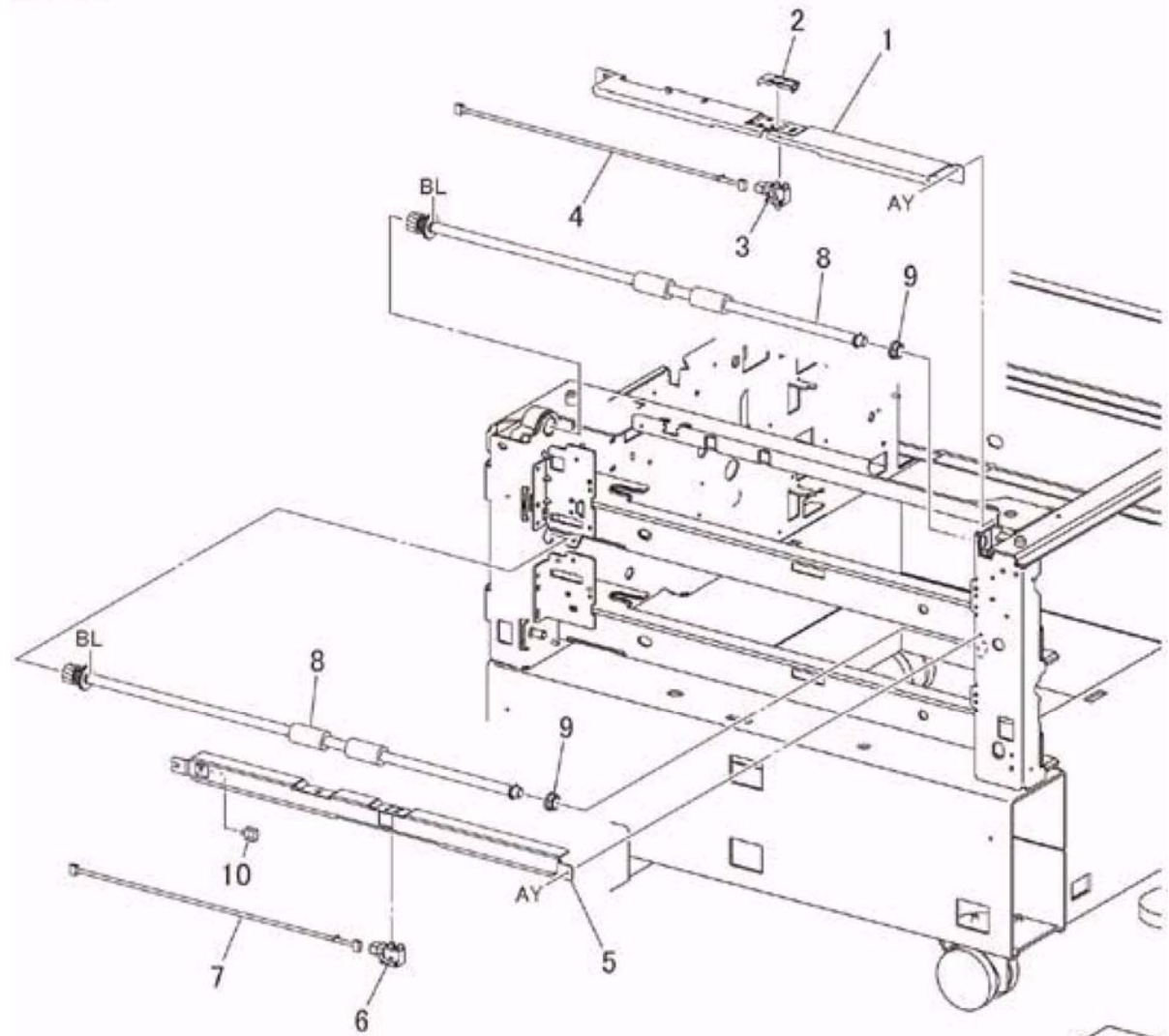
PL 11.4
1 {2-13



PL 11.5 Takeaway Roll

Item	Part	Description
1	-	Chute
2	802E54672	Cover
3	130K64121	Tray 3 Feed Out Sensor
4	952K08150	Wire Harness
5	-	Chute
6	130K64471	Tray 4 Feed Out Sensor
7	962K18900	Wire Harness
8	059K26251	Takeaway Roll Assembly
9	013E84520	Bearing
10	-	Clamp

PL 11.5

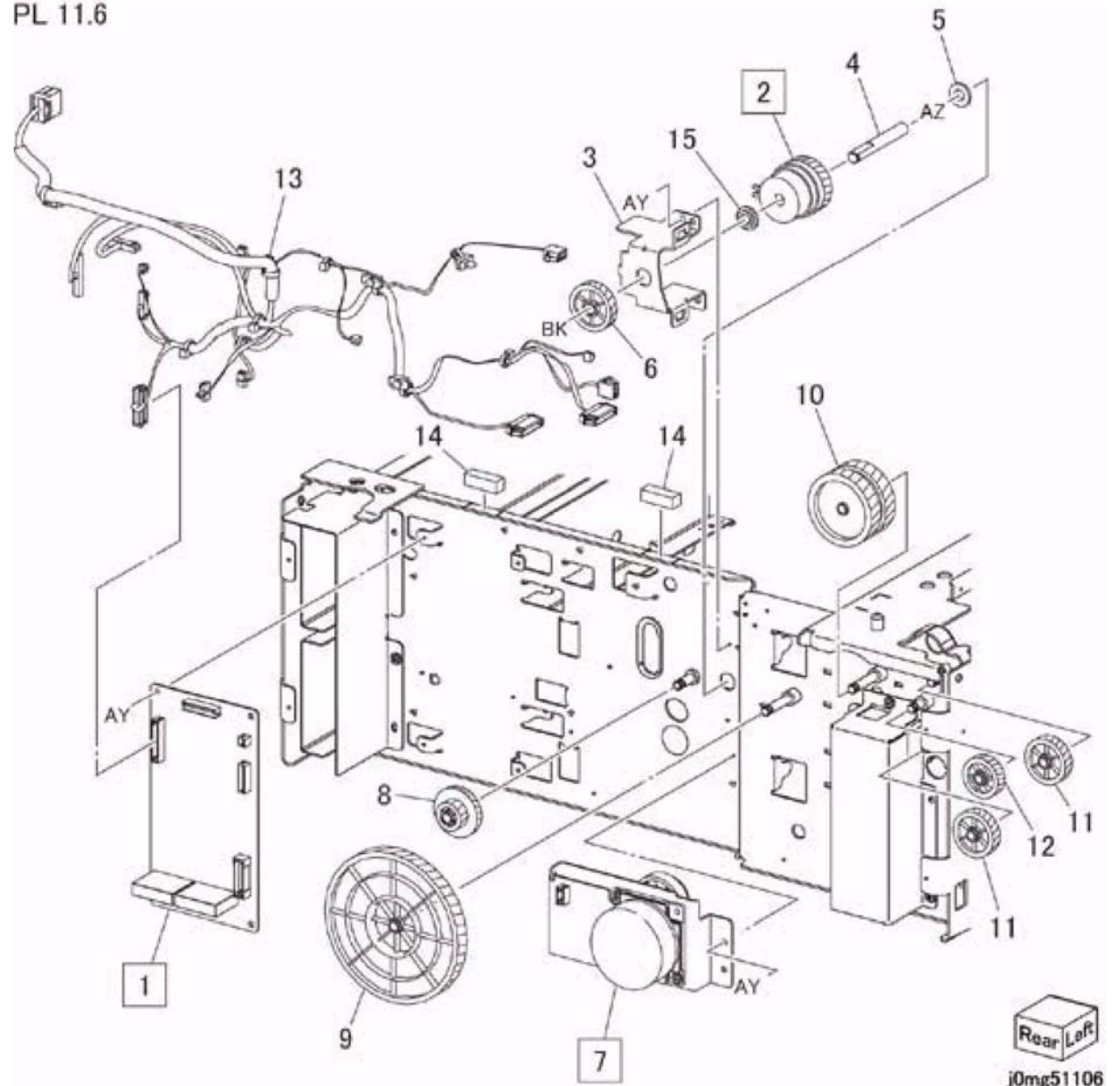


Left Front
j0mg51105

PL 11.6 Electrical

Item	Part	Description
1	960K64673	2 Tray Module PWB (REP 11.6.1)
2	121K31530	2 Tray Module Takeaway Roll Clutch
3	-	Bracket
4	006E78490	Shaft
5	413W11860	Bearing
6	007E78260	Gear (38T)
7	007K18170	2 Tray Module Takeaway Motor (REP 11.6.2)
8	007E78220	Gear (22T/40T)
9	007E78250	Gear (126T)
10	007E78240	Gear (60T)
11	007E78230	Gear (37T)
12	007E78420	Gear (32T)
13	962K19435	Wire Harness
14	-	Gasket
15	413W77359	Bearing

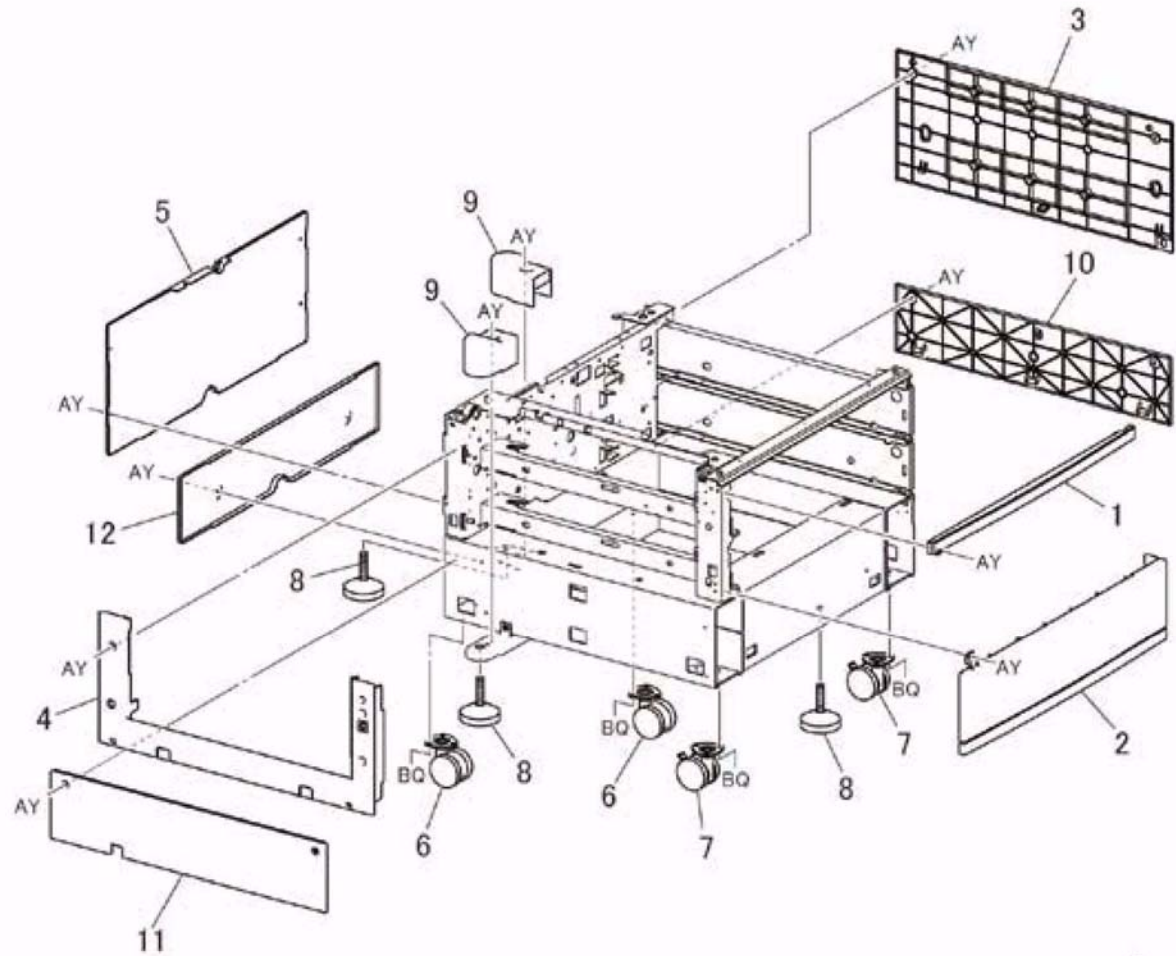
PL 11.6



PL 11.7 Cover

Item	Part	Description
1	802E54731	Top Cover
2	-	Front Lower Cover
3	802E54750	Right Upper Cover
4	802E54762	Left Upper Cover
5	802E54771	Rear Upper Cover
6	017K93121	Caster
7	017K93132	Caster (Stopper)
8	-	Foot
9	-	Cover
10	-	Right Lower Cover
11	-	Left Lower Cover
12	-	Rear Lower Cover

PL 11.7

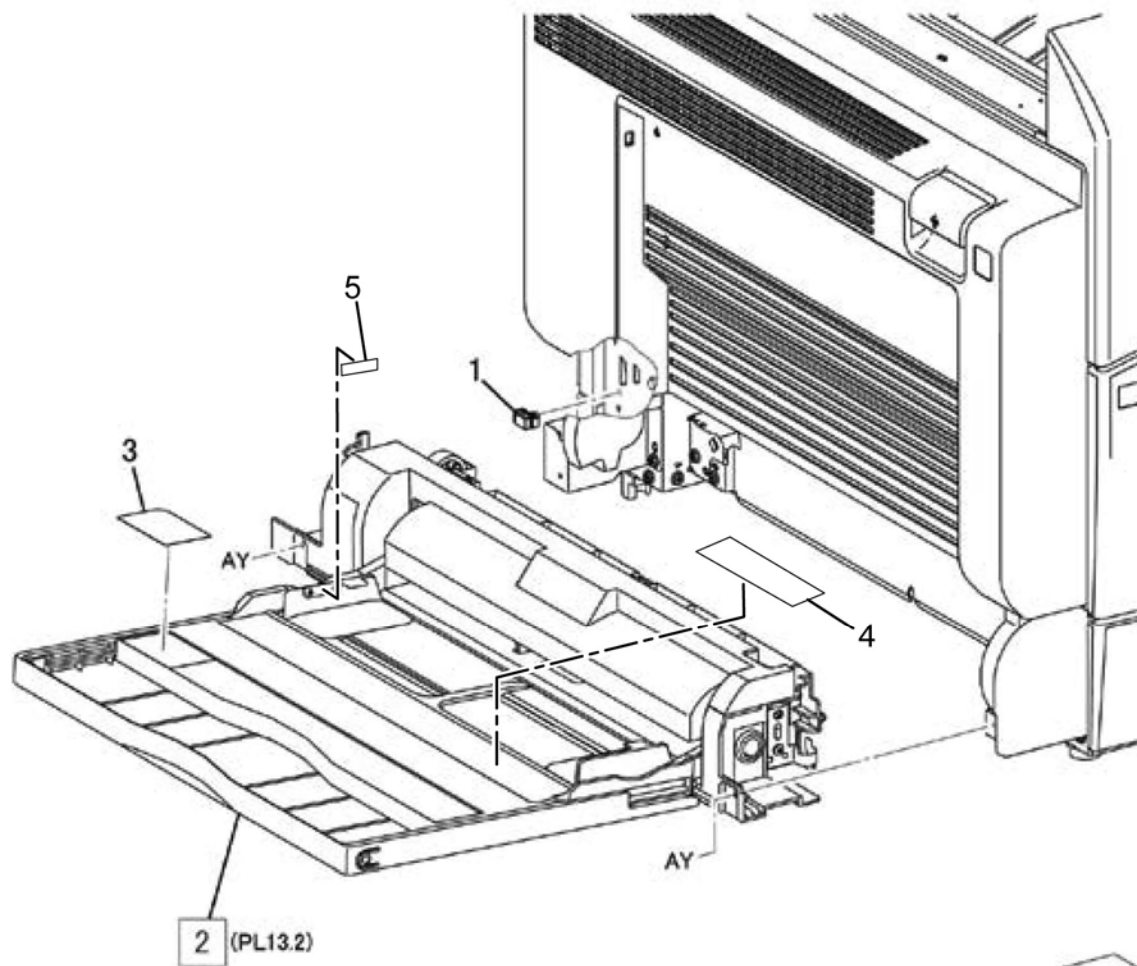


PL 13.1 MSI

Item	Part	Description
1	-	Clamp
2	059K81900	MSI (PL 13.2) (REP 13.1.1)
3	-	Instruction Label (P/O Item 6)
4	-	Size Label (P/O Item 6)
5	-	Max Label (P/O Item 6)
6	604K80730	MSI Label Kit (Item3-5)

PL13.1

6{3-5



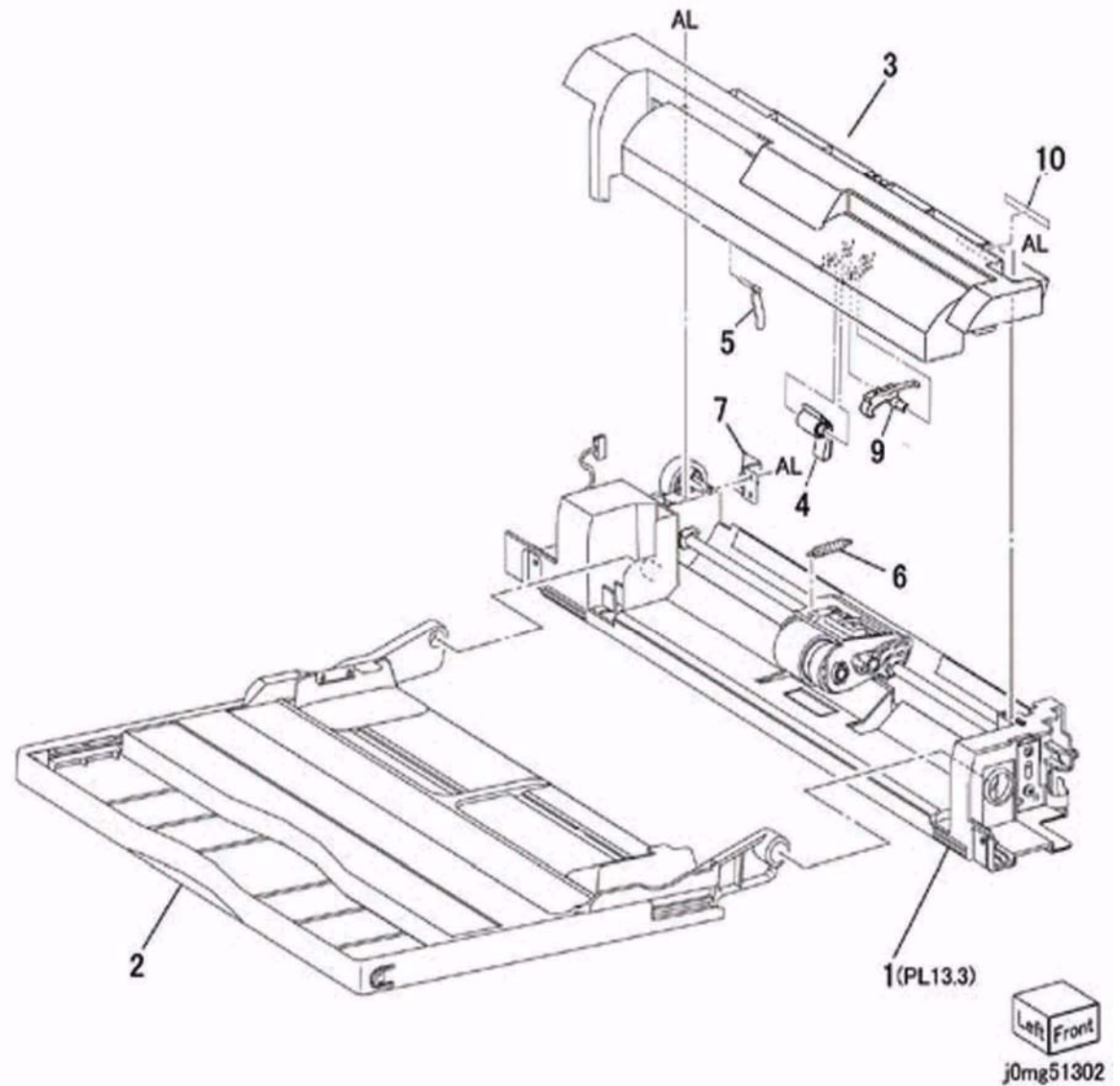
Left Front
J0651301

PL 13.2 MSI Component

Item	Part	Description
1	059K81950	MSI Lower Feeder (PL 13.3)
2	050K71130	MSI Tray
3	801E28470	MSI Top Cover
4	803E17021	Paper Stopper
5	120E34130	No Paper Actuator
6	899E01350	Spring
7	848E87781	Gear Cover
8	—	MSI Feeder Kit (Item 1,3-7)
9	803E17031	Paper Stopper Lock
10	—	Label (Barcode)

PL13.2

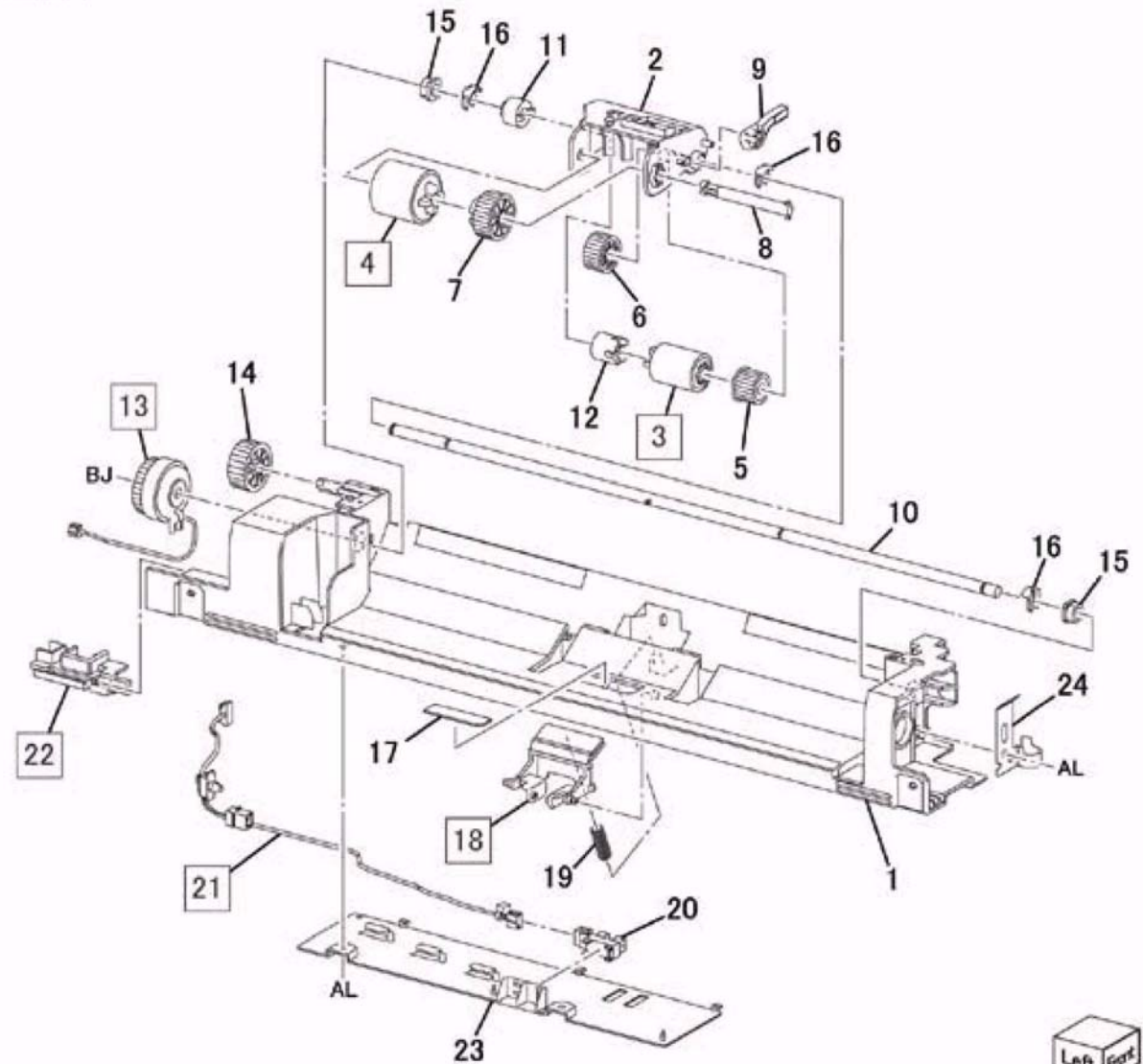
8 {1,3-7}



PL 13.3 MSI Lower Feeder

Item	Part	Description
1	-	MSI Lower Frame
2	019E85410	Nudger Holder
3	022K77450	MSI Feed Roll (REP 13.3.1)
4	022K78481	MSI Nudger Roll (REP 13.3.1)
5	007K18660	Oneway Clutch Gear (30T)
6	807E39610	Gear (33T)
7	807E39600	Gear (46T)
8	806E37300	Shaft
9	803E17031	Stopper Paper Lock
10	-	Shaft
11	005K83510	Friction Clutch
12	005K83520	Oneway Clutch
13	121K52220	MSI Feed Clutch
14	807E39620	Gear (18T)
15	413W11660	Bearing
16	-	KL-Clip
17	019E84010	Bottom Pad
18	019K12820	MSI Retard Pad (REP 13.3.2)
19	899E01340	Spring
20	930W00123	MSI No Paper Sensor
21	962K68852	MSI Wire Harness
22	848E85862	Connector Cover
23	848E85940	MSI Lower Cover
24	815E77090	Ground Plate

PL13.3

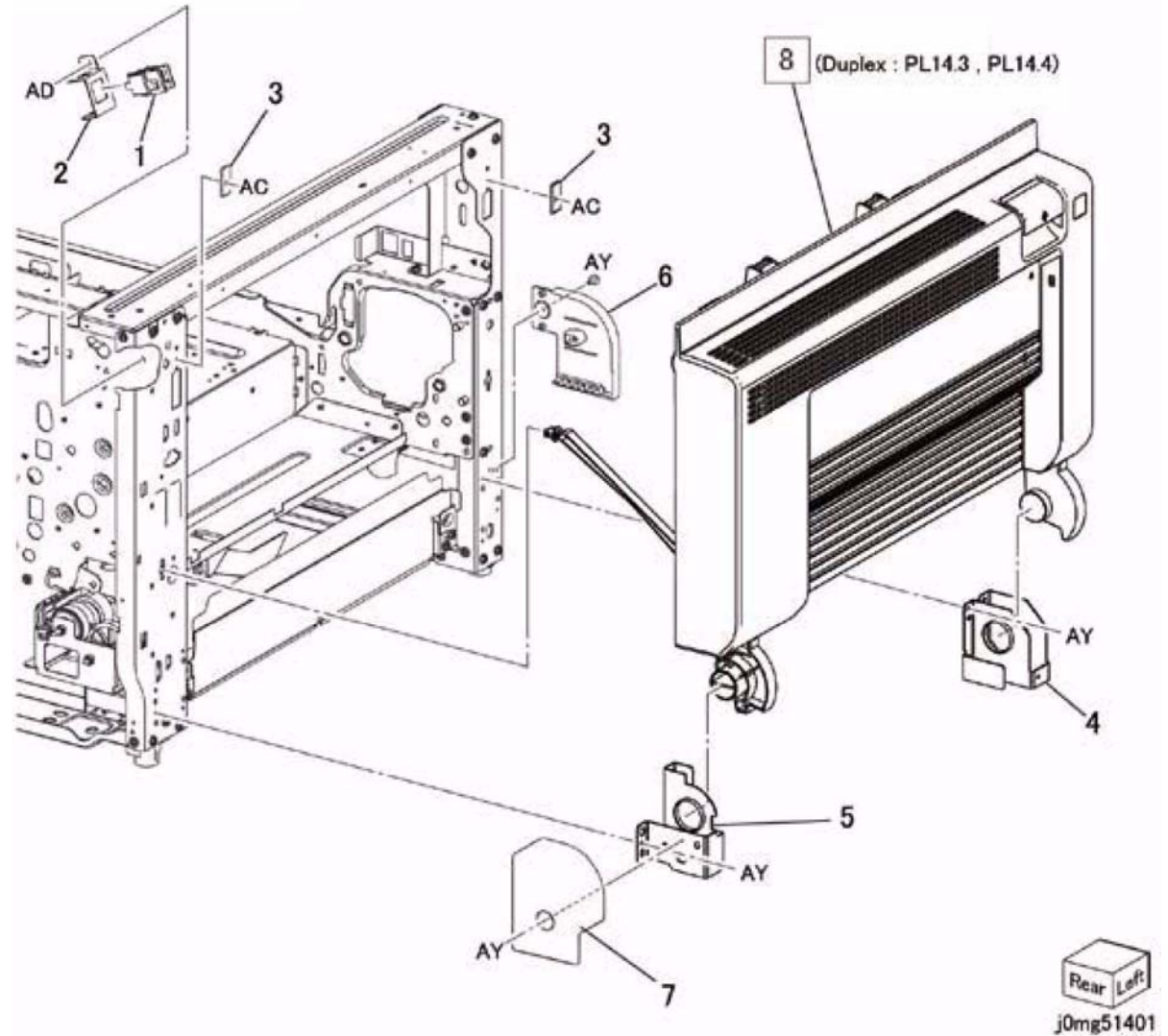


Left View
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PL 14.1 Duplex L/H Cover

Item	Part	Description
1	110E94770	L/H Cover Interlock Switch
2	868E77060	Switch Bracket
3	032E40060	Latch Guide
4	-	Front Hinge
5	-	Rear Hinge
6	848E83270	Hinge Front Cover
7	848E83290	Hinge Rear Cover
8	848K68301	Duplex L/H Cover (PL 14.3, PL 14.4) (REP 14.1.1)

PL14.1

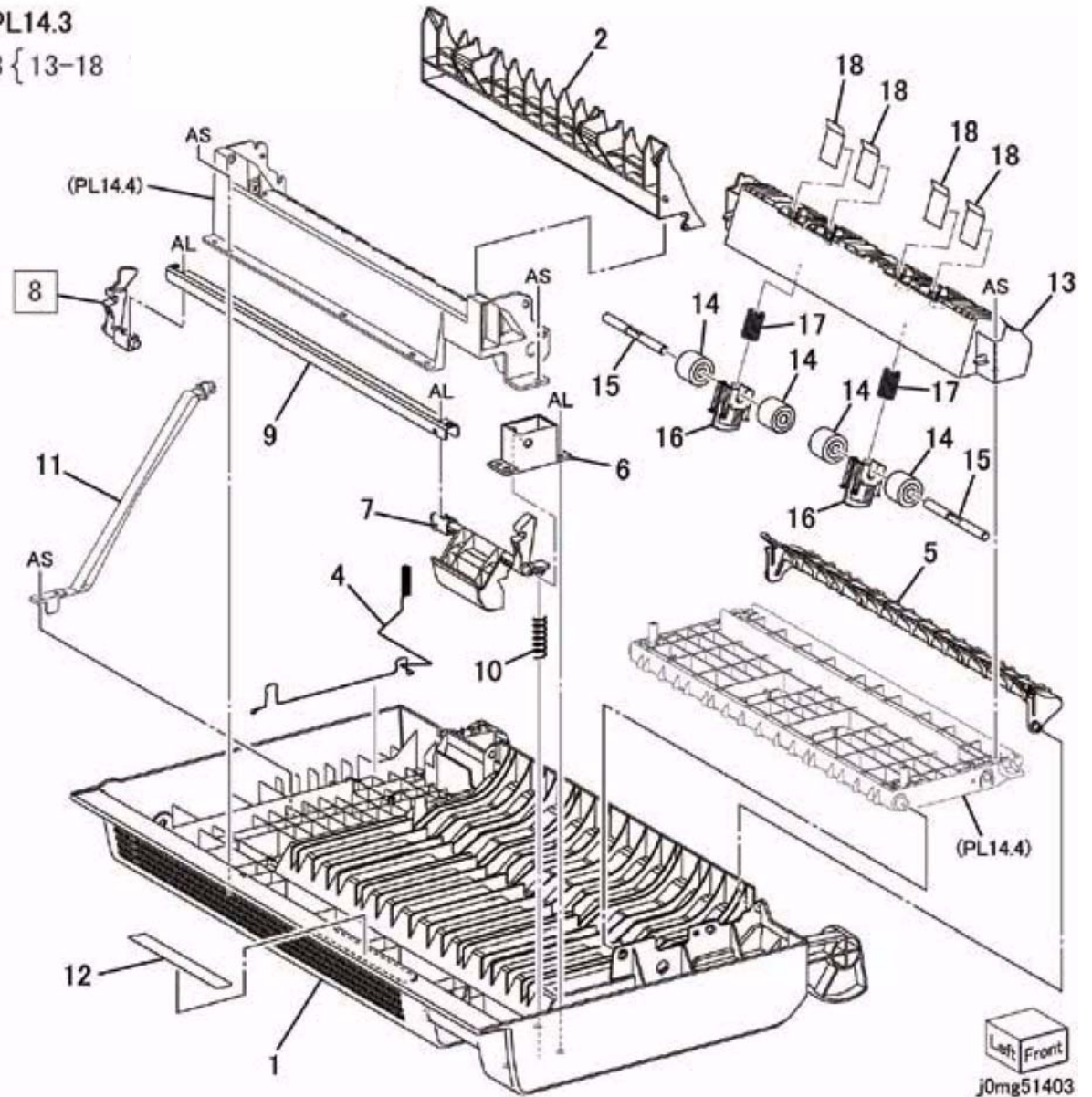


PL 14.3 Duplex L/H Cover-Chute,Latch

Item	Part	Description
1	-	L/H Cover
2	054E50031	Duplex In Chute
3	054K48501	Registration Pinch Chute Assembly (Item 13-18)
4	062E16500	Conductor
5	054E49741	L/H Cover Lower Chute
6	868E78150	Front Latch Support
7	011E26670	Front Latch Lever
8	011E26691	Rear Latch Lever
9	815E75070	Latch Plate
10	809E99540	Spring
11	868E77081	L/H Cover Support
12	898E45921	Caution Label
13	-	Registration Pinch Chute (P/O Item 3)
14	-	Pinch Roller (P/O Item 3)
15	-	Shaft (P/O Item 3)
16	-	Spring (P/O Item 3)
17	-	Spring Holder (P/O Item 3)
18	-	Paper Guide (P/O Item 3)

PL14.3

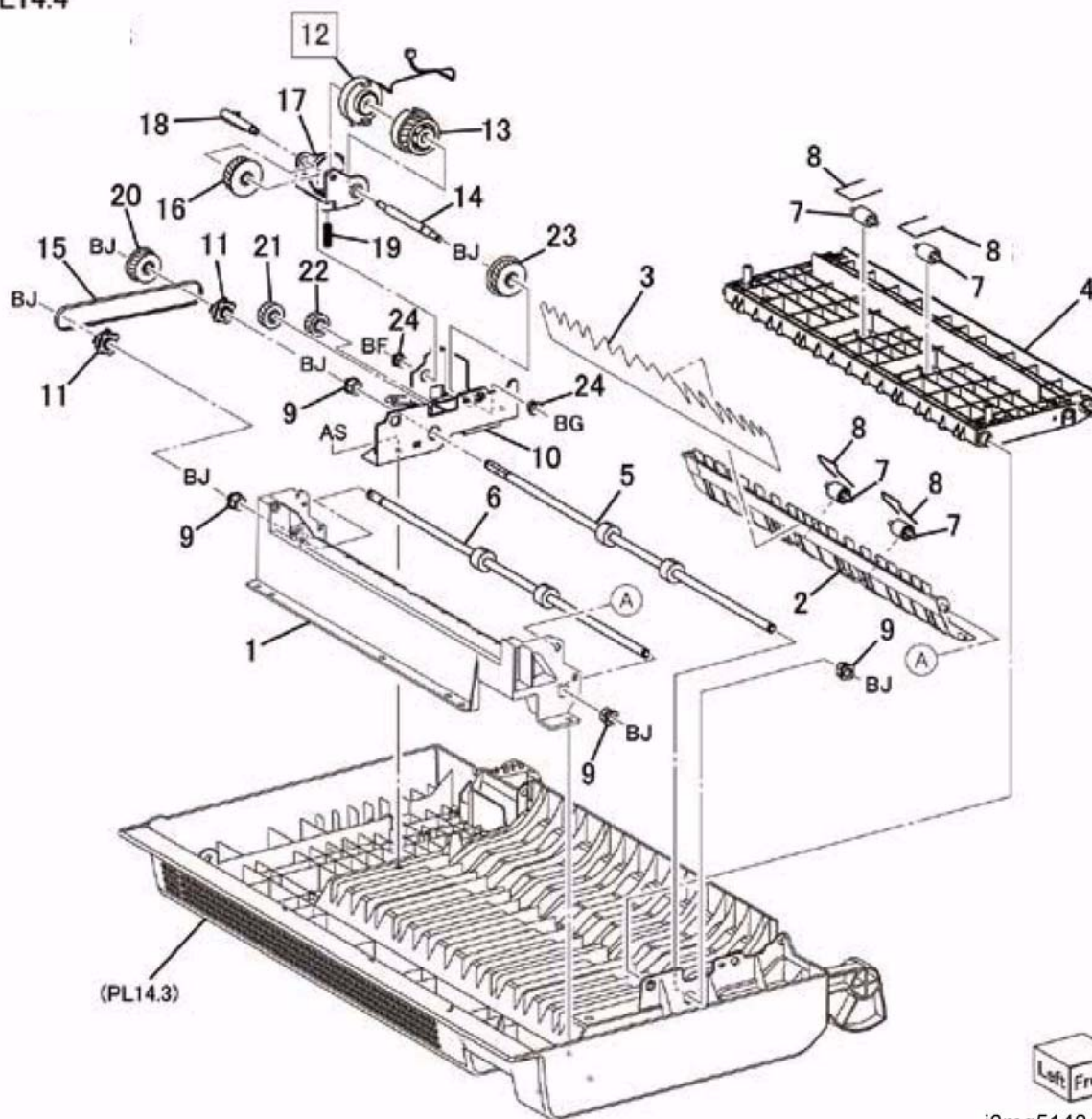
3 { 13-18



PL 14.4 Duplex L/H Cover-Roll,Gear

Item	Part	Description
1	054E49711	L/H Cover Upper Chute
2	-	L/H Cover Upper Lower Chute
3	038E27201	Paper Guide
4	-	Duplex Inner Chute
5	059K74950	Duplex Roll 1
6	059K74960	Duplex Roll 2
7	059E04010	Pinch Roll
8	809E75530	Spring
9	013E40060	Bearing
10	-	Gear Bracket
11	020E45140	Pulley
12	121K52130	Duplex Clutch
13	807E40930	Helical Gear
14	-	Duplex Clutch Shaft
15	023E27800	Belt
16	807E39430	Swing Helical Gear (27T)
17	868E77401	Swing Bracket
18	806E37111	Swing Shaft
19	809E99740	Spring
20	-	Helical Gear (24T)
21	-	Helical Gear (19T)
22	-	Helical Gear (17T)
23	-	Helical Gear (28T)
24	413W11460	Bearing

PL14.4

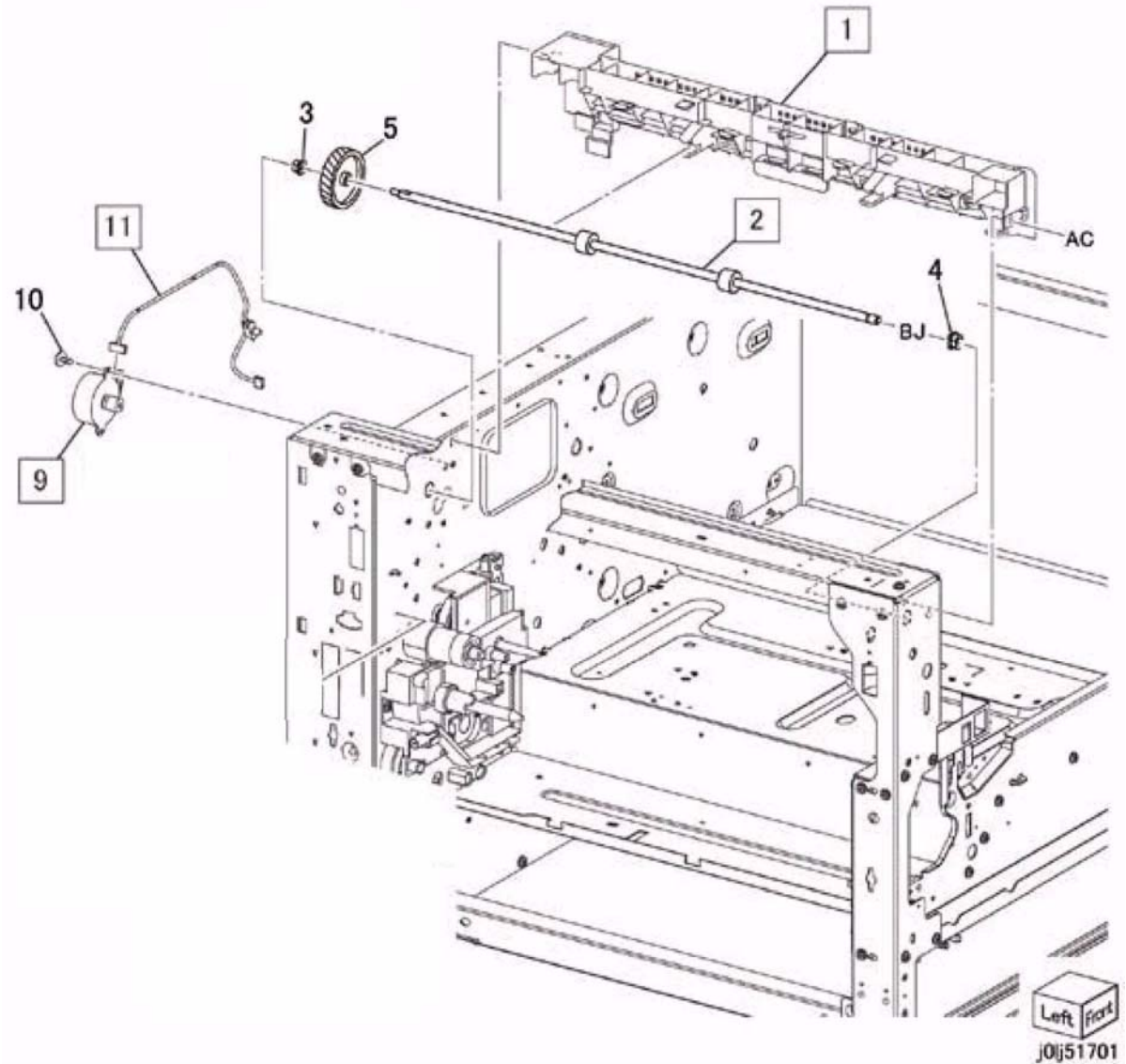


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PL 17.1 Duplex Exit

Item	Part	Description
1	848K68381	Exit Cover (REP 17.1.1)
2	059K74910	Exit Roll (REP 17.1.2)
3	413W14460	Bearing (d:4mm)
4	413W11660	Bearing (d:6mm)
5	807E39150	Helical Gear
9	127K66210	Inverter Motor
10	-	Bind Head Screw
11	952K01160	Motor Wire Harness

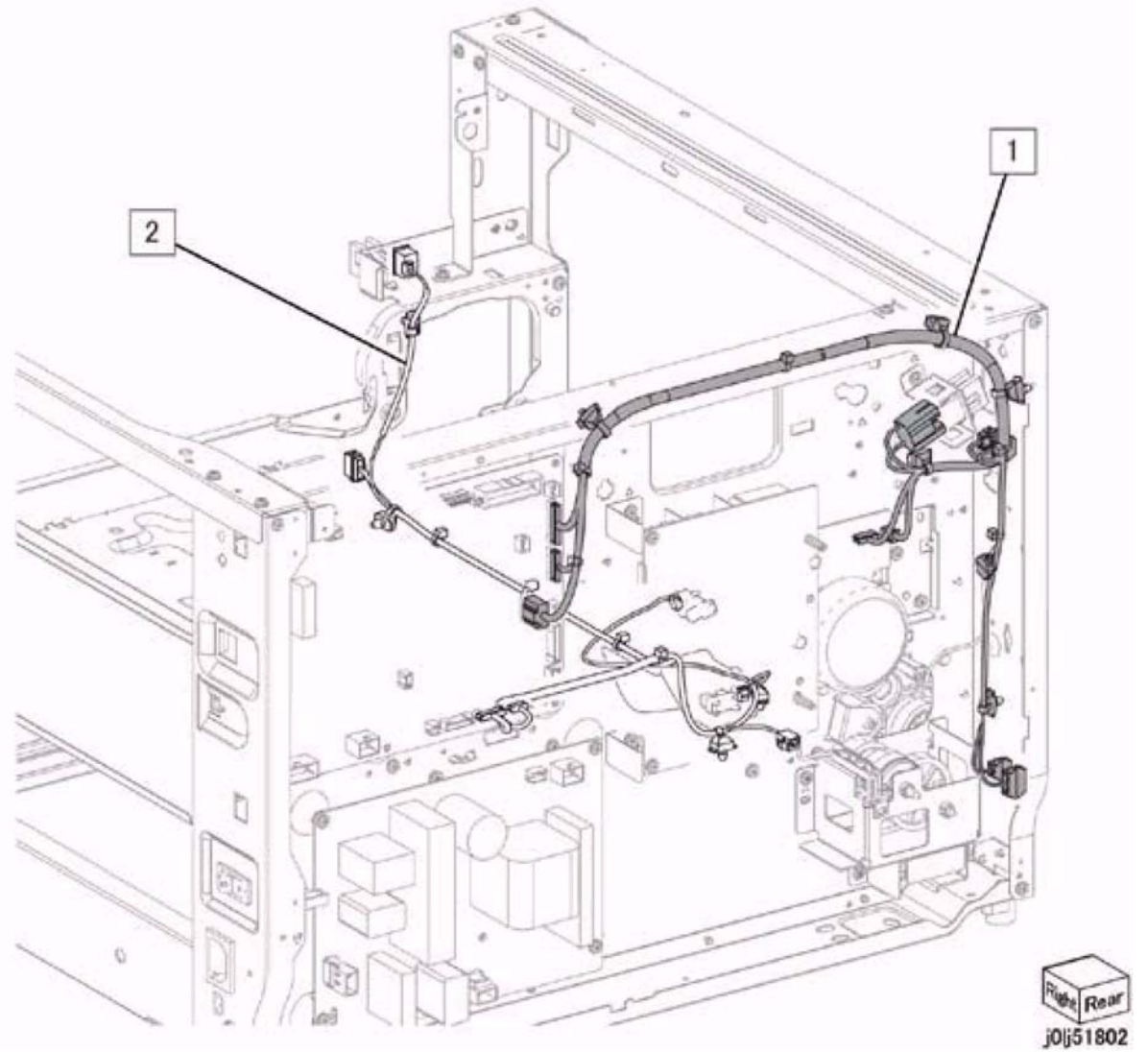
PL17.1



PL 18.2 Wire Harness

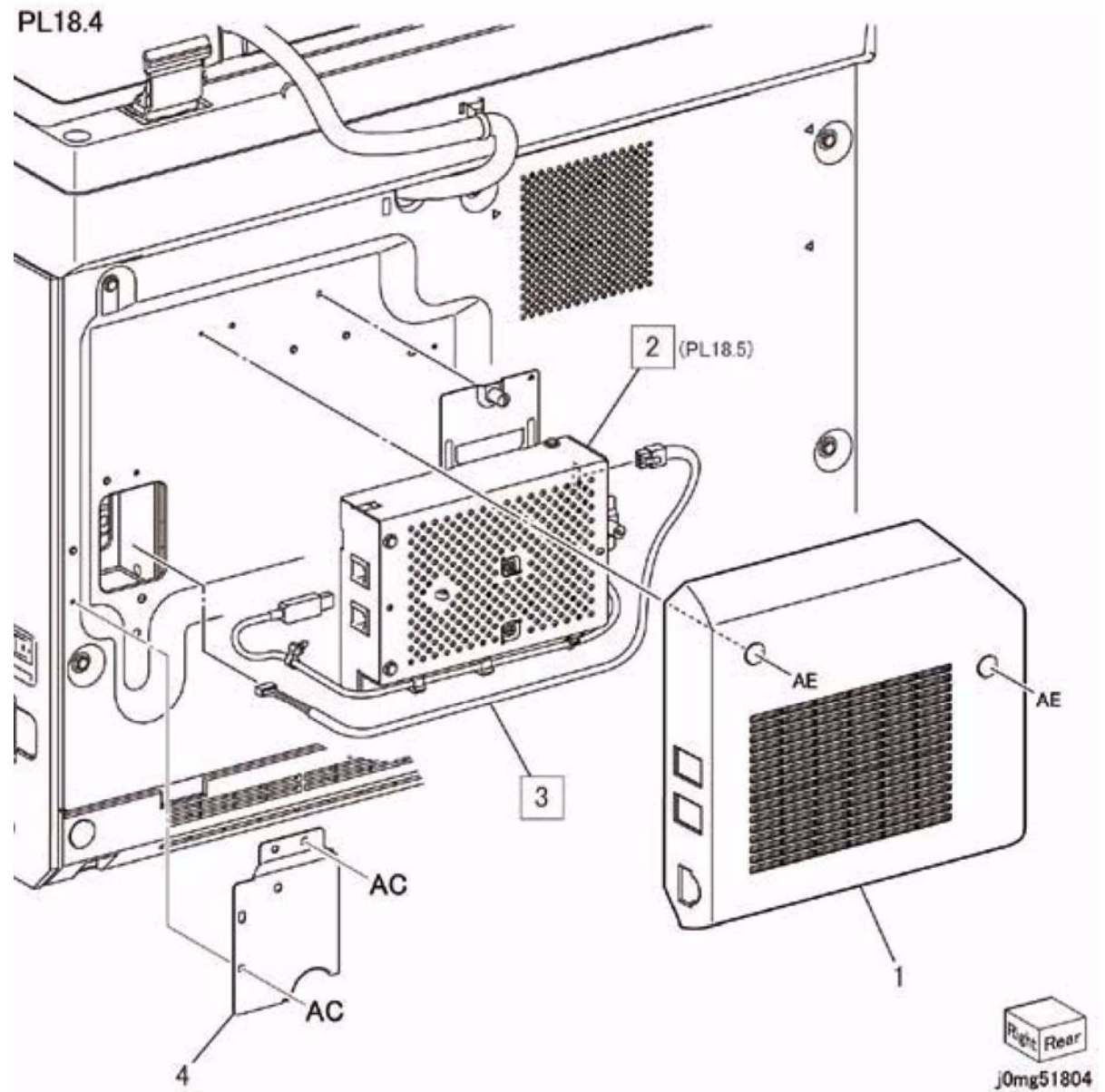
Item	Part	Description
1	952K18480	Wire Harness
2	952K18470	Wire Harness

PL18.2



PL 18.4 Fax Box Assembly

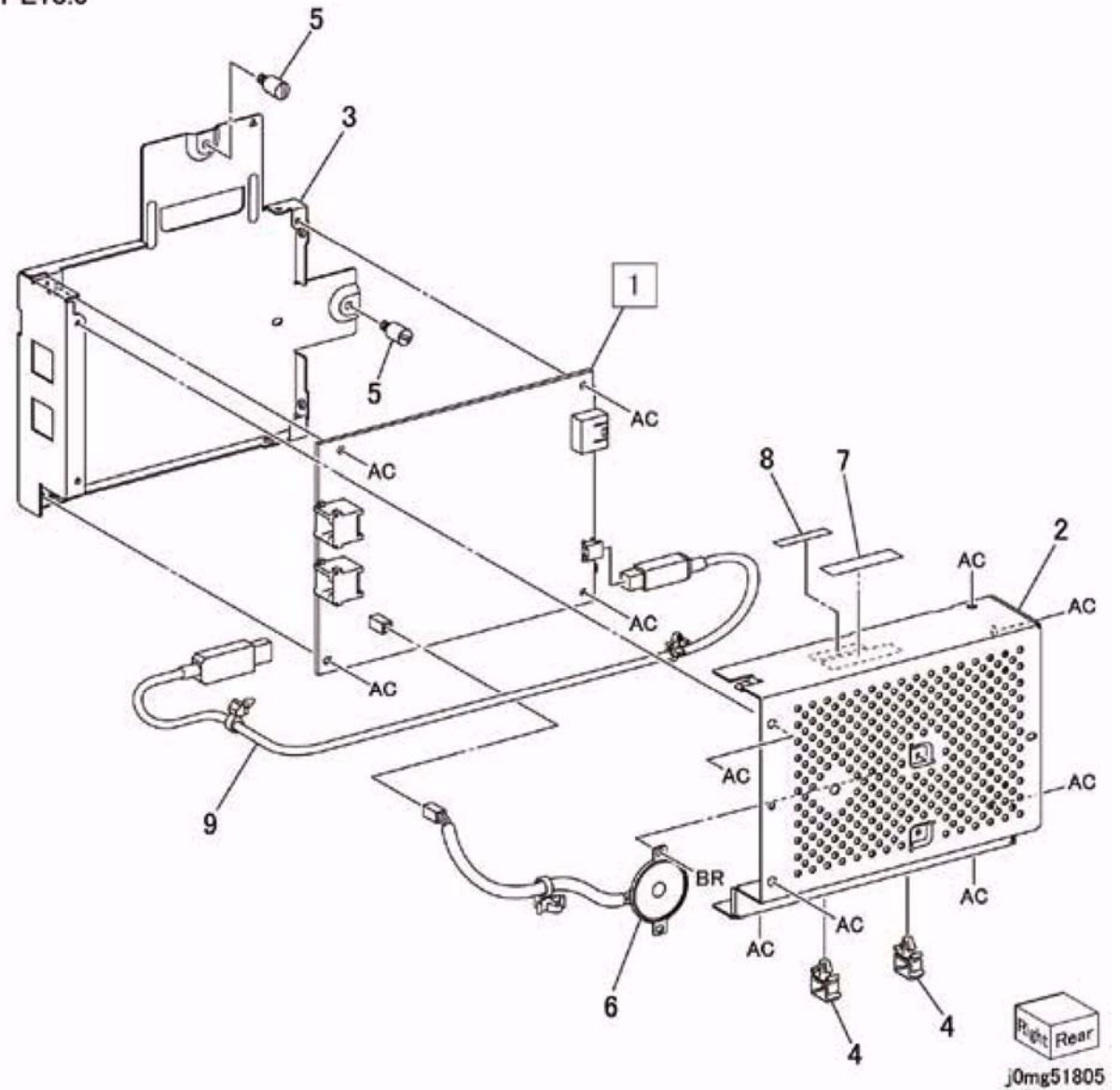
Item	Part	Description
1	848E95640	Fax Box Cover
2	-	Fax Box Assembly (PL 18.5)
3	952K08170	Wire Harness (Fax Box)
4	-	STM Connector Cover



PL 18.5 Fax Box Assembly

Item	Part	Description
1	960K76940	Fax PWB
2	-	Fax Top Cover
3	-	Fax Bottom
4	-	Clamp
5	-	Screw
6	130K78820	Speaker
7	-	Label
8	-	Label
9	117K47650	USB Cable

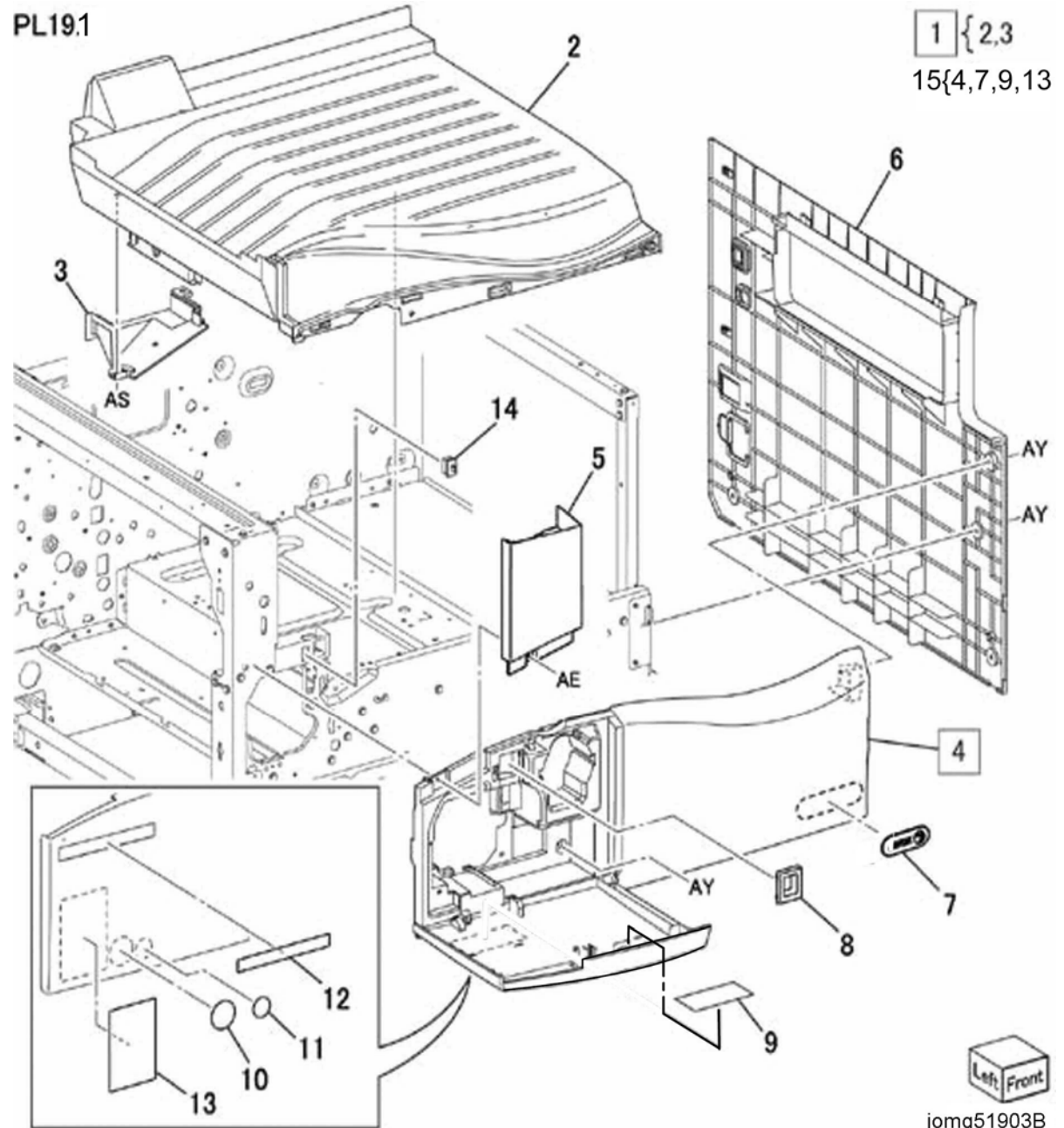
PL18.5



PL 19.1 Cover-Front,Top,Right

Item	Part	Description
1	848K68291	Top Cover (Item 2,3) (REP 19.1.2)
2	-	Top Cover (P/O Item 1)
3	054E50280	Duct
4	-	Front Cover (P/O Item 15) (REP 19.1.1)
5	848E84571	Fusing Unit Cover
6	848E84614	Right Cover
7	-	Logo Plate (P/O Item 15)
8	-	Switch Cover
9	-	CRU Instruction (P/O Item 15)
10	-	Label
11	-	Label
12	604K90820	Name Plate Kit
13	-	Energy Label (P/O Item 15)
14	110E94770	Front Cover Switch
15	848K76560	Front Cover Kit (Item 4,7,9,13)

PL19.1



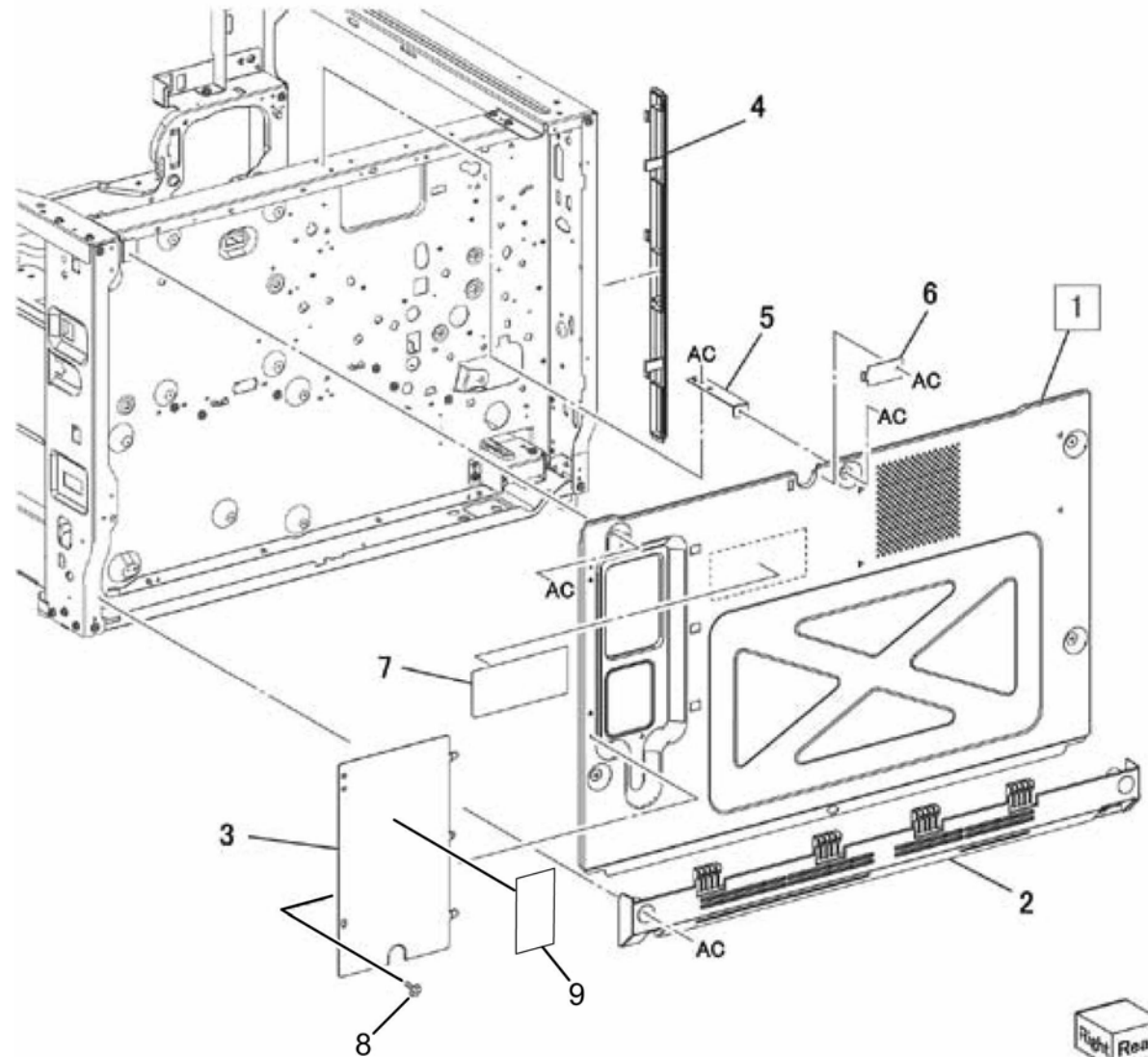
1 { 2,3
15 { 4,7,9,13

Left Front
jomg51903B

PL 19.2 Cover-Rear,Left Rear

Item	Part	Description
1	-	Rear Cover (REP 19.4.1)
2	848E84631	Rear Lower Cover
3	-	STM Connector Cover
4	848E87322	Left Rear Cover
5	868E69740	Bracket
6	-	Blind Cover
7	-	Data Plate
8	-	Thumbscrew
9	-	STM Caution Label

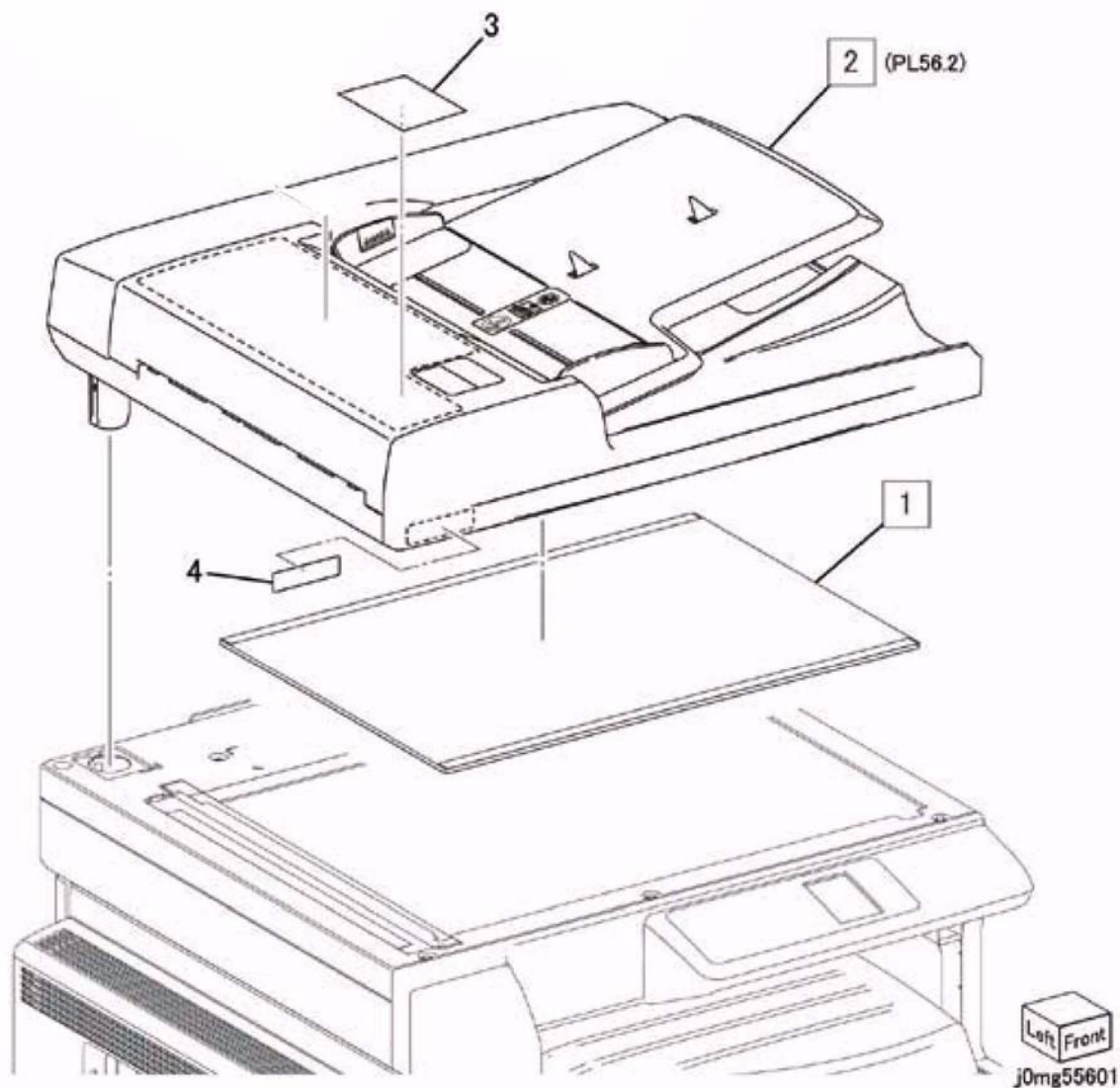
PL19.2



PL 56.1 DADF Accessory

Item	Part	Description
1	004K03410	DADF Platen Cushion (REP 56.1.2)
2	059K75714	DADF (PL 56.2) (REP 56.1.1)
3	—	Label
4	—	Label

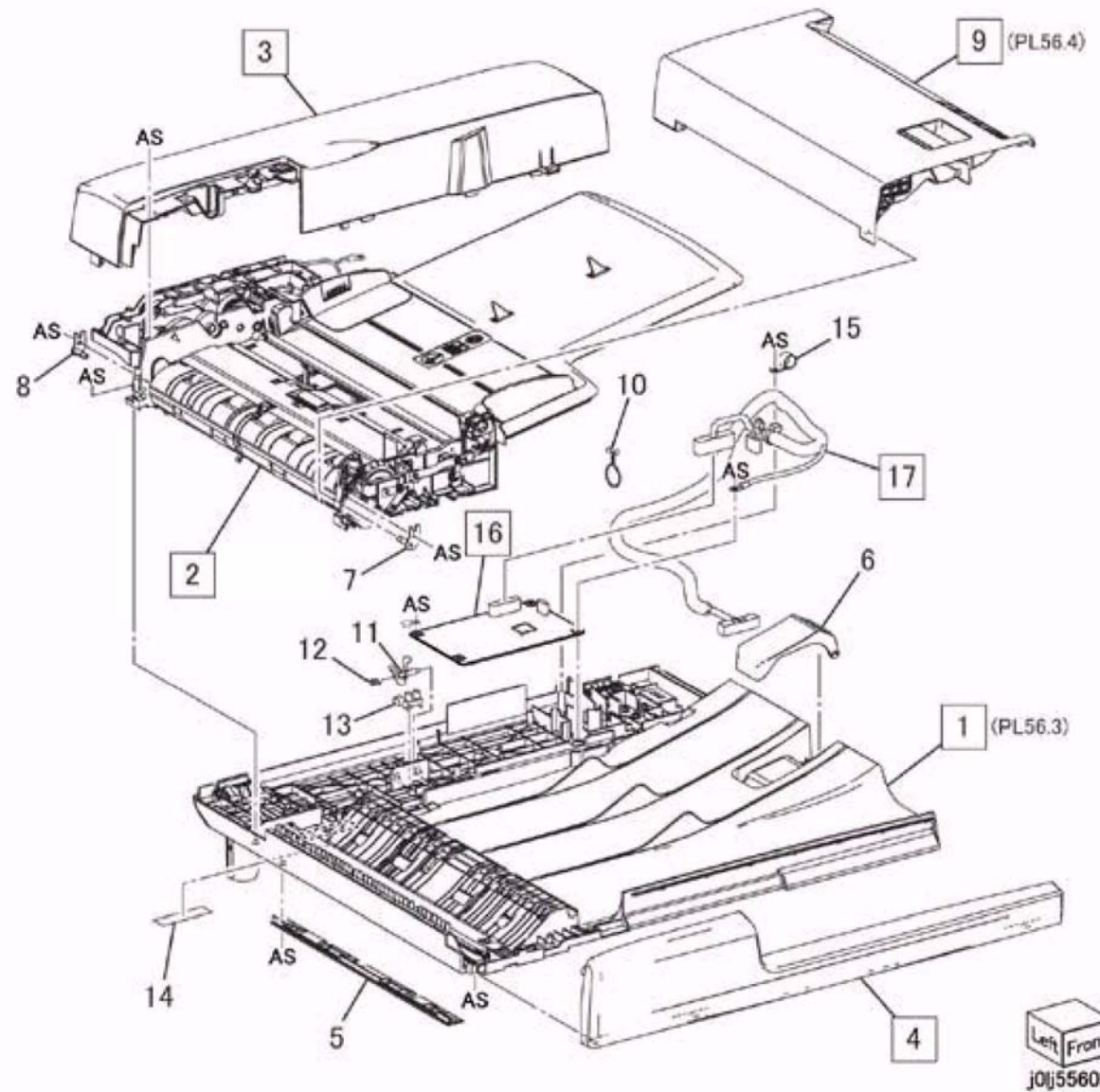
PL56.1



PL 56.2 DADF Component

Item	Part	Description
1	–	DADF Base Frame (PL 56.3)
2	059K75733	DADF Feeder Assembly (REP 56.2.5)
3	848E86411	DADF Rear Cover (REP 56.2.2)
4	848E86430	DADF Front Cover (REP 56.2.1)
5	848E86450	Registration Pinch Cover
6	803E13310	Tray Stopper
7	068K67551	Hinge Bracket (Front)
8	049K17810	Hinge Bracket (Rear)
9	059K75752	Upper Feeder (PL 56.4) (REP 56.2.4)
10	–	Clamp
11	120E34270	Actuator
12	809E50792	Spring
13	930W00121	DADF Open Sensor
14	–	Data Plate
15	–	Clamp
16	960K62447	DADF PWB (REP 56.2.3)
17	952K08471	DADF I/F Wire Harness

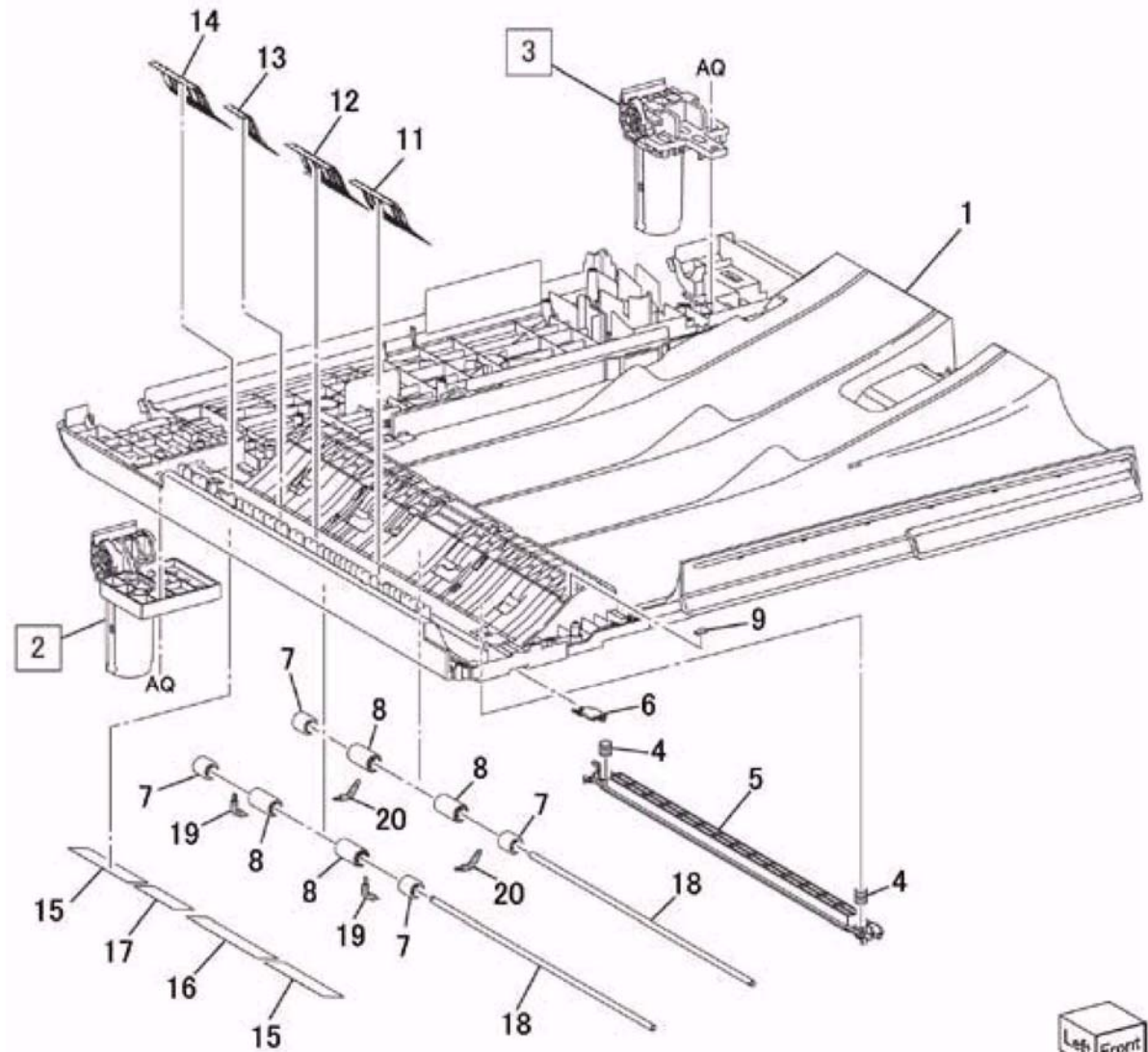
PL56.2



PL 56.3 DADF Base Frame

Item	Part	Description
1	-	DADF Base Frame
2	036K92141	Left Counter Balance (REP 56.3.1)
3	036K92130	Right Counter Balance (REP 56.3.2)
4	809E86290	CVT Spring
5	-	CVT Chute
6	803E13340	CVT Stopper
7	059E98711	Registration Pinch Roll (Short)
8	059E98701	Registration Pinch Roll (Long)
9	-	Gate Pad
11	035K85290	Seal (Chute 2)
12	035K85320	Seal (Chute 3)
13	035K85330	Seal (Chute 4)
14	035K85341	Seal (Chute 5)
15	035K85380	Seal (B1)
16	035K85390	Seal (B2)
17	035K85400	Seal (B3)
18	-	Shaft
19	899E01591	Spring (Hook:C,O)
20	899E01911	Spring (Hook:C,C)

PL56.3



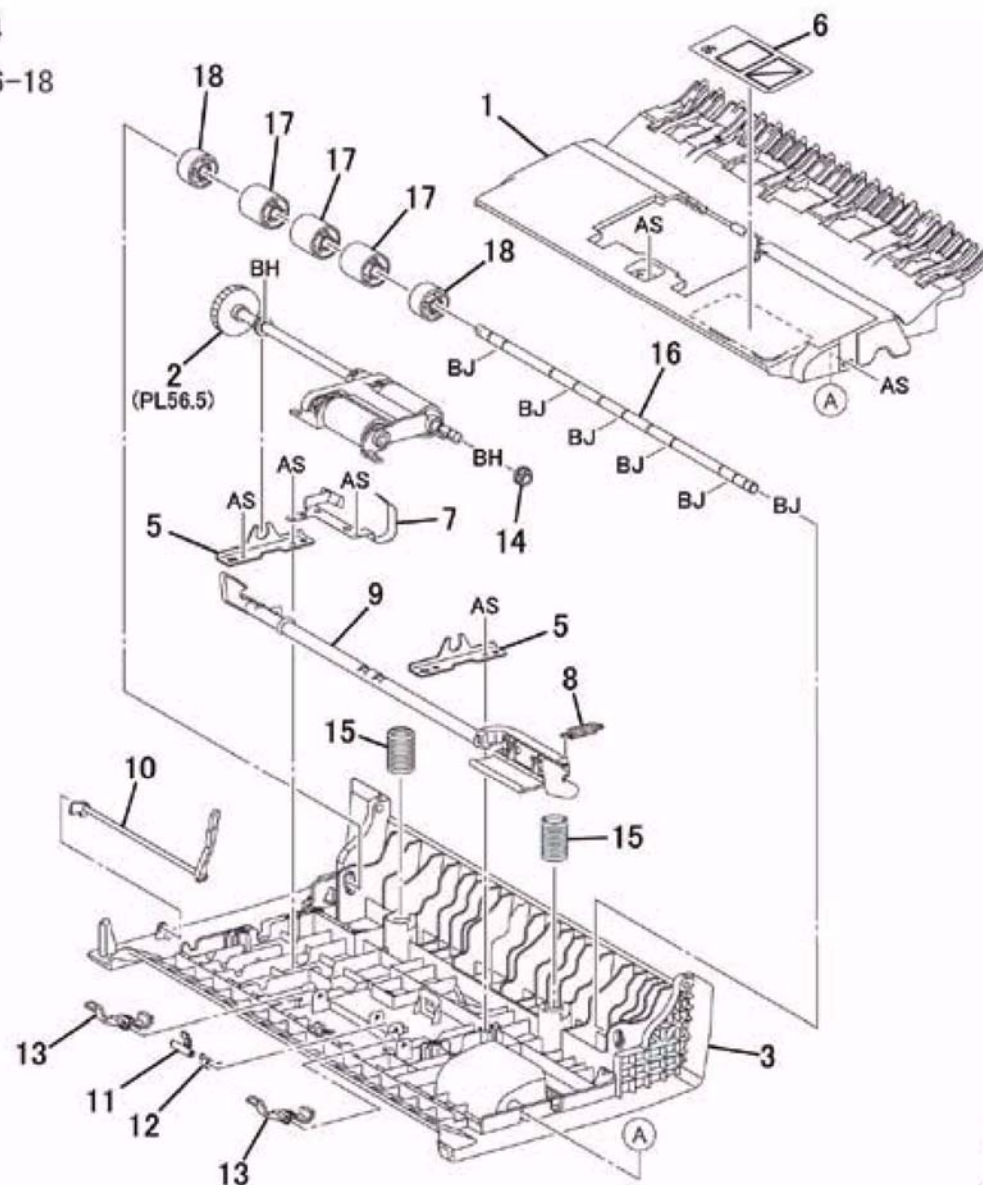
Left Front
j0mg55603

PL 56.4 Upper Feeder

Item	Part	Description
1	054E50182	Upper Feeder Chute
2	059K75770	Feed Roll Nudger Roll Assembly (PL 56.5)
3	-	Upper Feeder Cover
4	059K75760	Takeaway Pinch Roll Assembly (Item 16-18)
5	-	Bracket
6	897E24001	Jam Label
7	815E76300	Ground Plate
8	899E01531	Spring
9	011K04260	Handle Lever
10	120E34244	Actuator (Document Set)
11	120E34250	Stopper Actuator
12	899E01541	Spring
13	012E18310	Set Link
14	413W85459	Bearing
15	899E01551	Spring
16	-	Shaft (P/O Item 4)
17	-	Pinch Roll (P/O Item 4)
18	-	Pinch Roll (P/O Item 4)

PL56.4

4 { 16-18



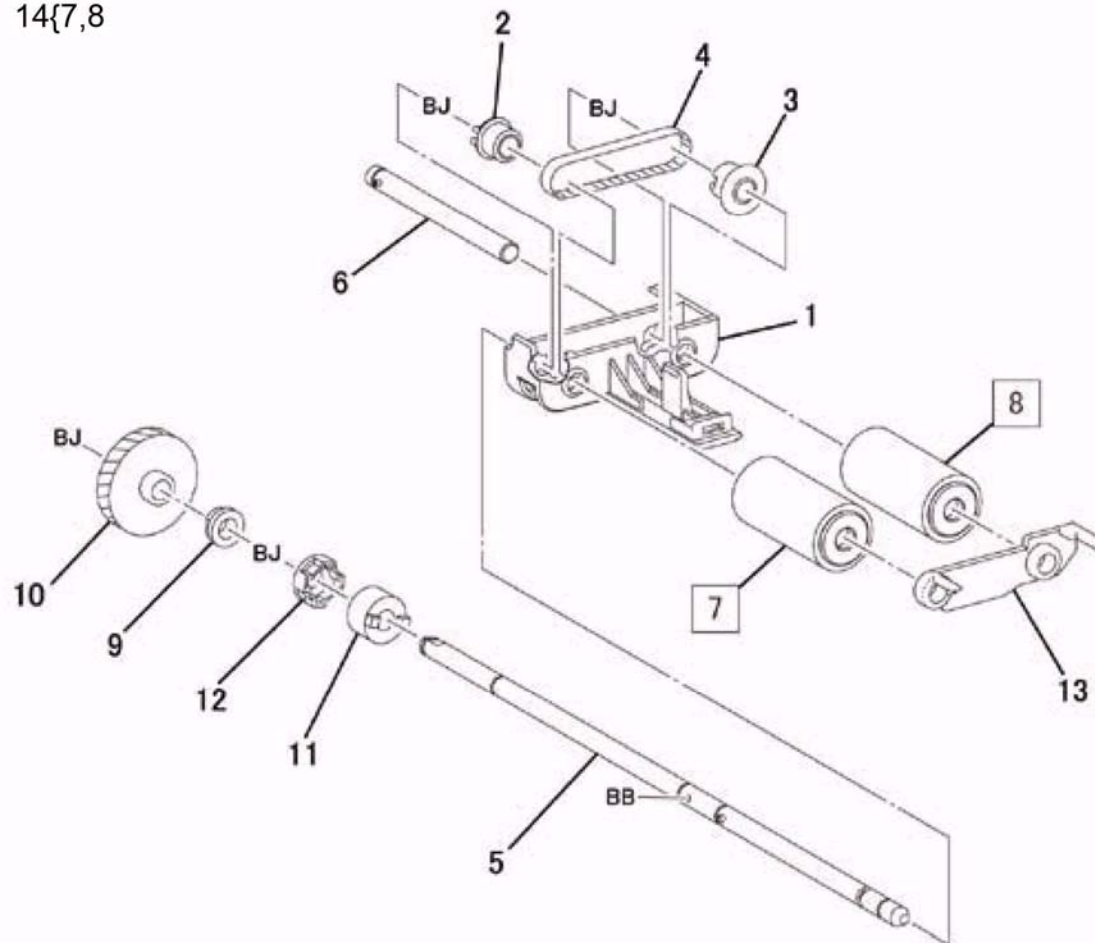
Front Path
j0mg55604

PL 56.5 Feed Roll Nudger Roll Assembly

Item	Part	Description
1	-	Housing
2	-	Pulley (Feed)
3	-	Pulley (Nudger)
4	423W05354	Belt
5	-	Shaft (Feed)
6	-	Shaft (Nudger)
7	-	DADF Feed Roll (P/O Item 14) (REP 56.5.1)
8	-	DADF Nudger Roll (P/O Item 14) (REP 56.5.1)
9	413W85459	Bearing
10	807E40760	Helical Gear
11	-	Brake
12	-	Brake Holder
13	-	Housing
14	604K80750	DADF Feed/Nudger Roll Kit (Item 7,8)

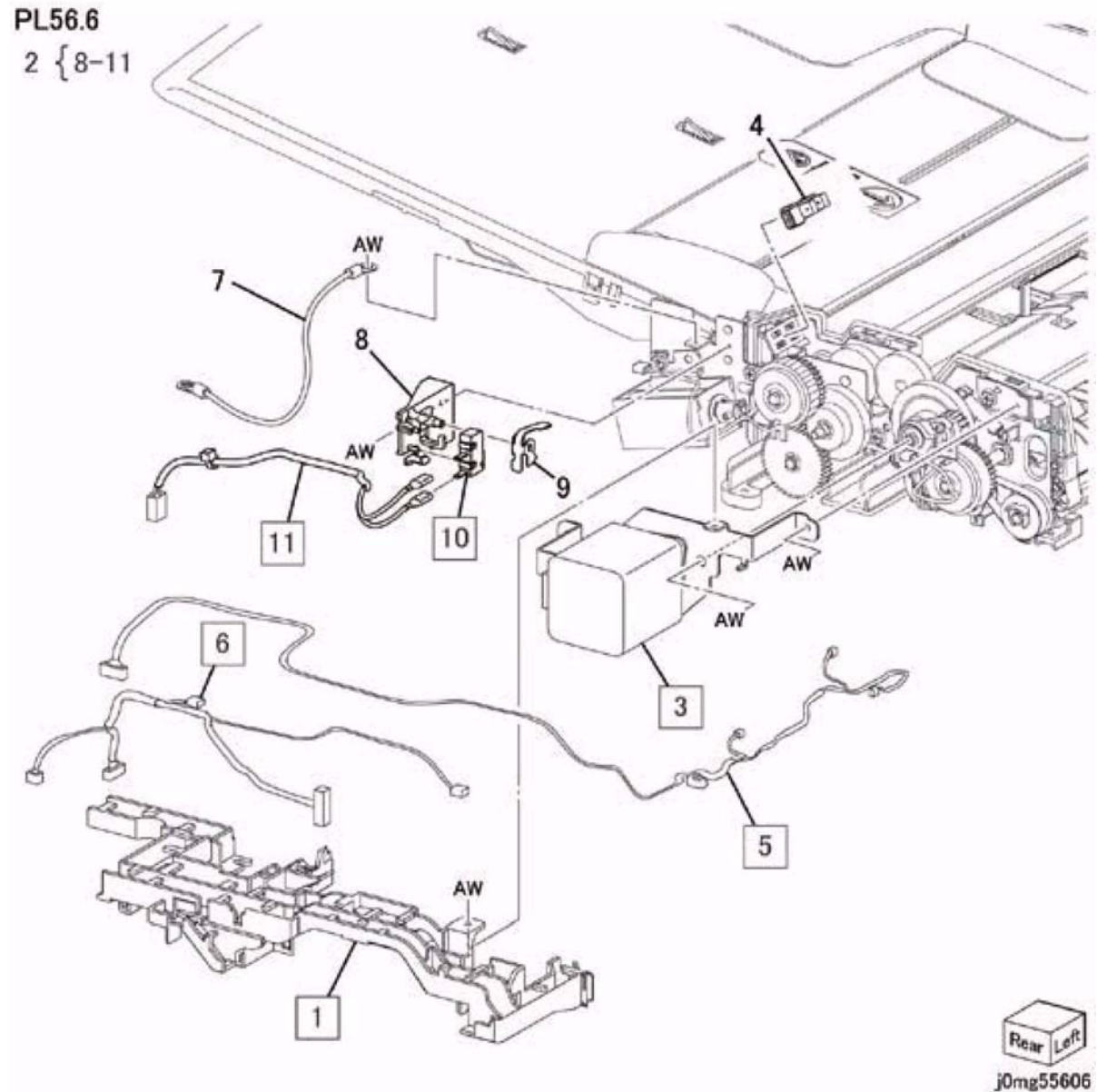
PL56.5

14{7,8}



PL 56.6 DADF Feed Motor, Harness Guide

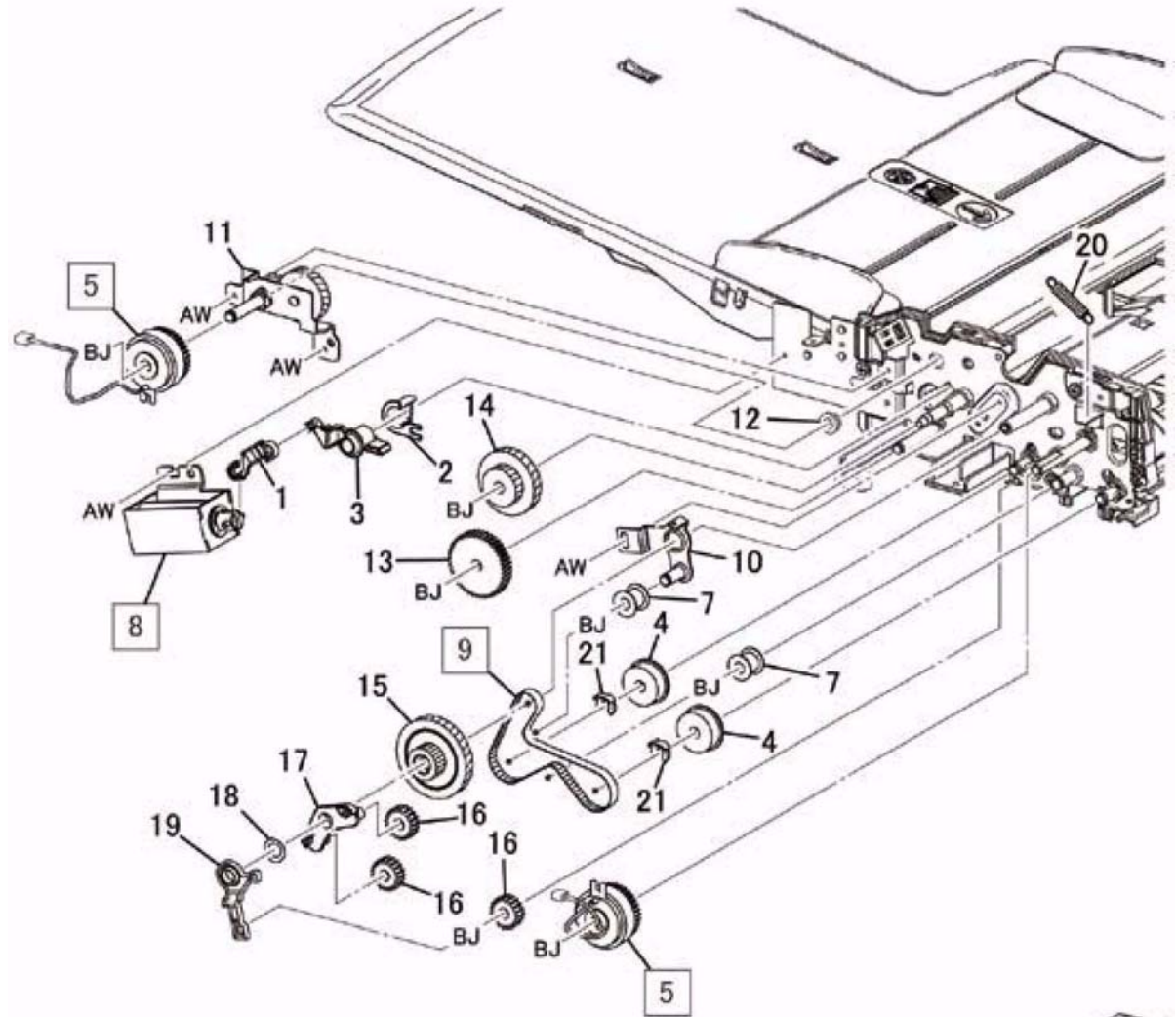
Item	Part	Description
1	032E40210	Harness Guide (REP 56.6.1)
2	110K17140	DADF Feeder Cover Interlock Switch Assembly (Item 8-11)
3	127K66690	DADF Feed Motor (REP 56.6.2)
4	930W00121	DADF Document Set Sensor
5	952K08460	Wire Harness (Sensor)
6	952K08440	Wire Harness (Motor/Clutch)
7	117K38961	Ground Wire
8	-	Bracket (P/O Item 2)
9	-	Spring (P/O Item 2)
10	-	DADF Feeder Cover Interlock Switch (P/O Item 2)
11	-	Wire Harness (P/O Item 2)



PL 56.7 DADF Feeder Rear Frame

Item	Part	Description
1	012E18260	Release Link
2	013E41200	Set Bearing
3	012E18270	Exit Link
4	020E46551	Pulley
5	121K52310	DADF Feed Clutch, DADF Takeaway Clutch
7	-	Roll
8	121K52470	Exit Nip Release Solenoid
9	423W32055	DADF Drive Belt (REP 56.7.1)
10	-	Tension Bracket
11	049K18190	Clutch Gear and Bracket
12	413W85459	Bearing
13	807E40790	Gear (42T)
14	807E40800	Gear (40/24T)
15	807E40830	Gear Pulley
16	807E40840	Gear (19T)
17	868E80570	Bracket
18	899E01573	Washer
19	012E18290	Link
20	899E01581	Spring
21	-	KL-Clip

PL56.7

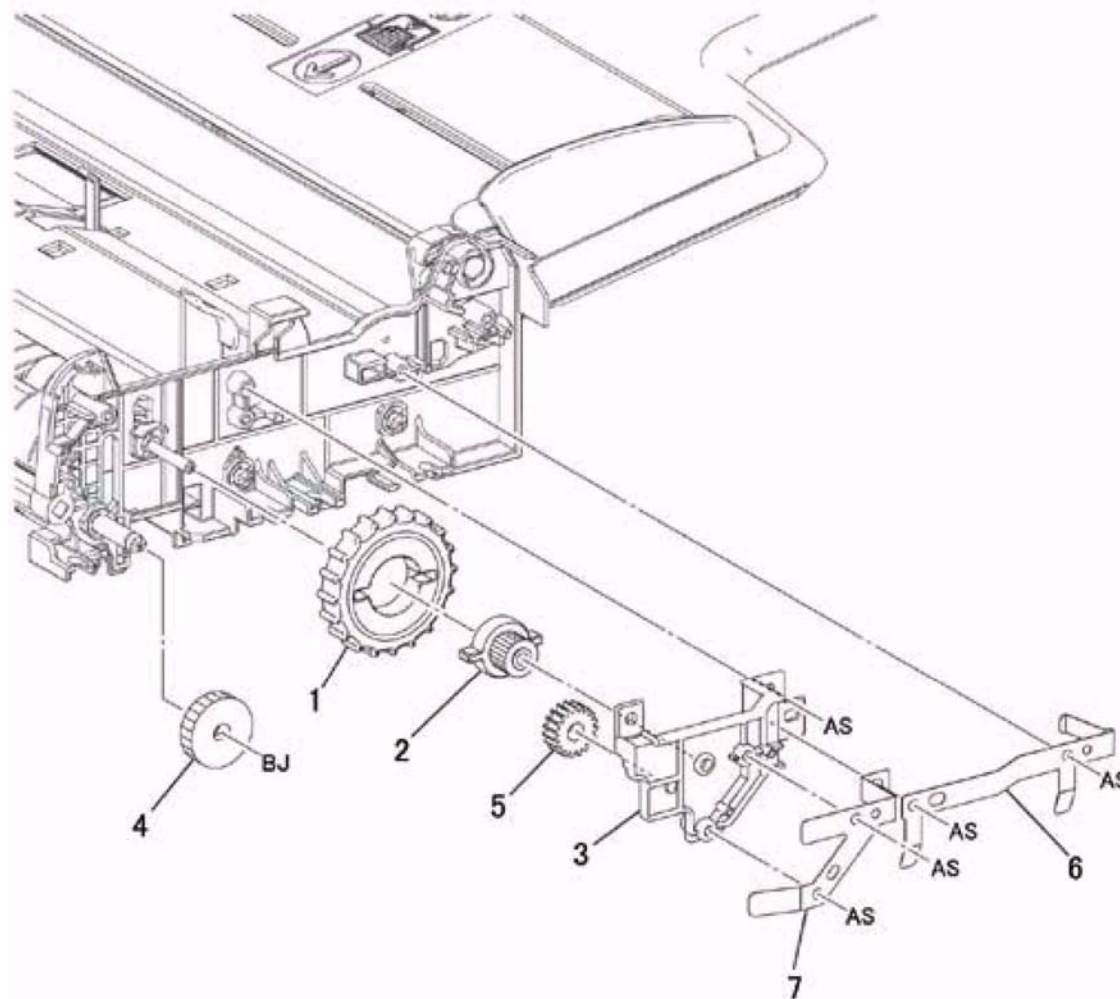


Rear Left
j0j55607

PL 56.8 DADF Feeder Front Frame

Item	Part	Description
1	803E13330	Knob Handle
2	807E41000	Gear
3	868E80542	Bracket
4	807E40780	Gear (27T)
5	807E40840	Gear (19T)
6	815E76320	Ground Plate
7	815E76340	Ground Plate

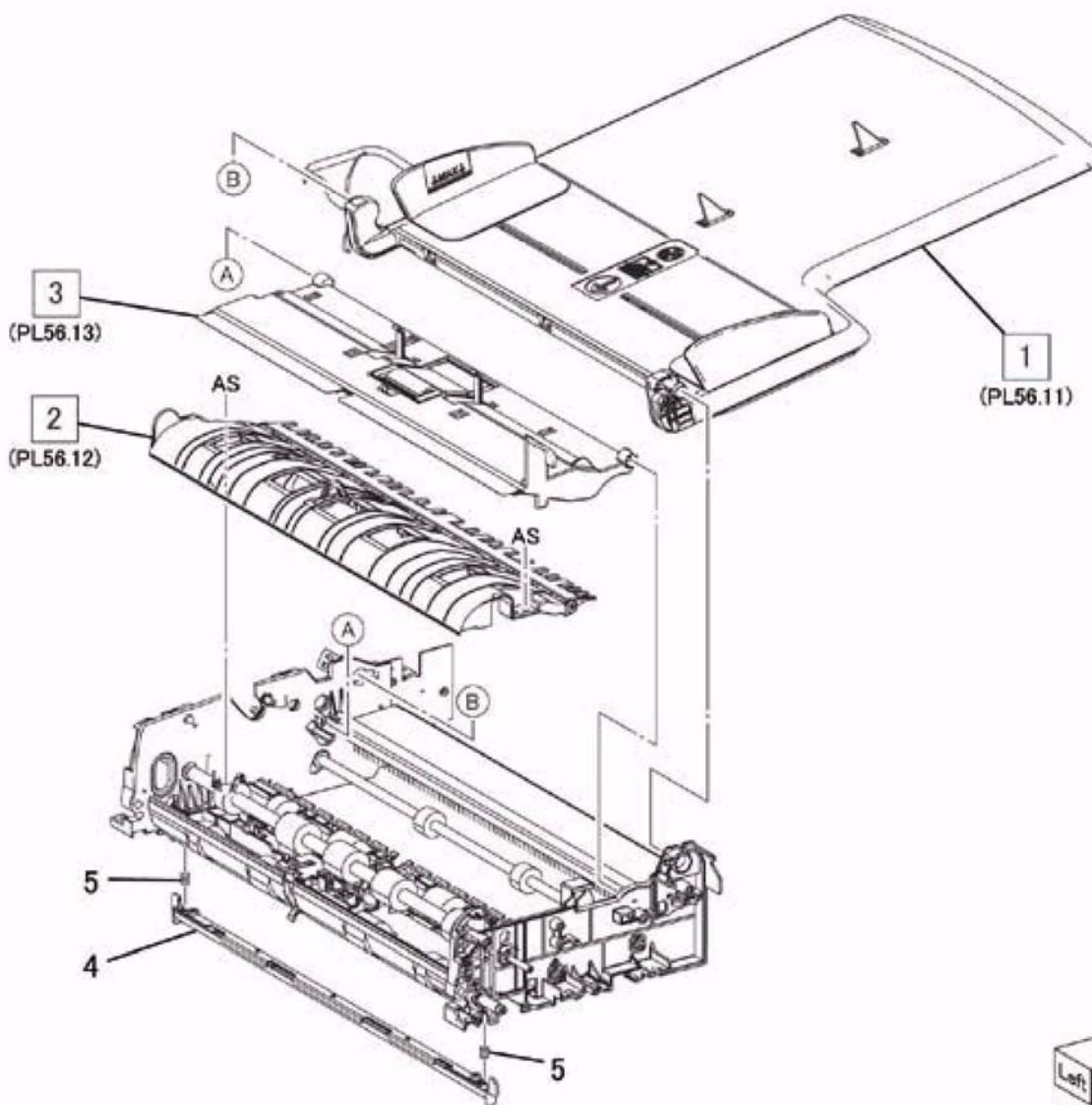
PL56.8



PL 56.9 DADF Tray,Chute

Item	Part	Description
1	050K69651	Document Tray (PL 56.11) (REP 56.9.1)
2	054K48570	Invert Chute (PL 56.12) (REP 56.9.3)
3	054K48581	Retard Chute (PL 56.13) (REP 56.9.2)
4	054K49150	Floating Chute
5	-	Spring

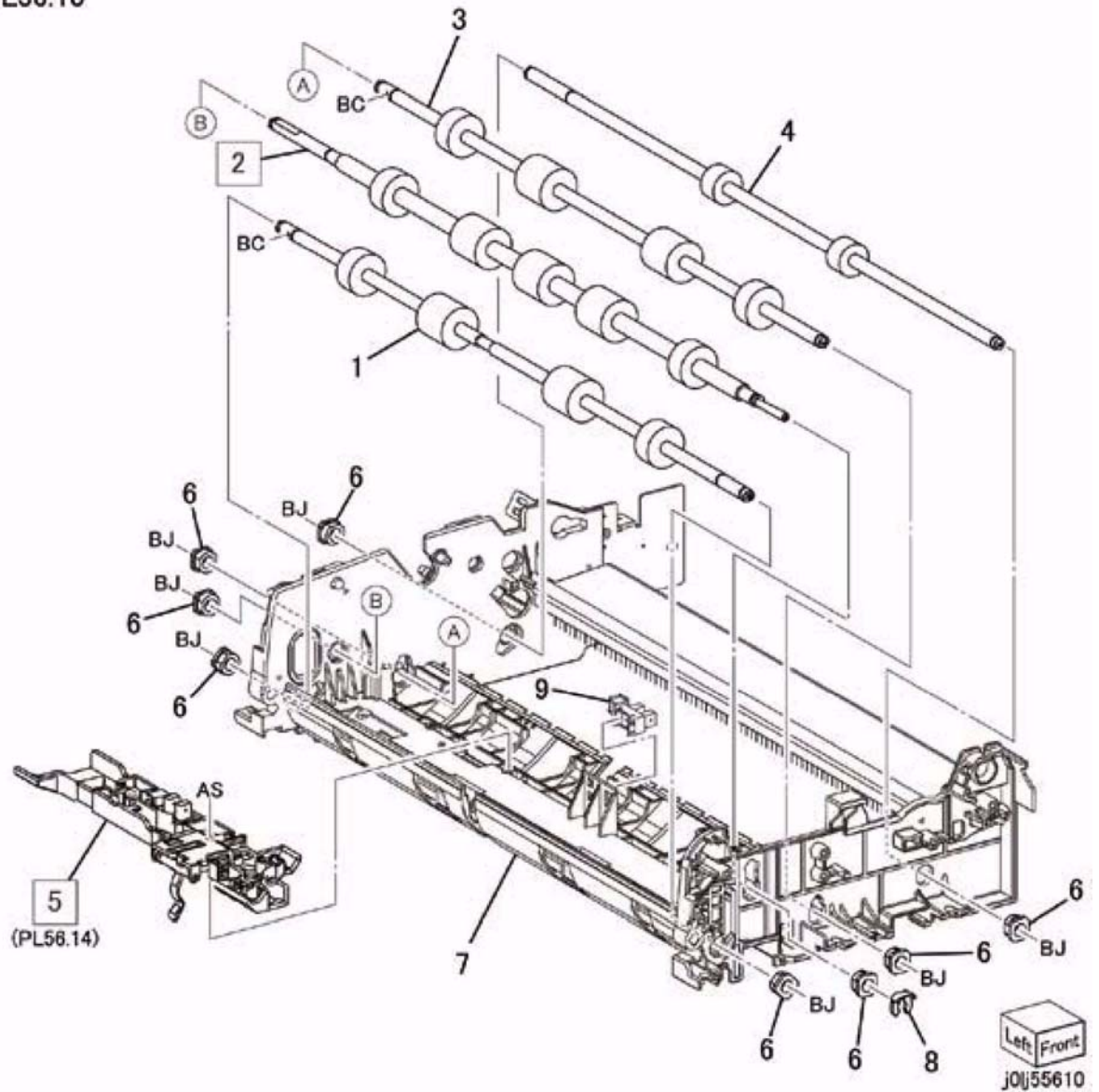
PL56.9



PL 56.10 DADF Roll, Sensor Bracket

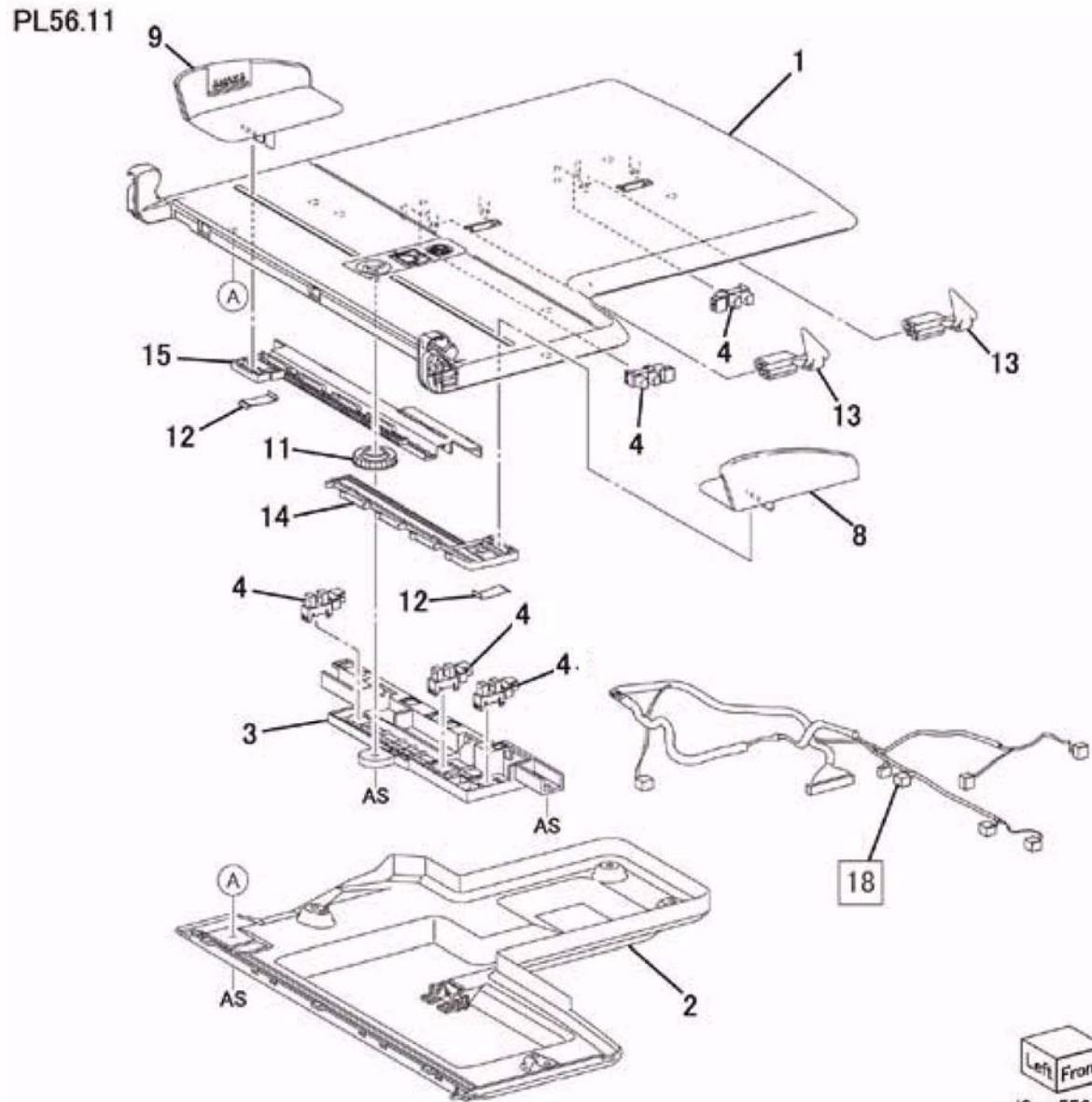
Item	Part	Description
1	059K75780	DADF Registration Roll
2	059K75790	DADF Takeaway Roll (REP 56.10.1)
3	059K75800	DADF Out Roll
4	059K75810	DADF Exit Roll
5	049K17820	Sensor Bracket (PL 56.14) (REP 56.10.2)
6	413W11660	Bearing
7	-	DADF Feeder Frame
8	-	KL-Clip
9	930W00121	DADF Invert Sensor

PL56.10



PL 56.11 Document Tray

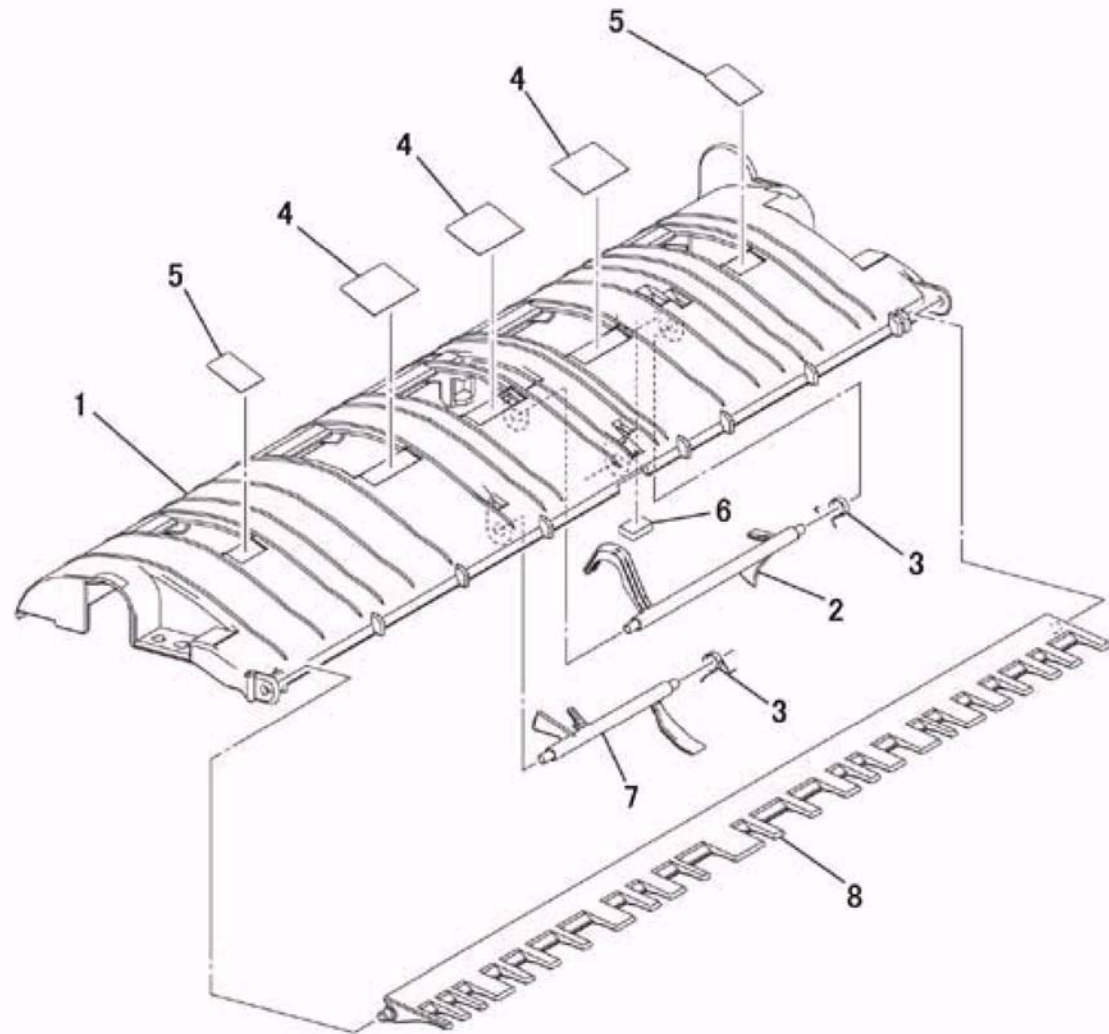
Item	Part	Description
1	-	Upper Tray
2	-	Tray Cover
3	868E80501	Sensor Bracket
4	930W00121	DADF Tray Set Guide Sensor, Document Tray Size Sensor
8	038E42770	Front Side Guide
9	038E42750	Rear Side Guide
11	807E30471	Pinion Gear
12	809E51860	Rack Spring
13	120E34210	Actuator
14	807E37830	Rack Gear (Front)
15	807E40750	Rack Gear (Rear)
18	952K08451	Tray Wire Harness



PL 56.12 Invert Chute

Item	Part	Description
1	-	Invert Chute
2	120E34220	Actuator (Pre Regi.)
3	809E50792	Spring
4	035K82730	Seal (Long)
5	035K82740	Seal (Short)
6	-	Pad
7	120E34230	Actuator (Invert)
8	050E25313	Invert Gate

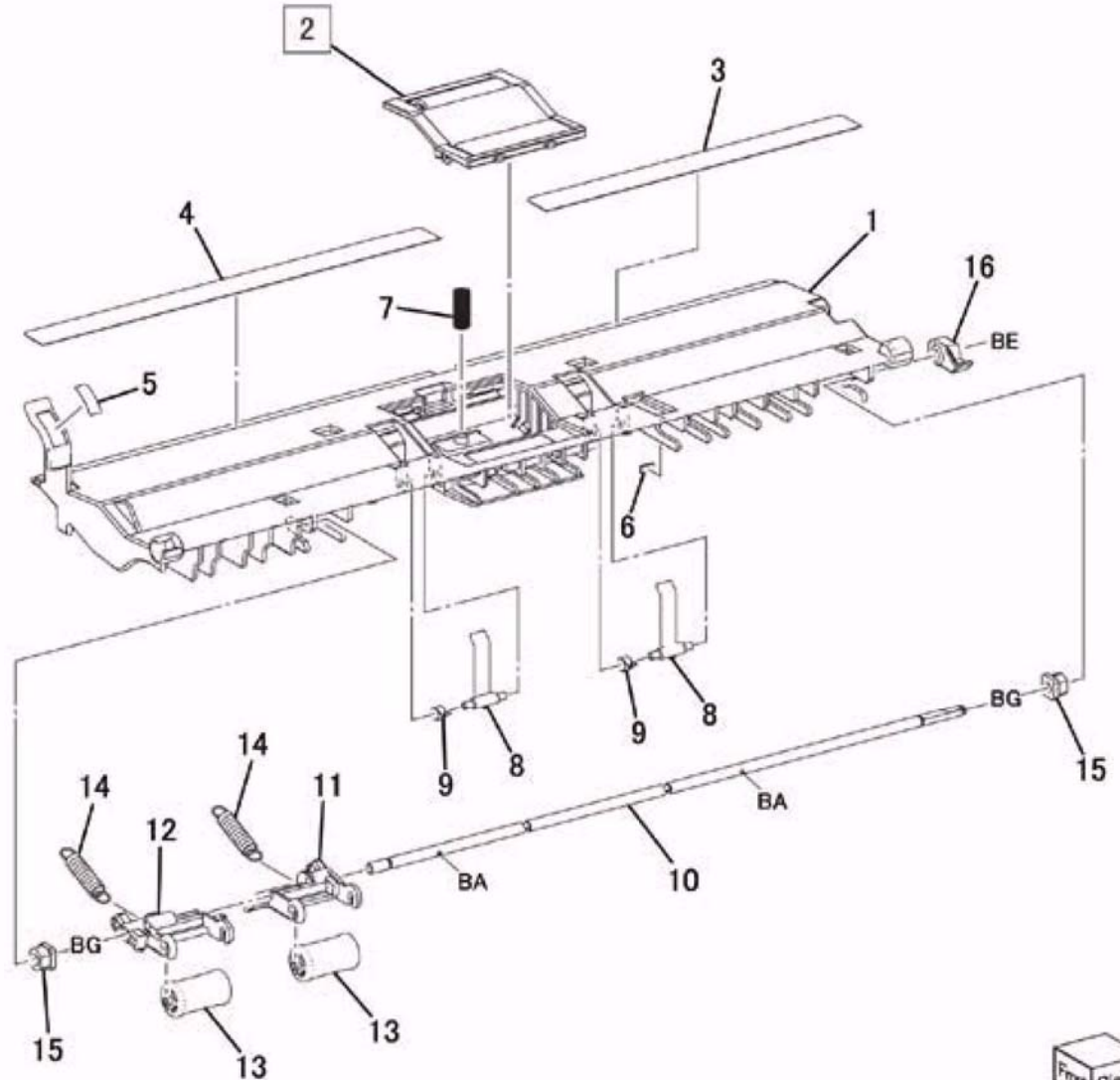
PL56.12



PL 56.13 Retard Chute

Item	Part	Description
1	054E50171	Retard Chute
2	848K68731	DADF Retard Pad (REP 56.13.1)
3	035K84270	Rear Seal
4	035K84260	Front Seal
5	-	Label
6	-	Pad
7	899E01520	Spring
8	050E28270	Set Gate
9	899E01510	Spring
10	-	Shaft
11	019E84132	Rear Holder
12	019E84120	Front Holder
13	059E08661	Pinch Roll
14	899E01531	Spring
15	413W11460	Bearing
16	012E18280	Link

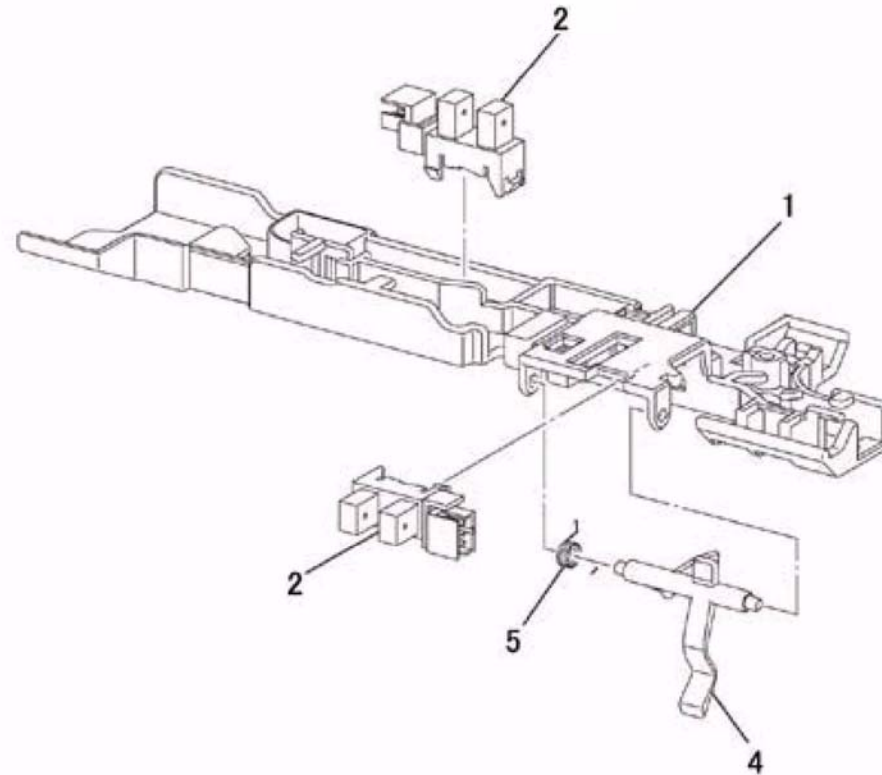
PL56.13



PL 56.14 Sensor Bracket

Item	Part	Description
1	032E40221	Sensor Bracket
2	930W00121	DADF Regi. Sensor
4	120E34260	Actuator (Regi.)
5	809E50792	Spring

PL56.14



Common Hardware

Item	Part	Description
AA	112W27898	Pan Head Screw (M3x8)
AB	113W20478	Screw (M3x4:White)
AC	113W20678	Screw (M3x6:White)
AD	113W20698	Round Screw (M3x6)
AE	113W20878	Screw (M3x8:White)
AF	113W21098	Round Screw (M3x10)
AG	113W21678	Screw (M3x16:White)
AH	113W27488	Pan Head Screw (M3x4:White)
AJ	113W27688	Pan Head Screw (M3x6:White)
AK	114W27678	Bind Head Tapping Screw (M3x6:White) (P 0.5)
AL	115W27878	Bind Head Tapping Screw (3x8:White) (P 1.4)
AM	115W28078	Bind Head Tapping Screw (3x10:White) (P 1.4)
AN	116W27678	Bind Head Screw (M3x6:White)
AP	153W16088	Tapping Screw (M4x10:White)
AQ	153W16288	Tapping Screw (M4x12:White)
AR	153W17688	Tapping Screw (M3x6:White)
AS	153W17888	Tapping Screw (M3x8:White)
AT	153W18088	Tapping Screw (M3x10:White)
AU	153W27678	Bind Head Tapping Screw (M3x6:White) (P 1.06)
AV	153W27878	Bind Head Tapping Screw (M3x8:White) (P 1.06)
AW	158W27678	Screw (M3x6:White)
AX	158W27688	Round Point Screw (M3x7:White)
AY	158W27878	Screw (M3x8:White)
AZ	252W29450	Nylon Washer (8) (t 1)
BA	271W11250	Dowel Pin (1.6x12)
BB	271W16050	Dowel Pin (2x10)
BC	271W21050	Dowel Pin (2.5x10)
BD	354W15278	E-Clip (2:White)
BE	354W19278	E-Clip (2.5:White)
BF	354W21254	KL-Clip (3)
BG	354W21278	E-Clip (3:White)
BH	354W24254	KL-Clip (4)
BJ	354W24278	E-Clip (4:White)
BK	354W26278	E-Clip (5:White)
BL	354W27254	KL-Clip (6)
BM	354W27278	E-Clip (6:White)
BN	354W29278	E-Clip (8:White)
BP	158W36678	Screw (M4x16:White)
BQ	158W45078	Screw (M5x10:White)
BR	113W20588	Pan Head Screw (M2.5x5)

Part Number Index

Table 1 Part Number Index

Part Number	Part List
003E59630	PL 10.4
003E59630	PL 11.4
003E59640	PL 11.4
003E59640	PL 10.4
003E60941	PL 9.3
003E60952	PL 9.1
003E61510	PL 10.1
003E61510	PL 11.1
004K03410	PL 56.1
005K05890	PL 11.3
005K05890	PL 10.3
005K06760	PL 10.3
005K06760	PL 11.3
005K07010	PL 10.3
005K07010	PL 11.3
005E25160	PL 8.3
005E33441	PL 1.4
005E33441	PL 1.9
005K81880	PL 10.3
005K83081	PL 11.3
005K83081	PL 10.3
005K83510	PL 13.3
005K83520	PL 13.3
005K83551	PL 9.1
005K83930	PL 3.2
006R01573	PL 8.1
006E78490	PL 10.6
006E78490	PL 11.6
006E79021	PL 9.3
006K89940	PL 9.1
007K18170	PL 11.6
007K18660	PL 13.3
007K18750	PL 8.2
007K19210	PL 10.6
007E78220	PL 11.6
007E78230	PL 11.6
007E78240	PL 11.6
007E78250	PL 11.6
007E78260	PL 11.6

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Part Number	Part List
007E78260	PL 10.6
007E78420	PL 11.6
007E78900	PL 11.3
007E78900	PL 10.3
007E79380	PL 10.3
007E79380	PL 11.3
007E79830	PL 10.6
007E79840	PL 10.6
007E79850	PL 10.6
007K85730	PL 11.3
007K85730	PL 10.3
007K98390	PL 3.1
011K04260	PL 56.4
011E14481	PL 11.4
011E14481	PL 10.4
011E14771	PL 11.3
011E14771	PL 10.3
011E26670	PL 14.3
011E26691	PL 14.3
012E11090	PL 10.2
012E11090	PL 11.2
012E11810	PL 9.3
012E18260	PL 56.7
012E18270	PL 56.7
012E18280	PL 56.13
012E18290	PL 56.7
012E18310	PL 56.4
013R00670	PL 8.1
013E25881	PL 9.3
013E26100	PL 10.4
013E26530	PL 11.3
013E26530	PL 10.3
013E40060	PL 14.4
013E40990	PL 15.1
013E41200	PL 56.7
013E41230	PL 9.1
013E84520	PL 11.5
013E92890	PL 10.3
013E92890	PL 11.3
014E44770	PL 11.3
014E44770	PL 10.3

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Part Number	Part List
014E45030	PL 11.3
014E45030	PL 10.3
014E45350	PL 9.1
014E51110	PL 11.1
014E51110	PL 10.1
014E59990	PL 11.1
014E59990	PL 10.1
017K93121	PL 11.7
017K93132	PL 11.7
019K07150	PL 11.2
019K07150	PL 10.2
019K09420	PL 9.3
019K12820	PL 13.3
019E56680	PL 10.3
019E56680	PL 11.3
019E71680	PL 11.2
019E71680	PL 10.2
019E84010	PL 13.3
019E84120	PL 56.13
019E84132	PL 56.13
019E85410	PL 13.3
020E45140	PL 14.4
020E46551	PL 56.7
020E49550	PL 1.9
022K77450	PL 13.3
022K78481	PL 13.3
023E27800	PL 14.4
023E27860	PL 1.9
028E94160	PL 10.3
028E94160	PL 11.3
029E32810	PL 9.3
030K75511	PL 10.4
030K75511	PL 11.4
032K08082	PL 8.2
032K08100	PL 8.2
032E35503	PL 8.2
032E38920	PL 10.7
032E40060	PL 14.1
032E40210	PL 56.6
032E40221	PL 56.14
032E40350	PL 9.1

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Part Number	Part List
032E41320	PL 15.1
035K82730	PL 56.12
035K82740	PL 56.12
035K84260	PL 56.13
035K84270	PL 56.13
035K85290	PL 56.3
035K85320	PL 56.3
035K85330	PL 56.3
035K85341	PL 56.3
035K85380	PL 56.3
035K85390	PL 56.3
035K85400	PL 56.3
036K92130	PL 56.3
036K92141	PL 56.3
038K21332	PL 9.3
038K21640	PL 9.3
038K21980	PL 9.3
038E26533	PL 11.2
038E26533	PL 10.2
038E26550	PL 11.2
038E26550	PL 10.2
038E27124	PL 9.3
038E27201	PL 14.4
038E42750	PL 56.11
038E42770	PL 56.11
038K87114	PL 10.2
038K87114	PL 11.2
049K17710	PL 3.1
049K17810	PL 56.2
049K17820	PL 56.10
049K17900	PL 1.9
049K18190	PL 56.7
050E25313	PL 56.12
050E28270	PL 56.13
050K64424	PL 10.1
050K64424	PL 11.1
050K69651	PL 56.9
050K70180	PL 9.1
050K71130	PL 13.2
054E22622	PL 11.1
054E23170	PL 11.3

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Part Number	Part List
054E23170	PL 10.3
054E23421	PL 10.4
054E23421	PL 11.4
054E23461	PL 11.3
054E23461	PL 10.3
054K27520	PL 10.1
054K27520	PL 11.1
054K48391	PL 6.1
054K48460	PL 9.1
054K48501	PL 14.3
054K48570	PL 56.9
054K48581	PL 56.9
054K49150	PL 56.9
054E49711	PL 14.4
054E49741	PL 14.3
054E50031	PL 14.3
054E50171	PL 56.13
054E50182	PL 56.4
054E50272	PL 4.1
054E50280	PL 19.1
055E58451	PL 8.2
059E04010	PL 14.4
059E08661	PL 56.13
059K26251	PL 10.5
059K26251	PL 11.5
059K32773	PL 9.3
059K33051	PL 9.3
059K74891	PL 15.1
059K74901	PL 15.1
059K74910	PL 17.1
059K74950	PL 14.4
059K74960	PL 14.4
059K75714	PL 56.1
059K75733	PL 56.2
059K75752	PL 56.2
059K75760	PL 56.4
059K75770	PL 56.4
059K75780	PL 56.10
059K75790	PL 56.10
059K75800	PL 56.10
059K75810	PL 56.10

Table 1 Part Number Index

Part Number	Part List
059K79560	PL 6.1
059K79621	PL 10.1
059K79621	PL 11.1
059K81900	PL 13.1
059K81950	PL 13.2
059E98190	PL 11.4
059E98590	PL 15.1
059E98701	PL 56.3
059E98711	PL 56.3
059E99241	PL 10.4
062E16500	PL 14.3
062K25290	PL 2.1
068K67551	PL 56.2
094K93270	PL 8.2
105E20482	PL 18.3
105E21071	PL 18.3
105E21351	PL 18.3
110K11680	PL 9.1
110K11680	PL 11.1
110K11680	PL 10.1
110E12220	PL 10.4
110E12220	PL 11.4
110K17140	PL 56.6
110E94770	PL 14.1
110E94770	PL 19.1
117K38961	PL 56.6
117K47330	PL 1.9
117K47570	PL 18.3
117K47580	PL 18.3
117K47611	PL 18.3
117K47650	PL 18.5
117K47742	PL 1.5
117K47810	PL 18.3
117K47820	PL 18.3
117K47830	PL 18.3
117K47880	PL 1.9
120E22040	PL 11.2
120E22040	PL 10.2
120E22051	PL 11.2
120E22051	PL 10.2
120E22081	PL 10.2

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Part Number	Part List
120E22081	PL 11.2
120E22240	PL 10.4
120E22481	PL 11.3
120E22481	PL 10.3
120E23764	PL 9.3
120E34050	PL 15.1
120E34060	PL 18.3
120E34130	PL 13.2
120E34210	PL 56.11
120E34220	PL 56.12
120E34230	PL 56.12
120E34244	PL 56.4
120E34250	PL 56.4
120E34260	PL 56.14
120E34270	PL 56.2
120K92011	PL 9.3
120K92900	PL 1.9
121K31530	PL 11.6
121K31530	PL 10.6
121K52130	PL 14.4
121K52220	PL 13.3
121K52310	PL 56.7
121K52340	PL 9.1
121K52340	PL 15.1
121K52470	PL 56.7
123K09500	PL 1.6
126K30556	PL 7.1
126K31733	PL 7.1
127K38171	PL 10.3
127K38171	PL 11.3
127K66210	PL 17.1
127K66290	PL 3.1
127K66690	PL 56.6
127K66721	PL 1.4
127K66870	PL 8.2
127E86170	PL 4.1
130E16130	PL 3.2
130E16140	PL 3.2
130E16150	PL 3.2
130E16160	PL 3.2
130K64121	PL 11.5

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Part Number	Part List
130K64121	PL 10.5
130K64471	PL 11.5
130K78820	PL 18.5
130K79500	PL 1.9
252W29450	PL 10.6
413W11460	PL 14.4
413W11460	PL 56.13
413W11660	PL 13.3
413W11660	PL 10.3
413W11660	PL 56.10
413W11660	PL 11.3
413W11660	PL 17.1
413W11860	PL 11.6
413W11860	PL 10.6
413W11860	PL 10.5
413W14460	PL 17.1
413W77359	PL 10.6
413W77359	PL 11.6
413W85459	PL 56.4
413W85459	PL 56.5
413W85459	PL 56.7
423W05354	PL 56.5
423W32055	PL 56.7
604K20541	PL 11.2
604K20541	PL 10.2
604K75331	PL 11.3
604K75331	PL 10.3
604K80730	PL 13.1
604K80750	PL 56.5
604K87280	PL 1.6
604K90800	PL 9.1
604K90810	PL 11.1
604K90810	PL 10.1
604K90820	PL 19.1
801E28470	PL 13.2
802E54672	PL 11.1
802E54672	PL 11.5
802E54672	PL 10.5
802E54721	PL 11.2
802E54731	PL 10.7
802E54731	PL 11.7

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802E54750	PL 11.7
802E54762	PL 11.7
802E54771	PL 11.7
802E56601	PL 10.7
802K57026	PL 10.4
802E62310	PL 9.3
802K70856	PL 11.4
802E85381	PL 10.2
802E86971	PL 10.7
803E13310	PL 56.2
803E13330	PL 56.8
803E13340	PL 56.3
803E15701	PL 9.3
803E16660	PL 1.6
803E17021	PL 13.2
803E17031	PL 13.2
803E17031	PL 13.3
803E17620	PL 1.6
806E37111	PL 14.4
806E37300	PL 13.3
807E00070	PL 10.3
807E00070	PL 11.3
807E00390	PL 10.3
807E00390	PL 11.3
807E00410	PL 11.3
807E00410	PL 10.3
807E00800	PL 10.3
807E00800	PL 11.3
807E13521	PL 10.2
807E13521	PL 11.2
807E30471	PL 56.11
807E31531	PL 8.3
807E37830	PL 56.11
807E39150	PL 17.1
807E39180	PL 3.2
807E39200	PL 3.2
807E39210	PL 3.2
807E39220	PL 3.2
807E39230	PL 3.2
807E39240	PL 3.2
807E39250	PL 3.2

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807E39260	PL 3.1
807E39410	PL 8.2
807E39430	PL 14.4
807E39580	PL 3.2
807E39600	PL 13.3
807E39610	PL 13.3
807E39620	PL 13.3
807E40750	PL 56.11
807E40760	PL 56.5
807E40780	PL 56.8
807E40790	PL 56.7
807E40800	PL 56.7
807E40830	PL 56.7
807E40840	PL 56.8
807E40840	PL 56.7
807E40871	PL 1.4
807E40880	PL 1.4
807E40890	PL 1.4
807E40920	PL 9.1
807E40930	PL 14.4
807E40940	PL 15.1
807E41000	PL 56.8
807E41440	PL 9.3
809E27650	PL 9.3
809E41880	PL 10.2
809E41880	PL 11.2
809E42531	PL 11.3
809E42531	PL 10.3
809E47091	PL 11.2
809E47091	PL 9.3
809E47091	PL 10.2
809E50531	PL 10.3
809E50531	PL 11.3
809E50792	PL 56.12
809E50792	PL 56.14
809E50792	PL 56.2
809E51070	PL 11.3
809E51070	PL 10.3
809E51080	PL 11.3
809E51080	PL 10.3
809E51860	PL 56.11

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809E54160	PL 9.3
809E54170	PL 9.3
809E54501	PL 10.4
809E54501	PL 11.4
809E54590	PL 10.4
809E58300	PL 1.9
809E75530	PL 14.4
809E79130	PL 8.3
809E86290	PL 56.3
809E99540	PL 14.3
809E99570	PL 15.1
809E99740	PL 14.4
809E99862	PL 6.1
809E99871	PL 6.1
815K09820	PL 9.3
815E75070	PL 14.3
815E76300	PL 56.4
815E76320	PL 56.8
815E76340	PL 56.8
815E77090	PL 13.3
826E07210	PL 10.7
826E07210	PL 10.1
830E45710	PL 11.4
848K67531	PL 3.2
848K68291	PL 19.1
848K68301	PL 14.1
848K68381	PL 17.1
848K68731	PL 56.13
848K76560	PL 19.1
848K76930	PL 1.8
848K81862	PL 1.9
848K81890	PL 1.8
848E83270	PL 14.1
848E83290	PL 14.1
848E83411	PL 7.1
848E84353	PL 9.3
848E84571	PL 19.1
848E84614	PL 19.1
848E84631	PL 19.2
848E84830	PL 3.2
848K85390	PL 9.1

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Part Number	Part List
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848E85940	PL 13.3
848E85990	PL 9.3
848E86411	PL 56.2
848E86430	PL 56.2
848E86450	PL 56.2
848E87322	PL 19.2
848E87781	PL 13.2
848K91750	PL 1.6
848K91750	PL 1.8
848E93840	PL 1.8
848E95640	PL 18.4
849E06322	PL 10.2
849E06322	PL 11.2
849E34880	PL 10.7
868E69740	PL 19.2
868E77060	PL 14.1
868E77081	PL 14.3
868E77401	PL 14.4
868E78150	PL 14.3
868E80501	PL 56.11
868E80542	PL 56.8
868E80570	PL 56.7
868E80610	PL 1.8
868E94540	PL 1.6
897E24001	PL 56.4
898E45921	PL 14.3
899E01340	PL 13.3
899E01350	PL 13.2
899E01510	PL 56.13
899E01520	PL 56.13
899E01531	PL 56.13
899E01531	PL 56.4
899E01541	PL 56.4
899E01551	PL 56.4
899E01573	PL 56.7
899E01581	PL 56.7
899E01591	PL 56.3
899E01911	PL 56.3
910W00703	PL 18.3
913W02321	PL 18.3

Table 1 Part Number Index

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930W00121	PL 56.14
930W00121	PL 56.6
930W00121	PL 56.11
930W00121	PL 56.2
930W00121	PL 56.10
930W00123	PL 10.3
930W00123	PL 1.9
930W00123	PL 15.1
930W00123	PL 13.3
930W00123	PL 11.3
952K01141	PL 18.3
952K01160	PL 17.1
952K01190	PL 18.3
952K01221	PL 7.1
952K01230	PL 18.3
952K01240	PL 2.1
952K08120	PL 1.4
952K08150	PL 11.5
952K08150	PL 10.5
952K08170	PL 18.4
952K08440	PL 56.6
952K08451	PL 56.11
952K08460	PL 56.6
952K08471	PL 56.2
952K08490	PL 10.6
952K10740	PL 18.3
952K11130	PL 1.9
952K18470	PL 18.2
952K18480	PL 18.2
960K62447	PL 56.2
960K64673	PL 11.6
960K68380	PL 1.5
960K68560	PL 10.6
960K76800	PL 1.6
960K76830	PL 18.3
960K76940	PL 18.5
960K77160	PL 18.3
962K18900	PL 11.5
962K19435	PL 11.6
962K19692	PL 11.3
962K19692	PL 10.3

Table 1 Part Number Index

Part Number	Part List
962K68852	PL 13.3
962K69061	PL 7.1
962K69080	PL 18.3

Navi 1.1 Processor + Option

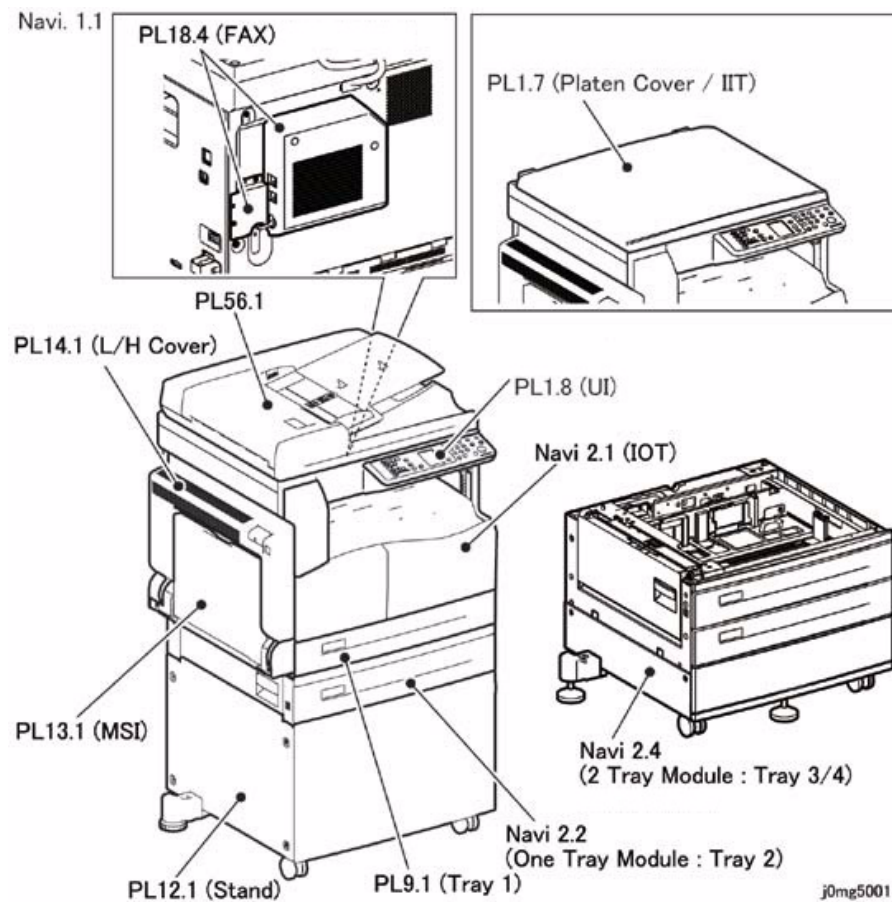


Figure 1 j0mg50011

Navi 2.1 IOT

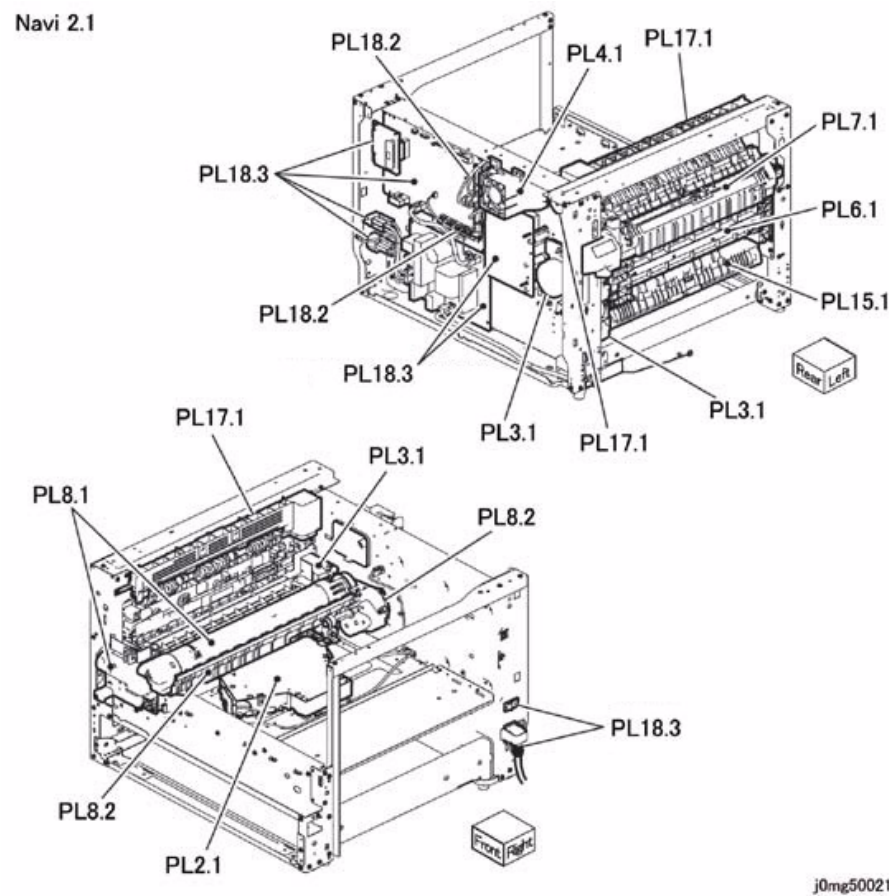


Figure 1 j0mg50021

Navi 2.2 One Tray Module

Navi. 2.2

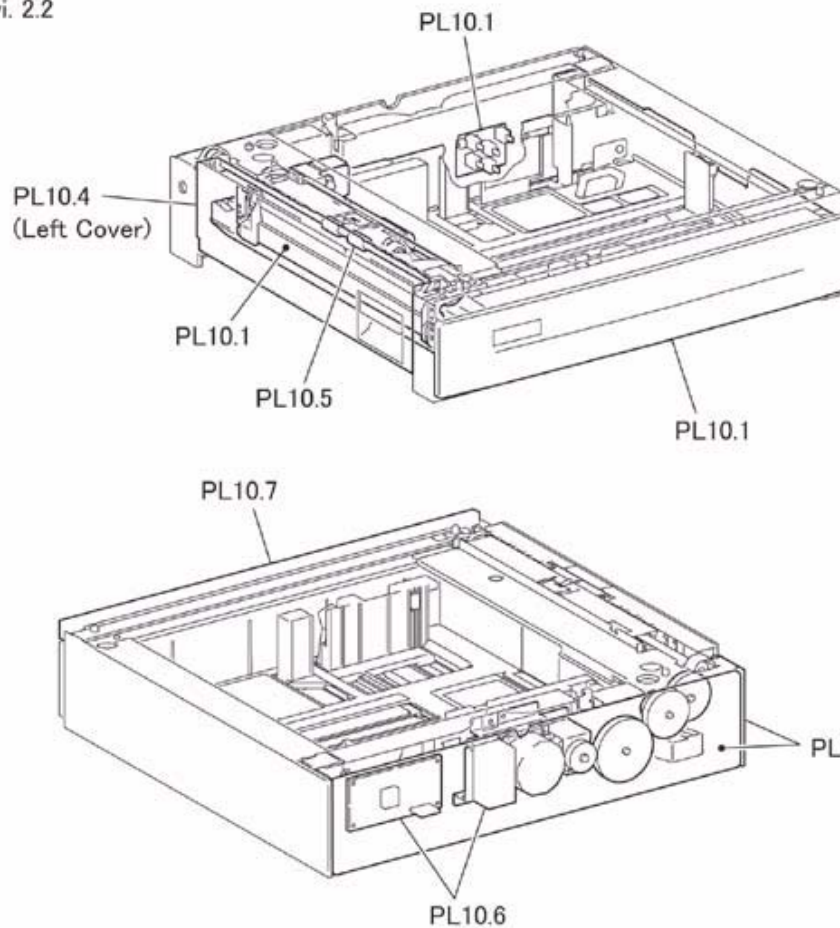


Figure 1 j0lj50022

Navi 2.3 DADF

Navi 2.3

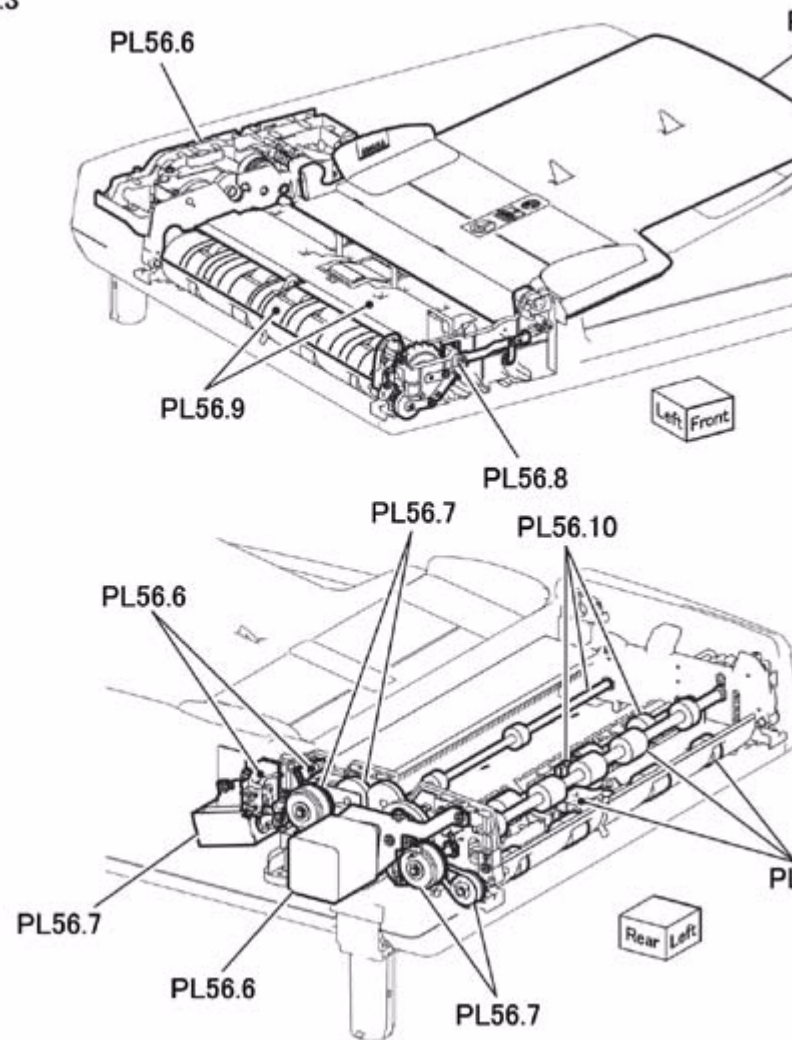


Figure 1 j0lj50023

Navi 2.4 2 Tray Module

Navi. 2.4

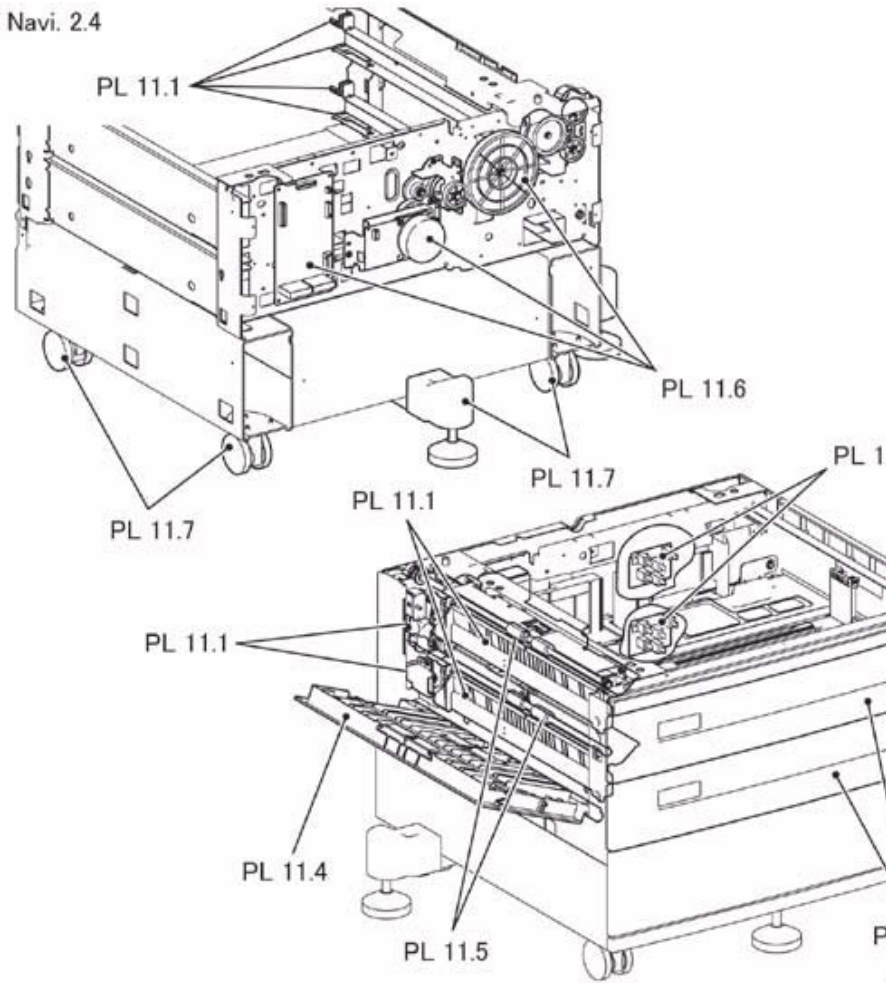


Figure 1 j0mg50024

Chapter 6 General

6 General Procedures

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6.1.1 Product Name/Product Code/Serial No.

6.1.1.1 Main Unit

Table 1

Destination	Product Name	CPM	Product Code	Serial No.	Note
DMO-W	WorkCentre 5022	22	G8B	G8B267501 ~ G8B292500	USB Print/Scan, DADF, Duplex
DMO-W	WorkCentre 5024	24	G7B	G7B292501 ~ G7B317500	USB Print/Scan, DADF, Duplex
DMO-E & DMO-W	WorkCentre 5022	22	G5B	G5B377501 ~ G5B437500 333377501x ~ 333437500x	USB Print/Scan, DADF, Duplex
DMO-E & DMO-W	WorkCentre 5024	24	G6B	G6B317501 ~ G6B377500 333317501x ~ 333377500x	USB Print/Scan, DADF, Duplex
India Direct	WorkCentre 5022	22	G2X	333437501x ~ 333467500x	USB Print/Scan, DADF, Duplex
India Direct	WorkCentre 5024	24	G9B	333467501x ~ 333497500x	USB Print/Scan, DADF, Duplex

6.1.1.2 Options

Table 2

Option	Part No.	Remarks
1 Tray Module	497K14780	Tray 2, 500 sheets
2 Tray Module	497K14790	Trays 3 & 4, must have 1 Tray Module
Stand	497K11620	Mobile stand, must have 1 Tray Module
Network Kit	497K14820	Enables Network Scan & Print
Fax Kit	497K14810	Includes Speed Dial Pad
Tray Lock	497K14800	Tray 1 only

6.1.2 Configuration

This IOT is a Black & White print engine that uses the electrophotographic method with semiconductor laser beam.

The output performance when transporting A4 LEF and 8.5x11" LEF Plain paper is 24 ppm/22 ppm. The resolution of the IOT Engine is 600 dots/25.4 mm.

This IOT forms a Multi-Function System in combination with the System Controller, UI, IIT, and DADF.

6.1.2.1 IOT Overview

Table 1

Item	Contents
Recording System	Electrophotographic method using OPC Drum
Photoreceptor Type/Diameter	OPC/30 mm in diameter
Development Method (1 component, 2 components, etc.)	Dry bicomponent development method
Toner component (crush method, polymerization method)	EA (HG base) Toner/6.5 Micrometer
Exposure System	Semiconductor laser scanning method
Transfer Method (charger, etc.)	Transfer Roll Method
Fusing System	Heat pressure fusing method by Heat Roll
Cleaning Method	Drum: Blade method/Transfer Roll: None

6.1.3 Operating Modes

The following 4 operating modes are available.

Table 1

Mode	State
Running Mode	The data receiving/image creation/recording (printing) operation mode
Ready Mode	When the system can enter the Running Mode immediately
Low Power Mode	The mode that reduces the power consumption more than the Ready Mode
Sleep Mode *1	The mode that reduces the power consumption further more than the Low Power Mode

*1 Applies to the International Energy Star Program.

6.1.3.1 IOT States

The IOT systems are in the following states in each mode.

Table 2

	Running Mode	Ready Mode	Low Power Mode	Sleep Mode	Power OFF
Fusing System (Fusing Unit)	Maintaining the operating temperature	Maintaining the standby temperature	Stop state	Stop state	Stop state
Recording System (Transfer/Development)	Operating state	Stop state	Stop state	Stop state	Stop state
ROS Assembly	Operating state	Stop state	Stop state	Stop state	Stop state
ESS/MCU PWB (Reference)	Operating state	Standby	Standby	Ready to receive	Stop state

6.1.4 Machine Sizes and Basis Weights

The following are the sizes and weights of the individual products: (excluding toner)

6.1.4.1 Machine Sizes

Projecting sections such as label recesses are not included. The sizes are for when the Bypass Tray is minimized.

The tolerance is +/-5 mm.

*1: For details on the machine sizes, refer to 6.1.4.3.

*2: This measurement is for when the Power Cord is disconnected. If it is connected, add +27 mm for Basic Models 1 and 2, and add +22 mm for Basic Model 3.

*3: The height is measured up to the top surface of the Platen Glass. Add +34 mm to this if the Platen Cover is installed and add +119 mm if the DADF is installed.

Table 1

Product Configuration	Configuration	Machine Size (mm) *1		
	Tray Module	Width *2	Depth	Height *3
Basic Model 1	None (Desktop)	595	573	580
Basic Model 2	1TM	595	573	680
Basic Model 3	1TM + Stand	595	573	1084
Full Model 1	1TM + 2TM	595	573	968

*1: For details on the machine sizes, refer to 6.1.4.4.

*2: This measurement is for when the Power Cord is disconnected. If it is connected, add +30 mm for Basic Models 1, 2, and Full Model 1, and add +25 mm for Basic Model 3.

*3: The height is measured up to the top surface of the Platen Glass. Add +33 mm to this if the Platen Cover is installed and add +119 mm if the DADF is installed.

6.1.4.2 Machine Weights

Measurement Conditions:

Not inclusive of Options, Output Tray, Paper, and New Toner Cartridges.

Max Floor Weight Capacity (Reference value):

= Main Unit (w/ Dup + w/ DADF) + 1TM + Stand = 36.0 kg + 10.7 kg + 19 kg = 65.7 kg

Max Floor Weight Capacity (Reference value):

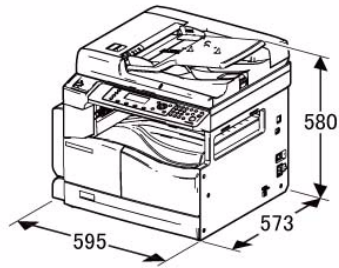
= Main Unit (w/ Dup + w/ DADF) + 1TM + 2TM + Fax Kit + Margin

= 37.0 kg + 11.0 kg + 31.0 kg + 0.8 kg + 0.5 kg = 80.3 kg

6.1.4.4 Detailed Machine Sizes

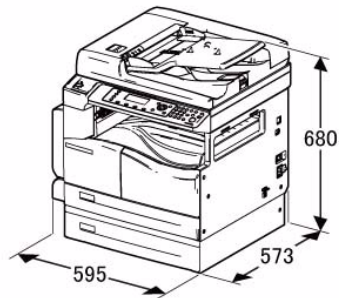
- Basic Model 1
 - Machine Size (W x D x H): 595 mm x 573 mm x 580 mm (Figure 2)

*1: This machine size (W) does not include the Power Cord.



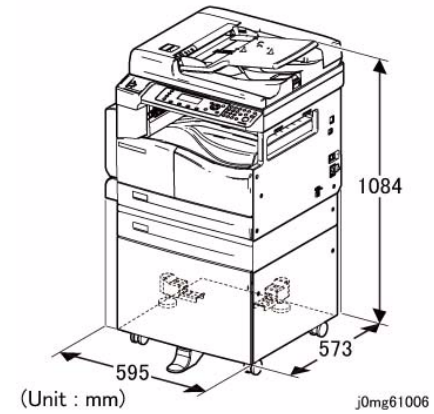
(Unit : mm) j0mg61002
Figure 1 j0mg61002

- 2. Basic Model 2
 - Machine Size (W x D x H): 595 mm x 573 mm x 680 mm (Figure 4)
 - *1: This machine size (W) does not include the Power Cord.



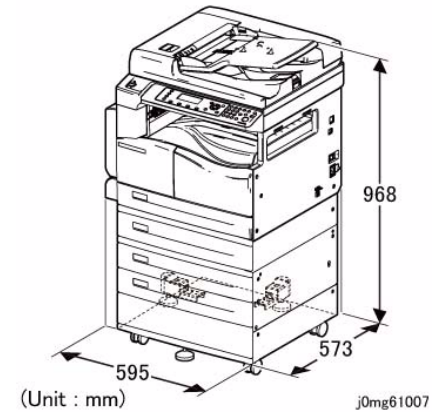
(Unit : mm) j0mg61004
Figure 2 j0mg61004

- 3. Basic Model 3
 - Machine Size (W x D x H): 595 mm x 573 mm x 1,084 mm (Figure 6)
 - *1: This machine size (W) does not include the Power Cord.



(Unit : mm) j0mg61006
Figure 3 j0mg61006

- 4. Basic Model 4 (Main Unit + 1TM + 2TM + DADF)
 - Machine Size (W x D x H): 595 mm x 573 mm x 968 mm (Figure 7)
 - *1: This machine size (W) does not include the Power Cord.



(Unit : mm) j0mg61007
Figure 4 j0mg61007

6.1.5 Installation Space

6.1.5.1 Installation Space

Sufficient space must be made available around the machine for performing activities such as loading paper, refilling, retrieving printouts, replacing consumables, clearing Jams, maintenance inspection, and etc., as well as to ensure that the machine's performance can be maintained.

- Width: The max. width with the MSI Tray pulled out is 921 mm.
- Depth: The depth with the Tray pulled out is 960 mm. (Including the Front Cover)

The installation space includes the following working space.

- Width: 80 mm added to the left and 100 mm added to the right
- Depth: 400 mm added to the front (for pulling out of Tray) and 100 mm added to the back (for air circulation)

Table 1

Configuration	Width (mm)	Depth (mm)	Area (square meters)
Main Unit (w/ Platen Cover or w/ DADF)	1101	1475	1.62
Main Unit + 1TM	1101	1475	1.62
Main Unit + 1TM + Stand	1101	1475	1.62
Main Unit + 1TM + 2TM	1101	1475	1.62

- Width: The max. width with the MSI Tray pulled out is 921 mm.
- Depth: The depth with the Tray pulled out is 975 mm. (Including the Front Cover)

The installation space includes the following working space.

- Width: 80 mm added to the left and 100 mm added to the right
- Depth: 400 mm added to the front (for pulling out of Tray) and 100 mm added to the back (for air circulation)

6.1.5.2 Occupied Space

The occupied space may include a fully extended Bypass Tray and Output Tray.

Table 2

Configuration	Depth (mm)	Area (square meters)
Main Unit + Platen Cover	573	0.54
Main Unit + Platen Cover + 1TM	573	0.54
Main Unit + DADF	573	0.54

Table 2

Configuration	Depth (mm)	Area (square meters)
Main Unit + DADF + 1TM	573	0.54
Main Unit + DADF + 1TM + Stand	573	0.54
Main Unit + DADF + 1TM + 2TM	573	0.54

6.1.5.4 Detailed Installation Spaces

1. Main Unit (w/ DADF)
 - Installation Space (W x D): 1101 mm x 1475 mm (Figure 1)

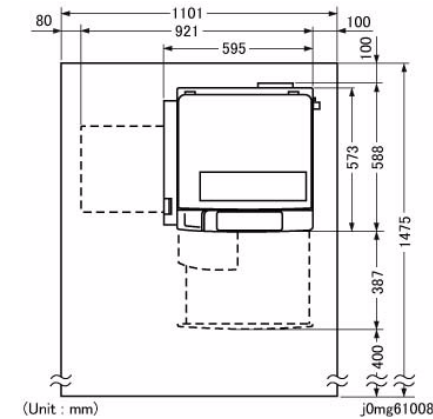


Figure 1 j0mg61008

2. Main Unit (w/ DADF) + 1TM
 - Installation Space (W x D): 1101 mm x 1475 mm (Figure 2)

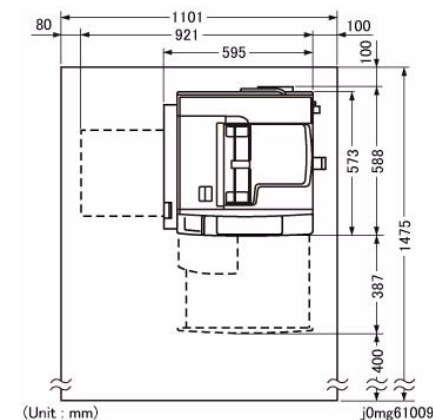


Figure 2 j0mg61009

3. Main Unit (w/ DADF) + 1TM + Stand
 - Installation Space (W x D): 1101 mm x 1475 mm (Figure 3)

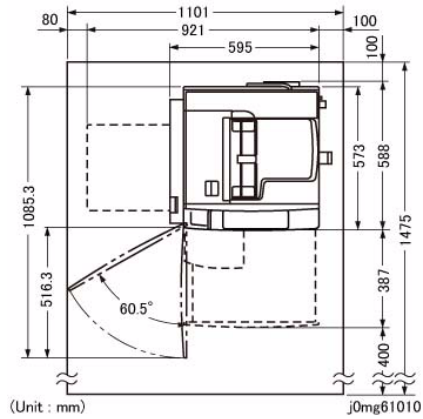


Figure 3 j0mg61010

4. Main Unit (w/ DADF) + 1TM + 2TM
 - Installation Space (W x D): 1101 mm x 1475 mm (Figure 4)

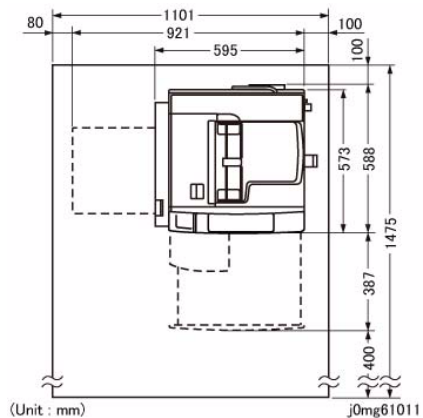


Figure 4 j0mg61011

6.1.6 Levelness

As long as the machine is placed horizontally and the maximum difference under the M/C Cabinet (Casters) is within 5 mm between all the front, the rear, the right, and the left, there should not be any interference with its performance.

6.1.7 Operating Air Pressure

The machine operates normally between 0 to 2,500 m (0 to 8,200 feet).

However, when the altitude exceeds 2,000 m, an adjustment in the field may be required.

6.1.8 Electrical Specification

Specifies the power supply operating voltage/frequency and the power consumption.

6.1.8.1 Power Supply Operating Voltage and Frequency

Possessing an electric configuration that is applicable to the following power supply specifications:

Table 1

Configuration	Source Voltage (V)	Frequency (Hz)
WC 5022/5024	220-10% to 240+10%	50/60 +/-3%

6.1.10 Installation Environment

This machine can be operated under the following conditions:

- Temperature: 10 Degree Celsius to 32 Degree Celsius
- Humidity: 15 to 85% (with no condensation)
- Altitude: 0 to 2,500 m

6.1.11 Warm Up Time

The time required before print operation can start after the main power is turned ON or after the Sleep Mode and the Low Power Mode is cancelled is as follows.

Table 1

Measurement Conditions	Rated at 20 Degrees Celsius/65% RH. Toner Recovery and Setup Cycle are not included. Power ON after seasoning when the power has been OFF for 3 hours or longer.
Basic Configuration	Standard Main Unit

*1: [Time taken from power ON to the UI entering the Standby state] or

the time equal to [Power ON to 1st sheet is output] - [Standby to 1st sheet is output]

Table 2

Configuration	Immediately after main power is turned ON*1
WC 5022/5024	19 s or faster

*1: [Time taken from power ON to the UI entering the Standby state] or

the time equal to [Power ON to 1st sheet is output] - [Standby to 1st sheet is output]

6.1.12 FCOT

<Definition>

The time that is required since <Start> is pressed until the tail edge of paper is output to the defined output destination.

The measurement result is rounded to the first decimal place.

- Prerequisite

Table 1

Item	Contents
Document/Paper Size	Slow Scan Length is Letter LEF (8.5 inch = 215.9 mm) or shorter. Document size must be detected before <Start> is pressed.
IIT/DADF Status	When using the Platen, as the document size is detected when the Platen Cover is closed, the start should be within 7 seconds from the time the Platen Cover is closed and the Carriage is at the scan position. When using the DADF, the document must already be loaded and the Carriage at the home position.
Tray Used	Specify the Tray directly (including MSI)
Copy Side Settings	1->1 Sided Copy
Paper Quality Settings	Plain
Document Type	Text Mode
Reduce / Enlarge	100% (excluding cases where the AMS result became 100%)
State of Fusing Unit	The Fusing Unit must be in the Ready state
Output	Uncollated
N-Up	1 Up (not N-Up/ID Card Copy)
AutoRotation	Do not perform

- 24/22-sheet models FCOT

Table 2

No.	Document Set Platen/ DADF	Output Tray	FCOT (PS: 100 mm/s)
1	Platen	Center Tray	7.2 s or faster
2	DADF	Center Tray	11.0 s or faster

6.1.13 Print Speed

Continuous speed (PPM) of the print engine is defined as follows:

During output to Face Down Tray, taking the time from when the tail edge of the 1st sheet is output from the IOT exit area until the tail edge of the 11th sheet is output from the MC exit area to be t seconds, the no. of sheets that is printed in 1 minute is given by the formula: [(60/t)x10 for 1 Sided and (60/t)x20 for 2 Sided] as shown in the following table. The numerical value for Duplex is IPM (Images Per Minute).

Limitations

- This does not include the time for settings/cleaning/sagging/procon.
- When automatic recognition of paper size at the MSI is in operation, it prints at the corresponding productivity rate of that paper size. However, if the paper size is not automatically detected, the 1st paper is printed with the same productivity as the A3 SEF or 17" paper. Immediately after that, the 2nd BTR is cleaned, then the 2nd and subsequent paper will be printed with the productivity of the paper size that was detected when printing the 1st paper.

24/22 IOT (feed from Tray/output to Center Tray)

Unit: 1 Sided: ppm, 2 Sided: ipm

Table 1

Paper Type Settings	216.0 mm or shorter in the SS direction and 210.0 mm or longer in the FS direction		216.1 mm to 297.2 mm in the SS direction		297.3 mm to 364.1 mm in the SS direction		364.2 mm to 432.0 mm in the SS direction (A3S/11x17S)			
	A4 LEF 8.5x11 LEF B5 LEF		A5 SEF B5 SEF 5.5x8.5 SEF		A4 SEF 8.5x11 SEF		B4 SEF 8.5x13 SEF8.5x14 SEF8.5x13.4 SEF		A3 SEF 11x17 SEF	
	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided
BondPlain-Recycle-dReload *1	24*2/22	17/16	12/12	7.2/7.2	15/15	8.7/8.7	12/12	7.9/7.9	12/12	8.6/8.6
Heavy-weight Gloss	13/13	NA	5/5	NA	7/7	NA	7/7	NA	7/7	NA

Table 1

Paper Type Settings	216.0 mm or shorter in the SS direction and 210.0 mm or longer in the FS direction				216.1 mm to 297.2 mm in the SS direction		297.3 mm to 364.1 mm in the SS direction		364.2 mm to 432.0 mm in the SS direction (A3S/11x17S)	
	A4 LEF 8.5x11 LEF B5 LEF		A5 SEF B5 SEF 5.5x8.5 SEF		A4 SEF 8.5x11 SEF		B4 SEF 8.5x13 SEF8.5x14 SEF8.5x13.4 SEF		A3 SEF 11x17 SEF	
	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided	1 Sided	2 Sided
Extra	13/13	NA	5/5	NA	7/7	NA	7/7	NA	7/7	NA
Heavy-weight										
Heavy-weight										
Gloss										

*1 : There is no 2 Sided for Plain Reload

*2 : IOT designed value: 23.55

6.1.14 Tray (Paper Feed)

6.1.14.1 Paper Trays

Paper Trays refer to all type of Trays that are pulled out towards the front. The Main Unit has the MSI and the 250-sheet Paper Tray (1 level) as standard configuration. As field options, the 500-sheet Paper Tray (Single Tray Module: STM) and the 500-sheet 2 Level Paper Tray (2-Tray Module: 2TM) are available. The MSI is installed on the left side of the IOT by standard.

6.1.14.2 Paper Tray Characteristics

*1: B Zone/Fresh Paper, P Paper

Table 1

IOT/ TM	Tray No.	Supported Paper (Standard Size)	Supported Paper (Non-Standard Size) (W x L) mm	Supported Paper Weight (gsm)	Storage Capacity *1	Remarks *3
IOT	Tray 1	Min: A5 SEF, 5.5x8.5" Max: A3 SEF, 11x17" SEF	Non-Standard Sizes not supported	60-90	250	Stack height: 27 mm
	MSI	Min: A5 SEF Max: A3 SEF, 11x17" SEF	Min: 127x98 *2 Max: 297x432	60-216	100	Stack height: 10 mm
STM	Tray 2	Min: A5 SEF Max: A3 SEF, 11x17" SEF	Non-Standard Sizes not supported	60-216	500	Stack height: 54 mm
2TM	Tray 3	Min: A5 SEF Max: A3 SEF, 11x17" SEF	Non-Standard Sizes not supported	60-216	500	Stack height: 54 mm
	Tray 4	Min: A5 SEF Max: A3 SEF, 11x17" SEF	Non-Standard Sizes not supported	60-216	500	Stack height: 54 mm

*1: B Zone/Fresh Paper, P Paper

6.1.14.3 Remaining Paper Amount Detection

- When the power is turned OFF during liftup, if the power is turned ON again without removing the Tray, and the Tray is inserted again while the Bottom Plate has not dropped, the remaining paper amount cannot be detected correctly.

Table 2

Target Tray	Detection & Notification	Remarks
Tray 1-4	None	
MSI	None	

- When the power is turned OFF during liftup, if the power is turned ON again without removing the Tray, and the Tray is inserted again while the Bottom Plate has not dropped, the remaining paper amount cannot be detected correctly.

6.1.14.4 Load while RUN

The function that enables loading of paper into a Tray that is not being used while printing is in progress is available.

6.1.15 Tray Size Factory Settings

The Factory Default Size Settings are as follows:

Table 1

Tray		Size
Main Unit Standard	250-sheet Tray	A4 LEF
STM	500-sheet Tray	A3 SEF
MSI	100-sheet Tray	A3 SEF
2TM	500-sheet Tray x2	A3 SEF

6.1.16 Classifications and Functions

6.1.16.1 Classifications and Functions

This section describes the relationship between paper type selection and paper feeding.

The Paper Type Settings for the Main Unit Tray and Option Trays can be set at the Key Operator Tools Mode (KO) or the CE Mode.

The Paper Type Settings for the MSI can also be set in the same way as for the Main Unit Trays at the KO Mode or the CE Mode.

O: Possible, X: Not Possible

Table 1

Tray	UI Classification	IOT Paper Type Data	Weight gsm	Function			
				Paper Size		Automatic 2 Sided Print *	Output Exit1
				Standard Size	Non-Standard Size		
Tray 1	Plain 1	Normal Paper	64-79	O	X	O	O
	Plain 2	Normal Paper	80-90	O	X	O	O
	Lightweight	Thin Paper	60-63	O	X	O	O
Tray 2	Plain 1	Normal Paper	64-79	O	X	O	O
Tray 3	Plain 2	Normal Paper	80-90	O	X	O	O
Tray 4	Heavyweight	Thick Paper 1	91-169	O	X	X	O
	Extra Heavy-weight	Thick Paper 2	170-216	O	X	X	O
	Lightweight	Thin Paper	60-63	O	X	O	O
MSI	Plain 1	Normal Paper	64-79	O	ÇO	O	O
	Plain 2	Normal Paper	80-90	O	ÇO	O	O
	Heavyweight	Thick Paper 1	91-169	O	ÇO	X	O
	Extra Heavy-weight	Thick Paper 2	170-216	O	ÇO	X	O
	Lightweight	Thin Paper	60-63	O	ÇO	O	O

*: Automatic 2 Sided Print cannot support Non-Standard Size paper.

6.1.16.2 Classifications and Paper Types

This is not specified as there is no classification.

6.1.17 Auto 2 Sided Printing

The paper sizes and weights that can be used for 2 sided print are as follows.

- Paper Size
 - Min: A5 SEF / B5 SEF
 - Max: A3 SEF, 11x17" SEF
- Paper Weight
 - 60 gsm to 90 gsm

6.1.18 Output Function

6.1.18.1 Center Tray

Supported Size: All paper sizes handled by the machine

Capacity: The average values of the no. of sheets that can be accommodated are as follows (using fresh paper).

Table 1

Configuration	Output Tray	Paper Type	Output Capacity
Center Tray	Top of machine	A4 LEF Standard Paper (P Paper)	250 sheets
		Heavyweight (90 to 216 gsm)	50 sheets

- The above is Simplex print
- The ability to accommodate A4 SEF and Letter SEF is not defined.
- Full Stack detection: None
- Finishing Capability
 - Can easily sort without folding or messing up the order
 - Paper curl: 20 mm or less (standard paper, 22 Degree Celsius/55% RH)
- Output orientation: Face down

6.1.18.2 SCT

SCT (Simple Catch Tray) output function not available.

6.1.18.3 OCT

OCT (Offset Catch Tray) output function not available.

6.1.18.4 Side Tray

Side Tray output function not available.

6.1.19 Resolution/Gradation

6.1.19.1 IOT Unit

- Resolution
Fast Scan: 600 dots/25.4 mm (by the ESS), Slow Scan: 600 dots/25.4 mm
- Gradation
256-Gradation

6.1.19.2 Copy Quality/Resolution

- Data resolution: Processing resolution for ESS output

Table 1

Printing Type		Standard
BW	Data Resolution (dpi)	600x600
	Depth	1bit
	IE (Black Text only)	None

- Output Resolution: The resolution that is printed by the IOT after receiving the above ESS data

Table 2

Printing Type		Standard
BW	Output Resolution (dpi)	600x600
	Depth	1bit
	IE (Black Text only)	None

6.1.20 Image Loss

Each paper size has the following image loss.

- Lead Edge: 4 +/-1.5 mm or shorter
- Side Edge: 4 +/-1.5 mm or shorter

To adjust the Edge Erase amount, refer to [ADJ 18.1.3 Edge Erase Value Adjustment] in Chapter 4 of the Service Manual.

6.1.21 Print Area

6.1.21.1 Paper Sizes that Can be Transported

The minimum and maximum paper sizes that can be transported in the Main Unit are as follows:

- Minimum transportable paper size:
 - Width IOT/STM/2TM: 148.5 mm (A5 SEF), MSI: 127 mm (Non-Standard Size)
 - Length MSI: 98 mm (Non-Standard Size)
- Maximum transportable paper size:
 - Width: 297.0 mm (A3)
 - Length: 431.8. mm (11x17)

6.1.21.2 Maximum Print Area

The printable area defines the area where the image can be printed. The maximum printable area of the Main Unit is as follows.

- Maximum printable area: 297.0 mm wide x 425.8 mm long

6.1.21.3 Maximum Print Guaranteed Area

The area where the image quality is guaranteed is referred to as Print Guaranteed Area. The Print Guaranteed Area of the Main Unit is as follows.

- Maximum print guaranteed area: 289.0 mm wide x 423.4 mm long

However, this print area is fully applied only when the Copy Job and Print Job uses paper with size A3 SEF in width direction or 11x17" SEF in length direction.

6.1.22 Alignment Specification

- Alignment Measurement Method and Specification (Calculated for 100%)
- Alignment (Calculated for 100%) (Upper IOT Side 1, Lower IOT Side 2)

- (-) means a deviation in the Lead direction while (+) means a deviation in the Tail direction.

NOTE: Effect of paper elongation and shrinkage due to environmental changes is not included.

Table 1

Item	SYSTEM Spec *1 (Platen)			SYSTEM Spec (DADF)	IOT			IIT	DADF	Conditions
	Tray	MSI *2	STM 2TM *5		Tray	MSI*2	STM 2TM *5			
Lead Regi *3	+/-2.8 mm +/-3.8 mm	+/-3.6 mm -	+/-3.6 mm -	+/-3.8 mm +/-4.4 mm	+/-2.4 mm +/-3.4 mm	+/-3.1 mm -	+/-3.1 mm -	+/-0.7 mm -	+/-1.5 mm +/-1.5 mm	
Side Regi *4	+/-3.4 mm +/-3.8 mm	+/-3.6 mm -	+/-3.4 mm -	+/-4.2 mm +/-4.6 mm	+/-3.0 mm +/-3.4 mm	+/-3.2 mm -	+/-3.0 mm -	+/-0.75 mm -	+/-1.5 mm +/-1.5 mm	
Lead Skew (200 mm)	+/-2.4 mm +/-2.8 mm	+/-2.7 mm -	+/-2.4 mm -	+/-2.8 mm +/-3.2 mm	+/-1.9 mm +/-2.3 mm	+/-2.2 mm -	+/-1.9 mm -	+/-0.8 mm -	+/-1.0 mm +/-1.0 mm	
Side Skew (400 mm)	+/-4.4 mm +/-4.6 mm	+/-4.8 mm -	+/-4.4 mm -	+/-5.4 mm +/-5.6 mm	+/-3.8 mm +/-4.0 mm	+/-4.4 mm -	+/-3.8 mm -	+/-1.2 mm -	+/-2.2 mm +/-2.2 mm	
Horizontal R/E Precision (All area) Applicable for 100%	+/-1.05% +/-1.4%	- -	- -	+/-1.6% +/-2.0%	+/-0.95% +/-1.3%	- -	- -	+/-0.31% -	+/-0.5% +/-0.5%	This value is for length of 280 mm
Vertical R/E Precision (All area) Applicable for 100%	+/-1.05% +/-1.4%	- -	- -	+/-1.6% +/-2.0%	+/-0.95% +/-1.3%	- -	- -	+/-0.31% -	+/-0.5% +/-0.5%	This value is for length of 400 mm
Perpendicularity (400 mm)	+/-3.6 mm	-	-	+/-3.4 mm	+/-2.3 mm	-	-	+/-1.7 mm	+/-2.2 mm +/-2.2 mm	
Linearity (Vertical)	1.8 mm	-	-	2.4 mm	1.4 mm	- -	-	0.8 mm -	0.5 mm 0.5 mm	This value is for length of 400 mm
Linearity (Horizontal)	1.8 mm	-	-	2.4 mm	1.4 mm	-	-	Not defined	-	This value is for length of 280 mm
Linearity (Diagonal)	1.8 mm	-	-	2.4 mm	1.4 mm	-	-	Not defined	-	This value is for length of 283 mm
Trapezoid Correction (400 mm)	+/-2.1 mm	-	-	+/-3.0 mm	+/-2.0 mm	-	-	+/-0.7 mm	+/-1.8 mm (/280 mm)	

*1: Specified in the state where the center of the document is set correctly.

*2: Specified in the state where the Side Guide is set correctly.

*3: The User Adjustment Pitch is 0.254 mm.

*4: The User Adjustment Pitch is 0.135 mm.

- DC Test Pattern (STP3600) (Figure 1)

*1: For the reference value in the table, measure the length of the corresponding position on the STP3600.

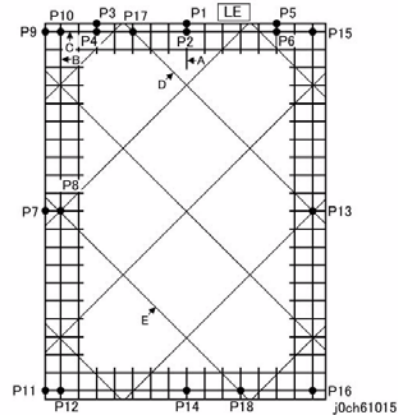


Figure 1 j0ch61015

How to Measure

Table 2

Measurement Item	How to Measure
Lead Regi [mm]	(P1 to P2) - Reference value *1
Side Regi [mm]	(P7 to P8) - Reference value *1
Lead Skew (200 mm) [mm]	(P5 to P6)-(P3 to P4)
Side Skew (400 mm) [mm]	(P9 to P10)-(P11 to P12)
Horizontal R/E Precision (All area) [%]	$[(P8 \text{ to } P13)-280]/280 \times 100$
Vertical R/E Precision (All area) [%]	$[(P2 \text{ to } P14)-400]/400 \times 100$
Perpendicularity [mm]	The shift between P14 and the perpendicular line that extends from the intersection of the straight line connecting P4 and P6 and the line A.
Linearity (Vertical) (400 mm) [mm]	The maximum shift between the intersections of the vertical line B with the various horizontal lines and the straight line connecting P10 and P12.
Linearity (Horizontal) (280 mm) [mm]	The maximum shift between the intersections of the horizontal line C with the various vertical lines and the straight line connecting P10 and P15.
Linearity (Diagonal) (280 mm) [mm]	The maximum shift between the intersections of the diagonal line D with the various lines and the straight line connecting P17 and P13, or the maximum shift of the intersections of the diagonal line E with the various lines and the straight line connecting P8 and P18, whichever is larger.
Trapezoid Correction [mm]	(P10 to P12)-(P15 to P16)

6.1.23 I/F Specification

6.1.23.1 I/F Layout Sketch

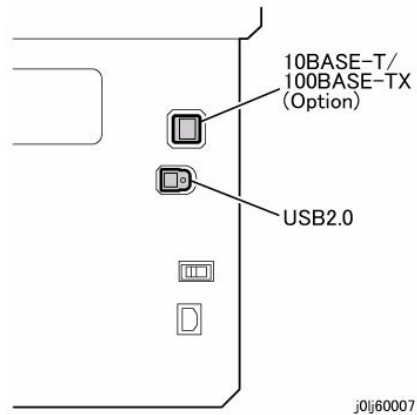


Figure 1 j0lj60007

6.1.23.2 I/F Overview

The overview of the supported I/F is as follows.

Table 1

No.	Name	Overview
1	10BASE-T/100BASE-TX I/F (Optional)	Connects the Network Cable
2	USB2.0 I/F	Connects the cable for USB 2.0.

6.1.24 Print Feature

*1: The speed may also drop due to Image Quality adjustment. The print speed may also drop depending on the document.

Table 1

Item	Contents
Type	Built-in Type
Continuous Print Speed*1	Conforms with the Basic Feature/Copy Feature
Resolution	Output Resolution: 600x600 dpi Data Processing Resolution: 600x600 dpi
Page-Description Language	Standard: HBPL Options: PCL6 - available when the Network Kit (PCL) Option is installed (Post Launch)
Supported Protocols Ethernet (Standard)	TCP/IP v4/v6 ((lpd, Port9100)
Supported OS	Windows XP, Windows XP Professional x64 Edition Windows Server 2003, Windows Server 2003 x64 Editions Windows Vista, Windows Vista 64 bit Windows Server 2008 (x86), Windows Server 2008 (x64) Windows Server 2008 R2 Windows 7, Windows 7 64 bit Windows 8, Windows 8 64 bit Windows Server 2012 (x64)
Built-in Fonts	Standard: None Options: PCL compatible 81 Fonts - available when the Network Kit (PCL) Option is installed (Post Launch)
Emulation	None
Interface	Standard: USB 1.1 / 2.0 Options: Ethernet 100 BASE-TX/10 BASE-T

*1: The speed may also drop due to Image Quality adjustment. The print speed may also drop depending on the document.

6.1.25 Scan Feature Specifications

*1: The scan speed differs depending on the document.

Table 1

Item	Contents
Type	Color Scanner
Scan Size	Conforms with the Basic Feature/Copy Feature
Scan Resolution	Monochrome: 600x600 dpi, 400x400 dpi, 300x300 dpi, 200x200 dpi Color: 300x300 dpi, 200x200 dpi
Scan Gradation	8 bit input and 8 bit output for each color of RGB
Document Scan Speed*1	Monochrome: 18 sheets/min [When using Xerox standard document (A4 LEF), 200 dpi, Scan to PC (TWAIN: USB)] Color: 4 sheets/min [When using Xerox standard document (A4 LEF), 200 dpi]
Interface	Standard: USB 1.1 / 2.0 Options: Ethernet 100 BASE-TX/10 BASE-T
Scan to PC(TWAIN: USB)	Output Format: Monochrome/Color: depends on application Supported OS: Windows XP, Windows XP Professional x64 Edition Windows Server 2003, Windows Server 2003 x64 Editions Windows Vista, Windows Vista 64 bit Windows Server 2008 (x86), Windows Server 2008 (x64) Windows Server 2008 R2 Windows 7, Windows 7 64 bit Windows 8, Windows 8 64 bit Windows Server 2012 (x64)
Scan to PC(SMB)	Supported Protocols: TCP/IP (SMB) Output Format: Monochrome: TIFF (MultiPages), PDF Color: JPEG, PDF
Scan to E-mail	Supported Protocols: TCP/IP (SMTP) Output Format: Monochrome: TIFF (MultiPages), PDF Color: JPEG, PDF

*1: The scan speed differs depending on the document.

6.1.26 Fax Feature

6.1.26.1 Fax Feature

Table 1

Item	Contents
Sent document size	Max: A3
Recording paper size	Max: A3, Min: A4
Transmission time	3 s or faster
Communication Mode	Super G3 / G3 ECM / G3 (ITU-T)
Scan line density	Standard: 8x3.85 lines/mm, 200x100 dpi High Quality: 8x7.7 lines/mm, 200x200 dpi Superfine (400 dpi): 16x15.4 lines/mm, 400x400 dpi
Encoding Method	MH, MR, MMR, JBIG
Communication speed	G3: 33.6 / 31.2 / 28.8 / 26.4 / 24.0 / 21.6 / 19.2 / 16.8 / 14.4 / 12.0 / 9.6 / 7.2 / 4.8 / 2.4 kbps
Applicable lines	PBX, Facsimile Communication Network (PSTN)

6.1.26.2 Direct Fax Feature

Table 2

Item	Contents
Sent document size	A3, B4, A4
Communication speed	According to the Fax Function
Communication resolution	Standard: 200x100 dpi (7.9x3.9 dots/mm) High Qualist: 200x200 dpi (7.9x7.9 dots/mm) Superfine: 400x400 dpi (15.7x15.7 dots/mm)
Applicable lines	According to the Fax Function
Supported OS	Windows XP, Windows XP Professional x64 Edition Windows Server 2003, Windows Server 2003 x64 Editions Windows Vista, Windows Vista 64 bit Windows Server 2008 (x86), Windows Server 2008 (x64) Windows Server 2008 R2 Windows 7, Windows 7 64 bit Windows 8, Windows 8 64 bit Windows Server 2012 (x64)

6.1.27 Document Feeder (DADF)

- CPS (Local) is an option

Table 1

Item	Contents
Type of Document Feeder	Duplex Auto Document Feeder
Originals Size/Type	Max: A3, 11x17" Min: A5 38 to 128 g/m2 (Duplex: 50 to 128 g/m2)
Document capacity *1	110 sheets
Document replacement speed (A4 LEF 1 Sided Copy)	WC 5022: 22 sheets/min WC 5024: 24 sheets/min
Size/Weight	Width: 540 mm or shorter x Depth: 492 mm or shorter x Height: 115 mm or shorter 6.7 kg or lighter

*1: Xerox P Paper

6.1.28 Billing Counter

6.1.28.2 Billing Counter

1. Type of Billing Counter
 - The following counters are provided for this product.

Table 1 (Counter Groups)

Type	Description
Group I	This counter group had been defined as technical standard to fulfill the billing needs by Operation Mode (by service type, such as Copy) and Output Color
Group II	The large size counter function

Table 2 (Counter Type)

Type	Description	Range	Remarks
BW Copy Counter	The total number of printed impressions that had been output by the machine as Copy Jobs	0~10,000,000	All Report types are counted as Print.
BW Print Counter	The total number of printed impressions for Print Jobs and Reports	0~10,000,000	
BW Fax Counter	The total number of printed impressions for Fax Jobs	0~10,000,000	
BW Large Size Counter	The total number of large size impressions for Copy/Print/Fax Print	0~10,000,000	

2. Format of Billing Counter
 - Including the backup, there are 2 sets of installed Billing Counters (that are defined in Type of Billing Counter). These Billing Counters are installed in the NVMs of the ESS / MCU PWB.
3. Billing Meter
 - a. Billing Meter Display
 - Meter 1: Equivalent to the total number of sheets for Copy Counter, Print Counter, and Fax Counter
 - Meter 2: Equivalent to the number of sheets for Copy Counter
 - Meter 3: Equivalent to the number of sheets for Print Counter
 - Meter 4: Equivalent to the number of sheets for Fax Counter
 - Meter 5: Total number of sheets for Large Size

b. Billing Meter Notification

Table 3

Meter	Check Method			
	UI	MIB	Report	CWIS
Meter 1	O	O	O	X
Meter 2	O	O	O	X
Meter 3	O	O	O	X
Meter 4	O	O	O	X
Meter 5	O	O	O	X

6.1.29 Environmental Feasibility (Energy Star Program)

- The energy consumption for mode transition, recovery time, and the various modes are as follows.

(Power Supply: AC 230V)

Table 1

Config	TEC Method (kWh)	
	Electrical Power (Energy Star Standard)	Electrical Power Report
22 CPM CPFS	1.79	1.38
24 CPM CPFS	1.93	1.46

Table 2

Config	Low Power Mode (Energy Saver Mode 2)				
	Electrical Power (BA Standard) (W)	Electrical Power (Catalog) (W)	Electrical Power (W) *1*3	Transition Time *2*3	Recovery Time (BA Report) *3
22 CPM CPFS	-	41	39.02	1 min	-
24 CPM CPFS	-	41	39.02	1 min	-

*1: The electrical power (actual measured value) that is used as the base for TEC method electrical power report.

*2: The factory default settings value.

*3: Used upon obtaining the Blue Angel Mark.

6.2.1 Tools and Service Consumables

6.2.1.1 Tools

The following tools can be stored in the CE Basic Tool Set as standard.

Table 1

No.	TOOL No.	TOOL NAME
1	499T 00247	Test Pattern (Mono A3X1)
2	499T 00283	Test Pattern (A3) for DADF Adjustment
3	499T 00301	Screw Driver (-) 3x50
4	499T 00353	Stubby Driver
5	499T 00355	Screw Driver (+) 100 mm
6	499T 01423	Box Driver with Magnet (5.5 mm)
7	499T 01901	Side Cutting Nipper
8	499T 02005	Round Nose Plier-Safety
9	499T 02327	Digital Multi-Meter Set
10	499T 02601	Silver Scale 150 mm
11	499T 08104	Flash Light (U-3)
12	499T 08902	Brush
13	499T 09588	Needle Adapter
14	499T 07776	USB Cable For PSW
15	499T 00276	Color Test Pattern

6.2.1.2 Service Consumables

There are no Service Consumables unique to this model.

Whenever special consumables for the machine are required, it will be notified in a separate technical information.

6.2.2 Consumables

Table 1

Consumables	Product Code	CRU/ERU	Life End *1
Standard Capacity Toner Cartridge	006R01573	CRU	9,000 PV
Drum Cartridge	013R00670	CRU	66,000 PV (22 PPM) 78,000 PV (24 PPM) (343 kCycle)

*1 As the PV may differ greatly from the target value depending on the usage conditions, it should only be regarded as a reference value.

6.3.1.1 DADF Input Component Check List

Table 1 DADF Input Component Check List

Chain-Link	Component Name	UI Display	Description
005-102	DADF DOCUMENT SET SENSOR	H	H: Document detected at DADF DOCUMENT SET SENSOR
005-110	DADF REGI. SENSOR	H	H: Document detected at DADF REGI SENSOR
005-206	DADF PRE REGI. SENSOR	L	L: Document detected at DADF PRE REGI SENSOR
005-211	DADF INVERT SENSOR	L	L: Document detected at DADF INVERT SENSOR
005-212	DADF INTERLOCK SWITCH	H	H: FEEDER OPEN SENSOR
005-213	DADF OPEN SENSOR	H	H: DADF PLATEN INTERLOCK OPEN
005-215	DADF TRAY SET GUIDE SENSOR 1	H	H: The Actuator is not blocked.
005-216	DADF TRAY SET GUIDE SENSOR 2	H	H: The Actuator is not blocked.
005-217	DADF TRAY SET GUIDE SENSOR 3	H	H: The Actuator is not blocked.
005-221	DOCUMENT TRAY SIZE SENSOR 1	L	L: Document detected at DOCUMENT TRAY SIZE SENSOR 1
005-222	DOCUMENT TRAY SIZE SENSOR 2	L	L: Document detected at DOCUMENT TRAY SIZE SENSOR 2
005-224	SACN START	H	H: SCAN START signal ON detected
005-228	APS EXIST	L	L: APS SENSOR detected

6.3.1.2 IIT Input Component Check List

Table 1 IIT Input Component Check List

Chain-Link	Component Name	UI Display	Description
062-201	SHEET ABORT	L	L: Registers a document
062-212	IIT REGI. SENSOR	L	L: IIT REGI SENSOR deactuated
062-240	DADF EXIST	H	H: DADF not installed
062-251	APS Sensor 1	L	L: Document detected
062-272	SCAN START	L	L: Scanning possible
062-300	Platen I/L Switch	L -> H -> L	L: -> H -> L: Platen closed -> Platen open
062-301	Angle Sensor	H	H: Platen closed

6.3.1.4 IOT Input Component Check List

Table 1 IOT Input Component Check List

Chain-Link	Component Name	UI Display	Description
071-105	REGI SENSOR	H	H: Paper detected at REGI SENSOR
071-106	FUSING UNIT EXIT SENSOR	H	H: Paper detected at FUSING UNIT EXIT SENSOR
071-300	L/H COVER INTERLOCK SWITCH	L	L: L/H COVER INTERLOCK SWITCH is closed
071-301	FRONT COVER INTERLOCK SWITCH	L	L: FRONT COVER INTERLOCK SWITCH is closed
072-300	STM LEFT COVER SWITCH	L	L: STM LEFT COVER SWITCH is closed
072-301	2TM LEFT COVER SWITCH	L	L: 2TM LEFT COVER SWITCH is closed
072-100	TRAY 1 NO PAPER SENSOR	H	H: Paper detected at TRAY 1 NO PAPER SENSOR
072-101	TRAY 2 NO PAPER SENSOR	L	L: Paper detected at TRAY 2 NO PAPER SENSOR

Table 1 IOT Input Component Check List

Chain-Link	Component Name	UI Display	Description
072-102	TRAY 3 NO PAPER SENSOR	L	L: Paper detected at TRAY 3 NO PAPER SENSOR
072-103	TRAY 4 NO PAPER SENSOR	L	L: Paper detected at TRAY 4 NO PAPER SENSOR
072-104	MSI NO PAPER SENSOR	H	H: Paper detected at MSI NO PAPER SENSOR
072-105	TRAY 2 NUDGER LEVEL SENSOR	L	L: The Actuator is not blocked.
072-106	TRAY 2 FEED OUT SENSOR	H	H: Paper detected at TRAY 2 FEED OUT SENSOR
072-107	TRAY 2 PAPER SIZE SWITCH	H	H: SW 5 of TRAY 2 PAPER SIZE SWITCH is ON
072-108	TRAY 3 NUDGER LEVEL SENSOR	L	L: The Actuator is not blocked.
072-109	TRAY 3 FEED OUT SENSOR	H	H: Paper detected at TRAY 3 FEED OUT SENSOR
072-110	TRAY 3 PAPER SIZE SWITCH	H	H: SW 5 of TRAY 3 PAPER SIZE SWITCH is ON
072-111	TRAY 4 NUDGER LEVEL SENSOR	L	L: The Actuator is not blocked.
072-112	TRAY 4 FEED OUT SENSOR	H	H: Paper detected at TRAY 4 FEED OUT SENSOR
072-113	TRAY 4 PAPER SIZE SWITCH	H	H: SW 5 of TRAY 4 PAPER SIZE SWITCH is ON
072-114	TRAY 1 PAPER SIZE SWITCH	H	H: SW 5 of TRAY 1 PAPER SIZE SWITCH is ON

6.3.2.1 DADF Output Component Check List

Table 1 DADF Output Component Check List

Chain-Link	Component Name	Description
005-004	DADF FEED MOTOR CW 82.5 mm/s	Drives the DADF FEED MOTOR at 82.5 mm/s in CW direction. Turns ON for 50 s -> Auto OFF
005-005	DADF FEED MOTOR CW 110.0 mm/s	Drives the DADF FEED MOTOR at 110.0 mm/s in CW direction. Turns ON for 50 s -> Auto OFF
005-008	DADF FEED MOTOR CW 165.0 mm/s	Drives the DADF FEED MOTOR at 165.0 mm/s in CW direction. Turns ON for 50 s -> Auto OFF
005-010	DADF FEED MOTOR CW 220.0 mm/s	Drives the DADF FEED MOTOR at 220.0 mm/s in CW direction. Turns ON for 50 s -> Auto OFF
005-046	DADF FEED MOTOR CCW 82.5 mm/s	Drives the DADF FEED MOTOR at 82.5 mm/s in CCW direction. Turns ON for 50 s -> Auto OFF
005-047	DADF FEED MOTOR CCW 110.0 mm/s	Drives the DADF FEED MOTOR at 110.0 mm/s in CCW direction. Turns ON for 50 s -> Auto OFF
005-048	DADF FEED MOTOR CCW 165.0 mm/s	Drives the DADF FEED MOTOR at 165.0 mm/s in CCW direction. Turns ON for 50 s -> Auto OFF
005-049	DADF FEED MOTOR CCW 220.0 mm/s	Drives the DADF FEED MOTOR at 220.0 mm/s in CCW direction. Turns ON for 50 s -> Auto OFF
005-062	DADF FEED CLUTCH	Drives the DADF FEED CLUTCH. Turns ON for 3 s -> Auto OFF
005-072	EXIT NIP RELEASE SOLENOID	Turns ON the EXIT NIP RELEASE SOLENOID. Turns ON for 3 s -> Auto OFF
005-083	DOCUMENT READY	Turns ON the DOCUMENT READY signal.
005-088	Image Area ON	Turns ON the Image Area signal for 5 s.
005-098	TAKEAWAY CLUTCH	Turns ON the TAKEAWAY CLUTCH for 3 s.

6.3.2.2 IIT Output Component Check List

Table 1 IIT Output Component Check List

Chain-Link	Component Name	Description	Remarks
062-002	IIT Exposure Lamp	Turns ON the IIT Exposure Lamp. Turns the Lamp ON for 180 s -> Auto OFF	Will also turn OFF when Stop is instructed before Auto OFF.
062-005	CARRIAGE MOTOR (Scan direction)	Moves it 50 mm from current position in Scan direction -> Auto OFF	Will not accept Stop instruction before Auto OFF.
062-006	CARRIAGE MOTOR (Return direction)	Moves it 50 mm from current position in Return direction -> Auto OFF	Will not accept Stop instruction before Auto OFF.
062-091	Exchange to DADF	Turns ON the document exchange command signal to the DADF.	

6.3.2.4 IOT Output Component Check List

Table 1 IOT Output Component Check List

Chain-Link	Component Name	Description
042-001	MAIN DRIVE MOTOR On	Drives the MAIN DRIVE MOTOR.

Table 1 IOT Ouput Component Check List

Chain-Link	Component Name	Description
042-002	NOHAD FAN (High Speed)	Drives the NOHAD FAN at high speed.
042-003	NOHAD FAN (Low Speed)	Drives the NOHAD FAN at low speed.
061-001	ROS Motor On	Turns ON the Polygon Motor.
071-001	REGI. CLUTCH On	Turns ON the REGI CLUTCH.
071-002	DUPLEX CLUTCH On	Turns ON the DUPLEX CLUTCH.
071-003	INVERT MOTOR (CW Phase1-2)	Drives the INVERT MOTOR in CW Phase 1-2.
071-004	INVERT MOTOR (CW Phase2)	Drives the INVERT MOTOR in CW Phase 2.
071-005	INVERT MOTOR (CCW Phase1-2)	Drives the INVERT MOTOR in CCW Phase 1-2.
071-006	INVERT MOTOR (CCW Phase2)	Drives the INVERT MOTOR in CCW Phase 2.
072-001	TRAY 1 FEED CLUTCH On	Turns ON the TRAY 1 FEED CLUTCH.
072-002	TRAY 2 FEED/LIFT UP MOTOR (Feed)	Performs the Paper Feed operation using TRAY 2 FEED/LIFT UP MOTOR.
072-003	TRAY 3 FEED/LIFT UP MOTOR (Feed)	Performs the Paper Feed operation using TRAY 3 FEED/LIFT UP MOTOR.
072-004	TRAY 4 FEED/LIFT UP MOTOR (Feed)	Performs the Paper Feed operation using TRAY 4 FEED/LIFT UP MOTOR.
072-005	STM TAKEAWAY ROLL CLUTCH On	Turns ON the STM TAKEAWAY ROLL CLUTCH.
072-006	2TM TAKEAWAY ROLL CLUTCH On	Turns ON the 2TM TAKEAWAY ROLL CLUTCH.
072-007	STM TAKEAWAY MOTOR On	Drives the STM TAKEAWAY MOTOR.
072-008	2TM TAKEAWAY MOTOR On	Drives the 2TM TAKEAWAY MOTOR.
072-009	TRAY 2 FEED/LIFT UP MOTOR (Lift Up)	Performs the Tray Lift Up operation using TRAY 2 FEED/LIFT UP MOTOR.
072-010	TRAY 3 FEED/LIFT UP MOTOR (Lift Up)	Performs the Tray Lift Up operation using TRAY 3 FEED/LIFT UP MOTOR.
072-011	TRAY 4 FEED/LIFT UP MOTOR (Lift Up)	Performs the Tray Lift Up operation using TRAY 4 FEED/LIFT UP MOTOR.
072-014	MSI FEED CLUTCH On	Turns ON the MSI FEED CLUTCH.
091-001	Xero Combination	Carries out combined operation of the following components. <ul style="list-style-type: none"> • BCR AC Bias On • BCR DC Bias On • DEVE DC Bias On • MAIN DRIVE MOTOR On • BTR +Bias On
091-002	BCR AC Bias On	Turns ON the BCR AC Bias.
091-003	BCR DC Bias On	Turns ON the BCR DC Bias.
091-004	DEVE DC Bias On	Turns ON the DEVE DC Bias.
091-005	BCR AC DC Bias On	Turns ON the AC and DC BCR Bias.
092-001	TONER DISPENSE MOTOR On	Drives the TONER DISPENSE MOTOR.
094-001	BTR+ Bias On	Turns ON the BTR positive bias.
094-002	BTR- Bias On	Turns ON the BTR negative bias.

6.3.3.2 Analog Monitor List

Table 1 Analog Monitor List

Chain-Link	Component Name	Description
072-050	TRAY 1 PAPER SIZE Sensor	Displays the AD value for Tray 1 paper size. For the relationship between the Tray 1 paper size and the AD value, refer to "BSD Chain 7.1" in Chapter 7
072-051	TRAY 2 PAPER SIZE Sensor	Displays the AD value for Tray 2 paper size. For the relationship between the Tray 2 paper size and the AD value, refer to "BSD Chain 7.1" in Chapter 7
072-052	TRAY 3 PAPER SIZE Sensor	Displays the AD value for Tray 3 paper size. For the relationship between the Tray 3 paper size and the AD value, refer to "BSD Chain 7.1" in Chapter 7
072-053	TRAY 4 PAPER SIZE Sensor	Displays the AD value for Tray 4 paper size. For the relationship between the Tray 4 paper size and the AD value, refer to "BSD Chain 7.1" in Chapter 7
092-050	ATC_SNR	Displays the AD value that was detected by the ATC SENSOR. <ul style="list-style-type: none"> • AD Value Retrieval Range: 0~999 • Normal Range: 100~900 • Failure Determination Level: Out of the above range
010-050	Heat Roll STS Center	Displays the AD value for the temperature that was detected by the FUSING UNIT CENTER THERMISTOR. <ul style="list-style-type: none"> • AD Value Retrieval Range: 0~1023 • Normal Environment: 488 (210 degrees C) to 760 (145 degrees C) • High Temperature Failure Determination Level: when 362 and lower [245 degrees C and higher] is detected continuously for the specified time.
010-051	Heat Roll STS Rear	Displays the AD value for the temperature that was detected by the FUSING UNIT REAR THERMISTOR. <ul style="list-style-type: none"> • AD Value Retrieval Range: 0~1023 • Normal Environment: 490 (210 degrees C) to 761 (145 degrees C) • High Temperature Failure Determination Level: when 292 and lower [270 degrees C and higher] is detected continuously for the specified time.

6.3.4.1 DADF HFSI List

Table 1 DADF HFSI List

Chain-Link	Content Name	Life Value	Setting Range	Count Condition	Description
955-806	Document Feed (CVT DADF machine)	200,000	0~5,000,000	Counts up when the Feed Sensor turns ON HFSI -> Document Feed count after clearing HFSI Counter Recycle -> Total Document Feed count without clearing To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	No. of sheets fed from the CVT Tray The NVM is controlled by the CVT
955-807	Document Feed Simp (CVT DADF machine)	360,000	0~5,000,000	Counts the no. of document sheets fed in Simplex mode To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	The NVM is controlled by the CVT * Life is common to 955-808
955-808	Document Feed Dup (CVT DADF machine)	360,000	0~5,000,000	Counts the no. of document pages fed in Duplex mode To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	The NVM is controlled by the CVT * Life is common to 955-807
955-810	Platen Open/Close Count (CVT DADF machine)	180,000	0~1,000,000	Counts up when the Platen Interlock opens To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	The NVM is controlled by the CVT
955-812	Takeaway Clutch ON Count	1,080,000	0~1,000,000	Counts up at Takeaway Clutch On	The NVM is controlled by the CVT
955-826	Nip Release Solenoid ON Count	500,000	0~1,000,000	Counts up at Nip Release Solenoid On	The NVM is controlled by the CVT
955-828	Feed Clutch ON Count	360,000	0~1,000,000	Counts up at Feed Clutch On	The NVM is controlled by the CVT

6.3.4.2 IIT HFSI List

Table 1 IIT HFSI List

Chain-Link	Content Name	Life Value	Setting Range	Count Condition	Description
956-802	IIT Scan	-	0~6,881,175	Scan Count (including pre-Scan) Counts up with each scan HFSI -> Scan count after clearing HFSI Counter Recycle -> Total Scan count without clearing To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	The NVM Write timing is T.B.D. 1 time increments Max count value = 6,000,000 times and above Only count Platen Scans, not CVT Scans
956-803	Lamp ON Time	-	0~7,864,200	Lamp ON Time Starts timing when the lamp turns ON Stops timing when the lamp turns OFF Writes to the NVM during CRG Initialize HFSI -> Lamp ON time after clearing HFSI Counter Recycle -> Total Lamp ON time without clearing To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	Lamp Life 2000 hours 1 second increments Max count value = 7,200,000 s and above Counts the total duration when the lamp is ON (including AGOC, LampCheck).
956-804	Lamp ON Count	-	0~6,881,175	Lamp ON count after clearing HFSI Counter Counts up when the lamp turns ON Writes to the NVM during CRG Initialize To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'.	Lamp Life 6,000,000 times 1 time increments Max count value = 6,000,000 times and above Counts the no. of times the lamp turns ON (including AGOC, LampCheck).
956-808	Platen I/L Open Count	-	0~1,966,050	Counts up at every detection of the full open status of the Angle Sensor.	Count increment: 1 time Max count value: 1000K times or more

6.3.4.4 IOT HFSI List

Table 1 IOT HFSI List

Chain-Link	HFSI Name	Life Value	Count Condition	Description
950-800	BTR Unit (X'fer)	100,000	Counts up when paper passes through the Fusing Unit Exit Sensor. The count value is determined based on multiples of paper length in 216 mm.0 mm < Paper Length <= 216 mm: 1 Count Up216 mm < Paper Length <= 432 mm: 2 Counts Up To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 1,000,000 and the maximum value is retained until the counter is cleared.	BTR Unit ON Count (PV conversion)
950-801	Fusing Unit	17,500,000	Counts up when paper passes through the Fusing Unit Exit Sensor. The conversion value is calculated with 1 sheet of A4 L being equivalent to a value of 100. Count value = (the rest of the former counter up + paper length)[0.1mm]/210 To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 9,999,999 and the maximum value is retained until the counter is cleared.	No. of sheets transported through the Fusing Unit (A4 LEF conversion value)
950-802	MSI Feed Roll/Nudger Roll/Retard Pad	50,000	Counts up at feeding from MSI. To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 999,999 and the maximum value is retained until the counter is cleared.	No. of sheets fed to MSI Feed Roll, MSI Nudger Roll, and MSI Retard Pad
950-803	Tray1 Feed Roll/Retard Pad	50,000	Counts up at feeding from Tray 1. To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 999,999 and the maximum value is retained until the counter is cleared.	No. of sheets fed to Tray 1 Feed Roll and Tray 1 Retard Pad.
950-804	Tray2 Feed/Retard/Nudger Roll	300,000	Counts up at feeding from Tray 2. To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 999,999 and the maximum value is retained until the counter is cleared.	No. of sheets fed through Tray 2 Feed Roll, Tray 2 Retard Roll, and Tray 2 Nudger Roll
950-805	Deodorant Filter	-	Not used	
950-807	Drum_Cycle_Counter	[22PPM] 343K Cycle (Ref 66K PV) [24PPM] 343K Cycle (Ref 78K PV)	Counts up at each 0.1 cycle. This can count up to the maximum of 8,000,000 and the maximum value is retained until the counter is cleared.	
950-808	Tray3 Feed/Retard/Nudger Roll	300,000	Counts up at feeding from Tray 3. To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 999,999 and the maximum value is retained until the counter is cleared.	No. of sheets fed through Tray 3 Feed Roll, Tray 3 Retard Roll, and Tray 3 Nudger Roll

Table 1 IOT HFSI List

Chain-Link	HFSI Name	Life Value	Count Condition	Description
950-809	Tray4 Feed/Retard/Nudger Roll	300,000	Counts up at feeding from Tray 4. To clear the counter, enter the HFSI Counter Read / Clear Mode and select [Clear] -> [Start] to clear it to '0'. This can count up to the maximum of 999,999 and the maximum value is retained until the counter is cleared.	No. of sheets fed through Tray 4 Feed Roll, Tray 4 Retard Roll, and Tray 4 Nudger Roll
950-810	COUNT_DRUM_PV_HFSI_COUNTER	-	Not Used	-

6.3.4.5 IOT HFSI List - System Administrator Mode Version

Purpose

This provides a function to initialize the HFSI Counter and Replacement Flag in the System Administrator Mode, which is limited to the Periodic Replacement Parts that a User can replace.

Procedure

1. Enter the System Administrator Mode.
 - a. Press <Log In/Out> for 4 seconds or longer.
 - b. Use the keypad to enter the Password [11111] *1 and select [OK].

NOTE: *1 Default Value

2. Use <Up>/<Down> to select [System Settings] and then select [OK] or [->].
3. Use <Up>/<Down> to select [Maintenance] and then select [OK] or [->].
4. Input the following number for the applicable parts and then press <Start> to display the [Part Name] and [Current Value]. Pressing <Start> again clears the counter.

Table 1

Number	Component Name
950800	X'fer (BTR Unit)
950801	Fusing Unit Assy
950802	MSI Feed
950803	Tray 1 Feed
950804	Tray 2 Feed
950805	Deodorant Filter
950806	VOC Filter
950807	Drum Cartridge
950808	Tray 3 Feed
950809	Tray 4 Feed
752133 *1	Manual Toner Change

*1: 752133 is not an HFSI Counter. It is something used for clearing the Replacement Flag in the event of a replacement. The Current Value displays '0'.

5. Check the value using Step 4 as needed.
6. Exit from the System Administrator Mode.
 - a. Press <Log In/Out>. *2

*2: If any of the above parts had been cleared, the machine will reboot upon exiting from the System Administrator Mode.

6.3.5 NVM DADF

Table 1 NVM DADF

Chain-Link	NVM Name	Setting Range	Default Value	step	Description
711-001	DADF Lead Reg. Adjustment (Side 1) (220.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-140 value is Default and 711-001 value is 120) 2) Adjustment Range (when 711-140 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-140 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-002	DADF Lead Reg. Adjustment (Side 1) (165.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-140 value is Default and 711-002 value is 120) 2) Adjustment Range (when 711-140 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-140 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-003	DADF Lead Reg. Adjustment (Side 1) (110.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-140 value is Default and 711-003 value is 120) 2) Adjustment Range (when 711-140 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-140 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-004	DADF Lead Reg. Adjustment (Side 1) (82.5 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-140 value is Default and 711-004 value is 120) 2) Adjustment Range (when 711-140 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-140 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-021	DADF Lead Reg. Adjustment (Side 2) (220.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-141 value is Default and 711-021 value is 120) 2) Adjustment Range (when 711-141 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-141 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-022	DADF Lead Reg. Adjustment (Side 2) (165.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-141 value is Default and 711-022 value is 120) 2) Adjustment Range (when 711-141 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-141 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-023	DADF Lead Reg. Adjustment (Side 2) (110.0 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-141 value is Default and 711-023 value is 120) 2) Adjustment Range (when 711-141 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-141 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)

Table 1 NVM DADF

Chain-Link	NVM Name	Setting Range	Default Value	step	Description
711-024	DADF Lead Reg. Adjustment (Side 2) (82.5 mm/s)	105-135	120	0.1 mm	1) Default Value: 0 mm (When 711-141 value is Default and 711-024 value is 120) 2) Adjustment Range (when 711-141 value is Default) : +1.5 mm (105 pulse) / -1.5 mm (135 pulse) 3) Adjustment Range (when 711-141 value is 80 to 230) : +5.5 mm (80 pulse) / -12.5 mm (230 pulse)
711-041	DADF Tail Edge Adjustment (Side 1) (220.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-042	DADF Tail Edge Adjustment (Side 1) (165.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-043	DADF Tail Edge Adjustment (Side 1) (110.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-044	DADF Tail Edge Adjustment (Side 1) (82.5 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-061	DADF Tail Edge Adjustment (Side 2) (220.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-062	DADF Tail Edge Adjustment (Side 2) (165.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-063	DADF Tail Edge Adjustment (Side 2) (110.0 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-064	DADF Tail Edge Adjustment (Side 2) (82.5 mm/s)	0-255	151	0.0718 mm	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Tail Edge adjustment = Lead Regi adjustment value + Tail Edge fine adjustment value
711-081	Vertical Reduce/Enlarge Fine Adjustment 1 (High:TBD, Mid:220.0 mm/s, Low:TBD)	0-40	20	0.001	Default Value: 0% (20), +/-2% (+/-20), 0.1% increments Adjusts only the Top Speed for Feed Motor.
711-082	Vertical Reduce/Enlarge Fine Adjustment 2 (High:TBD, Mid:165.0 mm/s, Low:TBD)	0-40	20	0.001	Default Value: 0% (20), +/-2% (+/-20), 0.1% increments Adjusts only the Top Speed for Feed Motor.
711-083	Vertical Reduce/Enlarge Fine Adjustment 3 (High:TBD, Mid:110.0 mm/s, Low:TBD)	0-40	20	0.001	Default Value: 0% (20), +/-2% (+/-20), 0.1% increments Adjusts only the Top Speed for Feed Motor.
711-084	Vertical Reduce/Enlarge Fine Adjustment 4 (High:TBD, Mid:82.5 mm/s, Low:TBD)	0-40	20	0.001	Default Value: 0% (20), +/-2% (+/-20), 0.1% increments Adjusts only the Top Speed for Feed Motor.
711-140	DADF Lead Regi Offset NVM(Side 1)	80-230	120	0.1 mm	Default Value: 0 mm (120 pulse), +4.0 mm (80 pulse) / -11.0 mm (230 pulse)
711-141	DADF Lead Regi Offset NVM(Side 2)	80-230	120	0.1 mm	Default Value: 0 mm (120 pulse), +4.0 mm (80 pulse) / -11.0 mm (230 pulse)
711-142	DADF Tail Edge Replace All NVM (Side 1)	0-255	151	0.0718 mm (x2 for Soft)	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Rewrites all data of 711-041 to 711-044 with the specified data.
711-143	DADF Tail Edge Replace All NVM (Side 2)	0-255	151	0.0718 mm (x2 for Soft)	Default Value: 0 mm (151 pulse), +10.8 mm (-151 pulse) / -7.5 mm (+104 pulse) Rewrites all data of 711-061 to 711-064 with the specified data.
711-144	Vertical Ratio Fine Adjustment - Replace All	0-40	20	0.001	Default Value: 0% (20), +/-2% (+/-20), 0.1% increments Adjusts only the Top Speed for Feed Motor. Rewrites all data of 711-081 to 711-084 with the specified data.
711-150	Loop Amount Adjustment (Side 1) (x1 Pulse)	0-9	6	40 Pulse	Feed Roll Step: 0.026112 NVM 1Count: 0.026112 * 40 = 1.044 mm
711-151	Loop Amount Adjustment (Side 2) (x6 Pulse)	0-14	5	30 Pulse	Exit Roll Step: 0.035904 NVM 1Count: 0.035904 * 30 = 1.077 mm

Table 1 NVM DADF

Chain-Link	NVM Name	Setting Range	Default Value	step	Description
711-155	Feed Gear Initialize Operation	0-1	0	-	0: Do not perform initialize operation 1: Perform initialize operation
711-158	Stop Position Adjustment During Invert (T27)	0-40	20	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-159	TA Clutch OFF Timing (T21)	0-20	0	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-160	Feed Clutch OFF Timing (Side 1 Loop Unravel Timing) (T20)	0-40	20	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-161	Solenoid ON Timing (Side 2 Loop Unravel Timing) (T22)	0-40	20	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-164	Document Slow Scan Size Correction Value	0-100	50	0.1 mm	Correction value for [Size Detection Auto-Correction Function] Document Size Correction Value: +/-5 mm
711-174	Nudger Lift Up Adjustment (High) (T26 ms)	0-40	20	4ms	Default value: 0 ms +/-80 ms, 4 ms increments
711-175	Nudger Lift Up Adjustment (Middle) (T26 ms)	0-40	20	4ms	Default value: 0 ms +/-80 ms, 4 ms increments
711-176	Nudger Lift Up Adjustment (Low) (T26 ms)	0-40	20	4ms	Default value: 0 ms +/-80 ms, 4 ms increments
711-187	Letter Mode Setting	0-15	0	-	Operation setting for letter documents
711-188	Prohibited Combination Jam Detection Settings (No Mixed Mode)	0-1	1	-	When in No Mixed Mode: 0: Do not detect Jams due to prohibited combinations 1: Detect Jams due to prohibited combinations
711-190	Too Long Jam Settings Switch	0-165	40	15 mm	Default value: 1275 mm (40), -600 mm/+1875 mm, 15 mm increments
711-191	Too Short Jam Detection Settings	0-1	1	-	0: Do not detect Jams 1: Detect Jams
711-198	DADF OPEN SENSOR Availability	0-1	0		There is no DADF OPEN SENSOR at the DADF: 1
711-199	Drive Type	0-3	1	-	0: High, 1: Middle, 2: Low, 3: Dummy
711-202	Speed Up Start Position Adjustment During Duplex (T25)	0-40	20	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-204	Solenoid ON Timing During Invert Output (T24)	0-20	10	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).
711-205	Feed Motor Reverse Start Time Adjustment Value at Side 2 (T1 ms)	0-20	4	4 ms	Default Value: 0 ms, +80 ms/-20 ms, 4 ms increments
711-209	Invert Start Time Adjustment Value (T6 ms)	0-25	5	4 ms	Default Value: 0 ms, +80 ms/-20 ms, 4 ms increments
711-213	DADF Stamp Solenoid ON Time Adjustment	0-20	5	2 ms	Default value: 10 ms, +30 ms/-4 ms, 2 ms increments
711-214	DADF Stamp Position Adjustment Side 1 (T23)	0-30	15	0.5 mm	Default Value: 0 mm, +7.5 mm/-7.5 mm, approx. 0.5 mm increments Default Value is 10 mm from Tail Edge
711-215	DADF Stamp Position Adjustment Side 2 (T28)	0-40	20	0.2 mm	Sets the adjustment time so that the distance (step distance) is the same for every speed. Adjustment Value (ms) = (NVM Input Value - NVM Default Value) / Transport Speed x 1000 x 0.2 (mm step).

Table 1 NVM DADF

Chain-Link	NVM Name	Setting Range	Default Value	step	Description
711-220	Usage of DPM Control Parameter Instructed from the Controller	0-1	1	-	0: Cont DPM Parameter Reject 1: Cont DPM Parameter Accept
711-221	DADF DPM Control Parameter	0-255	101	-	100th Digit: Drive Type (0: High, 1: Middle, 2: Low) 10th Digit: Loop Control 1st Digit: Pre Regist Speed
711-272	Side 1 Side Regi Adjustment Value (ADF-IIT Combine Adjustment Value Data 3)	0-240	120	-	Side 1 Side Regi Adjustment Value
711-274	Side 2 Side Regi Adjustment Value (ADF-IIT Combine Adjustment Value Data 5)	0-240	120	-	Side 2 Side Regi Adjustment Value
711-276	ADF-IIT Combine Adjustment Value Data 7	0-255	0	-	Adjustment Value Data 7 sent to IIT during ADF-IIT Combine
711-277	ADF-IIT Combine Adjustment Value Data 8	0-255	0	-	Adjustment Value Data 8 sent to IIT during ADF-IIT Combine
711-278	ADF-IIT Combine Adjustment Value Data 9	0-255	0	-	Adjustment Value Data 9 sent to IIT during ADF-IIT Combine
711-279	ADF-IIT Combine Adjustment Value Data 10	0-255	0	-	Adjustment Value Data 10 sent to IIT during ADF-IIT Combine
711-280	ADF-IIT Combine Adjustment Value Data 11	0-255	0	-	Adjustment Value Data 11 sent to IIT during ADF-IIT Combine
711-281	ADF-IIT Combine Adjustment Value Data 12	0-255	0	-	Adjustment Value Data 12 sent to IIT during ADF-IIT Combine
711-282	ADF-IIT Combine Adjustment Value Data 13	0-255	0	-	Adjustment Value Data 13 sent to IIT during ADF-IIT Combine
711-283	ADF-IIT Combine Adjustment Value Data 14	0-255	0	-	Adjustment Value Data 14 sent to IIT during ADF-IIT Combine
711-284	ADF-IIT Combine Adjustment Value Data 15	0-255	0	-	Adjustment Value Data 15 sent to IIT during ADF-IIT Combine
711-297	Communication Fail Bypass	0-1	0	-	0: Communication Fail Bypass OFF 1: Communication Fail Bypass ON

6.3.6.2 NVM IIT

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
710-501	Fax Document Size Detection	0	1	0	O	Indicates the switching of detection method when Fax Document Size Detection is specified in DADF mode. 0: A/B series, 1: Inch series
710-551	JAM Bypass	0	1	0	O	0: Do not bypass, 1: Bypass Applies to CVT mode.
710-600	Size Mismatch Set	1	3	3	O	1: When Size Mismatch is detected, notify a Jam. 2: Size Mismatch Detection OFF. 3: When Size Mismatch is detected, notify an operation fail and purge the document. Reduced range for non-standard in the No Mixed Size Detection Table.
710-601	Alternate Size Set 1	1	2	1	O	Switches between 8.5x13 SEF and 8.46x12.4 SEF. 0: Default 1: 8.5x13 SEF 2: 8.46x12.4 SEF
710-602	Alternate Size Set 2	1	2	1	O	Switches between 8.5x14 SEF and 8.46x12.4 SEF. 0: Default 1: 8.5x14 SEF 2: 8.46x12.4 SEF
710-603	Alternate Size Set 3	0	2	0	O	Switches between 11x15 SEF and 11x17 SEF. 0: Default 1: 11x17 SEF 2: 11x15 SEF
710-604	Alternate Size Set 4	0	2	0	O	Switches between 8.5x13 SEF and 8.5x14 SEF. 0: Default 1: 8.5x13 SEF 2: 8.5x14 SEF or 8.5x13.4 SEF
710-605	Alternate Size Set 5	0	2	0	O	B5 SEF 0: Default 1: B5 SEF
710-606	Alternate Size Set 6	0	3	0	O	Switches among 8x10 SEF, 8x10.5 SEF, and 8.5x11 SEF. 0: Default 1: 8.5x11 SEF 2: 8x10 SEF 3: 8x10.5 SEF
710-607	Alternate Size Set 7	0	3	0	O	Switches among 8x10 LEF, 8x10.5 LEF, and 8.5x11 LEF. 0: Default 1: 8.5x11 LEF 2: 8x10 LEF 3: 8x10.5 LEF

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
710-608	Alternate Size Set 8	0	4	0	O	Switches among B4 SEF and 11x17 SEF. 0: Default 1: B4 SEF 2: 11x17 SEF
710-609	Alternate Size Set 9	0	2	0	O	Switches between 8x10 SEF and 8x10.5 SEF. 0: Default 1: 8x10 SEF 2: 8x10.5 SEF
710-610	Alternate Size Set 10	0	3	0	O	Switches between B5 LEF and 8.5x11 LEF. 0: Default 1: B5 LEF 2: 8.5x11 LEF
710-611	Alternate Size Set 11	0	3	0	O	Switches between B5 SEF and 8.5x11 SEF. 0: Default 1: B5 SEF 2: 8.5x11 SEF
710-612	Size-Mix Mode Assumed Size	0	1	1	O	Switches between LEF and SEF 0: LEF 1: SEF
710-613	Fixed Size Selection	0	1	0	O	During Fax Mixed Size Mode, switches the size (Standard/Non-standard) notified to IISS from the DADF. 0: Non-standard mode 1: Standard mode
710-620	DADF Dpm Specification	0	65535	0	O	Specifies the DPM for DADF. 0: Operates at the maximum performance DPM of DADF 1~65535: Operates at the specified DPM (in increments of 1 DPM)
715-010	Energy Saver Disable	0	1	0	O	When Setting Value: 0, At Power OFF: Move the CRG to the W-Ref board position. *Note At Power ON: Initialize the CRG. Returning from Energy Saver: Do not initialize the CRG. When Setting Value: 1, At Power OFF: Do not move the CRG. At Power ON: Initialize the CRG. Returning from Energy Saver: Initialize the CRG. *Depending on the setting value of 719-999, there might be no movement instead. For more details, refer to the Meaning column of 719-999.
715-017	IIT Fail Bypass	0	1	0	O	0: Fail Bypass OFF 1: Fail Bypass ON

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-018	Config Fail Bypass	0	1	0	O	Controls whether to perform Fail bypass for the [Configuration Check] function of IIT-Elect Request. Furthermore, this NVM is not involved with the separate SelectConfig that is performed internally by the IISS. 0: Fail Bypass OFF 1: Fail Bypass ON
715-020	Number Of APS Sensor	0	1	0	O	0: 1 APS 1: 2 APS
715-022	Lamp Fan Fail Bypass	0	1	0	O	Lamp Fan Fail Detection 0: Detects Lamp Fan Fail. 1: Does not detect Lamp Fan Fail.
715-026	Lamp On Interval	1	60	30	O	Interval setting (Unit: min)
715-027	Lamp On Time	1	60	1	O	Lamp ON time setting (Unit: s)
715-030	IIT Failure Part Diagnosis	0	65535	0	O	Writing 1 starts the IIT Faulty Parts Diagnosis. After that, the write value of this NVM will be changed from '1' to the presumed faulty Parts No. After the Faulty Part Diagnosis has completed, reading this NVM displays the presumed faulty Part No. When a Fail occurs during the Faulty Part Diagnosis, the Faulty Part Diagnosis ends after the Fail code is recorded in this NVM. * If other than '1' has been written, it will follow the usual NVM-Write operation. (Faulty Parts Diagnosis will not be performed)
715-050	Platen SS Registration Adjustment	16	184	100	O	Regi Correction in Slow Scan Direction "Factory Settings"
715-051	Platen SS Magnification Adjustment	44	56	50	O	Slow Scan Direction Regi Correction Value (0.1% increments) "Factory Settings"
715-053	Platen PRadjF	0	240	120	O	Fast Scan Regi Correction Value (Dot) $VLSS = PROMVLSS + (PRadjF - 120) \times 2$ "Factory Settings"
715-056	CVT FS Offset Side 1-1	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-057	CVT FS Offset Side 2-1	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-058	CVT FS Offset Side 1-2	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-059	CVT FS Offset Side 2-2	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-060	CVT FS Offset Side 1-3	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-061	CVT FS Offset Side 2-3	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-062	CVT FS Offset Side 1-4	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-063	CVT FS Offset Side 2-4	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-064	CVT FS Offset Side 1-5	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-065	CVT FS Offset Side 2-5	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-066	CVT FS Offset Side 1-6	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-067	CVT FS Offset Side 2-6	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-068	CVT FS Offset Side 1-7	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-069	CVT FS Offset Side 2-7	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-070	CVT FS Offset Side 1-8	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-071	CVT FS Offset Side 2-8	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-072	CVT FS Offset Side 1-9	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-073	CVT FS Offset Side 2-9	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-074	CVT FS Offset Side 3-1	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-075	CVT FS Offset Side 4-1	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-076	CVT FS Offset Side 3-2	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-077	CVT FS Offset Side 4-2	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-078	CVT FS Offset Side 3-3	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-079	CVT FS Offset Side 4-3	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-080	CVT FS Offset Side 3-4	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-081	CVT FS Offset Side 4-4	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-082	CVT FS Offset Side 3-5	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-083	CVT FS Offset Side 4-5	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-084	CVT FS Offset Side 3-6	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-085	CVT FS Offset Side 4-6	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-086	CVT FS Offset Side 3-7	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-087	CVT FS Offset Side 4-7	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-088	CVT FS Offset Side 3-8	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-089	CVT FS Offset Side 4-8	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-090	CVT FS Offset Side 3-9	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-091	CVT FS Offset Side 4-9	0	240	120	O	Fast Scan Regi Correction Value (0.1 mm/step) during CVT "Factory Settings"
715-092	WREF_ADJ__R	70	255	140	O	Red W-Ref correction coefficient, "Factory Settings"
715-093	WREF_ADJ__G	70	255	140	O	Green W-Ref correction coefficient, "Factory Settings"
715-094	WREF_ADJ__B	70	255	140	O	Blue W-Ref correction coefficient, "Factory Settings"
715-095	WREF_ADJ__BWX	70	255	140	O	BW-X W-Ref correction coefficient, "Factory Settings"
715-096	WREF_ADJ__BWY	70	255	140	O	BW-Y W-Ref correction coefficient, "Factory Settings"
715-102	WREF_Offset_R	0	127	63	O	Red W-Ref correction coefficient for each individual paper type.
715-103	WREF_Offset_G	0	127	63	O	Green W-Ref correction coefficient for each individual paper type.
715-104	WREF_Offset_B	0	127	63	O	Blue W-Ref correction coefficient for each individual paper type.
715-105	WREF_Offset_K	0	127	63	O	BW W-Ref correction coefficient for each individual paper type.
715-106	IIT Paper Code	0	8	0	O	0: Use NVM Individual Paper Coefficient 1: J paper 2: P paper 3: C2 paper 4: Green100 paper 5: Digital Color Xpression 6: Color Tech+ 7: Xerox4200 paper 8: Xerox Business
715-110	CVT FS Side 1 Standard Adjustment	0	240	120	O	Fast Scan Regi Reference Adjustment Value (0.1 mm/step) during CVT Side 1 "Factory Settings" At Power ON, this will be overwritten by the DADF NVM (711-272) value.
715-111	CVT FS Side 2 Standard Adjustment	0	240	120	O	Fast Scan Regi Reference Adjustment Value (0.1 mm/step) during CVT Side 2 "Factory Settings" At Power ON, this will be overwritten by the DADF NVM (711-274) value.
715-112	CVT FS Side 3 Standard Adjustment	0	240	120	O	Fast Scan Regi Reference Adjustment Value (0.1 mm/step) during CVT Side 3 "Factory Settings" At Power ON, this will be overwritten by the DADF NVM (711-274) value.

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-113	CVT FS Side 4 Standard Adjustment	0	240	120	O	Fast Scan Regi Reference Adjustment Value (0.1 mm/step) during CVT Side 4 "Factory Settings" At Power ON, this will be overwritten by the DADF NVM (711-274) value.
715-280	HOSEI_SCAN	0	6	3	O	b* correction coefficient no., "Factory Settings"
715-281	LED_HOSEI_SCAN	0	19	5	O	LED correction coefficient no., "Factory Settings" Used for parameter selection at ENL
715-282	CCD Calib Y Scan Red	0	1023		O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-283	CCD Calib Y Scan Green	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-284	CCD Calib Y Scan Blue	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-285	CCD Calib M Scan Red	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-286	CCD Calib M Scan Green	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-287	CCD Calib M Scan Blue	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-288	CCD Calib C Scan Red	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-289	CCD Calib C Scan Green	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-290	CCD Calib C Scan Blue	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-291	CCD Calib PK Scan Red	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-292	CCD Calib PK Scan Green	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-293	CCD Calib PK Scan Blue	0	1023	0	O	Red when scanning CCD Calib Y Patch (Reflective Ratio LSB) "Factory Settings"
715-300	A6 / Postcard Detection	0	2	0	O	0: The default in the Table 1: A6 SEF 2: Japanese Postcard SEF (mm series) or Postcard SEF (inch series)
715-302	A4S/8.5in Detection 2	0	6	3	O	0: 210 mm 1: 211 mm 2: 212 mm 3: 213 mm 4: 214 mm 5: 215 mm 6: 216 mm
715-303	B5/8x10 Detection	0	3	0	O	0: The default in the Table 1: Detect as B5 LEF or Executive LEF 2: Detect as 8x10 LEF/8x10.5 LEF Mixed 3: For design verification, performance not guaranteed

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-305	8.5x13/8.5x14 Detection	0	3	0	O	0: The default in the Table 1: For design verification, performance not guaranteed 2: 13 inch 3: 14 inch
715-306	Original detection table for special paper	0	2	0	O	0: Special documents not supported 1: A4 LEF when APS is OFF and A3 when APS in ON 2: Letter LEF when APS is OFF and 17 inch when APS in ON
715-307	Change Size Table	1	5	2	O	1: Inch 13-2 2: mm-2 3: mm 4: Inch 13-1 5: Inch 14
715-310	A3/11x17 Detection	0	3	0	O	0: The default in the Table 1: A3 SEF 2: For design verification, performance not guaranteed 3: Detect as A3 SEF/11x17 SEF Mixed
715-311	A4/8.5x11 Detection	0	3	0	O	0: The default in the Table 1: A4 LEF 2: For design verification, performance not guaranteed 3: Detect as 8.5x11 LEF/A4 LEF Mixed
715-312	A6 SEF Threshold	50	110	90	O	Changes the Fast Scan direction threshold value for Non-standard, as well as Japanese Postcard SEF, Postcard SEF, and A6 SEF. When other than 50 to 110 has been set, the Fast Scan direction threshold value is 90 mm. 50: 50 mm [Down] (1 mm increment/step) 110: 110 mm
715-344	Document Size Detection	0	3	0	O	(IISS) 0: Detection by 4 registers 1: Detection by 3 registers (countermeasure for dirt) (IPoC) 0: Detection by 4 registers 1: Detection by 3 registers (countermeasure for dirt); 2 at open + the document edge at close 2: Detection by 3 registers (countermeasure for dirt); 2 at open + the ladder edge at close 3: Detection by 2 registers (countermeasure for dirt); 2 at open
715-346	B4/8-Kai Detection	0	6	3	O	0: 256 mm 1: 258 mm 2: 260 mm 3: 262 mm 4: 264 mm 5: 266 mm 6: 268 mm
715-347	8-Kai/11x17 Detection	0	6	3	O	0: 269 mm 1: 271 mm 2: 273 mm 3: 275 mm 4: 277 mm 5: 279 mm 6: 281 mm
715-349	B6/5x7 Detection	0	2	0	O	0: The default in the Table 1: B6 SEF 2: 5x7 SEF
715-362	FL_CHK_NG_Count	0	65535	0	O	Lamp Check NG Count (Reset when lamp is replaced)

Table 1 NVM IIT

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Read/Write	Description
715-363	FL_CHK_NG_Data	0	1023	0	O	Data obtained when Lamp Check is NG (Blank scan data of G compared at checking)
715-418	AOCerr	0	255	0	O	No. of times the AOC flow has ended abnormally

6.3.8.2 NVM DRIVE & NOHAD

Table 1 NVM DRIVE & NOHAD

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
740-001	DRV_MAIN_MOTOR_SPEED	1040000	1562000	1496201	Disabled	Enabled	main motor speed (Unit: Ref CLK)
740-002	DRV_MAIN_MOTOR_BRAKE_SWITCH	0	1	0	Disabled	Enabled	Main motor brake signal switch 0: Main motor brake signal invalid1: Main motor brake signal effective
741-001	NOHAD_PRINT_STOP_DELAY	15	1800	15	Disabled	Enabled	The time for Fan high speed rotation after printing has completed. (Unit: 1 s)
741-002	NOHAD_STBY_MODE_INTVAL	1	20	1	Disabled	Enabled	The temperature sampling time for Fusing Fan Temperature Control. (Unit: 1 s)
741-003	NOHAD_STBY_MODE_COUNT_THRESHOLD	1	20	3	Disabled	Enabled	The threshold count for determining the mode transition of the Fusing Fan Temperature Control. (Unit: 1 time)
741-004	NOHAD_STBY_MODE_TEMP_THRESHOLD	0	800	245	Disabled	Enabled	The threshold temperature for determining the mode transition of the Fusing Fan Temperature Control. (Unit: 0.1 Degrees Celsius)
741-005	NOHAD_STBY_MODE_SWITCH	0	1	1	Disabled	Enabled	Fusing Fan Temperature Control Execution Switch 0: Do not perform, 1: Perform
741-006	NOHAD_COLD_MODE_TEMP_THRESHOLD	0	300	140	Disabled	Enabled	The threshold temperature for determining the Fan Low Temperature Stop Operation. (Unit: 0.1 Degrees Celsius)
741-007	NOHAD_COLD_MODE_HOLD_TIME	0	180	0	Disabled	Enabled	The time to maintain the Fan in low speed rotation for Fan Low Temperature Stop Operation. (Unit: 1 s)
741-026	NOHAD_CONDENSE_SWITCH	0	1	0	Disabled	Enabled	Condensation Mode Execution Switch. 0: Do not perform, 1: Perform
741-027	NOHAD_CONDENSE_ENTRY_TEMP_THRESHOLD	0	300	120	Disabled	Enabled	The threshold temperature for determining whether to transition to the Condensation Mode. (Unit: 0.1 Degrees Celsius)
741-028	NOHAD_CONDENSE_HOLD_TIME	0	240	90	Disabled	Enabled	The time where the transition to the Sleep Mode is prohibited after entering the Condensation Mode. (Unit: min)
741-029	NOHAD_SMELL_FILTER_SWITCH	0	1	0	Disabled	Enabled	Deodorant Filter Availability Switch. 0: No Deodorant Filter, 1: Deodorant Filter available
741-031	NOHAD_FAN_FAIL_START_TIMER	0	60	6	Disabled	Enabled	The time where Fail Detection is prohibited after the Fan operation. (Unit: 1 s)
741-032	NOHAD_FAN_FAIL_SUMPLE_TIME_THRESHOLD	10	300	48	Disabled	Enabled	Fan Fail Signal Accumulated Time. (Unit: 1 s)

Table 1 NVM DRIVE & NOHAD

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
741-033	NOHAD_FAN_FAIL_ERROR_COUNT_THRE SHOLD	5	150	24	Disabled	Enabled	The threshold count for determining a Fail by the Fan Fail Accumulated Time. If an abnormal Fan Fail Determination Pulse Count (number of times) is detected in the Fail Accumulated Time, it will be judged as a Fail. (Unit: 1 time)
741-034	NOHAD_FAN_FAIL_BYPASS	0	1	0	Disabled	Enabled	FAN Fail Bypass 0: Do not bypass, 1: Bypass

6.3.7.2 NVM DIAG

Table 1 NVM DIAG

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/NO	Discription
747-006	DIAG_TONE_UP_DOWN_JOB_VOLUME	1	20	1	Disable	Enable	Diagnostic Tone Up/Down job volume
870-202	DIAG_TEST_PRINT_JOB_VOLUME	1	99	1	Disable	Enable	Diagnostic test print job volume (Unit: 1 sheet)

6.3.9.2 NVM PH

Table 1 NVM PH

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/NO	Description
742-001	PH_LEAD_REGI_ALL_TRAY	-50	50	0	Disable	Enable	LEAD REGI ADJUSTMENT - ALL TRAY Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-002	PH_LEAD_REGI_TRAY1	-50	50	0	Disable	Enable	TRAY1 for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-003	PH_LEAD_REGI_TRAY2	-50	50	0	Disable	Enable	TRAY2 for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-004	PH_LEAD_REGI_TRAY3	-50	50	0	Disable	Enable	TRAY3 for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-005	PH_LEAD_REGI_TRAY4	-50	50	0	Disable	Enable	TRAY4 for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-006	PH_LEAD_REGI_MSI	-50	50	0	Disable	Enable	SMH for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-007	PH_LEAD_REGI_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for Normal LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-008	PH_LEAD_REGI_THICK1_TRAY1	-50	50	0	Disable	Enable	TRAY1 for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-009	PH_LEAD_REGI_THICK1_TRAY2	-50	50	0	Disable	Enable	TRAY2 for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-010	PH_LEAD_REGI_THICK1_TRAY3	-50	50	0	Disable	Enable	TRAY3 for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-011	PH_LEAD_REGI_THICK1_TRAY4	-50	50	0	Disable	Enable	TRAY4 for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-012	PH_LEAD_REGI_THICK1_MSI	-50	50	0	Disable	Enable	SMH for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-013	PH_LEAD_REGI_THICK1_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for thick1 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)

Table 1 NVM PH

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/NO	Description
742-014	PH_LEAD_REGI_THICK2_TRAY1	-50	50	0	Disable	Enable	TRAY1 for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-015	PH_LEAD_REGI_THICK2_TRAY2	-50	50	0	Disable	Enable	TRAY2 for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-016	PH_LEAD_REGI_THICK2_TRAY3	-50	50	0	Disable	Enable	TRAY3 for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-017	PH_LEAD_REGI_THICK2_TRAY4	-50	50	0	Disable	Enable	TRAY4 for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-018	PH_LEAD_REGI_THICK2_MSI	-50	50	0	Disable	Enable	SMH for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-019	PH_LEAD_REGI_THICK2_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for thick2 LEAD REGI ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-020	PH_REGI_LOOP_ALL_TRAY	-50	50	0	Disable	Enable	REGI LOOP ADJUSTMENT - ALL TRAY Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-021	PH_REGI_LOOP_TRAY1	-50	50	0	Disable	Enable	TRAY1 for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-022	PH_REGI_LOOP_TRAY2	-50	50	0	Disable	Enable	TRAY2 for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-023	PH_REGI_LOOP_TRAY3	-50	50	0	Disable	Enable	TRAY3 for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-024	PH_REGI_LOOP_TRAY4	-50	50	0	Disable	Enable	TRAY4 for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-025	PH_REGI_LOOP_MSI	-50	50	0	Disable	Enable	SMH for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-026	PH_REGI_LOOP_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for Normal REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-027	PH_REGI_LOOP_THICK1_TRAY1	-50	50	0	Disable	Enable	TRAY1 for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)

Table 1 NVM PH

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/NO	Description
742-028	PH_REGI_LOOP_THICK1_TRAY2	-50	50	0	Disable	Enable	TRAY2 for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-029	PH_REGI_LOOP_THICK1_TRAY3	-50	50	0	Disable	Enable	TRAY3 for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-030	PH_REGI_LOOP_THICK1_TRAY4	-50	50	0	Disable	Enable	TRAY4 for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-031	PH_REGI_LOOP_THICK1_MSI	-50	50	0	Disable	Enable	SMH for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-032	PH_REGI_LOOP_THICK1_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for thick1 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-033	PH_REGI_LOOP_THICK2_TRAY1	-50	50	0	Disable	Enable	TRAY1 for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-034	PH_REGI_LOOP_THICK2_TRAY2	-50	50	0	Disable	Enable	TRAY2 for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-035	PH_REGI_LOOP_THICK2_TRAY3	-50	50	0	Disable	Enable	TRAY3 for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-036	PH_REGI_LOOP_THICK2_TRAY4	-50	50	0	Disable	Enable	TRAY4 for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-037	PH_REGI_LOOP_THICK2_MSI	-50	50	0	Disable	Enable	SMH for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-038	PH_REGI_LOOP_THICK2_DUPLEX	-50	50	0	Disable	Enable	DUP ALL SIZE for thick2 REGI LOOP ADJ Image input is delayed when Set Value is increased. (Unit: 2 ms)
742-058	PH_DUP_OPT_ENABLE_SWITCH	0	1	0	Disable	Enable	Switch for enabling/disabling Dup Option0: Disable Dup Option1: Enable Dup Option

6.3.10 NVM Fusing

Table 1 NVM Fusing

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
744-040	Fusing_U42_HISTORY	0	3	0	Enable	Enable	The Overheat Temp Fail has occurred.
744-056	Fusing_U41_HISTORY	0	4	0	Enable	Enable	Types of Fusing On Time Fail occurrence: 0: Has not occurred 1: U4-1 Control 12: U4-1 Control 23: U4-1 Control 34: U4-1 Control 4

6.3.11.2 NVM X'fer

Table 1 NVM X'fer

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
745-016	XERO_TEMP_DATA	-20	60	18	Enabled	Enabled	Stores the temperature detection result. (Unit: 1 Degrees Celsius)
745-026	XERO_BTR_OUTPUT_SIDE1_BIAS	0	200	80	Enabled	Enabled	Stores the BTR Output (Side 1) (Unit: 0.1 MicroAmp)
745-027	XERO_BTR_OUTPUT_SIDE2_BIAS	0	200	80	Enabled	Enabled	Stores the BTR Output (Side 2) (Unit: 0.1 MicroAmp)
745-028	XERO_BTR_NET_OUTPUT_SIDE1_BIAS	0	200	80	Enabled	Enabled	Stores the BTR Final Output (for Side 1) (Unit: 0.1 MicroAmp)
745-029	XERO_BTR_NET_OUTPUT_SIDE2_BIAS	0	200	80	Enabled	Enabled	Stores the BTR Final Output (for Side 2) (Unit: 0.1 MicroAmp)
745-030	XERO_BTR_CORR_COEF_PLAIN_SIDE1	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Plain Side 1) (Unit: %)
745-031	XERO_BTR_CORR_COEF_PLAIN_SIDE2	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Plain Side 2) (Unit: %)
745-032	XERO_BTR_CORR_COEF_HEAVY1_SIDE1	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Heavyweight Side 1) (Unit: %)
745-033	XERO_BTR_CORR_COEF_HEAVY1_SIDE2	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Heavyweight Side 2) (Unit: %)
745-034	XERO_BTR_CORR_COEF_HEAVY2_SIDE1	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Extra Heavyweight Side 1) (Unit: %)
745-035	XERO_BTR_CORR_COEF_HEAVY2_SIDE2	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Extra Heavyweight Side 2) (Unit: %)
745-036	XERO_BTR_CORR_COEF_OHP_SIDE1	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Transparency) (Unit: %)
745-037	XERO_BTR_CORR_COEF_LABEL_SIDE1	0	200	100	Disabled	Enabled	BTR Output Correction Coefficient (for Labels) (Unit: %)

6.3.13.2 NVM ROS

Table 1 NVM ROS

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/NO	Discription
749-001	ROS_LASER_SIDE_REGI_ADJUSTMENT_ALL_TRAY	-50	50	0	Disable	Enable	ALL TRAY-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-002	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY1	-50	50	0	Disable	Enable	TRAY1-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-003	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY2	-49	49	0	Enable	Enable	TRAY2-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-004	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY3	-49	49	0	Enable	Enable	TRAY3-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-005	ROS_LASER_SIDE_REGI_ADJUSTMENT_TRAY4	-49	49	0	Enable	Enable	TRAY4-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-006	ROS_LASER_SIDE_REGI_ADJUSTMENT_MSI	-50	50	0	Disable	Enable	MSI-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-007	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_ALL_TRAY	-50	50	0	Disable	Enable	DUP ALL TRAY-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-008	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY1	-50	50	0	Disable	Enable	DUP TRAY1-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-009	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY2	-50	50	0	Disable	Enable	DUP TRAY2-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-010	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY3	-50	50	0	Disable	Enable	DUP TRAY3-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-011	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_TRAY4	-50	50	0	Disable	Enable	DUP TRAY4-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-012	ROS_LASER_SIDE_REGI_ADJUSTMENT_DUP_MSI	-50	50	0	Disable	Enable	DUP MSI-LASER SIDE REGI ADJUSTMENT (Unit: 0.254mm increments)
749-013	ROS_TEST_VREF_OUTPUT	0	255	204	Disable	Enable	Test for ROS Vref output (use for diag test)(Unit: times)
749-014	ROS_MOTOR_AUTO_STOP_TIME	1	30	10	Disable	Enable	The timeout time during priority start up.This may shorten the lifespan of the ROS.(Unit: 1 s)
749-015	ROS_MOTOR_JOB_END_AUTO_STOP_TIME	1	10	1	Disable	Enable	ROS Motor Stop DelayThis may shorten the lifespan of the ROS.(Unit: 1 s)

6.3.12 NVM XERO

Table 1 NVM XERO

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
750-001	XERO_BCR_AC_IO_BIAS	0	222	222	Disable	Enable	BCR-AC I/O Check Output Value (Unit: 3.95 MicroAmp)
750-002	XERO_BCR_DC_IO_BIAS	0	100	74	Disable	Enable	BCR-DC I/O Check Output Value (Unit: 1%)
750-003	XERO_DEVE_IO_BIAS	0	100	86	Disable	Enable	Deve-DC I/O Check Output Value (Unit: 1%)
750-023	XERO_DRUM_CYCLE	0	8000000	0	Enable	Disable	Drum Cycle (Unit: 0.1 cycle)
750-024	XERO_DRUM_PV	0	200000	0	Enable	Disable	Drum PV (Unit: 1 sheet)
750-025	XERO_TOTAL_DRUM_CYCLE	0	4294967295	0	Enable	Enable	M/C Total Cycle (Unit: 0.1 cycle)
750-026	XERO_TOTAL_DRUM_PV	0	4294967295	0	Enable	Enable	M/C Total PV (Unit: 1 sheet)
750-051	XERO_DRUM_PRE_NEAR_CYCLE_DATA	0	65535	0	Enable	Enable	Cycle Count When Pre Near Occurs (Unit: 100 cycle)
750-052	XERO_DRUM_PRE_NEAR_PV_DATA	0	65535	0	Enable	Enable	PV When Pre Near Occurs (Unit: 100 sheet)
750-053	XERO_DRUM_PRE_NEAR_TICK_DATA	0	5000	0	Enable	Enable	Remaining Film Thickness When Pre Near Occurs (Unit: 0.01 Micrometer)
750-054	XERO_DRUM_NEAR_CYCLE_DATA	0	65535	0	Enable	Enable	Cycle Count When Near Occurs (Unit: 100 cycle)
750-055	XERO_DRUM_NEAR_PV_DATA	0	65535	0	Enable	Enable	PV When Near Occurs (Unit: 100 sheet)
750-056	XERO_DRUM_NEAR_TICK_DATA	0	5000	0	Enable	Enable	Remaining Film Thickness When Near Occurs (Unit: 0.01 Micrometer)
750-057	XERO_DRUM_LIFE_END_CYCLE_DATA	0	65535	0	Enable	Enable	Cycle Count When Life End Occurs (Unit: 100 cycle)
750-058	XERO_DRUM_LIFE_END_PV_DATA	0	65535	0	Enable	Enable	PV When Life End Occurs (Unit: 100 sheet)
750-059	XERO_DRUM_LIFE_END_TICK_DATA	0	5000	0	Enable	Enable	Remaining Film Thickness When Life End Occurs (Unit: 0.01 Micrometer)

6.3.15.2 NVM SYSTEM

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
610-400	KO_PASSWORD_1	0	9	1	O	O	The 1st digit (highest order digit) number of the KO Password.
610-401	KO_PASSWORD_2	0	9	1	O	O	The 2nd digit number of the KO Password.
610-402	KO_PASSWORD_3	0	9	1	O	O	The 3rd digit number of the KO Password.
610-403	KO_PASSWORD_4	0	9	1	O	O	The 4th digit number of the KO Password.
610-404	KO_PASSWORD_5	0	10	1	O	O	The 5th digit number of the KO Password. '10' indicates a termination.
610-405	KO_PASSWORD_6	0	10	10	O	O	The 6th digit (lowest order digit) number of the KO Password. '10' indicates a termination.
621-400	NVM_MATCHING	0	2	0	O	X	0: Default Value 1: Perform restore from Controller NVM to Backup NVM 2: Perform restore from Backup NVM to Controller NVM When the Controller NVM is blank, the input of '1' becomes prohibited. When the Backup NVM is blank, the input of '2' becomes prohibited.

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
700-120	TIMEZONE	0	32	7	0	0	0: UTC -12:00 1: UTC -11:00 2: UTC -10:00 3: UTC -09:00 4: UTC -08:00 5: UTC -07:00 6: UTC -06:00 7: UTC -05:00 8: UTC -04:00 9: UTC -03:30 10: UTC -03:00 11: UTC -02:00 12: UTC -01:00 13: UTC 00:00 14: UTC +01:00 15: UTC +02:00 16: UTC +03:00 17: UTC +03:30 18: UTC +04:00 19: UTC +04:30 20: UTC +05:00 21: UTC +05:30 22: UTC +05:45 23: UTC +06:00 24: UTC +06:30 25: UTC +07:00 26: UTC +08:00 27: UTC +09:00 28: UTC +09:30 29: UTC +10:00 30: UTC +11:00 31: UTC +12:00 32: UTC +13:00
700-122	DATE_FORMAT	0	2	0	0	0	0: YYMMDD 1: MMDDYY 2: DDMMYY
700-123	TIME_FORMAT	0	1	1	0	0	0: 12 h 1: 24 h
700-124	AUTO_RESET_TIMER	0	6	2	0	0	0: Return to default display after 15 s 1: Return to default display after 30 s 2: Return to default display after 45 s 3: Return to default display after 1 min 4: Return to default display after 2 min 5: Return to default display after 3 min 6: Return to default display after 4 min

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
700-125	JOB_CANCEL_TIMER	-	-	600	O	O	0: Feature Disabled (s)
700-126	AUTO_PRINT_TIMER	1	240	10	O	O	(s)
700-128	AUTO_SCAN_COMPLETE_TIMER	1	4	2	O	O	1: Scan Complete in 20 s 2: Scan Complete in 30 s 3: Scan Complete in 60 s 4: Scan Complete in 90 s
700-129	LOW_POWER_MODE_TIMER	0	60	1	O	O	0: Feature Disabled (min)
700-130	SLEEP_MODE_TIMER	0	239	1	O	O	0: Feature Disabled (min)
700-131	AUTO_SELECTION_TIMER	10	100	20	O	O	Shortcut key settings change timer (0.1 s)
700-132	UIPANEL_PANEL_SELECT_TONE	0	3	0	O	O	UI Panel Select Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-133	UIPANEL_PANEL_ALERT_TONE	0	3	0	O	O	UI Panel Alert Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-136	UIPANEL_ALERT_TONE	0	3	2	O	O	Alert Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-137	UIPANEL_FAULT_TONE	0	3	2	O	O	Fault Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-138	UIPANEL_MACHINE_READY_TONE	0	3	2	O	O	UI Panel Ready Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-139	UIPANEL_CONSUMABLES_ALERT	0	3	2	O	O	Low Toner Alert Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-143	JOB_HISTORY_VERBOSE	0	1	0	O	O	0: Do not record Job History of Copy and Scan to PC (USB) Jobs 1: Record Job History of Copy and Scan to PC (USB) Jobs
700-144	JOB_HISTORY	0	0	0	X	O	Not used

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
700-153	UIPANEL_OUT_OF_PAPER	0	3	2	O	O	Out of Paper Warning Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-154	UIPANEL_AUTO_CLEAR_ALERT	0	3	0	O	O	Auto Clear Alert Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-155	UIPANEL_BASE_TONE	0	3	0	O	O	Base Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-233	UIPANEL_JOB_TONE	0	3	2	O	O	Job Complete Tone 0: OFF 1: Soft 2: Normal 3: Loud
700-401	PAPER_CLASS	2	5	4	O	X	2: XC (NA (North America)) 3: XE/DMO-E (EU) 5: DMO-W (SA) Default value = 5.
700-420	DOWNLOAD_DISABLE_FLAG	-	-	2	O	X	0: Allow Download for same family 2: Allow Download for same model only
720-006	PRINT_COUNTER_PRINTJOB	0	10000000	0	X	X	The counters for Print Job, Report Job, and Maintenance Report. When LARGE_SIZE_COUNT = 1, This will be 2 counts for each impression that falls under Large Size. It is possible to exceed the Max by a little.
720-009	PRINT_COUNTER_COPYJOB	0	10000000	0	X	X	The counter for Copy Job. When LARGE_SIZE_COUNT = 1, This will be 2 counts for each impression that falls under Large Size. It is possible to exceed the Max by a little.
720-011	PRINT_COUNTER_FAXJOB	0	10000000	0	X	X	The counter for Fax Receive When LARGE_SIZE_COUNT = 1, This will be 2 counts for each impression that falls under Large Size. It is possible to exceed the Max by a little.
720-046	PRINT_COUNTER_LARGE_SIZE	0	10000000	0	X	X	The counter for Large Size This counts when LARGE_SIZE_COUNT = 2.
720-065	LARGE_SIZE_COUNT	0	2	2	X	X	0: Count as normal (1 count) 1: Count as Large Size (2 counts) (MN) 2: Count as Large Size (2 counts) (IBG)

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
780-013	IOT_TRAY1_PAPER_TYPE	-	-	0	0	0	Paper Type in Tray 1 0: Plain 1 1: Plain 2 5: Lightweight
780-014	IOT_STM_PAPER_TYPE	-	-	0	0	0	Paper Type in STM 0: Plain 1 1: Plain 2 2: Heavyweight 3: Extra Heavyweight 5: Lightweight
780-015	IOT_TRAY3_PAPER_TYPE	-	-	0	0	0	Paper Type in Tray 3 0: Plain 1 1: Plain 2 2: Heavyweight 3: Extra Heavyweight 5: Lightweight
780-016	IOT_TRAY4_PAPER_TYPE	-	-	0	0	0	Paper Type in Tray 4 0: Plain 1 1: Plain 2 2: Heavyweight 3: Extra Heavyweight 5: Lightweight
780-017	IOT_MSI_PAPER_SIZE	-	-	18	0	0	Paper Size at MSI 1: 11x17 SEF 2: A3 SEF 5: B4 SEF 6: 8.5x14 SEF 7: 8.5x13 SEF 9: A4 SEF 10: 8.5x11 SEF 14: B5 SEF 16: 8.5x11 LEF 18: A4 LEF 19: A5 SEF 23: B5 LEF 131: Non-Standard Size 135: Preset Custom Size 1 136: Preset Custom Size 2 137: Preset Custom Size 3 138: Preset Custom Size 4 139: Preset Custom Size 5

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
780-018	IOT_MSI_PAPER_TYPE	-	-	0	0	0	Paper Type at MSI 0: Plain 1 1: Plain 2 2: Heavyweight 3: Extra Heavyweight 5: Lightweight
780-061	APS_ATS_PERMISSION_STM	0	1	1	0	0	Sets the APS/ATS target setting (STM) 0: Not applicable 1: Applicable
780-062	APS_ATS_PERMISSION_TRAY3	0	1	1	0	0	Sets the APS/ATS target setting (Tray 3) 0: Not applicable 1: Applicable
780-063	APS_ATS_PERMISSION_TRAY4	0	1	1	0	0	Sets the APS/ATS target setting (Tray 4) 0: Not applicable 1: Applicable
780-064	APS_ATS_PERMISSION_MSI	0	1	1	0	0	Sets the APS/ATS target setting (MSI) 0: Not applicable 1: Applicable
780-266	UIPANEL_DRUM_ALERT_PHASE1	0	2	1	0	0	0: Do not display 1: Display only after the power had been turned OFF and ON 2: Display only when the Auto Reset Timer had timed-out
780-267	UIPANEL_DRUM_ALERT_PHASE2	0	2	2	0	0	0: Do not display 1: Display only after the power had been turned OFF and ON 2: Display only when the Auto Reset Timer had timed-out
790-002	UIPANEL_DEFAULTS_DISPLAY	-	-	0	0	0	UI Panel Screen Default 0: Copy Job 2: Scan Job 3: Fax Job
790-004	UIPANEL_TONER_ALERT	0	2	1	0	0	0: Do not display 1: Display only after the power had been turned OFF and ON 2: Display only when the Auto Reset Timer had timed-out
790-017	IOT_MSI_CUSTOM_SIZE_FS	127	297	297	0	0	Fast scan length of custom size (mm)
790-018	IOT_MSI_CUSTOM_SIZE_SS	98	432	210	0	0	Slow scan length of custom size (mm)
790-020	IOT_MSI_PRESET_CUSTOM_SIZE_1_FS	-	-	0	0	0	Fast scan length of preset custom size 1 (mm) 0: Not set
790-021	IOT_MSI_PRESET_CUSTOM_SIZE_1_SS	-	-	0	0	0	Slow scan length of preset custom size 1 (mm) 0: Not set
790-022	IOT_MSI_PRESET_CUSTOM_SIZE_2_FS	-	-	0	0	0	Fast scan length of preset custom size 2 (mm) 0: Not set
790-023	IOT_MSI_PRESET_CUSTOM_SIZE_2_SS	-	-	0	0	0	Slow scan length of preset custom size 2 (mm) 0: Not set
790-024	IOT_MSI_PRESET_CUSTOM_SIZE_3_FS	-	-	0	0	0	Fast scan length of preset custom size 3 (mm) 0: Not set

Table 1 SYSTEM

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/ No	Description
790-025	IOT_MSI_PRESET_CUSTOM_SIZE_3_SS	-	-	0	0	0	Slow scan length of preset custom size 3 (mm) 0: Not set
790-026	IOT_MSI_PRESET_CUSTOM_SIZE_4_FS	-	-	0	0	0	Fast scan length of preset custom size 4 (mm) 0: Not set
790-027	IOT_MSI_PRESET_CUSTOM_SIZE_4_SS	-	-	0	0	0	Slow scan length of preset custom size 4 (mm) 0: Not set
790-028	IOT_MSI_PRESET_CUSTOM_SIZE_5_FS	-	-	0	0	0	Fast scan length of preset custom size 5 (mm) 0: Not set
790-029	IOT_MSI_PRESET_CUSTOM_SIZE_5_SS	-	-	0	0	0	Slow scan length of preset custom size 5 (mm) 0: Not set
790-150	IIT_PLATEN_CUSTOM_SIZE_FS	86	297	297	0	0	Fast scan length of non-standard size at the Platen (mm)
790-151	IIT_PLATEN_CUSTOM_SIZE_SS	86	432	210	0	0	Slow scan length of non-standard size at the Platen (mm)
790-243	UIPANEL_GUIDANCE_IDCARD_COPY	0	1	1	0	0	0: Do not display the ID Card Copy guidance confirmation screen 1: Display the ID Card Copy guidance confirmation screen
790-244	UIPANEL_CONFIRM_RECIPIENT	0	1	0	0	0	0: Do not display the Recipient confirmation screen 1: Display the Recipient confirmation screen
790-245	UIPANEL_GUIDANCE_IDCARD_COPY_DETAIL	0	1	0	0	0	Type of ID Card Copy guidance confirmation screen 0: Image + text screen 1: Image only screen
790-435	UIPANEL_LANGUAGE	0	3	0	0	0	UI Panel Language 0: English 6: French 7: Spanish 8: Brazilian Portuguese 9: Hungarian 10: Czech 11: Polish 12: Romanian 13: Turkish 14: Russian 15: Italian 16: German 17: Greek
790-640	UIPANEL_NOTIFICATION	0	1	1	0	0	0: Do not display prohibited screen 1: Display prohibited screen

6.3.14.2 NVM PROCON

Table 1 NVM PROCON

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
752-022	PRC_ATC_AVE	0	999	0	Enabled	Enabled	ATC Average Value
752-023	PRC_ATC_AMP	0	999	0	Enabled	Enabled	ATC Amplitude
752-028	PRC_ATC_AVE_FAIL	0	1	0	Enabled	Enabled	ATC Average Fail 0: Normal, 1: Abnormal
752-029	PRC_ATC_AVE_FAIL_CNT	0	65535	0	Enabled	Enabled	ATC Average Fail Count
752-031	PRC_ATC_AMP_FAIL	0	1	0	Enabled	Enabled	ATC Amplitude Fail 0: Normal, 1: Amplitude is too small
752-032	PRC_ATC_AMP_FAIL_CNT	0	65535	0	Enabled	Enabled	ATC Amplitude Fail Count
752-033	PRC_ATC_WARNING	0	1	0	Enabled	Enabled	ATCwarning
752-034	PRC_ATC_WARNING_CNT	0	65535	0	Enabled	Enabled	ATC Warning Counter
752-036	PRC_ATC_FAIL	0	1	0	Enabled	Enabled	ATCFail
752-037	PRC_ATC_FAIL_CNT	0	65535	0	Enabled	Enabled	Number of ATC Fails
752-038	PRC_ATC_FAIL_CONTINUED_CNT	0	255	0	Enabled	Enabled	ATC Fail Continuous Count
752-048	PRC_ATC_DOUBLE_AVE_PRE	0	999	510	Enabled	Enabled	ATC_2 Weighted Average Value_Previous
752-049	PRC_ATC_DOUBLE_AVE	0	999	510	Enabled	Enabled	ATC_2 Weighted Average Value
752-050	PRC_TEMP_SNR	0	1023	0	Enabled	Enabled	Temperature Sensor Value
752-053	PRC_TEMP_SNR_FAIL	0	1	0	Enabled	Enabled	Temperature Sensor Fail 0: Normal, 1: Fail occurred
752-054	PRC_TEMP_SNR_FAIL_CNT	0	65535	0	Enabled	Enabled	Temperature Sensor Fail Count
752-055	PRC_REAL_TEMP	-50	110	0	Enabled	Enabled	The actual temperature
752-057	PRC_TEMP_NOW	-10	80	0	Enabled	Enabled	temp_now/temperature
752-060	PRC_MAX_TEMP	-20	60	0	Enabled	Enabled	max temperature value/temperature max value (Unit: 1 Degrees Celsius)
752-069	PRC_IMAGE_PIXEL_HI	0	16383	0	Enabled	Enabled	Image_Pixel_Hi
752-070	PRC_IMAGE_PIXEL_LO	0	65535	0	Enabled	Enabled	Image_Pixel_Lo
752-077	PRC_ACCUM_USE_ICDC_ACCUM	0	2147483648	0	Enabled	Enabled	ICDC Accumulated Value for Measuring Accumulated Usage
752-087	PRC_ICDC_MOVE_AVE_ACCUM_FEW	0	32767	0	Enabled	Enabled	ICDC Moving Average Accumulated Value [Minority]
752-088	PRC_ICDC_MOVE_AVE_ACCUM_MANY	0	32767	0	Enabled	Enabled	ICDC Moving Average Accumulated Value [Majority]
752-091	PRC_ICDC_MOVE_AVE_FEW	0	1023	0	Enabled	Enabled	ICDC Moving Average Value [Minority]
752-092	PRC_ICDC_MOVE_AVE_MANY	0	1023	0	Enabled	Enabled	ICDC Moving Average Value [Majority]
752-093	PRC_DRUM_CYCLE_COUNT	0	1023	0	Enabled	Enabled	Drum Rotation Time (Cycle Count)/PR_Cycle uint32_t
752-094	PRC_DRUM_LIFE_INFO	0	4	0	Enabled	Enabled	Drum Cartridge Status (NVM. 0 to 4) normal, pre-near, near, over, end
752-123	PRC_DISP_TONER_REMAIN_CORR_COEF	0	255	0	Enabled	Enabled	Disp Remaining Toner Correction Coefficient
752-133	PRC_FLAG_TONER_REPLACEMENT	0	1	0	Enabled	Enabled	Flag manual toner replacement

Table 1 NVM PROCON

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
752-284	PRC_DELTA_ATC_TARGET_TEMP_CORR	-999	999	0	Enabled	Enabled	Delta ATC Target Temperature Correction Amount
752-287	PRC_DELTA_ATC_TARGET_HUMI_CORR	-999	999	0	Enabled	Enabled	Delta ATC Target Humidity Correction Amount
752-300	PRC_DELTA_AGE_ATC	0	255	0	Enabled	Enabled	Delta Age_ATC
752-304	PRC_DELTA_ATC_TARGET_DEVE_CORR	-999	999	0	Enabled	Enabled	Delta ATC Target Deve Correction Amount
752-314	PRC_DELTA_ATC_TARGET_AC_CORR	-32768	32767	0	Enabled	Enabled	Delta ATC Target AC Correction Amount
752-316	PRC_ATC_MOD_TARGET	0	999	510	Enabled	Enabled	ATC Correction Target Value
752-320	PRC_DELTA_ATC_TARGET_MANUAL_CORR	-512	511	0	Enabled	Enabled	Delta ATC Target Manual Correction Amount
752-321	PRC_DELTA_ATC_TARGET_DIFF	-999	999	0	Enabled	Enabled	Delta ATC_Target Deference
752-384	PRC_BCR_DC_OUT	0	1000	735	Enabled	Enabled	BCR_DC_OUT (0 to 1000: -0 to -1000V)
752-385	PRC_BIAS_DC_OUT	0	255	220	Enabled	Enabled	BIAS_DC_OUT (0 to 255: 0 to -700V)
752-386	PRC_LD_OUT	0	255	220	Enabled	Enabled	LD_OUT (0 to 255: 0 to 2V)
752-408	PRC_DELTA_VH_TEMP	-128	127	0	Enabled	Enabled	Delta VHtemp
752-440	PRC_DELTA_VH_PR	-128	127	0	Enabled	Enabled	Delta VHpr
752-455	PRC_DELTA_VH_PR2	-1000	1000	0	Enabled	Enabled	Delta VHpr2
752-477	PRC_DELTA_VB_PR	-255	255	0	Enabled	Enabled	Delta VBpr
752-478	PRC_DELTA_VB	-255	255	0	Enabled	Enabled	Delta VB
752-497	PRC_DELTA_LD_TEMP	-128	127	0	Enabled	Enabled	Delta LDtemp
752-514	PRC_DELTA_LD_HUMI	-128	127	0	Enabled	Enabled	Delta LDhum
752-529	PRC_DELTA_LD_PR	-128	127	0	Enabled	Enabled	Delta LDpr
752-542	PRC_DELTA_LD_EMP	-128	127	0	Enabled	Enabled	Delta LDemp
752-549	PRC_DELTA_LD_MANUAL_CORR	0	255	0	Enabled	Enabled	Delta LD_Manual Correction Amount (0 to 255: 0 to 2V)
752-550	PRC_DELTA_LD_MANUAL_CORR_MAX	0	255	0	Disabled	Enabled	Delta LD_Manual Correction Amount Upper Limit
752-551	PRC_DELTA_LD_MANUAL_CORR_MIN	0	255	0	Disabled	Enabled	Delta LD_Manual Correction Amount Lower Limit
752-560	PRC_DELTA_LD	-128	127	0	Enabled	Enabled	Delta LD
752-598	PRC_CRU_EMPTY_STATE	0	3	0	Enabled	Enabled	Flag empty detection state 0: Normal, 1: Pre Near, 2: Near Empty, 3: Empty
752-605	PRC_FLAG_EMPTY_CHECK_STATE_ATC	0	3	0	Enabled	Enabled	Flag ATC empty detection state 0: Normal, 1: Empty detection count in progress, 2: Near Empty, 3: Empty
752-610	PRC_ATC_EMPTY_CHECK_STATE1_CNT	0	65535	0	Enabled	Enabled	ATC empty detection state 1 count
752-618	PRC_BUFFER_EMPTY_CHECK_CNT	-30000	30000	0	Enabled	Enabled	Buffer empty detection count
752-620	PRC_EMPTY_CHECK_START_ATC_MOD_TARGET	0	999	0	Enabled	Enabled	The ATC Correction Target Value at the start of empty detection
752-622	PRC_CORR_BUFFER_EMPTY_CHECK_CNT	-30000	30000	0	Enabled	Enabled	Correction Buffer empty detection count
752-646	PRC_1_TO_2_PV_CNT_PRE	0	4294967295	0	Enabled	Enabled	1 to 2 PV count_previous

Table 1 NVM PROCON

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Yes/No	Initialization Yes/No	Description
752-647	PRC_1_TO_2_PV_CNT	0	4294967295	0	Enabled	Enabled	1 to 2 PV count
752-679	PRC_TONER_REST	0	100	100	Enabled	Enabled	Remaining Toner %
752-686	PRC_RECOVERY_CNT	0	255	0	Enabled	Enabled	Recovery count
752-732	PRC_DISP_MOTOR_FAIL_FLAG	0	1	0	Enabled	Enabled	DispenseFailFlag 0: Has not occurred, 1: Occurred
752-740	PRC_SEAL_DETECT_FLAG	0	1	0	Enabled	Enabled	Seal Not Pulled Off Detection Flag
752-746	PRC_DELTA_ATC_TARGET_SETUP_CORR	-128	127	0	Enabled	Enabled	Delta ATC Target Setup Correction Amount

6.3.16 NVM NET

Table 1 NVM NET

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Infrequent Range	Write Allowed/ Protected	Default Value Yes/No	Description
610-420	ADMIN_USER_ID_1	-	-	'1'	Other than '0' ASCII Code	O	O	
610-421	ADMIN_USER_ID_2	-	-	'1'	ASCII Code	O	O	
610-422	ADMIN_USER_ID_3	-	-	'1'	ASCII Code	O	O	
610-423	ADMIN_USER_ID_4	-	-	'1'	ASCII Code	O	O	
610-424	ADMIN_USER_ID_5	-	-	'1'	ASCII Code	O	O	
610-425	ADMIN_USER_ID_6	-	-	'0'	ASCII Code	O	O	
610-426	ADMIN_USER_ID_7	-	-	'0'	ASCII Code	O	O	
610-427	ADMIN_USER_ID_8	-	-	'0'	ASCII Code	O	O	
610-428	ADMIN_USER_ID_9	-	-	'0'	ASCII Code	O	O	
610-429	ADMIN_USER_ID_10	-	-	'0'	ASCII Code	O	O	
610-430	ADMIN_USER_ID_11	-	-	'0'	ASCII Code	O	O	
610-431	ADMIN_USER_ID_12	-	-	'0'	ASCII Code	O	O	
610-432	ADMIN_USER_ID_13	-	-	'0'	ASCII Code	O	O	
610-433	ADMIN_USER_ID_14	-	-	'0'	ASCII Code	O	O	
610-434	ADMIN_USER_ID_15	-	-	'0'	ASCII Code	O	O	
610-435	ADMIN_USER_ID_16	-	-	'0'	ASCII Code	O	O	
610-436	ADMIN_USER_ID_17	-	-	'0'	ASCII Code	O	O	
610-437	ADMIN_USER_ID_18	-	-	'0'	ASCII Code	O	O	
610-438	ADMIN_USER_ID_19	-	-	'0'	ASCII Code	O	O	
610-439	ADMIN_USER_ID_20	-	-	'0'	ASCII Code	O	O	
610-440	ADMIN_USER_ID_21	-	-	'0'	ASCII Code	O	O	
610-441	ADMIN_USER_ID_22	-	-	'0'	ASCII Code	O	O	
610-442	ADMIN_USER_ID_23	-	-	'0'	ASCII Code	O	O	
610-443	ADMIN_USER_ID_24	-	-	'0'	ASCII Code	O	O	
610-444	ADMIN_USER_ID_25	-	-	'0'	ASCII Code	O	O	
610-445	ADMIN_USER_ID_26	-	-	'0'	ASCII Code	O	O	
610-446	ADMIN_USER_ID_27	-	-	'0'	ASCII Code	O	O	
610-447	ADMIN_USER_ID_28	-	-	'0'	ASCII Code	O	O	
610-448	ADMIN_USER_ID_29	-	-	'0'	ASCII Code	O	O	
610-449	ADMIN_USER_ID_30	-	-	'0'	ASCII Code	O	O	
610-450	ADMIN_USER_ID_31	-	-	'0'	ASCII Code	O	O	
610-451	ADMIN_USER_ID_32	-	-	'0'	ASCII Code	O	O	
610-460	ADMIN_USER_PASSWORD_1	-	-	'x'	ASCII Code	O	O	
610-461	ADMIN_USER_PASSWORD_2	-	-	'L'	Other than '0' ASCII Code	O	O	

Table 1 NVM NET

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Infrequent Range	Write Allowed/ Protected	Default Value Yes/No	Description
610-462	ADMIN_USER_PASSWORD_3	-	-	'a'	Other than '0' ASCII Code	O	O	
610-463	ADMIN_USER_PASSWORD_4	-	-	'd'	Other than '0' ASCII Code	O	O	
610-464	ADMIN_USER_PASSWORD_5	-	-	'm'	ASCII Code	O	O	
610-465	ADMIN_USER_PASSWORD_6	-	-	'i'	ASCII Code	O	O	
610-466	ADMIN_USER_PASSWORD_7	-	-	'n'	ASCII Code	O	O	
610-467	ADMIN_USER_PASSWORD_8	-	-	'0'	ASCII Code	O	O	
610-468	ADMIN_USER_PASSWORD_9	-	-	'0'	ASCII Code	O	O	
610-469	ADMIN_USER_PASSWORD_10	-	-	'0'	ASCII Code	O	O	
610-470	ADMIN_USER_PASSWORD_11	-	-	'0'	ASCII Code	O	O	
610-471	ADMIN_USER_PASSWORD_12	-	-	'0'	ASCII Code	O	O	
665-401	MAC_ADDRESS_1	0	255	0	-	X	X	AAh part of AAh.BBh.CCh.DDh.EEh.FFh
665-402	MAC_ADDRESS_2	0	255	0	-	X	X	BBh part of AAh.BBh.CCh.DDh.EEh.FFh
665-403	MAC_ADDRESS_3	0	255	0	-	X	X	CCh part of AAh.BBh.CCh.DDh.EEh.FFh
665-404	MAC_ADDRESS_4	0	255	0	-	X	X	DDh part of AAh.BBh.CCh.DDh.EEh.FFh
665-405	MAC_ADDRESS_5	0	255	0	-	X	X	EEh part of AAh.BBh.CCh.DDh.EEh.FFh
665-406	MAC_ADDRESS_6	0	255	0	-	X	X	FFh part of AAh.BBh.CCh.DDh.EEh.FFh

Table 1 NVM NET

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Infrequent Range	Write Allowed/Protected	Default Value Yes/No	Description
700-163	PFRID_SYS_PRODUCT_INFO_COUNTRY	-	-	0	-	O	O	0: Not specified; 840: United States; 124: Canada; 76: Brazil; 826: United Kingdom; 276: Germany; 380: Italy; 250: France; 724: Spain; 528: Netherlands(Holland); 756: Switzerland; 752: Sweden; 56: Belgium; 40: Austria; 620: Portugal; 246: Finland; 208: Denmark; 578: Norway; 300: Greece; 372: Ireland; 484: Mexico; 152: Chile; 32: Argentina; 862: Venezuela; 170: Columbia; 604: Peru; 356: India; 818: Egypt; 710: South Africa; 792: Turkey; 643: Russia; 203: Czech Republic; 616: Poland; 348: Hungary; 642: Romania; 100: Bulgaria; 504: Morocco; 703: Slovakia; 48: Bahrain; 72: Botswana; 196: Cyprus; 231: Ethiopia; 238: Falklands; 292: Gibraltar; 364: Iran; 376: Israel; 400: Jordan; 414: Kuwait; 422: Lebanon; 586: Pakistan; 634: Qatar; 682: Saudi Arabia; 512: Oman; 784: UAE; 232: Eritrea; 270: Gambia; 288: Ghana; 404: Kenya; 426: Lesotho; 454: Malawi; 470: Malta; 516: Namibia; 566: Nigeria; 736: Sudan; 694: Sierra Leone; 748: Swaziland; 760: Syria; 834: Tanzania; 800: Uganda; 894: Zambia; 887: Yemen; 716: Zimbabwe; 12: Algeria; 450: Madagascar; 480: Mauritius; 646: Rwanda; 148: Chad; 788: Tunisia; 562: Niger; 108: Burundi; 178: Congo; 266: Gabon; 384: Cote d'Ivoire; 24: Angola; 854: Burkina Faso; 120: Cameroon; 132: Cape Verde; 140: CAR; 180: DR Congo; 466: Mali; 508: Mozambique; 686: Senegal; 690: Seychelles; 768: Togo; 218: Ecuador; 780: Trinidad and Tobago; 804: Ukraine; 442: Luxembourg; 352: Iceland; 891: Yugoslavia
770-010	PFRID_SYS_ETHER_TRANSRATE	-	-	127	17, 18, 33, 34, 127	O	O	17: 10 Mbps Half-Duplex 18: 100 Mbps Half-Duplex 33: 10 Mbps Full-Duplex 34: 100 Mbps Full-Duplex 127: Auto
770-060	PFRID_SYS_IF_LIST_LP_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled
770-070	PFRID_SYS_IPCONFIG_ACCESSCONTROLMODE	0	1	0	-	O	O	0: Do not perform IPv4 Access Control 1: Perform IPv4 Access Control
770-080	PFRID_SYS_IF_LIST_SMB_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled
770-100	PFRID_SYS_IPCONFIG_IPINFOACQUISITION	-	-	8	1, 2, 4, 8, 16	O	O	1: RARP 2: DHCP 4: BOOTP 8: DHCP with AutoIP 16: Manual Setting

Table 1 NVM NET

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Infrequent Range	Write Allowed/ Protected	Default Value Yes/No	Description
770-104	PFRID_IPV6_STACK_CONFIG	-	-	4	4, 6, 10	O	O	4: Start IPv4 protocol only 6: Start IPv6 protocol only 10: Start both IPv4 and IPv6 protocols
770-126	PFRID_IPV6_PROT_MANUAL_MANUALA DDRCONF	0	1	0	-	O	X	0: IPv6 Protocol related manual settings function disabled 1: IPv6 Protocol related manual settings function enabled
770-130	PFRID_SYS_IF_LIST_NM_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled
770-140	PFRID_SYS_IF_LIST_EWS_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled
770-151	PFRID_IPV6_CONFIG_INET6ACCESSCO NTROLMODE	0	1	0	-	O	O	0: Do not perform IPv6 Access Control 1: Perform IPv6 Access Control
770-165	PFRID_EWS_MODE_PORT_NUM	1	65535	80	-	O	O	The CWIS connection port number
770-222	PFRID_SYS_IF_LIST_P9100_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled
771-075	PFRID_EWS_FEATURE__PFRSC_EWS_F EATURE_INDEX_TITLE_TAG	0	1	0	-	O	O	0: The value of PFRID_EWS_TITLE_TAG_STR (fixed value on ROM) is displayed in the title of CWIS. 1: [Product name - IP address] is displayed in the title of CWIS.
830-083	PFRID_SYS_IF_LIST_MAILSEND_ENABLE	0	1	1	-	O	O	0: Function Disabled 1: Function Enabled

6.3.18.2 NVM JOB ATTRIBUTE

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
620-408	SCANJOB_FAXJOB_DEFAULT_AE_LEVEL	0	4	1	O	O	The default background suppression for Fax Send Job and document type = Text. 0: Level 1 1: Level 2 2: Level 3 3: Level 4 4: Level 5
630-181	COPYJOB_DEFAULT_DUPLEX_MODE	3	3	3	O	O	3 : Flip on Long Edge
630-406	COPYJOB_DEFAULT_TONER_SAVE	0	1	0	O	O	0: Toner Save = OFF 1: Toner Save = ON
630-407	COPYJOB_DEFAULT_DOCUMENT_TYPE_FOR_TONER_SAVE	1	3	2	O	O	1: Text 2: Text & Photo 3: Photo
630-408	COPYJOB_DEFAULT_LIGHTEN_DARKEN_FOR_TONER_SAVE	0	4	0	O	O	0: Lighten +2 1: Lighten +1 2: Normal 3: Darken +1 4: Darken +2
630-409	COPYJOB_DEFAULT_SHARPNESS_FOR_TONER_SAVE	0	4	4	O	O	0: Soften +2 1: Soften +1 2: Normal 3: Sharpen +1 4: Sharpen +2
630-411	COPYJOB_DEFAULT_IDCARD_SCAN_AREA	86	297	100	O	O	
650-405	FAXJOB_DEFAULT_AE	0	1	1	O	O	The default background suppression for Fax Send Job and document type = Text. 0: OFF 1: ON
650-409	FAXJOB_DEFAULT_ECM	0	1	1	O	O	The default send ECM capability for Fax Receive Job. 0: OFF 1: ON
780-066	COPYJOB_DEFAULT_EDGE_ERASE	0	500	40	O	O	Paper Edge Erase Amount (0.1 mm) To calculate the pixel count, use the following formula. ((This Value x 600) / 254) rounded to the nearest whole number.
780-072	COPYJOB_DEFAULT_OFFSET	0	1	0	O	O	The default rotate & collate for Copy Job. 0: Do not rotate & collate 1: Rotate & collate

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
785-022	COPYJOB_DEFAULT_AE_LEVEL	0	4	1	O	O	0: Level 1 1: Level 2 2: Level 3 3: Level 4 4: Level 5
790-060	COPYJOB_PRESET_MAGNIFICATION	25	400	400	O	O	%
790-070	COPYJOB_DEFAULT_TRAY	0	5	0	O	O	0: APS 1: Tray 1 2: STM 3: Tray 3 4: Tray 4 5: MSI
790-072	COPYJOB_DEFAULT_MAGNIFICATION	-	-	255	O	O	The default Reduce / Enlarge for Copy Job. 0: 100% 1: R/E Preset 1 2: R/E Preset 2 3: R/E Preset 3 4: R/E Preset 4 5: R/E Preset 5 6: R/E Preset 6 7: R/E Preset 7 8: R/E Preset 8 254: R/E Preset 255: AMS
790-073	COPYJOB_FIXED_MAGNIFICATION_1	-	-	Depend s on the value of PAPER _CLASS	X	X	The default R/E Preset 1 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-074	COPYJOB_FIXED_MAGNIFICATION_2	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 2 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%
790-075	COPYJOB_FIXED_MAGNIFICATION_3	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 3 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-076	COPYJOB_FIXED_MAGNIFICATION_4	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 4 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%
790-077	COPYJOB_FIXED_MAGNIFICATION_5	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 5 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-078	COPYJOB_FIXED_MAGNIFICATION_6	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 6 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%
790-079	COPYJOB_FIXED_MAGNIFICATION_7	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 7 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-080	COPYJOB_FIXED_MAGNIFICATION_8	-	-	Depends on the value of PAPER_CLASS	X	X	The default R/E Preset 8 for Copy Job. 1002: 35.3% 1003: 50.0% 1005: 61.2% 1006: 64.7% 1007: 70.7% 1008: 78.5% 1009: 81.6% 1010: 86.6% 1011: 94.0% 1012: 97.3% 1013: 115.4% 1014: 122.5% 1015: 127.3% 1016: 129.4% 1017: 141.4% 1021: 180.0% 1022: 200.0% 1024: 282.8% 1025: 400.0%
790-094	COPYJOB_DEFAULT_DOCUMENT_TYPE	1	3	1	O	O	1: Text 2: Text & Photo 3: Photo
790-095	COPYJOB_DEFAULT_DOCUMENT_TYPE_FOR_IDCARD_COPY	1	3	1	O	O	1: Text 2: Text & Photo 3: Photo
790-097	COPYJOB_DEFAULT_AE	0	1	1	O	O	0: AE = OFF 1: AE = ON
790-098	COPYJOB_DEFAULT_LIGHTEN_DARKEN	0	4	2	O	O	0: Lighten +2 1: Lighten +1 2: Normal 3: Darken +1 4: Darken +2
790-122	COPYJOB_DEFAULT_SHARPNESS	0	4	2	O	O	0: Soften +2 1: Soften +1 2: Normal 3: Sharpen +1 4: Sharpen +2
790-131	COPYJOB_DEFAULT_DOCUMENT_SIZE	133	133	133	O	O	The default document size specification for Copy Job. 133: Auto Detect
790-181	COPYJOB_DEFAULT_PAGE_MODE	0	3	0	O	O	0: S/S 1: S/D 2: D/S 3: D/D

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-182	COPYJOB_DEFAULT_COLLATED	0	0	0	O	O	0: Uncollated
790-187	FAXJOB_DEFAULT_LIGHTEN_DARKEN	0	4	2	O	O	The default density for Fax Send Job. 0: Lighten +2 1: Lighten +1 2: Normal 3: Darken +1 4: Darken +2
790-188	FAXJOB_DEFAULT_DOCUMENT_TYPE	1	3	1	O	O	The default document type for Fax Send Job. 1: Text 2: Text & Photo 3: Photo
790-189	FAXJOB_DEFAULT_RESOLUTION_SEND	-	-	0	O	O	The default send resolution for Fax Send Job. 0: Standard 1: Fine 4: Superfine
790-196	FAXJOB_DEFAULT_DELAYED_START_HOUR	0	23	21	O	O	The default time (hours) of send queue for Fax Send Job.
790-197	FAXJOB_DEFAULT_DELAYED_START_MINUTE	0	59	0	O	O	The default time (minutes) of send queue for Fax Send Job.
790-210	FAXJOB_DEFAULT_DOCUMENT_SIZE	-	-	133	O	O	The default document size specification for Fax Send Job 1: 11x17 SEF 2: A3 SEF 5: B4 SEF 6: 8.5x14 SEF 7: 8.5x13 SEF 9: A4 SEF 14: B5 SEF 19: A5 SEF 133: Auto Detect
790-223	SCANJOB_DEFAULT_COLOR_MODE	0	1	0	O	O	The default Output Color for Scan Job (excluding Scan to PC (USB)). 0: BW 1: Color
790-224	SCANJOB_DEFAULT_DOCUMENT_TYPE	1	3	1	O	O	The default document type for Scan Job (excluding Scan to PC (USB)). 1: Text 2: Text & Photo 3: Photo
790-225	SCANJOB_DEFAULT_RESOLUTION	-	-	200	O	O	The default resolution (dpi) for Scan Job (excluding Scan to PC (USB)). 200: 200 dpi 300: 300 dpi 400: 400 dpi/300 dpi 600: 600 dpi/300 dpi

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-229	SCANJOB_DEFAULT_LIGHTEN_DARKEN	0	4	2	O	O	The default density for Scan Job (excluding Scan to PC (USB)). 0: Lighten +2 1: Lighten +1 2: Normal 3: Darken +1 4: Darken +2
790-231	SCANJOB_DEFAULT_DOCUMENT_SIZE	-	-	133	O	O	The default document size specification for Scan Job (excluding Scan to PC (USB)). 1: 11x17 SEF 2: A3 SEF 5: B4 SEF 6: 8.5x14 SEF 7: 8.5x13 SEF 9: A4 SEF 10: 8.5x11 SEF 14: B5 SEF 16: 8.5x11 LEF 18: A4 LEF 19: A5 SEF 23: B5 LEF 133: Auto Detect
790-288	SCANJOB_DEFAULT_AE	0	1	1	O	O	The default background suppression for Scan Job (excluding Scan to PC (USB)). 0: AE = OFF 1: AE = ON
790-298	SCANJOB_DEFAULT_FORMAT_BW	-	-	7	O	O	Specifies the format when BW Scan is specified for Send E-mail and Scan to PC (SMB). 4: TIFF 7: PDF
790-299	SCANJOB_DEFAULT_FORMAT	-	-	7	O	O	Specifies the format when FC Scan is specified for Send E-mail and Scan to PC (SMB). 3: JPEG 7: PDF
790-301	COPYJOB_DEFAULT_FRAME_ERASE	0	50	2	O	O	Document Border Erase Amount (mm) To calculate the pixel count, use the following formula. $\text{Å} @ ((\text{This Value} \times 600) / 25.4)$ rounded to the nearest whole number.
790-302	COPYJOB_DEFAULT_FRAME_ERASE_FOR_IDCARD_COPY	0	10	3	O	O	Document Border Erase Amount (mm) (for ID Card Copy) To calculate the pixel count, use the following formula. $\text{Å} @ ((\text{This Value} \times 600) / 25.4)$ rounded to the nearest whole number.

Table 1 JOB ATTRIBUTE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
790-307	SCANJOB_DEFAULT_IMAGE_COMPRESSION	0	4	2	O	O	The default file compression rate when Output Color = FC is selected for Scan Job (excluding Scan to PC (USB)). 0: Lower 2 1: Lower 1 2: Normal 3: Higher 1 4: Higher 2
790-311	SCANJOB_DEFAULT_SHARPNESS	0	4	2	O	O	The default Sharpness for Scan Job (excluding Scan to PC (USB)). 0: Soften +2 1: Soften +1 2: Normal 3: Sharpen +1 4: Sharpen +2
790-550	FAXJOB_DEFAULT_MAGNIFICATION	0	0	0	O	O	The default Reduce / Enlarge for Fax Send Job. 0: 100%
790-856	SCANJOB_DEFAULT_FRAME_ERASE	0	10	2	O	O	The default Edge Erase (mm) (All Edges) for Scan Job (excluding Scan to PC (USB)). To calculate the pixel count, use the following formula. $\text{Pixel Count} = ((\text{This Value} \times 600) / 25.4)$ rounded to the nearest whole number.
820-045	FAXJOB_DEFAULT_FRAME_ERASE	0	10	2	O	O	The default Edge Erase (mm) (All Edges) for Fax Send Job. To calculate the pixel count, use the following formula. $\text{Pixel Count} = ((\text{This Value} \times 600) / 25.4)$ rounded to the nearest whole number.
840-023	SCANJOB_DEFAULT_AE_LEVEL	0	4	1	O	O	The default background suppression for Scan Job. 0: Level 1 1: Level 2 2: Level 3 3: Level 4 4: Level 5
840-167	SCANJOB_DEFAULT_MAIL_MAX_ATTACH_SIZE	2	20	20	O	O	The limit value of attachment size for Scan to E-mail.

6.3.17 NVM IPS

Table 1 NVM IPS

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/No	Description
680-400	IPS_AE1FS_EXTERNAL_AREA	0	65535	255	O	O	Speed Priority AE/Fast Scan Direction Non-detection Area INSTV during SMPST and SMPED settings
680-401	IPS_LINE_TO_FIX_VARIATION	0	65535	60	O	O	Speed Priority AE/Slow Scan Variable Fixed Position/NCON Slow Scan Lead Edge AE Detection Amount
680-402	IPS_AE_CONTROL_OF_FS_LENGTH	0	1	0	O	O	AE Control of FS Length 0: Always use the document size detection result 1: Use the [Minimum FS Length for AE] as detection size
680-403	IPS_MINIMUM_FS_LENGTH_FOR_AE	0	65535	500	O	O	Minimum FS Length for AE. Fast Scan Detection Min Range. For calculating AES parameter.
680-404	IPS_BW_COPY_OFFSET_LEVEL_OF_AE	0	1092	0	O	O	Background Suppression Level for BW Copy. The suppression level: 0 (weak) to 4 (strong) for each Input Device. bit [0:3]: Platen bit[4:7]:ADF/DADF bit[8:11]:ReservedCIS Anything exceeding level 4 (5 to 15) will be treated as level 0.
680-405	IPS_BW_SCAN_FAX_OFFSET_LEVEL_OF_AE	0	1092	0	O	O	Background Suppression Level for Fax Send/BW Scan. The suppression level: 0 (weak) to 4 (strong) for each Input Device. bit [0:3]: Platen bit[4:7]:ADF/DADF bit[8:11]:ReservedCIS Anything exceeding level 4 (5 to 15) will be treated as level 0.
680-406	IPS_CL_CONTONE_OFFSET_LEVEL_OF_AE	0	1092	0	O	O	Background Suppression Level for Full Color Scan. The suppression level: 0 (weak) to 4 (strong) for each Input Device. bit [0:3]: Platen bit[4:7]:ADF/DADF bit[8:11]:ReservedCIS Anything exceeding level 4 (5 to 15) will be treated as level 0.
680-407	IPS_SCAN_SHOW_THROUGH_REMOVAL_SWITCH	0	1	0	O	O	Shadow Suppression for Full Color Scan. 0: OFF 1: ON
680-408	IPS_SCAN_SHOW_THROUGH_REMOVAL_LEVEL	0	4	2	O	O	Shadow Suppression Level for Full Color Scan. 0: Lower -2 1: Lower -1 2: Normal 3: Higher +1 4: Higher +2
680-409	IPS_CL_BALANCE_DEF_K_LOW_DENSITY	0	8	4	O	O	Default Color Balance Adjustment Level K Color Low Density

Table 1 NVM IPS

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
680-410	IPS_CL_BALANCE_DEF_K_MEDIUM_DENSITY	0	8	4	O	O	Default Color Balance Adjustment Level K Color Medium Density
680-411	IPS_CL_BALANCE_DEF_K_HIGH_DENSITY	0	8	4	O	O	Default Color Balance Adjustment Level K Color High Density
680-412	IPS_PLT_JOB_RAE_SS_NOT_DETECT_AREA	0	65535	0	O	O	For Speed Priority Background Suppression/Slow Scan Non-detection Area Platen Jobs Slow Scan Non-detection Area Setup Value BASE at Real Time AE for Platen Jobs.
680-413	IPS_ADF_JOB_RAE_SS_NOT_DETECT_AREA	0	65535	0	O	O	For Speed Priority Background Suppression/Slow Scan Non-detection Area ADF/DADF Jobs. Slow Scan Non-detection Area Setup Value BASE at Real Time AE for ADF/DADF Jobs.
680-414	IPS_DENSITY_ADJUSTMENT_FLAG_FOR_ORIGINAL_TYPE_OF_COPY	0	7	0	O	O	Density Fine Adjustment Flag - Copy Document Type bit [0]: Text, bit [1]: Photo & Text, bit [2]: Photo 1: Enabled, 0: Disabled
680-415	IPS_DENSITY_ADJUSTMENT_FLAG_FOR_DENSITY_LEVEL_OF_COPY	0	63	0	O	O	Density Fine Adjustment Flag - Copy Density Level bit [0]: Lighten +2 to bit [4]: Darken +2 1: Enabled, 0: Disabled
680-416	IPS_DENSITY_ADJUSTMENT_FLAG_FOR_ORIGINAL_TYPE_OF_BW_SCAN_AND_FAX	0	7	0	O	O	Density Fine Adjustment Flag - BW Scan/Fax Document Type bit [0]: Text, bit [1]: Photo & Text, bit [2]: Photo 1: Enabled, 0: Disabled
680-417	IPS_DENSITY_ADJUSTMENT_FLAG_FOR_DENSITY_LEVEL_OF_BW_SCAN_AND_FAX	0	63	0	O	O	Density Fine Adjustment Flag - BW Scan/Fax Density Level bit [0]: Lighten +2 to bit [4]: Darken +2 1: Enabled, 0: Disabled
680-418	IPS_DENSITY_ADJUSTMENT_PARAMETER_A_FOR_COPY	0	255	64	O	O	Density Fine Adjustment Slant A for Copy. Slant A fixed decimal format. bit [6] corresponds to coefficient 1.
680-419	IPS_DENSITY_ADJUSTMENT_PARAMETER_B_FOR_COPY	0	255	0	O	O	Density Fine Adjustment Section B for Copy. The section B negative is specified with 2 complements.
680-420	IPS_DENSITY_ADJUSTMENT_PARAMETER_A_FOR_BW_SCAN_AND_FAX	0	255	64	O	O	Density Fine Adjustment Slant A for BW Scan/Fax. Slant A fixed decimal format. bit [6] corresponds to coefficient 1.
680-421	IPS_DENSITY_ADJUSTMENT_PARAMETER_B_FOR_BW_SCAN_AND_FAX	0	255	0	O	O	Density Fine Adjustment Section B for BW Scan/Fax. The section B negative is specified with 2 complements.
680-422	IPS_FULL_COLOR_SCAN_SATURATION_ADJUSTMENT	0	4	2	O	O	Saturation Adjustment for Full Color Scan. 0: Pastel +2 1: Pastel +1 2: Normal 3: Vivid +1 4: Vivid +2

Table 1 NVM IPS

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/ Protected	Default Value Yes/No	Description
680-423	IPS_FULL_COLOR_SCAN_CONTRAST_ADJUSTMENT	0	4	2	O	O	Contrast Adjustment for Full Color Scan. 0: Less Contrast -2 1: Less Contrast -1 2: Normal 3: More Contrast +1 4: More Contrast +2
680-424	IPS_COLOR_SPACE	0	1	0	O	O	Color Space 0: Standard Color Space 1: Device Color Space
680-425	IPS_IMAGE_ENHANCE_FOR_COPY_PHOTO_MODE	0	1	0	O	O	The binarization image processing method at Photo Mode of Copy. 0: Error Diffusion 1: Dither

6.3.19 NVM ACCOUNT MODE

Table 1 NVM ACCOUNT MODE

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Scan Yes/No	Default Value Yes/No	Description
700-540	COPY_ACCOUNT_MODE	0	2	0	0	0	0: Account Free Mode 1: Single Account Mode 2: Multi Account Mode

6.3.20 NVM Jam Counter Clear & Initialize HFSI

Table 1 NVM Jam Counter Clear & Initialize HFSI

Chain-Link	NVM Name	Description
998-960	Jam Counter Clear-Tray3 Feed Out#3 Sensor On Jam	
998-961	Jam Counter Clear-Tray3 Feed Out#2 Sensor On Jam	
998-962	Jam Counter Clear-Tray3 Regi Sensor On Jam	
998-963	Jam Counter Clear-Tray4 Feed Out#4 Sensor On Jam	
998-964	Jam Counter Clear-Tray4 Feed Out#3 Sensor On Jam	
998-965	Jam Counter Clear-Tray4 Feed Out#2 Sensor On Jam	
998-966	Jam Counter Clear-Tray4 Regi Sensor On Jam	
998-970	Jam Counter Clear-Tray1 Regi Sensor On Jam	
998-971	Jam Counter Clear-Tray2 Feed Out#2 Sensor On Jam	
998-972	Jam Counter Clear-Tray2 Regi Sensor On Jam	
998-973	Jam Counter Clear-MSI Regi Sensor On Jam	
998-974	Jam Counter Clear-DUP Regi Sensor On Jam	
998-975	Jam Counter Clear-Regi Sensor Off Jam	
998-976	Jam Counter Clear-Exit Sensor On Jam	
998-977	Jam Counter Clear-Exit Sensor Off Jam	
998-978	Jam Counter Clear-Paper Length Mismatch	Paper Length Mismatch at each Tray
998-980	Initialize Fault History	
998-981	Initialize Jam Counter	Clears all the Jam Counters at one go. • Refer to [6.4.2.10 Jam Counter Reset].
998-982	Initialize HFSI Counter	Clears all the HFSI Counters at one go. • Refer to [6.4.2.8 HFSI Counter Reset].
998-983	Initialize HFSI Counter-IIT	Clears all the IIT-related HFSI Counters at one go.
998-984	Initialize HFSI Counter-MCU	Clears all the MCU-related HFSI Counters at one go.
998-985	Initialize HFSI Counter-DADF	Clears all the DADF-related HFSI Counters at one go.
999-990	NVM Initialize-Controller	• Refer to [6.4.2.5 NVM Initialize].
999-991	NVM Initialize-Network	Same as above
999-992	NVM Initialize-IIT	Same as above
999-993	NVM Initialize-MCU	Same as above
999-994	NVM Initialize-DADF	Same as above
999-995	NVM Initialize-FAX	Same as above
999-999	NVM Initialize-All Area	Same as above
999-980	Maintenance Report	• Refer to [6.4.2.7 Maintenance Report].
999-970	DATA All Delete	Initializes the Job History • Refer to [6.4.2.1.2 Data All Delete].

6.3.21 NVM FAX

Table 1 FAX

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
670-400	FAXBOX_ANS_SELECT	0	1	0	O	O	The switching of Auto Receive Mode for Fax Job. 0 = Fax Mode, 1 = Ans/Fax Mode
670-401	FAXBOX_AUTO_ANSWER_FAX	1	15	*1	O	O	The number of retrievals (times) during Auto Receive for Fax Job.
670-402	FAXBOX_AUTO_ANS_TEL_FAX	1	15	*1	O	O	The number of external line rings (times) when switching between FAX/TEL for Fax Job.
670-403	FAXBOX_LINE_MONITOR_VOLUME	0	3	2	O	O	The line transmission volume for Fax Job. 0 = OFF, 1 = Soft, 2 = Normal, 3 = Loud
670-404	FAXBOX_LINE_TYPE	0	1	0	O	O	Selects the phone line for Fax Job. 0 = PSTN, 1 = PBX
670-405	FAXBOX_DIALING_TYPE	0	2	*1	O	O	The dial type for Fax Job. 0 = PB, 1 = DP (10PPS), 2 = DP (20PPS)
670-406	FAXBOX_INTERVAL_TIMER	3	255	*1	O	O	The Fax communication interval (seconds) for Fax Job.
670-407	FAXBOX_NUMBER_OF_REDIAL	0	20	*1	O	O	The number of redials (times) for Fax Job.
670-408	FAXBOX_REDIAL_INTERVAL	1	15	*1	O	O	The redial interval (minutes) for Fax Job.
670-409	FAXBOX_JUNK_FAX_FILTER	0	1	0	O	O	Sets whether to use the DM Prevention Function for Fax Job. 0 = OFF, 1 = ON
670-410	FAXBOX_SEND_HEADER	0	1	1	O	O	Sets whether to print the Sender Record for Fax Job. 0 = OFF, 1 = ON
670-411	FAXBOX_SENT_FAX_FWD	0	1	0	O	O	Sets whether to perform Fax forwarding for Fax Job. 0 = OFF, 1 = ON
670-412	FAXBOX_DISCARD_SIZE	-	-	2	O	O	The Auto Reduce On Receipt for Fax Job. 0 = OFF, 2 = ON In this case, 2 = ON to retain compatibility with the data of Fax Box for DC2058.
670-414	FAXBOX_PAGE_MARGIN	0	127	16	O	O	The Border Limit (mm) for Fax Job.
670-416	FAXBOX_RECEIVE_PAPER_SIZE	0	3	3	O	O	The Receiving Paper Size for Fax Job. 0 = Auto, 1 = A4, 2 = A4/B4, 3 = A4/B4/A3
670-417	FAXBOX_AUTO_LETTER_A4_SELECTION	0	1	0	O	O	The Letter/A4 Auto Receive for Fax Job. 0 = Letter/A4, 1 = Letter
670-418	FAXBOX_SHIFT_IMMEDIATE_MEMORY	0	99	0	O	O	The Immediate Send Shift Remaining Memory Threshold (%) for Fax Job.
670-419	FAXBOX_EXTTEL_HOOK_THRESH	0	4	0	O	O	The Off-hook detection threshold value for Fax Job. 0 = Level 1, 1 = Level 2, 2 = Level 3, 3 = Level 4, 4 = Level 5
670-420	FAXBOX_COUNTRY	0	65535	65535	X	O	The Country for Fax Job. 65535=Unknown ,27=India ,28=Russia ,29=South Africa ,30=Central Africa ,31=Emirates ,32=Saudi Arabia ,33=Egypt, 38=Mexico ,82=Turkey ,86=Reserved ,89=Reserved When this value is set to other than default value, perform Market Info Initialization.

Table 1 FAX

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
670-421	FAXBOX_FAX_ACTIVITY	0	1	1	O	O	Sets whether to automatically output the Activity Report for Fax Job. 0 = No Auto Print, 1 = Auto Print * When changing from '1' (Auto Print) to '0' (No Auto Print) and there are 50 or more records in the receive/send history, the history after the first 50 might get erased.
670-422	FAXBOX_FAX_TRANSMIT	0	2	2	O	O	Sets whether to automatically output the Transmission Report/Transmission Report - Job Undelivered for Fax Job. 0 = Print Disabled, 1 = Print Always, 2 = Print on Error
670-423	FAXBOX_FAX_BROADCAST	0	2	1	O	O	Sets whether to automatically output the Broadcast Report for Fax Job. 0 = Print Disabled, 1 = Print Always, 2 = Print on Error
670-424	FAXBOX_FAX_PROTOCOL	0	2	0	O	O	Sets whether to automatically output the Protocol Transmission Report for Fax Job. 0 = Print Disabled, 1 = Print Always, 2 = Print on Error
671-400	FAXBOX_LOG_MSG	0	1	0	O	O	The message parameter for serial log output settings. 0 = Do not output, 1 = Output
671-401	FAXBOX_PROTOCOL_MSG	0	1	0	O	O	Protocol trace other V8 signal. 0 = Do not output, 1 = Output
690-400	FAXBOX_RX_ECM	0	1	1	O	O	The receiving ECM for Fax Job. 0 = OFF, 1 = ON
690-401	FAXBOX_FTT_FALLBACK	2	2	2	X	X	The number of FTT until fallback (times) (fixed value) for Fax Job.
690-402	FAXBOX_G3M_EQM_48	0	127	*1	O	O	The 4800 bps EQM comparison value for Fax Job.
690-403	FAXBOX_G3M_EQM_72	0	127	*1	O	O	The 7200 bps EQM comparison value for Fax Job.
690-404	FAXBOX_G3M_EQM_96	0	127	*1	O	O	The 9600 bps EQM comparison value for Fax Job.
690-405	FAXBOX_G3M_EQM_120	0	127	*1	O	O	The 12000 bps EQM comparison value for Fax Job.
690-406	FAXBOX_G3M_EQM_144	0	127	*1	O	O	The 14400 bps EQM comparison value for Fax Job.
690-407	FAXBOX_G3M_EQM_TCM72	0	127	*1	O	O	The TCM7200 EQM comparison value for Fax Job.
690-408	FAXBOX_G3M_EQM_TCM96	0	127	*1	O	O	The TCM9600 EQM comparison value for Fax Job.
690-409	FAXBOX_CABLE_EQLIZER_TX	0	3	0	O	O	The sending cable equalizer for Fax Job. 0 = 0 km, 1 = 1.8 km, 2 = 3.6 km, 3 = 7.2 km
690-410	FAXBOX_CABLE_EQLIZER_RX	0	3	2	O	O	The receiving cable equalizer for Fax Job. 0 = 0 km, 1 = 1.8 km, 2 = 3.6 km, 3 = 7.2 km
690-411	FAXBOX_TE_ATTENUATOR	0	15	*1	O	O	The Calling Tone (dBm) for Fax Job. * However, the Calling Tone is not guaranteed when 0 to 3 is selected.
690-412	FAXBOX_RX_THRESHOLD	0	3	0	O	O	The Receiving Tone for Fax Job. 0 = -43 dBm, 1 = -33 dBm, 2 = -26 dBm, 3 = -16 dBm
690-413	FAXBOX_TAP_HOLD	0	0	0	X	X	The TAP HOLD (fixed value) for Fax Job. 0 = OFF
690-414	FAXBOX_ECHO	0	1	0	O	O	The EP tone for Fax Job. 0 = OFF, 1 = ON
690-415	FAXBOX_RX_GAIN_ADJUSTMENT	0	0	0	X	X	The receive gain correction value (fixed value) for Fax Job. 0 = 0.0 dBm

Table 1 FAX

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
690-416	FAXBOX_G3_CNG_WAIT	0	255	3	O	O	The CNG Send Signals time (seconds) for Fax Job.
690-417	FAXBOX_MANUAL_CNG_SIGNAL	1	1	1	X	X	The manual send CNG Send Signals (fixed value) for Fax Job. 1 = Send
690-418	FAXBOX_CNG_STOP_SELECT	2	2	2	X	X	The CNG Cancel Sending judgment selection (fixed value) for Fax Job. 2 = V.21 preamble detection
690-419	FAXBOX_MANUAL_CED_START	2	2	2	X	X	The manual send CED Send Signals time (seconds) (fixed value) for Fax Job. 2 = 2 seconds.
690-420	FAXBOX_T1_TIMER	0	60	40	O	O	The T1 timer value immediately after calling (100 ms) for Fax Job.
690-421	FAXBOX_TX_T1_TIMER	35	35	35	X	X	The T1 timer value during send (seconds) (fixed value) for Fax Job. 35 = 35 s
690-422	FAXBOX_RX_T1_TIMER	35	35	35	X	X	The T1 timer value during receive (seconds) (fixed value) for Fax Job. 35 = 35 s
690-423	FAXBOX_T2_TIMER	5	6	6	X	X	The T2 timer value (seconds) (fixed value) for Fax Job. 6 = 6 s
690-424	FAXBOX_T3_TIMER	10	10	10	X	X	The T3 timer value (seconds) (fixed value) for Fax Job. 10 = 10 s
690-425	FAXBOX_T4_TIMER_AUTO	0	255	30	O	O	The T4 timer value during Auto Send/Receive (100 ms) for Fax Job.
690-426	FAXBOX_T4_TIMER_MANUAL	0	255	45	O	O	The T4 timer value during Manual Send/Receive (100 ms) for Fax Job.
690-427	FAXBOX_IVL_TINER	75	75	75	X	X	The no-tone timing timer value (ms) (fixed value) for Fax Job. 75 = 75 ms
690-428	FAXBOX_ITUT_PIX_DELAY	200	200	200	X	X	The image information send delay time (ms) (fixed value) for Fax Job. 200 = 200 ms
690-429	FAXBOX_IGNORE_1ST_DIS	0	1	0	O	O	The number of times to ignore DIS for Fax Job. 0 = 1 time, 1 = 2 times
690-430	FAXBOX_TX_MODEM_SPEED	0	4	0	O	O	The communication mode during send (speed) for Fax Job. 0 = Fallback from the destination machine's capability, 1 = V27 Ter fallback (2400 bps only), 2 = V27 Ter (2400, 4800 bps only), 3 = V29 Ter (7200, 9600 bps only), 4 = V17 (TC7200, TC9600, TC12000, TC14400)
690-431	FAXBOX_RX_MODEM_SPEED	0	4	0	O	O	The communication mode during receive (speed) for Fax Job. 0 = V27 Ter + V29 + V17, 1 = V27 Ter fallback (2400), 2 = V27 Ter (2400, 4800), 3 = V29 (7200, 9600), 4 = V27 Ter + V29
690-432	FAXBOX_TIS_CIG_MODE	0	0	0	X	X	The TSI/CNG send timing (fixed value) for Fax Job. 0 = Determine by availability of Local ID (Auto)
690-433	FAXBOX_WITH_CSI	0	0	0	X	X	The CSI send (fixed value) for Fax Job. 0 = Determine by availability of Local ID (Auto)
690-434	FAXBOX_TCF_CHECK_TIME	0	1	0	O	O	The TCF signal judgment reference for Fax Job. 0 = 1200 ms, 1 = 1000 ms

Table 1 FAX

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
690-435	FAXBOX_CTC_NUMBER	0	15	13	O	O	The number of ECM/CTC sends for Fax Job.
690-436	FAXBOX_T5_TIMER	60	60	60	X	X	The RNR signal timer (seconds) (fixed value) for Fax Job. 60 = 60 s
690-437	FAXBOX_RTN_PERCENT	0	100	10	O	O	The Send Reference of RTN Command (%) (proportion) for Fax Job.
690-438	FAXBOX_EXTEND_DIS_DTC	0	0	0	X	X	The number of DIS/DTC FIF send bytes (fixed value) for Fax Job. 0 = Auto
690-439	FAXBOX_DROP_OUT_TIMER	6	6	6	X	X	The image information receive dropout monitoring timer value (seconds) (fixed value) for Fax Job. 6 = 6 seconds.
690-440	FAXBOX_RX_RESOLUTION	0	4	4	O	O	The resolution specification during receive for Fax Job. 0 = STD, 1 = STD + FINE, 4 = S-FINE
690-441	FAXBOX_DATA_FORMAT	0	3	3	O	O	The Encoding Method (send/receive) for Fax Job. 0 = T30_MH, 1 = T30_MR, 2 = T30_MMR, 3 = T30_JBIG
690-450	FAXBOX_V34_MODEM_PERMITTED	0	1	1	O	O	The V34 capability for Fax Job. 0 = OFF, 1 = ON
690-451	FAXBOX_V34_SYMBOL_RATE	1	5	5	O	O	The max. permissible value of symbol speed for Fax Job. 1 = 2400, 2 = 2800, 3 = 3000, 4 = 3200, 5 = 3429
690-452	FAXBOX_V34_FIRST_TX_SPEED	1	14	14	O	O	The max. value of bit speed for Fax Job. 1=2400,2=4800,3=7200,-,12=28800,13=31200,14=33600
690-453	FAXBOX_V34_SYMBOL_ENABLE	0	255	240	O	O	The enable instruction of symbol speed for Fax Job. (When 0 to 15 is set, this is not in use).
690-454	FAXBOX_V34_CTRL_BIT_RATE	0	0	0	X	X	The control channel bit speed (fixed value) for Fax Job. 0 = 1200 bps
690-455	FAXBOX_V34_ANSAM_PHASE_REVERSAL	1	1	1	X	X	The ANSam phase reversal (fixed value) for Fax Job. 1 = Reverse
690-456	FAXBOX_V8_TE_TIME	10	10	10	O	O	The V8 Te time (100 ms) (fixed value) for Fax Job. 10 = 1000 ms
690-457	FAXBOX_V34_CC_TIMER	35	35	35	X	X	The timeout time from V34 mode (Phase 2) to control channel (seconds) (fixed value) for Fax Job. 35 = 35 s
690-458	FAXBOX_V34_SHIFT_G3	0	0	0	X	X	The G3 mode transition at V34 CC timeout (fixed value) for Fax Job. 0 = Do not transition
690-459	FAXBOX_ANSAM_SEND_TIME	4	4	4	X	X	The ANSam signal max. send time (seconds) (fixed value) for Fax Job. 4 = 4 s
690-460	FAXBOX_ANSAM_START_TIME	2	2	2	X	X	The time from line close to ANSam send (seconds) (fixed value) for Fax Job. 2 = 2 seconds.
690-461	FAXBOX_V34_GAIN_CHANGE	1	1	1	X	X	The V34 receive gain switching (fixed value) for Fax Job. 1 = Perform
690-462	FAXBOX_V34_FLAME	0	1	0	O	O	The V34 1 frame size for Fax Job. 0=256, 1=64
690-470	FAXBOX_NT_PAUSE_DURATION	0	255	*1	O	O	The pause time (100 ms) for Fax Job.
690-471	FAXBOX_PBX_SELECTION_ENABLED	0	255	3	O	O	The public network selection Send Signals time (seconds) for Fax Job.

Table 1 FAX

Chain-Link	NVM Name	Setting Range (Minimum Value)	Setting Range (Maximum Value)	Default Value	Write Allowed/Protected	Default Value Yes/No	Description
690-472	FAXBOX_TX_RETRY_NUMBER_MAX	0	255	*1	O	O	The max. number of redials (times) for Fax Job.
690-473	FAXBOX_BT_DETECTION	0	1	*1	O	O	The busy tone detection when calling for Fax Job. 0 = OFF, 1 = ON
690-474	FAXBOX_TEL_FAX_CNG_TIME	0	255	*1	O	O	The CNG detection time when switching between FAX/TEL (100 ms) for Fax Job.
690-475	FAXBOX_PARAM_FAX_LINE_MON_PERIOD	0	2	1	O	O	The line transmission setting for Fax Job. 0 = OFF, 1 = Phase A-B, 2 = All Intervals
690-476	FAXBOX_NT_DC_CURVE	1	4	*1	O	O	The DC curve selection for Fax Job. 1 = Characteristic 1, 2 = Characteristic 2, 3 = Characteristic 3, 4 = Characteristic 4
690-477	FAXBOX_NT_DP_FAST_EDGE	0	1	*1	O	O	The dial pulse edge selection for Fax Job. 0 = SLOW, 1 = FAST
690-478	FAXBOX_NT_LINE_TERMINATION	0	1	*1	O	O	The line termination for Fax Job. 0 = 600 ohm, 1 = complex
690-479	FAXBOX_DT_DETECTION	0	1	*1	O	O	The public line dial tone detection setting for Fax Job. 0 = Do not detect, 1 = Detect
690-480	FAXBOX_INCH_MILLI_BASE	0	0	0	X	X	The mm/inch switching (fixed value) for Fax Job. 0 = T30_INCH_BASE
690-482	FAXBOX_THRESH_MEM_RX	0	100	0	O	O	The Cancel Receive Remaining Memory Threshold (%) for Fax Job.
690-483	FAXBOX_G3M_TX_CODING	0	0	0	X	X	The Encoding Method during send (fixed value) for Fax Job. 0 = 3 lines
690-490	FAXBOX_PAGE_LENGTH	0	2	2	O	O	The max. recording paper length selection for Fax Job. 0 = T30_LN_A4, 1 = T30_LN_B4, 2 = T30_LN_UNLIMITED
690-495	FAXBOX_SAVE_ERROR_RX_DATA	0	0	0	X	X	Sets whether to store the pages where decode error had occurred (fixed value) for Fax Job. 0 = Do not store
691-400	FAXBOX_NT_MF_DURATION	0	255	*1	O	O	The send time (seconds) for Fax Job.
691-401	FAXBOX_NT_MF_MIN_PAUSE	0	255	*1	O	O	The PB pause time (seconds) for Fax Job.
691-402	FAXBOX_PARAM_PTT_NT_MF_ATTENUATOR_LOW	4	15	*1	O	O	The DTMF send attenuator level (dBm) for Fax Job.
691-403	FAXBOX_PARAM_PTT_NT_MF_ATTENUATOR_HIGH	0	15	*1	O	O	The DTMF high frequency/low frequency level difference (dBm) for Fax Job.
691-404	FAXBOX_FAX_TIME_FLAG	0	1	0	X	X	The availability of time settings at the Fax Board. 0: Not set, 1: Already set
691-405	FAXBOX_DATE_FORMAT	0	2	*1	O	O	0 = YY-MM-DD, 1 = MM-DD-YY, 2 = DD-MM-YY
691-406	FAXBOX_TIME_FORMAT	0	1	*1	O	O	0 = CLOCK_12HOURS, 1 = CLOCK_24HOURS

*1 : Depends on the value of COUNTRY

6.5.1.1 UI CE Diag Mode Structure

The UI displays the CE Diag Mode as a [4-Line LCD] screen.

UI Screen

The structure of the CE Diag Mode is as follows.

Enter the CE Diag Mode and sort through the diagnostic functions by inputting the Chain-Links on the [Diagnostics Mode Base] screen.

1. Shutdown History
 - Initialize Fault History
2. NVM Read / Write
3. Analog Monitor
4. NVM Initialize
5. Component Check
6. Maintenance Report
7. HFSI Counter Clear/Initialize
8. DATA All Delete
 - DATA All Delete (Controller NVM)
 - DATA All Delete (Fax NVM)
9. Test Pattern Print
10. ATC Check
11. Tone Up / Down
 - Tone Up
 - Tone Down
12. Read Temperature
13. IIT Calibration
 - Auto Shading (Platen)
 - Auto Shading (DADF BW)
 - Auto Shading (DADF CL)
 - LED Calibration
14. IIT Breakdown Diagnosis
15. DADF Size Detect Auto Adjust
16. Self Test Settings (Fax)
 - Market Info Initialize
 - Factory Settings
17. Self Test Request (Fax)
 - Tonal Signal Test
 - Dial Pulse Test
 - DTMF Dial Pulse Test
 - DTMF Signal Test
 - Modem Signal Test
 - Parameter Check
 - RAM Check
 - RTC Check
 - NCU Relay On/Off Test
18. Billing Counter Check and Repair (621-400)

6.5.1.2 How to Enter the CE Diag Mode

Procedure

Enter the CE Diag Mode by the following procedure.

1. Inform the customer that the machine will be temporarily unavailable for use (inform that all Copy, Local Print, Fax Jobs, etc. will stop) as it is going to be serviced.
2. Disconnect the machine from the customer's network.
3. Make sure that there is no Job, such as Copy, Print, or Fax, etc. that is in progress at the machine. Also check that there are no Stored Jobs.
4. Press and hold the <0> key on the Control Panel for 4 seconds or longer and then press <Start> while keeping your finger on the <0> key.
5. The [CE - Type Passcode] screen will be displayed.

Table 1

CE Mode
Please Input Entry Passcode []

6. Use the keypad to enter the Passcode [6.7.8.9] and select [OK].
7. The [Diagnostics Mode Base] screen will be displayed.

Table 2

CE Mode
Chain-Link# -

8. Perform the various diagnostics by inputting the Chain-Links on the [Diagnostics Mode Base] screen.

6.5.1.3 How to Exit from the CE Diag Mode

CAUTION

Do not leave the machine unattended while it is in the CE Diag Mode.

Procedure

Turn the power OFF and ON.

6.5.2.1 Shutdown History

Purpose

Initialize the Fault History.

- You can reference the [Error History Report] in KO Mode.

Overview

The Chain-Link, type, and overview for the Shutdown History are as follows.

Table 1

Chain-Link	Type	Overview
998-980	Initialize Fault History	Initialize the Fault History.

6.5.2.1.1 Initialize Fault History

Purpose

Initializes the Fault History (without Jam/Jam).

Procedure

- Enter the CE Diag Mode and input 998-980 in the Chain-Link.
- Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
- Perform the initialization. When the initialization has completed, [Done] will be displayed.
- Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.2 NVM Read / Write

Purpose

Refers to the NVM data or changes setting value.

NOTE: For details on NVM No. (Chain-Link), refer to 6.3.5 until 6.3.21 in Chapter 6.

Procedure

- Enter the CE Diag Mode.
- Input the Chain-Link No. and press <Start>.

NOTE: E.g.) The machine does not accept [700-6] as an abbreviation of [700-006]. When a number starts with '0', the '0' must be input.
- The current NVM setting value is displayed.
- For an NVM that can have its setting value changed, use the keypad to input the setting value and press <Start>.
 - The value that was input can be cleared by pressing <Clear (C)>.
 - To input a negative number, insert '*' at the beginning of the input.

NOTE: If an invalid value was input, an [Error] screen will be displayed. Press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
- The changed NVM setting value is displayed.
- Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.3 Analog Monitor

Purpose

Monitors the A/D converted analog value of the sensor while each component is being operated.

NOTE: For more details on the Analog Monitor Code, refer to 6.3.3.2 in Chapter 6.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. and press <Start>.
3. The current analog value is displayed.
 - When the Analog Monitor is in progress, the message [In progress] is displayed on the UI.
 - The analog value of the monitored component is displayed on the UI with a refresh rate of 3 times per second
 - It is not possible to input several Chain-Link No. at the same time to perform monitoring.
 - As there is no item with automatic timeout, the process will run until <Stop> is pressed.
4. Pressing <Stop> displays [Done] on the UI.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.4 NVM Initialize

Purpose

Returns the NVM to its default values.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. of the item to initialize.

Table 1

Chain-Link	Type	Overview
999-990	NVM Initialize - Controller	Initializes the NVM of the Controller.
999-991	NVM Initialize - Network	Initializes the NVM of the Network.
999-992	NVM Initialize - IIT	Initializes the NVM of the IIT.
999-993	NVM Initialize - MCU	Initializes the NVM of the MCU.
999-994	NVM Initialize - DADF	Initializes the NVM of the DADF.
999-995	NVM Initialize - Fax	Initializes the NVM of the Fax.
999-999	NVM Initialize - All Area	Initializes the NVM of all areas.

3. Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
4. Perform the initialization. When the initialization has completed, [Done] will be displayed.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.5 Component Check

Purpose

Displays the logic state of Input Component input signals and operates the Output Components.

NOTE: For more details on the Component Check Code, refer to 6.3.1 and 6.3.2 in Chapter 6.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. and press <Start>.

NOTE: E.g.) The machine does not accept '005-1' as an abbreviation of '005-001'. When a number starts with '0', the '0' must be entered.

3. When this is in progress, the message [In progress] is displayed on the UI.
<Input Component Check>
 - The electrical level (High or Low) of the monitored component is displayed on the UI with a refresh rate of 3 times per second
 - It is not possible to input several Chain-Link No. at the same time to perform monitoring.
 - As there is no item with automatic timeout, the process will run until <Stop> is pressed.<Output Component Check>
 - The target component is activated.
 - It is not possible to input several Chain-Link No. at the same time to perform activations.
 - For the item that does not stop automatically, press <Stop> to stop its operation.
4. Pressing <Stop> displays [Done] on the UI.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.6 Maintenance Report

Purpose

Prints the Maintenance items that can be set from and displayed on the CE Mode.

Procedure

1. Enter the CE Diag Mode and input 999-980 in the Chain-Link.
2. Pressing <Start> prints the Maintenance Report using the following settings.
 - 1 Sided Print - fixed. (The Maintenance Report cannot be printed using 2 Sided.)
 - Quantity: 1 - fixed.
3. When this is in progress, the message [In progress] is displayed on the UI.
4. Once the Maintenance Report has been printed, [Done] will be displayed on the UI.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.7 HFSI Counter Clear/Initialize

Purpose

Clears and initializes the HFSI Counter that is used as the guideline for replacement of consumables.

6.5.2.7.1 HFSI Counter Clear

Purpose

To clear the HFSI Counter.

NOTE: For more details on the HFSI Counter Code, refer to 6.3.4 in Chapter 6.

- You can reference the [Maintenance Report] in KO Mode.

Procedure

- Enter the CE Diag Mode.
- Input the Chain-Link No. and press <Start>.
- The read value of the HFSI Counter for the monitored component is displayed on the UI.
- Pressing <Clear (C)> and then <Start> clears the read value of the HFSI Counter to '0'.
- Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.7.2 HFSI Counter Initialize

Purpose

To initialize the HFSI Counter.

Procedure

- Enter the CE Diag Mode.
- Input the Chain-Link No. of the item to initialize.

Table 1

Chain-Link	Type	Overview
998-982	Initialize HFSI Counter	Clears all the HFSI Counters at one go.
998-983	Initialize HFSI Counter-IIT	Clears all the IIT-related HFSI Counters at one go.
998-984	Initialize HFSI Counter-MCU	Clears all the MCU-related HFSI Counters at one go.
998-985	Initialize HFSI Counter-DADF	Clears all the DADF-related HFSI Counters at one go.

- Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.

- Perform the initialization. When the initialization has completed, [Done] will be displayed.
- Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.8 DATA All Delete

Purpose

Erases the customer's data in the machine for security reasons when a PWB was replaced, the machine was removed, etc.

6.5.2.8.1 DATA All Delete (Controller NVM)

Purpose

To initialize the following data that are stored in the ESS/MCU PWB.

- Job History

Procedure

1. Enter the CE Diag Mode and input 999-970 in the Chain-Link.
2. Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
3. Perform the initialization. When the initialization has completed, [Done] will be displayed.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.8.2 DATA All Delete (Fax NVM)

Purpose

To initialize the following data that are stored in the Fax Kit.

- Local Terminal Information
- Telephone Book
- Jobs Stored for Transmission Information
- Various Reports
- Sending Data
- Receiving Data
- System Parameter (Default Value for each Market)

Procedure

1. Enter the CE Diag Mode and input 825-730 in the Chain-Link.
2. Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
3. Perform the initialization. When the initialization has completed, [Done] will be displayed.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.9 Test Pattern Print

Purpose

Performs copy quality check by printing the Test Pattern in the machine.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. of the Test Pattern to print.

NOTE: The 24 Gradation Density Pattern (998-905 and 998-906) can only be output on A3.

Table 1

Chain-Link	Type	Overview
998-901	Blank Image	Outputs a blank printout.
998-902	Solid black	Outputs a solid black printout.
998-903	Stripe	Outputs a black and white stripes printout.
998-904	Grid Pattern	Outputs a grid pattern printout.
998-905	24 Gradation Density Pattern (A3) (ATCN24KED)	Outputs a 24 gradation density pattern (ATCN24KED) printout.
998-906	24 Gradation Density Pattern (A3) (ATCN24KDI)	Outputs a 24 gradation density pattern (ATCN24KDI) printout.

3. The default values for the setting screen are - Quantity: 1, Tray 1, and 1 to 1 Sided.
4. Select the [Quantity], [Paper Supply] and [1 to 2 Sided].

NOTE: The Quantity can be specified up to 2 digits, with the maximum of 99.
5. Selecting Tray 5 (MSI) displays the [Paper Size] and [Paper Type] settings screen. The default values for this settings screen are as follows:
 - The values that were set most recently will be displayed.
6. When the Test Pattern output has completed, [Done] will be displayed.
7. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.10 ATC Check

Purpose

To determine ATC Sensor failure and to judge the current state of TC (toner density) in the Developer Housing Assy based on the output value of the ATC Sensor. Tone Up / Down will be performed depending on the result.

NOTE: For more details on Adjust Toner Density, refer to [ADJ 8.1.1 Adjust Toner Density] in Chapter 4.

NOTE: Never open the LH Cover and/or the Front Cover when this operation is in progress.

Procedure

1. Enter the CE Diag Mode and input 942-950 in the Chain-Link.
2. Pressing <Start> starts the ATC measurement. When the measurement is in progress, the message [In progress] is displayed.
3. After measurement ends, the measured value of the following items will be displayed.
 - Target Value: numeric display
 - Output Value: numeric display
 - Result: display [OK] or [NG] for ATC Sensor status.
4. When the Result displays [NG], perform the Tone Up / Down procedure.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.11 Tone Up / Down

Purpose

Adjusts the toner density.

NOTE: For more details on Adjust Toner Density, refer to [ADJ 8.1.1 Adjust Toner Density] in Chapter 4.

6.5.2.11.1 Tone Up

Purpose

Darkens the toner density when the Result displays [NG] during ATC Check and [Output Value] is lower than [Target Value].

Procedure

1. Enter the CE Diag Mode and input 923-913 in the Chain-Link.
2. Pressing <Start> displays the result obtained when [6.5.2.10 ATC Check] was performed.
3. Pressing <Start> after that moves you to the [Tone Up] screen.
4. On the [Tone Up] screen, specify between 1 to 20 sheets for the quantity of blank sheets to output. Use the keypad to set the quantity.
5. Select [Paper Supply].
6. Selecting Tray 5 (MSI) displays the [Paper Size] and [Paper Type] settings screen. The default values for this settings screen are as follows:
 - The values that were set most recently will be displayed.
7. Pressing <Start> outputs the specified quantity of blank sheets and increases the Toner density.
8. When this has completed, [Done] will be displayed.
9. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.11.2 Tone Down

Purpose

Lightens the toner density when the Result displays [NG] during ATC Check and [Output Value] is higher than [Target Value].

Procedure

1. Enter the CE Diag Mode and input 923-914 in the Chain-Link.
2. Pressing <Start> displays the result obtained when [6.5.2.10 ATC Check] was performed.
3. Pressing <Start> after that moves you to the [Tone Down] screen.
4. On the [Tone Down] screen, specify between 1 to 20 sheets for the quantity of solid black printouts to output. Use the keypad to set the quantity.
5. Select [Paper Supply].
6. Selecting Tray 5 (MSI) displays the [Paper Size] and [Paper Type] settings screen. The default values for this settings screen are as follows:
 - The values that were set most recently will be displayed.
7. Pressing <Start> outputs the specified quantity of solid black printouts and lowers the Toner density.
8. When this has completed, [Done] will be displayed.

9. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.12 Read Temperature

Purpose

Displays the Temperature (Degrees Celsius) inside the machine on the UI.

NOTE: *Never open the LH Cover and/or the Front Cover when this operation is in progress.*

Procedure

1. Enter the CE Diag Mode and input 942-951 in the Chain-Link.
2. Pressing <Start> displays the Temperature (Degrees Celsius) inside the machine.
3. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.13 IIT Calibration

Purpose

Performs Auto Shading (Platen), Auto Shading (DADF), and LED Calibration for the IIT.

6.5.2.13.1 Auto Shading (Platen)

Purpose

Performs auto correction for the White Reference Board's uneven density and degradation due to the passage of time.

NOTE: Auto Shading is to be performed during CE Image Quality adjustment after replacing the Top Cover, LED Lamp PWB, or IIT Carriage Kit.

Procedure

1. Enter the CE Diag Mode and input 715-106 in the Chain-Link to set the Paper Type used during Auto Shading.

Table 1

Chain-Link No.	Value	Paper Type	Default Value	Setting Range
715-106 IIT Paper Code	0	Use NVM Individual Paper Coefficient	0	0~8
	1	J paper		
	2	P paper		
	3	C2 paper		
	4	Green100 paper		
	5	Digital Color Xpression		
	6	Color Tech+		
	7	Xerox4200 paper		
	8	Xerox Business		

2. Input 998-920 in the Chain-Link.
3. Pressing <Start> displays the screen that prompts you to load a stack of 10 A3 size blank sheets on the Platen.
4. Load a stack of 10 A3 size blank sheets on the Platen and press <Start> to start the Auto Shading.
 - Performs shading to stabilize the IIT state.
 - Obtains the shading data.
 - Performs sampling of white paper data to calculate and set the White Reference Correction Coefficient. (Written into NVMs [715-092 to 715-095].)
 - Performs shading to reflect the result after the White Reference Adjustment.

5. When the Auto Shading has completed, [Done] will be displayed along with the following measured values.

Table 2

Meaning	Chain-Link No.	Default Value	Setting Range
R: numeric display (W-Ref Correction Coefficient Red)	715-092	140	70~255
G: numeric display (W-Ref Correction Coefficient Green)	715-093	140	70~255
B: numeric display (W-Ref Correction Coefficient Blue)	715-094	140	70~255
BW: numeric display (W-Ref Correction Coefficient BW)	715-095	140	70~255

6. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.13.2 Auto Shading (DADF BW)

Purpose

This diagnostic function performs correction on the density dispersion that is caused by floating DADF.

- DADF Density Correction Mode (BW): Scans in BW and calculates the BW Density Coefficient.

NOTE: Auto Shading is to be performed during CE Image Quality adjustment after replacing the DADF, Top Cover, or IIT Carriage Kit.

Procedure

1. Enter the CE Diag Mode and input 715-106 in the Chain-Link to set the Paper Type used during Auto Shading.

Table 3

Chain-Link No.	Value	Paper Type	Default Value	Setting Range
715-106 IIT Paper Code	0	Use NVM Individual Paper Coefficient	0	0~8
	1	J paper		
	2	P paper		
	3	C2 paper		
	4	Green100 paper		
	5	Digital Color Xpression		
	6	Color Tech+		
	7	Xerox4200 paper		
	8	Xerox Business		

2. Input 998-931 in the Chain-Link.

3. Pressing <Start> displays the screen that prompts you to load 1 A3 size blank sheet on the DADF.
4. Load 1 A3 size blank sheet on the DADF and press <Start> to start the Auto Shading.
 - Performs shading to stabilize the IIT state.
 - Obtains the shading data.
 - Performs sampling of white paper data to calculate and set the White Reference Correction Coefficient. (Written into NVM [715-100].)
 - Performs shading to reflect the result after the White Reference Adjustment.
5. When the Auto Shading has completed, [Done] will be displayed along with the following measured values.

Table 4

Meaning	Chain-Link No.	Default Value	Setting Range
CVT Scan Density Correction Coefficient BW	715-100	100	1~255

6. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.13.3 Auto Shading (DADF CL)

Purpose

This diagnostic function performs correction on the density dispersion that is caused by floating DADF.

- DADF Density Correction Mode (Color): Scans in Color and calculates the Color Density Coefficient.

NOTE: Auto Shading is to be performed during CE Image Quality adjustment after replacing the DADF, Top Cover, or IIT Carriage Kit.

Procedure

1. Enter the CE Diag Mode and input 715-106 in the Chain-Link to set the Paper Type used during Auto Shading.

Table 5

Chain-Link No.	Value	Paper Type	Default Value	Setting Range
715-106 IIT Paper Code	0	Use NVM Individual Paper Coefficient	0	0~8
	1	J paper		
	2	P paper		
	3	C2 paper		
	4	Green100 paper		
	5	Digital Color Xpression		
	6	Color Tech+		
	7	Xerox4200 paper		
	8	Xerox Business		

2. Input 998-932 in the Chain-Link.
3. Pressing <Start> displays the screen that prompts you to load 1 A3 size blank sheet on the DADF.
4. Load 1 A3 size blank sheet on the DADF and press <Start> to start the Auto Shading.
 - Performs shading to stabilize the IIT state.
 - Obtains the shading data.
 - Performs sampling of white paper data to calculate and set the White Reference Correction Coefficient. (Written into NVMs [715-097 to 715-099].)
 - Performs shading to reflect the result after the White Reference Adjustment.
5. When the Auto Shading has completed, [Done] will be displayed along with the following measured values.

Table 6

Meaning	Chain-Link No.	Default Value	Setting Range
CVT Scan Density Correction Coefficient Red	715-097	100	1~255
CVT Scan Density Correction Coefficient Green	715-098	100	1~255
CVT Scan Density Correction Coefficient Blue	715-099	100	1~255

6. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.13.4 LED Calibration

Purpose

1. Performs correction on the dispersion that is caused by the LED lamp color sensitivity. Calculates a* and b* from the Y Patch scan value of Calibration Chart (STP5001) and then compares them with reference values that were pre-set in the NVM to select the Correction Coefficient No. to set in the NVM.
2. At the same time, IIT Calibration is also performed to obtain the Reflective Ratio of each color by scanning each YMCK Patch of Calibration Chart (STP5001) and store them in the NVM.

NOTE: LED Calibration is to be performed during CE Image Quality adjustment after replacing the LED Lamp PWB or IIT Carriage Kit.

Procedure

1. Enter the CE Diag Mode and input 998-922 in the Chain-Link.
2. Pressing <Start> displays the screen that prompts you to place the chart (STP5001) for obtaining image data on the Platen.
3. Place the chart (STP5001) on the Platen and press <Start> to start the LED Calibration.
4. When the LED Calibration has completed, [Done] will be displayed along with the following measured values.

Use <Up> and <Down> on the control panel to scroll through the display and select [OK] to display the result. Select [Back] to return to the previous screen.

 - a. IIT Reflectivity
 - R, G, B/Y, M, C, K: numeric display (IIT Reflectivity_NVMs [715-282 to 715-293])

- Result: displays [OK] or [NG].
- b. Scan Image (for LED)
- Before: NVM [715-489] (Calculated Value Before a* Correction)
 - After: NVM [715-257] (Calculated Value After a* Correction)
 - Result: displays [OK] or [NG].
- c. Scan Image (for CCD)
- Before: NVM [715-269] (Calculated Value Before b* Correction)
 - After: NVM [715-263] (Calculated Value After b* Correction)
 - Result: displays [OK] or [NG].
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.14 IIT Breakdown Diagnosis

Purpose

Performs troubleshooting for the IIT and displays the presumed Faulty Parts No. on the UI.

Procedure

1. Enter the CE Diag Mode and input 715-030 in the Chain-Link.
2. Pressing <Start> displays the [NVM Read / Write] screen.
3. Use the keypad to enter the '1' into [NVM new value] and press <Start>.
4. Perform troubleshooting for the IIT.
When this is in progress, the message [In progress] is displayed on the UI.
5. When the troubleshooting has completed, [Done] will be displayed.
6. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.
7. On the [Diagnostics Mode Base] screen, input 715-030 in the Chain-Link again.
8. Pressing <Start> displays the Faulty Parts No. in [NVM value] of the [NVM Read / Write] screen.

The Faulty Parts No. is displayed using a 3-digit or 4-digit number.

Sample Display

- 110 (3-digit display)
The LED Lamp PWB is damaged, and the LED Lamp Flexible Flat Cable is damaged or has poor contact. The first digit '1' in '110' is the upper digit, which indicates the LED Lamp PWB ('0' in '01' is not displayed). The lower two digits '10' indicates the LED Lamp Flexible Flat Cable.
- 1000 (4-digit display)
The LED Lamp Flexible Flat Cable is damaged or has poor contact. The first 2 digits '10' in '1000' are the upper digits, which indicates the LED Lamp Flexible Flat Cable. The lower two digits '00' indicates that nothing is applicable (no failures.)

Table 1

Faulty Parts No.	Component Name	PL No.
00	Not applicable (No errors)	-
01	LED Lamp (LED Lamp PWB)	PL 1.5
02	IIT Carriage	PL 1.3
03	CCD Flexible Flat Cable	PL 1.3
04	This value is not displayed	-
05	This value is not displayed	-
06	This value is not displayed	-
07	This value is not displayed	-
08	This value is not displayed	-
09	This value is not displayed	-
10	LED Lamp Flexible Flat Cable	PL 1.5

9. After replacing the applicable parts, perform troubleshooting for the IIT again.

10. Repeat the procedure until the [NVM value] of the [NVM Read / Write] screen displays [000].

6.5.2.15 DADF Size Detect Auto Adjust

Purpose

To automatically adjust the original size during DADF scan to the desired original size.

Procedure

1. Enter the CE Diag Mode and input 998-930 in the Chain-Link.

***NOTE:** Inputting 998-930 in the Chain-Link and pressing <Start> for machines that do not have a DADF will cause an Error to be displayed.*

2. Pressing <Start> displays the screen that prompts you to load the originals on the DADF.

***NOTE:** Load 3 sheets of A4 LEF size originals.*

3. Load the originals on the DADF and press <Start>.
4. The DADF Size Detect Auto Adjust will be performed. When this is in progress, the message [In progress] is displayed on the UI.
5. When the DADF Size Detect Auto Adjust has completed, [Done] will be displayed.
6. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.16 Self Test Settings (Fax)

6.5.2.16.1 Market Info Initialize

Purpose

Initializes the Fax feature for the designated region.

Procedure

1. Enter the CE Diag Mode.
2. Enter the following Chain-Link No. depending on the designated region.

NOTE: As the Fax is optional, inputting the following Chain-Link No. and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

Table 1

Chain-Link	Type	Remarks
825-710	Market Info Initialize (INDIA)	Performs initialization for India Region
825-711	Market Info Initialize (RUSSIA)	Performs initialization for Russia region.
825-712	Market Info Initialize (SOUTH AFRICA)	Performs initialization for South Africa region.
825-713	Market Info Initialize (CENTRAL AFRICA)	Performs initialization for Central Africa region.
825-714	Market Info Initialize (EMIRATES)	Performs initialization for Emirates region.
825-715	Market Info Initialize (SAUDI ARABIA)	Performs initialization for Saudi Arabia region.
825-716	Market Info Initialize (EGYPT)	Performs initialization for Egypt region.
825-718	Market Info Initialize (MEXICO)	Performs initialization for Mexico region.
825-719	Market Info Initialize (TURKEY)	Performs initialization for Turkey region.
825-720	Reserved	
825-721	Reserved	

3. Pressing <Start> displays the initialization confirmation on the UI.
 - To initialize, press <Start> to start the initialization.
 - To cancel initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
4. Perform the initialization. When the initialization has completed, [Done] will be displayed.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.16.2 Factory Setting

Purpose

Returns the FAX-NVM settings to its factory default.

Procedure

1. Enter the CE Diag Mode and input 825-725 in the Chain-Link.
2. Pressing <Start> displays the FAX-NVM initialization confirmation on the UI.
 - To initialize the FAX-NVM, press <Start> to start the initialization.

- To cancel the FAX-NVM initialization, press <Clear (C)> to return to the [Diagnostics Mode Base] screen.
3. Perform the FAX-NVM initialization. When the initialization has completed, [Done] will be displayed.
 4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17 Self Test Request (Fax)

Purpose

Performs output check for the various signals and parts that form the Fax.

6.5.2.17.1 Tonal Signal Test

Purpose

Outputs the Tonal Signal continuously for the purpose of line monitoring and analyzer signal check.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. of the Tonal Signal to output continuously.

NOTE: As the Fax is optional, inputting the following Chain-Link No. and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

Table 1

Chain-Link	Type	Overview
825-731	Tonal Signal Test (1100 Hz)	Outputs the 1100 Hz Tonal Signal continuously.
825-732	Tonal Signal Test (2,100 Hz)	Outputs the 2,100 Hz Tonal Signal continuously.

3. Pressing <Start> starts the continuous output of Tonal Signal.
When this is in progress, the message [In progress] is displayed on the UI.
4. Pressing <Stop> ends the output of Tonal Signal and displays [Done] on the UI.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.2 Dial Pulse Test

Purpose

Outputs the PB Pulse Signal of the Dial continuously for the purpose of analyzer signal check.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. of the Dial Pulse Signal to output continuously.

NOTE: As the Fax is optional, inputting the following Chain-Link No. and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

Table 2

Chain-Link	Type	Overview
825-733	Dial Pulse Test (10 pps)	Outputs the 10 pps Dial Pulse Signal continuously.
825-734	Dial Pulse Test (20 pps)	Outputs the 20 pps Dial Pulse Signal continuously.

3. Pressing <Start> displays the [Dial Pulse Test Settings] screen on the UI.
4. Input the Dial value to be tested on the [Dial Pulse Test Settings] screen.
 - Use the numeric keypad ('0' to '9', '#', and '*') to input the Dial value of up to 16 characters.
 - Pressing <Clear (C)> clears the Dial value that was input.
5. Pressing <Start> starts the continuous output of Dial Pulse Signal for the Dial number that was set.
When this is in progress, the message [In progress] is displayed on the UI.
6. Pressing <Stop> ends the output of Dial Pulse Signal and displays [Done] on the UI.
7. Pressing <Clear (C)> returns you to the [Dial Pulse Test Settings] screen.
8. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.3 DTMF Dial Pulse Test

Purpose

Outputs a DTMF Pulse Signal of the Dial for the purpose of analyzer signal check.

Procedure

1. Enter the CE Diag Mode and input 825-735 in the Chain-Link.
NOTE: As the Fax is optional, inputting 825-735 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.
2. Pressing <Start> displays the [DTMF Dial Pulse Test Settings] screen on the UI.
3. Input the Dial value to be tested on the [DTMF Dial Pulse Test Settings] screen.
 - Use the numeric keypad ('0' to '9', '#', and '*') to input the Dial value of up to 16 characters.
 - Pressing <Clear (C)> clears the Dial value that was input.
4. Pressing <Start> starts the output of DTMF Pulse Signal for the Dial number that was set.
When this is in progress, the message [In progress] is displayed on the UI.
5. When the DTMF Pulse Signal output has completed, [Done] will be displayed.
6. Pressing <Clear (C)> returns you to the [DTMF Dial Pulse Test Settings] screen.
7. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.4 DTMF Signal Test

Purpose

Outputs a specified Dial Data ('0' to '9', '#', and '*') continuously for the purpose of analyzer signal check.

Procedure

1. Enter the CE Diag Mode and input 825-736 in the Chain-Link.

NOTE: As the Fax is optional, inputting 825-736 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

2. Pressing <Start> displays the [DTMF Signal Test Settings] screen on the UI.
3. Input the Dial value to be tested on the [DTMF Signal Test Settings] screen.
 - Use the numeric keypad ('0' to '9', '#', and '*') to input a Dial value.
 - Pressing <Clear (C)> clears the Dial value that was input.
4. Pressing <Start> starts the continuous output of Dial Data Signal for the Dial number that was set.
When this is in progress, the message [In progress] is displayed on the UI.
5. Pressing <Stop> ends the output of Dial Data Signal and displays [Done] on the UI.
6. Pressing <Clear (C)> returns you to the [DTMF Signal Test Settings] screen.
7. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.5 Modem Signal Test

Purpose

Performs a Modem speed (bps) test for the purpose of analyzer signal check.

Procedure

1. Enter the CE Diag Mode.
2. Input the Chain-Link No. of the communication speed to test.

NOTE: As the Fax is optional, inputting the following Chain-Link No. and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

Table 3

Chain-Link	Type	Overview
825-737	Modem Signal Test-V34 (33600 bps)	Performs the Modem speed test at V34 (33600 bps).
825-738	Modem Signal Test-V34 (28800 bps)	Performs the Modem speed test at V34 (28800 bps).
825-739	Modem Signal Test-V17 (14400 bps)	Performs the Modem speed test at V17 (14400 bps).
825-740	Modem Signal Test-V17 (12000 bps)	Performs the Modem speed test at V17 (12000 bps).
825-741	Modem Signal Test-V17 (9600 bps)	Performs the Modem speed test at V17 (9600 bps).
825-742	Modem Signal Test-V17 (7200 bps)	Performs the Modem speed test at V17 (7200 bps).
825-743	Modem Signal Test-V29 (9600 bps)	Performs the Modem speed test at V29 (9600 bps).
825-744	Modem Signal Test-V29 (7200 bps)	Performs the Modem speed test at V29 (7200 bps).
825-745	Modem Signal Test-V27 (4800 bps)	Performs the Modem speed test at V27 (4800 bps).
825-746	Modem Signal Test-V27 (2400 bps)	Performs the Modem speed test at V27 (2400 bps).

3. Pressing <Start> starts the Modem speed test.
When this is in progress, the message [In progress] is displayed on the UI.
4. Pressing <Stop> ends the output and displays [Done] on the UI.
5. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.6 Parameter Check

Purpose

Checks the checksum of file registration data.

Procedure

1. Enter the CE Diag Mode and input 825-747 in the Chain-Link.

NOTE: As the Fax is optional, inputting 825-747 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.

2. Pressing <Start> starts the Parameter Check.
When this is in progress, the message [In progress] is displayed on the UI.
3. If the Parameter Check did not detect any errors, [Done] will be displayed on the UI at the completion of the Parameter Check. If it has completed with an error, a screen that indicates the condition will be displayed.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.7 RAM Check

Purpose

Checks whether the address area can be read from/written to normally by performing bit check test on specific areas.

Procedure

1. Enter the CE Diag Mode and input 825-748 in the Chain-Link.
NOTE: As the Fax is optional, inputting 825-748 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.
2. Pressing <Start> starts the RAM Check.
When this is in progress, the message [In progress] is displayed on the UI.
3. If the RAM Check did not detect any errors, [Done] will be displayed on the UI at the completion of the RAM Check. If it has completed with an error, a screen that indicates the condition will be displayed.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.8 RTC Check

Purpose

Checks whether it is possible to read the time that is set in the RTC Task.

Procedure

1. Enter the CE Diag Mode and input 825-749 in the Chain-Link.
NOTE: As the Fax is optional, inputting 825-749 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.
2. Pressing <Start> starts the RTC Check.
When this is in progress, the message [In progress] is displayed on the UI.
3. If the RTC Check did not detect any errors, [Done] will be displayed on the UI at the completion of the RTC Check. If it has completed with an error, a screen that indicates the condition will be displayed.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.17.9 NCU Relay On/Off Test

Purpose

Checks for relay malfunction, voltage value, and current value by turning the relay that is used in the NCU ON and OFF.

Procedure

1. Enter the CE Diag Mode and input 825-750 in the Chain-Link.
NOTE: As the Fax is optional, inputting 825-750 in the Chain-Link and pressing <Start> for machines that do not have Fax will cause an Error to be displayed.
2. Pressing <Start> turns ON the relay that is used in the NCU and displays [NCU Relay On] on the UI.

3. Pressing <Stop> turns OFF the relay that is used in the NCU and displays [NCU Relay Off] on the UI.
4. Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.5.2.18 Checking and Repairing the Billing Counter (621-400)

Purpose

- If there is any difference between the Billing/Meter values at the 2 locations, the error code (116-334 NVM Data Mismatch or 124-311 Serial Number Fail) will be displayed. The corrective action for this condition is listed here.

Overview

- The Billing Counter for WorkCenter 5022/5024 is a Software Meter. The Billing Counter number of sheets is stored in 2 locations - the [External (Master) EEP ROM] on the ESS/ MCU (AIO Controller) PWB and the [Mounted (Backup) EEP ROM] in the PWB.

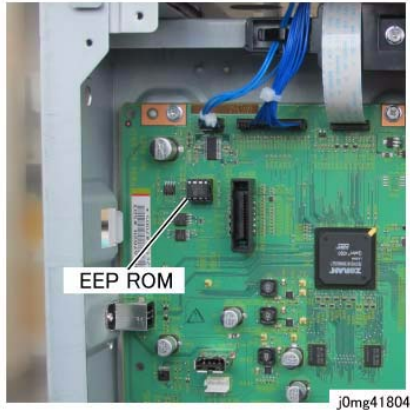


Figure 1 j0mg41804

- When the power is turned ON, the Billing/Meter values that is stored in the EEP ROM at the 2 locations will be checked. If a difference appears between the values at the 2 locations, the error code (116-334 NVM Data Mismatch or 124-311 Serial Number Fail) will be displayed.

Procedure

- Enter the CE Diag Mode and input 621-400 in the Chain-Link to perform NVM matching.
- Input '1' in [NVM new value] if you want to restore the data from the External (Master) EEP ROM to the Mounted (Backup) EEP ROM and input '2' if you want to restore the data from the Mounted (Backup) EEP ROM to the External (Master) EEP ROM.

Table 1

Input Value	Operation	Data Copy
0	Do nothing	Default (NVM value)
1	NVM Restore	Restores the data from the External (Master) EEP ROM to the Mounted (Backup) EEP ROM

Table 1

Input Value	Operation	Data Copy
2	NVM Restore	Restores the data from the Mounted (Backup) EEP ROM to the External (Master) EEP ROM

621-400 NVM Read/Write	
Chain-Link#	621 - 400
NVM valve	0
NVM new valve	1

j0mg64011

Figure 2 j0mg64011

- Press <Start> to perform the repair.
- Pressing <Clear (C)> returns you to the [Diagnostics Mode Base] screen.

6.8.1 Activity Report (User Mode)

Send

Table 1

No.	Document No.	Recipient	Start Time	Time used	No. of pages	Mode	Communication Contents	Communication Result
1	xx	xxx	xx: xx	x min xx sec	x	xx	xxx	xxxx
2	xx	xxx	xx: xx	x min xx sec	xx	xx	xxx	xxxx

Receive

Table 2

No.	Document No.	Recipient	Start Time	Time used	No. of pages	Mode	Communication Contents	Communication Result
1	xx	xxx	xx: xx	x min xx sec	x	xx	xxx	xxxx
2	xx	xxx	xx: xx	x min xx sec	xx	xx	xxx	xxxx

In the following order, 1 Remote Station is recorded.

Table 3

During Registration Dialing	Outgoing Call Recipient Name > Telephone Number > Remote ID > Communication Mode
-----------------------------	--

Table 4

Communication Result	Contents
Ready	Print or Store to Mailbox completes without any errors.
Line Busy	The specified number of redials was exceeded
Auto Resend	Call for resend without exceeding the limit on resending
Disconnect	The operator forced a specific call to stop on the panel
Recipient Verification Required	Error during communication caused by the recipient or the network
xxx-xxx	Error Code has occurred (Chain-Link Code)

6.8.2 Activity Report (CE Mode)

Send

Table 1

No.	Document No.	Recipient	Start Time	Time used	No. of pages	Mode	Communication Contents	Communication Result
1	xx	xxx	xx: xx	x min xx sec	x	xx	xxx	xxxx
2	xx	xxx	xx: xx	x min xx sec	xx	xx	xxx	xxxx

Receive

Table 2

No.	Document No.	Recipient	Start Time	Time used	No. of pages	Mode	Communication Contents	Communication Result
1	xx	xxx	xx: xx	x min xx sec	x	xx	xxx	xxxx
2	xx	xxx	xx: xx	x min xx sec	xx	xx	xxx	xxxx

6.8.3 Protocol Monitor

Format Overview

The implication of the symbol which appears in the arrow

In G3 mode, the command for displaying added information in the arrow is displayed.

< [Added Information] -

Example)

< @- , < #-

Implication of added information

Table 1

Added Information Code	When sending	When receiving
-	Normal signal	Normal signal
@	Undefined	Undefined
X	Undefined	CRC Error Detection
#	Undefined	Undefined
!	Undefined	Carrier disconnected for 1sec in image information
=	Undefined	Intermittent discontinuity in image information
/	Undefined	Undefined
*	Undefined	Undefined
+	Undefined	Undefined
:	Undefined	Undefined
A	Undefined	Undefined
B	Undefined	Undefined
C	Undefined	Undefined
D	Undefined	Undefined
E	Undefined	Undefined
F	Undefined	Undefined

Recorded G3 Signal Name and Implication

Table 2

Signal Name	Description
CED	Called Station Identification Signal
CNG	Outgoing Calling Tone
CI	Function Display Signal
ANSam	Varied Answering Tone
CM	Calling Menu Signal
JM	Common Menu Signal
CJ	CM Terminal Signal
NSF	Non-standard Features
CSI	Called Station Identification
DIS	Digital Identification Signal
NSC	Non-Standard Function Command
CIG	Calling Terminal Identification
DTC	Digital Send Command
SEP	Selection Polling
PSA	Polling Sub-Address
PWD	Password
NSS	Non-Standard Function Settings
TSI	Transmission Terminal Identification
DCS	Digital Command Signal
SUB	Sub Address
SID	Sending Station Identification
TCF	Training Check
CFR	Reception Preparation Verification
FTT	Training Failed
CTC	Correction Continuation (ECM)
CTR	Correction Continuation Response (ECM) [Response for CTC]
NSSX	Non-Standard Function Settings
TCFX	Training Check
PIX	Image Information
TRN	Training
CPIX	Image Information (ECM)
EOM	Note
EOP	Message Ends
EOS	Procedure Ends
MCF	Message Confirmation
MPS	Multi-Page Signal
PIN	Procedure Disruption Reject
PIP	Procedure Disruption Affirmation
PRI-EOM	Procedure Disruption EOM

Table 2

Signal Name	Description
PRI-MPS	Procedure Disruption MPS
PRI-EOP	Procedure Disruption EOP
RTN	Retraining Reject
RTP	Retraining Affirmation
EOR. EOM	Resend Ends / Message Ends (ECM)
EOR. EOP	Resend Ends / Procedure Ends (ECM)
EOR. MPS	Resend Ends / Multi-Page Signal (ECM)
EOR.NULL	Resend Ends / Partial Page Boundary (ECM)
EOR.PEOM	Resend Ends / Procedure Disruption EOM (ECM)
EOR.PEOP	Resend Ends / Procedure Disruption EOP (ECM)
EOR.PMPS	Resend Ends / Procedure Disruption MPS (ECM)
ERR	Resend Completion Response (ECM) [Response for EOR]
PPR	Partial Page Request (ECM)
PPS. EOM	Partial Page Signal / Message Ends (ECM)
PPS. EOP	Partial Page Signal / Procedure Ends (ECM)
PPS. MPS	Partial Page Signal / Multi-Page Signal (ECM)
PPS. NULL	Partial Page Signal / Partial Page Boundary (ECM)
PPS. PEOM	Partial Page Signal / Procedure Disruption EOM (ECM)
PPS. PEOP	Partial Page Signal / Procedure Disruption EOP (ECM)
PPS. PMPS	Partial Page Signal / Procedure Disruption MPS (ECM)
RNR	Reception Not Allowed (ECM)
RR	Reception Allowed (ECM)
EOMX	Message Ends (Xerox)
EOR.EOMX	Resend Ends / Message Ends (Xerox, ECM)
EOR.MPSX	Resend Ends / Multi-Page Signal (Xerox, ECM)
EOR.PEOX	Resend Ends / Procedure Disruption EOM (Xerox, ECM)
EOR.PMPX	Resend Ends / Procedure Disruption MPS (Xerox, ECM)
MPSX	Multi-Page Signal (Xerox)
PPS. EOMX	Partial Page Signal / Message Ends (Xerox, ECM)
PPS. MPSX	Partial Page Signal / Multi-Page Signal (Xerox, ECM)
PPS. PEOX	Partial Page Signal / Procedure Disruption EOM (Xerox, ECM)
PPS. PMPX	Partial Page Signal / Procedure Disruption MPS (Xerox, ECM)
PRI-MPSX	Procedure Disruption MPS (Xerox)
PRI-EOMX	Procedure Disruption EOM (Xerox)
CRP	Command Resend
DCN	Disconnection Command

6.8.4.2 FCF/FIF Description

DIS: 80

DCS: 82/83

DTC: 81

Frame (Signal) List Table sent by Sending Station during F-Code Communication... Frame Name is printed in protocol

Table 1

Frame Name	FCF	Name/Contents
PWD	C1	Password. Enter password in FIF. Sending permitted only when Bit 50 of DIS is 1.
SEP	A1	Selective Polling. Enter the Sub Address in FIF. Displays the specific document number when used with PSA concurrently. Sending permitted only when Bit 47 of DIS is 1.
PSA	61	Polling Sub Address. Enter the Sub Address in FIF. Sending permitted only when Bit 35 of DIS is 1.
SUB	C2/C3	Sub Address. Enter the Sub Address of the called party in FIF. Sending permitted only when Bit 49 of DIS is 1.
SID	A2/A3	Sending Station ID. Enter the identification number (Local Station ID) of the Sending Station in FIF. Sending permitted only when Bit 50 of DIS is 1.

The frame (signal) that can be used is decided according to the capability of the Receiving Station declared by DIS.

Every frame in the table has to be sent prior to DCS.

When sending, Bit 49 and 50 of DCS and Bit 35, 47, and 50 of DTC must be set to '1'.

Enter 20 characters for Password in ASCII code (0-9, #, *) and 20 characters for Sub Address in ASCII code (0-9).

6.8.4.3 Bit 7 Description

64: ECM Frame size (DCS is invalid)

0 -> 256 Octet

1 -> 64 Octet

Refer to 'EFS' of Bit 28 (6.8.4.15)

6.8.4.4 Bit 6 Description

V8: V.8 Capability (28.8Kbps MODEM Function, SG3)

0 -> Off

1 -> On (DCS is invalid)

6.8.4.5 Bit 16 Description

D2: Two Dimension Coding (Encoding Capability)

0 -> MH only

1 -> MH and MR

6.8.4.6 Bit 15 Description

VR: Vertical Resolution (Slow Scan Linear Density)

0 -> 3.85l/mm 1 -> 3.85l/mm and 7.7l/mm

Also see Bit 44 and 45

- Bit 44: Refer to 6.8.4.22
- Bit 45: Refer to 6.8.4.21

6.8.4.7 Bit 14~11 Description

DSR: Data Signaling Rate (Electrical Transmission Speed), [] corresponds to the past machine only

Table 1

14	13	12	11	DIS/DTC	DCS
0	0	0	0	V27ter Fall Back	2400 Bit/s: V27ter
0	0	1	0	V27ter	4800 Bit/s: V27ter
0	0	0	1	V29	9600 Bit/s: V29
0	0	1	1	V27ter and V29	7200 Bit/s: V29
0	1	0	0	Not Used	Invalid [14400 Bit/s: V33]
0	1	1	0	Preset	Invalid [12000 Bit/s: V33]
0	1	0	1	Not Used	Preset
0	1	1	1	Invalid [V27ter, V29, V33]	Preset
1	0	0	0	Not Used	14400 Bit/s: V17
1	0	1	0	Preset	12000 Bit/s: V17
1	0	0	1	Not Used	9600 Bit/s: V17
1	0	1	1	V27ter, V29, [V33] V17	7200 Bit/s: V17
1	1	0	0	Not Used	Preset
1	1	1	0	Preset	Preset
1	1	0	1	Not Used	Preset
1	1	1	1	Preset	Preset

6.8.4.8 Bit 10 Description

RX: Reception Capability

0 -> Off

1 -> On

6.8.4.9 Bit 9 Description

TX: Preparation of Send Originals or Documents for Public Polling

0 -> Send Document Not Available (DCS is fixed at 0)

1 -> Ready

6.8.4.10 Bit 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112 Description

EXT: Extend Field (Extended Field)

0 -> Indicates no data in the subsequent byte

1 -> Indicates data in the subsequent byte

6.8.4.11 Bit 21~23 Description

MSL: Minimum Scan Line (Minimum Scan Line Electrical Transmission Time Capability)

Table 1

23	22	21	DIS (Minimum Scan Line Time Capability)	DCS (Minimum Scan Line Time)
0	0	0	20ms (3.85l/mm): T7.7=T3.85	20ms
1	0	0	40ms (3.85l/mm): T7.7=T3.85	40ms
0	1	0	10ms (3.85l/mm): T7.7=T3.85	10ms
0	0	1	5ms (3.85l/mm): T7.7=T3.85	5ms
1	1	0	10ms (3.85l/mm): T7.7=1/2 T3.85	Not Used
0	1	1	20ms (3.85l/mm): T7.7=1/2 T3.85	Not Used
1	0	1	40ms (3.85l/mm): T7.7=1/2 T3.85	Not Used
1	1	1	0ms (3.85l/mm): T7.7=T3.85	0ms

- Displays the minimum scanning time per scan line for 7.7l/mm (High Quality) and 3.85l/mm (Standard) Slow Scan Linear Density of T7.7 and T3.85 respectively.
- T7.7=1/2 T3.85 means that the scanning time in High Quality mode is reduced to half of the scanning time in Standard Mode.
- MSL is being ignored at ECM Communication.

6.8.4.12 Bit 19, 20 Description

UL: Unlimited (Unlimited length=Roll Paper)

LB4: Length of B4 (B4 length)

Table 1

UL	LB4	Maximum Record Length (Slow Scan Length)
0	0	A4 length (297mm)
0	1	B4 length (364mm) and A4 length (297mm)
1	0	Unlimited length (Roll Paper)
1	1	Invalid (Selection not allowed)

6.8.4.13 Bit 17, 18 Description

WA3: Width of A3 (A3 Width)

WB4: Width of B4 (B4 Width)

Table 1

WA3	WB4	Maximum Record Width (Fast Scan Width)
0	0	A4 width (215mm)
0	1	Below B4 width (255mm) (A4 included)
1	0	Below A3 width (303mm) (B4 and A4 included)
1	1	Invalid (Selection not allowed)

6.8.4.14 Bit 31 Description

T6: T.6 Coding (MMR Coding)

0 -> MMR Coding Disabled

1 -> MMR Coding Enabled

6.8.4.15 Bit 28 Description

EFS: ECM Frame size (ECM Frame Octet Count)

0 -> 256 Octet (DIS is fixed at 0)

1 -> 64 Octet

NOTE: Among Bit 7 data, when DIS Bit 7 is '1', DCS Bit 28 will be declared as '1', and ECM frame will become 64 Octet Mode. (For Description of Bit 7, refer to 6.8.4.3)

6.8.4.16 Bit 27 Description

ECM: Error Correction Mode

- 0 -> ECM Disabled
- 1 -> ECM Enabled

6.8.4.17 Bit 26 Description

UCM: Uncompressed Mode

- 0 -> Off
- 1 -> On

6.8.4.18 Bit 25 Description

HSM: 2400BPS Handshaking

0 -> Off

1 -> On

HSM is pertinent to past models. New recommended machine is set to '0'.

6.8.4.19 Bit 1, 3, 33~38, 47, 49~51, 53~55, 57, 59, 60, 62, 65~71, 73~75, 81~84, 87, 92~95, 97~99, 101, 102 Description

Table 1

Division	Bit No.	Item Name	Contents [For DIS/DTC -> 1: With capability, 0: No capability; For DCS -> 1: Send the relevant signal, 0: Do not send]
I	Bit 1	SIM	Internet Fax Simple Mode Capability
I	Bit 3	REAL	Internet Fax Real time Internet Fax
-	Bit 33	IGN	Invalid Field Signal Capability
F	Bit 34	SPC	F Code Multiple Selection Polling Capability. DCS is set to 0. (Refer to the table in 6.8.4.2)
F	Bit 35	SUB	F-Code Polling Sub Address Capability DCS is set to 0. (Refer to the table in 6.8.4.2)
C	Bit 36	T43	Color Fax T.43 Encoding Capability. Select T.43 or JPEG (Bit 68) as the Encoding Method
C	Bit 37	INT	Color Fax Plain Interleave Capability. Valid only when Bit 36 is 1.
F	Bit 34	SPC	F Code Multiple Selection Polling Capability. DCS is set to 0. (Refer to the table in 6.8.4.2)
F	Bit 47	SEP	F Code Selection Polling Capability. DCS is set to 0. (Refer to the table in 6.8.4.2)
F	Bit 49	SAC	F Code Sub Address Capability (Refer to the table in 6.8.4.2)
F	Bit 50	PWC	F Code Password Capability (Refer to the table in 6.8.4.2)
-	Bit 51~51	-	File Transfer Capability
-	Bit 59~65	-	Mixed Mode / Bit 66 and 67
C	Bit 68	JPG	Color Fax JPEG Encoding Capability. Bit 27 (ECM) is set to 1 if this is set to 1.
C	Bit 69	FC	Color Fax Full Color Capability. Valid only when Bit 68 is 1.
C	Bit 70	HUF	Huffman Code Table Command. Valid only when Bit 68 is 1. DIS is set to 0. (Change the compression rate based on the Code Table)
C	Bit 71	12	12bit/pixel Capability. For 0, image data is 8bit/pixel. Valid only when Bit 68 is 1.
C	Bit 73	SAM	Color Fax Sub Sampling Disabled (L*, a*, b* is 1: 1: 1). 0 is 4: 1: 1. Valid only when Bit 68 is 1.
C	Bit 74	ILL	Color Fax Non-Standard Irradiated Light. 0 uses CIE Standard Irradiated Light D50. Valid only when Bit 68 is 1.
C	Bit 75	GAR	Color Fax Non-Standard Gamut Range. 0 uses the standard range. Valid only when Bit 68 is 1.
-	Bit 81	HKM	HKM key
-	Bit 82	RSA	RSA key

Table 1

Division	Bit No.	Item Name	Contents [For DIS/DTC -> 1: With capability, 0: No capability; For DCS -> 1: Send the relevant signal, 0: Do not send]
-	Bit 83	OVR	Overwrite Mode
-	Bit 84	HFX	HFX40 Code
-	Bit 87	HFI	HFX40-I Hashing Capability
-	Bit 92-95	T44	Mixed Raster Contents Mode
C	Bit 97	C34	Color Fax 300x300, or 400x400 pixels/25.4mm Capability
C	Bit 98	C100	Color Fax 100x100 pixels/25.4mm Capability
-	Bit 99	BFT	Binary File Transfer Capability
I	Bit 101	IP	Internet Fax Selective Polling. DCS is set to 0.
I	Bit 102	IA	Internet Fax Routing Address. When used in DCS, other F-Code Bit 49 and 50 may be set to 1.

Division Description

Table 2

Division	Contents
C: Color Fax	Scan a color document with a Scanner of 200 dpi or more and encode (compress) the image data with 8x8 bits pixel elements (or more) (CIELAB data Expressed by L*, a*, b*) to JPEG or T43 for transmission purposes. ECM is required for G3. a*: +Red<->Green- ('+' value for Red and '-' value for Green), b*: +Yellow<->Blue-(same) CIELAB Data Color Component Sampling L*,a*,b* -> 4: 1: 1 shows that a*, b* components are reduced to 1/4 of L* component (Brightness element data). 1: 1: 1 indicates that Sub Sampling is not performed (not thinned out). Moreover, if only L* component is being used while a*,b* value is set to 0, 0, it will become BW Fax.
F: F-Code	(Refer to Table 2 for F-Code) F-Code Communication also supports password-protected Mail Box communication with machine of other brands. Registers the password or sub-address to the receiving station and notifies the setup availability in DIS. Add password, sub address, and others in the function frame at the Sending Station and send. The Receiving station will receive only if the settings match. If the Sending Station does not have the capability, the frame will not be sent.
T: File Transfer	-
M: Mixed Mode	-

6.8.4.20 Bit 46 Description

HMSL: Super High Quality Mode MSL Time (Valid for DIS only)

0 -> T15.4=T7.71 -> T15.4=1/2 T7.7

- If HMSL is '1' and T7.7 is 10, 20, 40ms, the linear scan time for Super High Quality Mode is reduced to 1/2 of High Quality Mode.
- If DIS T7.7 is 0ms or 5ms (Bit 23, 22 and 21 are 111, 001, and 110 respectively), Bit 46 must be set to '0'.

6.8.4.21 Bit 45 Description

MBR: Metric Based Resolution Preferred

(mm series resolution capability ... DIS only)

DIS

0 -> Off

1 -> On (DCS is optional)

When Bit 15 is '1'

Table 1

MBR	IBR	Resolution (relationship between Bit 15 and Bit 43, 44, and 45)
0	0	Invalid (Selection not allowed)
0	1	200x200 pel/inch
1	0	8x7.7 l/mm
1	1	8x7.7l/mm and 200x200pel/inch

When Bit 43 is '1'

Table 2

MBR	IBR	Resolution (relationship between Bit 15 and Bit 43, 44, and 45)
0	0	Invalid (Selection not allowed)
0	1	400x400 pel/inch
1	0	16x15.4 l/mm
1	1	16x15.4 l/mm and 400x400 pel/inch

* When Bit 41~43 is 0, the contents of Bit 15 becomes valid.

6.8.4.22 Bit 44 Description

IBR: Inch Based Resolution Preferred

(Inch Series Resolution Capability) DIS

0 -> Off

1 -> On

DCS

0 -> mm series

1 -> Inch series

6.8.4.23 Bit 43 Description

Super High Quality Capability

0 -> Off

1 -> On

DIS 16x15.4 l/mm and/or 400x400 pel/inch

DCS 16x15.4 l/mm or 400x400 pel/inch

6.8.4.24 Bit 42 Description

300x300 pel/inch (TC7033 Super High Quality-equivalent)

0 -> Off

1 -> On

6.8.4.25 Bit 41 Description

8x15.4 l/mm (7017/7045 High Quality 2-equivalent)

0 -> Off

1 -> On

6.8.4.26 Bit 79 Description

850: T.85 JBIG Option Capabilities

0-> OFF

1->On (Bit 78 and 27 are set to '1')

6.8.4.27 Bit 78 Description

85B: T.85 JBIG Basic Capacity

0: OFF

1: On (Bit 27: ECM is set to '1')

6.8.4.28 Bit 77 Description

LEG: North America Legal Size (215.9x355.6mm)

0: OFF

1: On (when DIS/DTC is 1, the reception capability of A4 size is required)

6.8.4.29 Bit 76 Description

LET: North America Letter Size (215.9x279.4mm)

0: OFF

1: On (when DIS/DTC is 1, the reception capability of A4 size is required)

6.8.4.30 Bit 105~109 Description

Table 1

Bit NO	Contents	Description	Value
105	600	600x600 pixels/25.4mm	1: ON 0: OFF
106	1200	1200x1200 pixels/25.4mm	1: ON 0: OFF
107	3x6	300x600 pixels/25.4mm	1: ON 0: OFF
108	4x8	400x800 pixels/25.4mm	1: ON 0: OFF
109	6x12	600x1200 pixels/25.4mm	1: ON 0: OFF

6.8.5.1 Super G3 Fax

In 1996 ITU-T, [Super G3 Fax] is recommended.[Super G3 Fax] supports 28.8Kbps Fax communication, has modem capability of V.8 and V.34, and its protocol consists of V.8 and V.34 parts....33.6Kbps is also available as an option. With [Super G3 Fax], 28.8Kbps communication with the other companies Fax is made possible, and so is the communication with the conventional 14.4K/9600 bps G3 Fax.

- When communicating via [Super G3] mode, [SG3] is recorded in the Report Mode column.
- [Super G3] Image Information Transmission is performed in 'ECM (Error Correction Mode)'.
- V.34 is the standard for 28.8K (option: 33.6K) to 2400 bps modem; V.8 is the standard for deciding on the procedure to select the optimal mode for the preceding line condition to V.34.FIF configuration (Table 1) of CM and JM signals used in V.8 and the details of every bit are as follows.

[Super G3 Fax] can communicate with conventional Fax in standards other than V.34 (28.8K), such as V.17 (14.4K) and V.29/V.27ter(9600/4800), and has V.8 feature which supports the procedure for selecting the optimal speed for verifying the line condition.

- TCF signal (in Phase B) is not used in V.34.
- The command (such as NSF/DIS) speed for the conventional procedure is 1200bps in V.34.

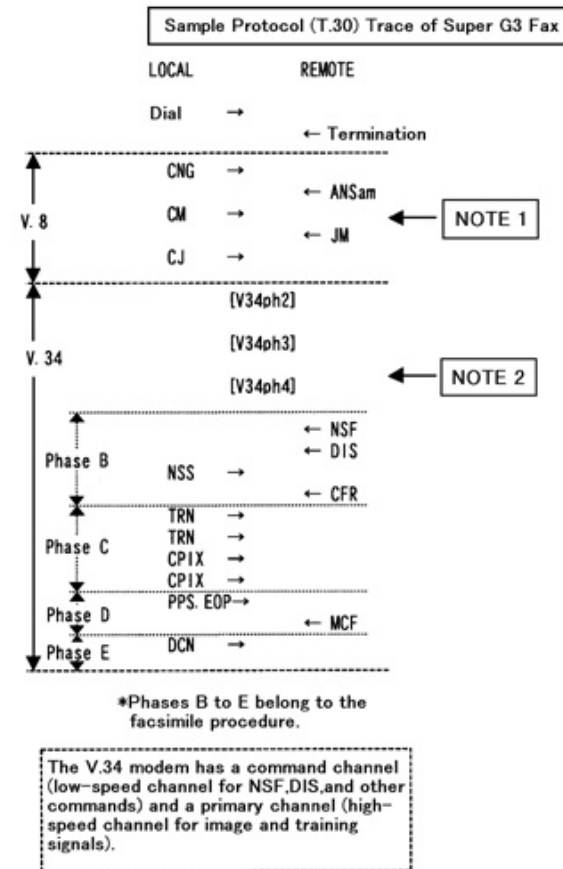


Figure 1 j0mf2716

NOTE1 Signal Names and Contents

CNG (Calling signal):

The signal for showing the communication function from the outgoing terminal is sent continuously until ANSam arrives.

CNG is not recorded in Trace.

During Manual Send, 'CI' signal is sent as V.8 Calling signal

When Phase B is entered without ANSam being detected and DIS V.8 capability is available (bit 6=1)', send CI from the outgoing side and return to the V.8 procedure in Super G3 mode.

ANSam (Response signal):

Stops after the signal with amplitude of 2100Hz modulated by 15Hz is being sent continuously for 4sec, or once CM is detected. Fax without Super G3 capability is detected as CED.

CM (Calling Menu Signal):

300bps signal (*) that declares the modem mode that can be used at outgoing terminal.

JM (Joined Menu Signal):

Stops when 300bps signal, which declares the modem mode that can be used on the outgoing/incoming terminal, and CJ are detected (For CM or JM FIF, refer to No. 2 'V.8 CM/JM Signal')

CJ (CM terminator):

Continuation of 300bps and 3 octet '0' by signals which indicate the end of CM and verify JM.

NOTE2 Signal Names and Contents

V.34ph2 (Phase 2): Probing

Measures the line attribute using Probing signal.

V.34ph3 (Phase 3): Equalizer Training

Set up the modem equalizer by the TRN signal

V.34ph4 (Phase 4): Final Training

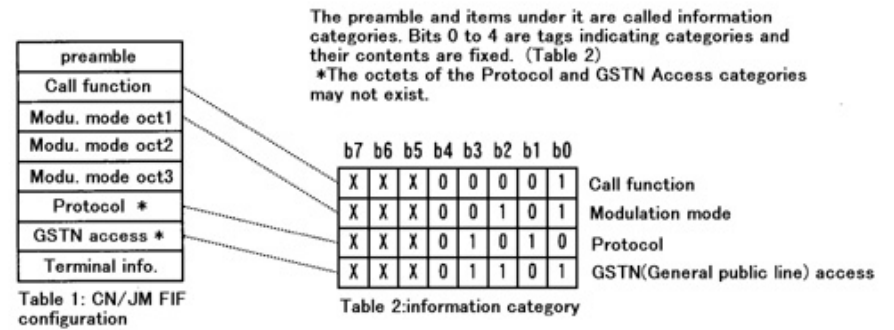
Determines the signal speed
(V.34 Phase 1 is V.8 procedure)

This section (Phase 2 to 4) is automatically performed by the modem at the outgoing and incoming terminals. Send Level, Equalizer, and Modulator Speed are determined. The value determined here takes precedence over the NSF/DIS contents.

6.8.5.2 V.8 CM/JM Signal

FIF configuration (Table 1) of CM and JM signals used in V.8 and the details of every bit are as follows.

V.8 is the standard that decides the procedure for modem with multiple capabilities to auto select the optimal mode corresponding to the line condition.



j0mf2717

Figure 1 j0mf2717

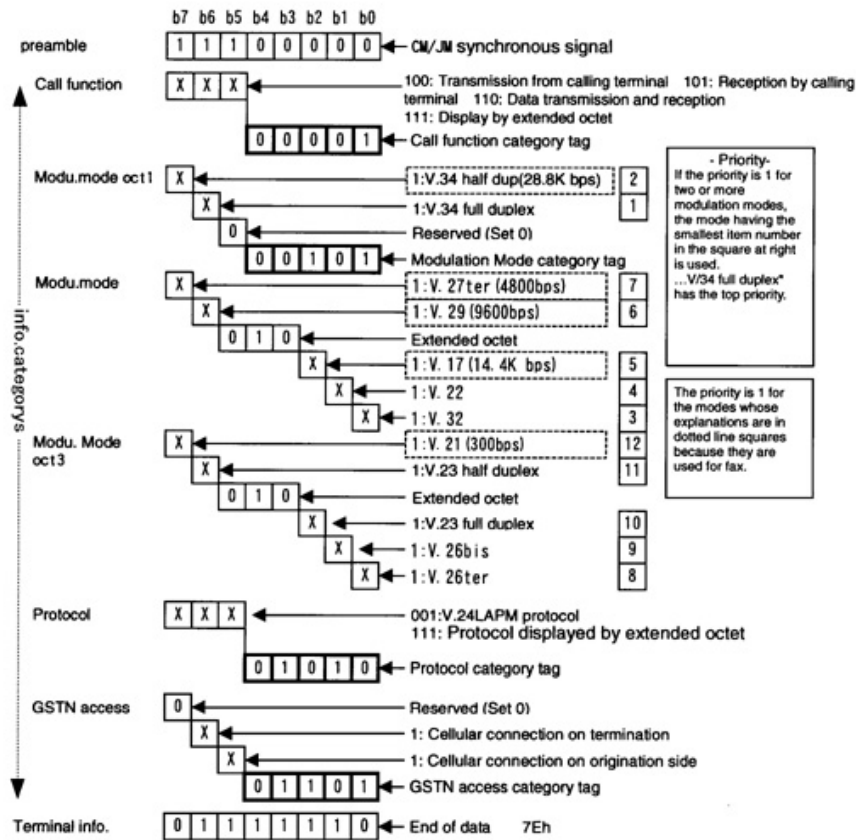


Figure 2 j0mf2718

6.8.5.3 V.8 Operation / Auto Send

[Super G3 Fax] can communicate with conventional Fax in standards other than V.34 (28.8K), such as V.17 (14.4K) and V.29/V.27ter (9600/4800). Communication procedure is selected following the flow below based on the capability of the remote station/detected signal.

Below is the flow when either the incoming or outgoing terminal or both has [Super G3 Fax] capability and Auto Send takes place at the outgoing terminal.

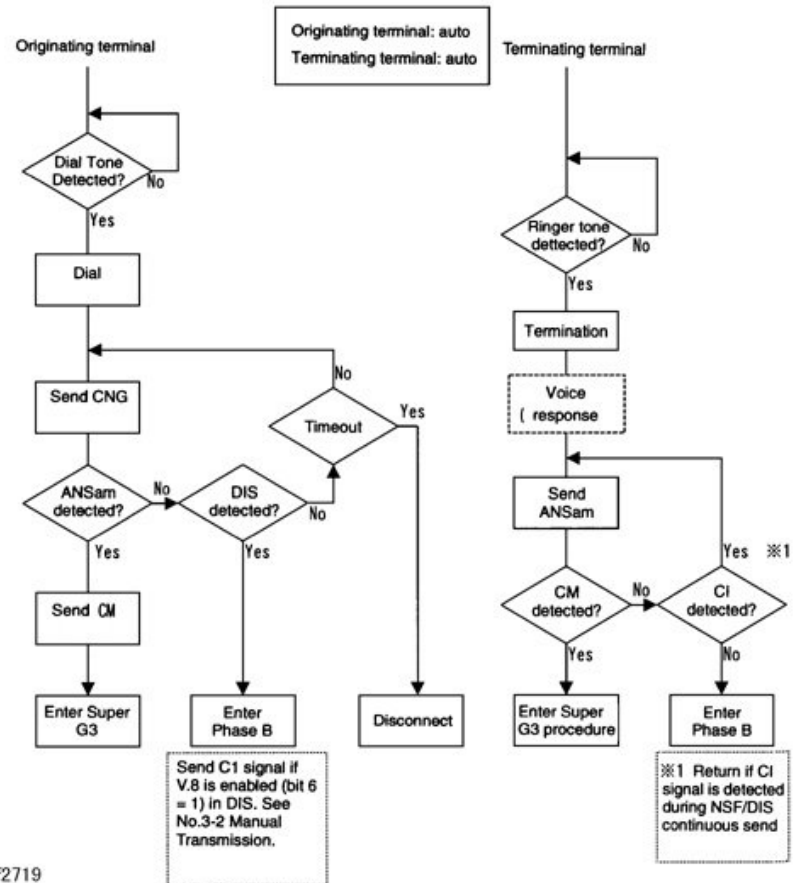
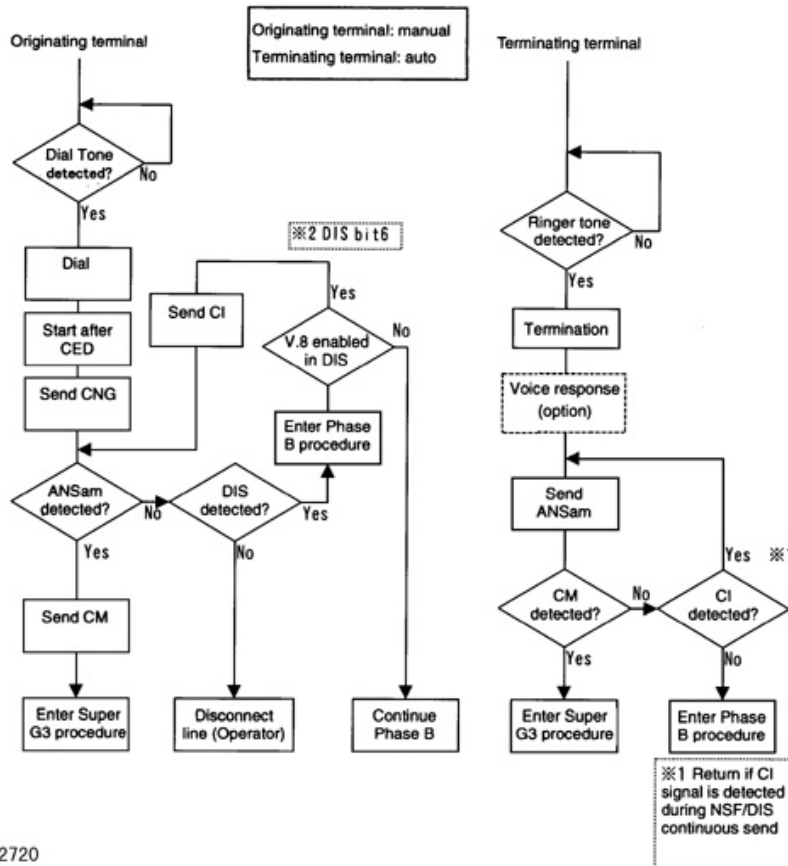


Figure 1 j0mf2719

6.8.5.4 V.8 Operation/Manual Send

Below is the flow for Manual Send at the Sending Terminal.



j0mf2720

Figure 1 j0mf2720

6.8.5.5 Troubleshooting of Super G3 Fax

As Super G3 Fax belongs to analog communication, its basic troubleshooting is the same as G3 Fax. As differences exist due to the fast communication speed and the different communication procedure, troubleshooting unique in Super G3 mode will be described.

Super G3 Fax can communicate up to a maximum speed of 28800bit/s with V.34 modem. With option, it can communicate up to 33600bit/s.

As the conventional communication speed is 14400bit/s (V.17), to achieve high speed communication by V.34, you have to perform data transmission of 2 times or above the conventional speed at one time. Therefore, communication is affected by the quality of telephone line now more than before. Even with telephone lines that can communicate without errors in 14400/9600bit/s, communication errors may occur in Super G3.

Normal analog public lines have satisfactory frequency characteristics in 300-3400Hz zone. Even if Super G3 communication sends or receives using the same remote party or telephone line, the communication speed may differ. This is because the speed is decided based on the line quality measured at the sending side using the Probing feature performed in V.34 procedure, and when sending or receiving is done in Super G3, the result from Probing is changed. That is, Super G3 mode cannot always communicate at the highest speed (33600bit/s). Domestic Super G3 communication can achieve a speed of 21600bit/s and above in most cases.

The conventional Fax at 14400bit/s or lower uses half-duplex communication which sends the signal alternately whereas Super G3 Fax is performed using full-duplex communication which has a different communication procedure. In full-duplex communication, Fax from both sides will send signal concurrently and each side can monitor the signal of the remote party while sending its own signal. Therefore, until now, the communication status can be verified by monitoring the sound of the line but Super G3 communication is unable to judge by the monitor sound. That is, when communication error occurs, protocol monitor analysis is required now more than ever, and the frequency in which the Traces between the incoming and outgoing stations are compared increases.

Super G3 Troubleshooting Precautions

ECM: ECM is required in Super G3 communication. Set the ECM feature to OFF and communicate via V.17/V.29(1400/9600bit/s) instead of V.34, even if Super G3 mode is available.

Communication Procedure: Super G3 communication procedure consists of V.8 and V.34 procedures. V.8 procedure will determine the verification of Super G3 mode and the communication speed. Once the V.8 procedure has completed, it will proceed to V.34 procedure and transmit image information via V.34 procedure. V.34 procedure has the same command names as G3 procedure (such as V.17/V.29) and most of their protocol traces are the same, but as it uses full-duplex communication, its command transmission speed is 1200bit/s.

V.8 procedure uses CNG (or CI: for Manual Send) sent by the outgoing terminal and ANSam tonal (sound) signal sent by the incoming terminal. If the line is noisy or the signal level is low, these tonal signals cannot be recognized properly by the remote station and resulting in errors. Procure the protocol of the remote station and determine whether the signals (recorded in one's Trace) sent from here are recorded.

V.34 procedure is being carried out in order of Phase 2, 3, and 4, and [V34ph2], [V34ph3], and [V34ph4] is recorded in the Protocol Trace. If Phase 4 has completed successfully, proceed to Phase B, C, D, and E. Please refer to the procedure in the past for the troubleshooting here.

When the line is noisy or the signal is low, the procedure is not carried out properly. When Phase 2, 3, and 4 is being carried out repeatedly, [V34ph2], [V34ph3], [V34ph4], [V34ph2], [V34ph3], [V34ph4]... will be recorded in the Protocol Trace repeatedly. If error occurred in the procedure of Phase 2, [V34ph2] is recorded but not [V34ph3] and [V34ph4].

It can determine whether there is a problem with the analog characteristics of the telephone line in both examples described here and determine if the Send level is not appropriate.

Send level: As Super G3 Fax is analog communication, the signal level is very important. Especially when the noise level ratio (known as S/N ratio) becomes an issue. To detect the signal correctly, the S/N ratio must be above a certain level. Verify the Protocol Trace, if the remote station indicates 'Same signal is sent repeatedly', 'Do not advance to the next procedure', or the likes, it will mean that the remote station cannot recognize the signal from here.

In such cases, you can try changing the Send Level. If the Send Level is increased with the same noise level, S/N ratio becomes larger. When changing the Send Level, slowly increase or decrease the level (1-2dB) and test the communication several times with the changed value to find the best value.

However, if digital lines (ISDN/Corporate Digital Leased Line) or digital devices (such as digital PBX/TA) are used, analog signal with too high a level will cause the wave pattern to become erratic and the communication cannot take place normally (when performing analog-digital modulation, the wave pattern of high level signals is erratic). In line environment like this, lower the Send Level for satisfactory communication.

Speed: The highest speed is 33600bit/s for Super G3 mode; however, most of the PSTN communications in Japan are performed in 31200~21600 bit/s. If the line condition is very bad, the speed may be reduced to 9600bit/s. Communication speed is determined by the result of Phase 2 procedure for V.34 Send Terminal. Therefore, even if the same line is used, a change in the Send Terminal will affect the communication speed.

Line Frequency Characteristics (F attribute): Attributes for telephone line frequency is known as [Frequency Characteristic], and ideally, the characteristic is uniform between 300 to 3400Hz used by the telephone. However, for public lines, it is normal for the lower frequency and the higher frequency to deteriorate (attenuation distortion, delayed signals), and the deterioration extent increases as the ground distance (accurately speaking, the line distance for the analog section) becomes longer. As compared to normal telephone calls and G3 Fax communication, the Frequency Characteristics for Super G3 communication is greatly affected. Even for lines that can carry out 14000/9600bps communication normally, error may occur in Super G3 communication. As audio compression is being performed in most of the Corporate Leased Lines (digital lines), the Frequency Characteristic is worst than the NTT public line, resulting in a high level of error occurrences in Super G3 communication.

Chapter 7 Wiring Data

7 Wiring Data

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7.3 BSD

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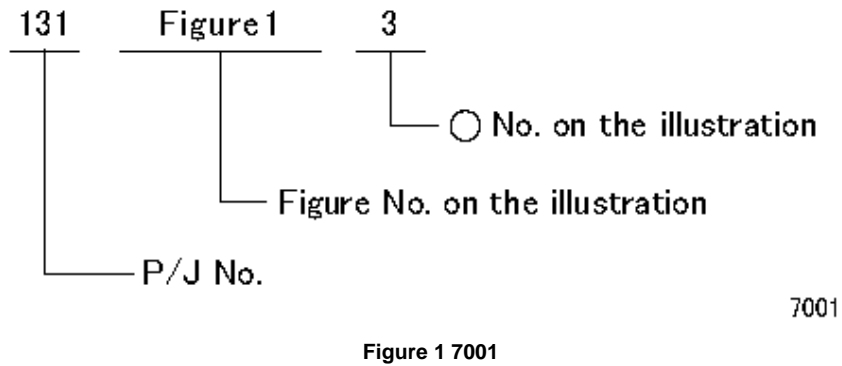
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7.1.1 Plug/Jack Location List

How to Use the Plug/Jack Location List

- To find which position to install specific connectors to, refer to the table 'Plug/Jack Location List' for Figure No. and Item No., and then to the figure in 'Plug/Jack Positions.'
- P/J No. on 'Plug/Jack Location List' is expressed in the four ways below:
 - J250 represents Jack 250.
 - P250 represents Plug 250.
 - CN1 represents Connector 1.
 - FS1 represents Faston Terminal 1.

Example :



Plug/Jack Location List

Table 1 Plug/Jack Location List

P/J	Fig	Item	Remarks (where to Connect)
J1	8	9	AC Inlet
P/J2	3	15	UI PWB (to LCD Display)
J2	8	7	AC Inlet
J2	14	4	FAX PWB (Connect to P353)
P3	3	10	UI PWB
J3	8	1	Main Power Switch
J3	14	6	FAX PWB
P/J4	3	9	UI PWB (to One Touch Panel)
J4	8	2	Main Power Switch
J4	14	5	FAX PWB (Micro SD)
P/J5	3	8	One Touch Panel
P5	14	3	FAX PWB (Connect to J352)
J5	8	11	Main Power Switch
J6	8	10	Main Power Switch
J7	8	8	AC Inlet
P/J10	4	7	Fusing Unit
P/J100	7	4	L/H Cover Interlock Switch
P/J101A	12	2	Tray 4 Nudger Level Sensor (2TM)
P/J101B	12	2	Tray 3 Nudger Level Sensor (2TM)
P/J101C	9	2	Tray 2 Nudger Level Sensor (1TM)
P/J102	4	2	MSI No Paper Sensor
P/J102A	12	3	Tray 4 No Paper Sensor (2TM)
P/J102B	12	3	Tray 3 No Paper Sensor (2TM)
P/J102C	9	3	Tray 2 No Paper Sensor (1TM)
P/J103	4	10	Fusing Unit Exit Sensor
P/J104	4	1	Regi. Sensor
P/J105	4	3	Tray 1 No Paper Sensor
P/J108	5	1	Front Cover Switch
P/J109	7	8	Tray 1 Paper Size Switch
P123	11	6	ESS/MCU PWB
P/J130	5	3	ROS Motor
P/J140	5	6	LD PWB (8pin)
P/J160	5	5	LD PWB (2pin)
P/J201	5	7	LD PWB 24V INTLK
P/J201	7	5	Main Drive Motor (2pin)
P/J202	7	3	Main Drive Motor (8pin)
P/J203	4	6	Duplex Clutch (2pin)
P/J204	7	6	Regi. Clutch

Table 1 Plug/Jack Location List

P/J	Fig	Item	Remarks (where to Connect)
P/J205	7	7	Tray 1 Feed Clutch
P/J206	4	4	MSI Feed Clutch
P/J207	11	13	ESS/MCU PWB (to Toner Dispense Motor)
P/J208	7	2	Invert Motor
P/J209	11	7	ESS/MCU PWB (to Nohad Fan)
P/J220A	12	1	Tray 4 Feed/Lift Up Motor (2TM)
P/J220B	12	1	Tray 3 Feed/Lift Up Motor (2TM)
P/J220C	9	1	Tray 2 Feed/Lift Up Motor (1TM)
J352	14	3	Connector (Connect to P5)
P353	14	4	Connector (Connect to J2)
P/J400	11	16	ESS/MCU PWB
P/J401	11	14	ESS/MCU PWB
P/J402	11	12	ESS/MCU PWB
P/J403	11	9	ESS/MCU PWB
P/J405	11	8	ESS/MCU PWB
P/J406	11	11	ESS/MCU PWB
P/J407	11	10	ESS/MCU PWB
P/J409	11	15	ESS/MCU PWB
P/J410	11	18	ESS/MCU PWB
P/J411	11	19	ESS/MCU PWB
P/J412	11	17	ESS/MCU PWB
P413	11	21	ESS/MCU PWB (Connect to J413)
J413	9	8	Connector (Connect to P413)(1TM)
P413C	10	8	STM PWB (Connect to J413C)(1TM)
J413C	12	12	Connector (Connect to P413C)(2TM)
P/J414	11	20	ESS/MCU PWB
P/J415	11	1	ESS/MCU PWB
P/J420	11	4	ESS/MCU PWB
P421	11	5	ESS/MCU PWB (Connect to J421)
J421	2	18	Connector (Connect to P421)
P/J422	11	3	ESS/MCU PWB
P425	11	25	ESS/MCU PWB (Connect to J425)
J425	14	2	NET I/F PWB (Connect to P425)
P441	11	22	ESS/MCU PWB (Connect to J441)
J441	14	9	Connector (Connect to P441)
P442	14	10	Connector (Connect to J442)
J442	11	23	ESS/MCU PWB (Connect to P442)
J443	11	24	ESS/MCU PWB
J444	14	1	NET I/F PWB
P/J445	11	2	ESS/MCU PWB
P/J500	7	1	HVPS

Table 1 Plug/Jack Location List

P/J	Fig	Item	Remarks (where to Connect)
P/J510	8	6	LVPS
P/J511	8	5	LVPS
P/J512	8	4	LVPS
P/J513	8	3	LVPS
P/J541	13	2	2TM PWB
P/J541C	10	1	STM PWB
P/J548	13	1	2TM PWB
P/J548C	10	6	STM PWB
P/J549	13	7	2TM PWB
P/J549C	10	5	STM PWB
P/J552	13	8	2TM PWB
P/J552C	10	7	STM PWB
P/J554	13	3	2TM PWB
P/J600	4	9	Fusing Unit (4pin)
P/J601	4	5	Connector (5pin)
P/J602	4	8	Connector (3pin)
P/J615	5	8	ATC Sensor
P/J620	5	4	Connector
P/J661A	12	8	Connector (2TM)
P/J661B	12	9	Connector (2TM)
P/J661C	9	5	Connector (1TM)
P/J700	3	7	CCD PWB
P/J721	3	2	Carriage Motor
P/J722	3	1	IIT Regi. Sensor
P/J723	3	13	Platen Open Sensor
P/J725	3	12	Platen Angle Sensor
P/J726	3	14	APS Sensor 1
P/J740	3	11	UI PWB
P/J751	2	9	DADF PWB
P/J752	2	8	DADF PWB
P/J753	2	7	DADF PWB
P/J754	2	4	DADF PWB
P/J756	2	5	DADF PWB (to Exit Nip Release Solenoid)
P/J758	2	6	DADF PWB
P/J759	2	3	DADF PWB
P/J760	2	2	DADF PWB
P/J761	2	1	DADF PWB
P762	2	11	DADF PWB
P763	2	10	DADF PWB
P/J764	1	3	Document Tray Size Sensor 1
P/J765	1	4	Document Tray Size Sensor 2

Table 1 Plug/Jack Location List

P/J	Fig	Item	Remarks (where to Connect)
P/J766	1	6	DADF Tray Set Guide Sensor 3
P/J767	1	5	DADF Tray Set Guide Sensor 2 (BLU)
P/J768	1	2	DADF Tray Set Guide Sensor 1
P/J770	1	1	DADF Document Set Sensor
P/J771	1	7	DADF Invert Sensor
P/J772	1	9	DADF Pre Regi. Sensor
P/J773	1	8	DADF Regi. Sensor
P/J774	2	14	DADF Open Sensor
P/J777	2	13	DADF Feed Motor
P/J780	2	17	Feed Clutch
P/J781	2	12	T/A Clutch
J802	14	11	FAX PWB (LINE)
J804	14	8	FAX PWB (TEL)
P/J805	14	7	FAX PWB (FAX Speaker)
P/J812C	9	6	STM Left Cover Switch
P/J813	12	11	2TM Left Cover Switch
P/J820	12	4	Tray 3 Paper Size Switch (2TM)
P/J820C	9	4	Tray 2 Paper Size Switch (1TM)
P/J821	12	7	Feed Out Sensor 3 (2TM)
P/J821C	9	7	Feed Out Sensor 2 (1TM)
P/J822	13	5	2TM Takeaway Roll Clutch
P/J822C	10	4	STM Take Away Roll Clutch
P/J824	12	5	Tray 4 Paper Size Switch (2TM)
P/J825	12	6	Feed Out Sensor 4 (2TM)
P/J826	13	6	2TM Takeaway Motor
P/J826C	10	2	STM Take Away Motor
P/J841	13	4	Connector (2TM)
P/J841C	10	3	Connector (1TM)
P/J842	12	10	Connector (2TM)
P/J2011	5	2	SOS PWB
P/J7001	3	6	CCD PWB
P/J7002	3	5	LED Lamp PWB
F1	2	15	DADF Feeder Cover Interlock Switch
F2	2	16	DADF Feeder Cover Interlock Switch

7.1.2 Plug/Jack Location

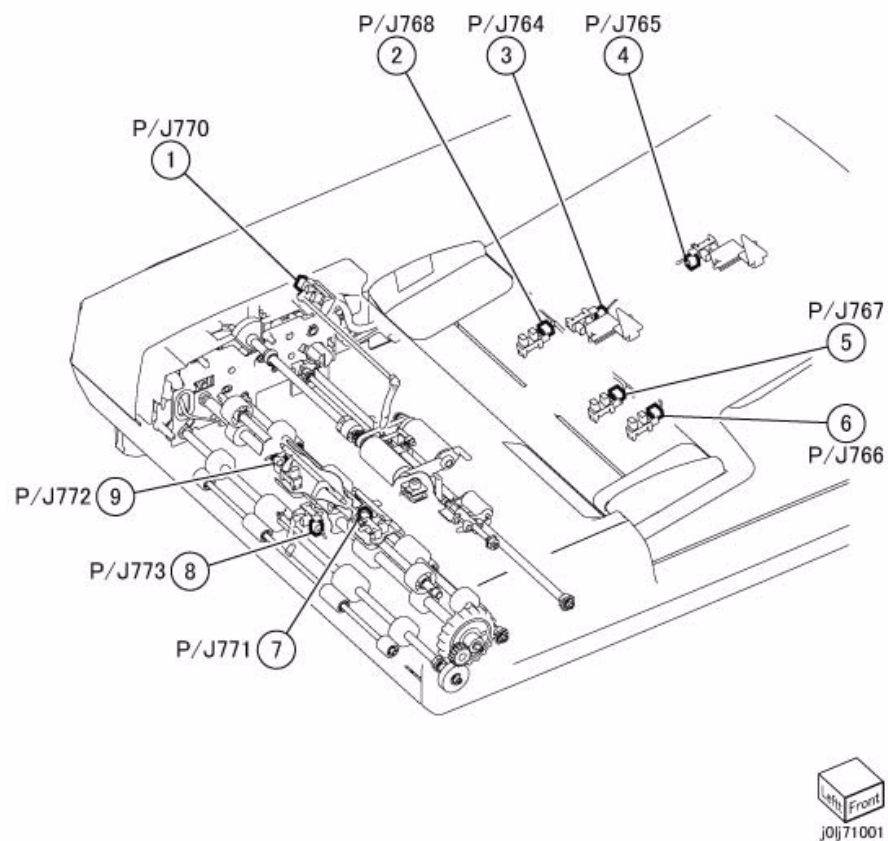


Figure 1 DADF 1 of 2 (j0lj71001)

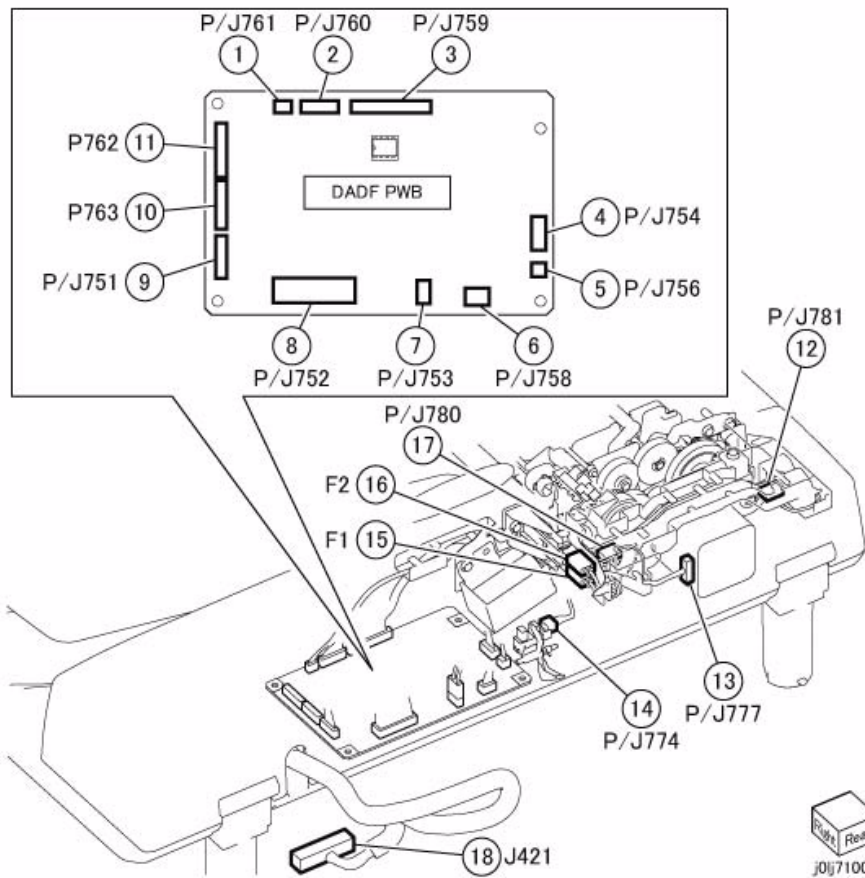


Figure 2 DADF 2 of 2 (j0lj71002)

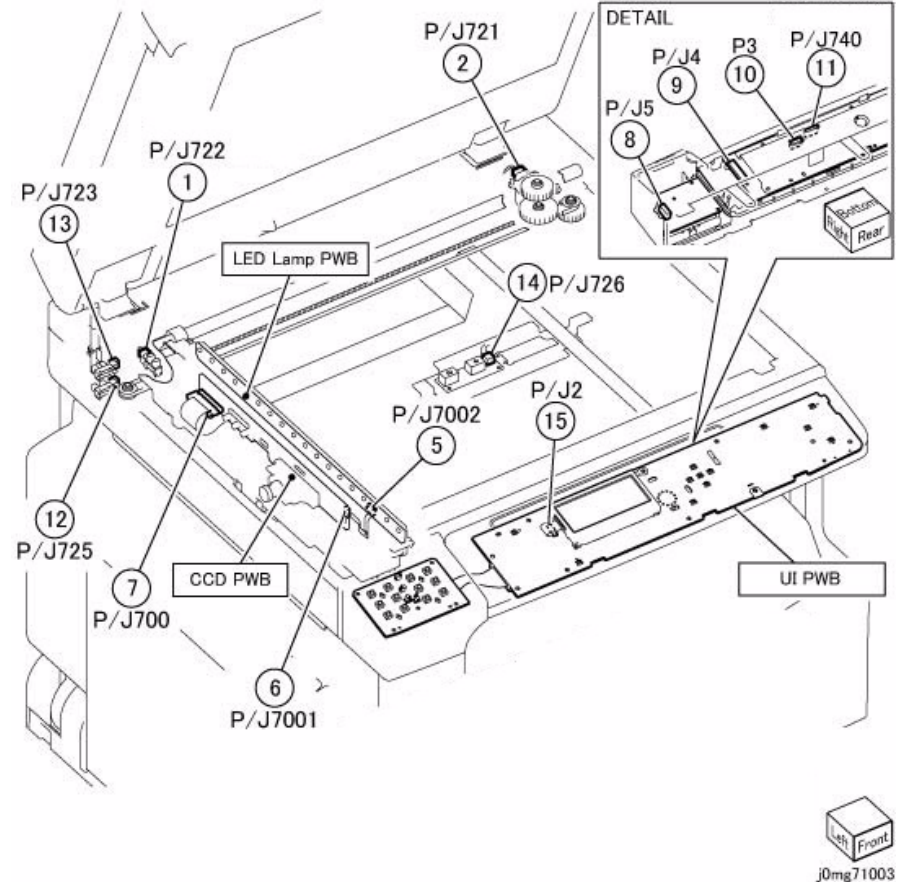


Figure 3 IIT / UI (j0mg71003)

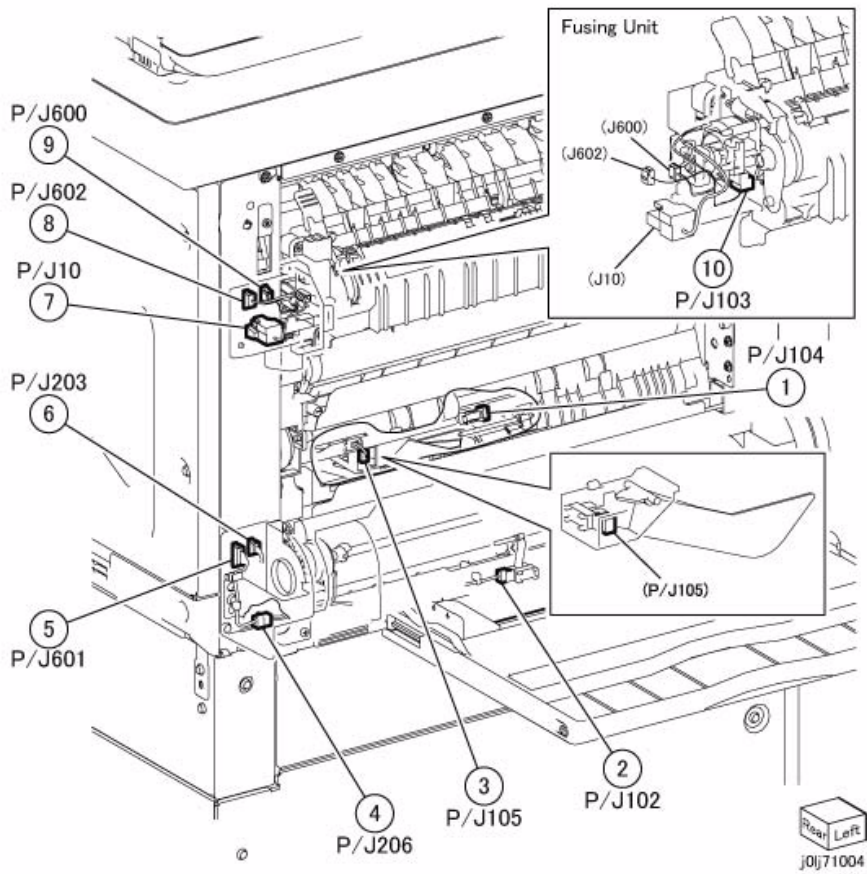


Figure 4 L/H Unit / MSI / Fusing Unit (j0lj71004)

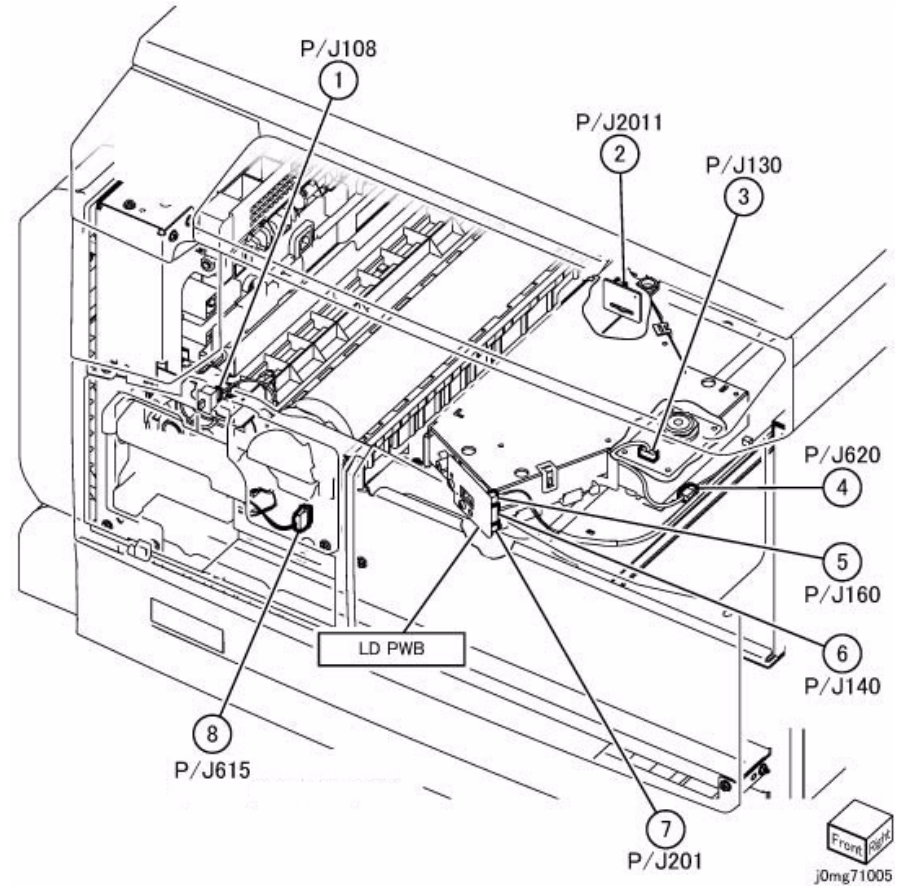


Figure 5 ROS Unit (j0mg71005)

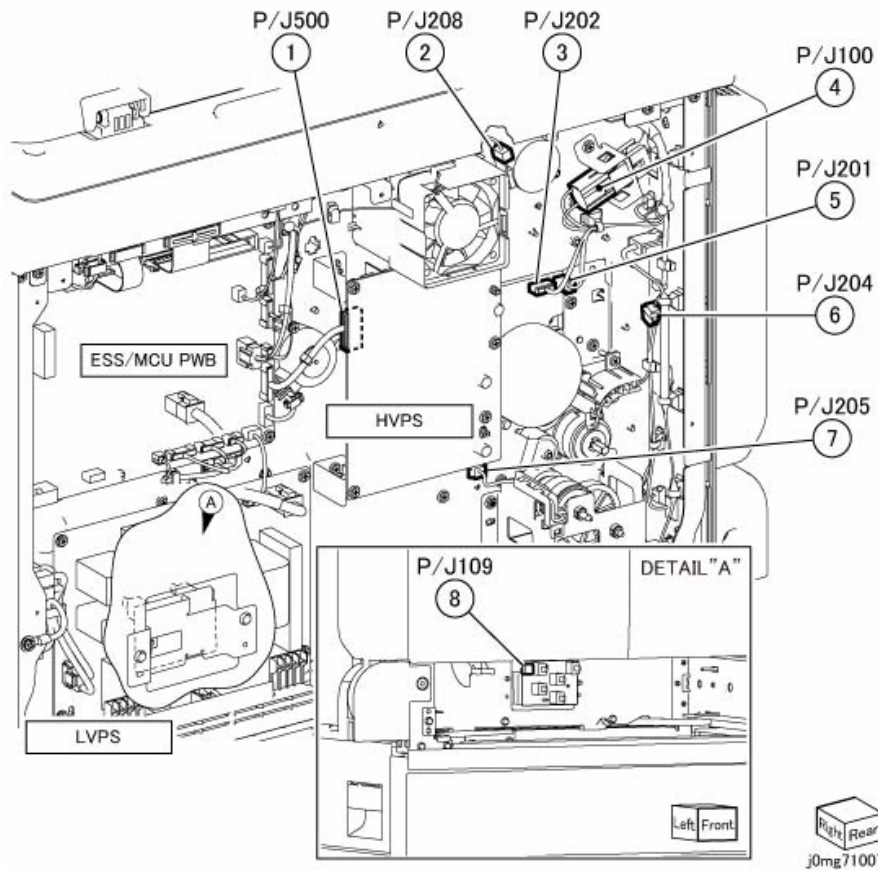


Figure 6 Rear Location 1 of 2 (j0mg71007)

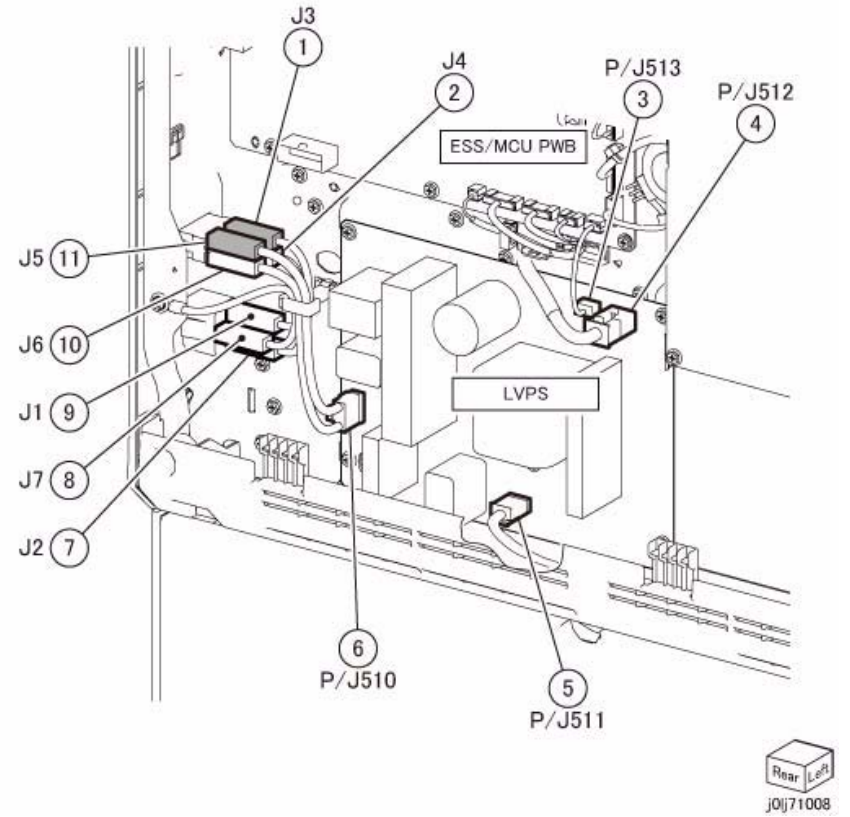


Figure 7 Rear Location 2 of 2 (j0lj71008)

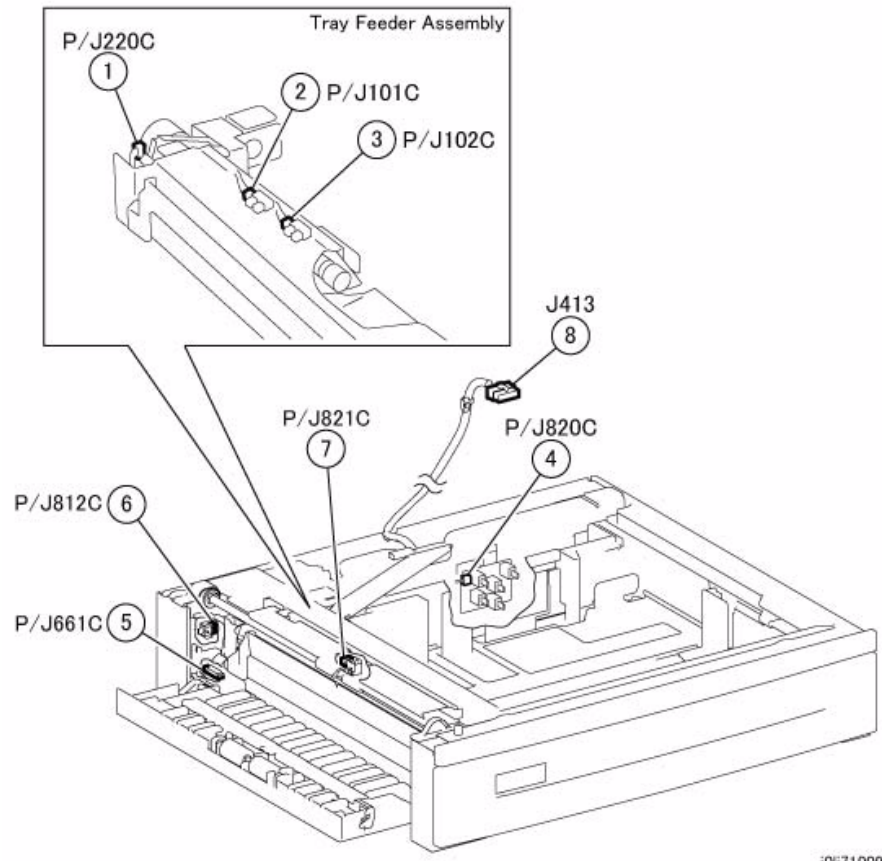


Figure 8 1TM 1 of 2 (j0lj71009)

j0lj71009

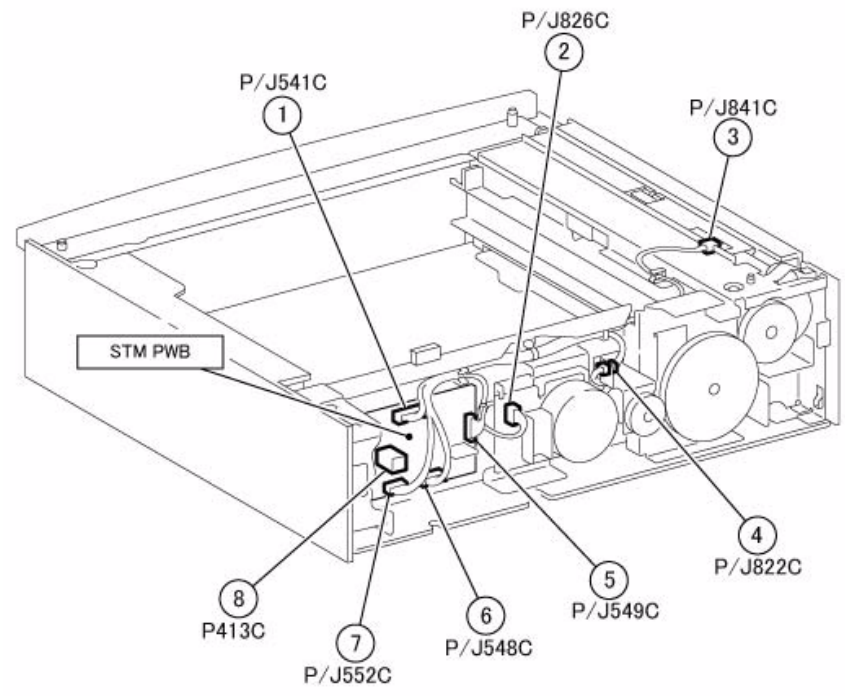
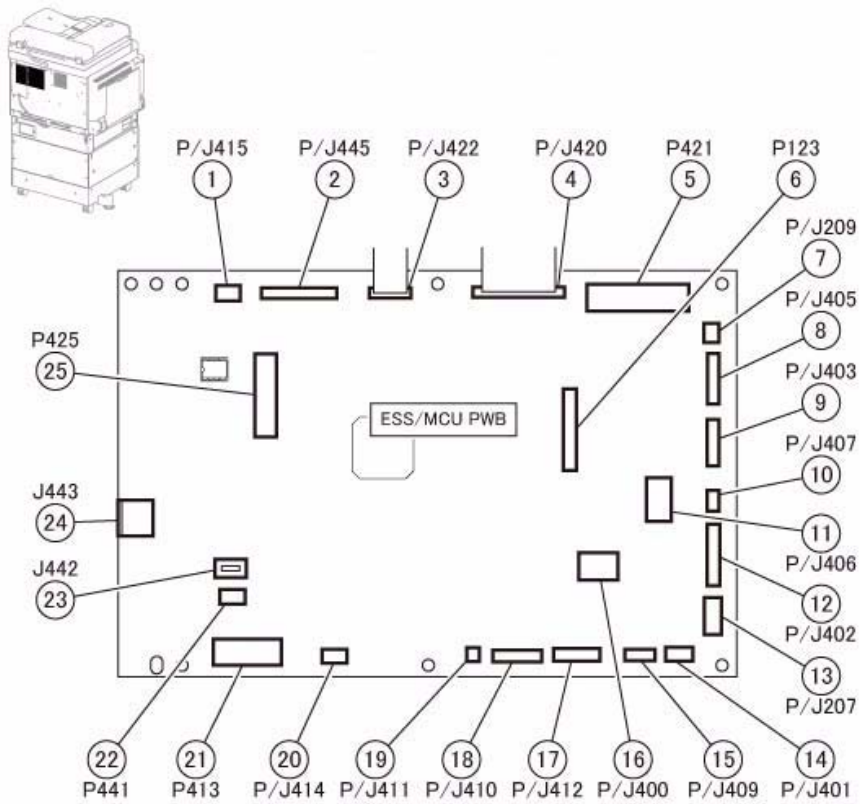


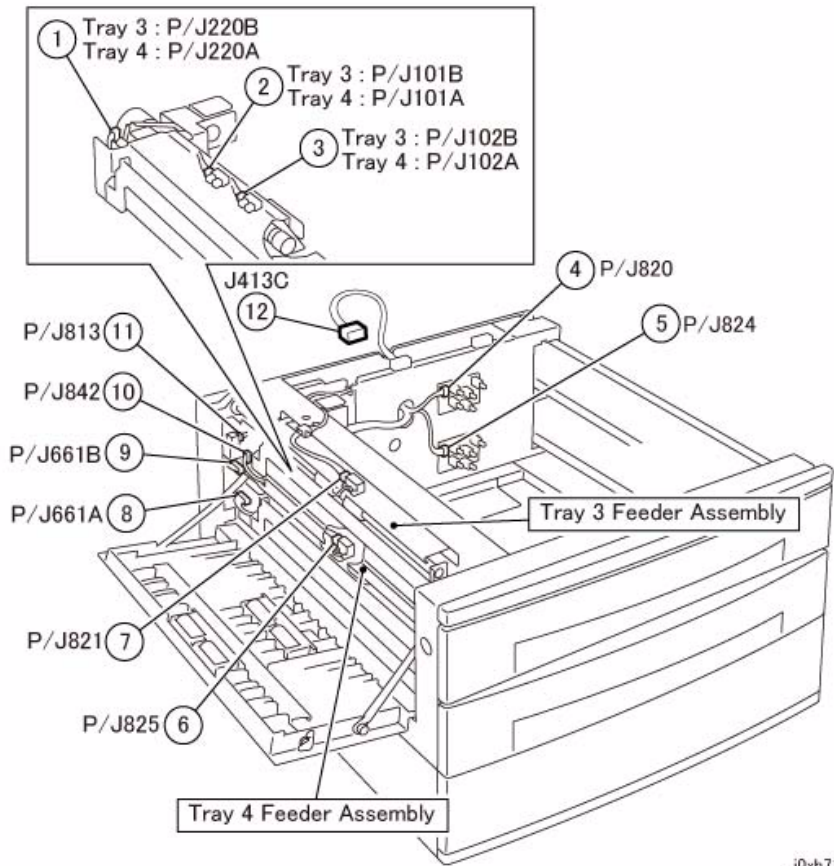
Figure 9 1TM 2 of 2 (j0lj71010)

j0lj71010



j0mg71006

Figure 10 ESS/MCU PWB (j0mg71006)



j0xh71015

Figure 11 2TM 1of2 (j0xh71015)

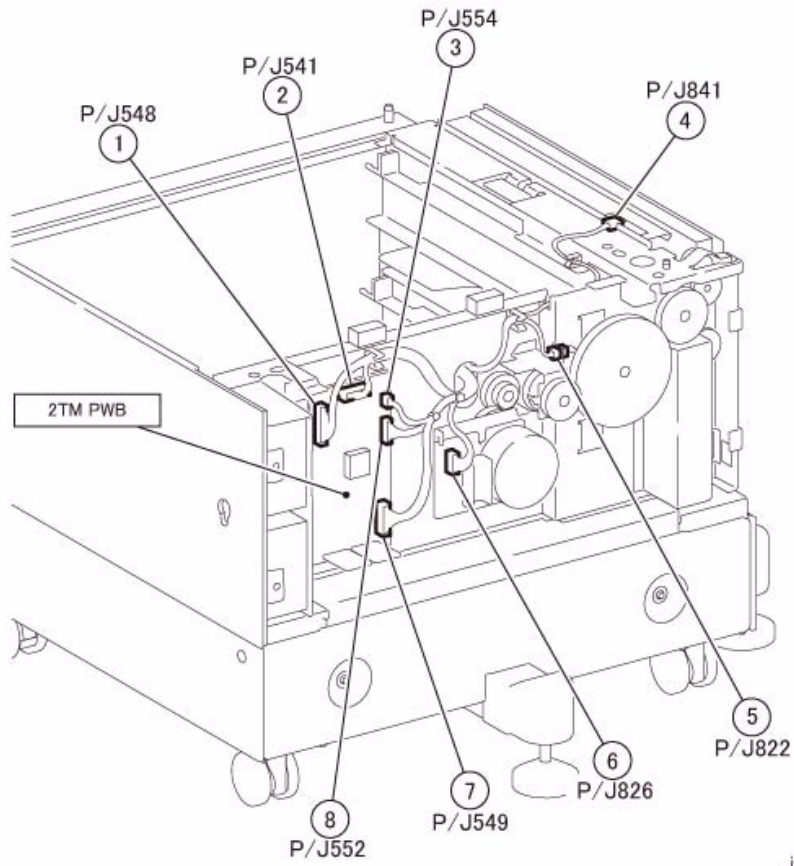


Figure 12 2TM 2of2 (j0xh71016)

j0xh71016

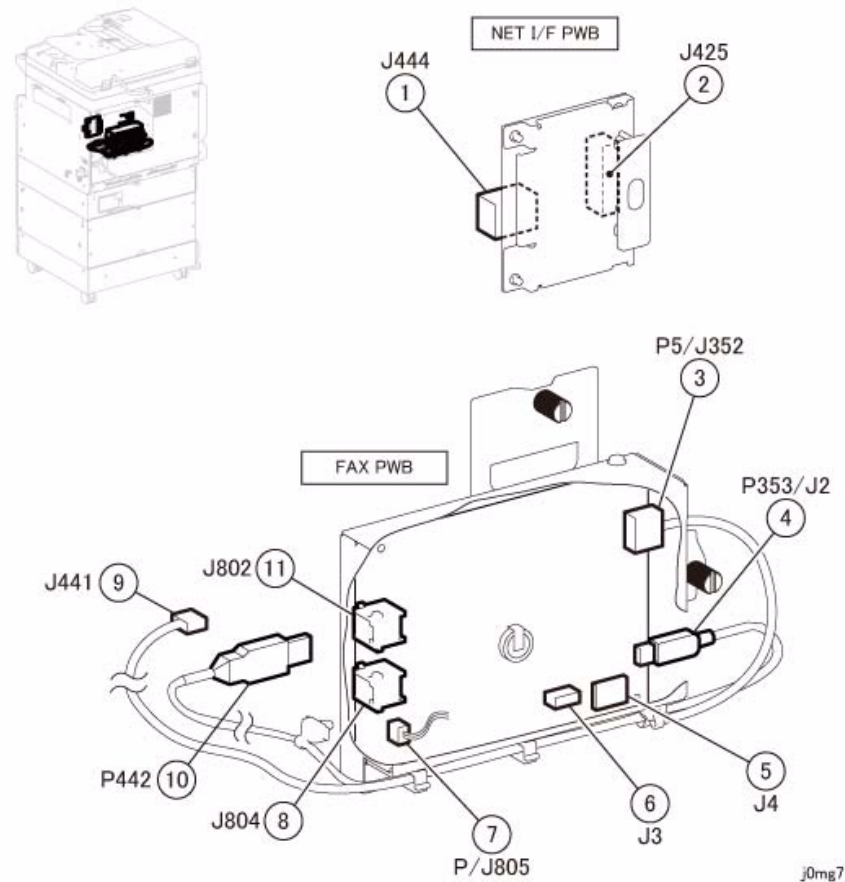


Figure 13 NET I/F PWB / FAX PWB (j0mg71014)

j0mg71014

7.2.1.1 IOT ACH

7.2.1 IOT/IIT

7.2.1.1 IOT ACH

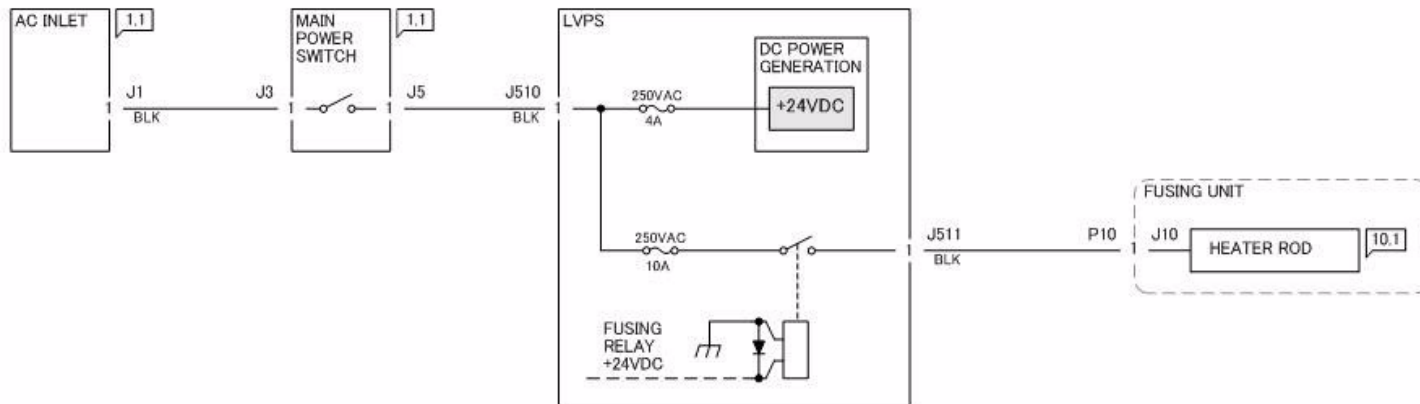


Figure 1 j0mg720101

j0mg720101

7.2.1.2 IOT ACN

7.2.1.2 IOT ACN

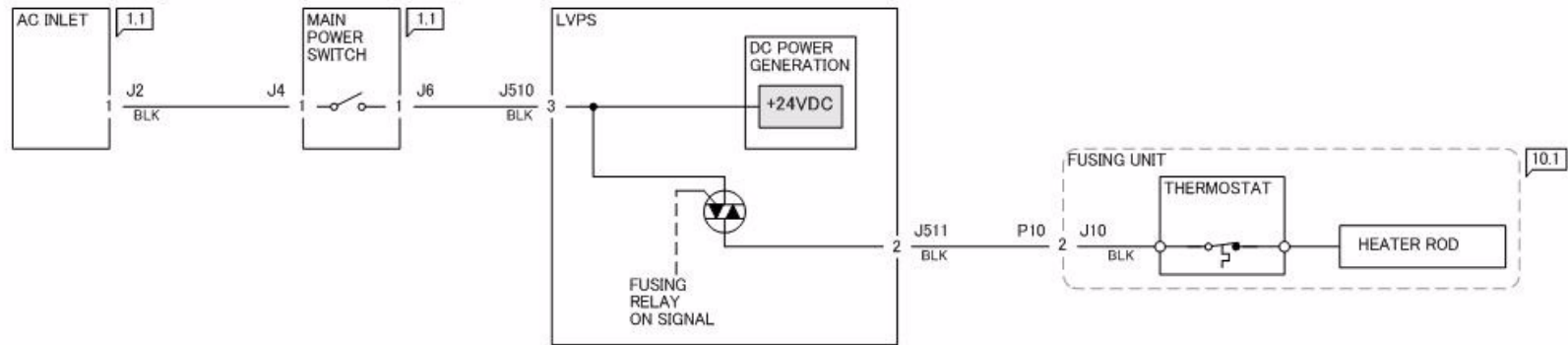


Figure 1 j0mg720102.jpg

j0mg720102

7.2.1.3 +24VDC-1

7.2.1.3 +24VDC-1

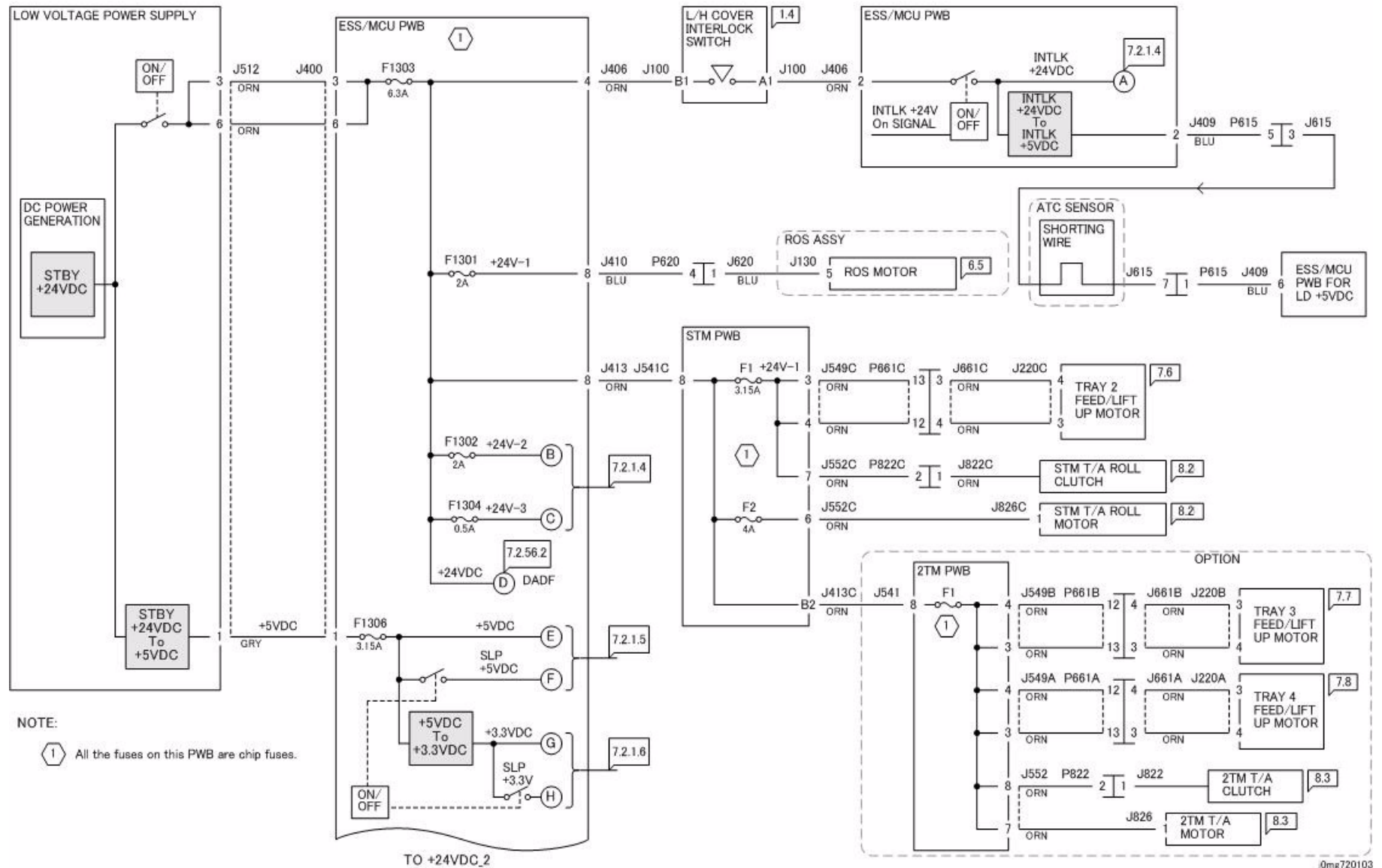


Figure 1 j0mg720103

7.2.1.4 +24VDC-2

7.2.1.4+24VDC-2

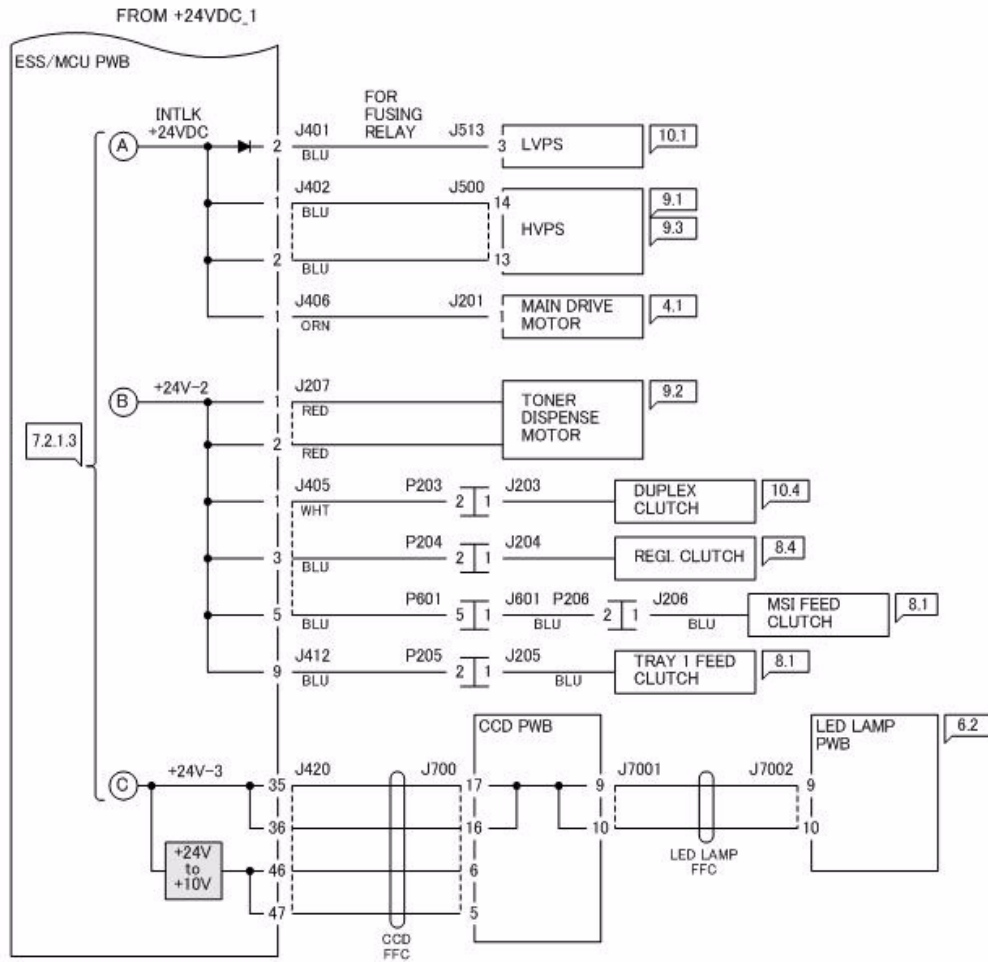


Figure 1 j0mg720104

j0mg720104

7.2.1.5 +5VDC/SLP +5VDC/+3.3VDC

7.2.1.5+5VDC/SLP +5VDC/+3.3VDC

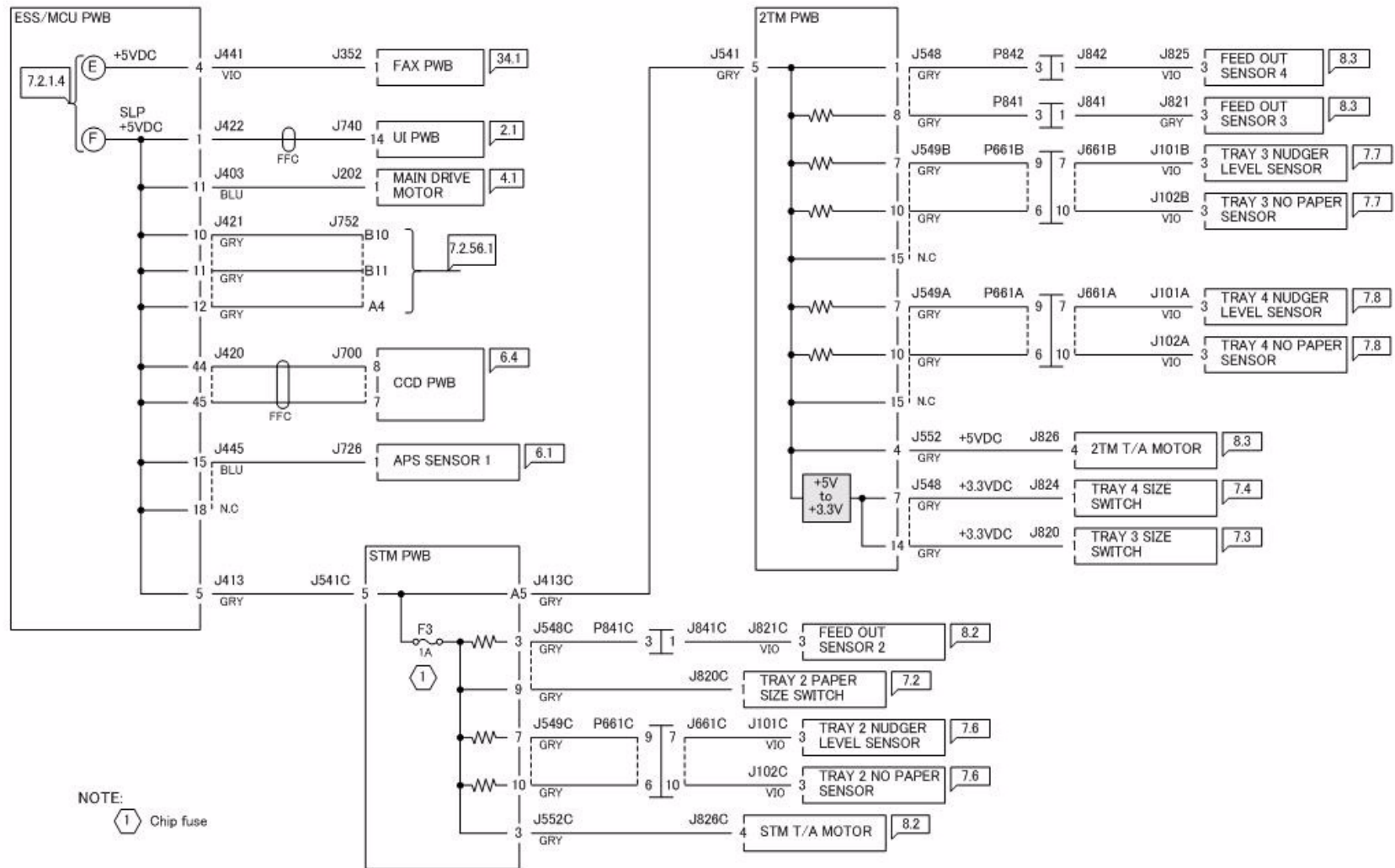


Figure 1 j0mg720105

j0mg720105

7.2.1.6 +3.3VDC/SLP +3.3VDC

7.2.1.6 +3.3VDC/SLP +3.3VDC

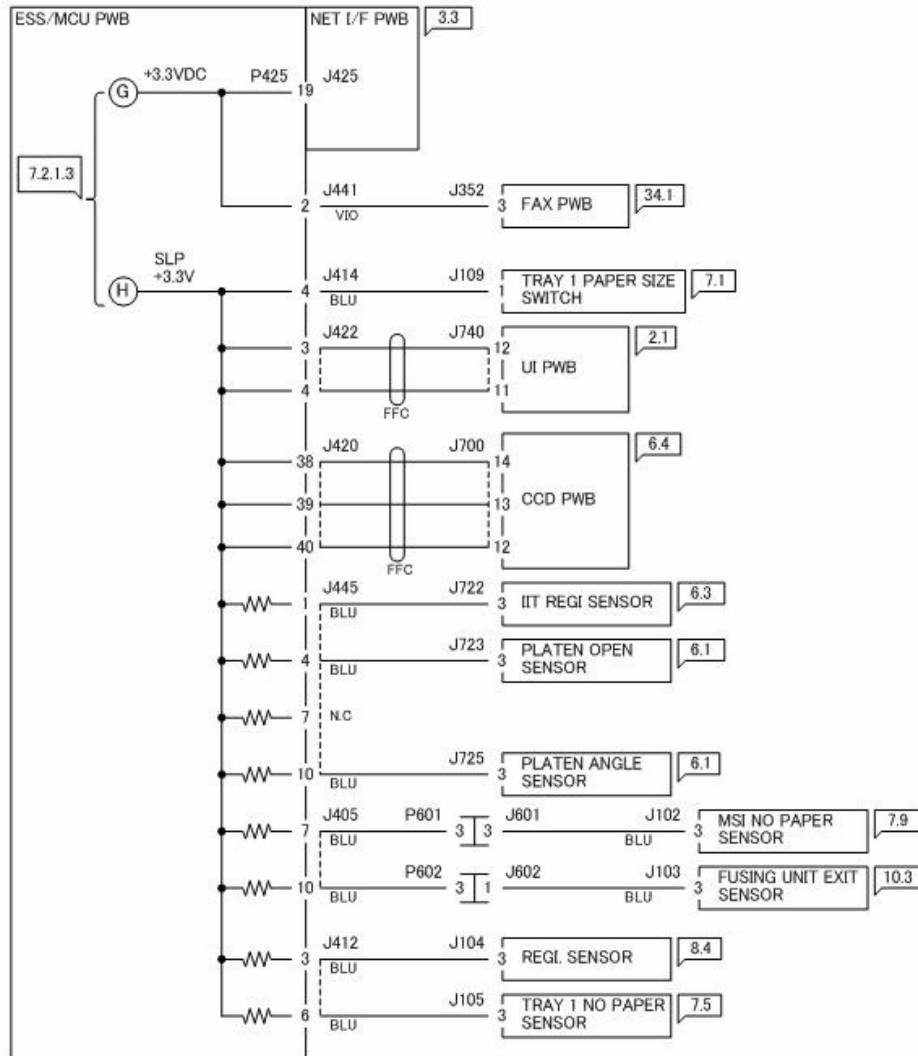


Figure 1 j0mg720106

j0mg720106

7.2.1.7 DC COM-1 (5V RTN)

7.2.1.7 DC COM-1 (5V RTN)

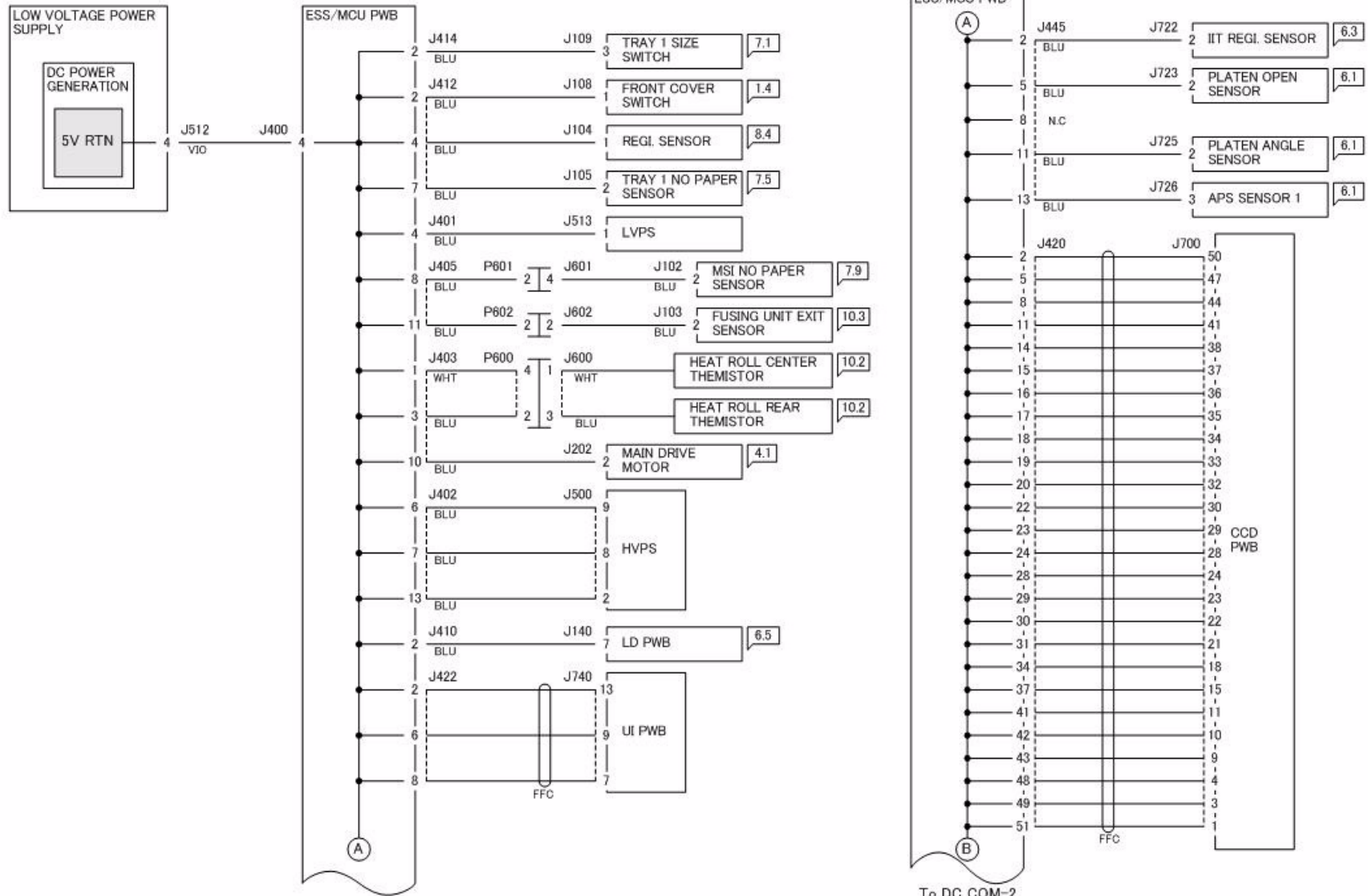


Figure 1 j0mg720107

j0mg720107

7.2.1.8 DC COM-2 (5V RTN)

7.2.1.8 DC COM-2 (5V RTN)

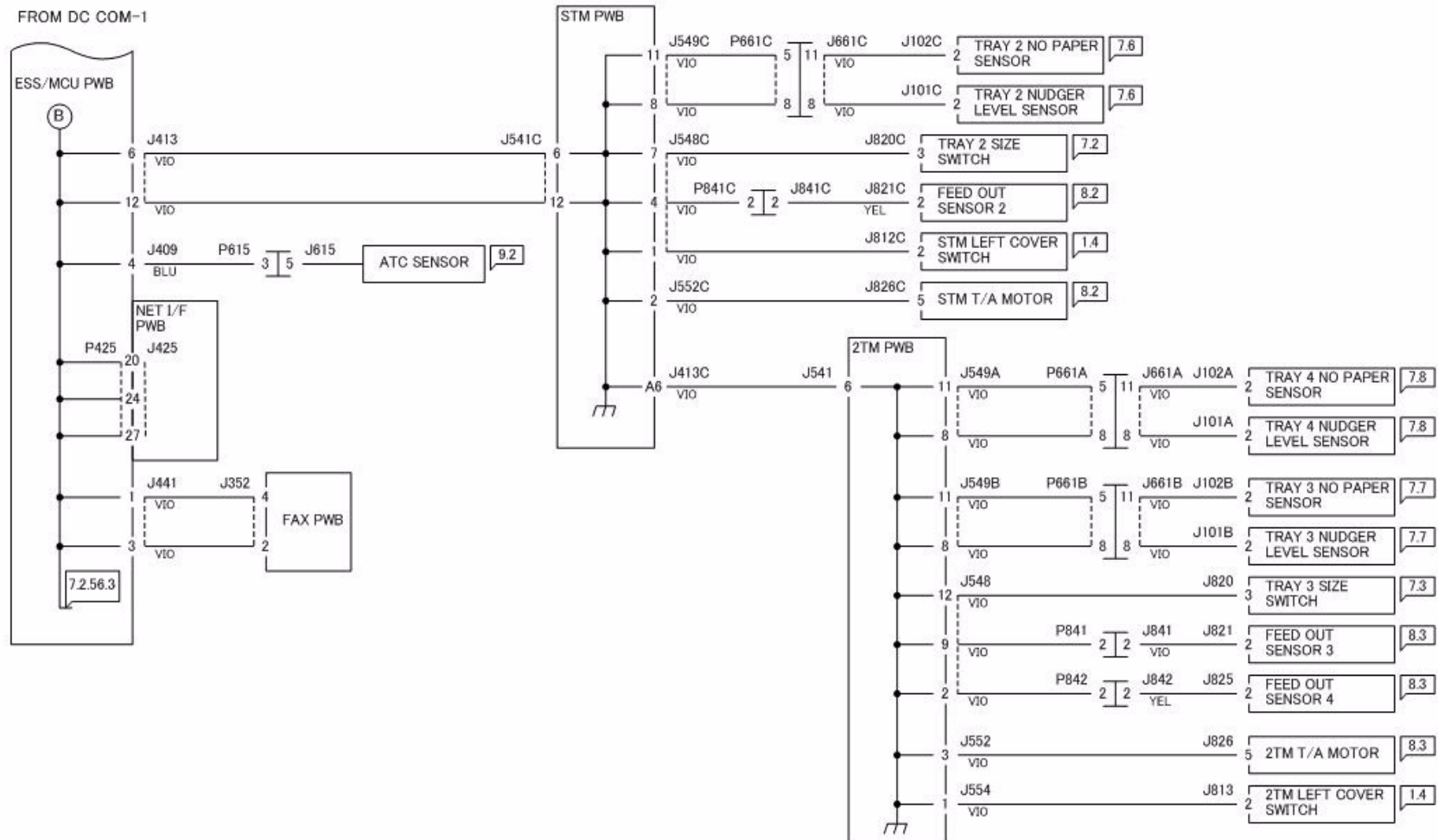


Figure 1 j0mg720108

j0mg720108

7.2.1.9 DC COM-3 (24V RTN)

7.2.1.9 DC COM-3 (24V RTN)

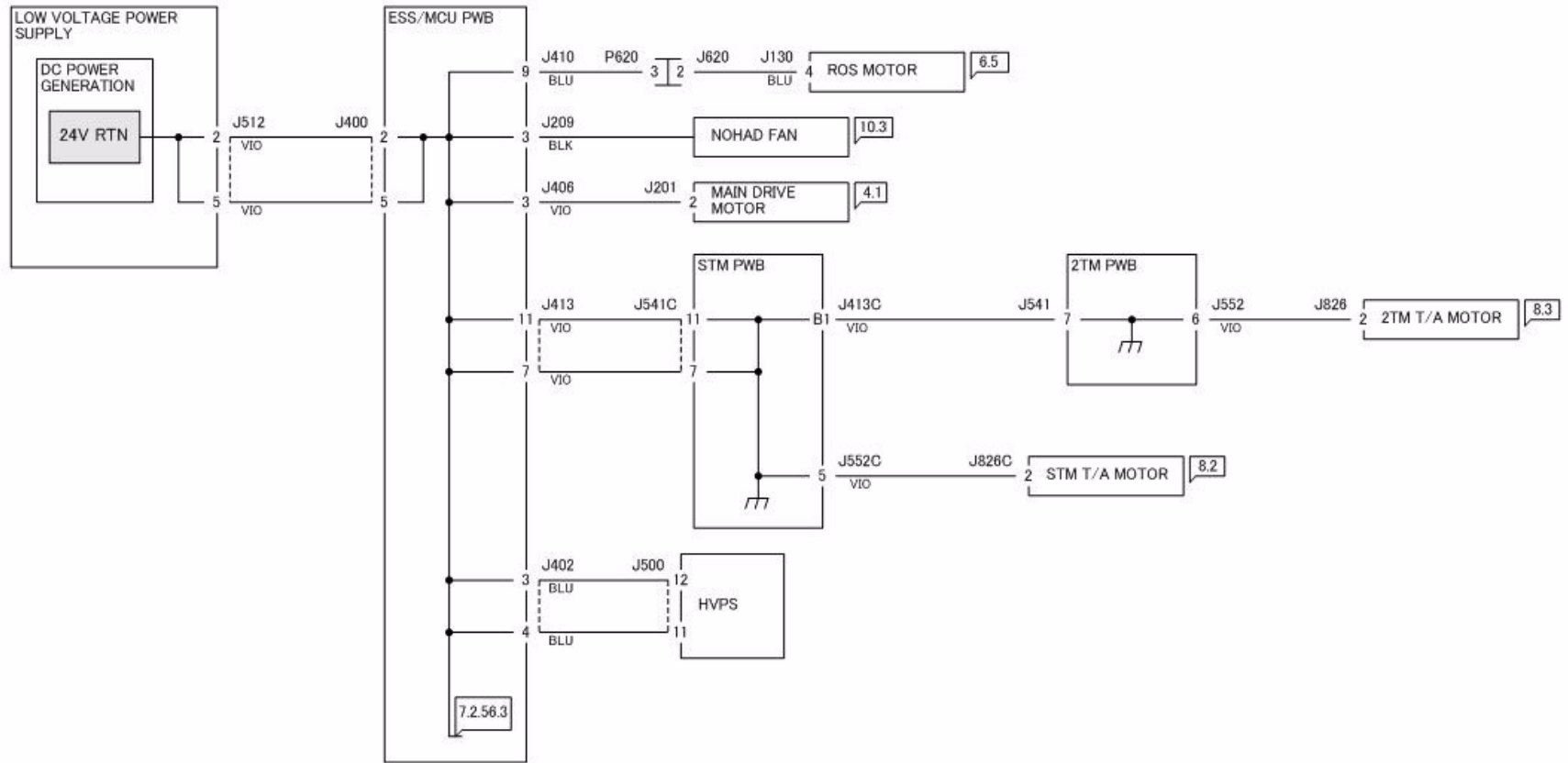


Figure 1 j0mg720109

j0mg720109

7.2.56.1 DADF +5VDC

7.2.56 DADF

7.2.56.1 DADF +5VDC

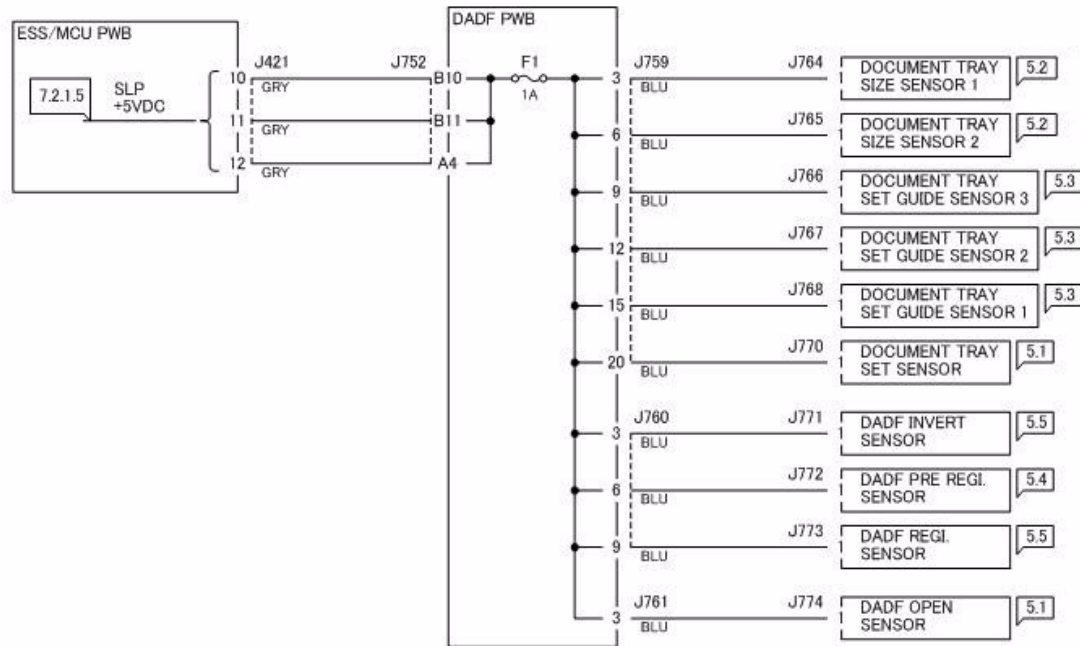


Figure 1 j0mg725601

j0mg725601

7.2.56.2 DADF +24VDC

7.2.56.2 DADF +24VDC

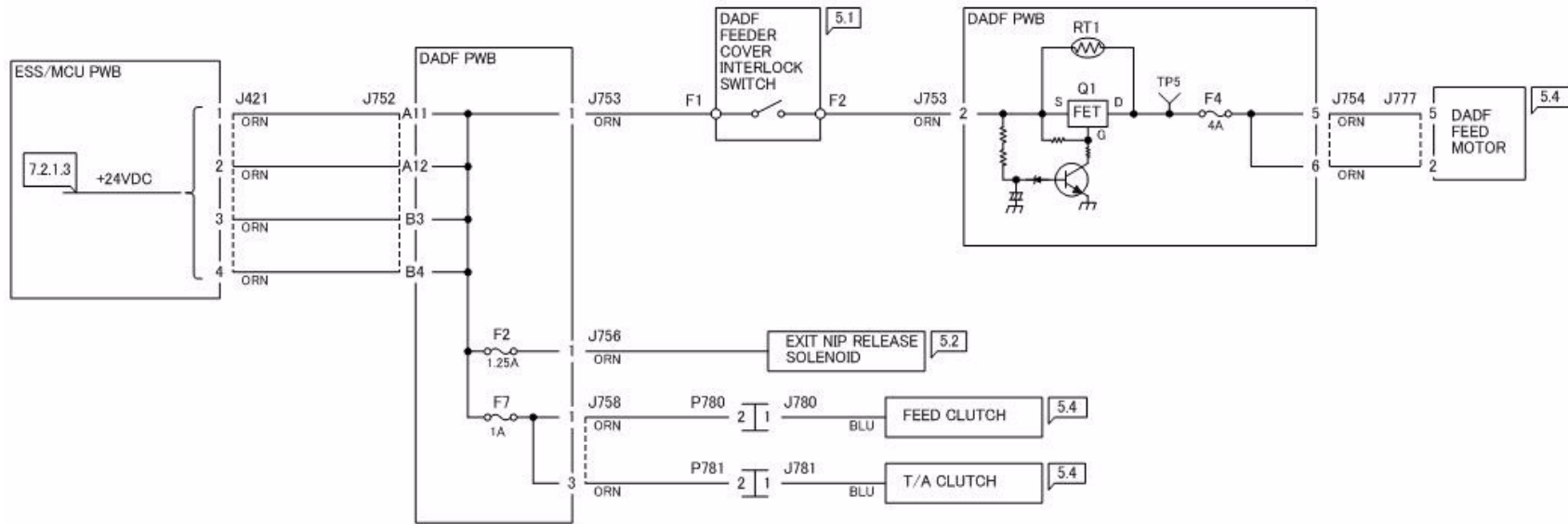


Figure 1 j0mg725602

j0mg725602

7.2.56.3 DADF DC COM

7.2.56.3 DADF DC COM

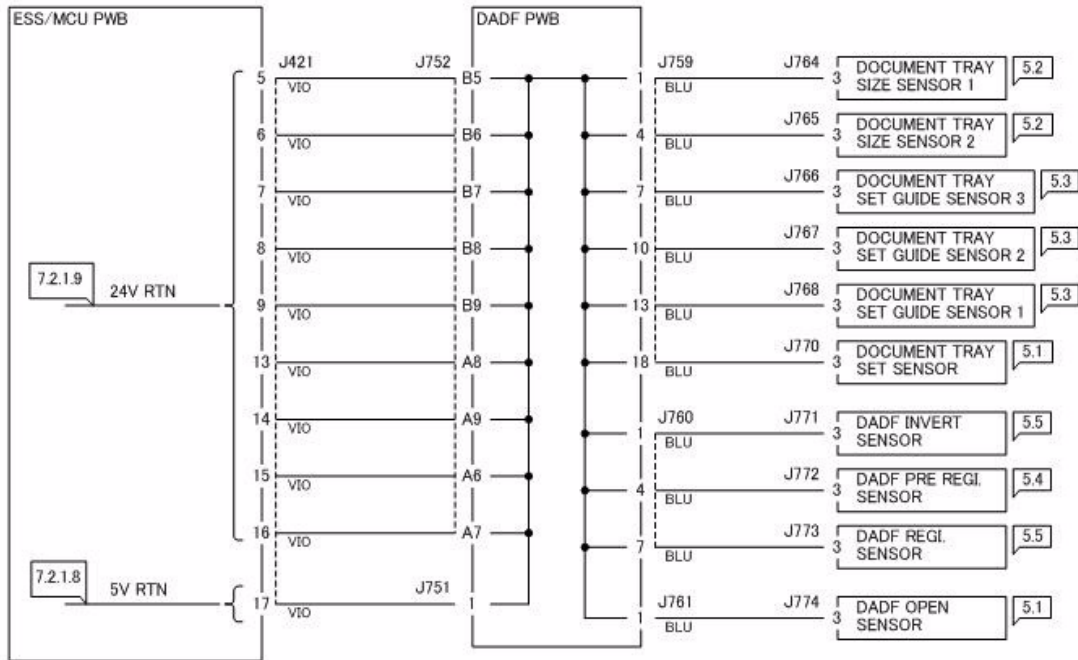


Figure 1 j0mg725603

j0mg725603

1. How to Use BSDs

1. Enter the Chain directed in the Troubleshooting chapter.
2. Or enter the appropriate Chain by referring to the contents.
3. Diagnose the failure in the appropriate Chain, using test data.
4. If where the failure has occurred can be located, refer to the Parts List No. or Adjustment No. on the location to go to the index of parts or the appropriate adjustment.

WARNING

Turn off the Main Power Switch and disconnect the Power Cord from the wall outlet before removing /installing any part.

Otherwise, there would be a danger of electrical shock or injury.

2. Symbology

Table 1



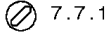
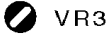
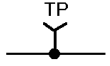
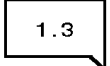
Symbol	Description
 Figure 1 9050	This symbol is used to refer to Notes usually described on the same page.
 Figure 2 9051	This symbol is used to refer to test data usually on the same page for reference in case the voltage value shown on the BSD id different from the measured value.
PL 7.7	This symbol is used to refer to the Parts List. PL stands for Parts List and 7.7 denotes Plate No. This shows the appropriate part is shown on the indicated plate. This symbol is added to all the replaceable parts on the BSD.
 Figure 3 9053	This symbol is used to refer to the adjustments in the Repair and Adjustment chapters. The number 7.7.1 shows the adjustment procedure is found as ADJ 7.7.1 in the Adjustment chapter.
 Figure 4 9054	This symbol identifies a variable resistor adjustable in the field.
 Figure 5 9061	This symbol identifies a test point of a signal.
 Figure 6 9055	This symbol is used to show where the input into the functions comes from. This example shows the input comes from the Group Functions in Chain 1-3.

Table 1

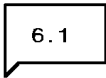
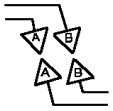
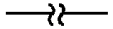
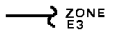
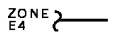

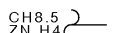
Symbol	Description
 <p>Figure 7 9056</p>	This symbol is used to show where the output from the functions go. This example shows the output goes to the Group Functions in Chain 6-1.
 <p>Figure 8 9041</p>	This symbol shows signal lines are connected vertically.
 <p>Figure 9 9042</p>	This symbol shows signal lines are connected horizontally.
 <p>Figure 10 9043</p>	This symbol shows a signal line is connected to a specific location in the same function. This example shows the destination the signal line goes to is marked in Zone (E-3).
 <p>Figure 11 9044</p>	This symbol shows a signal line is connected to a specific location in the same function. This example shows the location the signal line starts from is marked in Zone (E-4).
 <p>Figure 12 9045</p>	This symbol shows a signal line is connected to a specific location in another sheet (shown at lower right of the BSD). This example shows the destination the signal line goes to is marked in Zone (A-2) in CH8.5.
 <p>Figure 13 9046</p>	This symbol shows a signal line is connected to a specific location in another sheet (shown at lower right of the BSD). This example shows the location the signal line starts from is marked in Zone (H-4) in CH8.5.

Table 1

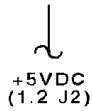






Symbol	Description
 <p>Figure 14 9047</p>	This symbol shows the power output line in Chain 1.
 <p>Figure 15 9025</p>	This symbol shows frame ground.
 <p>Figure 16 9062</p>	This symbol represents a twisted pair of wires.
 <p>Figure 17 9048</p>	This symbol shows a signal runs from right to left in the opposite direction of the usual one.
 <p>Figure 18 9049</p>	This represents a feedback signal.
 <p>Figure 19 9037</p>	This symbol shows a mechanical linkage to a part.
 <p>Figure 20 9038</p>	This symbol represents a mechanical drive signal and shows the direction in which the signal runs.

Table 1

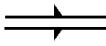


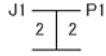
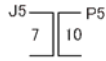
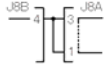

Symbol	Description
 Figure 21 9039	This symbol represents a document or paper and shows the direction in which it runs.
 Figure 22 9040	This symbol represents a heat, light or air signal and shows the direction in which it runs.
 Figure 23 9063	This symbol shows Control Logic.
 Figure 24 9064	This symbol shows a double plug connector.
 Figure 25 9065	This symbol shows a drawer plug connector.
 Figure 26 9066	This symbol shows a shorting plug connector.
 Figure 27 9028	This symbol shows the fastener is used for connection.

Table 1


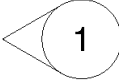
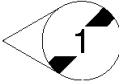






Symbol	Description
 Figure 28 9067	This symbol shows that an electrically conductive material such as a leaf spring and a plate is used for connection.
 Figure 29 4001	This symbol shows the part the arrow points to has been modified by 1V.
 Figure 30 4002	This symbol shows the part the arrow points to has not been modified by 1V. It still has the previous configuration.
 Figure 31 5005	This symbol shows the whole figure or the framed illustration is modified by 1V.
 Figure 32 5006	This symbol shows the whole figure or the framed illustration has not been modified by 1V. The area still has the previous configuration.
 Figure 33 9074	This symbol shows direction the air flows.
 Figure 34 9075	This symbol shows switch and is also used as Interlock Switch.

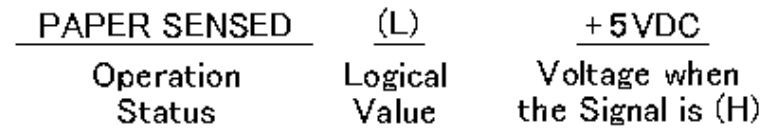
Table 1

Symbol	Description
 <p>Figure 35 9076</p>	This symbol shows the Cheater type of Interlock Switch.
 <p>Figure 36 9077</p>	This symbol shows the Chip Fuse.

3. Signal Name

Signal Name Structure

- Input Component

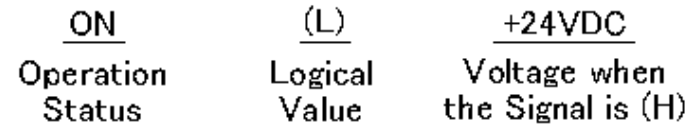


9069

Figure 1 9069

The example indicates that when paper is sensed, the signal level is (L) and that when paper is not sensed, the signal level is (H) with the voltage +5VDC.

- Output Component



9073

Figure 2 9073

The example indicates that when the component is ON, the signal level is (L) and that when it is OFF, the signal level is (H) with the voltage +24VDC.

4. DC Voltage

A measurement of DC voltage is made between the particular test point and the frame unless otherwise specified by note and test data. The measured DC voltage is in the range below:

Table 1

LVPS	Voltage	Level	Range
LVPS	+5VDC	(H)	+4.85 - +5.35VDC
	+24VDC	(H)	+22.28 - +25.72VDC

5. Other Descriptions

DC330 Input Component Voltage Level

The voltage levels (H/L) shown on the BSDs are the levels that are measured by the tester.

Some of them are therefore different from H/L displayed on the PSW.

Wire Color

Wires are distinguished by color in port of the BSDs for this model.

The colors of wires are shown below the signal lines in their respective abbreviations listed below:

Table 1

Abbreviation	Color
BRN	BROWN
RED	RED
ORN	ORANGE
YEL	YELLOW
GRN	GREEN
BLU	BLUE
VIO	VIOLET
GRY	GRAY
WHT	WHITE
BLK	BLACK
GN/YL	GREEN/YELLOW
PNK	PINK
SKY	SKY

Figures on the BSDs

The grayed-out portion of the figure shows the path from Motoror Solenoid to parts to drive.

CH1.1 Main Power On & M/C Power Control

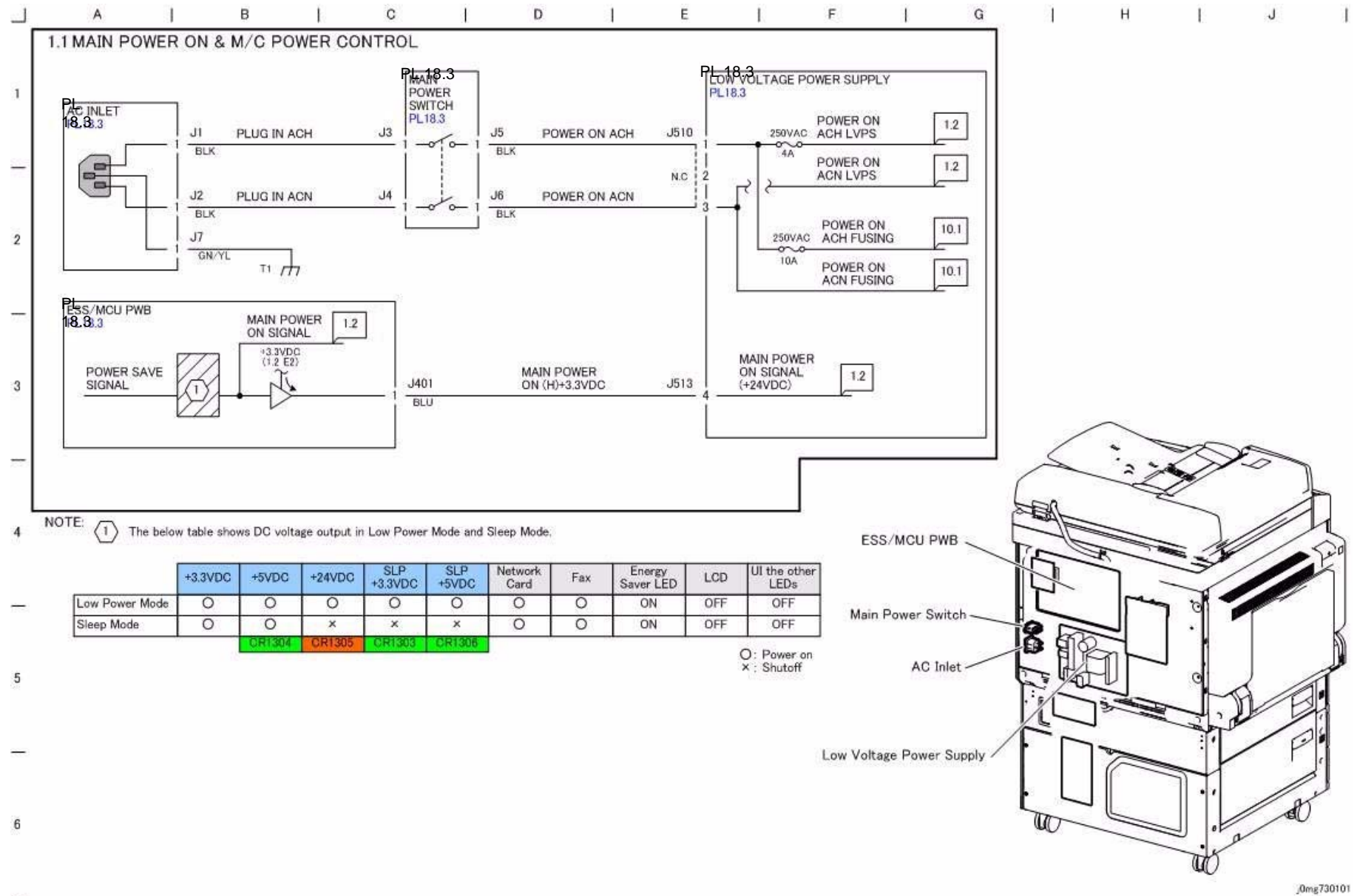


Figure 1 j0mg730101

.0mg730101

CH1.2 DC Power Generation

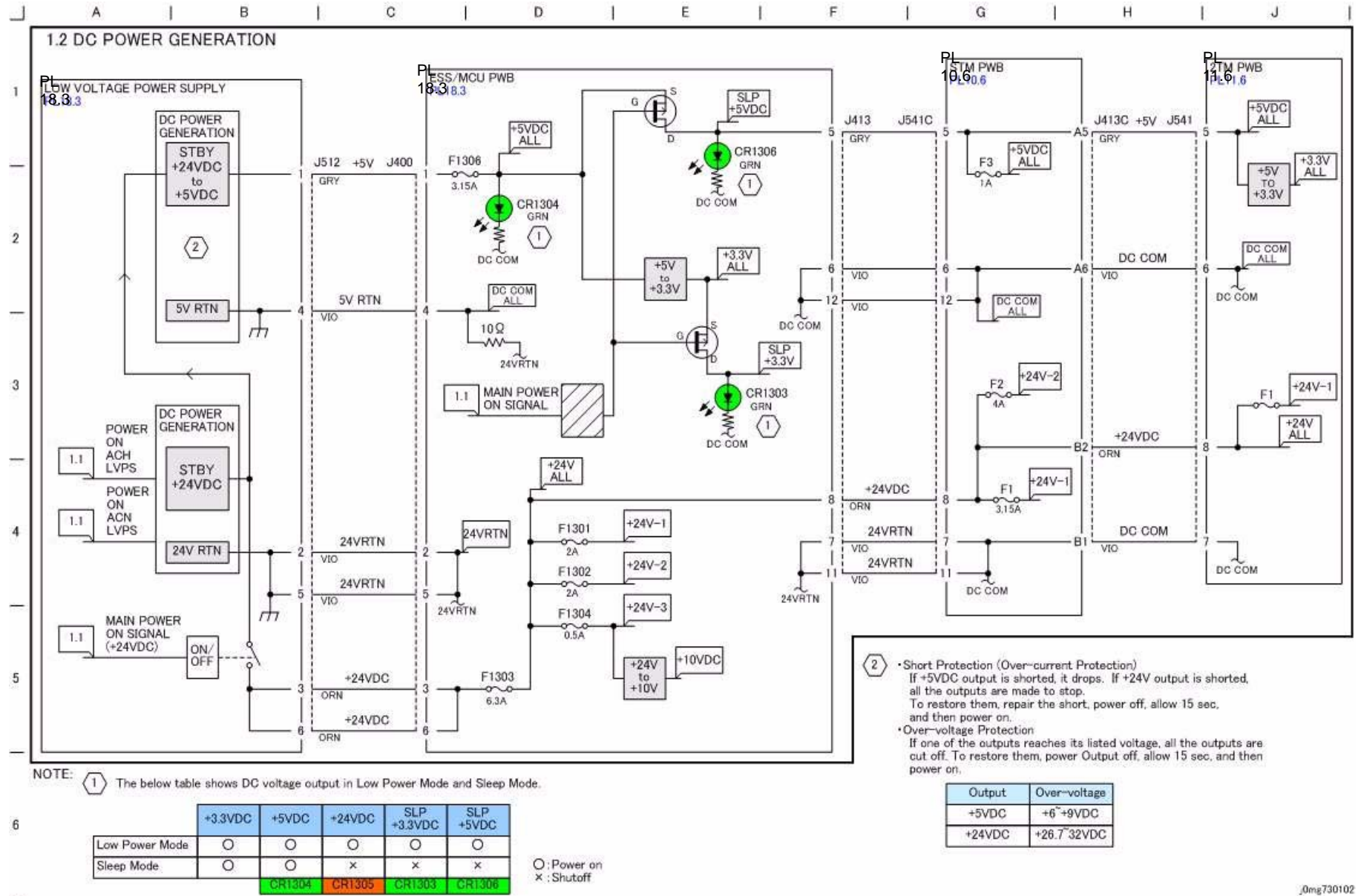


Figure 1 j0mg730102

CH1.3 IIT/DADF DC Power Distribution

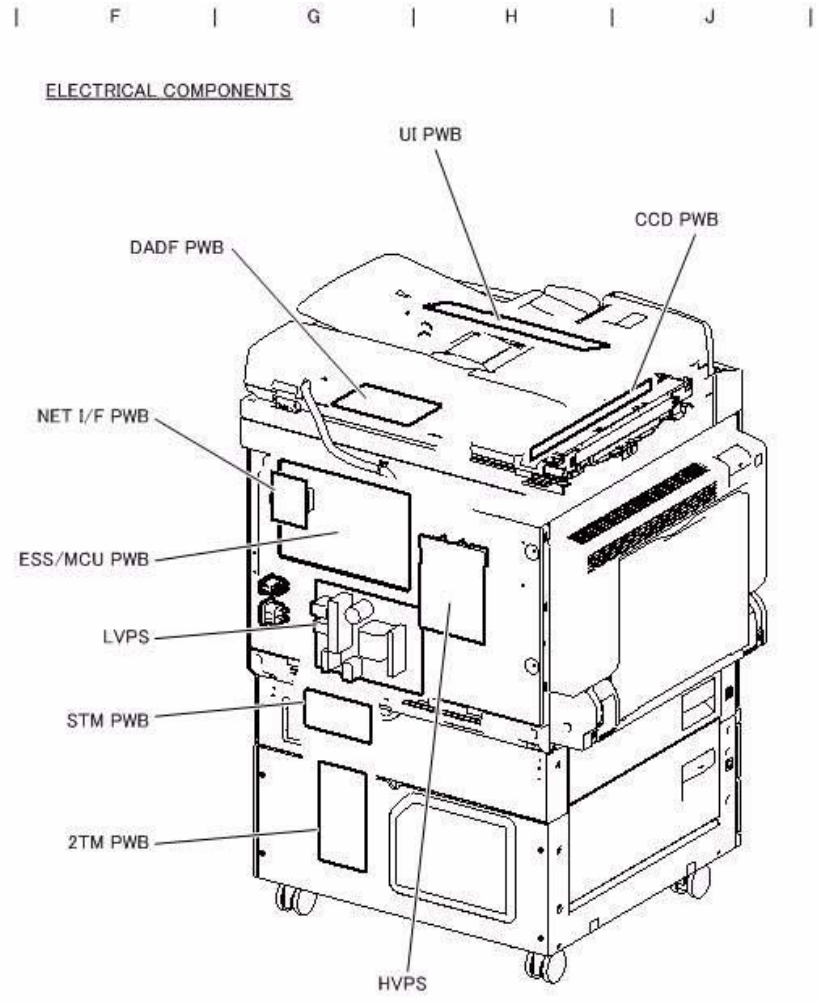
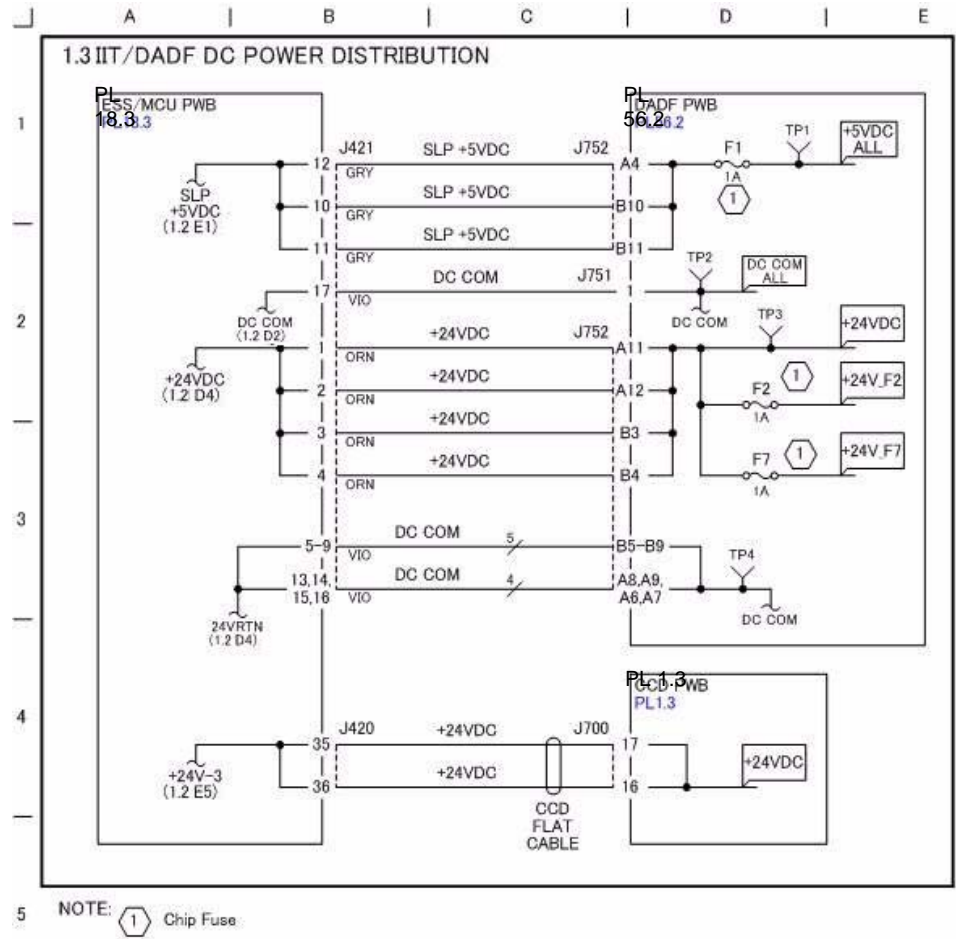


Figure 1 j0mg730103

.0mg730103

CH1.4 Power Interlock Switching

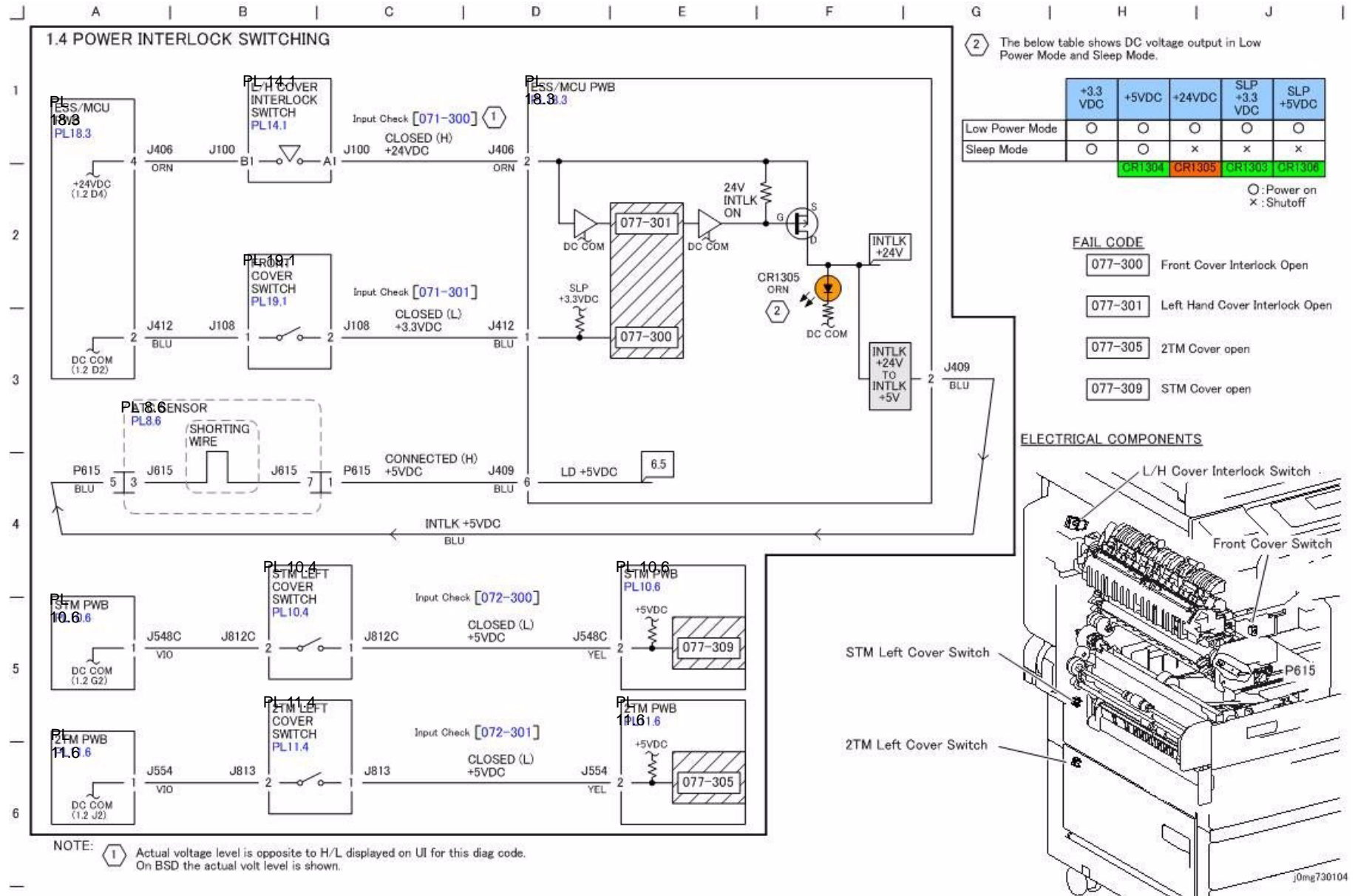


Figure 1 j0mg730104

CH1.5 Fuse & LED Location

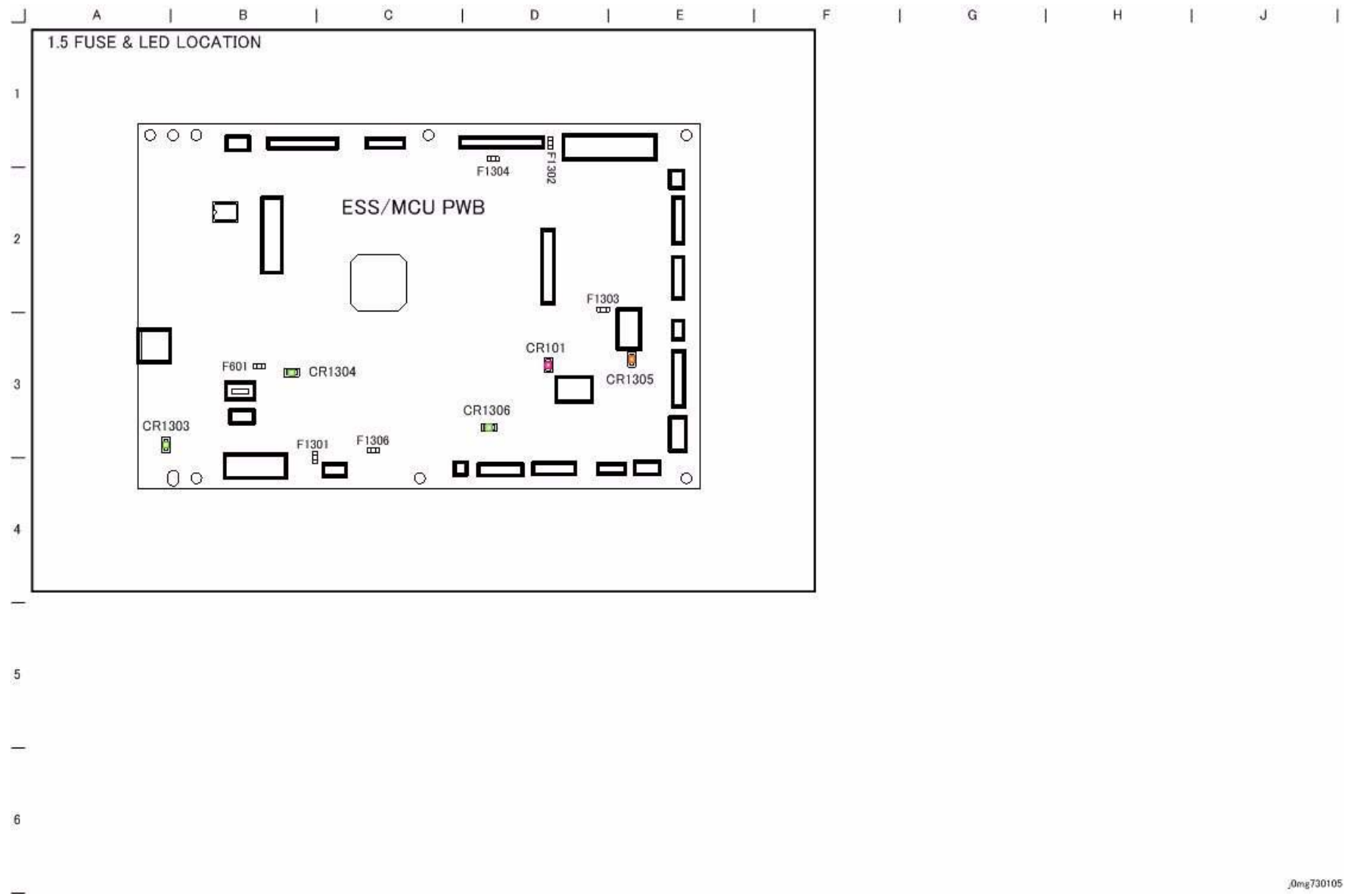


Figure 1 j0mg730105

.0mg730105

CH2.1 Control Panel

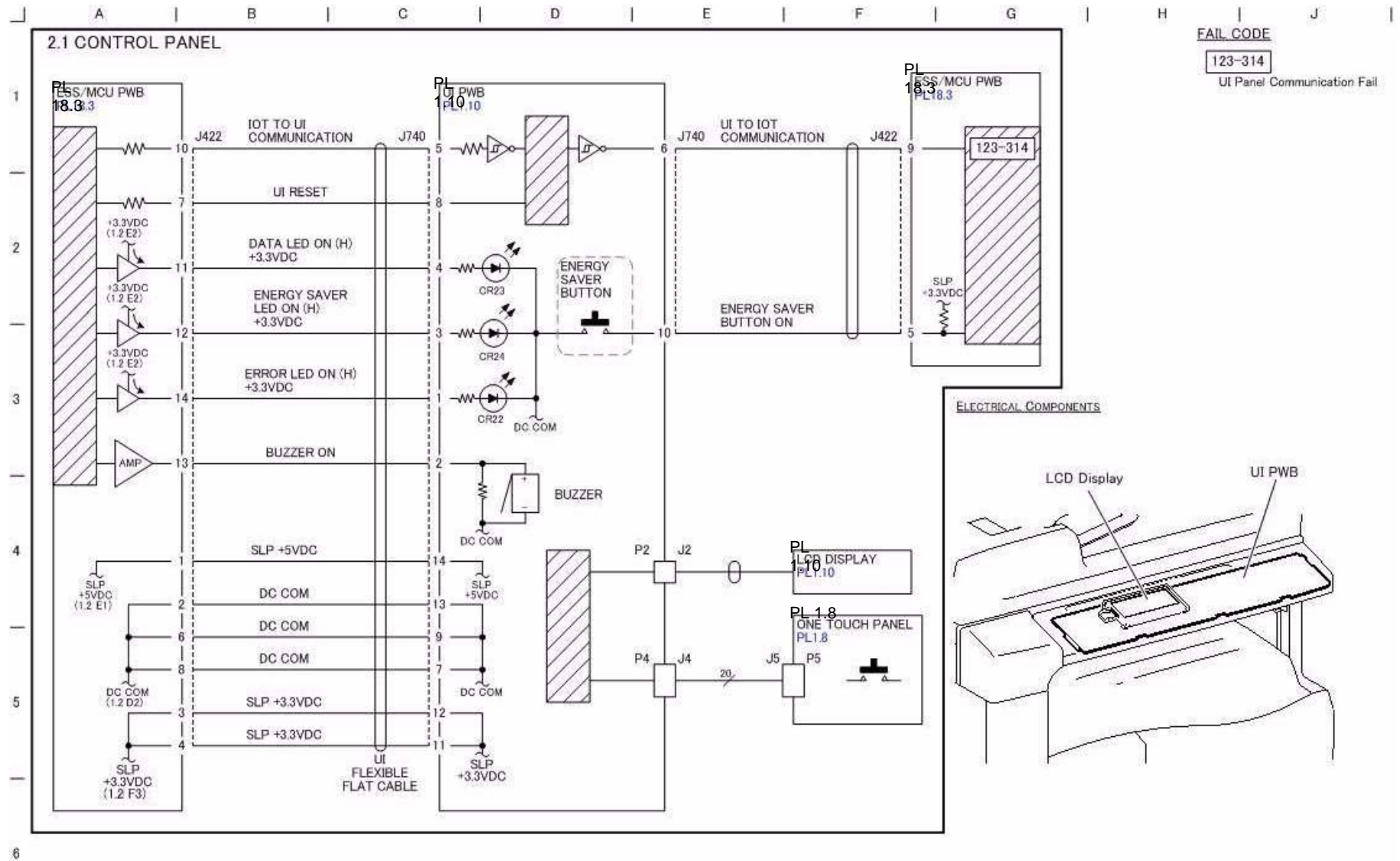


Figure 1 j0mg730201

.0mg730201

CH3.1 PWBS Communication (IIT/DADF)

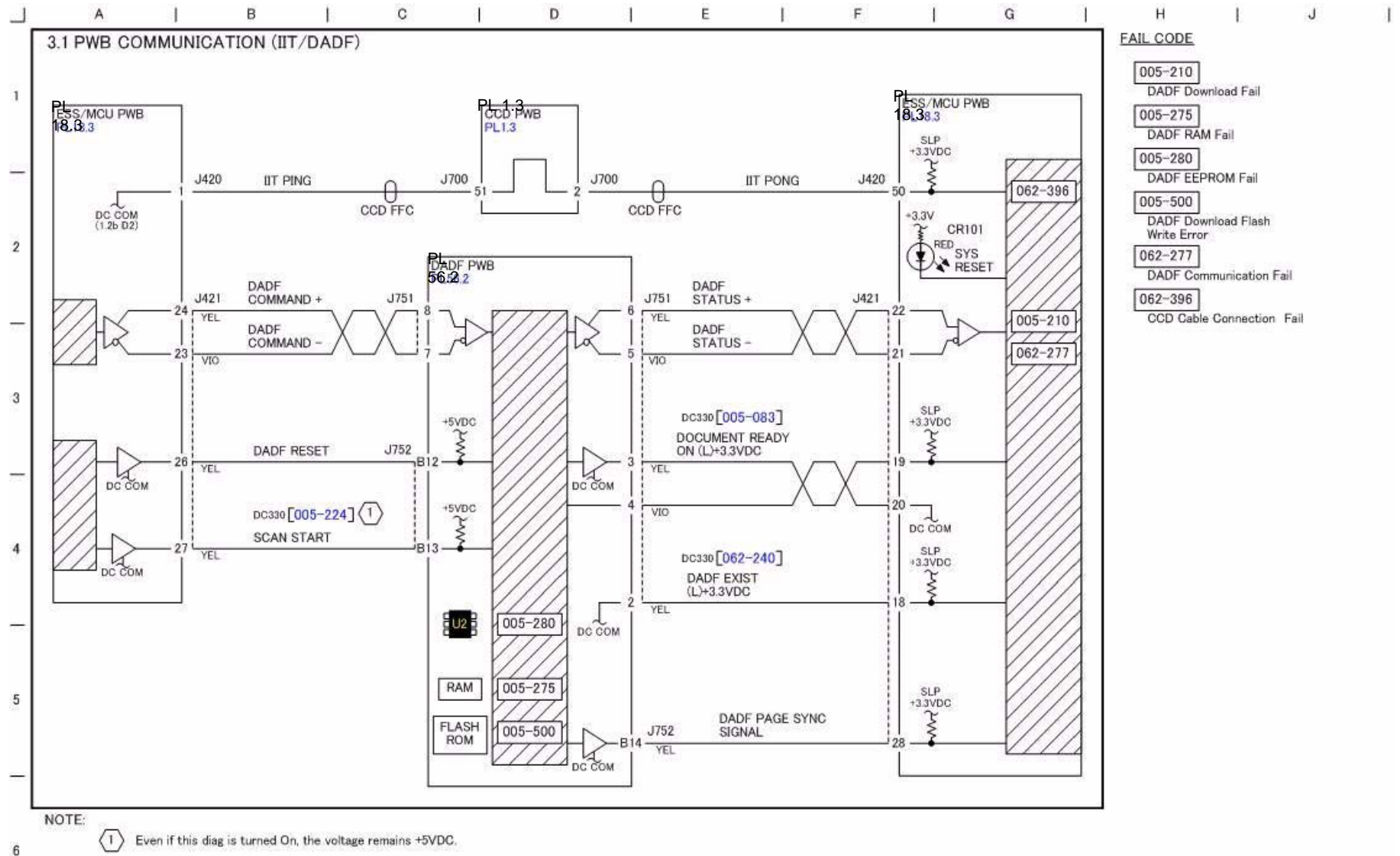


Figure 1 j0mg730301

.0mg730301

CH3.2 PWBS Communication (STM/2TM)

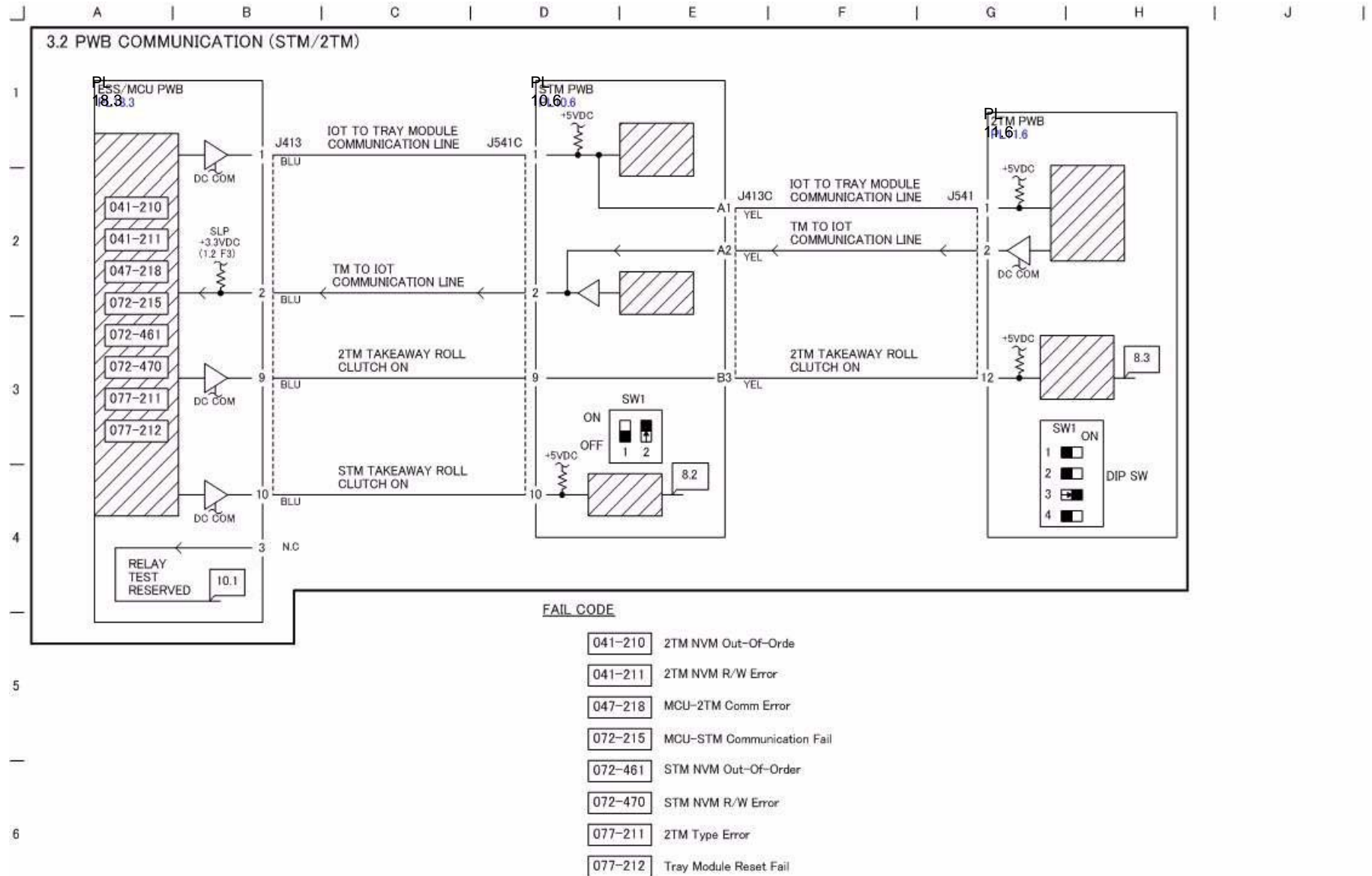


Figure 1 j0mg730302

.0mg730302

CH3.3 PWBS Communication (NET)

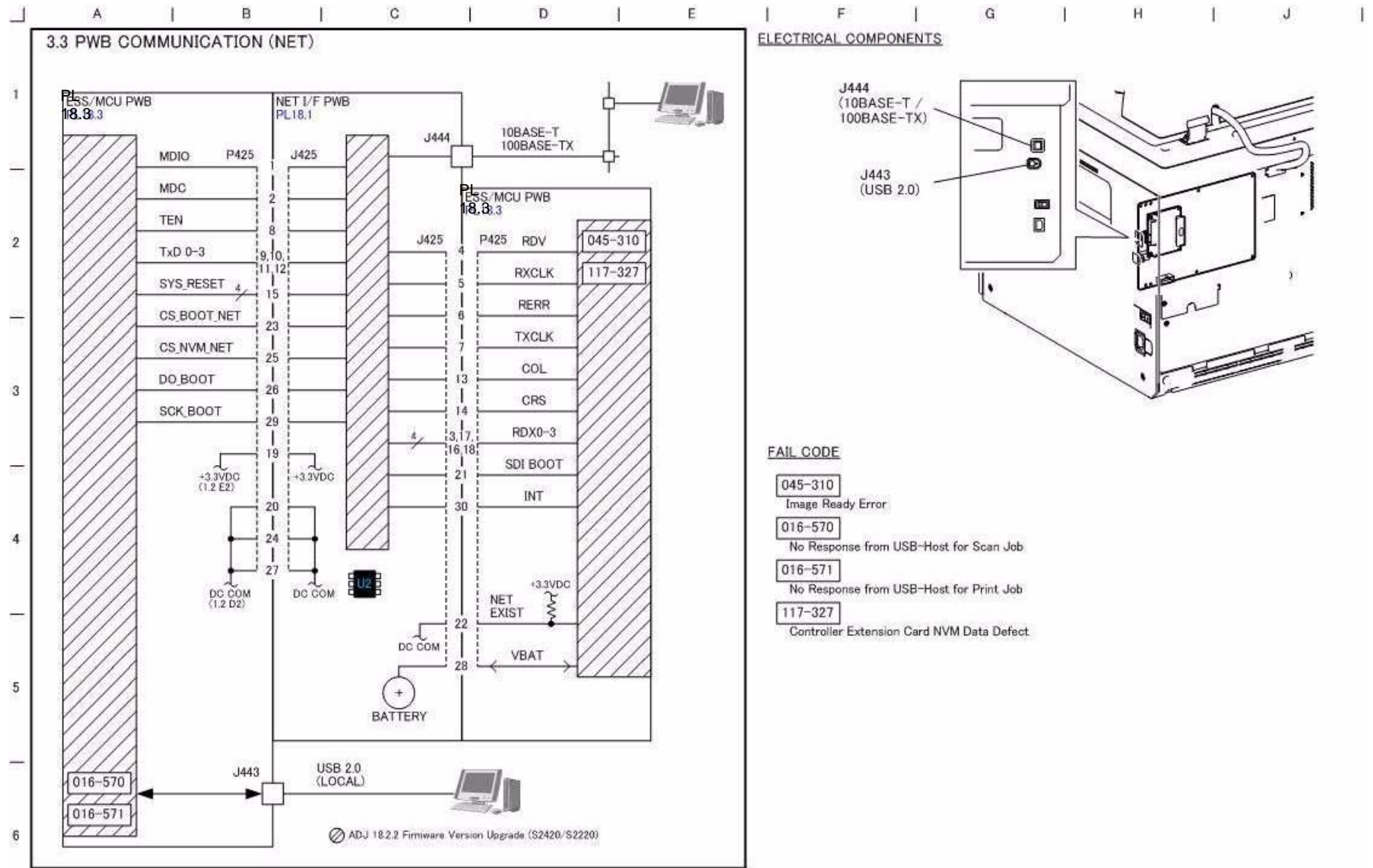


Figure 1 j0mg730303

.0mg730303

CH3.4 Electric Billing

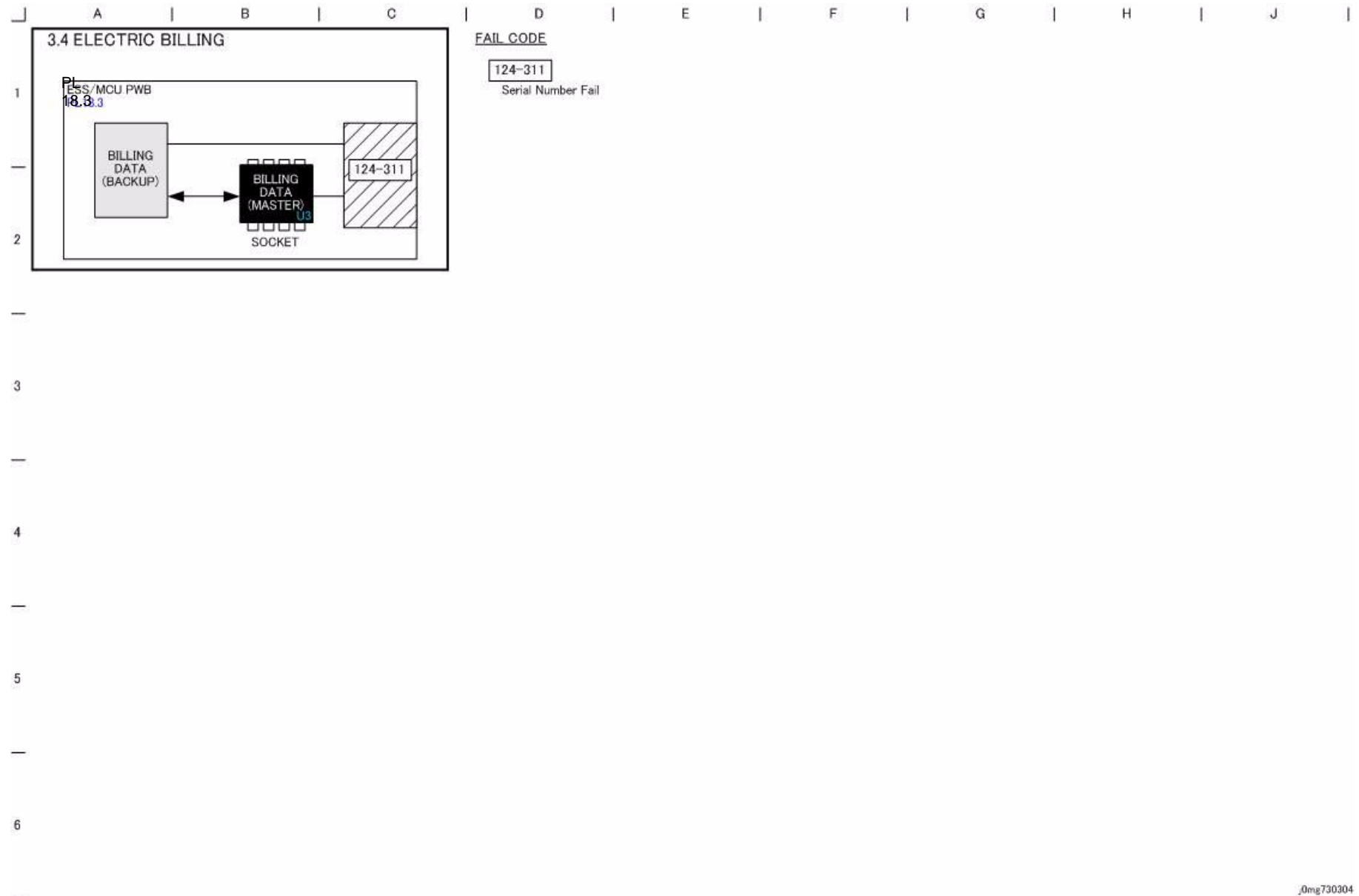


Figure 1 j0mg730304

.0mg730304

CH4.1 Main Drive

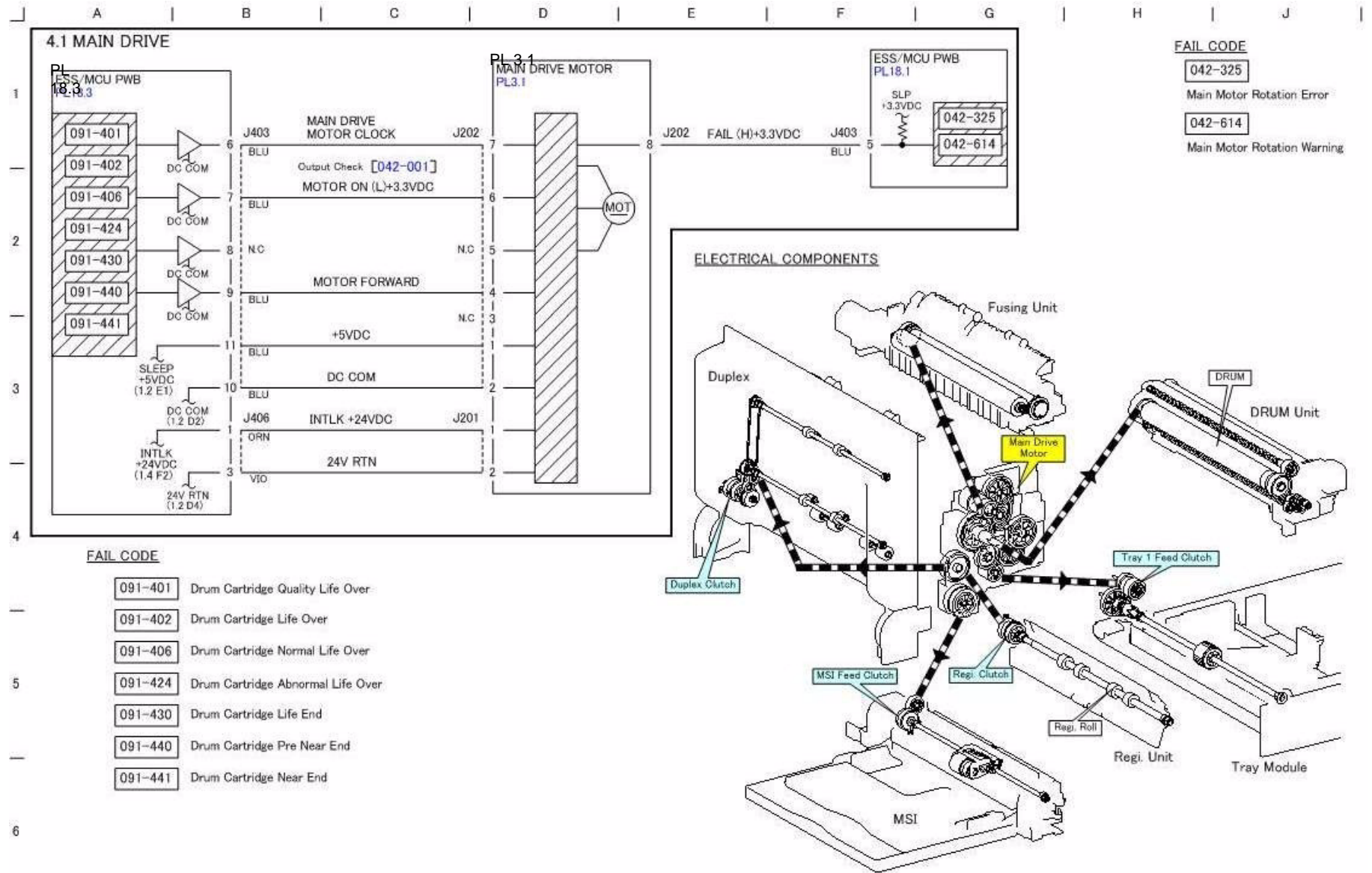


Figure 1 j0mg730401

.0mg730401

CH5.1 DADF Interlock and Document Setting

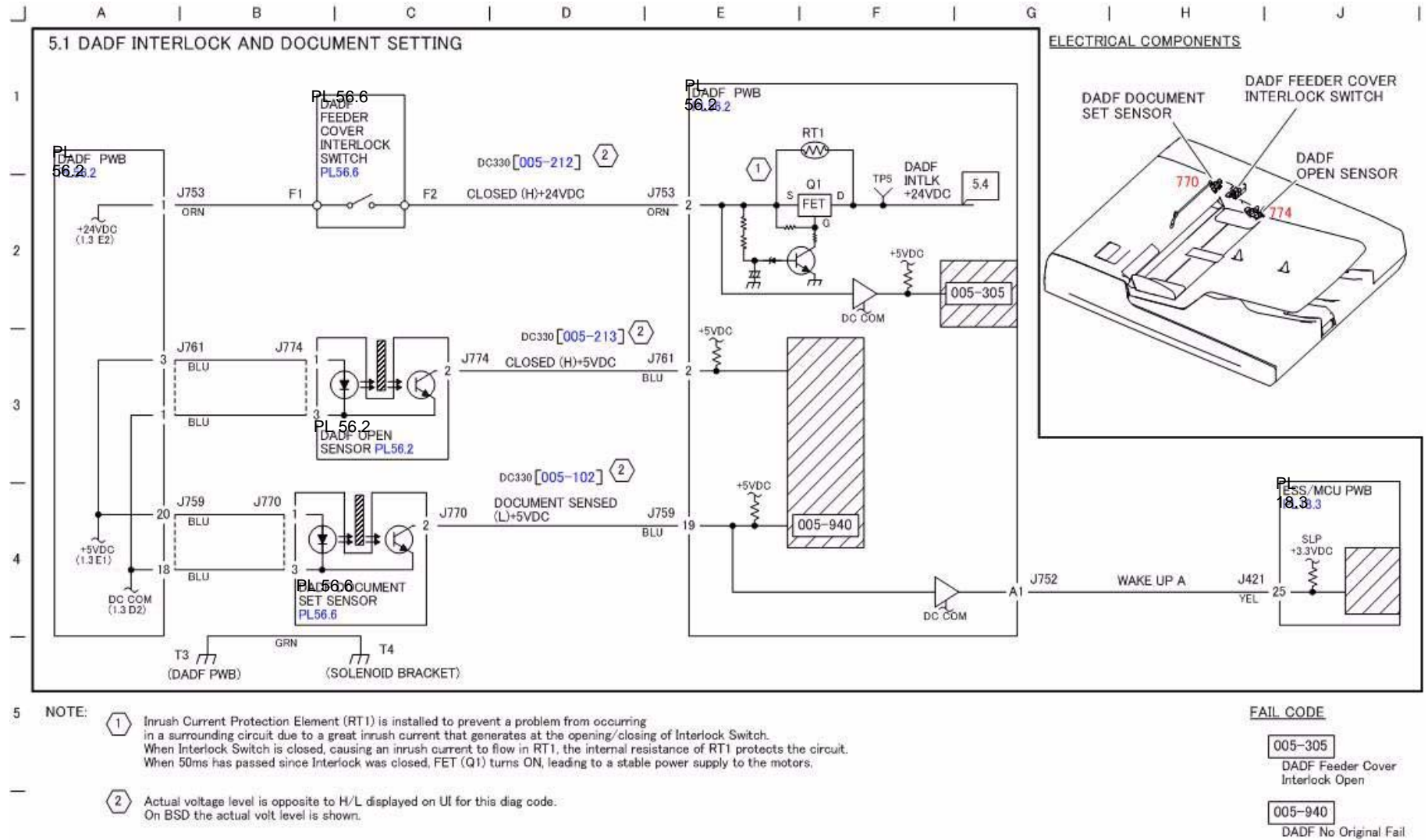


Figure 1 j0mg730501

.0mg730501

CH5.2 Document Size Sensing (1/2)

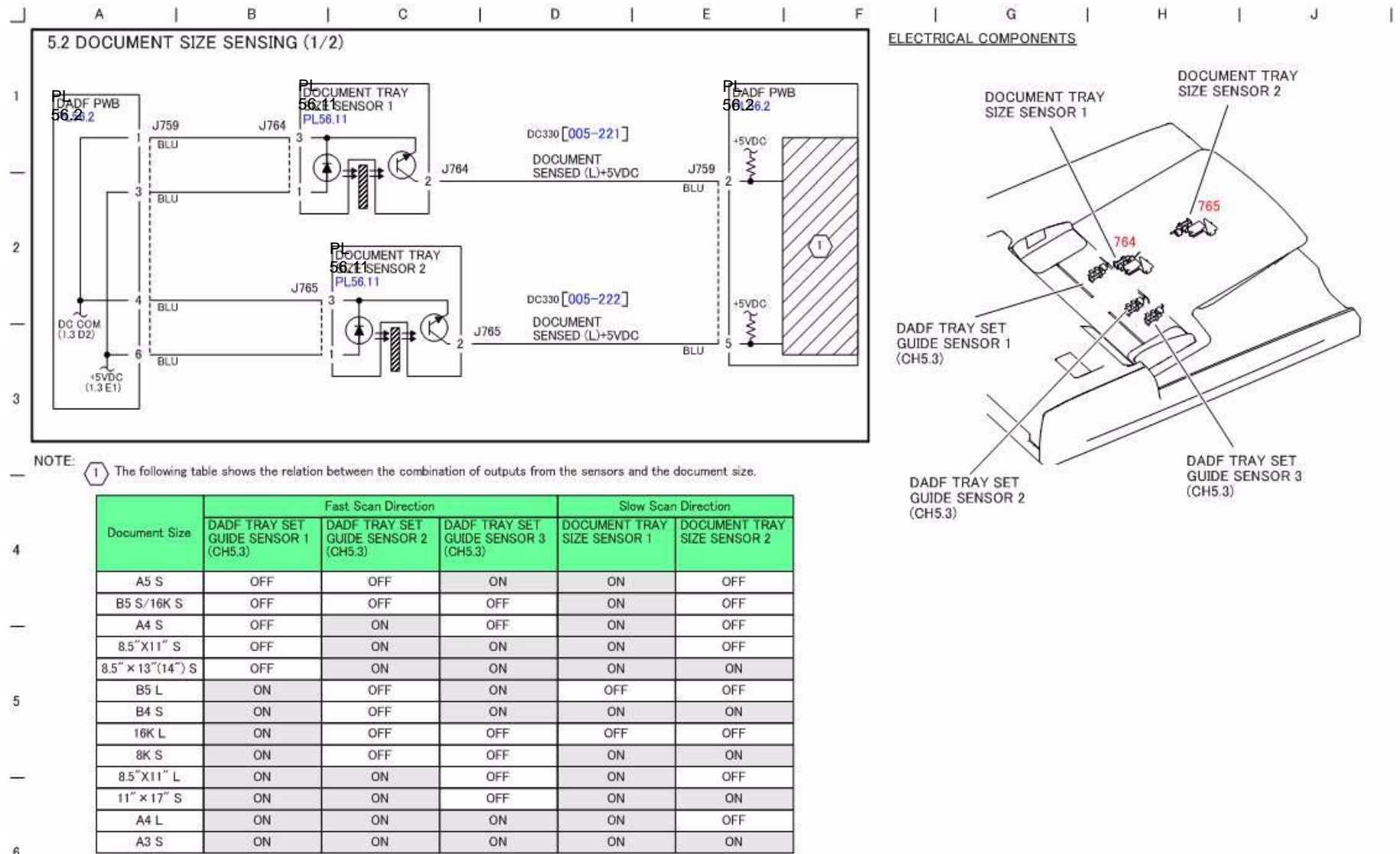


Figure 1 j0mg730502

.0mg730502

CH5.3 Document Size Sensing (2/2)

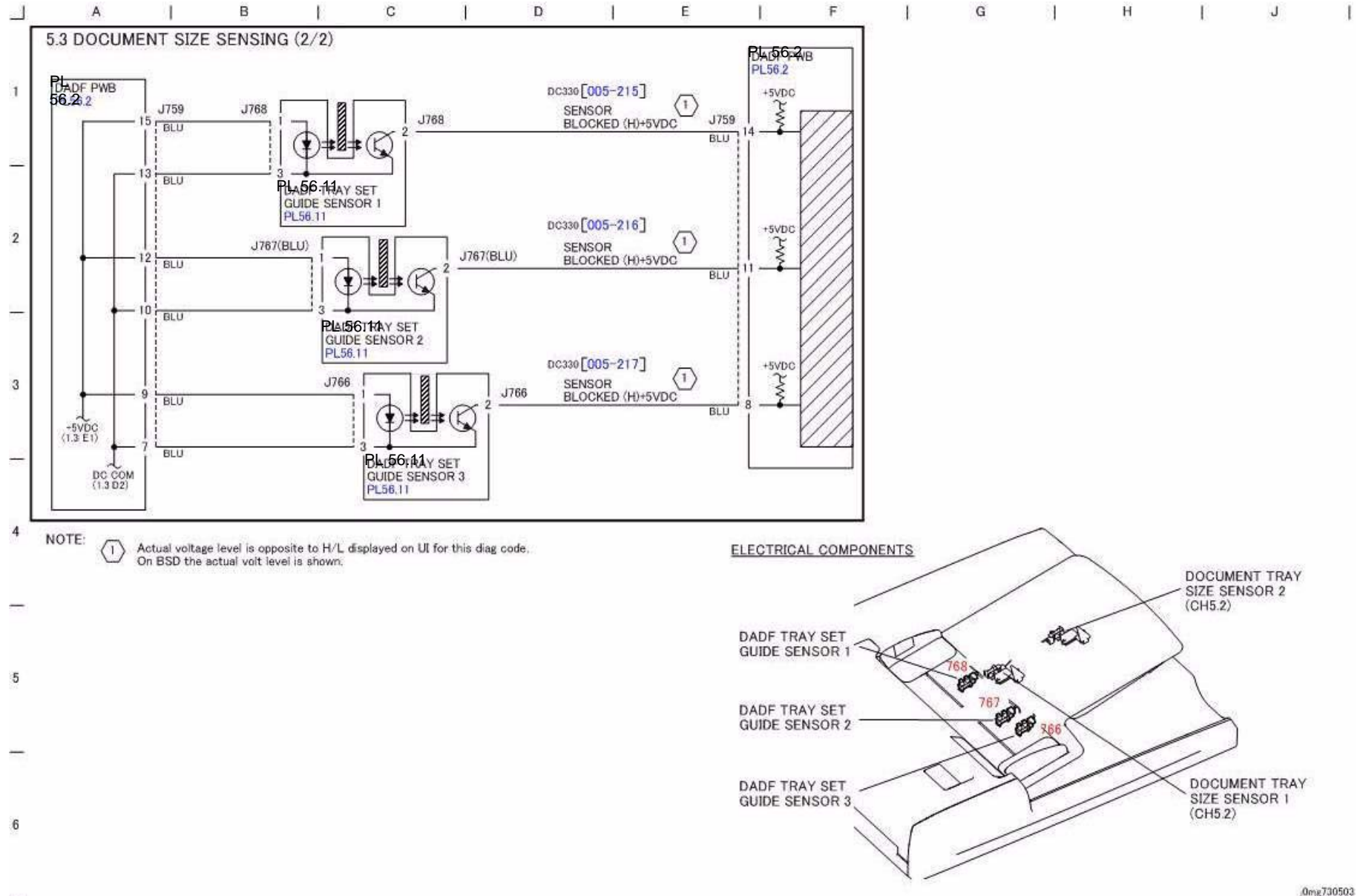


Figure 1 j0mg730503

.0mg730503

CH5.4 Document Feeding

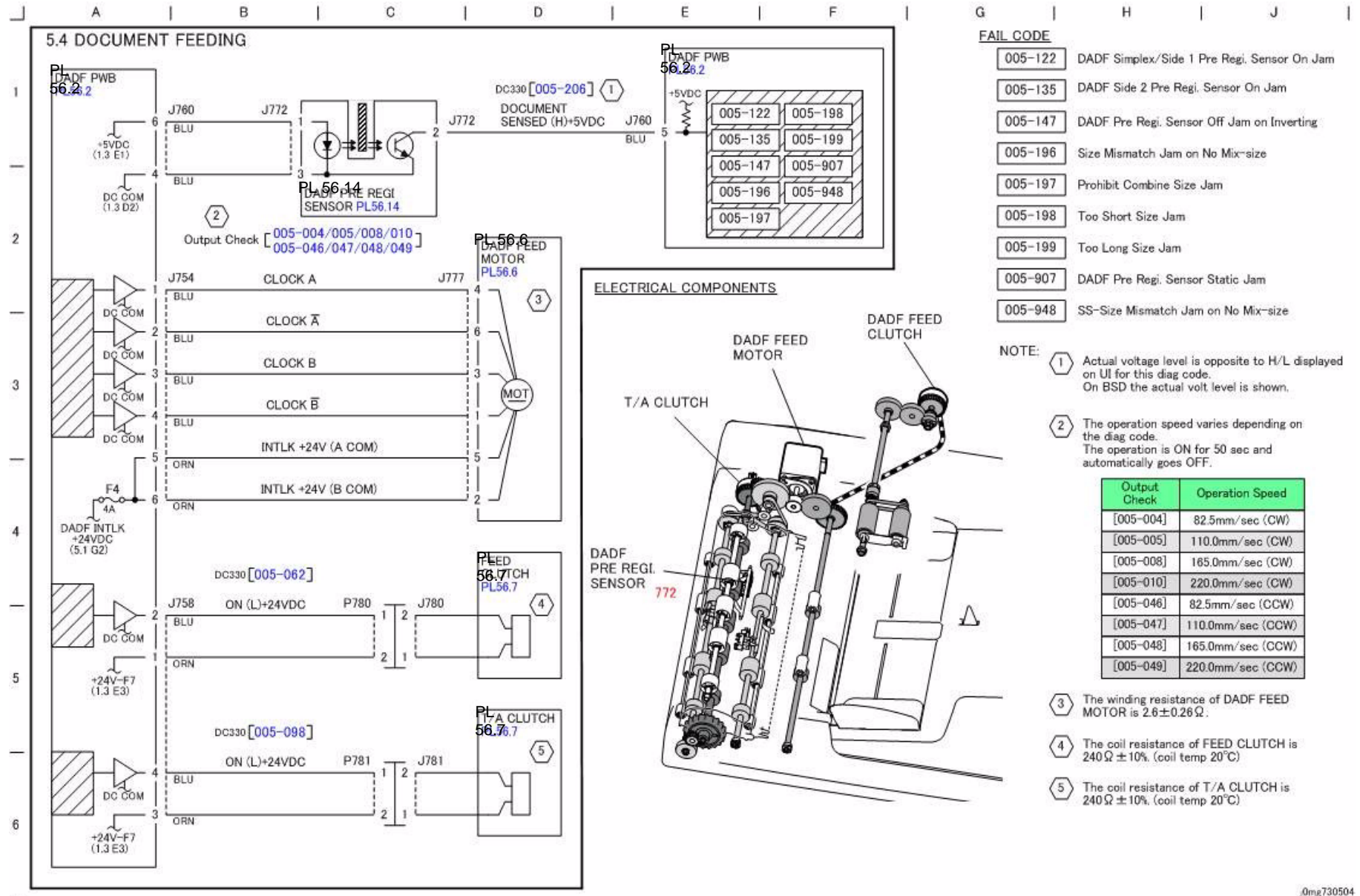


Figure 1 j0mg730504

.0mg730504

CH5.5 Document Scan, Invert & Exit Transportation

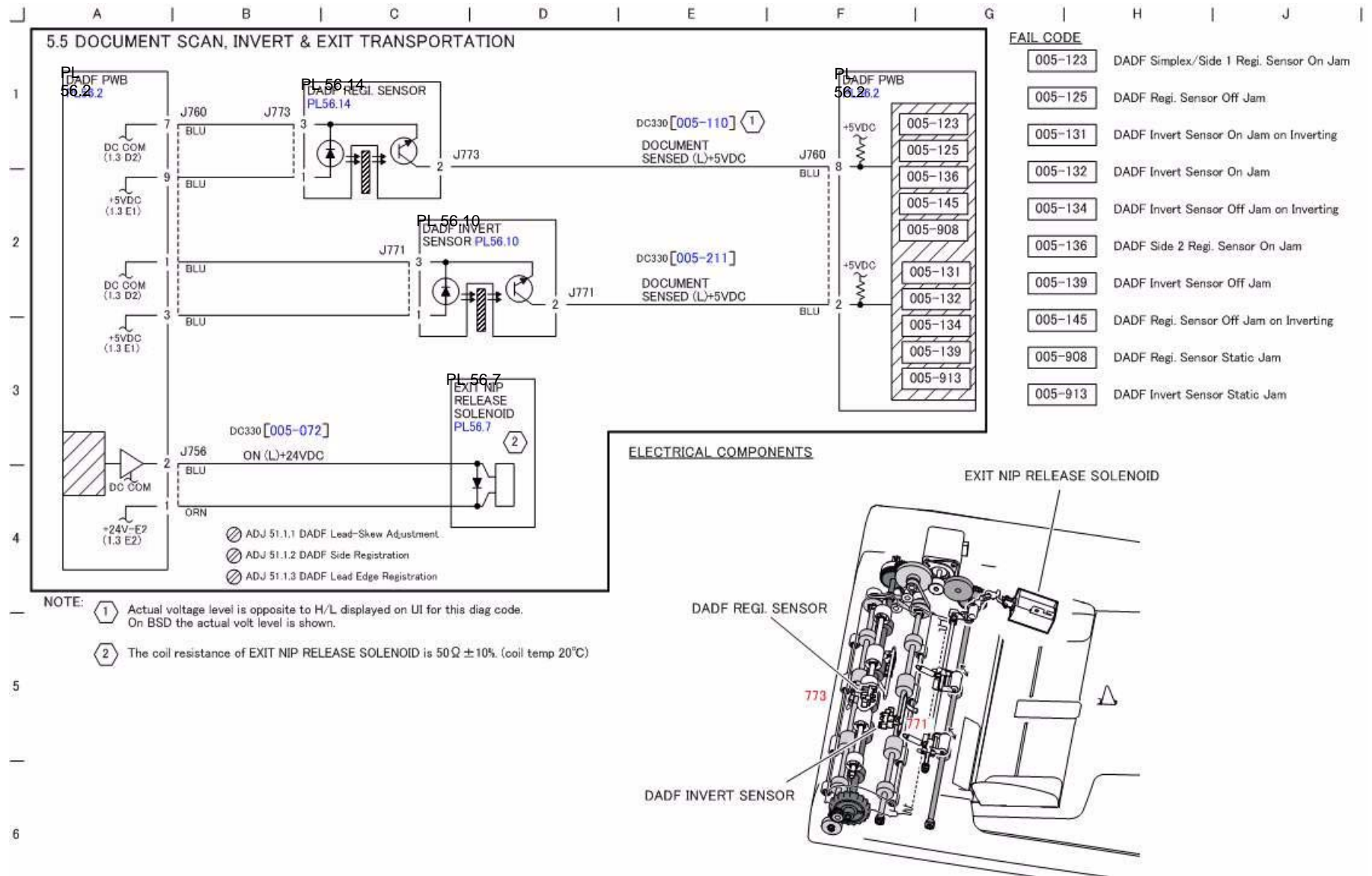


Figure 1 j0mg730505

.j0mg730505

CH5.6 Document Path & Drive Transmission

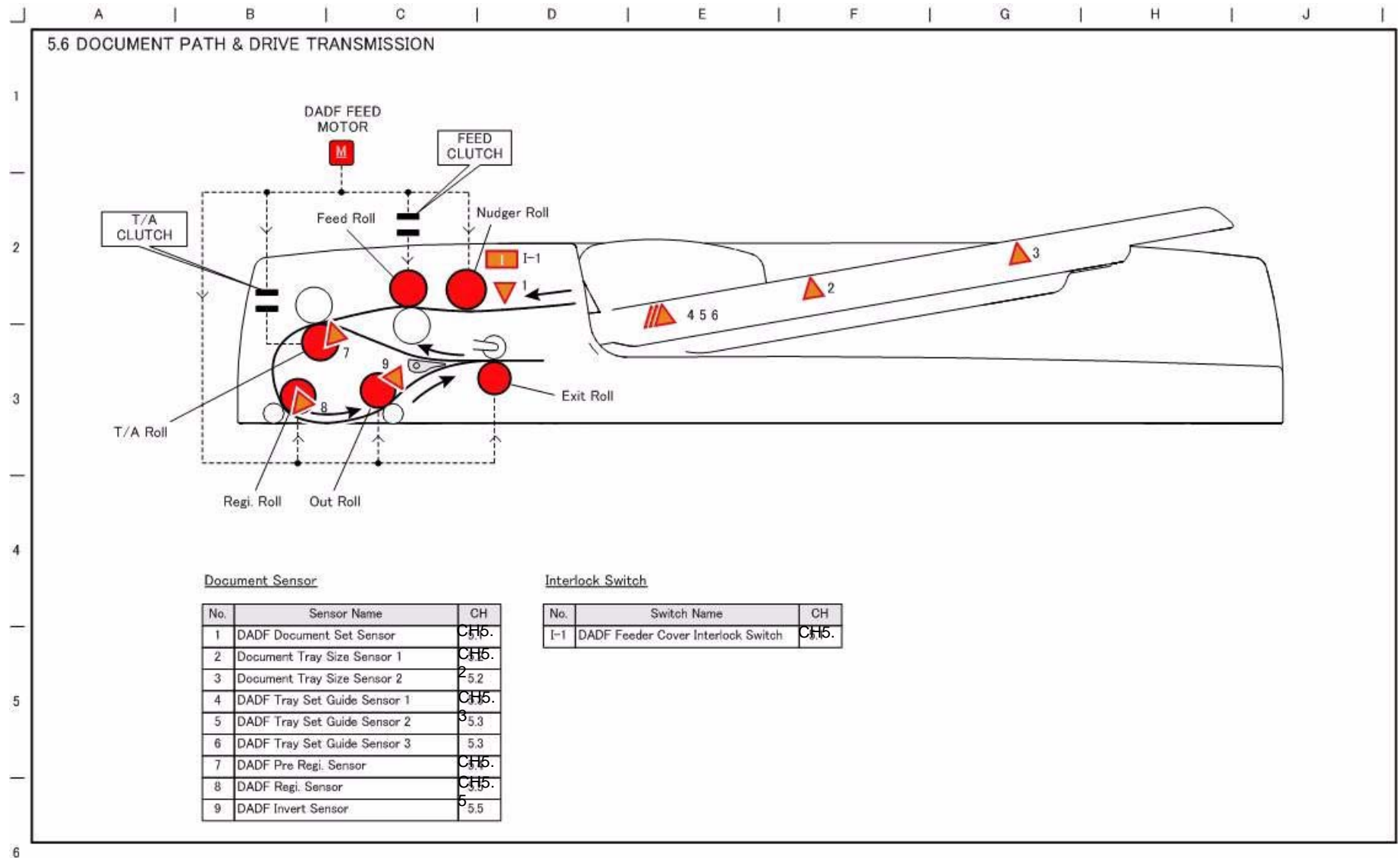
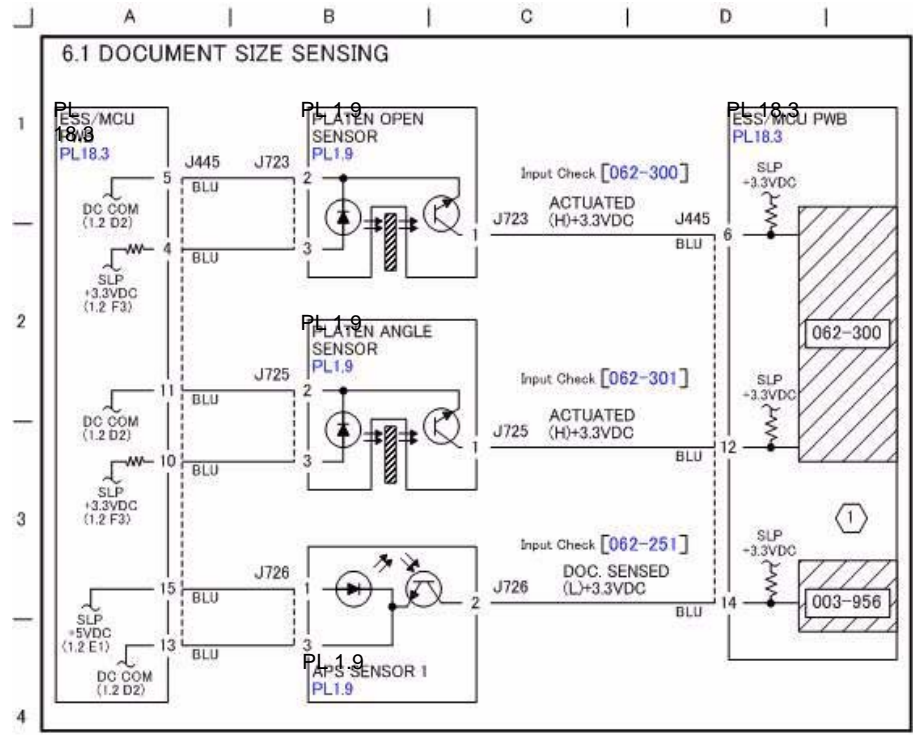


Figure 1 j0mg730506

j0mg730506

CH6.1 Document Size Sensing



ELECTRICAL COMPONENTS

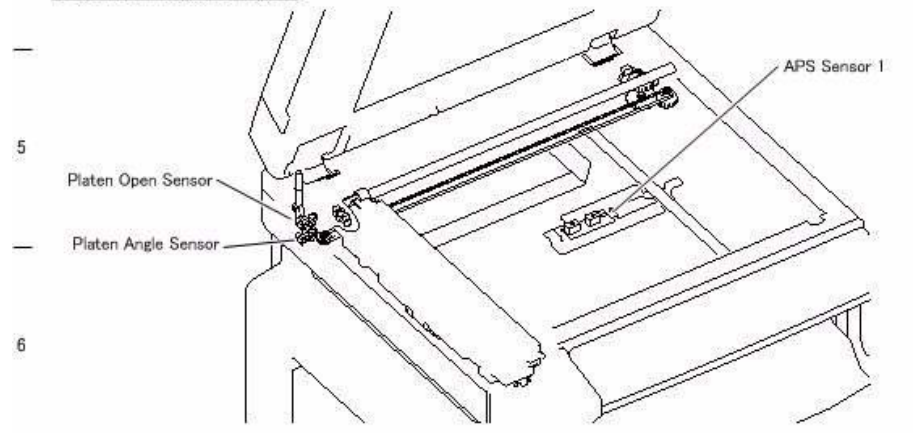


Figure 1 j0mg730601

NOTE:
①

Method of Sensing Paper Size and Timing
Paper size in the fast scan direction is sensed with CCD while that in the slow scan direction with APS Sensor 1.
The timing for sensing paper size is when the Platen Cover gets closed in standby mode or when the Start button is pressed with the Platen Cover open.

FAIL CODE

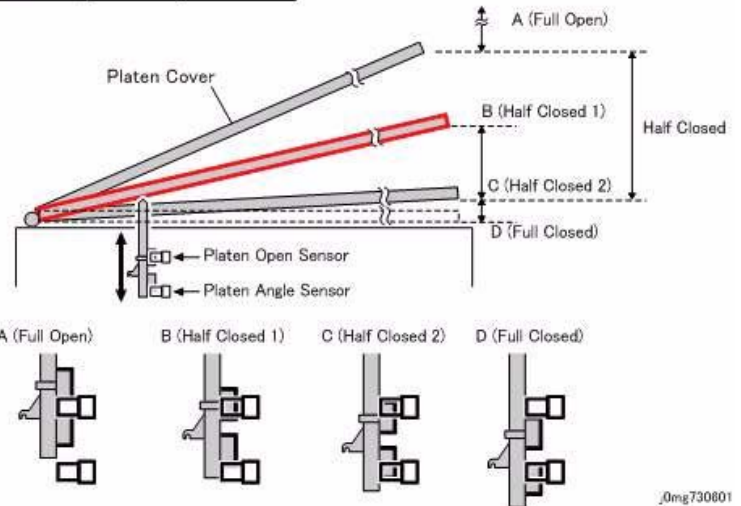
- 062-300 Platen I/L Open
- 003-956 Not-Supported Doc Size Platen

<Detectable Standard Sizes>

Doc. Size	Fast Scan Width (mm)	Doc. Size	Fast Scan Width (mm)
A6SEF	105.0	11x17SEF	279.4
B6SEF	128.0	A3SEF	297.0
A5SEF	148.0	A5LEF	210.0
B5SEF	182.0	B5LEF	257.0
16KSEF	194.0(TFX) 195.0(GCO)	16KLEF	267.0(TFX) 270.0(GCO)
A4SEF	210.0	8.5x11LEF	279.4
B4SEF	257.0	A4LEF	297.0
8KSEF	267.0(TFX) 270.0(GCO)		

The table below shows the relation between the opening/closing of the Platen Cover or DADF and sensor detection.

Condition	Angle Sensor	Platen Open Sensor
A (Full Open)	L	L
B (Half Closed 1)	L	H
C (Half Closed 2)	H	H
D (Full Closed)	H	L



.0mg730601

CH6.2 Document Illumination

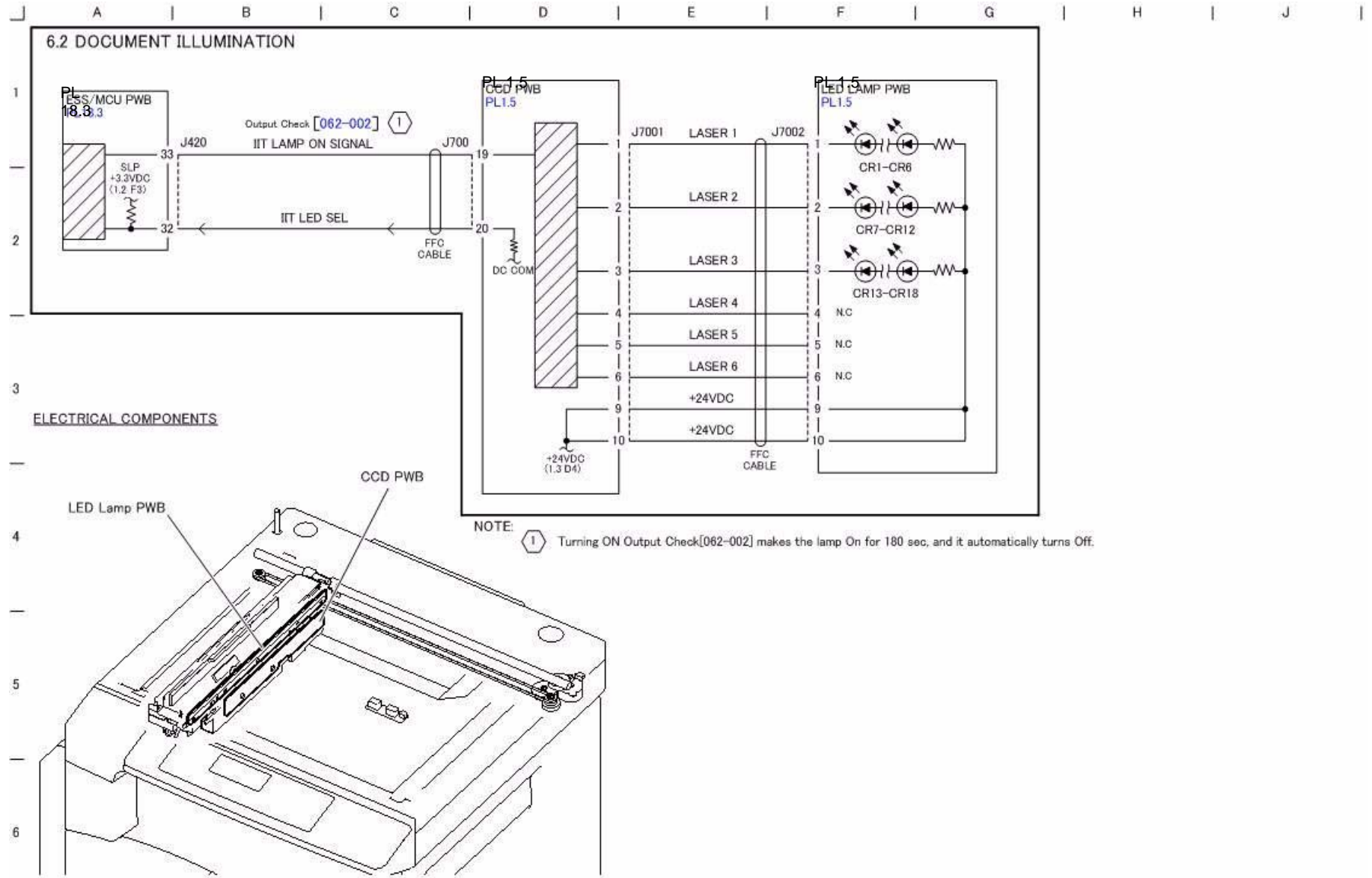
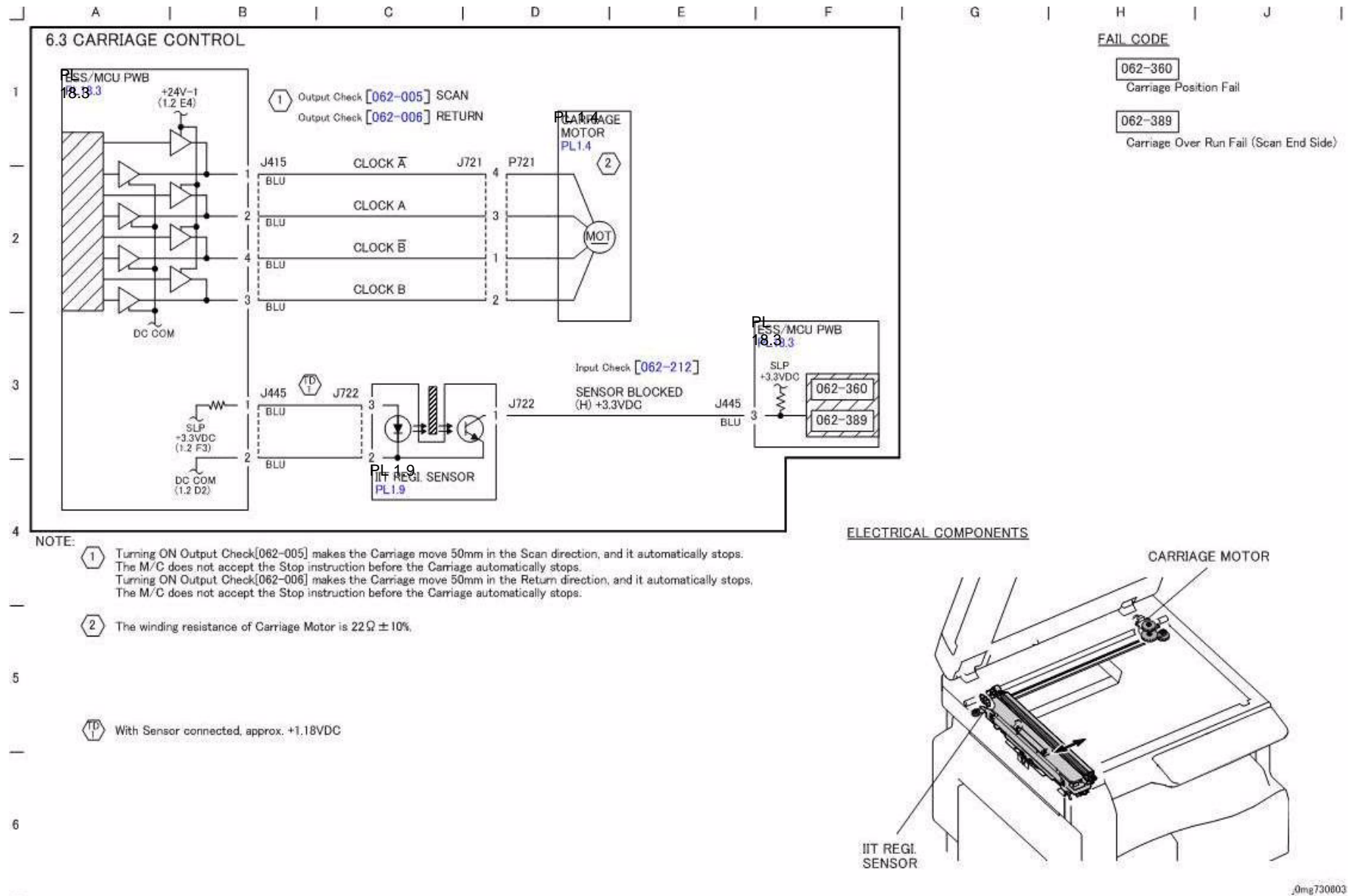


Figure 1 j0mg730602

.0mg730602

CH6.3 Carriage Control



- NOTE:**
- ① Turning ON Output Check[062-005] makes the Carriage move 50mm in the Scan direction, and it automatically stops. The M/C does not accept the Stop instruction before the Carriage automatically stops.
Turning ON Output Check[062-006] makes the Carriage move 50mm in the Return direction, and it automatically stops. The M/C does not accept the Stop instruction before the Carriage automatically stops.
 - ② The winding resistance of Carriage Motor is $22\Omega \pm 10\%$.
 - ③ With Sensor connected, approx. +1.18VDC

Figure 1 j0mg730603

CH6.4 Image Input

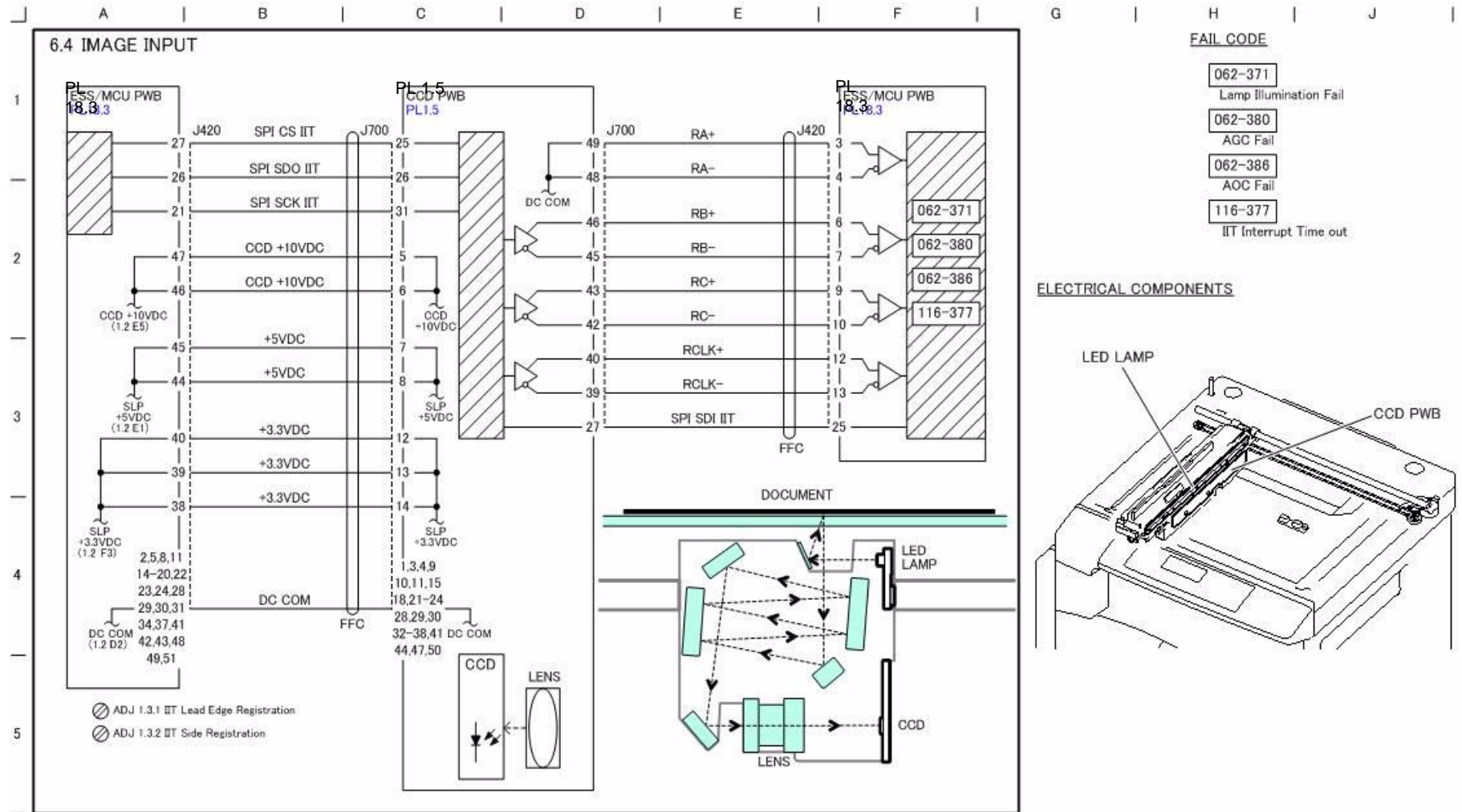


Figure 1 j0mg730604

j0mg730604

CH6.5 Laser Scanning

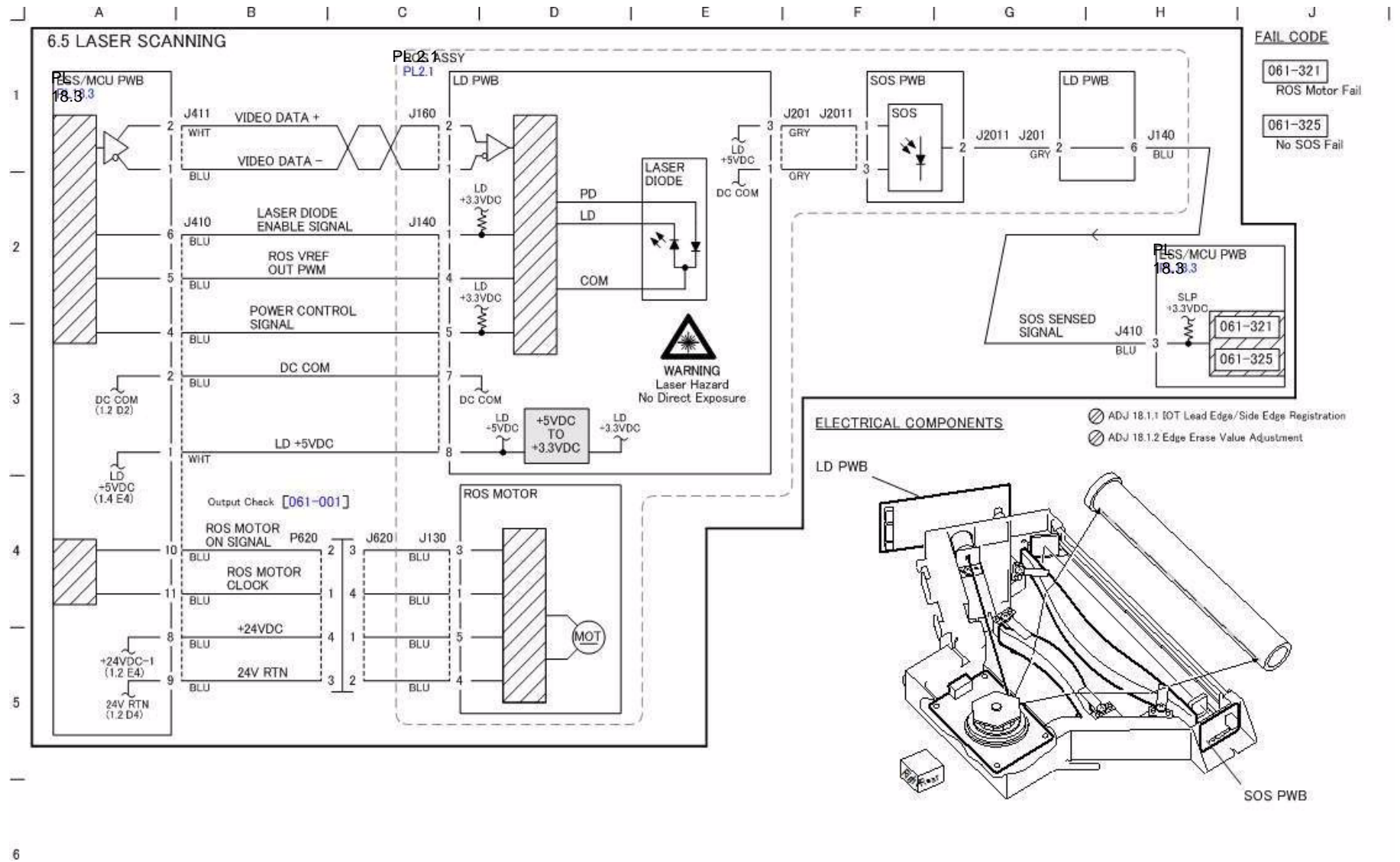
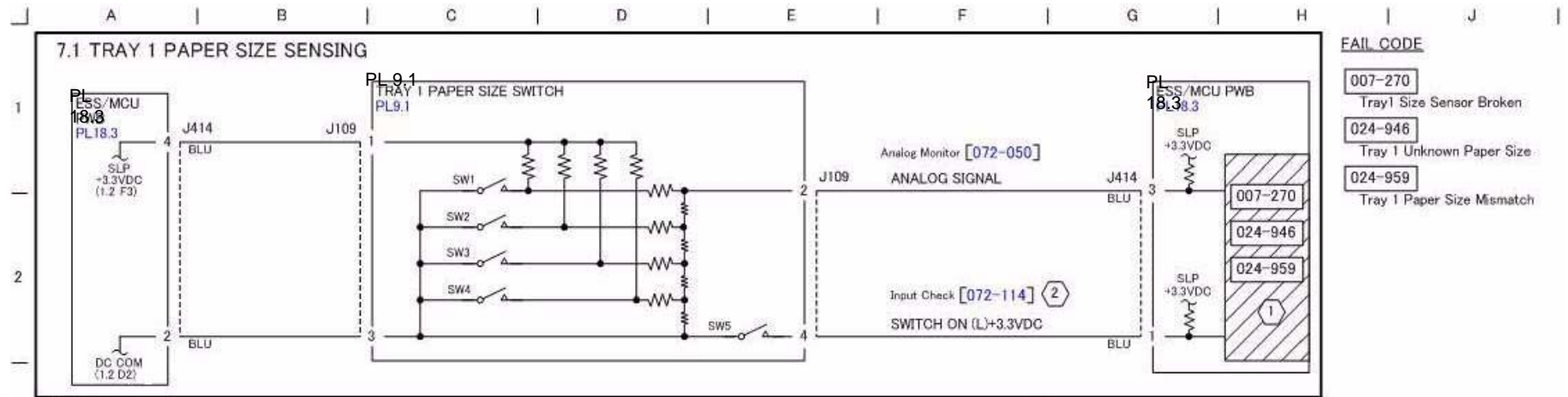


Figure 1 j0mg730605

.0mg730605

CH7.1 Tray 1 Paper Size Sensing



FAIL CODE

- 007-270 Tray 1 Size Sensor Broken
- 024-946 Tray 1 Unknown Paper Size
- 024-959 Tray 1 Paper Size Mismatch

NOTE: ① This device uses the Paper Size Switch only to detect the presence of the Tray 1. Although the detection method is the same as the previous models (Analog Monitor[072-050] and Input Check[072-114]), only whether the Tray 1 is installed or not is detected (the paper size detection feature is not provided).
For reference, the table below shows the ON/OFF status of the switches, voltage, and AD value corresponding to each paper size.

② Actual voltage level is opposite to H/L displayed on UI for this diag code. On BSD the actual volt level is shown.

Paper Size (APO/GCO)	Analog					Digital	Voltage (V) (J414-3)	AD Value Analog Monitor[072-050]		
	SW1	SW2	SW3	SW4	SW5	Min		Typ	Max	
NO TRAY	OFF	OFF	OFF	OFF	OFF	3.08±0.09	924	956	987	
A5S, 5.5" × 8.5" S	OFF	OFF	ON	OFF	OFF	2.67±0.09	798	829	859	
B5 S	OFF	OFF	ON	ON	ON	2.47±0.09	736	767	797	
8.5" × 13" S	OFF	ON	OFF	ON	OFF	2.06±0.09	609	640	671	
8.5" × 14" S	OFF	ON	OFF	ON	ON					
A4 S	OFF	ON	ON	OFF	OFF	1.86±0.09	547	578	608	
8.5" × 11" S, 9" × 11" S	OFF	ON	ON	OFF	ON					
8.5" × 12.4" S	OFF	ON	ON	ON	OFF	1.67±0.09	488	517	546	
8.5" × 10" S	OFF	ON	ON	ON	ON					
A4 L	ON	OFF	ON	OFF	OFF	1.07±0.09	302	333	364	
A3 S	ON	OFF	ON	ON	OFF	0.88±0.09	243	272	301	
B5 L/Executive L	ON	ON	OFF	OFF	ON	0.68±0.09	183	213	242	
8K S (GCO/TFX), 11" × 15" S	ON	ON	OFF	ON	OFF	0.49±0.09	122	152	182	
B4 S	ON	ON	OFF	ON	ON					
8.5" × 11" L	ON	ON	ON	OFF	OFF	0.3±0.09	63	92	121	
16K S (GCO/TFX), 9" × 11" L	ON	ON	ON	ON	OFF					
11" × 17" S	ON	ON	ON	ON	ON	0.1±0.09	0	31	62	

ELECTRICAL COMPONENTS

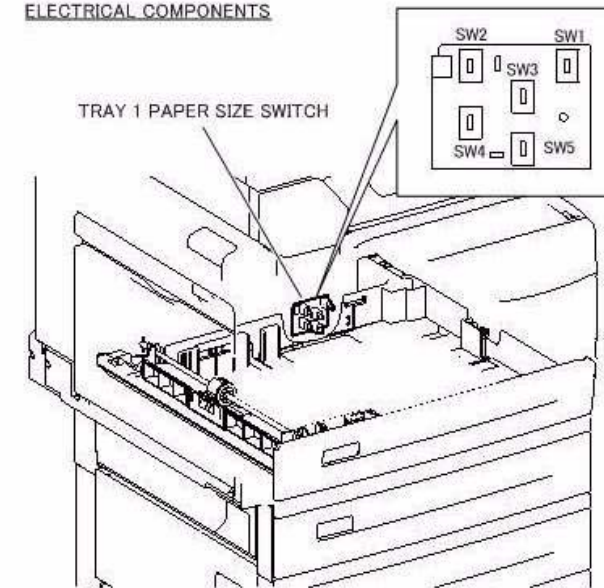
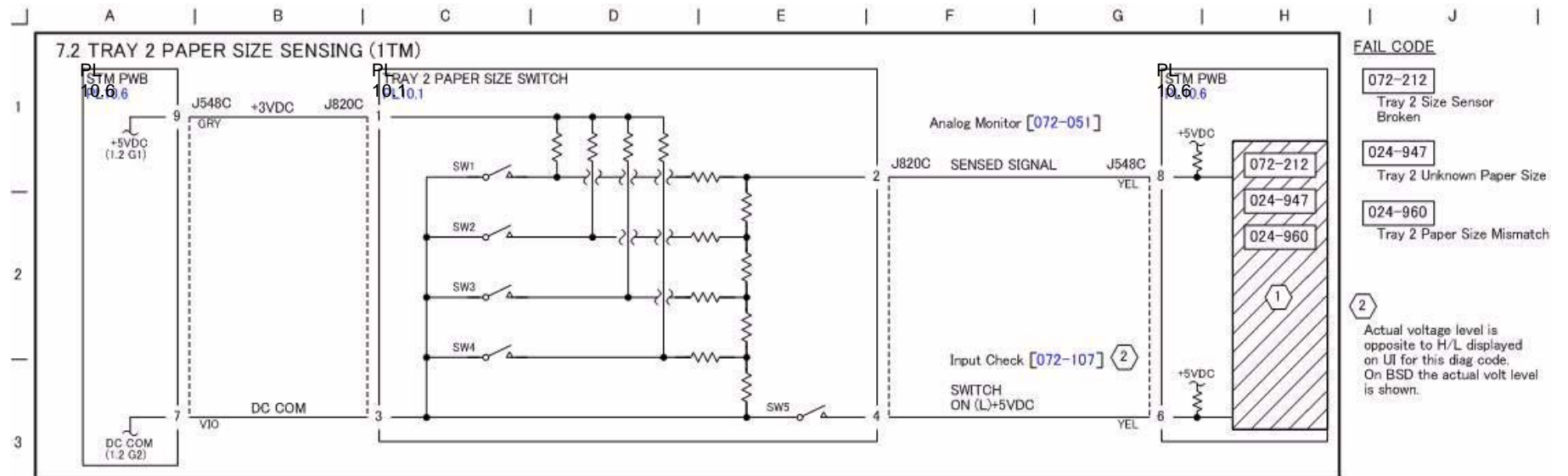


Figure 1 j0mg730701

.0mg730701

CH7.2 Tray 2 Paper Size Sensing (1TM)



NOTE: 1 This device uses the Paper Size Switch only to detect the presence of the Tray 2. Although the detection method is the same as the previous models (Analog Monitor[072-051] and Input Check[072-107]), only whether the Tray 2 is installed or not is detected (the paper size detection feature is not provided). For reference, the table below shows the ON/OFF status of the switches, voltage, and AD value corresponding to each paper size.

Paper Size (APO/GCO)	SW1	SW2	SW3	SW4	SW5	Voltage (V) (J548C-8)	AD Value Analog Monitor[072-050]		
							Min	Typ	Max
NO TRAY	OFF	OFF	OFF	OFF	OFF	4.66±0.05	231	239	247
A5S/5.5" × 8.5" S	OFF	OFF	ON	OFF	OFF	4.01±0.05	199	207	214
B5 S	OFF	OFF	ON	ON	ON	3.69±0.05	184	191	198
8.5" × 13" S	OFF	ON	OFF	ON	OFF	3.07±0.05	153	160	167
8.5" × 14" S	OFF	ON	OFF	ON	ON				
A4 S	OFF	ON	ON	OFF	OFF	2.75±0.05	137	145	152
8.5" × 11" S	OFF	ON	ON	OFF	ON				
A4 L	ON	OFF	ON	OFF	OFF	1.52±0.05	77	84	91
A3 S	ON	OFF	ON	ON	OFF	1.21±0.05	61	69	76
B5 L/7.25" × 10.5" L	ON	ON	OFF	OFF	ON	0.91±0.05	46	54	60
8KS (GCO,TFX)	ON	ON	OFF	ON	OFF	0.60±0.05	31	39	45
B4 S	ON	ON	OFF	ON	ON				
8.5" × 11" L	ON	ON	ON	OFF	OFF	0.30±0.05	16	24	30
16KL/7.25" × 10.5" L	ON	ON	ON	OFF	ON				
11" × 17" S	ON	ON	ON	ON	ON	0.00±0.05	0	9	15

ELECTRICAL COMPONENTS

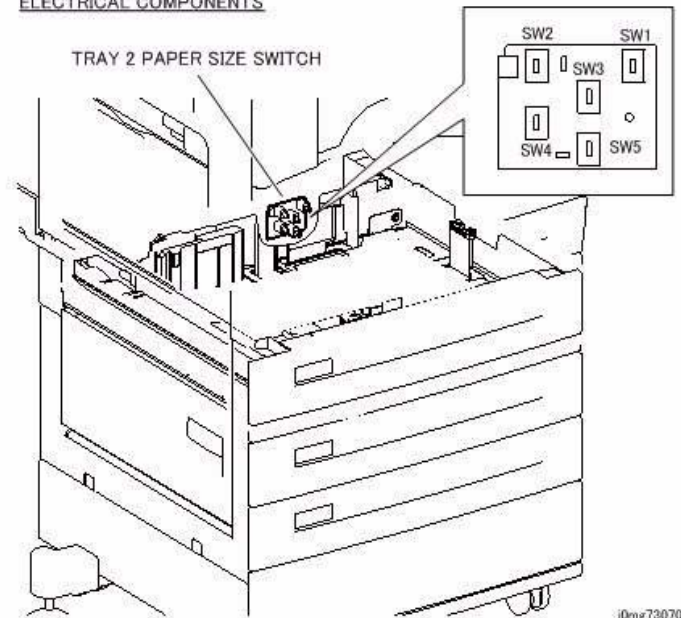


Figure 1 j0mg730702

CH7.3 Tray 3 Paper Size Sensing (2TM)

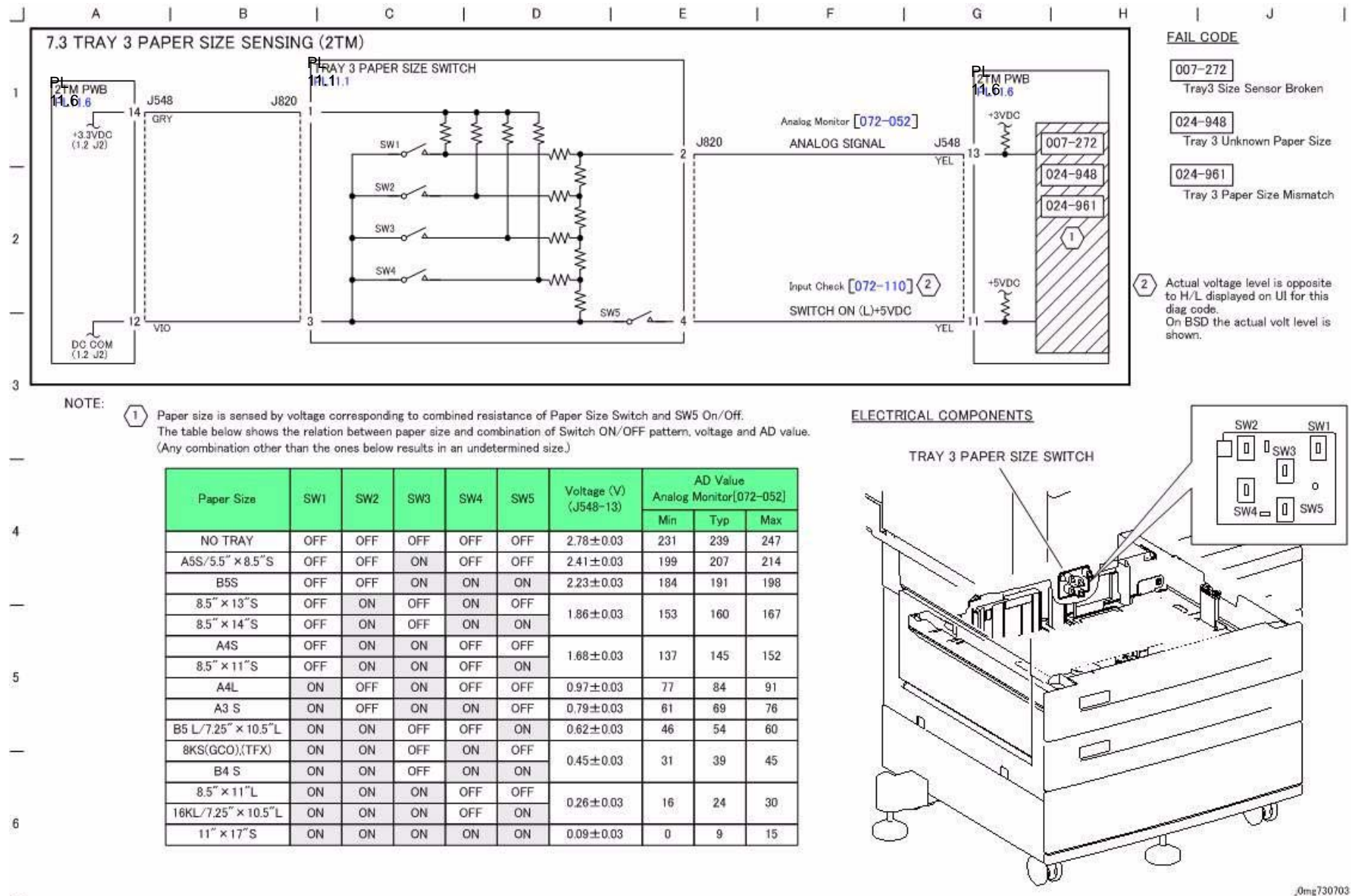
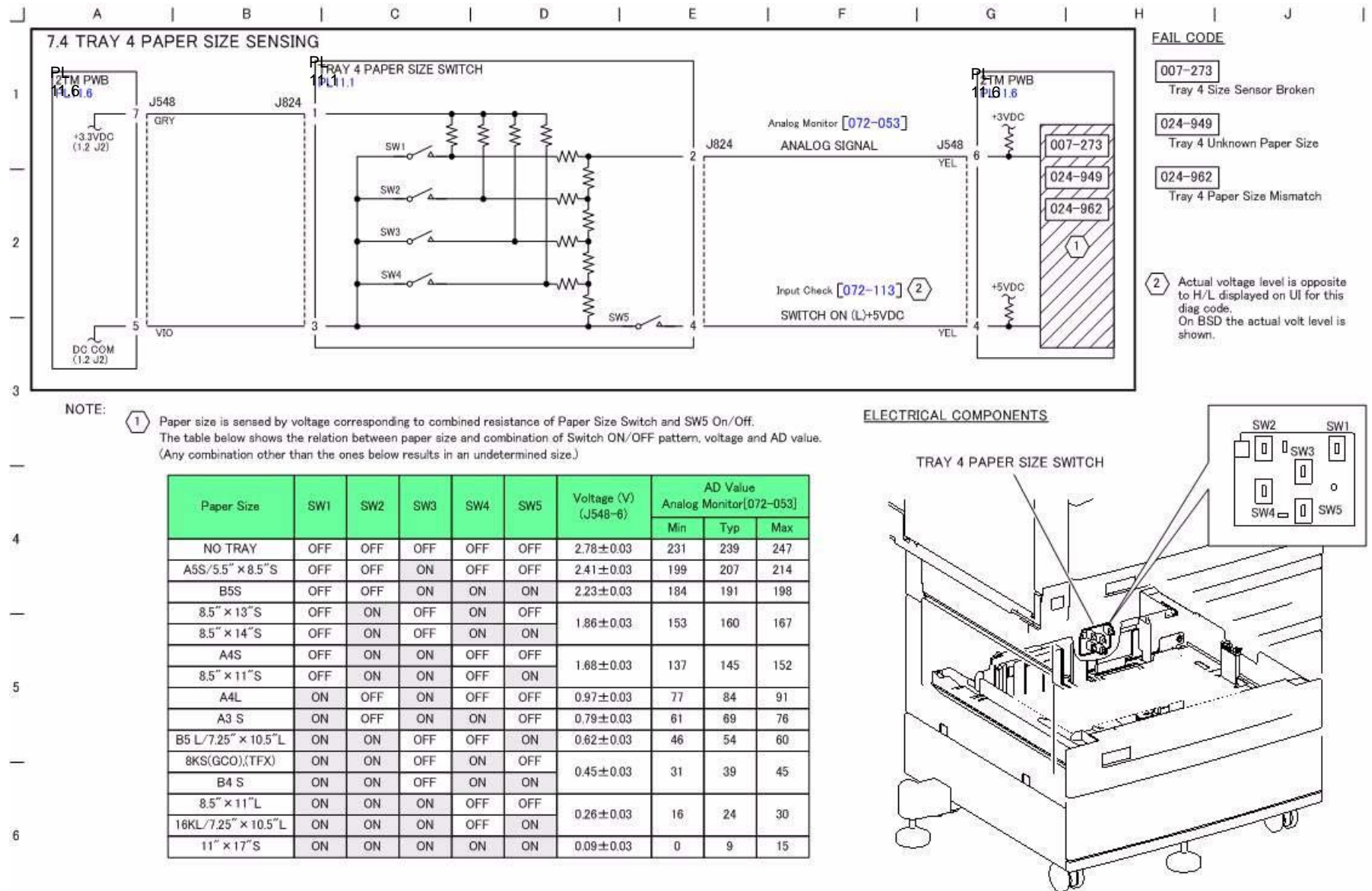
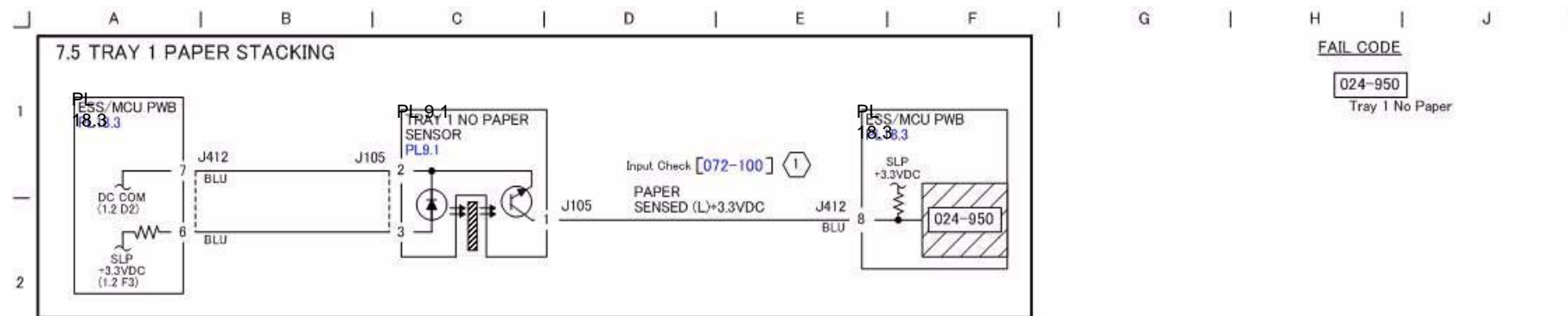


Figure 1 j0mg730703

CH7.4 Tray 4 Paper Size Sensing



CH7.5 Tray 1 Paper Stacking



FAIL CODE

024-950

Tray 1 No Paper

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

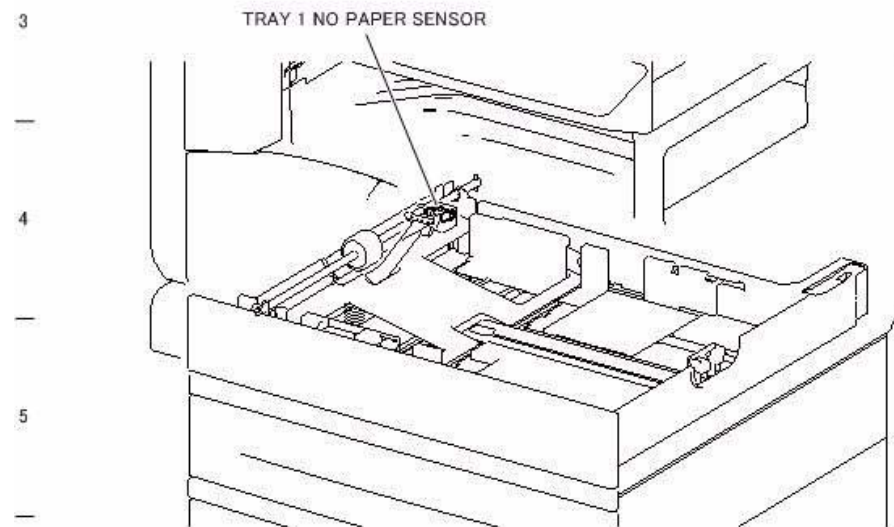


Figure 1 j0mg730705

.0mg730705

CH7.6 Tray 2 Paper Stacking

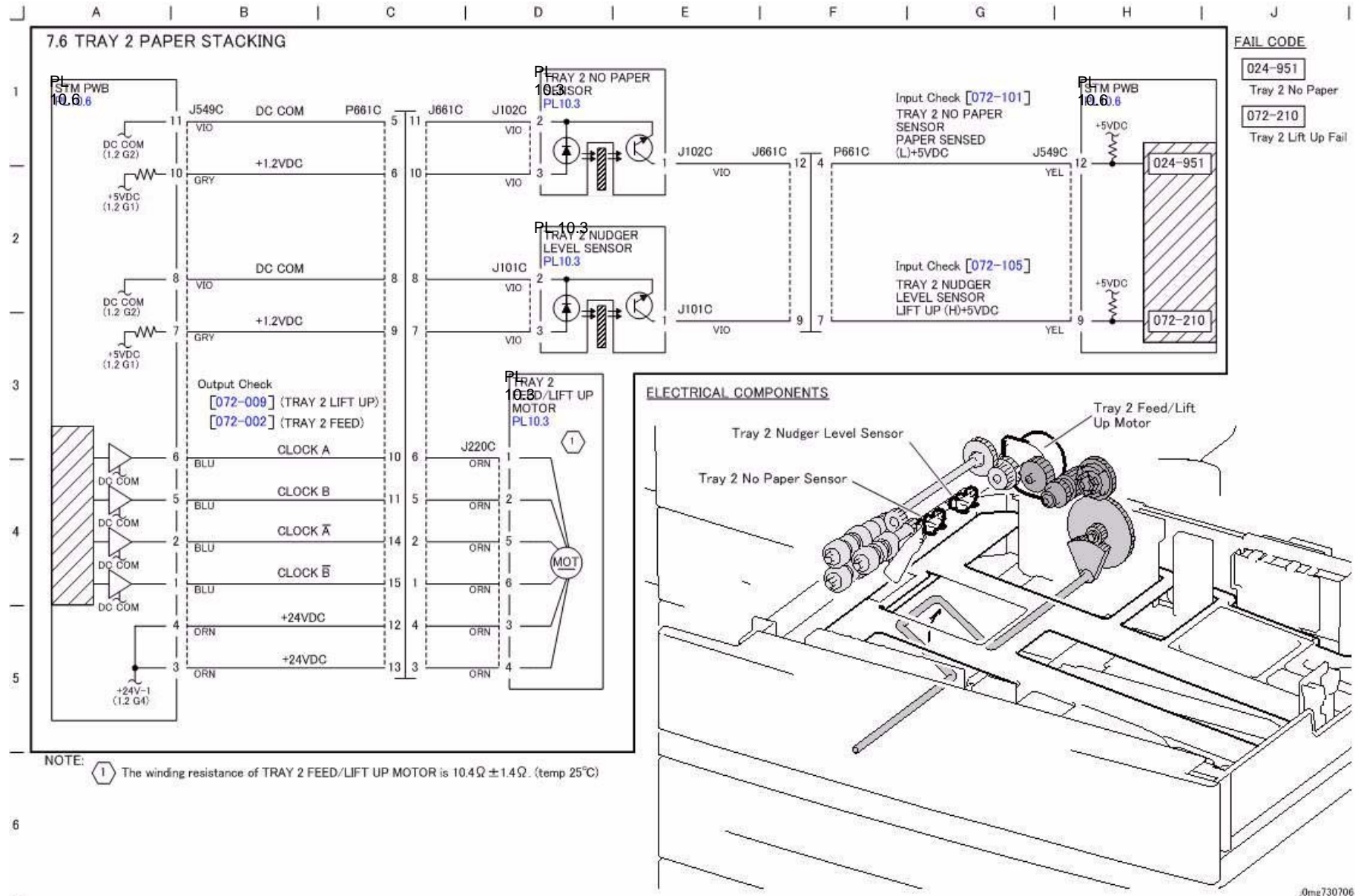


Figure 1 j0mg730706

CH7.7 Tray 3 Paper Stacking

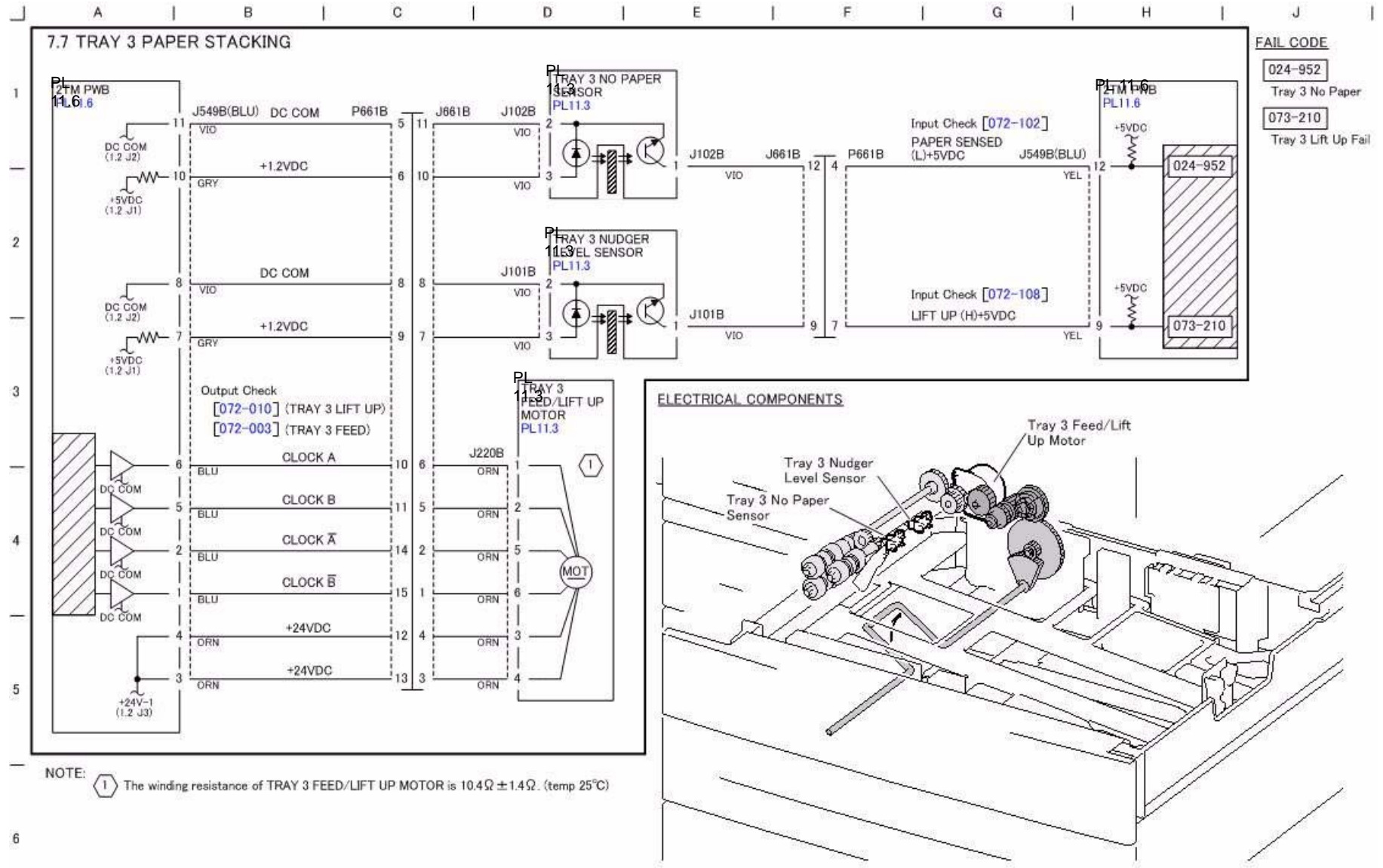


Figure 1 j0mg730707

.0mg730707

CH7.8 Tray 4 Paper Stacking

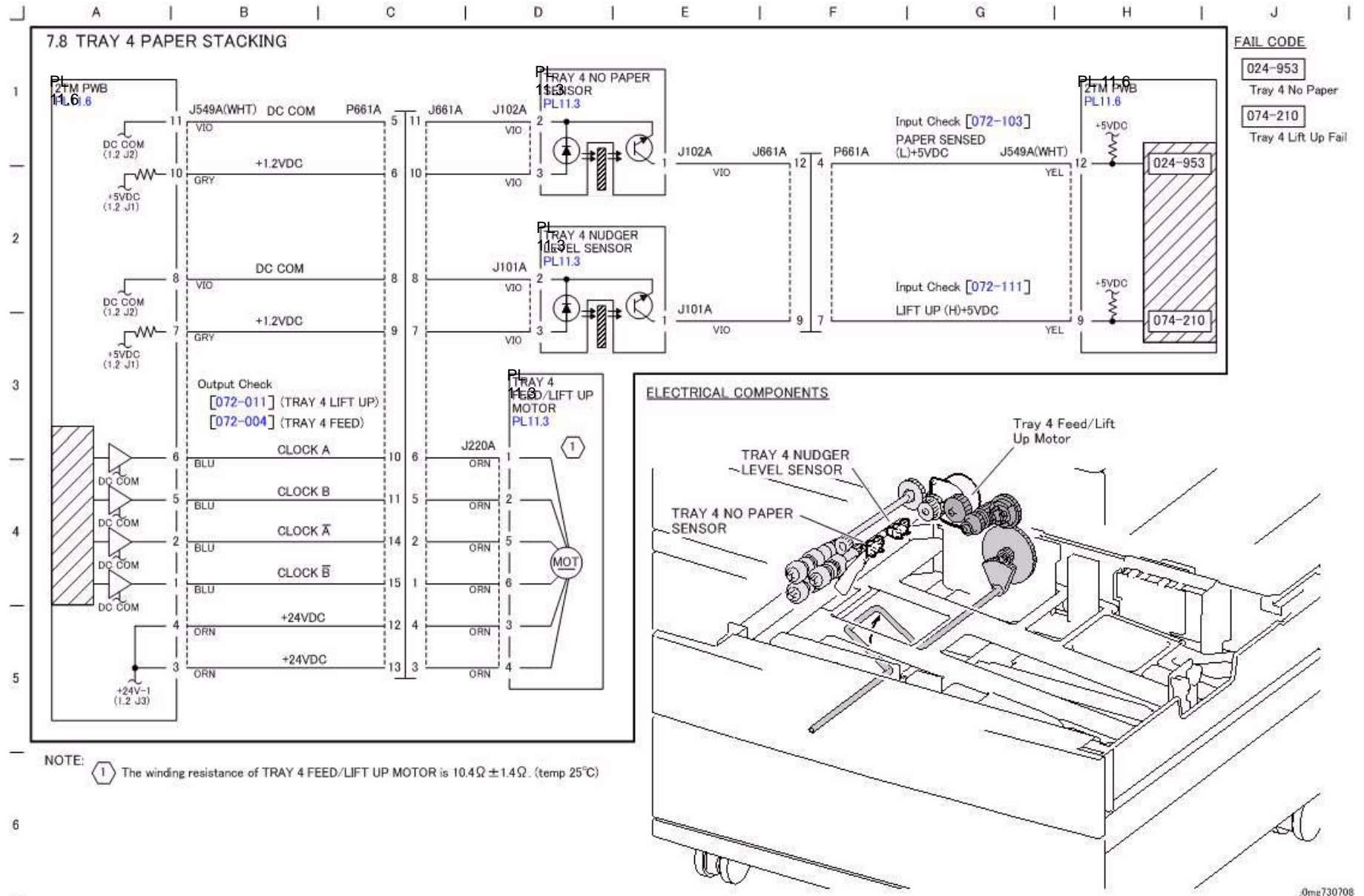
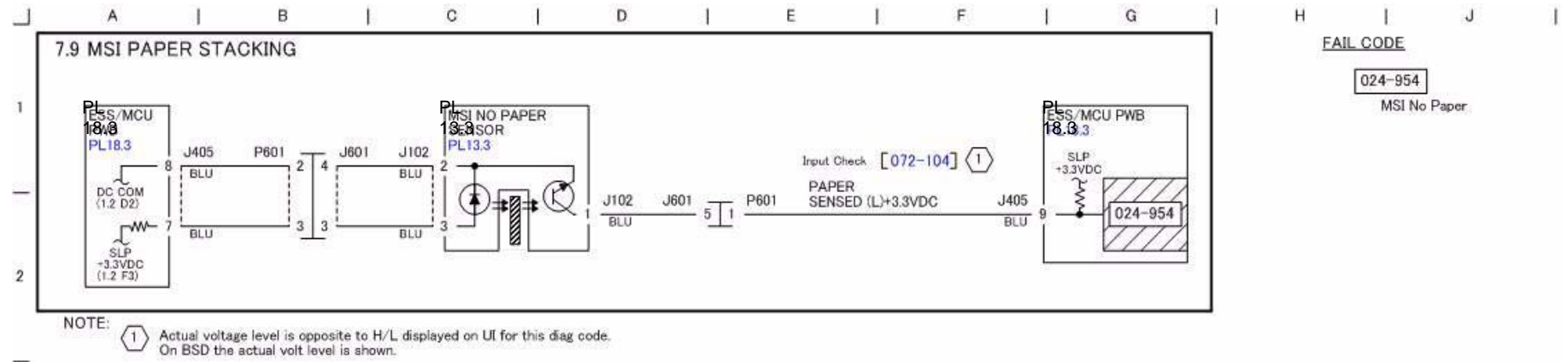


Figure 1 j0mg730708

CH7.9 MSI Paper Stacking



ELECTRICAL COMPONENTS

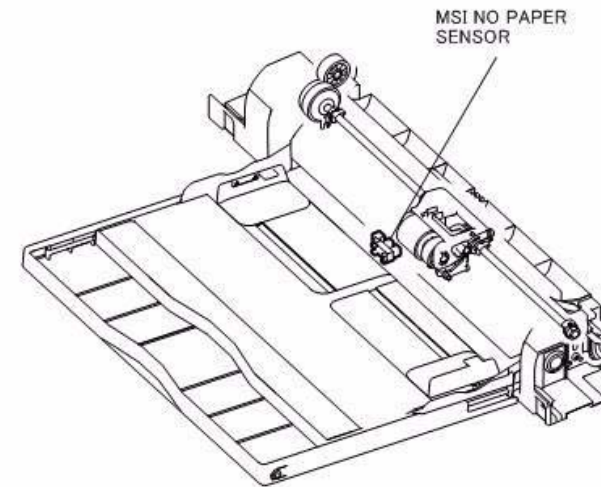


Figure 1 j0mg730709

.0mg730709

CH8.1 Tray 1 & MSI Paper Feeding

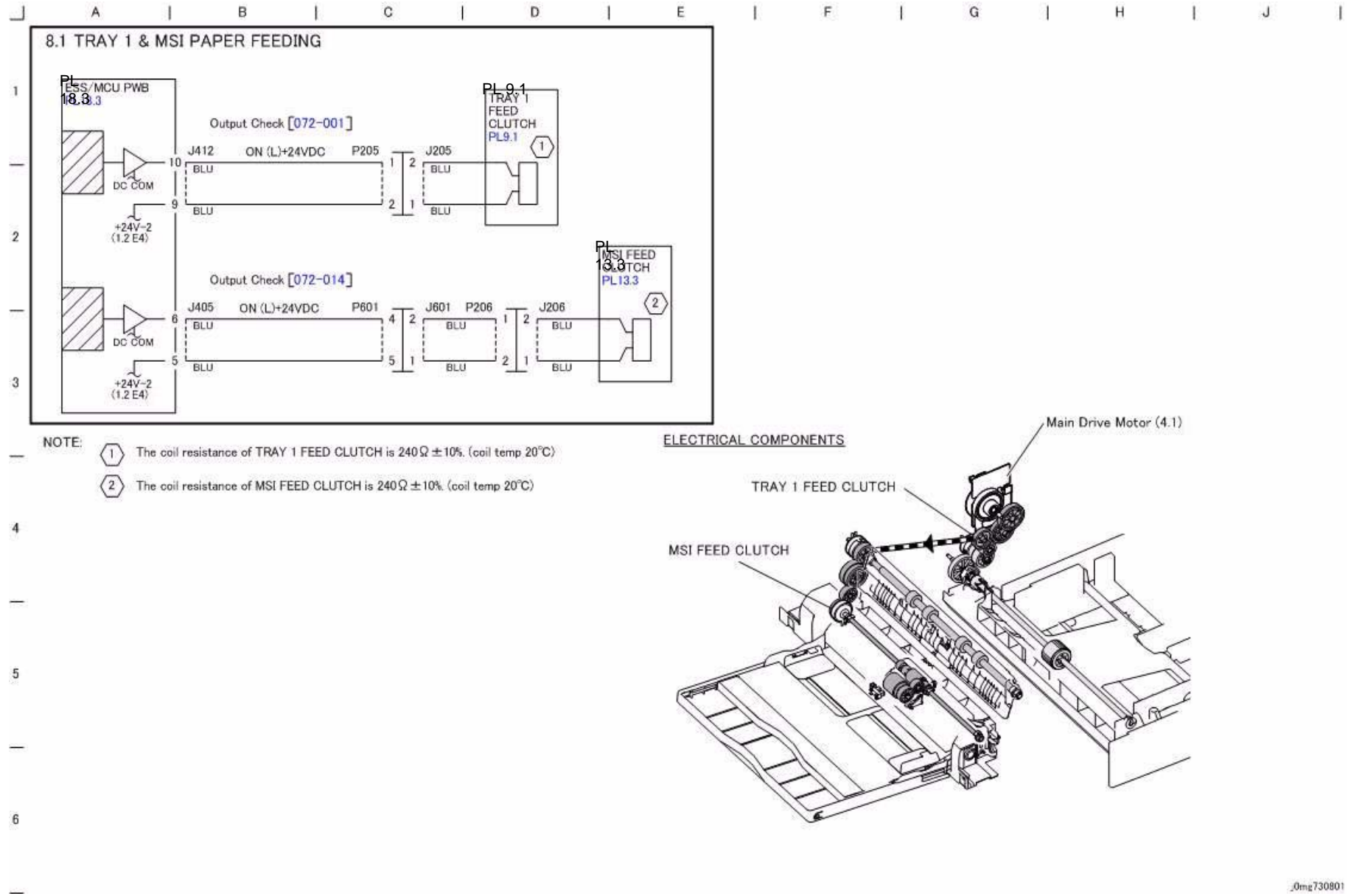


Figure 1 j0mg730801

.0mg730801

CH8.2 Tray 2 Paper Feeding & STM Paper Transportation

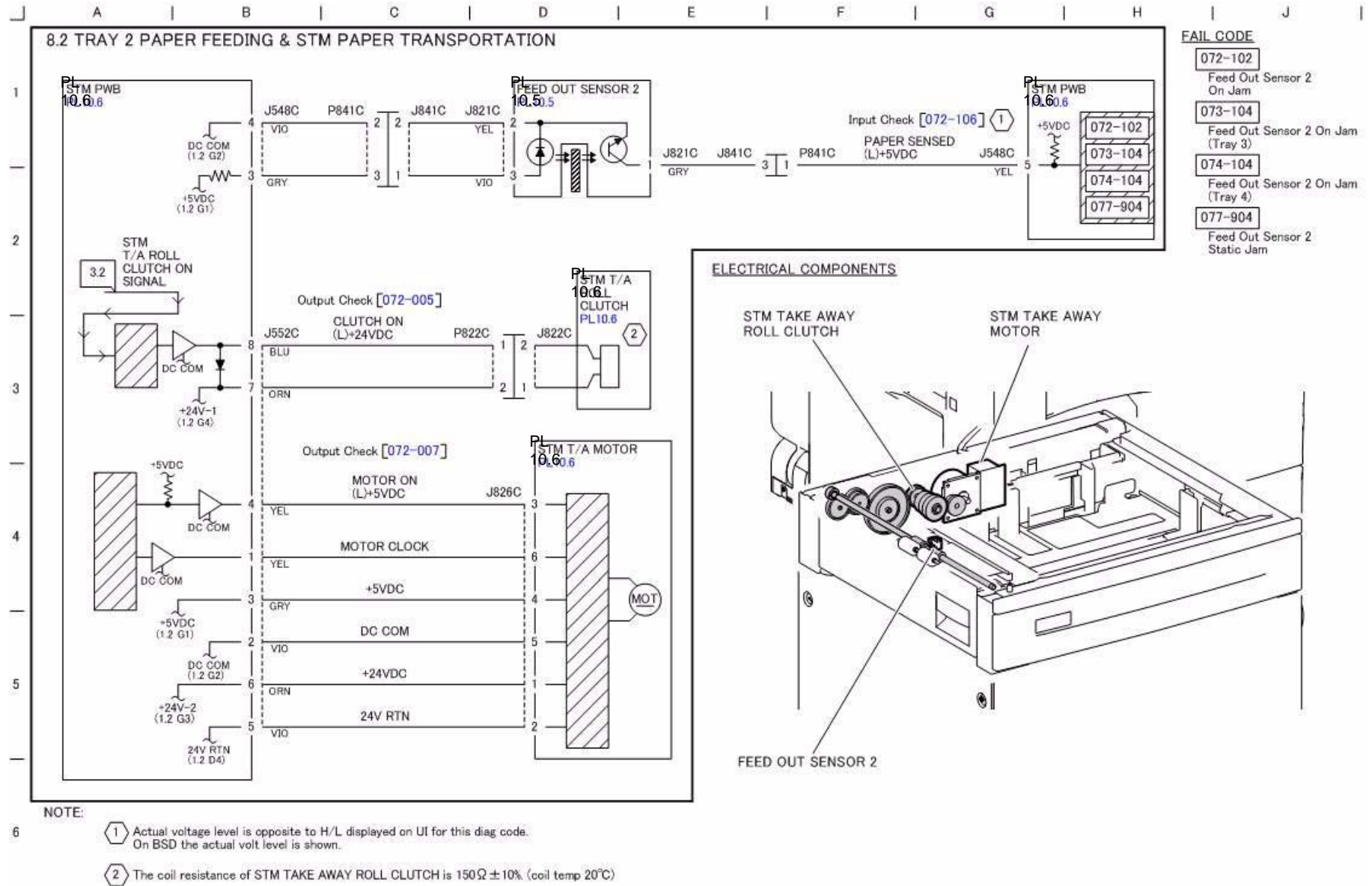


Figure 1 j0mg730802

CH8.3 Tray 3/4 Paper Feeding & 2TM Paper Transportation

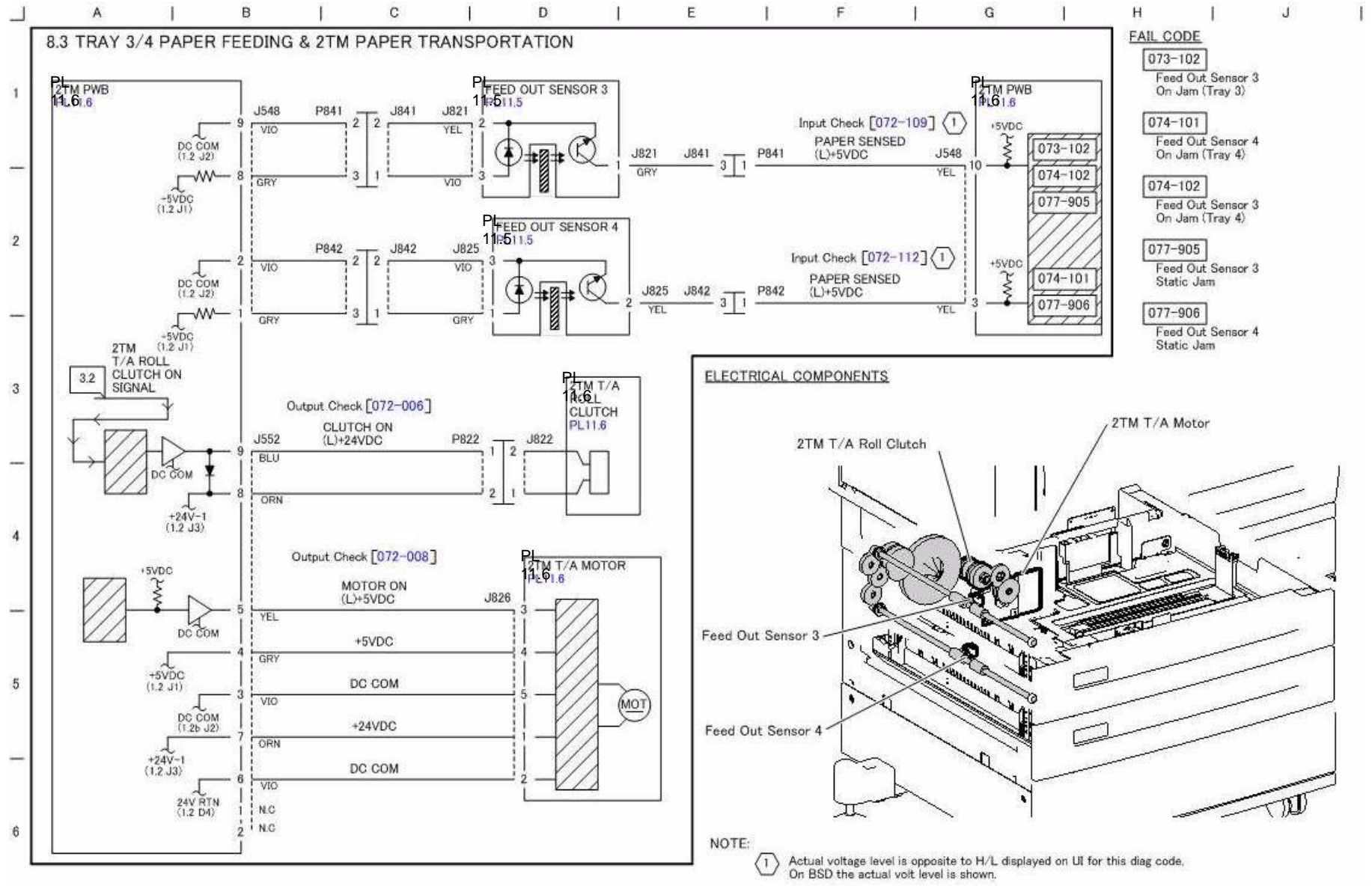


Figure 1 j0mg730803

CH8.4 Registration

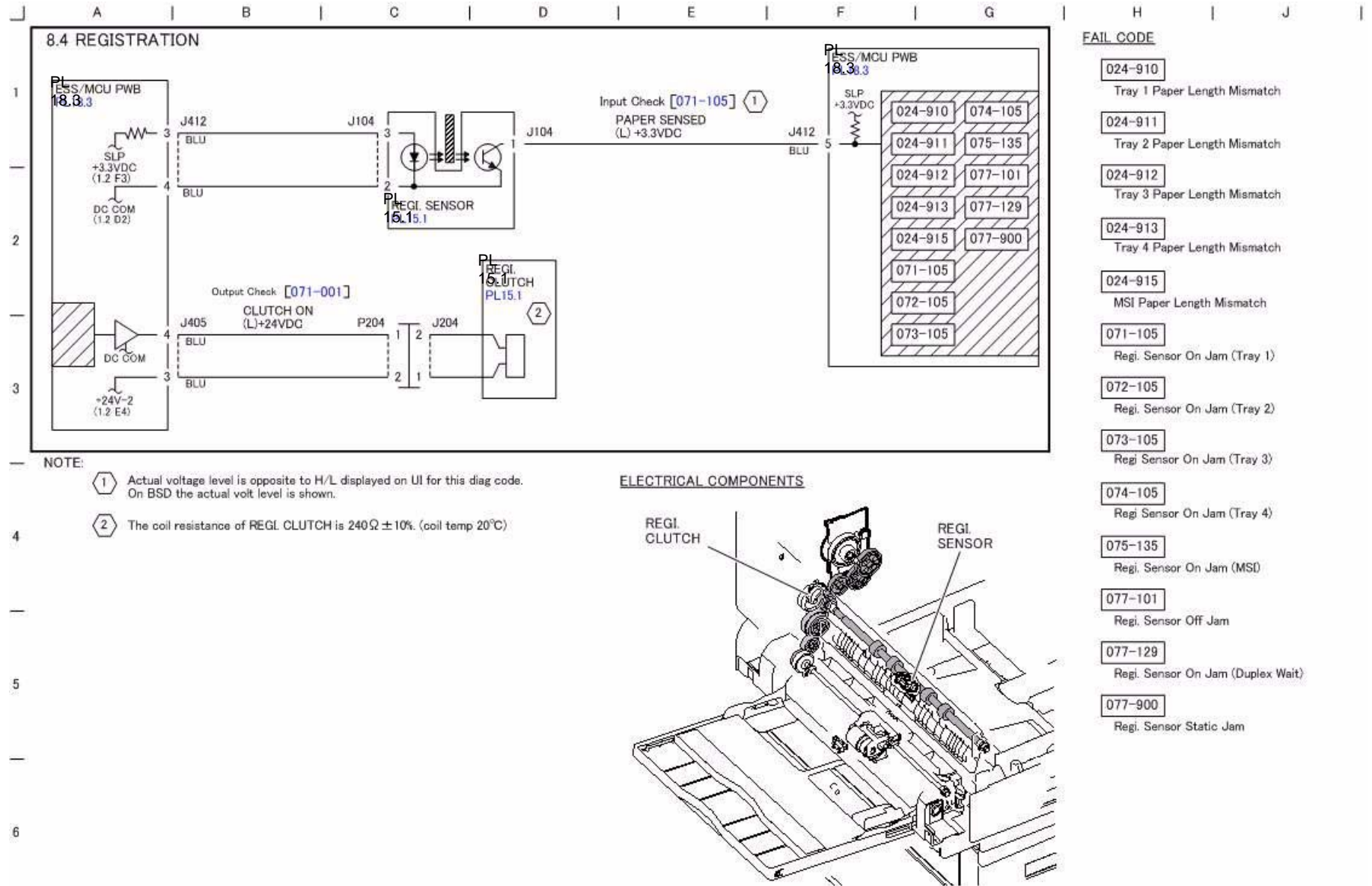


Figure 1 j0mg730804

.0mg730804

CH8.5 Paper Path & Drive Transmission

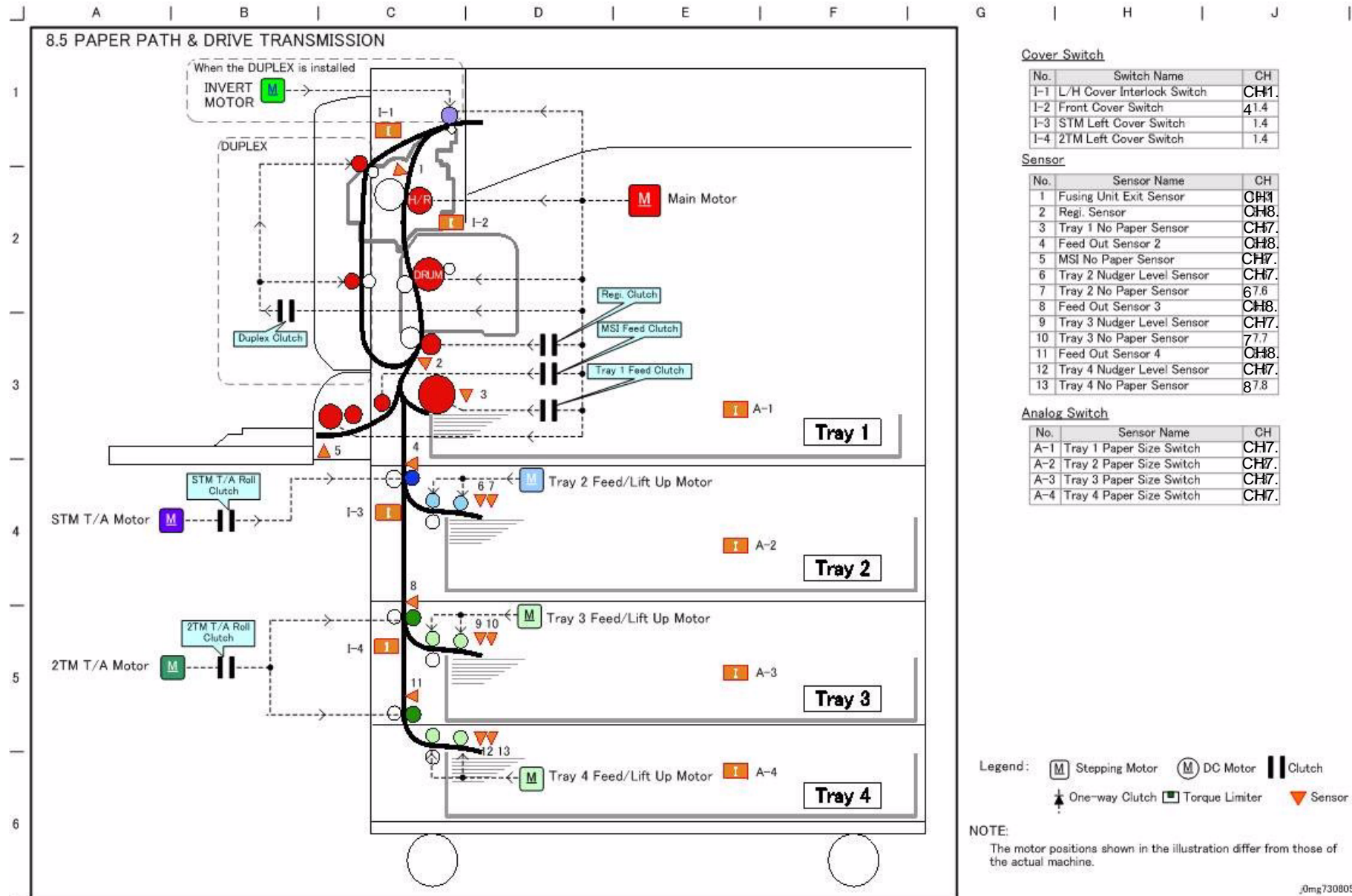


Figure 1 j0mg730805

CH9.1 Charging, Exposure & Development

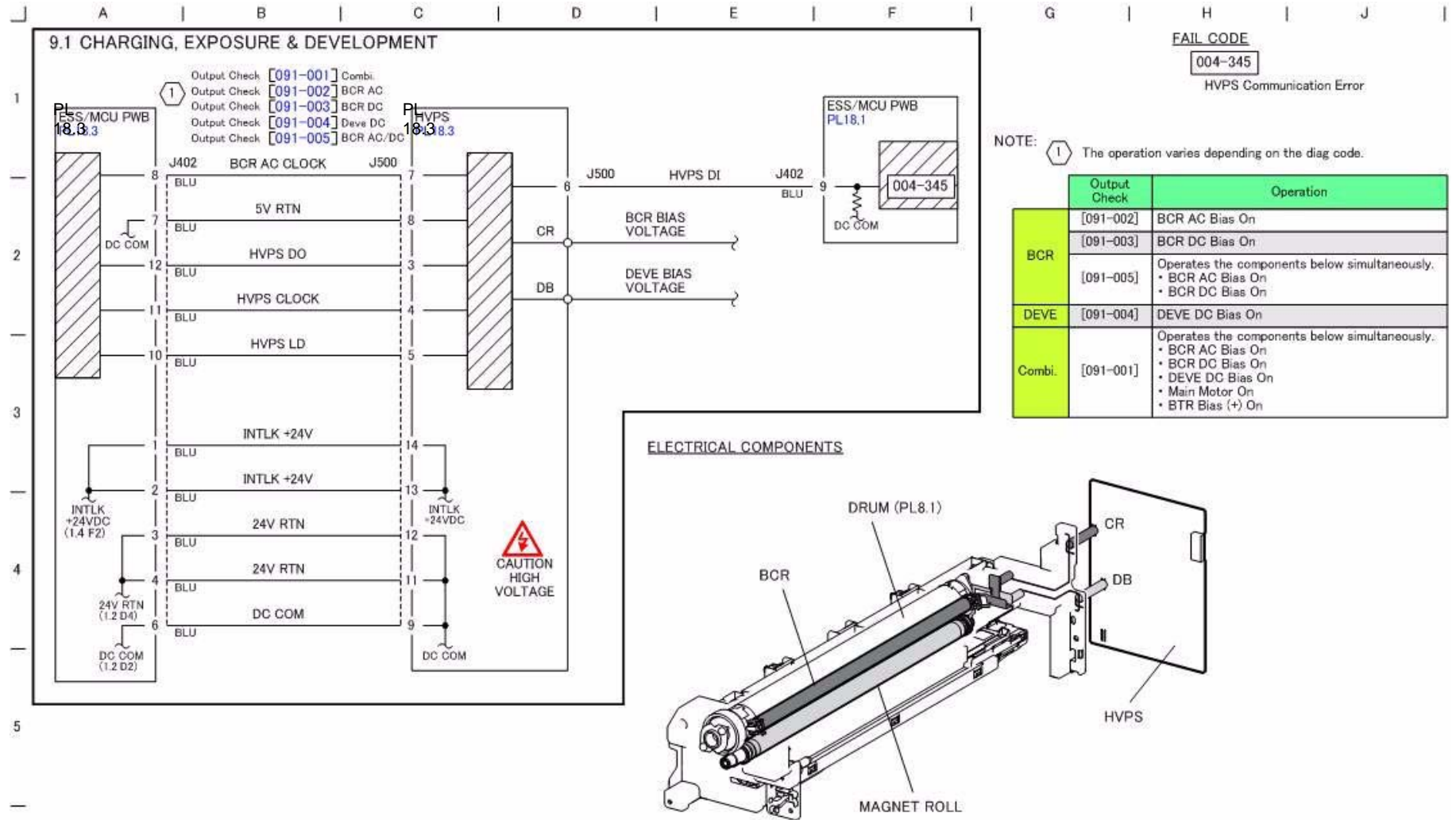


Figure 1 j0mg730901

.0mg730901

CH9.2 Toner Dispense & Toner Life Control

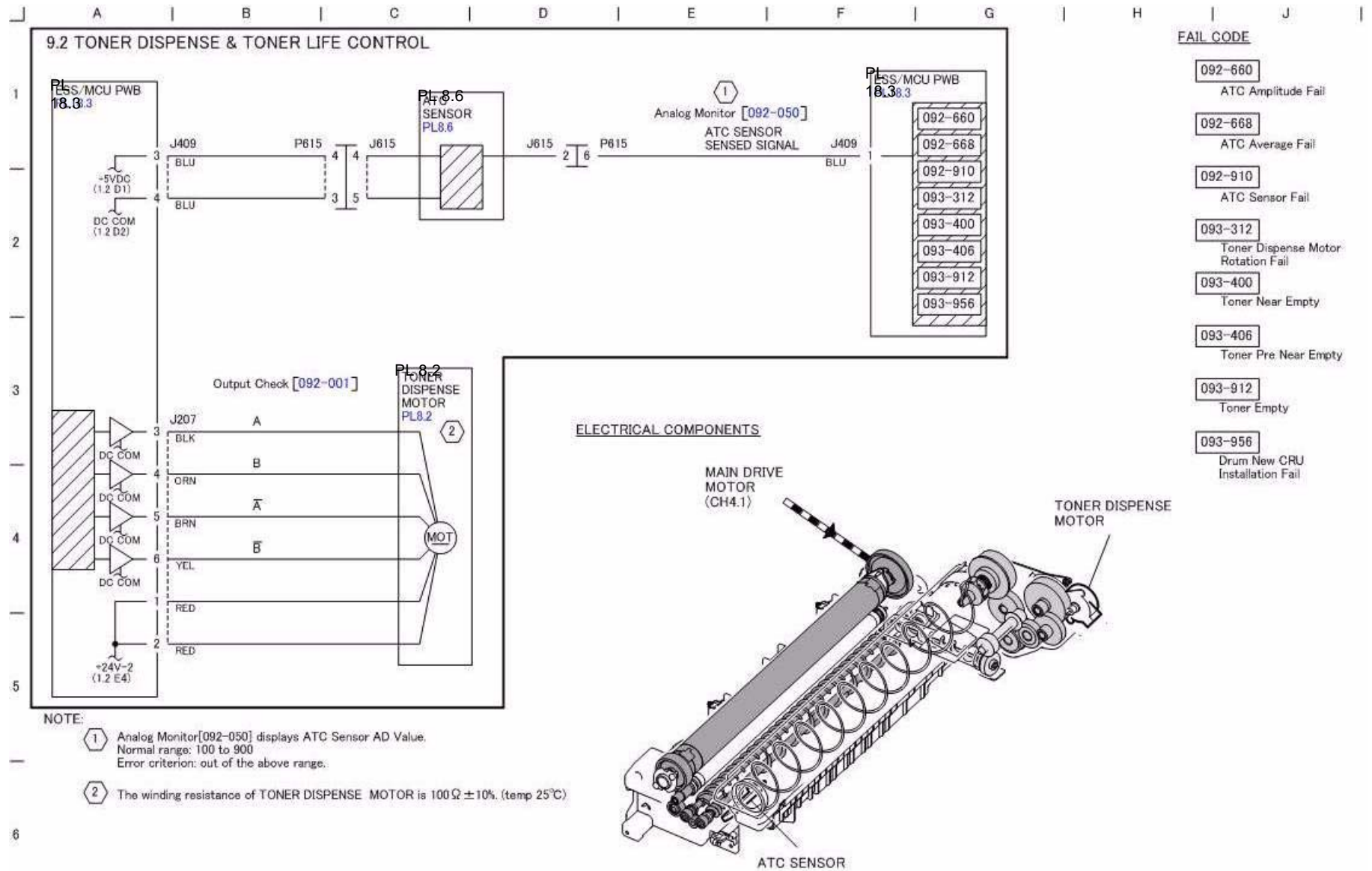


Figure 1 j0mg730902

.0mg730902

CH10.1 Fusing Heat (1/2)

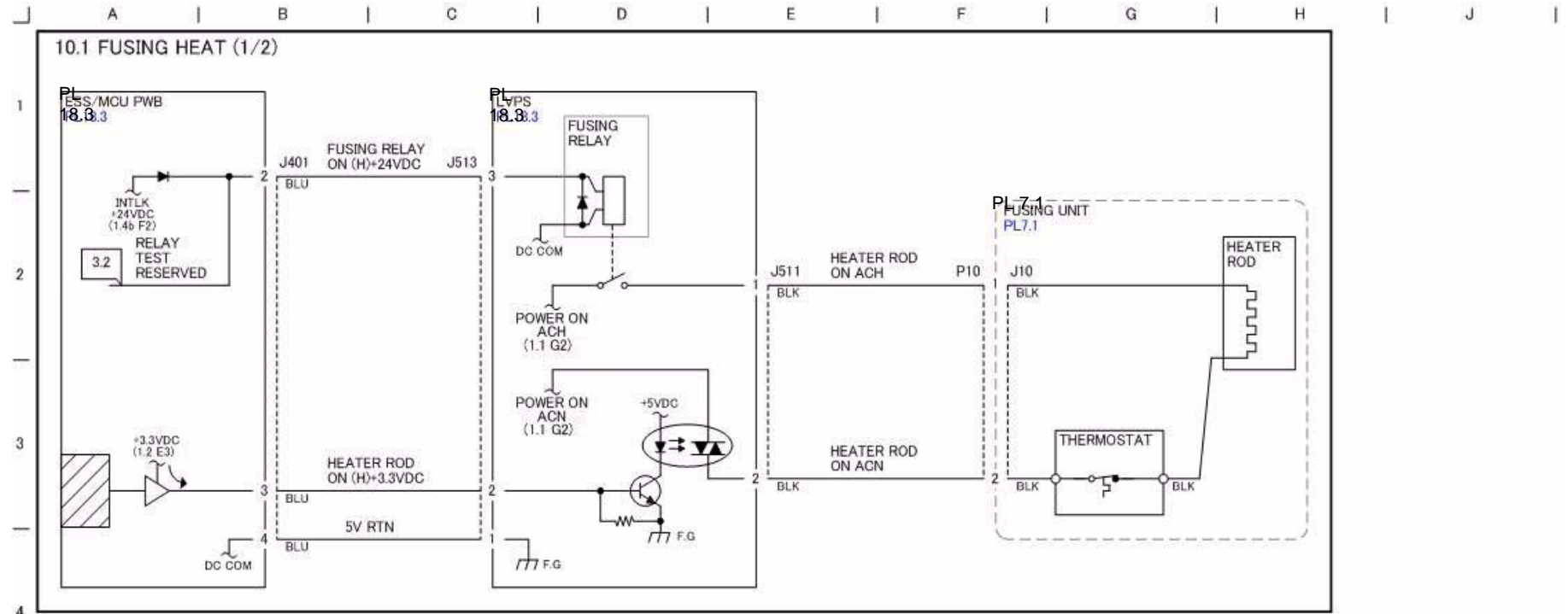


Figure 1 j0mg731001

.0mg731001

CH10.2 Fusing Heat (2/2)

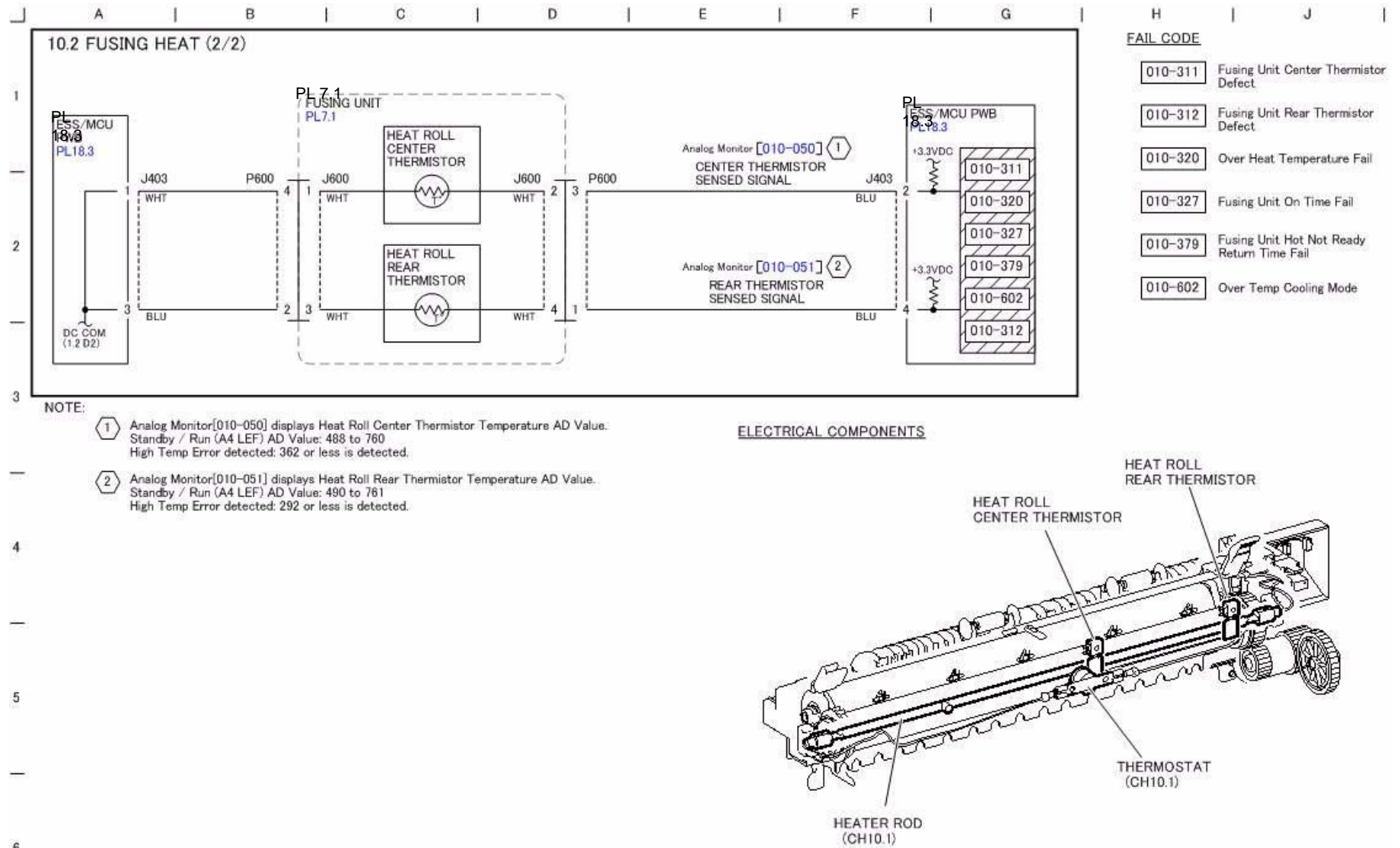
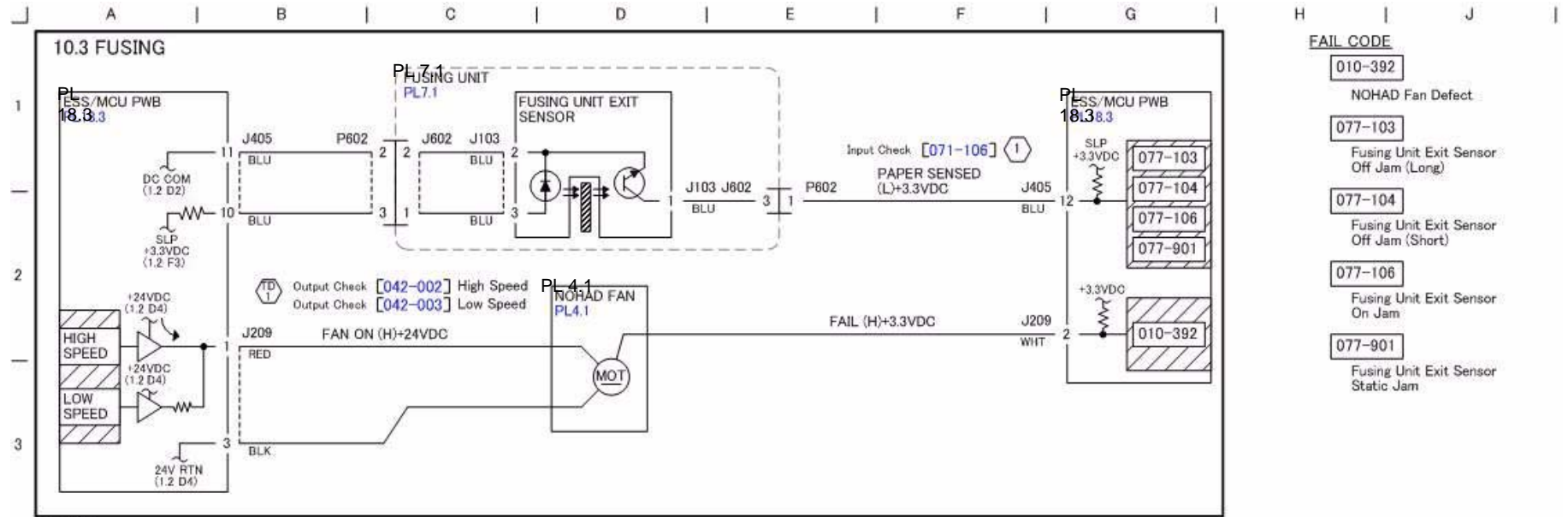


Figure 1 j0mg731002

j0mg731002

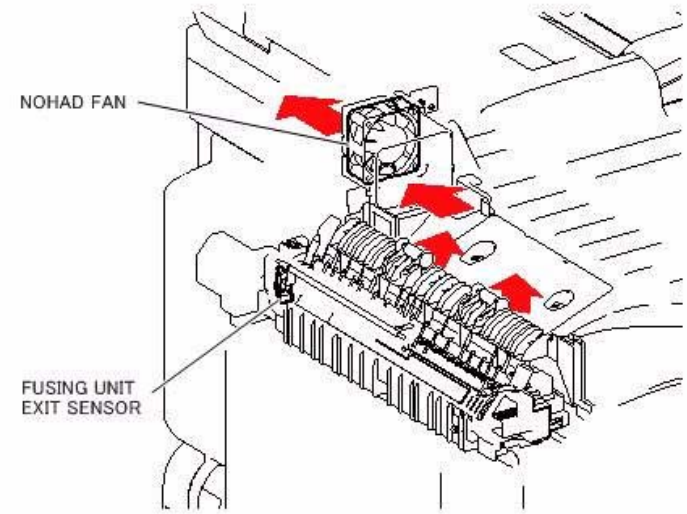
CH10.3 Fusing



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 Test Point
ESS/MCU PWB J209-1 (+) to GND
Output Check [042-002] ON High Speed Rotation: approx. +24.4VDC
Output Check [042-003] ON Low Speed Rotation: approx. +9.4VDC

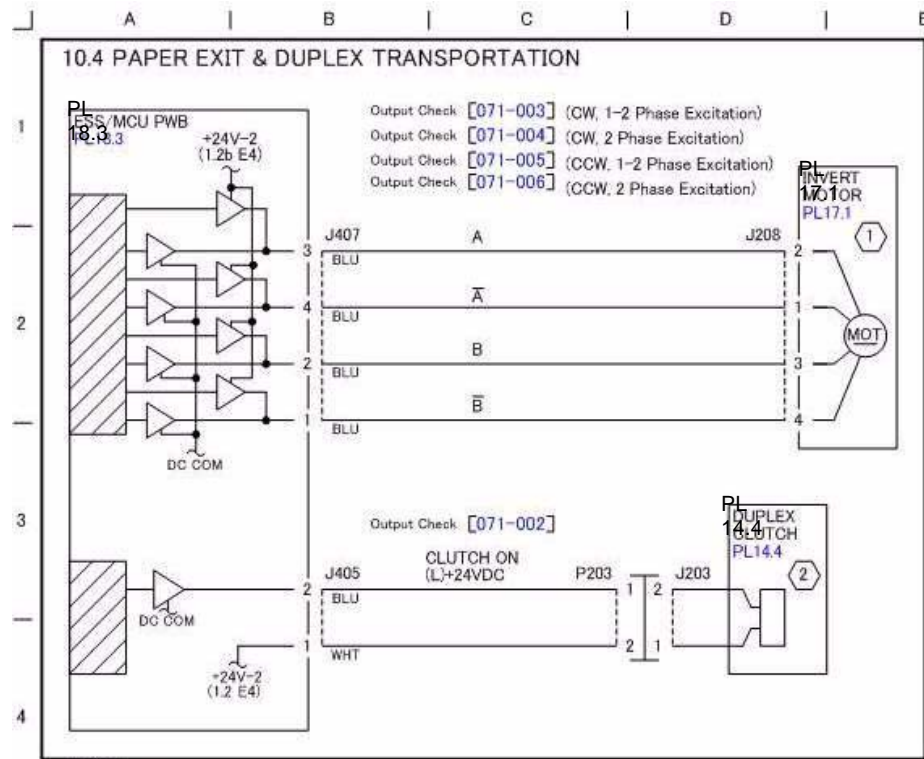
ELECTRICAL COMPONENTS



.0mg731003

Figure 1 j0mg731003

CH10.4 Paper Exit & Duplex Transportation

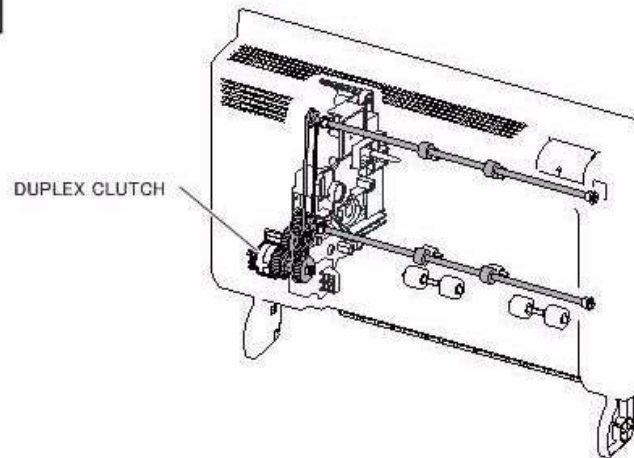
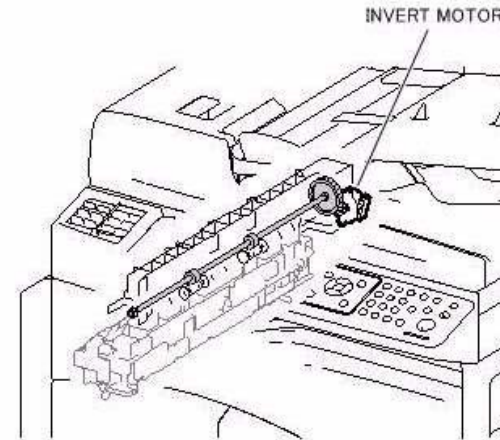


NOTE:

① The winding resistance of INVERT MOTOR is $20 \Omega \pm 10\%$.

② The coil resistance of DUPLEX CLUTCH is $240 \Omega \pm 10\%$ (coil temp 20°C).

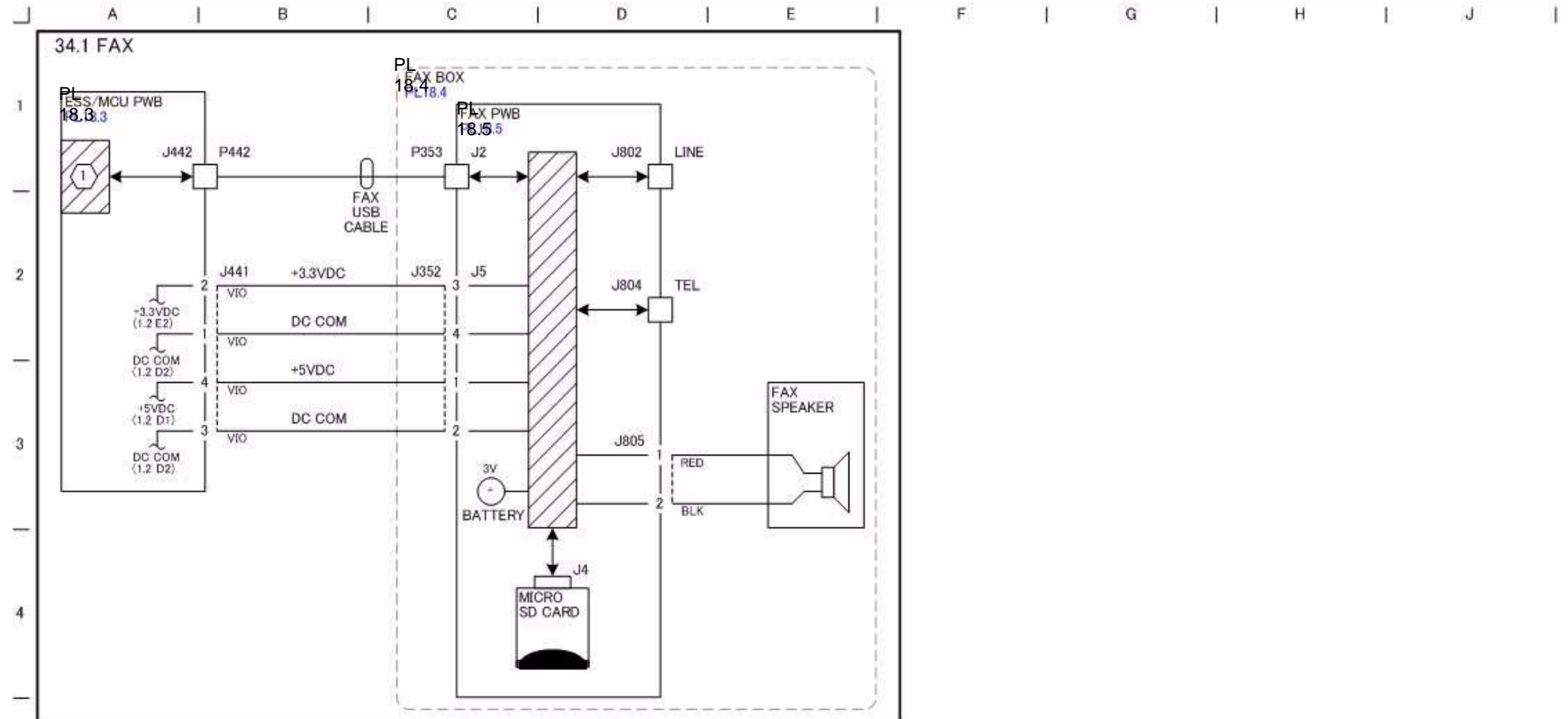
ELECTRICAL COMPONENTS



.0mg731004

Figure 1 j0mg731004

CH34.1 Fax



NOTE: ① For the details of Fax Fail codes, see Chapter 2 FIPs.

Figure 1 j0mg733401

.j0mg733401

7.4.1 Sensor Location (DADF)

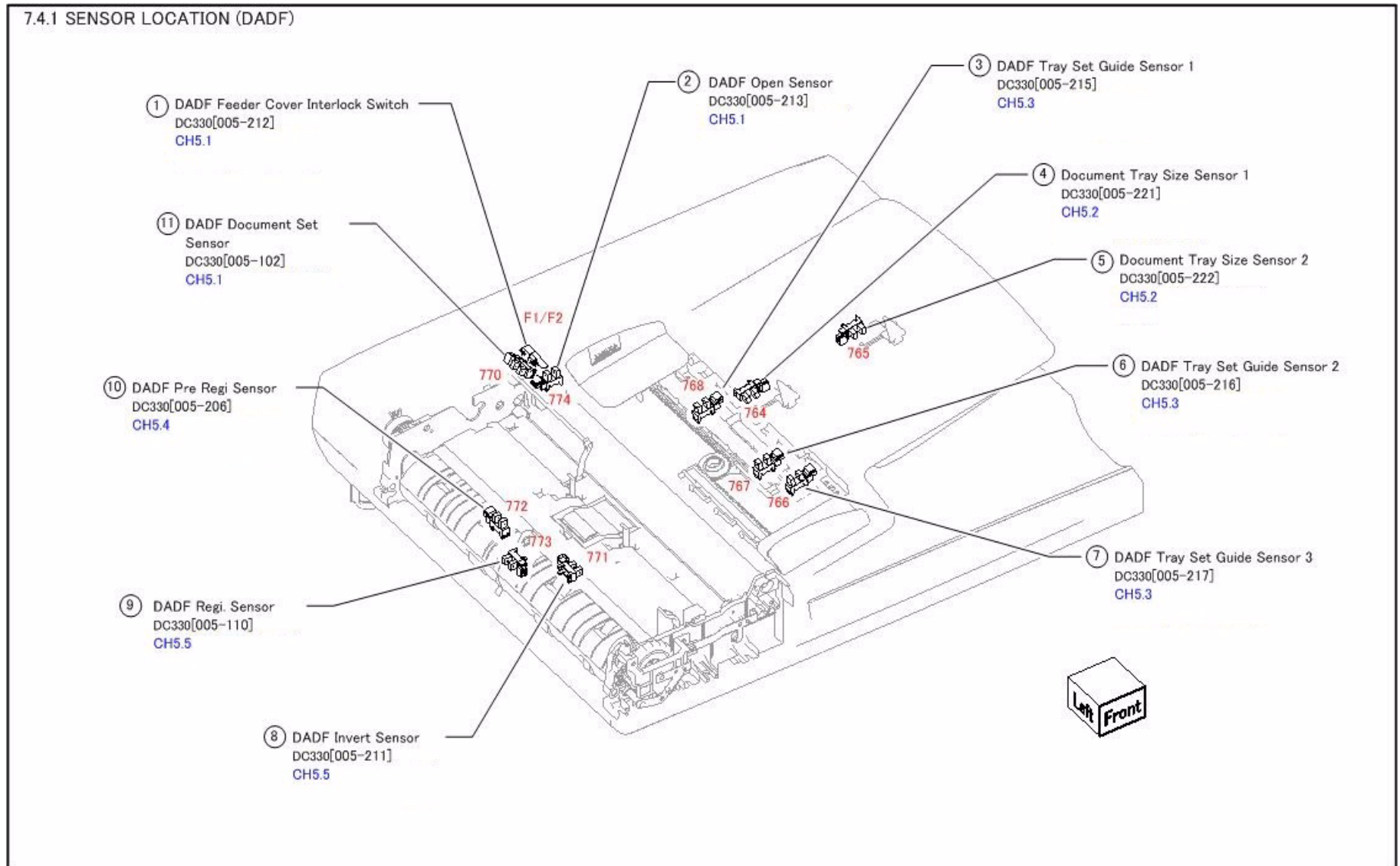


Figure 1 j0mg74001

j0mg74001

7.4.2 Sensor Location (IIT)

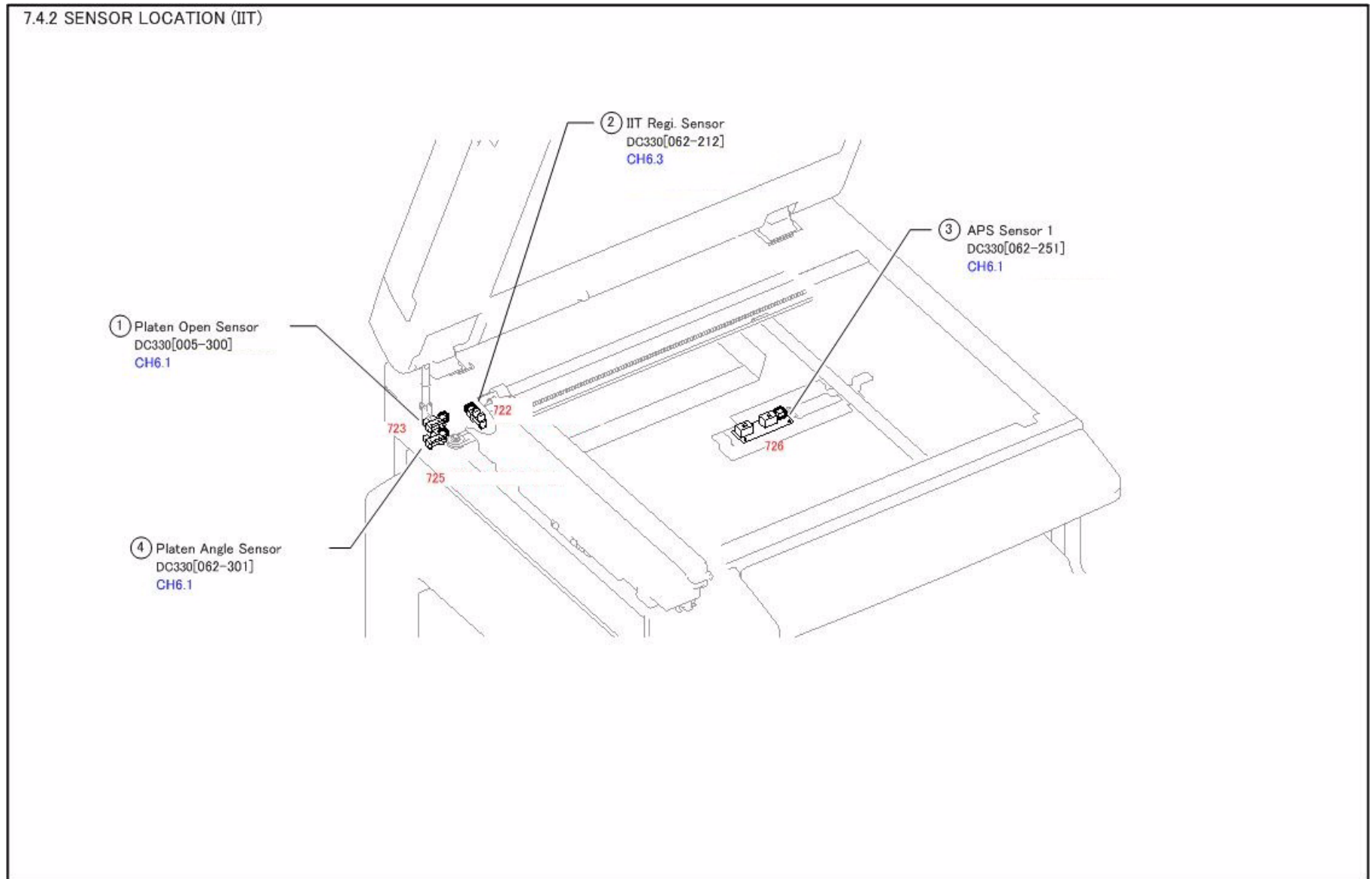


Figure 1 j0mg74002

j0mg74002

7.4.3 Sensor Location (L/H & Fusing)

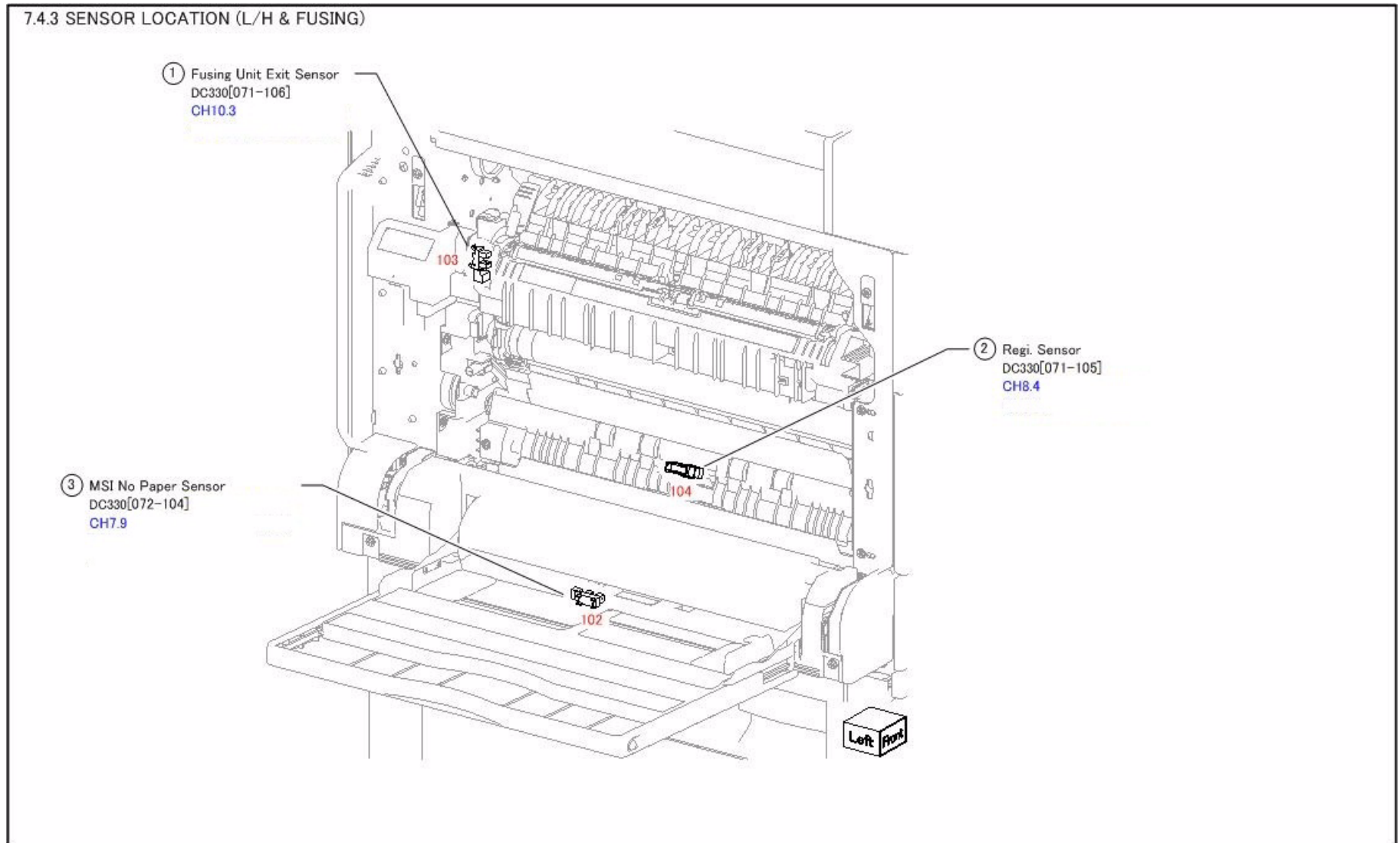


Figure 1 j0mg74003

j0mg74003

7.4.5 Sensor Location (IOT Front)

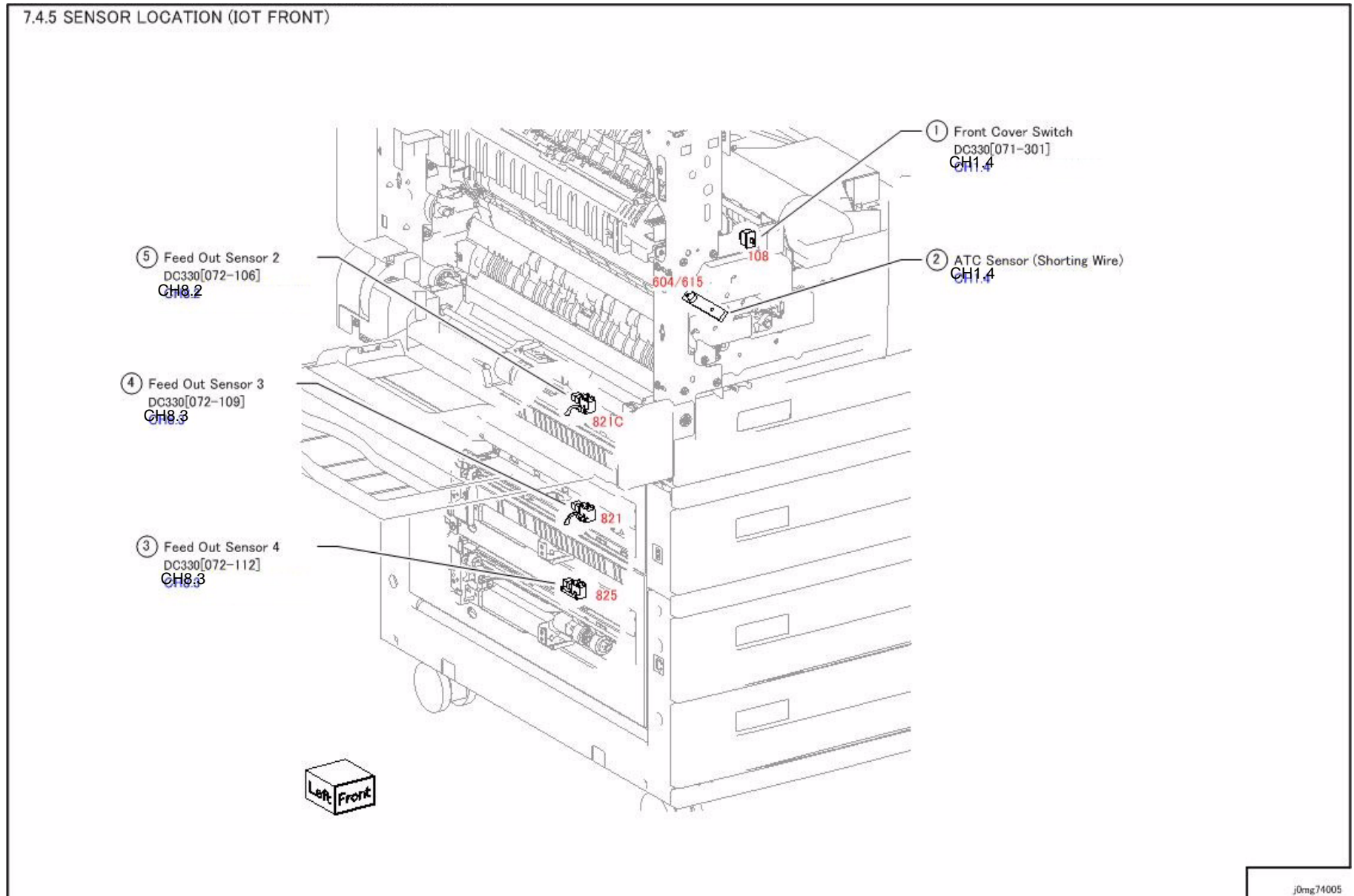


Figure 1 j0mg74005

7.4.7 Sensor Location (IOT Rear)

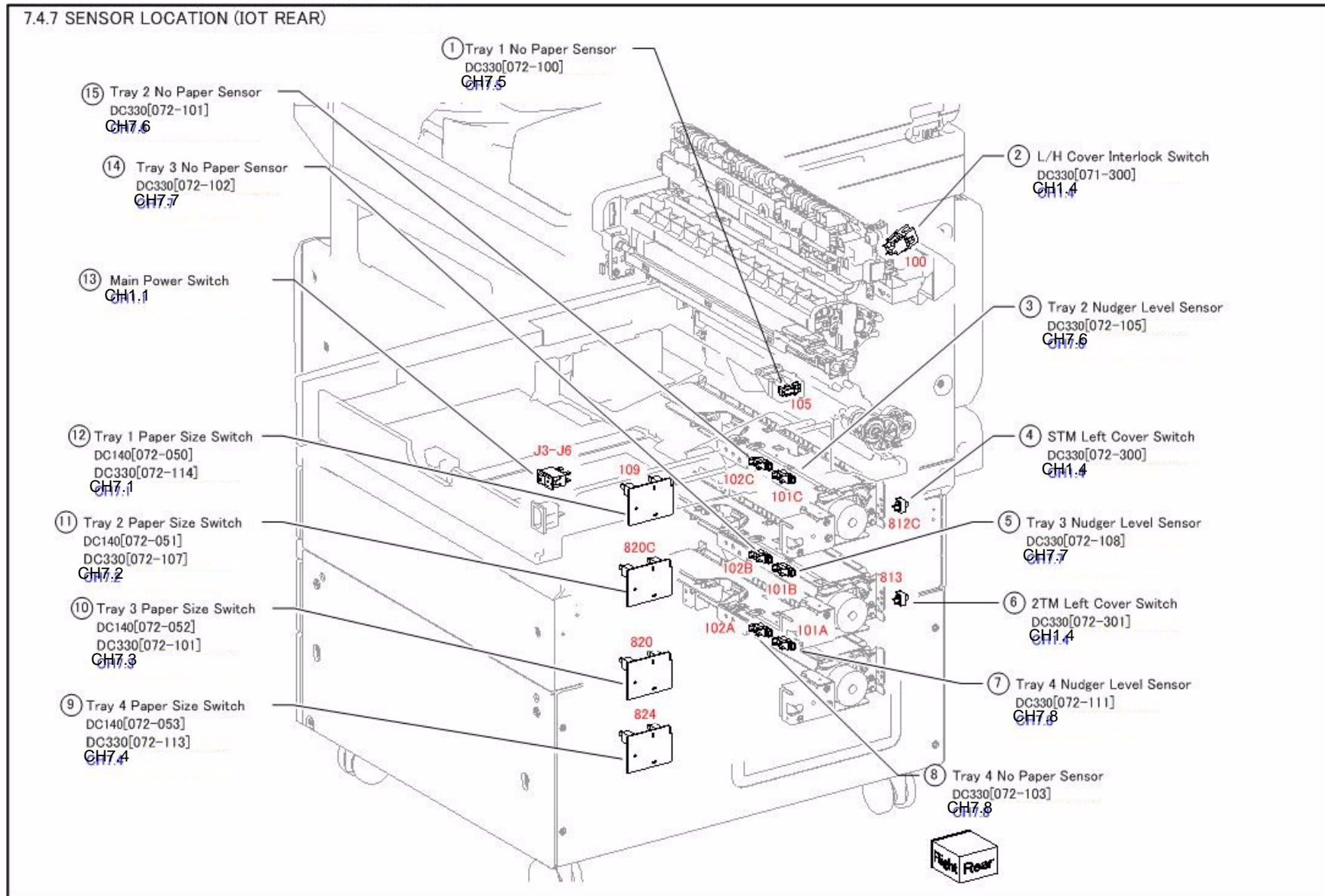


Figure 1 j0mg74007

j0mg74007

Chapter 9 Installation/Removal

9 Installation/Removal

9.1 Installation

9.1.1 Installation of Main Unit.....	9-3
9.1.5 One Tray Module	9-7
9.1.6 Stand.....	9-9
9.1.7 Two Tray Module	9-13
9.1.8 Fax Kit.....	9-17
9.1.9 Network Print Kit	9-23
9.1.10 Tray Lock Kit	9-25

9.2 Removal

9.2 Removal.....	9-29
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9.1.1 Installation of Main Unit

Before Installation

When servicing the installed options at the same time, refer to the following for more efficient servicing.

- 9.1.5 One Tray Module (Product Code:)
- 9.1.6 Stand (Product Code:)
- 9.1.7 Two Tray Module (Product Code:)

Installation Procedures

WARNING

As the Main Unit is very heavy, make sure you have 3 or more persons (2 at the left and 1 at the right) to perform any moving.

1. Open the package and check the bundled items.
 - a. Main Unit
 - b. Toner Cartridge
2. Hold onto the Main Unit at the indicated positions (A: x4) and place it at the installation location. (Figure 1)

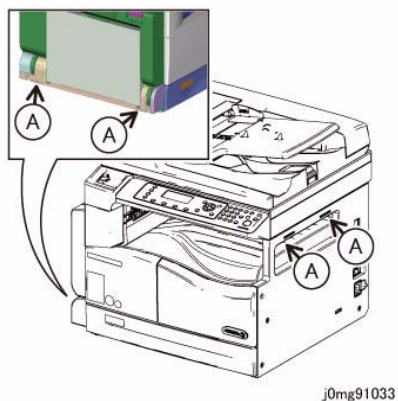


Figure 1 j0mg91033

3. Remove the packaging tapes and packaging materials, and then visually check the exterior appearance.
4. Check the bundled items in Tray 1. (Figure 2)
 - a. USB Cable: 1
 - b. Power Cord: 1
 - c. Stopper Bracket: 1
 - d. Thumbscrew: 1
 - e. Power Cord Bracket Install Guide: 1

- There is no illustration for Item 6

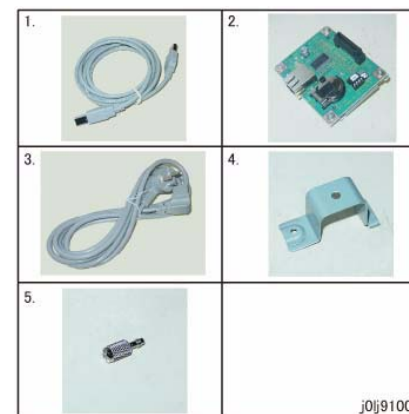


Figure 2 j0lj91002

- Types of Manual

Table 1

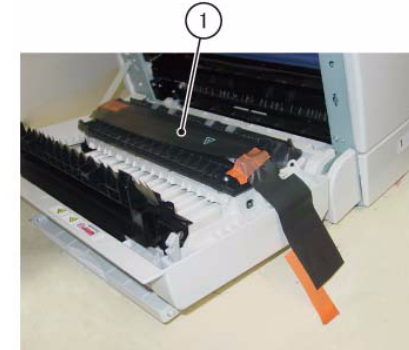
No	Name	Qty
1	Basic Operation Guide	1
2	Driver and User Manual (CD)	1
3	Setup Guide	1
4	NVM List	1
5	Instruction Label	1
6	Check List	1
7	Packaging List	1
8	Warranty Card	1
9	A Letter to Customer	1
10	Engineers History List	1

5. Open the Platen Cover or the DADF, and then remove the Platen Sheet. (Figure 3)
 - a. Remove the Platen Sheet.
 - b. Peel off the UI Label protective sheet.



j0lj91003

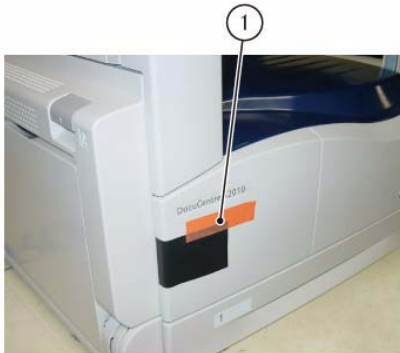
Figure 3 j0lj91003



j0lj91005

Figure 5 j0lj91005

6. Peel off the tape that secures the BTR protective sheet. (Figure 4)



j0lj91004

Figure 4 j0lj91004

7. Open the L/H Cover and remove the BTR protective sheet.
 - a. Remove the BTR protective sheet.



j0lj91008

Figure 6 j0lj91008

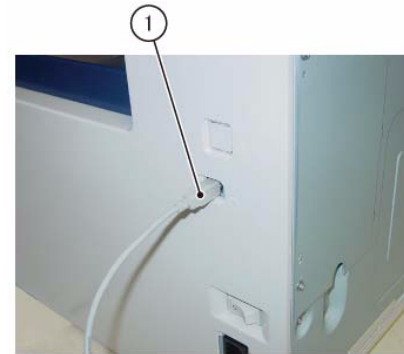
8. Close the L/H Cover.
9. Shake the Toner Cartridge horizontally several times.
10. Open the Front Toner Cover and install the Toner Cartridge. (Figure 6)

11. Remove the Heat Seal of the Drum Cartridge. (Figure 7)



j0mg91001

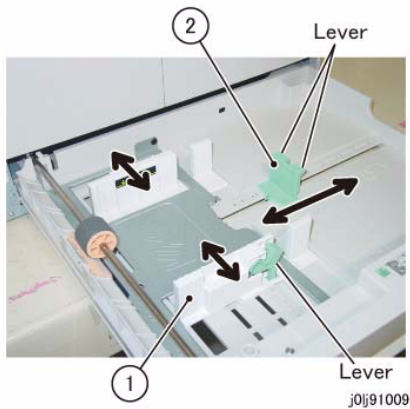
Figure 7 j0mg91001



j0lj91011

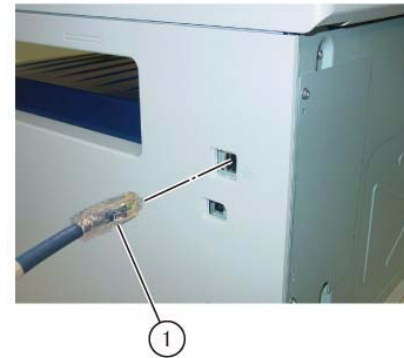
Figure 9 j0lj91011

12. Close the Front Toner Cover.
13. Shift the Side Guide and End Guide according to fit the paper that is going to be loaded in Tray 1. (Figure 8)
 - a. Pinch the lever and shift the Side Guide to match the Paper Size.
 - b. Pinch the lever and shift the End Guide to match the Paper Size.



j0lj91009

Figure 8 j0lj91009



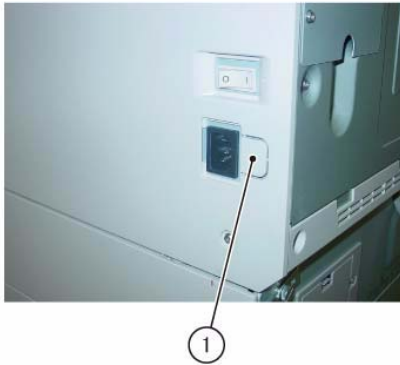
j0lj91010

Figure 10 j0lj91010

14. Load paper into Tray 1.
15. Connect the USB Cable. (Figure 9)
 - a. Connect the USB Cable.

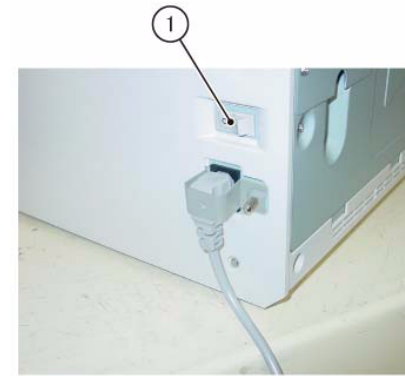
16. [CPS Net Model]: Connect the Network Cable (not a bundled item). (Figure 10)
 - a. Connect the Network Cable.

17. Remove the Blind Cover at the Right Cover. (Figure 11)
 - a. Remove the Blind Cover.



j0lj91012

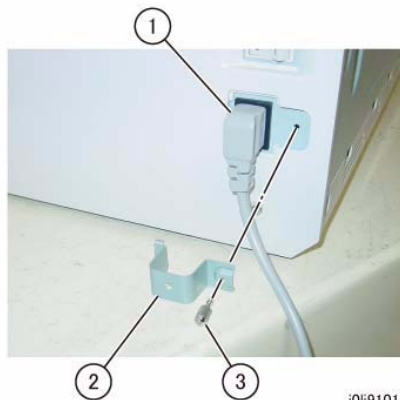
Figure 11 j0lj91012



j0lj91014

Figure 13 j0lj91014

18. Connect the Power Cord. (Figure 12)
 - a. Connect the Power Cord.
 - b. Install the Stopper Bracket.
 - c. Secure it by using the Thumbscrew.

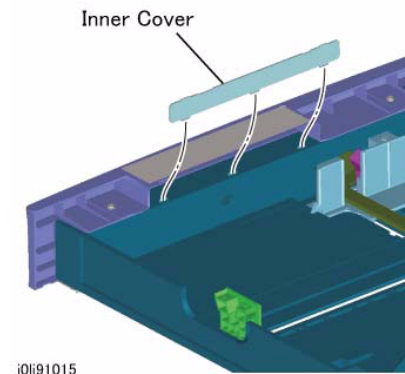


j0lj91013

Figure 12 j0lj91013

19. Turn ON the Power Switch. (Figure 13)
 - a. Turn ON the Power Switch.
 - "Ready to Copy" is displayed approx. 30 s later.

20. Check the operation.
21. Turn OFF the power.
22. Pull out Tray 1.
23. Remove the Inner Cover of Tray 1 slightly and store the NVM List and Engineers History List. (Figure 14)



j0lj91015

Figure 14 j0lj91015

24. Reinstall the Inner Cover and push in Tray 1.
25. Explain to the customer how to operate the machine where necessary.

9.1.5 One Tray Module

Product Code

•

Installation Procedures

1. Check the bundled items. (Figure 1)

Table 1

No	Name	Qty
1	One Tray Module	1
2	Docking Bracket	2
3	Docking Screw	4
4	Size Label	1
5	Clamp	1
6	Installation Guide	1

- There is no illustration for Item 6

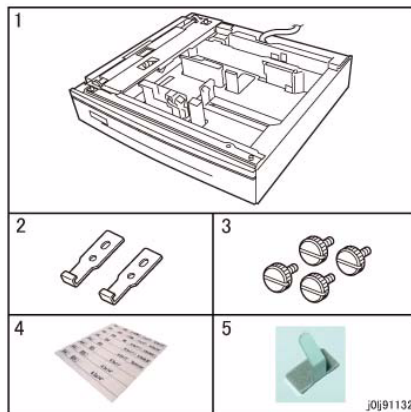


Figure 1 j0lj91132

2. Remove the packaging tapes and materials from the One Tray Module.
3. Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

4. Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

5. Disconnect all cables that are connected to the right of the IOT.

WARNING

As the IOT is very heavy, make sure you have 3 or more persons (2 at the left and 1 at the right) to perform the mounting.

6. Hold onto the IOT at the indicated positions (A: x4) and align it to the positioning pin (x2) of the One Tray Module to mount it. (Figure 2)

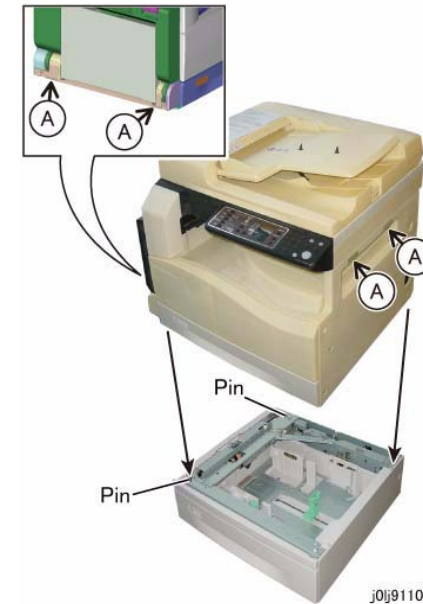
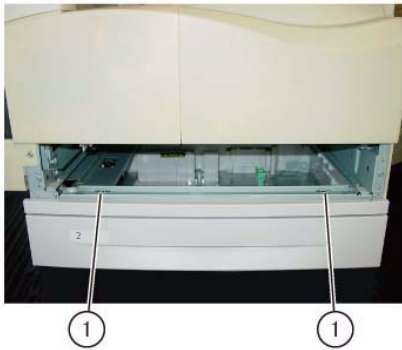


Figure 2 j0lj91105

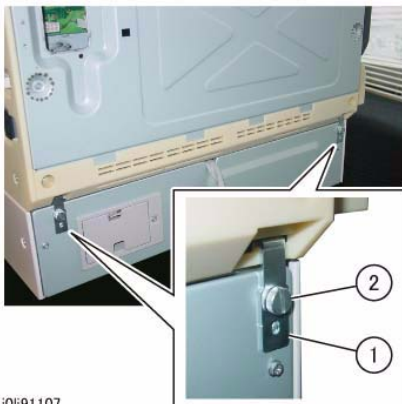
7. Pull out and remove Tray 1.
8. Secure the One Tray Module to the IOT by using the Docking Screw (x2). (Figure 3)
 - a. Secure it by using the Docking Screw (x2).



j0lj91106

Figure 3 j0lj91106

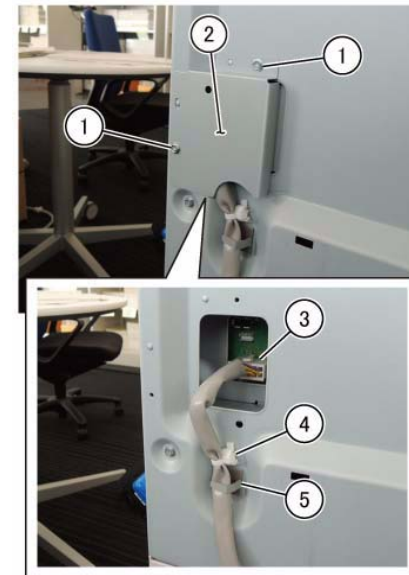
9. Reinstall Tray 1.
10. Secure the Docking Bracket (x2) by using the Docking Screw (x2). (Figure 4)
 - a. Install the Docking Bracket (x2).
 - b. Secure them by using the Docking Screw (x2).



j0lj91107

Figure 4 j0lj91107

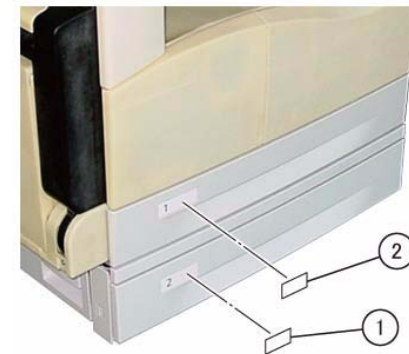
11. Connect the connector of the One Tray Module.
 - a. Remove the screw (x2).
 - b. Remove the STM Connector Cover.
 - c. Connect the connector.
 - d. Install the cable band.
 - e. Paste the clamp and secure the wire harness by using the clamp. (Figure 5)



j0mg91008

Figure 5 j0mg91008

12. Reinstall the STM Connector Cover that was removed in Step 11.
13. Load paper into Tray 2.
14. Paste the Size Label that correspond to the paper that is loaded in Tray 2. (Figure 6)
 - a. Paste the Size Label.
 - b. Paste the Size Label that correspond to the paper that is loaded in Tray 1.



j0lj91124

Figure 6 j0lj91124

15. Reconnect all the cables that are supposed to be connected to the right of the IOT.

16. Plug the power cord into power outlet, and turn ON the power switch.
17. Check the operation of the One Tray Module.
18. Explain to the customer how to operate the One Tray Module where necessary.

9.1.6 Stand

Product Code

- One Tray Module:
- Stand:

Installation Procedures

1. Before Installation
 - When installing this Kit, prepare the One Tray Module too and perform the installation in sequence.

NOTE: The [Installation Guide] that comes bundled with the Stand is meant for a User and therefore, it only contains the instruction for securing the One Tray Module and the Stand to the [Front Side]. As the procedure here is meant for a CE, it also contains the instruction for installing to the [Rear Side].

2. Check the bundled items.
 - One Tray Module (Figure 1)

Table 1

No	Name	Qty
1	One Tray Module	1
2	Docking Bracket	2
3	Docking Screw	4
4	Size Label	1
5	Clamp	1
6	Installation Guide	1

- There is no illustration for Item 6

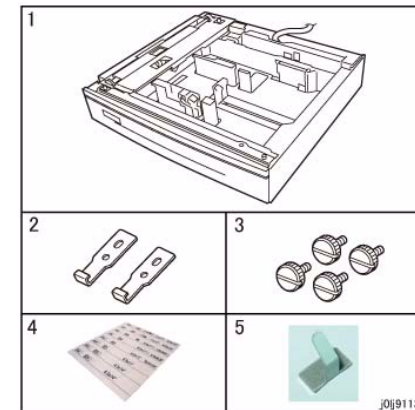


Figure 1 j0lj91132

- Stand (Figure 2)

Table 2

No	Name	Qty
1	Stand	1
2	Docking Screw	2
3	Screw	1
4	Joint	1
5	Bracket (Not used)	-
6	Installation Guide	1

- There is no illustration for Item 6

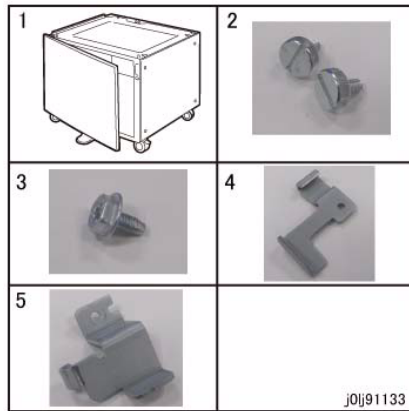


Figure 2 j0lj91133

3. Remove the packaging tapes and materials from the One Tray Module and the Stand.
4. Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

5. Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

6. Disconnect all cables that are connected to the right of the IOT.
7. Lower the lever of the caster (x2) at the front of the Stand. (Figure 3)
 - a. Lock the caster (x2).

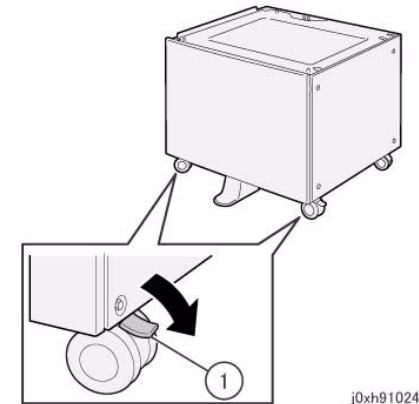


Figure 3 j0xh91024

8. Align the One Tray Module to the positioning pin (x3) of the Stand and mount it. (Figure 4)

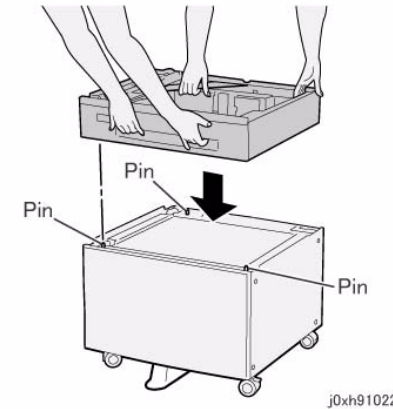
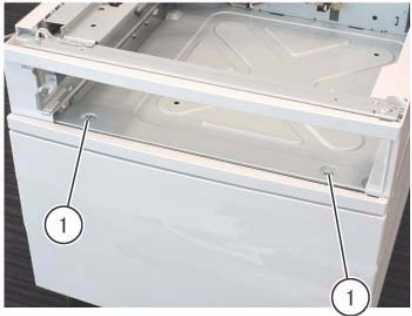


Figure 4 j0xh91022

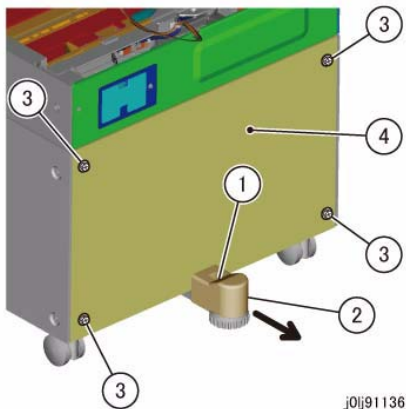
9. Pull out and remove Tray 2 of the One Tray Module.
10. Secure the One Tray Module to the Stand by using the Docking Screw (x2). (Figure 5)
 - a. Secure it by using the Docking Screw (x2).



j0xh91023

Figure 5 j0xh91023

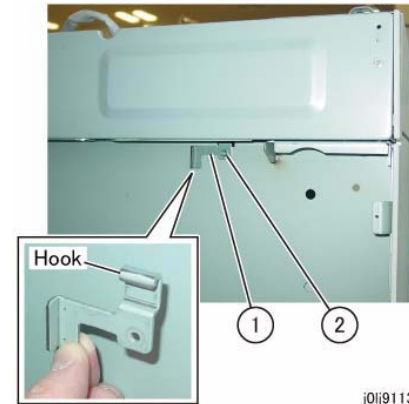
11. Push in Tray 2 of the One Tray Module.
12. Remove the Rear Cover of the Stand. (Figure 6)
 - a. Loosen the screw.
 - b. Slide the Foot Cover.
 - c. Remove the screw (x4).
 - d. Remove the Rear Cover.



j0lj91136

Figure 6 j0lj91136

13. Install the Joint. (Figure 7)
 - a. Hang the hook of the Joint to the One Tray Module.
 - b. Secure the Joint by using the screw.



j0lj91137

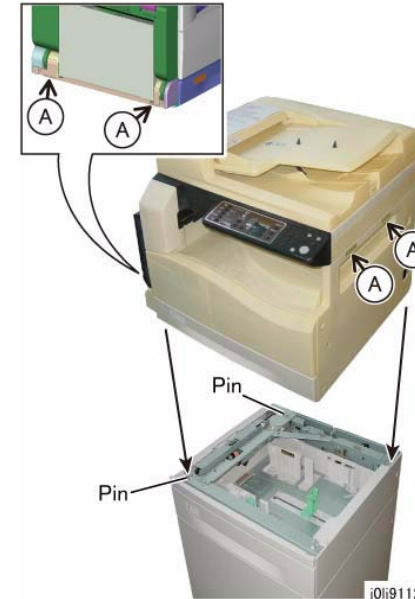
Figure 7 j0lj91137

14. Reinstall the parts removed in Procedure 12.

WARNING

As the IOT is very heavy, make sure you have 3 or more persons (2 at the left and 1 at the right) to perform the mounting.

15. Hold onto the IOT at the indicated positions (A: x4) and align it to the positioning pin (x2) of the One Tray Module to mount it. (Figure 8)



j0lj91125

Figure 8 j0lj91125

16. Pull out and remove Tray 1.
17. Secure the One Tray Module to the IOT by using the Docking Screw (x2). (Figure 9)
 - a. Secure it by using the Docking Screw (x2).

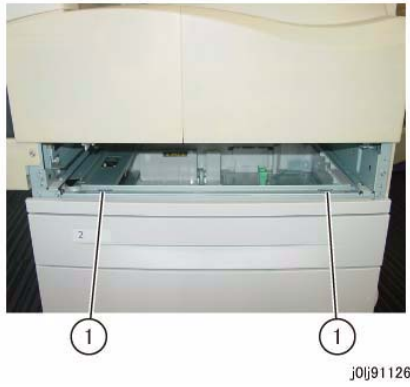


Figure 9 j0lj91126

18. Reinstall Tray 1.
19. Secure the Docking Bracket (x2) by using the Docking Screw (x2). (Figure 10)
 - a. Install the Docking Bracket (x2).
 - b. Secure them by using the Docking Screw (x2).



Figure 10 j0lj91127

20. Connect the connector of the One Tray Module.
 - a. Remove the screw (x2).
 - b. Remove the STM Connector Cover.
 - c. Connect the connector.
 - d. Install the cable band.

- e. Paste the clamp and secure the wire harness by using the clamp. (Figure 11)

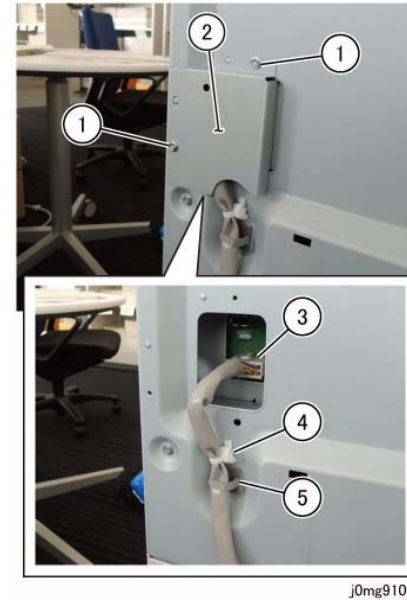


Figure 11 j0mg91008

21. Reinstall the STM Connector Cover that was removed in Step 20.
22. Rotate the Feet (x2) to lower them and lock the machine. (Figure 12)
 - a. Rotate the Feet (x2) to lower them.

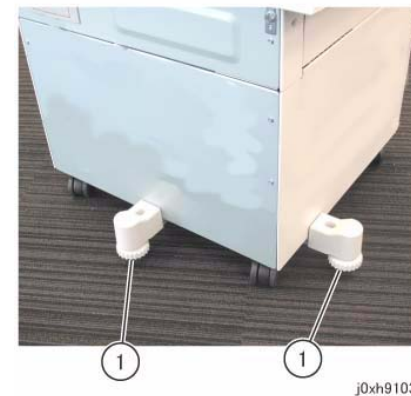


Figure 12 j0xh91030

23. Load paper into Tray 2.
24. Paste the Size Label that correspond to the paper that is loaded in Tray 2. (Figure 13)

- a. Paste the Size Label.
- b. Paste the Size Label that correspond to the paper that is loaded in Tray 1.

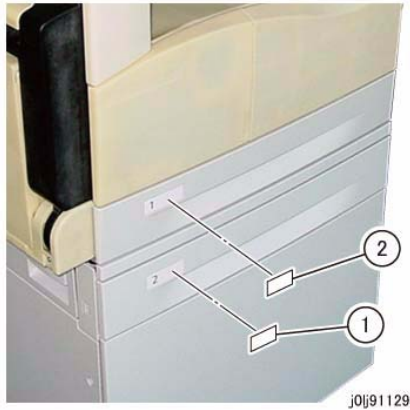


Figure 13 j0lj91129

- 25. Reconnect all the cables that are supposed to be connected to the right of the IOT.
- 26. Plug the power cord into power outlet, and turn ON the power switch.
- 27. Check the operation of the One Tray Module.
- 28. Explain to the customer how to operate the One Tray Module where necessary.

9.1.7 Two Tray Module

Product Code

- One Tray Module:
- Two Tray Module:

Installation Procedures

1. Before Installation
 - When installing this Kit, the One Tray Module (Product Code:) is required. Prepare the Kits and perform the installation in sequence.
2. Check the bundled items.
 - One Tray Module (Figure 1)

Table 1

No	Name	Qty
1	One Tray Module	1
2	Docking Bracket	2
3	Docking Screw	4
4	Size Label	1
5	Clamp	1
6	Installation Guide	1

- There is no illustration for Item 6.

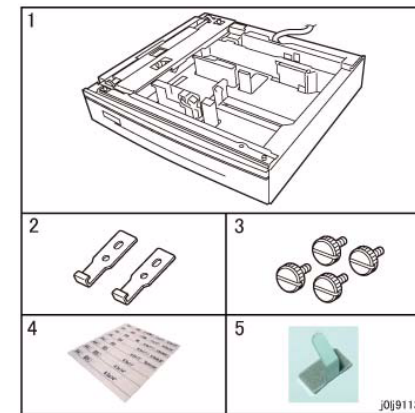


Figure 1 j0lj91132

- Two Tray Module (Figure 2)

Table 2

No	Name	Qty
1	Two Tray Module	1

Table 2

No	Name	Qty
2	Docking Screw	2
3	Screw (Unused)	1
4	Joint (Unused)	1
5	Tray Size Label	1
6	Installation Guide	1

- There is no illustration for Item 6.



Figure 2 j0xh91008

3. Remove the packaging materials from the One/Two Tray Modules.
4. Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

5. Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

6. Disconnect all cables that are connected to the Control part at the right of the IOT.
7. Lower the Levers to lock the Caster (x2) at the Front of the Two Tray Module. (Figure 3)
 - a. Lock the Caster (x2).

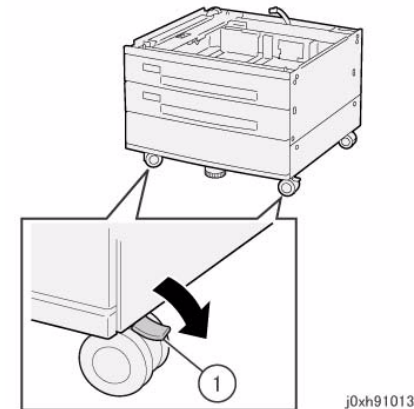


Figure 3 j0xh91013

8. Align the One Tray Module to the Positioning Pin (x3) of the Two Tray Module and mount it. (Figure 4)

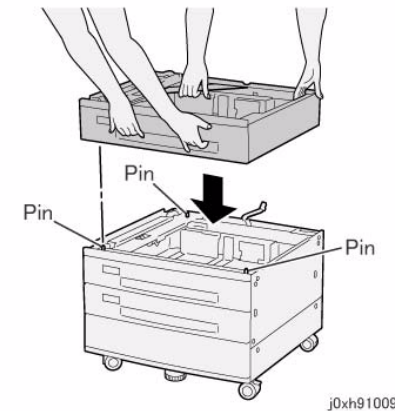
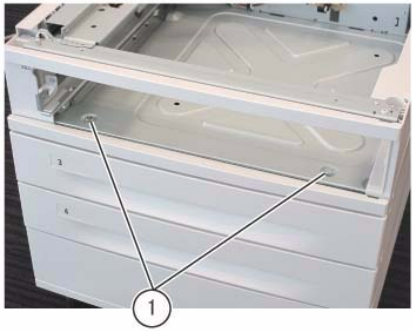


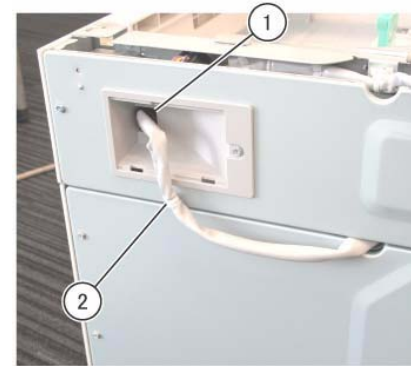
Figure 4 j0xh91009

9. Pull out and remove the Tray of the One Tray Module.
10. Secure the One Tray Module to the Two Tray Module by using the Docking Screw (x2). (Figure 5)
 - a. Secure it by using the Docking Screw (x2).



j0xh91010

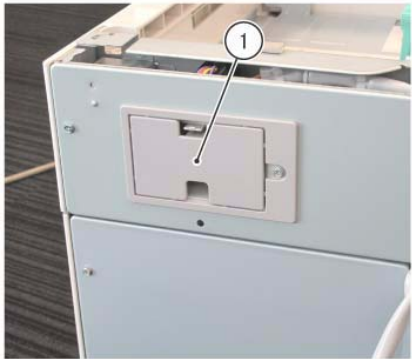
Figure 5 j0xh91010



j0xh91012

Figure 7 j0xh91012

11. Reinsert the Tray.
12. Remove the Connector Cover of the One Tray Module. (Figure 6)
 - a. Remove the Connector Cover.



j0xh91011

Figure 6 j0xh91011

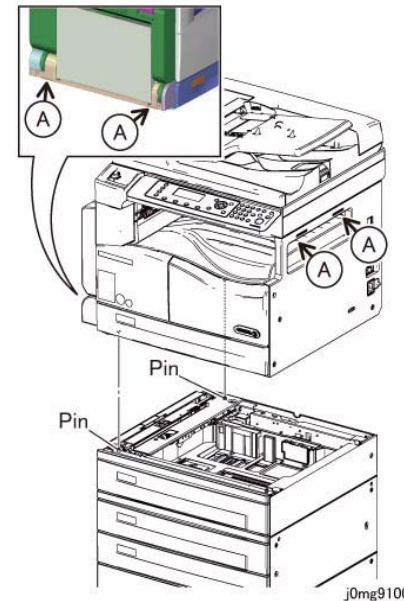
13. Connect the connector of the Two Tray Module. (Figure 7)
 - a. Connect the connector.
 - b. Install the clamp of the wire harness.

14. Reinstall the Connector Cover.

WARNING

As the IOT is very heavy, make sure you have 3 or more persons (2 at the left and 1 at the right) to perform the mounting.

15. Hold onto the IOT at the indicated positions (A: x4) and align it to the positioning pin (x2) of the One Tray Module to mount it. (Figure 8)



j0mg91005

Figure 8 j0mg91005

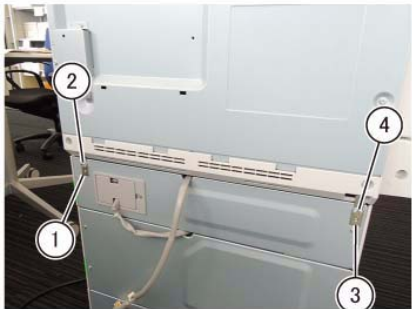
16. Pull out and remove Tray 1.
17. Secure the IOT to the One Tray Module by using the Docking Screw (x2). (Figure 9)
 - a. Secure it by using the Docking Screw (x2).



j0mg91006

Figure 9 j0mg91006

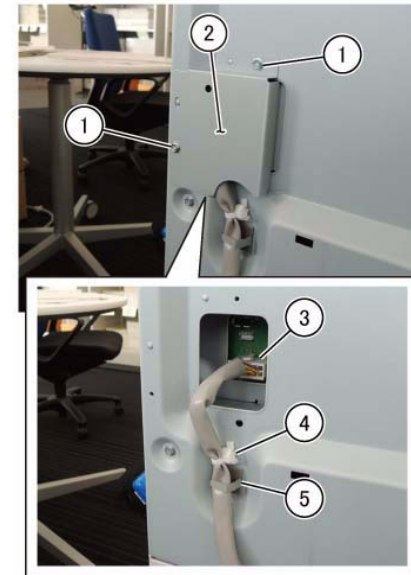
18. Secure the Docking Bracket (x2) by using the Docking Screw (x2). (Figure 10)
 - a. Install the Docking Bracket.
 - b. Secure it by using the Docking Screw.
 - c. Install the Docking Bracket.
 - d. Secure it by using the Docking Screw.



j0mg91007

Figure 10 j0mg91007

19. Connect the connector of the One Tray Module. (Figure 11)
 - a. Remove the screw (x2).
 - b. Remove the STM Connector Cover.
 - c. Connect the connector.



j0mg91008

Figure 11 j0mg91008

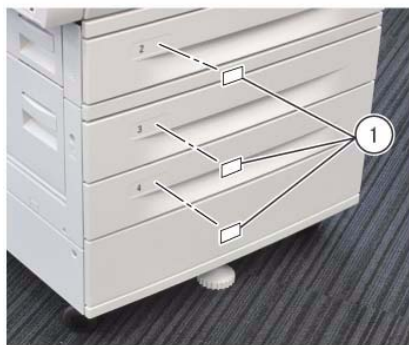
20. Reinstall the Connector Cover.
21. Unlock the Caster (x2) at the Front, move the machine to the installation location, and lock the Caster (x2) again.
22. Rotate the Foot (x3) to lower them and lock the machine in place. (Figure 12)
 - a. Rotate the Foot (x3) to lower them.



j0xh91019

Figure 12 j0xh91019

23. Set the Side/End Guides in Tray 2/3/4 according to the Paper Size to be used and load the paper.
24. Paste the Tray Size Labels on Tray 2/3/4 according to the size of loaded paper. (Figure 13)
 - a. Paste on the Tray Size Label.



j0xh91020

Figure 13 j0xh91020

25. Reconnect all the cables that are supposed to be connected to the right of the IOT.
26. Plug in the Power Plug and turn ON the power.
27. Check the operation of the One/Two Tray Module.
28. Explain to the customer how to operate the One/Two Tray Module as necessary.

9.1.8 Fax Kit

Product Code

- : ENG

Installation Procedures

1. Check the bundled items. (Figure 1)

Table 1

No	Name	Qty
1	Fax Box	1
2	Wire Harness	1
3	Fax Box Cover	1
4	One Touch Panel	1
5	Label (Unused)	1
6	Error Label-1	1
7	Error Label-2	1
8	Instruction	1
9	Screw	2

- There is no illustration for Item 8,9.

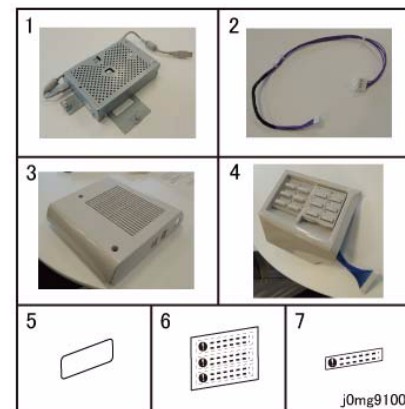


Figure 1 j0mg91009

2. Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

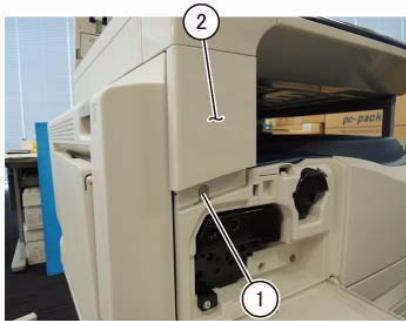
When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

3. Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

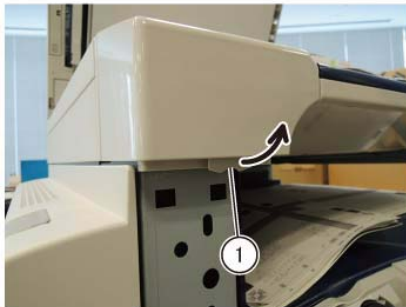
4. Open the Front Toner Cover.
5. Remove the Fusing Unit Cover. (Figure 2)
 - a. Remove the screw.
 - b. Remove the Fusing Unit Cover.



j0mg40101

Figure 2 j0mg40101

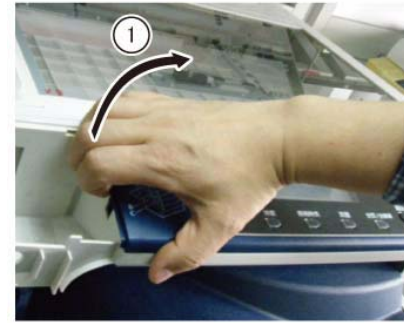
6. Remove the Clip Cover. (Figure 3)
 - a. Press the tab in the direction of the arrow to release the hook at the rear of the tab and remove the Clip Cover.



j0mg40102

Figure 3 j0mg40102

7. Remove the Control Panel. (Figure 4)
 - a. Open the Control Panel in the direction of the arrow.



j0mg40104

Figure 4 j0mg40104

8. Connect the wire harness of the One Touch Panel to the connector of the Control Panel. (Figure 5)
 - a. Connect the connector.



j0mg91010

Figure 5 j0mg91010

9. Pull out the wire harness of the One Touch Panel through the cutout of the IIT Front Cover. (Figure 6)

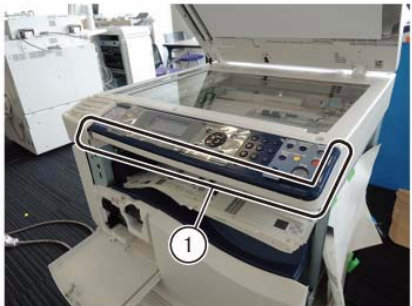


j0mg91011

Figure 6 j0mg91011

10. Reinstall the Control Panel. (Figure 7)

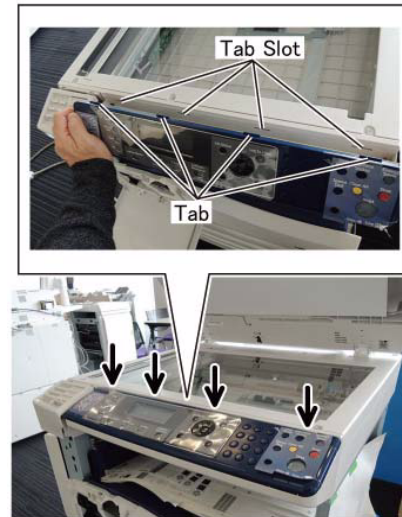
- a. At the front, align the Control Panel to the surface IIT Front Cover.



j0mg91012

Figure 7 j0mg91012

11. Insert the tab (x4) of the Control Panel into the tab slot (x4). (Figure 8)



j0mg91013

Figure 8 j0mg91013

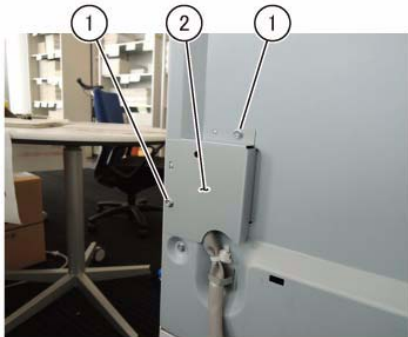
12. Insert the tab (x2) of the One Touch Panel into the tab slot (x2) and push in the lower side of the One Touch Panel in the direction of the arrow. (Figure 9)



j0mg91014

Figure 9 j0mg91014

13. Reinstall the Fusing Unit Cover.
14. Close the Front Toner Cover.
15. Remove the STM Connector Cover. (Figure 10)
 - a. Remove the screw (x2).
 - b. Remove the STM Connector Cover.

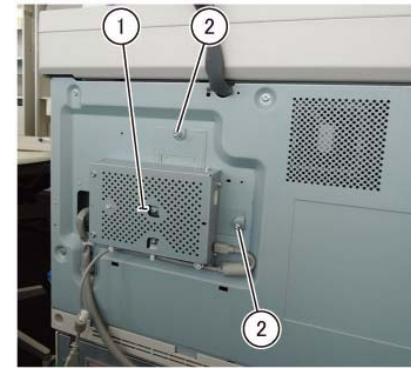


j0mg41902

Figure 10 j0mg41902

16. Install the Fax Box. (Figure 11)

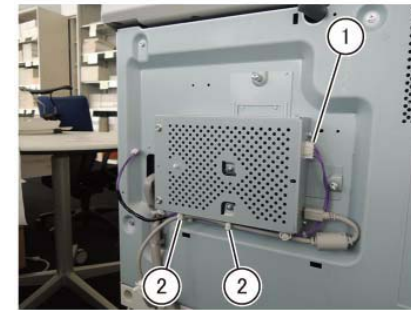
- a. Install the Fax Box.
- b. Secure it by using the screw (x2).



j0mg91015

Figure 11 j0mg91015

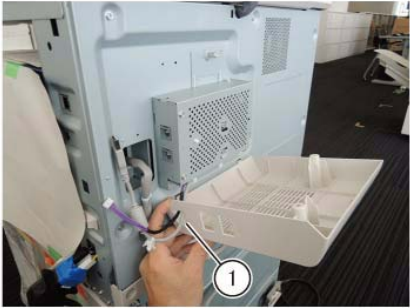
17. Attach the wire harness. (Figure 12)
 - a. Connect the wire harness to the connector of the Fax Box.
 - b. Secure the wire harness by using the clamp (x2) of the Fax Box.



j0mg91016

Figure 12 j0mg91016

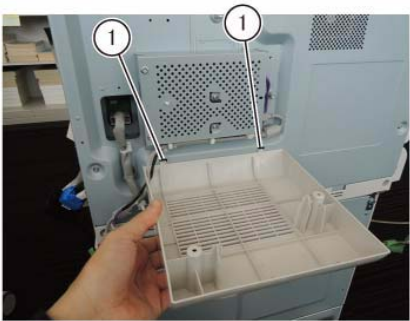
18. Pass the USB Cable and wire harness of the Fax Box through the hole of the Fax Box Cover. (Figure 13)
 - a. Pass the USB Cable and wire harness through the hole.



j0mg91017

Figure 13 j0mg91017

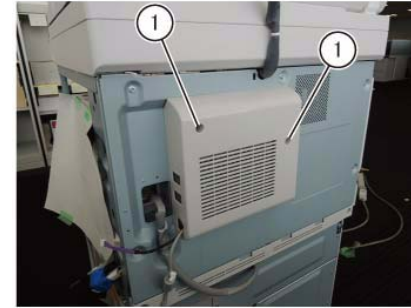
19. Insert the tab (x2) of the Fax Box Cover into the tab slot (x2) of the Rear Cover. (Figure 14)
 - a. Insert the tab (x2) of the Fax Box Cover into the tab slot (x2).



j0mg91018

Figure 14 j0mg91018

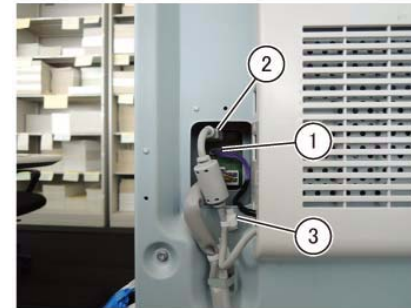
20. Secure the Fax Box Cover. (Figure 15)
 - a. Secure the Fax Box Cover by using the screw (x2).



j0mg91019

Figure 15 j0mg91019

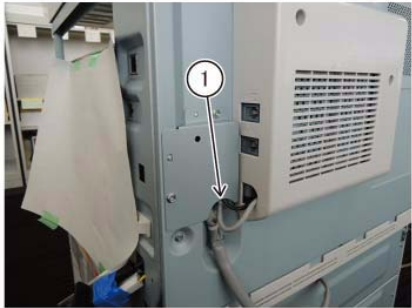
21. Connect the connector (x2) of the USB Cable and wire harness. (Figure 16)
 - a. Connect the connector.
 - b. Connect the connector.
 - c. Install the cable band.



j0mg91020

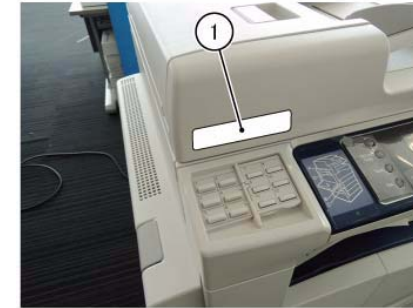
Figure 16 j0mg91020

22. Reinstall the STM Connector Cover. (Figure 17)
 - a. Pull out the USB Cable and wire harness through the cutout of the STM Connector Cover.



j0mg91021

Figure 17 j0mg91021



j0mg91023

Figure 19 j0mg91023

23. Connect the Data Cable to 'LINE'. (Figure 18)



j0mg91022

Figure 18 j0mg91022

24. Paste on the Error Label. (Figure 19)
a. Paste on the Error Label.

25. Plug in the Power Plug and turn ON the power.

26. Check the Fax transmission.

27. Request for the customer to set the 'Country' and 'Clock' using the System Administrator Mode.

9.1.9 Network Print Kit

- Enables printing via a network.
- Unable to scan via s network.

Product Code

- : ENG

Installation Procedures

- Before Installation
 - This Kit can be installed on CPS Local Models.
- Check the bundled items. (Figure 1)

Table 1

No	Name	Qty
1	Bracket	1
2	Net I/F PWB	1
3	Instruction	1
4	Screw	2

- There is no illustration for Item 3,4

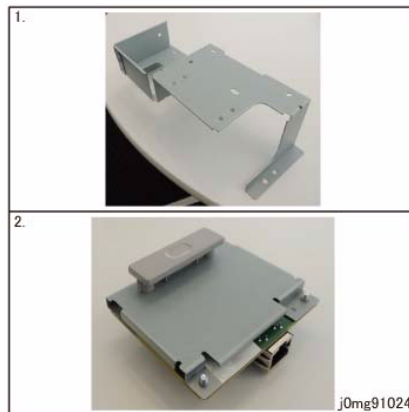


Figure 1 j0mg91024

- Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

- Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

- Remove the Blind Cover at the Right Cover. (Figure 2)
 - Remove the Blind Cover.

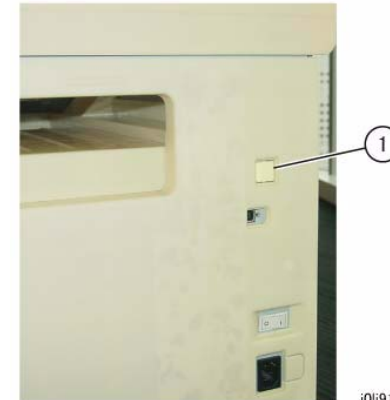


Figure 2 j0lj91122

- Remove the STM Connector Cover. (Figure 3)
 - Remove the screw (x2).
 - Remove the STM Connector Cover.

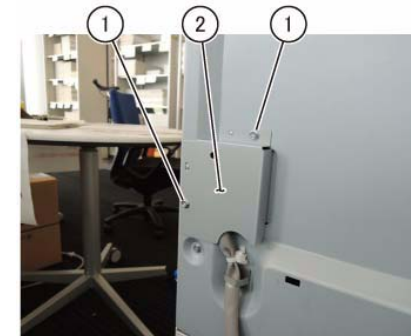
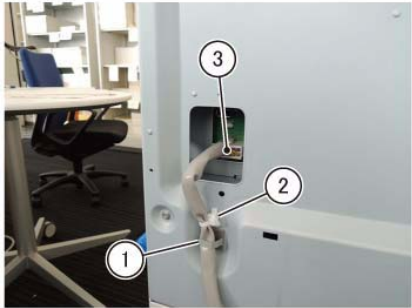


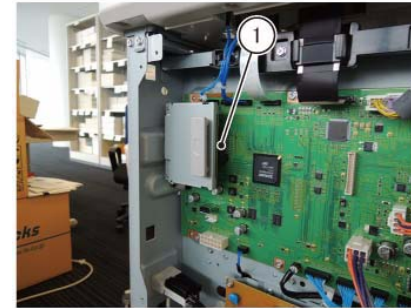
Figure 3 j0mg41902

- [Machines with One Tray Module]: Disconnect the connector. (Figure 4)
 - Release the wire harness from the clamp.
 - Remove the cable band.
 - Disconnect the connector.



j0mg41903

Figure 4 j0mg41903

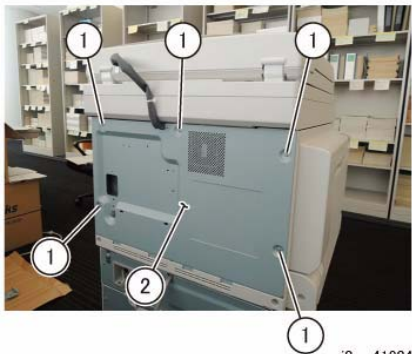


j0mg41852

Figure 6 j0mg41852

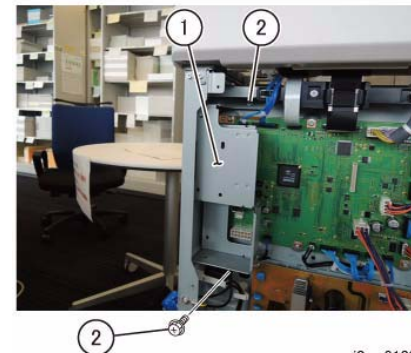
8. Remove the Blind Cover. (PL 19.4)
9. Remove the Rear Cover. (Figure 5)
 - a. Remove the screw (x5).
 - b. Remove the Rear Cover.

11. Install the Bracket. (Figure 7)
 - a. Install the Bracket.
 - b. Secure it by using the screw (x2).



j0mg41904

Figure 5 j0mg41904



j0mg91032

Figure 7 j0mg91032

10. Install the Net I/F PWB. (Figure 6)
 - a. Install the Net I/F PWB.

12. Reinstall the parts that were removed in Steps 6 to 9.
13. Plug the power cord into power outlet, and turn ON the power switch.
14. Check the operation of the Network Print Kit.
15. Explain to the customer how to operate the Network Print Kit where necessary.

9.1.10 Tray Lock Kit

Product Code

•

Installation Procedures

1. Check the bundled items. (Figure 1)

Table 1

No	Name	Qty
1	Lock Tray Support	1
2	Tray Lock	1
3	Screw	1

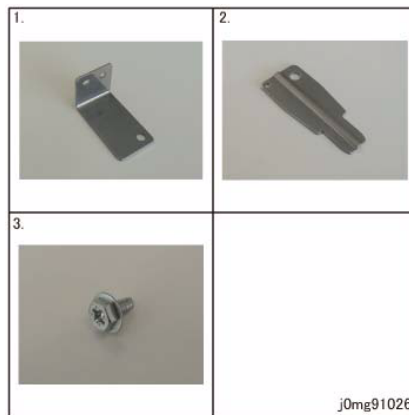


Figure 1 j0mg91026

2. Turn OFF the power switch and make sure that the screen display turns OFF.

CAUTION

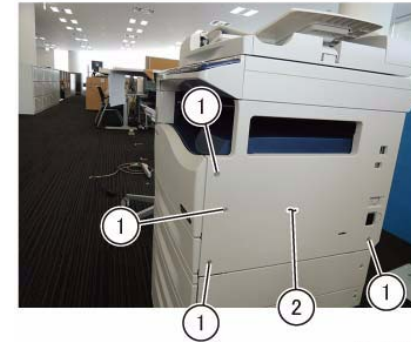
When turning OFF the power switch, check that the "Data" lamp is OFF and that there is no Job in progress.

3. Unplug the power plug.

WARNING

When maintaining the machine, turn OFF the power switch and unplug the power plug.

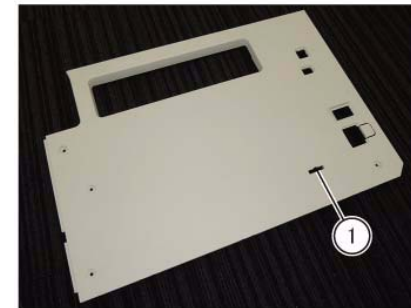
4. Remove the Right Cover. (Figure 2)
 - a. Remove the screw (x4).
 - b. Remove the Right Cover.



j0mg91027

Figure 2 j0mg91027

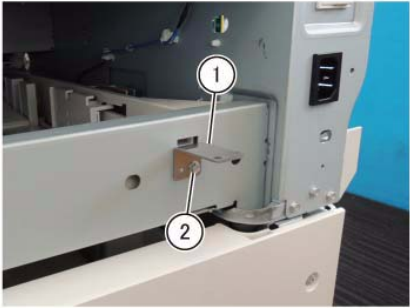
5. Remove the Blind Cover at the Right Cover. (Figure 3)
 - a. Remove the Blind Cover.



j0mg91028

Figure 3 j0mg91028

6. Install the Lock Tray Support. (Figure 4)
 - a. Install the Lock Tray Support.
 - b. Secure it by using the screw.



j0mg91029

Figure 4 j0mg91029

7. Reinstall the Right Cover.
 - Insert the hook (x2) of the Right Cover into the hole (x2) of the Frame. (Figure 5)



j0lj41910

Figure 6 j0lj41910

8. Install the Tray Lock. (Figure 7)



j0lj41909

Figure 5 j0lj41909

- Install the Right Cover as shown in the figure. (Figure 6)



j0mg91030

Figure 7 j0mg91030

9. Attach a lock. (Figure 8)



j0mg91031

Figure 8 j0mg91031

10. Plug the power cord into power outlet, and turn ON the power switch.

9.2 Removal

1. If any input option (One Tray Module/Stand) is installed, detach them from the Main Unit.
2. Tape up the machine where necessary.

