WorkCentre 5020/DN

Service Documentation

WorkCentre 5020/DN Service Documentation

702P00530

Reissue

December, 2011

Xerox Private Data

All service documentation is supplied to Xerox external customers for informational purposes only. Xerox service documentation is intended for use by certified, product-trained service personnel only. Xerox does not warrant or represent that it will notify or provide to such customer any future change to this documentation. Customer performed service of equipment, or modules, components, or parts of such equipment may affect whether Xerox is responsible to fix machine defects under the warranty offered by Xerox with respect to such equipment. You should consult the applicable warranty for its terms regarding customer or third-party provided service.

If the customer services such equipment, modules, components or parts thereof, the customer releases Xerox from any and all liability for the customer actions, and the customer agrees to indemnify, defend and hold xerox harmless from any third party claims which arise directly or indirectly for such service.

While Xerox has tried to make the documentation accurate, Xerox will have no liability arising out of any inaccuracies or omissions. Changes are periodically made to this document. Changes, technical inaccuracies, and typographical errors will be corrected in subsequent editions.

Prepared by:

Xerox Corporation

Content Development and Language Services

800 Phillips Road, Bldg. 0218-01A

Webster, New York 14580-9791

USA

©2011 by Xerox Corporation. All rights reserved.

Copyright protection claimed includes all forms and matters of copyrightable material and information now allowed by statutory judicial law or hereinafter granted, including without limitation, material generated from the software programs which are displayed on the screen such as icons, screen displays, looks, etc.

Printed in the United States of America.

XEROX® and all Xerox product names mentioned in this publication are trademarks of XEROX CORPORATION. Other company trademarks are also acknowledged.

PANTONE is a registered trademark of Pantone, Inc.

Changes are periodically made to this document. Changes, technical inaccuracies, and typographic errors will be corrected in subsequent editions.

CAUTION

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

Introduction

About this Manual	iii
Organization	iii
How to Use this Documentation	iv
Symbology and Nomenclature	V

About this Manual

This Service Manual is part of the multinational documentation system for WorkCentre 5020/ DN. The Service Documentation is used in order to diagnose machine malfunctions, adjust components and has information which is used to maintain the product in superior operating condition. It is the controlling publication for a service call. Information on its use is found in the Introduction of the Service Documentation.

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

Service Manual Revision

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

Organization

This Service Manual is divided into eight sections. The titles of the sections and a description of the information contained in each section are contained in the following paragraphs:

Section 1: Service Call Procedures

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

Section 2: Status Indicator RAPs

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

Section 3: Image Quality

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

Section 4: Repairs/Adjustments

This section contains all the Adjustments and Repair procedures.

Repairs

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

When there is a personnel or machine safety issue.

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

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

When the part requires an adjustment after replacement.

When a special tool is required for removal or replacement.

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

Adjustments

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

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

Section 5: Parts Lists

This section contains the Copier/Printer Parts List.

Section 6: General Procedures/Information

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

Section 7: Wiring Data

This section contains drawings, lists of plug/jack locations, and diagrams of the power distribution wire networks in the machine. This section also contains the Block Schematic Diagrams.

Section 8: Options and Accessories

This section contains installation information for option and accessory.

How to Use this Documentation

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

Use of the Circuit Diagrams

All wirenets are shown on the Circuit Diagrams (CDs). Power distribution wirenets are shown in Section 7 (Wiring Data) of the Service Manual. The power distribution wirenets on the CDs will end at the terminal board for the power being distributed. Find the wirenet for that power and locate the terminal board on the wirenet. Use the wirenet to troubleshoot any power distribution wiring not shown on the CD.

Use of the Block Schematic Diagrams

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

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

WorkCentre 5020/DN

Symbology and Nomenclature

The following reference symbols are used throughout the documentation.

Warnings, Cautions, and Notes

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

WARNING

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

CAUTION

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

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

Machine Safety Icons

The following safety icons are displayed on the machine:

WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser, the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface in the area of the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.

The following symbol and statement appear on a label in the machine. The symbol by itself, or the symbol and the statement may also appear in the service documentation and in the training program. When this symbol appears, the service representative is warned that conditions exist that could result in exposure to the laser beam.

WARNING

Do not try to bypass any laser interlocks for any reason. Permanent eye damage could result if the laser is accidentally directed into your eye.



Figure 1 Laser Hazard Symbol

Laser Hazard Statement

DANGER INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION

The use of controls or adjustments other than those specified in the Laser Safety Training Program may result in an exposure to dangerous laser radiation.

For additional information, review the Laser Safety Training program.

An arrow points to the location to install, to gain access to, or to release an object.



Figure 2 Customer Access Label

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



Figure 3 Heated Surface Label

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



Figure 4 Shock Hazard Label

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





Figure 5 ESD warning Label

Electrostatic Discharge (ESD) Field Service Kit

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

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

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

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

Illustration Symbols

Figure 6 shows symbols and conventions that are commonly used in illustrations.

REFERENCE SYMBOLOGY

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

TEST POINTS TEST DATA [x-xxx] This symbol is used to identify a test This symbol appears on the BSD This symbol placed above a signal whenever a test data reference is point/test hole available for name on a BSD indicates the input or necessary in order to verify the measuring a signal. output component control code for presence of a signal. that signal. **BSD GRAPHICS** [X-XXX] [X-XXX] This symbol placed above a signal name on a BSD indicates that two This symbol indicates the NOTES component control codes (an output continuation of a signal line in a This symbol is used to refer to notes. and an input) are required to check (2) vertical direction. The notes normally appear on the that signal. same page. This symbol indicates the [X-XXX/X-XXX]This symbol placed above a signal continuation of a signal line in a ADJUSTMENTS name on a BSD indicates component horizontal direction. This symbol refers to adjustments on control codes for two components. 0 the Service Data Section. in this example, two Paper Trays. This symbol indicates the direction The left hand code is for Paper Tray of signal flow. 1, and the right hand code is for Paper Tray 2. PARTS LISTS This symbol indicates a feedback Fault Codes Indicator X-XXX PL2-XX This symbol refers to a parts list on shown on BSD. the Service Data Section. PL indicates that this is a parts list The Flag symbol indicates a reference reference and, in this example, the point into a Circuit Diagram from a RAP. This symbol is used to show a twisted exploded view drawing is on Parts Instructions will be given to check for pair of wires. List 2-XX. Parts list reference appear an open circuit, a short circuit, or an intermittent condition on the BSDs next to all replaceable parts shown on the diagram.

Figure 6 Illustration Symbols

Signal Nomenclature

Refer to Figure 7 for an example of Signal Nomenclature used in Circuit Diagrams and BSDs.



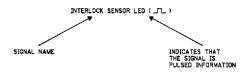


Figure 7 Signal Nomenclature

Voltage Measurement and Specifications

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

Table 1 Voltage Measurement and Specifications

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

Logic Voltage Levels

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

Table 2 Logic Levels

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

DC Voltage Measurements in RAPs

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

There is +5 VDC from TP7 to TP68.

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

Another example of a statement found in a RAP might be:

There is -15 VDC from TP21 to TP33.

In this example, the red meter lead would be placed on TP21 and the black meter lead would be placed on TP33.

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

1 Service Call Procedures

Service Call Procedures	1-3
Initial Actions	1-3
Call Flow	1-4
HFSI	1-5
Cleaning Procedures	1-5
Final Actions	1-6

Service Call Procedures

Service Strategy

The service strategy for the WorkCentre 5020/DN is to perform any High Frequency Service Item (HFSI) actions before attempting to repair any problems. Some problems will be corrected by this strategy without the need to diagnose them. The Repair Analysis Procedures (RAPs) will be used for any remaining problems.

Repair problems that occur in the Basic Printer mode problems that occur when using the accessories.

Repair Image Quality problems after all other problems are repaired.

Service Call Procedures

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

Initial Actions

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

Call Flow

Call Flow summarizes the sequence of the Service Call Procedures.

Detailed Maintenance Activities

The Detailed Maintenance Activities section provides the information needed to perform the High Frequency Service Item (HFSI) actions.

Cleaning Procedures

The Cleaning Procedures section lists what needs to be cleaned at each service call.

Final Actions

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

Initial Actions

Purpose

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

Procedure

- 1. Gather the information about the service call and the condition of the copier/printer.
 - Question the operator(s). Ask about the location of most recent paper jams. Ask about the image quality and the copier/printer performance in general, including any unusual sounds or other indications.
 - b. After informing the customer, disconnect the machine from the customer's network.
 - c. Check that the power cords are in good condition, correctly plugged in the power source, and free from any defects that would be a safety hazard. Repair or replace the power cords as required. Check that the circuit breakers are not tripped.
 - d. Inspect any rejected copies. Inquire as to, or otherwise determine, the paper quality and weight, the specified paper for optimum Image Quality, as indicated in the user manual. Look for any damage to the copies, oil marks, image quality defects, or other indications of a problem.
 - e. Print the Configuration Report (GP 10).
 - Record the billing meter readings.

NOTE: If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to diagnostics and continue with the procedure that you were performing. If the fault code is N9 124-374, upgrade the software (GP 15).

- g. Obtain the HFSI Item Counters information (GP 16). Classify this information into categories:
 - Information that is related to the reason for the service call.
 - Information that is related to secondary problems.
 - Information that does not require action, such as a single occurrence of a problem.
- h. Check the Service Log for any recent activities that are related to the reason for the service call, or any secondary problem.
- Perform any required HFSI activities identified above. Refer to the Detailed Maintenance Activities section.
- 3. Exit diagnostics by switching the power off, then switching the power on. Try to duplicate the problem by running the same jobs that the customer was running.
- 4. Check the Image Quality. Select the tray that is loaded with 11 x 17 or A3 paper, if unable to complete tray selection, go to Call Flow.
- 5. Go to Call Flow.

Call Flow

This procedure should be performed at every service call.

Initial Actions

Observe the overall machine status. If the machine does not power up, go to the Power On RAP in section 2. Make note of any fault codes displayed

- Print out the Configuration Report (GP 10).
- Record the billing meter readings using GP 13.
- Obtain the HFSI Item Counters Information (GP 16).
- Check Fault Code History (GP 3).

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

Procedure

Ask the operator about the problem.

- If the problem is identified by a fault code (including Paper/Document Jams), refer to Section 2 for the procedure and then proceed with servicing.
- If the problem is noise or smell, make test prints using GP 9 to isolate the problem to the IOT or the IIT/DADF, find the cause of the problem and proceed with servicing.

The operator operated the machine correctly.

ΥI

Explain to the operator how to operate the machine correctly.

The UI display is normal.

Y N

Refer to BSD 2.1.

The problem occurs only in Print or Scanner mode.

ΥI

There is an image quality problem.

Y N

If there is an alignment problem, obtain separate Platen and DADF output samples, refer to Section 4 Adjustments and then proceed with servicing.

Refer to Section 3 IQ1 IOT Image Quality Entry RAP and then proceed with servicing.

There is a problem with the network.

Y N

There is a problem with the USB connection.

YN

There is an image quality problem.

' N

The problem lies in a certain Client PC.

/ 1

There is a problem with a certain application or programming language. Obtain the latest information on restrictions and technical information. Proceed accordingly.

Service Call Procedures

December, 2011

Call Flow

December, 2011

1-4

WorkCentre 5020/DN

В

Check the settings of that particular Client PC and if necessary ask the user to reinstall the printer driver.

Refer to IQ1 IOT Image Quality Entry RAP and then proceed with servicing. If the problem persists, ask the user to reinstall the printer driver.

Check the machine settings and if necessary ask the user to reinstall the printer driver.

If the problem continues, replace the network cable. If the problem persists, replace the USB cable. Check the machine settings and discuss the problem with the customer's network administrator.

Table 1 Other Faults

Problem	Corrective Action
Duplexing is not available as a selection on the display.	Ensure the Duplex electrical connector is secure (PL 7.3) (BSD 10.2)
DADF inoperative after PWB replacement.	Initialize NVM (GP 7) Reload Firmware (GP 15)
Can not make copies when Auditron is enabled.	Initialize NVM (GP 7) Reload Firmware (GP 15)
Loud snapping noise is heard.	Make a test print using GP 9. If noise is present there is binding in toner drive system. Repair as required (BSD 9.1)

HFSI

Reissue

Procedure

- 1. Check and record the total copy count (GP 13) and HFSI counter values (GP 16).
- Use the customer's output volume numbers to help determine which HFSI components should be serviced. Consider components near threshold as candidates for service.
- Refer to Cleaning Procedures for detailed cleaning instructions.

Table 1

No	Parts/Consumables Name/PL No.	Replacement Interval	Comments
1	Tray 1 Feed Roll/ Retard Pad	50,000	Count up 1 for every feed. Replace both Feed Roll (PL 2.3) and Retard Pad (PL 2.4) at the same time.
2	Tray 2 Feed Roll/ Retard Roll	100,000	Count up 1 for every feed. Replace both Tray 2 Feed Roll (PL 11.4) and Tray 2 Retard Roll (PL 11.4) at the same time.
3	Bypass Tray Feed Roll/ Retard Pad	50,000	Count up 1 for every feed. Replace both Feed Roll (PL 7.5) and Retard Pad Assembly (PL 7.6) at the same time.
4	Fuser Unit	100,000	Count up 1 for every feed. Use total copy count value.
5	Toner Bottle	6,000	Toner Bottle is a CRU (PL 4.1). Refill at 6000 copies. Warning with approximately 100 copies of toner remaining. Use total copy count value.
6	Drum Cartridge	22,000	Drum Cartridge is a CRU (PL 4.1). 16,000 (Warning) 22,000 (Machine Hard Stop) Use total copy count value.

Cleaning Procedures

Purpose

To provide cleaning procedures to be performed at every service call.

Procedure

CAUTION

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

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

1. Feed Components (Rolls and Pads)

Follow the General Cleaning procedure above.

2. Toner Dispense Units

Vacuum the Toner Dispense units.

3. Jam Sensors

Clean the sensors with a dry cotton swab.

4. Scanner

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

5. DADF

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

6. Document Glass and Constant Velocity Transport Glass

Follow the General Cleaning procedure above.

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

Final Actions

Purpose

To provide a guide for procedures to be done at the end of every service call.

Procedure

- 1. Ensure that the exterior of the copier/printer and the adjacent area are clean. Use a dry cloth or a cloth moistened with water to clean the copier/printer. Do not use solvents.
- 2. Check the supply of consumables. Ensure that an adequate supply of consumables is available according to local operating procedures.
- Complete the Service Log.
- Perform the following steps to make a copy of the Demonstration Original for the cus
 - a. Load Tray 1 with 8.5 x 11 inch (A4) or 11 x 17 inch paper.
 - Place the Test Pattern on the glass with the short edge of the test pattern registered to the left edge of the glass. Select Tray 1 and make a single copy.
 - c. Print out the machine settings Configuration Report (GP 16). Store this report with the service log in the Inner Cover.
 - d. Ask the customer to verify the Print function.
 - e. Present the copies to the customer.
- Issue copy credits as needed.
- Discuss the service call with the customer to ensure that the customer understands what has been done and is satisfied with the results of the service call.

2 Status Indicator RAPS

Power On RAP	2-3	J7 (091-915) Drum CRUM Market Identity Mismatch	2-38
A1 (005-170) DADF Feed Fault	2-3	J7 (091-916) Drum CRUM ID Incorrect - R1	2-39
A1 (005-171) DADF Registration / Exit Fault	2-4	L9 (016-756) Auditron Service Prohibited	2-39
A1 (005-172) DADF Inverted Document Jam	2-5	L9 (016-757) Invalid Auditron User	2-40
A1 (005-920) Static Jam		L9 (016-759) Auditron Counter at Limit	2-40
A2 (005-198) Short Scan Jam	2-7	N0 (002-970) Waiting For Confirmation to Resume	2-41
A2 (005-199) Long Scan Jam	2-8	N1 (003-972) Maximum Stored Page Overflow	
A5 (005-305) Feeder Top Cover Open	2-10	N2 (003-942) Size of Documents Not Detected	2-42
A5 (062-300) Platen Open Fault	2-10	N3 (027-452) The Specified IP Address Already Exists	2-43
C0 (024-965) ATS/APS No Paper		N4 (016-500) Firmware Download Fault	
C0 (024-966) ATS/APS No Tray With Correct Paper		N4 (016-741) Firmware Download Fault	
C1 (071-100) Tray 1 Feed Sensor Jam		N4 (016-742) Firmware Download Fault	2-44
C2 (072-100) Tray 2 Feed Sensor Jam		N4 (016-743) Firmware Download Fault	
C3 (002-910) Bypass Tray Paper Misfeed	2-15	N4 (016-744) Firmware Download Fault	2-45
C3 (075-910) Bypass Tray Paper Misfeed		N4 (016-745) Firmware Download Fault	2-46
C5 (024-950) No Paper in Tray 1		N4 (062-500) Firmware Download Fault	
C5 (024-959) Tray 1 Paper Does Not Match Job	2-17	N4 (116-220) Firmware Download Fault	
C6 (024-951) Tray 2 No Paper		N5 (016-712) Scan Area Fault	
C6 (024-960) Tray 2 Paper Does Not Match Job	2-18	N5 (016-776) Print Job Image Conversion Fault	
C7 (024-958) Bypass Tray Paper Does Not Match Job		N5 (016-779) Scanned Image Conversion Fault	
C8 (003-963) ATS/APS No Tray With Correct Paper		N5 (016-788) Scan Job to PC Fault	
C8 (003-965) ATS/APS No Paper		N6 (003-760) Document Scan Settings Fault	2-49
C8 (003-966) ATS/APS No Tray With Correct Paper		N6 (016-701) Out of Memory	
E1 (075-135) Bypass Tray to IOT Registration Sensor Fault		N6 (016-702) Page Buffer Memory Full	
E1 (077-103) Fuser Exit Sensor Off Jam		N6 (016-704) Mailbox is Full	2-51
E1 (077-106) Fuser Exit Sensor Does Not Turn On		N6 (016-709) Print Job Fault	
E1 (077-130) Fuser Exit Sensor On Fault in Duplex Mode		N6 (016-718) Out of Memory	
E1 (077-900) IOT Registration Sensor On During Standby		N6 (016-719) Out of Memory	
E1 (077-901) Fuser Exit Sensor is On During Standby		N6 (016-720) Print Job Fault	
E2 (071-101) IOT Registration Sensor Fault Feeding From Tray 1		N6 (016-721) Print Job Fault	
E2 (077-903) Tray 1 Feed Sensor is On During Standby		N6 (016-761) Print Job Fault	
E3 (072-101) Tray 1 Feed Sensor Fault Feeding from Tray 2		N6 (116-720) Out of Memory	2-54
E3 (077-904) Tray 2 Feed Sensor On During Standby		N7 (016-726) Print Job Fault	
E4 (072-105) IOT Registration Sensor Fault Feeding from Tray 2		N7 (016-749) Print Job Fault	
E5 (077-300) Front Cover Interlock Switch Fault		N7 (016-762) Print Job Fault	
E5 (077-301) Left Hand Cover Interlock Switch Fault		N7 (016-799) Print Job Fault	
E6 (077-305) Access Cover 1 Interlock Switch Fault	2-32	N7 (024-747) Print Job Fault	2-57
E6 (077-309) Access Cover 2 Interlock Switch Fault	2-32	N7 (116-701) Out of Memory	
E8 (003-500) N-up AMS Limit Fault		N9 (003-318) IIT Firmware Fault	
E8 (003-501) N-up Paper Direction Mismatch		N9 (003-319) Video Driver Detect Fault	
E8 (003-502) Paper Direction Mismatch		N9 (003-338) Controller to IIT Communication Fault	
E9 (003-795) AMS Limit Fault		N9 (003-339) Controller to IIT Communication Fault	
H9 (010-325) SLCC PWB to Tray 2 PWB Communication Fault		N9 (003-340) Controller to IIT Communication Fault	
J1 (093-912) Toner Empty Fault		N9 (003-341) Controller to IIT Communication Fault	
J3 (091-912) No Drum Cartridge Fault		N9 (003-342) Controller to IIT Communication Fault	
J6 (091-401) Drum Cartridge Near End of Life		N9 (003-343) Controller to IIT Communication Fault	
J6 (091-913) Drum Cartridge End of Life		N9 (016-311) Scanner is Not Detected	
J7 (091-914) SLCC PWB to Drum Cartridge Communication Fault		N9 (016-315) IIT Interface Fault	
· ,	_	,	-

Reissue

N9 (016-317) Scanner Page Memory Fault	2-63	N9 (116-376) Firmware Fault	2-89
N9 (016-318) Scanner Page Memory Fault	2-63	N9 (116-377) Firmware Fault	2-89
N9 (016-336) Controller ROM Fault	2-64	N9 (116-380) Firmware Fault	2-90
N9 (016-338) Controller ROM Fault	2-64	N9 (116-385) Firmware Fault	2-90
N9 (016-347) Controller ROM Fault	2-65	N9 (116-390) NVM and Firmware Version Mismatch	2-91
N9 (016-348) Controller ROM Fault	2-65	N9 (116-391) NVM Data Fault	2-91
N9 (016-350) Controller ROM Fault		N9 (116-395) USB Interface Fault	2-92
N9 (016-351) Controller ROM Fault		N9 (116-399) System Does Not Startup Correctly	
N9 (016-362) Controller to UI Communication Fault		N9 (124-329) Serial Number Mismatch	
N9 (016-364) USB Interface Fault		N9 (124-339) Incorrect ROM installed	
N9 (016-365) USB Interface Fault		N9 (124-372) Controller Firmware Fault	
N9 (024-362) SLCC PWB Video Output to IOT Fault		N9 (124-373) Firmware Fault	
N9 (024-363) SLCC PWB Video Output to IOT Fault		N9 (124-374) Firmware Fault	
N9 (024-364) Controller Firmware Fault		N9 (127-353) Firmware Fault	
N9 (024-367) Controller Firmware Fault		N9 (127-399) Firmware Fault	
N9 (024-368) Controller Firmware Fault		U0 (077-329) IOT Motor Stop Fault	
N9 (024-370) Controller Firmware Fault	_	U1 (042-325) IOT Motor Rotation Fault	
N9 (024-371) SLCC PWB Internal Communication Fault		U2 (062-345) IIT EEPROM Fault	
N9 (024-372) SLCC PWB Internal Communication Fault		U2 (062-360) Carriage Position Fault	
N9 (024-373) SLCC PWB Internal Communication Fault		U2 (062-300) Carriage Position Pault	
N9 (024-375) SLCC PWB Internal Communication Fault		U2 (062-380) AGC Fault	
N9 (102-356) EWS Firmware Fault		U2 (062-386) AGC Fault	
,	_	,	
N9 (116-314) Ethernet Address Fault		U2 (062-392) IIT PWB Memory Fault	
N9 (116-315) RAM W/R Check Fail			
N9 (116-317) ROM W/R Check Fail		U3 (061-321) Laser Power or ROS Motor Fault	
N9 (116-319) Mismatch Between Controller Firmware and UI Configuration	2-75	U4 (010-313) FS1 Thermistor Defect	
N9 (116-321) System Firmware Fault		U4 (010-320) Overheat Temp Fault	
N9 (116-322) System Firmware Fault		U4 (010-327) Standby Heat Roll Fuser On Time Fault	
N9 (116-323) NVM Fault		U4 (010-398) NOHAD Fan Fault	
N9 (116-324) System Firmware Fault		U6 (041-340) RAM Read/Write Check Fault	
N9 (116-325) System Firmware Fault		U6 (041-362) NVM Read/Write Cannot be Executed	
N9 (116-331) NVM Fault		U6 (041-363) NVM Data Defect	
N9 (116-334) NVM Fault		U6 (041-364) CPU Cannot Access NVM	
N9 (116-337) SNTP Firmware Fault		U7 (102-380) Controller or UI Firmware Fault	
N9 (116-340) Out of Memory at Startup		U8 (041-313) Billing Counter Defect	
N9 (116-341) ROM Version Mismatch		U9 (042-398) HVPS Fault	2-108
N9 (116-346) Firmware Fault			
N9 (116-348) Firmware Fault			
N9 (116-349) Firmware Fault			
N9 (116-355) Firmware Fault			
N9 (116-356) Firmware Fault			
N9 (116-359) Firmware Fault			
N9 (116-361) Firmware Fault	_		
N9 (116-364) Firmware Fault			
N9 (116-365) Firmware Fault	2-85		
N9 (116-366) Firmware Fault	2-85		
N9 (116-368) Firmware Fault	2-86		
N9 (116-370) Firmware Fault	2-86		
N9 (116-371) Firmware Fault	2-87		
N9 (116-372) Firmware Fault	2-87		
N9 (116-374) Firmware Fault	2-88		
N9 (116-375) Firmware Fault	2-88		

Power On RAP

BSD-ON:BSD 1.1 Main Power Generation

This procedure is used to determine the reason that the machine will not power up after the Power Switch is switched on. Indications include a blank UI and no machine power up sounds (i.e. motors, relays, solenoids, beeps, etc.).

Initial Actions

- Ensure that the Customer's circuit breaker is not tripped and that AC power is available at the power outlet that the machine will be using.
- Ensure that the power cord is seated correctly and is not damaged.
- If the machine GFI Circuit Breaker is tripped, try to reset it. If it trips again, switch the
 power off and unplug the power cord. Refer to the AC Power (HOT) Wirenet and the AC
 Neutral Wirenet and check for a short circuit in the AC circuits.

Procedure

Switch the power on. There is ACH between FS32 and FS34 on the Power Switch.

(|

Perform the following in order:

- Switch the power off and disconnect the Power Cord (PL 8.1) from the customer power plug.
- 2. Switch the Power Switch (PL 8.1) to the on position.
- 3. Check for continuity between FS 32 and the appropriate pin on the connector that plugs into the customer power plug.
- 4. Check for continuity between FS 34 and the appropriate pin on the connector that plugs into the customer power plug.
- 5. Repair or replace the necessary components.

Check the following:

- Check that there is +3.3 VDC between P/J 407-A14 (-) and P/J 407-A16 (+)
- Check that there is +5.0 VDC between P/J 407-A12 (-) and P/J 407-A11 (+)
- Check that there is +24.0 VDC between P/J 407-A9 (-) and P/J 407-A7 (+)

All three voltages are correct.

Υ

Replace the LVPS (PL 8.1).

Replace the following in order:

- 1. SLCC PWB (PL 8.1).
- 2. UI PWB (PL 8.4).
- 3. LVPS (PL 8.1).

A1 (005-170) DADF Feed Fault

BSD-ON: BSD 5.6 Document Setting and Transport

BSD-ON: BSD 5.7 Document Feed and Transport Mechanism

BSD-ON: BSD 5.9 Document Path

The control logic has detected the failure of paper to reach the Document Feed Sensor after the Feed Clutch has been energized.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the document path.
- · Clean the Feed Roll.

Procedure

Check that a document is feeding into the document handler. A document feeds into the document handler.

N

Check the operation of the Document Drive Motor using GP 5 (005-001) **The Document Drive Motor operates.**

Y

Check the drive gears for debris or damage and check that the gears rotate freely.

NOTE: The gears will only move the amount allowed by the backlash of the gears, but within that range they should move freely.

The drive gears are undamaged, clean and rotate freely.

Y I

Clean or replace the gears and shafts as required (PL 10.5).

Check the following items:

- Check the connectors CN1, CN2 and P/J 414 for proper connection.
- Check the circuits between CN1 and P/J 414 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Y N

Repair the connector or circuit as required.

- 1. Initialize NVM using GP 7.
- 2. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Document Drive Motor (PL 13.5).
- 4. Replace the DADF PWB (PL 13.3).

. Replace the SLCC PWB (PL 8.1).

Check the Feed Roll to ensure that it rotates freely in the document feed direction only. The Feed Roll and associated components are working correctly.

Y N

Replace the Pick Up Roll, Feed Roll and associated components as required (PL 13.9).

Check the following items:

- Check the connectors P/J 801, CN3, CN1 and P/J 414 for proper connection.
- Check the circuits between P801 and CN3 and between CN1 and P/J 414 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Y N

Repair the connector or circuit as required.

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Document Feed Clutch (PL 13.9).
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Check the following items:

- Check the connectors CN6, CN7 and P/J 415 for proper connection.
- Check the circuits between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

ΥI

Repair the connector or circuit as required.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Document Feed Sensor (PL 13.7).
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

A1 (005-171) DADF Registration / Exit Fault

BSD-ON: BSD 5.8 Document Inversion

BSD-ON: BSD 5.9 Document Path

The control logic has detected the failure of paper to reach the Document Registration Sensor after the Registration Clutch has been energized or a failure of paper to reach the Exit/Invert Sensor after the Registration Clutch has been energized.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the document path up to the nip of the Lead Out Roll.
- Clean the Registration Roll, the Lead In Roll and the Lead Out Roll.

Procedure

Check that a document is feeding into the document handler a minimum of 1 inch (2.6 cm) past the nip of the Lead Out Roll. A document feeds into the document handler a minimum of 1 inch (2.6 cm) past the nip of the Lead Out Roll.

Y N

Perform the following checks:

- Check the lower drive gears for debris or damage.
- Check that the Registration Roll rotates freely.
- Check that the lower drive gears, the Lead In Roll and the Lead Out Roll rotate freely.

NOTE: The gears and rolls will only move the amount allowed by the backlash of the gears, but within that range they should move freely.

The drive gears are undamaged, clean and the gears and rolls rotate freely.

1

Clean or replace the gears and shafts as required (PL 10.5 and PL 10.7).

Check the operation of the Registration Clutch using GP 5 (005-063). **The clutch is operating correctly.**

Y N

Check the following items:

- Check the connectors P/J 804 CN3, CN6 and P/J 415 for proper connection.
- Check the circuits between J 804 and CN3 and between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

v 1

Repair the connector or circuit as required.

Perform the following in order:

1. Initialize NVM using GP 7.

- 6

Status Indicator RAPS A1 (005-170), A1 (005-171)

Reissue

- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Registration Clutch (PL 13.7).
- 4. Replace the DADF PWB (PL 13.3).
- 5. Replace the SLCC PWB (PL 8.1).

Check the Document Registration Sensor using GP 5 (005-063). **The Document Registration Sensor is operating correctly.**

Y N

Check the following items:

- Check the connectors CN5, CN6 and P/J 414 for proper connection.
- Check the circuits between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Y N

Repair the connector or circuit as required.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Document Registration Sensor (PL 13.9).
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Check that actuator of the Exit/Invert Sensor is undamaged and that it moves freely though the entire range of motion. The actuator is undamaged and moves freely through the range of motion.

Y N

Repair the actuator or replace the Exit /Invert Sensor (PL 13.7).

Check the following items:

- Check the connectors CN6, CN7 and P/J 415 for proper connection.
- Check the circuits between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Y I

Repair the connector or circuit as required.

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Exit/Invert Sensor (PL 13.7).
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

A1 (005-172) DADF Inverted Document Jam

BSD-ON: BSD 5.8 Document Inversion

BSD-ON: BSD 5.9 Document Path

When inverting documents, the control logic detected the failure of a document at the Document Registration Sensor after reversing the document travel by actuating the Exit/Invert Solenoid or document failure at the Exit/Invert Sensor after the Document Registration Sensor is actuated by a document.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the document path.
- Clean the Registration Roll, the Lead In Roll and the Lead Out Roll.

Procedure

Check that the fault is occurring when the document feed is set for 2-sided document scanning. The fault is occurring when the document feed is set for 2-sided document scanning.

Y N

Perform the following checks:

- Check the lower drive gears for debris or damage.
- Check that the Registration Roll rotates freely.
- Check that the lower drive gears, the Lead In Roll and the Lead Out Roll rotate freely.

NOTE: The gears and rolls will only move the amount allowed by the backlash of the gears, but within that range they should move freely.

The drive gears are undamaged, clean and the gears and rolls rotate freely.

_ N

Clean or replace the gears and shafts as required (PL 10.5 and PL 10.7).

Check the operation of the Exit/Invert Solenoid using GP 5 (005-065). **The Exit/Invert Solenoid is operating correctly.**

ΥI

Check that the Exit/Invert Solenoid mechanism is moving freely and releasing completely **The Exit/Invert Solenoid mechanism is releasing completely.**

Repair the mechanism or replace the Exit/Invert Solenoid (PL 13.7) as required.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.

December, 2011 Status Indicator RAPS 2-5 A1 (005-171), A1 (005-172)

Reissue

- B. Replace the Exit/Invert Solenoid (PL 13.7)
- Replace the DADF PWB (PL 13.3).
- 5. Replace the SLCC PWB (PL 8.1).

Check the Document Registration Sensor using GP 5 (005-063). **The Document Registration Sensor is operating correctly.**

N

Check the following items:

- Check the connectors CN5, CN6 and P/J 414 for proper connection.
- Check the circuits between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Y N

Repair the connector or circuit as required.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- 2. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Document Registration Sensor (PL 13.9).
- 4. Replace the DADF PWB (PL 13.3).
- 5. Replace the SLCC PWB (PL 8.1).

Check that actuator of the Exit/Invert Sensor is undamaged and that it moves freely though the entire range of motion. The actuator is undamaged and moves freely through the range of motion.

Y N

Repair the actuator or replace the Exit /Invert Sensor (PL 13.7).

Check the following items:

- Check the connectors CN6, CN7 and P/J 415 for proper connection.
- Check the circuits between CN6 and P/J 415 for an open or a short circuit.

The connectors are properly connected and no problems are found with the circuits.

Υ

Repair the connector or circuit as required.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Exit/Invert Sensor (PL 13.7).
- Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

A1 (005-920) Static Jam

BSD-ON: BSD 5.6 Document Setting and Transport

BSD-ON: BSD 5.8 Document Inversion

BSD-ON: BSD 5.9 Document Path

The control logic has detected that one or more of the three sensors in the document feed path is on at power on.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the complete document feed path.

Procedure

Check the actuators of the following sensors to ensure that they are operating freely:

- Document Feed Sensor (PL 13.7)
- Document Registration Sensor (PL 13.9)
- Exit/Invert Sensor (PL 13.7)

The actuators are operating correctly.

Υ

Repair or replace the sensor(s) as required.

Check the operation of the following sensors using GP 5:

- Document Feed Sensor (005-204)
- Document Registration Sensor (005-206)
- Exit/Invert Sensor (005-205)

The three sensors are operating correctly.

' N

More than one sensor is operating incorrectly.

' N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the appropriate sensor.
- 5. Replace the DADF PWB (PL 13.3).
- 6. Replace the SLCC PWB (PL 8.1).

Status Indicator RAPS A1 (005-172), A1 (005-920)

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the appropriate sensor.
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the senor and the DADF PWB and between the DADF PWB and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the three sensors one by one.
- Replace the DADF PWB (PL 13.3).
- 6. Replace the SLCC PWB (PL 8.1).

A2 (005-198) Short Scan Jam

BSD-ON: BSD 5.6 Document Setting and Transport

BSD-ON: BSD 5.8 Document Inversion

BSD-ON: BSD 5.9 Document Path

The control logic has found that the length of scan is less than 80 mm (3.1 inches).

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the complete document feed path.

Procedure

Check the actuators of the following sensors to ensure that they are operating freely:

- Document Feed Sensor (PL 13.7)
- Document Registration Sensor (PL 13.9)
- Exit/Invert Sensor (PL 13.7)

The actuators are operating correctly.

Y N

Repair or replace the sensor(s) as required.

Check the operation of the following sensors using GP 5:

- Document Feed Sensor (005-204)
- Document Registration Sensor (005-206)
- Exit/Invert Sensor (005-205)

The three sensors are operating correctly.

Y

More than one sensor is operating incorrectly.

.

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the appropriate sensor.
- 5. Replace the DADF PWB (PL 13.3).
- 6. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

1. Initialize NVM using GP 7.

- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the three sensors one by one.
- Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

A2 (005-199) Long Scan Jam

BSD-ON: BSD 5.6 Document Setting and Transport

BSD-ON: BSD 5.7 Document Feed and Transport Mechanism

BSD-ON: BSD 5.8 Document Inversion

BSD-ON: BSD 5.9 Document Path

The control logic has found that the length of scan is more than 672 mm (26.45 inches) in simplex mode or 480 mm (18.9 inches) in duplex mode.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the complete document feed path.
- Clean all rolls in the document path.
- Check that the drive gears are clean and undamaged.
- Check that all gears and rolls rotate freely.

NOTE: The gears and rolls will only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Document Drive Motor (PL 13.5) (005-001)
- Document Feed Clutch (PL 13.9) (005-062)
- Document Registration Clutch (PL 13.7) (005-063)
- Exit/Invert Clutch (PL 13.9) (005-064)
- Exit/Invert Solenoid (PL 13.7) (005-065)

The components are all operating correctly.

More than one component is operating incorrectly.

Perform the following in order when only one component is operating incorrectly:

- 1. Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the appropriate component.
- Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Status Indicator RAPS A2 (005-198), A2 (005-199)

Δ

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3).
- 4. Replace the SLCC PWB (PL 8.1).

Check the actuators of the following sensors to ensure that they are operating freely:

- Document Feed Sensor (PL 13.7)
- Document Registration Sensor (PL 13.9)
- Exit/Invert Sensor (PL 13.7)

The actuators are operating correctly.

Y I

Repair or replace the sensor(s) as required.

Check the operation of the following sensors using GP 5:

- Document Feed Sensor (005-204)
- Document Registration Sensor (005-206)
- Exit/Invert Sensor (005-205)

The three sensors are operating correctly.

/ N

More than one sensor is operating incorrectly.

N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the appropriate sensor.
- 5. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the appropriate sensor.
- 4. Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

- Using the appropriate BSD, check the connectors and the wiring between the sensor or component and the DADF PWB and between the DADF PWB and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.

- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the three sensors one by one.
- 5. Replace the DADF PWB (PL 13.3).
- 6. Replace the SLCC PWB (PL 8.1).

A5 (005-305) Feeder Top Cover Open

BSD-ON: BSD 5.6 Document Setting and Transport

The control logic has detected that the Feeder Top Cover is open.

Initial Actions

Perform the following:

- Check the Feeder Top Cover Switch and the actuator for damage.
- Ensure that the Feeder Top Cover Switch actuator moves freely
- Ensure that the Feeder Top Cover closes and latches correctly. If problems are found adjust or repair the Feeder Top Cover latch (REP 13.4.1).
- Switch the power off and switch the power on.

Procedure

The A5 5-305 fault code is displayed.

ΥI

Perform the following in order:

- Check the connectors and the wiring between the Feeder Top Cover Switch and the DADF PWB and between the DADF PWB and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - Replace the Feeder Top Cover Switch. (PL 13.9)
 - b. Replace the DADF PWB (PL 13.3).
 - c. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the Feeder Top Cover Switch and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Feeder Top Cover Switch. (PL 13.9)
- Replace the DADF PWB (PL 13.3).
- Replace the SLCC PWB (PL 8.1).

A5 (062-300) Platen Open Fault

BSD-ON: BSD 6.1 Image Input

The control logic has detected that the Platen Open Switch is open.

Initial Actions

Perform the following:

- Check that there is no metal stuck to the Platen Open Switch magnet located under the DADF at the front left corner.
- Check that there is no debris or obstruction on the top of the machine or under the DADF that is preventing the DADF from closing completely.
- Check that the DADF Counter Balances have not been misaligned (ADJ 13.1.1).
- Switch the power off and switch the power on.

Procedure

The A5 62-300 fault code is displayed.

′ N

Perform the following in order:

- Check the connectors and the wiring between the Platen Open Switch and the UI PWB and between the UI PWB and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - a. Replace the Platen Open Switch. (PL 10.5)
 - b. Replace the UI PWB (PL 8.4).
 - c. Replace the SLCC PWB (PL 8.1).

- Check the connectors and the wiring between the Platen Open Switch and the UI PWB and between the UI PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Platen Open Switch. (PL 10.5)
- 5. Replace the UI PWB (PL 8.4).
- Replace the SLCC PWB (PL 8.1).

C0 (024-965) ATS/APS No Paper

BSD-ON: BSD 5.5 Document Size Sensing

BSD-ON: BSD 5.9 Document Path

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

When a print job is sent or when a copy job is done with Automatic Tray Switching and/or Automatic Paper Selection enabled, the selected tray is out of paper.

Initial Actions

Perform the following:

- Switch the power off and switch the power on
- For print jobs, check the job parameters
- For jobs with the documents scanned using the DADF, verify that the paper guides in the DADF are set correctly
- Verify that one or both of the trays is programmed with the correct paper size and orientation for the job
- Verify that both of the trays are loaded with paper of a size and orientation that matches the programming
- For print jobs, send the job from a different computer

Procedure

Trav 2 is installed.

/

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Automatic Tray Selection and or Automatic Paper Selection is enabled.

/ N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Tray 2 is loaded with paper of the correct size and orientation.

Y N

Use GP 5 to check the operation of the Tray 1 No Paper Sensor. The actuator of the Tray 1 No Paper Sensor moves freely and the Tray 1 No Paper Sensor is operating correctly.

- 1

Check the circuits between P/J 501 on the SLCC PWB and P/J 157 at the Tray 1 No Paper Sensor for an open or a short circuit. **The circuit is good.**

N

Repair the wire harness or connectors.

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Use GP 5 to check the operation of the Tray 2 No Paper Sensor. The actuator of the Tray 2 No Paper Sensor moves freely and the Tray 2 No Paper Sensor is operating correctly.

' N

Check the circuits between P/J 542 on the Tray 2 Module PWB and P/J 158 at the Tray 2 No Paper Sensor for an open or a short circuit. **No problems are found with the circuits.**

ΥI

Repair the wire harness or connectors.

Replace the Tray 2 Module PWB (PL 11.5).

Check the operation of the five document size sensors in the DADF using GP 5. **All five sensors operate correctly.**

1

Only one of the sensors operates incorrectly

Y

Check the circuits between the DAFD PWB and the SLCC PWB for an open or a short circuit. If no problems are found, perform the following in order:

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

Check the circuits between the sensor that does not operate correctly and the DADF PWB for an open or a short circuit. If no problems are found, replace the DADF PWB (PL 13.3).

Perform the following in order:

1. Initialize NVM using GP 7

- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

C0 (024-966) ATS/APS No Tray With Correct Paper

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

When a print job is sent with Automatic Tray Switching and/or Automatic Paper Selection enabled, neither of the trays have the correct paper.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check the job parameters.
- Verify that one or both of the trays is programmed with the correct paper size and orientation for the job
- Verify that both of the trays are loaded with paper of a size and orientation that matches the programming
- Send the job from a different computer.
- Send a different job from a different computer.

Procedure

Tray 2 is installed.

Y N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- B. Replace the SLCC PWB (PL 8.1)

Automatic Tray Selection and or Automatic Paper Selection is enabled.

′ N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- B. Replace the SLCC PWB (PL 8.1)

Tray 2 is loaded with paper of the correct size and orientation.

Y N

Use GP 5 to check the operation of the Tray 1 No Paper Sensor. The actuator of the Tray 1 No Paper Sensor moves freely and the Tray 1 No Paper Sensor is operating correctly.

' N

Check the circuits between P/J 501 on the SLCC PWB and P/J 157 at the Tray 1 No Paper Sensor for an open or a short circuit. **The circuit is good.**

1

Repair the wire harness or connectors.

Status Indicator RAPS C0 (024-965), C0 (024-966)

December, 2011 2-12

В C

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Use GP 5 to check the operation of the Tray 2 No Paper Sensor. The actuator of the Tray 2 No Paper Sensor moves freely and the Tray 2 No Paper Sensor is operating correctly.

Y N

Check the circuits between P/J 542 on the Tray 2 Module PWB and P/J 158 at the Tray 2 No Paper Sensor for an open or a short circuit. No problems are found with the circuits.

Υ

Repair the wire harness or connectors.

Replace the Tray 2 Module PWB (PL 11.5).

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

C1 (071-100) Tray 1 Feed Sensor Jam

BSD-ON: BSD 8.1 Tray 1 Paper Feeding

Time-out between Tray 1 Feed Clutch on and Tray 1 Feed Sensor on.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check that the Feed Roll or Retard Pad is not dirty, contaminated with paper dust, worn, or faulty
- Check that the Tray 1 Feed Sensor is not dirty and that the actuator is not deformed or damaged
- Check that paper is undamaged, within specification, and loaded correctly.
- Check for debris or obstructions in the paper path
- Check that the drive gears are not worn or damaged

Procedure

Press the Start button to start a copy job. The job completes with no problems.

Paper jams and the C1 71-100 fault code is displayed.

Go to the RAP for the fault code being displayed and troubleshoot the problem,

Check the operation of the Tray 1 Feed Sensor using GP 5 (608-107). The Tray 1 Feed Sensor operates correctly.

Υ Ν

Perform the following in order:

- 1. Check the connectors and the wiring between the Tray 1 Feed Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 1 Feed Sensor (PL 2.5).
- Replace the SLCC PWB (PL 8.1).

Check the operation of the Tray 1 Feed Clutch using GP 5 (608-212). The Tray 1 Feed Clutch operates correctly.

Ν Υ

Perform the following in order:

- 1. Check the connectors and the wiring between the Tray 1 Feed Clutch and the SLCC PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 1 Feed Clutch (PL 2.2).
- Replace the SLCC PWB (PL 8.1).

Status Indicator RAPS Reissue December, 2011 C0 (024-966), C1 (071-100) WorkCentre 5020/DN 2-13

В

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 1 Feed Sensor (PL 2.5).
- 4. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the Platen Open Switch and the UI PWB and between the UI PWB and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs frequently, perform the following in order:
 - Replace the Tray 1 Feed Sensor (PL 2.5).
 - Replace the Tray 1 Feed Clutch (PL 2.2).
 - c. Replace the SLCC PWB (PL 8.1).

C2 (072-100) Tray 2 Feed Sensor Jam

BSD-ON: BSD 8.2 Tray 2 Paper Feeding

Time-out between Tray 2 Feed Motor on and Tray 2 Feed Sensor on.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check that the Feed Roll or Retard Pad is not dirty, contaminated with paper dust, worn, or faulty
- Check that the Tray 2 Feed Sensor is not dirty and that the actuator is not deformed or damaged
- Check that paper is undamaged, within specification, and loaded correctly.
- Check for debris or obstructions in the paper path
- · Check that the drive gears are not worn or damaged
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Press the Start button to start a copy job. The job completes with no problems.

1

Paper jams and the C1 72-100 fault code is displayed.

· .

Go to the RAP for the fault code being displayed and troubleshoot the problem,

Check the operation of the Tray 2 Feed Sensor using GP 5 (608-106). **The Tray 2 Feed Sensor operates correctly.**

Y N

Perform the following in order:

- Check the connectors and the wiring between the Tray 2 Feed Sensor and the Tray 2 PWB, and between the Tray 2 PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 2 Feed Sensor (PL 11.5).
- 5. Replace the Tray 2 PWB (PL 11.5).
- Replace the SLCC PWB (PL 8.1).

Check the operation of the Tray 2 Feed Clutch using GP 5 (608-211). **The Tray 2 Feed Clutch operates correctly.**

Y N

Perform the following in order:

 Check the connectors and the wiring between the Tray 2 Feed Clutch and the Tray 2 PWB, and between the Tray 2 PWB and the SLCC PWB for a poor connection, an open or a short circuit.

Status Indicator RAPS C1 (071-100), C2 (072-100)

Reissue

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 2 Feed Clutch (PL 11.6).
- 5. Replace the SLCC PWB (PL 8.1).

Check the operation of the Tray 2 Feed Motor using GP 5 (608-213). **The Tray 2 Feed Motor operates correctly.**

Y N

Perform the following in order:

- Check the connectors and the wiring between the Tray 2 Feed Motor and the Tray 2 PWB, and between the Tray 2 PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 1 Feed Motor (PL 11.6).
- 5. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 2 Feed Sensor (PL 11.5).
- 4. Replace the Tray 2 Feed Clutch (PL 11.6).
- Replace the Tray 2 Feed Motor(PL 11.6).
- 6. Replace the Tray 2 PWB (PL 11.5).
- 7. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the following components and the Tray 2
 PWB for an intermittent poor connection, or an intermittent open or short circuit.
 - The Tray 2 Feed Sensor (PL 11.5).
 - The Tray 2 Feed Clutch (PL 11.6).
 - The Tray 2 Feed Motor(PL 11.6).
- 2. Check the connectors and the wiring between the Tray 2 PWB and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- Initialize NVM using GP 7.
- 4. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 5. If the fault recurs frequently, perform the following in order:
 - a. Replace the Tray 2 Feed Sensor (PL 11.5).
 - Replace the Tray 2 Feed Clutch (PL 11.6).
 - c. Replace the Tray 2 Feed Motor(PL 11.6).
 - d. Replace the Tray 2 PWB (PL 11.5).
 - e. Replace the SLCC PWB (PL 8.1).

C3 (002-910) Bypass Tray Paper Misfeed

BSD-ON: BSD 8.3 Bypass Tray

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

Time-out between Bypass Solenoid on and IOT Registration Sensor on.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Ensure that the machine is set to feed from the Bypass Tray.
- Switch the power off and switch the power on.
- Check for obstructions in the Bypass Tray paper path.
- Clean all rolls in the document path.
- Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Bypass Solenoid (PL 7.5) (608-217)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

/ N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the appropriate component.
- Replace the SLCC PWB (PL 8.1).

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

C3 (075-910) Bypass Tray Paper Misfeed

BSD-ON: BSD 8.3 Bypass Tray

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

Time-out between Bypass Solenoid on and IOT Registration Sensor on.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight document. Refer to the User Guide for size and weight specifications.
- Ensure that the machine is set to feed from the Bypass Tray.
- Switch the power off and switch the power on.
- Check for obstructions in the Bypass Tray paper path.
- Clean all rolls in the document path.
- · Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Bypass Solenoid (PL 7.5) (608-217)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

N N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the appropriate component.
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

C5 (024-950) No Paper in Tray 1

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

- No paper is detected in Tray 1 when ATS function is disabled and Tray 1 is selected during a copy job.
- No paper is detected in Tray 1 when Tray 1 is selected during a print job (the paper size setting matches the one specified for the job).

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check the job parameters.
- Verify that Tray 1 is loaded with paper of a size and orientation that matches the programming.

Procedure

- 1. Check the Tray 1 No Paper Sensor for dirt or damage to the sensor actuator
- 2. Check the operation of the Tray 1 No Paper Sensor using GP 5 (607-107)
- 3. Check that the following wires are connected securely with good electrical contact. If there is no problem, replace the Tray 1 No Paper Sensor (PL 2.7) (REP 2.7.1).
 - Wire between Tray 1 No Paper Sensor J157-3 (P/J157) and LVPS J501-3 (P/J501)
 - Wire between Tray 1 No Paper Sensor J157-2 and LVPS J501-4
 - Wire between Tray 1 No Paper Sensor J157-1 and LVPS J501-5
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 1 No Paper Sensor (PL 2.7).
- 7. Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

C5 (024-959) Tray 1 Paper Does Not Match Job

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 8.1 Tray 1 Paper Feeding

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

- With the ATS function disabled and Tray 1 selected, the paper in Tray 1 does not match
 the document size fed into the DADF during a copy job.
- With the ATS function disabled and Tray 1 selected, the paper in Tray 1 does not match the paper size specified for the print job.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check for obstructions in the Tray 1paper path.
- · Clean all rolls in the paper path.
- Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Tray 1 No Paper Sensor (PL 2.7) (607-107)
- Tray 1 Feed Sensor (PL 2.5) (608-107)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

Y N

Perform the following in order:

- 1. Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the appropriate component.
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

C6 (024-951) Tray 2 No Paper

BSD-ON: BSD 3.1 PWB Communication (Tray 2 PWB)

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

- No paper is detected in Tray 2 when ATS function is disabled and Tray 2 is selected during a copy job.
- No paper is detected in Tray 2 when Tray 2 is selected during a print job (the paper size setting matches the one specified for the job).

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check the job parameters.
- Verify that Tray 2 is loaded with paper of a size and orientation that matches the programming.

Procedure

Check the operation of the Tray 2 No Paper Sensor using GP 5 (607-108): **The Tray 2 No Paper Sensor is operating correctly.**

' N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the Tray 2
 No Paper Sensor and the Tray 2 PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 2 No Paper Sensor (PL 11.7).
- Replace the Tray 2 PWB (PL 11.5).
- 6. Replace the SLCC PWB (PL 8.1).

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Tray 2 PWB (PL 11.5).
- Replace the SLCC PWB (PL 8.1).

C6 (024-960) Tray 2 Paper Does Not Match Job

BSD-ON: BSD 3.1 PWB Communication (Tray 2 PWB)

BSD-ON: BSD 8.2 Tray 2 Paper Feeding

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

- With the ATS function disabled and Tray 2 selected, the paper in Tray2 does not match the document size fed into the DADF during a copy job.
- With the ATS function disabled and Tray 2 selected, the paper in Tray 1does not match the paper size specified for the print job.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check for obstructions in the Tray 2 paper path.
- · Clean all rolls in the paper path.
- Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Tray 2 No Paper Sensor (PL 11.7) (607-108)
- Tray 2 Feed Sensor (PL 11.5) (608-106)
- Tray 2 Feed Motor (PL 11.6) (608-213)
- Tray 2 Feed Clutch (PL 11.6) (608-211)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

ΥI

Perform the following in order:

- 1. Using the appropriate BSD, check the connectors and the wiring between the faulty component and the Tray 2 PWB for a poor connection, an open or a short circuit.
- Using BSD 3.1, check the connectors and the wiring between the Tray 2 PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 3. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 5. Replace the Tray 2 PWB (PL 11.5).
- Replace the SLCC PWB (PL 8.1).

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.

- 3. Replace the Tray 2 PWB (PL 11.5).
- 4. Replace the SLCC PWB (PL 8.1).

C7 (024-958) Bypass Tray Paper Does Not Match Job

BSD-ON: BSD 8.3 Bypass Tray

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

- With the ATS function disabled and the Bypass Tray selected, the paper in the Bypass
 Tray does not match the document size fed into the DADF during a copy job.
- With the ATS function disabled and Bypass Tray selected, the paper in the Bypass Tray
 does not match the paper size specified for the print job.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check for obstructions in the Bypass Tray paper path.
- Clean all rolls in the paper path.
- Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Bypass Solenoid (PL 11.6) (608-213)
- IOT Registration Clutch (PL 11.6) (608-211)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

Y N

Perform the following in order:

- 1. Using the appropriate BSD, check the connectors and the wiring between the faulty component and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

C8 (003-963) ATS/APS No Tray With Correct Paper

BSD-ON: BSD 5.5 Document Size Sensing

BSD-ON: BSD 5.9 Document Path

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

When a copy job is done using the DADF and with Automatic Tray Switching and/or Automatic Paper Selection enabled, no tray is loaded with paper of a size to prevent image loss.

Initial Actions

Perform the following:

- Switch the power off and switch the power on
- For print jobs, check the job parameters
- Verify that the paper guides in the DADF are set correctly
- Verify that one or both of the trays is programmed with the correct paper size and orientation for the job
- Verify that both of the trays are loaded with paper of a size and orientation that matches the programming

Procedure

Tray 2 is installed.

Y N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Automatic Tray Selection and or Automatic Paper Selection is enabled.

ľ

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Tray 2 is loaded with paper of the correct size and orientation.

' N

Use GP 5 to check the operation of the Tray 1 No Paper Sensor. The actuator of the Tray 1 No Paper Sensor moves freely and the Tray 1 No Paper Sensor is operating correctly.

Y N

Check the circuits between P/J 501 on the SLCC PWB and P/J 157 at the Tray 1 No Paper Sensor for an open or a short circuit. **The circuit is good.**

Repair the wire harness or connectors.

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

Use GP 5 to check the operation of the Tray 2 No Paper Sensor. The actuator of the Tray 2 No Paper Sensor moves freely and the Tray 2 No Paper Sensor is operating correctly.

Check the circuits between P/J 542 on the Tray 2 Module PWB and P/J 158 at the Tray 2 No Paper Sensor for an open or a short circuit. No problems are found with the circuits.

Ν

Repair the wire harness or connectors.

Replace the Tray 2 Module PWB (PL 11.5).

Check the operation of the five document size sensors in the DADF using GP 5. All five sensors operate correctly.

Ν

Only one of the sensors operates incorrectly

Check the circuits between the DAFD PWB and the SLCC PWB for an open or a short circuit. If no problems are found, perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the DADF PWB (PL 13.3)
- Replace the SLCC PWB (PL 8.1)

Check the circuits between the sensor that does not operate correctly and the DADF PWB for an open or a short circuit. If no problems are found, replace the DADF PWB (PL 13.3).

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the DADF PWB (PL 13.3)
- Replace the SLCC PWB (PL 8.1)

C8 (003-965) ATS/APS No Paper

BSD-ON: BSD 5.5 Document Size Sensing

BSD-ON: BSD 5.9 Document Path

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

When a copy job is done using the DADF and with Automatic Tray Switching and/or Automatic Paper Selection enabled, the selected tray is out of paper.

Initial Actions

Perform the following:

- Switch the power off and switch the power on
- For print jobs, check the job parameters
- Verify that the paper guides in the DADF are set correctly
- Verify that one or both of the trays is programmed with the correct paper size and orientation for the job
- Verify that both of the trays are loaded with paper of a size and orientation that matches the programming

Procedure

Trav 2 is installed.

Ν

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

Automatic Tray Selection and or Automatic Paper Selection is enabled.

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

Tray 2 is loaded with paper of the correct size and orientation.

Use GP 5 to check the operation of the Tray 1 No Paper Sensor. The actuator of the Tray 1 No Paper Sensor moves freely and the Tray 1 No Paper Sensor is operating

Υ

Ν

Check the circuits between P/J 501 on the SLCC PWB and P/J 157 at the Tray 1 No Paper Sensor for an open or a short circuit. The circuit is good.

Status Indicator RAPS C8 (003-963), C8 (003-965)

Reissue

WorkCentre 5020/DN

December, 2011 2-20

V N

В

Repair the wire harness or connectors.

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

Use GP 5 to check the operation of the Tray 2 No Paper Sensor. The actuator of the Tray 2 No Paper Sensor moves freely and the Tray 2 No Paper Sensor is operating correctly.

Y N

Check the circuits between P/J 542 on the Tray 2 Module PWB and P/J 158 at the Tray 2 No Paper Sensor for an open or a short circuit. **No problems are found with the circuits.**

Y N

Repair the wire harness or connectors.

Replace the Tray 2 Module PWB (PL 11.5).

Check the operation of the five document size sensors in the DADF using GP 5. **All five sensors operate correctly.**

Y N

Only one of the sensors operates incorrectly

Check the circuits between the DAFD PWB and the SLCC PWB for an open or a short circuit. If no problems are found, perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

Check the circuits between the sensor that does not operate correctly and the DADF PWB for an open or a short circuit. If no problems are found, replace the DADF PWB (PL 13.3).

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

C8 (003-966) ATS/APS No Tray With Correct Paper

BSD-ON: BSD 5.5 Document Size Sensing

BSD-ON: BSD 5.9 Document Path

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

When a copy job is done using the DADF and with Automatic Tray Switching and/or Automatic Paper Selection enabled, the selected tray is out of paper.

Initial Actions

Perform the following:

- Switch the power off and switch the power on
- For print jobs, check the job parameters
- For jobs with the documents scanned using the DADF, verify that the paper guides in the DADF are set correctly
- Verify that one or both of the trays is programmed with the correct paper size and orientation for the job
- Verify that both of the trays are loaded with paper of a size and orientation that matches the programming
- For print jobs, Send the job from a different computer

Procedure

Tray 2 is installed.

' N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Automatic Tray Selection and or Automatic Paper Selection is enabled.

ľ

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Tray 2 is loaded with paper of the correct size and orientation.

N

Use GP 5 to check the operation of the Tray 1 No Paper Sensor. The actuator of the Tray 1 No Paper Sensor moves freely and the Tray 1 No Paper Sensor is operating correctly.

N

Check the circuits between P/J 501 on the SLCC PWB and P/J 157 at the Tray 1 No Paper Sensor for an open or a short circuit. **The circuit is good.**

/ N

Repair the wire harness or connectors.

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1)

Use GP 5 to check the operation of the Tray 2 No Paper Sensor. The actuator of the Tray 2 No Paper Sensor moves freely and the Tray 2 No Paper Sensor is operating correctly.

Y

Check the circuits between P/J 542 on the Tray 2 Module PWB and P/J 158 at the Tray 2 No Paper Sensor for an open or a short circuit. **No problems are found with the circuits.**

Y N

Repair the wire harness or connectors.

Replace the Tray 2 Module PWB (PL 11.5).

Check the operation of the five document size sensors in the DADF using GP 5. **All five sensors operate correctly.**

Y N

Only one of the sensors operates incorrectly

ΥI

Check the circuits between the DAFD PWB and the SLCC PWB for an open or a short circuit. If no problems are found, perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

Check the circuits between the sensor that does not operate correctly and the DADF PWB for an open or a short circuit. If no problems are found, replace the DADF PWB (PL 13.3).

Perform the following in order:

1. Initialize NVM using GP 7

- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the DADF PWB (PL 13.3)
- 4. Replace the SLCC PWB (PL 8.1)

E1 (075-135) Bypass Tray to IOT Registration Sensor Fault

BSD-ON: BSD 8.3 Bypass Tray

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 8.5 Paper Path

Time-out between Bypass Solenoid on and IOT Registration Sensor on.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight paper. Refer to the User Guide for size and weight specifications.
- Ensure that the machine is set to feed from the Bypass Tray.
- Switch the power off and switch the power on.
- Check for obstructions in the Bypass Tray paper path.
- Clean all rolls in the document path.
- Check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Bypass Solenoid (PL 7.5) (608-217)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

/ N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the faulty sensor and the DADF PWB and between the DADF PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the appropriate component.
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the Bypass Solenoid (PL 7.5) (608-217)
 - Replace the IOT Registration Sensor (PL 2.9) (608-105)
 - c. Replace the SLCC PWB (PL 8.1).

E1 (077-103) Fuser Exit Sensor Off Jam

BSD-ON: BSD 10.2 Exit and Duplex

- Fuser Exit Sensor does not turn off with paper in invert area. Fault may differ according to size paper or process speed.
- Paper does not exit from the Fuser area in time.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight paper. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the entire paper path.
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Fuser Exit Sensor (PL 6.3) (610-123)
- Exit Motor (PL 6.3) (610-208) (610-209)

The components are operating correctly.

ΥN

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the Fuser Exit Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Exit Motor and the Duplex PWB and between the Duplex PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- B. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Fuser Exit Sensor (PL 6.3).
- Replace the Exit Motor (PL 6.3).
- Replace the SLCC PWB (PL 8.1).

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - Replace the Fuser Exit Sensor (PL 6.3).
 - b. Replace the Exit Motor (PL 6.3).
 - c. Replace the SLCC PWB (PL 8.1).

E1 (077-106) Fuser Exit Sensor Does Not Turn On

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 10.2 Exit and Duplex

- Fuser Exit Sensor does not turn on or paper is unable to reach the Fuser Exit Sensor with paper in invert area. Fault may differ according to size paper or process speed.
- Paper does not exit from the Fuser area in time.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight paper. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the entire paper path.
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- IOT Registration Clutch (PL 2.9) (608-210)
- Fuser Exit Sensor (PL 6.3) (610-123)
- Exit Motor (PL 6.3) (610-208) (610-209)

The components are operating correctly.

ΥI

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Clutch and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Fuser Exit Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 3. Using the appropriate BSD, check the connectors and the wiring between the Exit Motor and the Duplex PWB and between the Duplex PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- 4. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 6. Replace the IOT Registration Clutch (PL 2.9).
- 7. Replace the Fuser Exit Sensor (PL 6.3).
- 8. Replace the Exit Motor (PL 6.3).
- 9. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.

- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the IOT Registration Clutch (PL 2.9).
 - Replace the Fuser Exit Sensor (PL 6.3).
 - c. Replace the Exit Motor (PL 6.3).
 - d. Replace the SLCC PWB (PL 8.1).

Status Indicator RAPS
December, 2011
Reissue
E1 (077-106)
2-24
WorkCentre 5020/DN

E1 (077-130) Fuser Exit Sensor On Fault in Duplex Mode

BSD-ON: BSD 8.4 Paper Registration

BSD-ON: BSD 10.2 Exit and Duplex

Fuser Exit Sensor on fault in Duplex Mode.

Initial Actions

Perform the following:

- Ensure that the customer is feeding a supported size and weight paper. Refer to the User Guide for size and weight specifications.
- Switch the power off and switch the power on.
- Check for obstructions in the entire paper path.
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- IOT Registration Clutch (PL 2.9) (608-210)
- Fuser Exit Sensor (PL 6.3) (610-123)
- Exit Motor (PL 6.3) (610-208) (610-209)

The components are operating correctly.

Y N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Clutch and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Fuser Exit Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Exit
 Motor and the Duplex PWB and between the Duplex PWB and the SLCC PWB for a
 poor connection, an open or a short circuit.
- 4. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 6. Replace the IOT Registration Clutch (PL 2.9).
- Replace the Fuser Exit Sensor (PL 6.3).
- 8. Replace the Exit Motor (PL 6.3).

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the IOT Registration Clutch (PL 2.9).

- Replace the Fuser Exit Sensor (PL 6.3).
- Replace the Exit Motor (PL 6.3).
- d. Replace the SLCC PWB (PL 8.1).

E1 (077-900) IOT Registration Sensor On During Standby

BSD-ON: BSD 8.4 Paper Registration

IOT Registration Sensor on is detected during standby.

Initial Actions

Perform the following:

- Switch the power off.
- Check that the IOT Registration Sensor is not dirty and that the actuator is not deformed or damaged

Procedure

Switch the power on. The E1 77-900 fault code is displayed.

N

A different fault code is displayed.

,

Run a copy jobs that feed paper from both trays. There is a jam.

N

Perform the following in order:

- Check the connectors and the wiring between the IOT Registration Sensor and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs frequently, perform the following in order:
 - a. Replace the IOT Registration Sensor (PL 2.9).
 - b. Replace the SLCC PWB (PL 8.1).

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Perform the following in order:

- Check the connectors and the wiring between the IOT Registration Sensor and the SLCC PWB for a poor connection, an open or short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the IOT Registration Sensor (PL 2.9).
- 5. Replace the SLCC PWB (PL 8.1).

E1 (077-901) Fuser Exit Sensor is On During Standby

BSD-ON: BSD 10.2 Exit and Duplex

Fuser Exit Sensor on is detected during standby.

Initial Actions

Perform the following:

- Switch the power off.
- Check that the Fuser Exit Sensor is not dirty and that the actuator is not deformed or damaged.

Procedure

Switch the power on. The E1 77-901 fault code is displayed.

- 1

A different fault code is displayed.

N

Run a copy jobs that feed paper from both trays. There is a jam.

N

Perform the following in order:

- Check the connectors and the wiring between the Fuser Exit Sensor and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs frequently, perform the following in order:
 - a. Replace the Fuser Exit Sensor (PL 6.3).
 - b. Replace the SLCC PWB (PL 8.1).

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Go to the RAP for the fault code being displayed and troubleshoot the problem.

- Check the connectors and the wiring between the Fuser Exit Sensor and the SLCC PWB for a poor connection, an open or short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Fuser Exit Sensor (PL 6.3).
- Replace the SLCC PWB (PL 8.1).

E2 (071-101) IOT Registration Sensor Fault Feeding From Tray 1

BSD-ON: BSD 8.4 Paper Registration

Time-out between Tray 1 Feed Sensor on and IOT Registration Sensor on.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check that the Feed Roll or Retard Pad is not dirty, contaminated with paper dust, worn, or faulty
- Check that the Tray 1 Feed Sensor is not dirty and that the actuator is not deformed or damaged
- Check that the IOT Registration Sensor is not dirty and that the actuator is not deformed or damaged
- Check that paper is undamaged, within specification, and loaded correctly.
- Check for debris or obstructions in the paper path
- · Check that the drive gears are not worn or damaged
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- IOT Registration Clutch (PL 2.9) (608-210)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Clutch and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 3. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 5. Replace the IOT Registration Clutch (PL 2.9).
- 6. Replace the Fuser Exit Sensor (PL 6.3).
- 7. Replace the Exit Motor (PL 6.3).
- 8. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

1. Initialize NVM using GP 7.

- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the IOT Registration Clutch (PL 2.9).
 - b. Replace the Fuser Exit Sensor (PL 6.3).
 - Replace the Exit Motor (PL 6.3).
 - d. Replace the SLCC PWB (PL 8.1).

E2 (077-903) Tray 1 Feed Sensor is On During Standby

BSD-ON: BSD 8.1 Tray 1 Paper Feeding

Tray 1 Feed Sensor on is detected during standby.

Initial Actions

Perform the following:

- Switch the power off.
- Check that the Tray 1 Feed Sensor is not dirty and that the actuator is not deformed or damaged

Procedure

Switch the power on. The E2 77-903 fault code is displayed.

1

A different fault code is displayed.

Run a copy jobs that feed paper from Tray 1. There is a jam.

N

Perform the following in order:

- Check the connectors and the wiring between the Tray 1 Feed Sensor and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs frequently, perform the following in order:
 - a. Replace the Tray 1 Feed Sensor (PL 2.5).
 - b. Replace the SLCC PWB (PL 8.1).

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Perform the following in order:

- Check the connectors and the wiring between the Tray 1 Feed Sensor and the SLCC PWB for a poor connection, an open or short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 1 Feed Sensor (PL 2.5).
- Replace the SLCC PWB (PL 8.1).

E3 (072-101) Tray 1 Feed Sensor Fault Feeding from Tray 2

BSD-ON: BSD 8.1 Tray 1 Paper Feeding

BSD-ON: BSD 8.2 Tray 2 Paper Feeding

Time-out between Tray 2 Feed Sensor on and Tray 1 Feed Sensor on.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check that the Feed Roll or Retard Pad is not dirty, contaminated with paper dust, worn, or faulty
- Check that the Tray 1 Feed Sensor is not dirty and that the actuator is not deformed or damaged
- Check that paper is undamaged, within specification, and loaded correctly.
- Check for debris or obstructions in the paper path
- Check that the drive gears are not worn or damaged
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- Tray 1 Feed Sensor (PL 2.5) (608-107)
- Tray 2 Feed Clutch (PL 11.5) (608-211)
- Tray 2 Feed Motor (PL 11.5) (608-213)

The components are operating correctly.

N

- Using the appropriate BSD, check the connectors and the wiring between the Tray 1
 Feed Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Tray 2
 Feed Sensor and the Tray 2 PWB and between the Tray 2 PWB and the SLCC PWB
 for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the Tray 2
 Feed Motor and the Tray 2 PWB and between the Tray 2 PWB and the SLCC PWB
 for a poor connection, an open or a short circuit.
- 4. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 6. Tray 1 Feed Sensor (PL 2.5)
- Tray 2 Feed Clutch (PL 11.6)
- Tray 2 Feed Motor (PL 11.6)
- 9. Replace the Tray 2 PWB (PL 11.5).
- 10. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the Tray 1 Feed Sensor (PL 2.5) (608-107)
 - b. Replace the Tray 2 Feed Motor (PL 11.6) (608-106)
 - Replace the Tray 2 Feed Clutch (PL 11.6)
 - d. Replace the Tray 2 PWB (PL 11.5).
 - e. Replace the SLCC PWB (PL 8.1).

E3 (077-904) Tray 2 Feed Sensor On During Standby

BSD-ON: BSD 8.2 Tray 2 Paper Feeding

Tray 2 Feed Sensor on is detected during standby.

Initial Actions

Perform the following:

- Switch the power off.
- Check that the Tray 2 Feed Sensor is not dirty and that the actuator is not deformed or damaged

Procedure

Switch the power on. The E3 77-904 fault code is displayed.

1

A different fault code is displayed.

N

Run a copy jobs that feed paper from Tray 2. There is a jam.

/

Perform the following in order:

- Check the connectors and the wiring between the Tray 2 Feed Sensor and the Tray 2 PWB and between the Tray 2 PWB and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs frequently, perform the following in order:
 - a. Replace the Tray 1 Feed Sensor (PL 11.5).
 - b. Replace the SLCC PWB (PL 8.1).

Go to the RAP for the fault code being displayed and troubleshoot the problem.

Go to the RAP for the fault code being displayed and troubleshoot the problem.

- Check the connectors and the wiring between the Tray 2 Feed Sensor and the Tray 2
 PWB and between the Tray 2 PWB and the SLCC PWB for an intermittent poor connection, or an intermittent open or short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Tray 2 Feed Sensor (PL 11.5).
- Replace the SLCC PWB (PL 8.1).

E4 (072-105) IOT Registration Sensor Fault Feeding from Tray 2

BSD-ON: BSD 8.1 Tray 1 Paper Feeding

BSD-ON: BSD 8.2 Tray 2 Paper Feeding

BSD-ON: BSD 8.4 Paper Registration

When feeding paper from the Tray 2, Time-out between Tray 1 Feed Sensor on and IOT Registration Sensor on.

Initial Actions

Perform the following:

- Switch the power off and switch the power on.
- Check that the Feed Roll or Retard Pad is not dirty, contaminated with paper dust, worn, or faulty
- Check that the Tray 1 Feed Sensor is not dirty and that the actuator is not deformed or damaged
- Check that the IOT Registration Sensor is not dirty and that the actuator is not deformed or damaged
- Check that paper is undamaged, within specification, and loaded correctly.
- Check for debris or obstructions in the paper path
- Check that the drive gears are not worn or damaged
- Clean all rolls in the paper path and check that all rolls rotate freely.

NOTE: The gears and rolls may only move the amount allowed by the backlash of the gears, but within that range they should move freely.

Procedure

Check the operation of the following components using GP 5:

- IOT Registration Clutch (PL 2.9) (608-210)
- IOT Registration Sensor (PL 2.9) (608-105)

The components are operating correctly.

Y N

Perform the following in order:

- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Clutch and the SLCC PWB for a poor connection, an open or a short circuit.
- Using the appropriate BSD, check the connectors and the wiring between the IOT Registration Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 3. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 5. Replace the IOT Registration Clutch (PL 2.9).
- Replace the IOT Registration Sensor (PL 2.9).
- 7. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

Α

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. If the fault recurs frequently, perform the following in order:
 - a. Replace the IOT Registration Clutch (PL 2.9).
 - b. Replace the Fuser Exit Sensor (PL 6.3).
 - c. Replace the Exit Motor (PL 6.3).
 - d. Replace the SLCC PWB (PL 8.1).

E5 (077-300) Front Cover Interlock Switch Fault

BSD-ON: BSD 1.2 Interlock Switching

The Front Cover Interlock Switch is open.

Initial Actions

Perform the following:

- Check the Front Cover Interlock Switch and the actuator for damage.
- Ensure that the Front Cover Interlock Switch actuator moves freely
- Ensure that the Front Cover closes and latches correctly. If problems are found adjust or repair the Front Cover.

Procedure

Switch the power off and switch the power on. The E5 77-300 fault code is displayed.

/ N

Perform the following in order:

- Check the connectors and the wiring between the Front Cover Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - a. Replace the Front Cover Interlock Switch. (PL 8.2)
 - b. Replace the LVPS (PL 8.1).
 - c. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the Front Cover Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Front Cover Interlock Switch. (PL 8.2)
- 5. Replace the LVPS (PL 8.1).
- Replace the SLCC PWB (PL 8.1).

E5 (077-301) Left Hand Cover Interlock Switch Fault

BSD-ON: BSD 1.2 Interlock Switching

The Left Hand Cover Interlock Switch is open.

Initial Actions

Perform the following:

- Check the Left Hand Cover Interlock Switch and the actuator for damage.
- Ensure that the Left Hand Cover Interlock Switch actuator moves freely
- Ensure that the Left Hand Cover closes and latches correctly. If problems are found adjust or repair the Left Hand Cover.

Procedure

Switch the power off and switch the power on. The E5 77-301 fault code is displayed.

Perform the following in order:

- Check the connectors and the wiring between the Left Hand Cover Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - a. Replace the Left Hand Cover Interlock Switch. (PL 8.2)
 - b. Replace the LVPS (PL 8.1).
 - c. Replace the SLCC PWB (PL 8.1).

- Check the connectors and the wiring between the Left Hand Cover Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Left Hand Cover Interlock Switch. (PL 8.2)
- 5. Replace the LVPS (PL 8.1).
- 6. Replace the SLCC PWB (PL 8.1).

E6 (077-305) Access Cover 1 Interlock Switch Fault

BSD-ON: BSD 7.1 Tray 1 Paper Stacking

The Access Cover 1 Interlock Switch is open.

Initial Actions

Perform the following:

- Check the Access Cover 1 Interlock Switch and the actuator for damage.
- Ensure that the Access Cover 1 Interlock Switch actuator moves freely
- Ensure that the Access Cover 1 closes and latches correctly. If problems are found adjust or repair Access Cover 1.

Procedure

Switch the power off and switch the power on. The E6 77-305 fault code is displayed.

/ N

Perform the following in order:

- Check the connectors and the wiring between the Access Cover 1 Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - a. Replace the Access Cover 1 Interlock Switch. (PL 2.5)
 - b. Replace the LVPS (PL 8.1).
 - c. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the Access Cover 1 Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Access Cover 1 Interlock Switch. (PL 2.5)
- Replace the LVPS (PL 8.1).
- Replace the SLCC PWB (PL 8.1).

E6 (077-309) Access Cover 2 Interlock Switch Fault

BSD-ON: BSD 7.2 Tray 2 Paper Stacking

The Access Cover 2 Interlock Switch is open.

Initial Actions

Perform the following:

- Check the Access Cover 2 Interlock Switch and the actuator for damage.
- Ensure that the Access Cover 2 Interlock Switch actuator moves freely
- Ensure that the Access Cover 2 closes and latches correctly. If problems are found adjust or repair Access Cover 2.

Procedure

Switch the power off and switch the power on. The E6 77-305 fault code is displayed.

' N

Perform the following in order:

- Check the connectors and the wiring between the Access Cover 2 Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for an intermittent poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. If the fault recurs, perform the following in order:
 - Replace the Access Cover 2 Interlock Switch. (PL 11.5)
 - b. Replace the LVPS (PL 8.1).
 - c. Replace the SLCC PWB (PL 8.1).

- Check the connectors and the wiring between the Access Cover 2 Interlock Switch and the LVPS and between the LVPS and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Access Cover 2 Interlock Switch. (PL 11.5)
- 5. Replace the LVPS (PL 8.1).
- 6. Replace the SLCC PWB (PL 8.1).

E8 (003-500) N-up AMS Limit Fault

Magnification is out of range when using the N-up feature.

Initial Actions

- Ensure that the customer is using the N-up feature correctly. Refer the User Guide for information on how the N-up feature is used.
- Check that at least one tray is loaded with paper of the correct size and orientation.

Procedure

Perform the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

E8 (003-501) N-up Paper Direction Mismatch

Direction of document and paper does not match when the N-up feature is selected.

Initial Actions

- Ensure that the customer is using the N-up feature correctly. Refer the User Guide for information on how the N-up feature is used.
- Check that at least one tray is loaded with paper of the correct size and orientation.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

E8 (003-502) Paper Direction Mismatch

There is a mismatch between the orientation of the loaded document and that of the paper in a tray.

Initial Actions

Check that at least one tray is loaded with paper of the correct size and orientation.

Procedure

Perform the following in order:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

E9 (003-795) AMS Limit Fault

AMS magnification control fault.

Initial Actions

- Ensure that the customer is using the enlarge/reduce feature correctly. Refer the User Guide for information on how this feature is used.
- Check that at least one tray is loaded with paper of the correct size and orientation.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

H9 (010-325) SLCC PWB to Tray 2 PWB Communication Fault

BSD-ON: BSD 3.1 PWB Communication (Tray 2 PWB)

SLCC PWB to Tray 2 PWB communication error.

Initial Actions

- Ensure that the customer is using the enlarge/reduce feature correctly. Refer the User Guide for information on how this feature is used.
- Check that at least one tray is loaded with paper of the correct size and orientation.

Procedure

Perform the following:

- Check the connectors and the wiring between the Tray 2 PWB and the SLCC PWB for a poor connection, an open or a short circuit.
- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Tray 2 PWB (PL 11.5).
- Replace the SLCC PWB (PL 8.1).

J1 (093-912) Toner Empty Fault

BSD-ON: BSD 9.2 Toner Sense and CRUM

The toner reservoir in the Drum Cartridge is empty.

Initial Actions

- Clean the Toner Empty Sensor and underside of the Drum Cartridge.
- Switch off the power and switch on the power.

Procedure

Check the remaining life of the Drum Cartridge CRU using GP 16. **The remaining life is more than 17%.**

-

Replace the Drum Cartridge (PL 4.1). The fault code J1 93-912 re-appears on the UI.

.

Perform the following:

- Check the connectors and the wiring between the Toner Empty Sensor and the SLCC PWB for an intermittent poor connection, open or short circuit.
- 2. If the fault recurs frequently, perform the following in order:
 - a. Initialize NVM using GP 7
 - b. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
 - c. Replace the Toner Empty Sensor. (PL 4.2).
 - d. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Check the connectors and the wiring between the Toner Empty Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- The Toner Empty Sensor. (PL 4.2).
- Replace the SLCC PWB (PL 8.1).

Add toner to the Drum Cartridge. The fault code J1 93-912 re-appears on the UI.

' N

- Check the connectors and the wiring between the Toner Empty Sensor and the SLCC PWB for an intermittent poor connection, open or short circuit.
- 2. If the fault recurs frequently, replace the following in order:
 - a. Initialize NVM using GP 7
 - Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
 - c. The Toner Empty Sensor. (PL 4.2).
 - d. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Check the connectors and the wiring between the Toner Empty Sensor and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7
- 3. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. The Toner Empty Sensor. (PL 4.2).
- 5. Replace the SLCC PWB (PL 8.1).

J3 (091-912) No Drum Cartridge Fault

BSD-ON: BSD 9.2 Toner Sense and CRUM

There is no Drum Cartridge installed.

Procedure

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Check the connectors and the wiring between the Drum Cartridge and the SLCC PWB for a poor connection, an open or a short circuit.
- 4. Replace the Drum Cartridge (PL 4.1).
- 5. Replace the SLCC PWB (PL 8.1).-

J6 (091-401) Drum Cartridge Near End of Life

BSD-ON: BSD 9.2 Toner Sense and CRUM

The control logic has detected that the Drum Cartridge is near the end of life.

Procedure

Check the remaining life of the Drum Cartridge CRU using GP 16. **The remaining life is more than 17%.**

N

Perform the following in order:

- 1. Replace the Drum Cartridge (PL 4.1).
- 2. Initialize NVM using GP 7
- 3. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the SLCC PWB (PL 8.1).-

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).-

J6 (091-913) Drum Cartridge End of Life

BSD-ON: BSD 9.2 Toner Sense and CRUM

The control logic has detected that the Drum Cartridge is at the end of life.

Procedure

Check the remaining life of the Drum Cartridge CRU using GP 16. **The remaining life is more than 15%.**

/ N

Perform the following in order:

- 1. Replace the Drum Cartridge (PL 4.1).
- 2. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the SLCC PWB (PL 8.1).-

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).-

J7 (091-914) SLCC PWB to Drum Cartridge Communication Fault

BSD-ON: BSD 9.2 Toner Sense and CRUM

There was a communication fault between the Drum Cartridge and the SLCC PWB.

Procedure

Perform the following in order:

- Check the connectors and the wiring between the Drum Cartridge and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7
- 3. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Drum Cartridge (PL 4.1).
- 5. Replace the SLCC PWB (PL 8.1).-

J7 (091-915) Drum CRUM Market Identity Mismatch

BSD-ON: BSD 9.2 Toner Sense and CRUM

There was a market identity between the Drum Cartridge and the SLCC PWB.

Procedure

- Check the connectors and the wiring between the Drum Cartridge and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Drum Cartridge (PL 4.1).
- 5. Replace the SLCC PWB (PL 8.1).-

J7 (091-916) Drum CRUM ID Incorrect - R1

BSD-ON: BSD 9.2 Toner Sense and CRUM

The control logic has detected that the Drum Cartridge ID is incorrect.

Procedure

Perform the following in order:

- Check the connectors and the wiring between the Drum Cartridge and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7
- 3. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Drum Cartridge (PL 4.1).
- 5. Replace the SLCC PWB (PL 8.1).-

L9 (016-756) Auditron Service Prohibited

The auditron feature cannot be used. An incorrect user entry was detected

Initial Actions

Ensure that the customer is using the auditron feature correctly. Refer the User Guide for information on how the auditron feature is used.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

L9 (016-757) Invalid Auditron User

An invalid auditron user account is detected. There is no account registered.

Initial Actions

Ensure that the customer is using the auditron feature correctly. Refer the User Guide for information on how the auditron feature is used.

Procedure

Perform the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

L9 (016-759) Auditron Counter at Limit

The auditron counter for the user is at a maximum.

Initial Actions

Ensure that the customer is using the auditron feature correctly. Refer the User Guide for information on how the auditron feature is used.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N0 (002-970) Waiting For Confirmation to Resume

This code appears after a jam that occurred during a copy job has been cleared.

Procedure

- 1. If print job does not resume when Start button is pressed, switch the power off, then on.
- 2. Check UI PWB to SLCC PWB connectors
- 3. If problem persists, Initialize NVM.

N1 (003-972) Maximum Stored Page Overflow

The number of scanned pages stored exceeded the maximum number set in the system data.

Procedure

A menu setup is incorrect, or stored pages need to be deleted. Set the number of pages of the document to be within the maximum number of pages that can be stored.

Refer customer to the Scanning section of the User Guide and/or System Administrator's Guide.

N2 (003-942) Size of Documents Not Detected

BSD-ON: BSD 5.5 - Document Size sensing

The size of the original documents was not detected.

Initial Actions

If the document is a non standard size, copy or scan from the Platen

Procedure

Enter Component Control (GP 5) [005-218]. Block and unblock the Document Tray Length Sensor 1. **The display changes.**

Y

Go to BSD 5.5. Check the wiring between the sensor and the DADF PWB and the wiring between the DADF PWB (CN1) and the SLCC PWB (P/J414). If the wiring is OK, ensure that there is +5VDC present at CN4 on the DADF PWB. If the power is good replace the Document Tray Length Sensor 1 (PL 13.10).

If the problem continues, replace the DADF PWB (PL 13.3).

If this does not resolve the problem, replace the SLCC (PL 8.1).

Enter Component Control (GP 5) [005-219]. Block and unblock the Document Tray Length Sensor 2. **The display changes.**

Y N

Go to BSD 5.5. Check the wiring between the sensor and the DADF PWB and the wiring between the DADF PWB (CN1) and the SLCC PWB (P/J414). If the wiring is OK, ensure that there is +5VDC present at CN4 on the DADF PWB. If the power is good replace the Document Tray Length Sensor 2 (PL 13.10).

If the problem continues, replace the DADF PWB (PL 13.3).

If this does not resolve the problem, replace the SLCC (PL 8.1).

Enter Component Control (GP 5) [005-216]. Block and unblock the Document Tray Width Sensor 1. **The display changes.**

Y N

Go to BSD 5.5. Check the wiring between the sensor and the DADF PWB and the wiring between the DADF PWB (CN1) and the SLCC PWB (P/J414). If the wiring is OK, ensure that there is +5VDC present at CN4 on the DADF PWB. If the power is good replace the Document Tray Width Sensor 1 (PL 13.10).

If the problem continues, replace the DADF PWB (PL 13.3).

If this does not resolve the problem, replace the SLCC (PL 8.1).

Enter Component Control (GP 5) [005-217]. Block and unblock the Document Tray Width Sensor 2. **The display changes.**

Y N

Go to BSD 5.5. Check the wiring between the sensor and the DADF PWB and the wiring between the DADF PWB (CN1) and the SLCC PWB (P/J414). If the wiring is OK, ensure that there is +5VDC present at CN4 on the DADF PWB. If the power is good replace the Document Tray Width Sensor 2 (PL 13.10).

If the problem continues, replace the DADF PWB (PL 13.3).

If this does not resolve the problem, replace the SLCC (PL 8.1).

mnonont Control (CD F)

Enter Component Control (GP 5) [005-215]. Block and unblock the Document Feeder Width Sensor. **The display changes.**

Y N

Go to BSD 5.5. Check the wiring between the sensor and the DADF PWB and the wiring between the DADF PWB (CN1) and the SLCC PWB (P/J414). If the wiring is OK, ensure that there is +5VDC present at CN5 on the DADF PWB. If the power is good replace the Document Feeder Width Sensor (PL 13.9).

If the problem continues, replace the DADF PWB (PL 13.3). If this does not resolve the problem, replace the SLCC (PL 8.1).

If the problem continues, replace the DADF PWB (PL 13.3). If this does not resolve the problem, replace the SLCC (PL 8.1).

N3 (027-452) The Specified IP Address Already Exists

The specified IP address already exists on the customer network.

Procedure

The customer must change the IP address of the machine or the IP address of the device on the network. Refer to System Administrator's Guide.

N4 (016-500) Firmware Download Fault

Procedure

- Refer to GP 15. Try reinstalling the software.
- If the problem continues, obtain another software CD or download another copy of the software file and try reloading that software.
- If the problem persists, replace the SLCC PWB (PL 8.1)

N4 (016-741) Firmware Download Fault

Download is prohibited because a job is in process.

Procedure

Wait until all jobs are complete or cancelled, then retry the download.

N4 (016-742) Firmware Download Fault

The download failed because the product code of the machine does not match the download file header.

Procedure

The download data may incorrect; acquire the correct download data then retry the download.

N4 (016-743) Firmware Download Fault

The download failed because the model name of the machine does not match the download file header.

Procedure

The download data may incorrect; acquire the correct download data then retry the download.

N4 (016-744) Firmware Download Fault

The download failed because the checksum of the data sent to the machine does not match the download file header.

Procedure

Check for an intermittent connection between the machine and the download device

N4 (016-745) Firmware Download Fault

XPJL fatal error in downloading. (Error occurs after XPJL recognizes received data to be download data).

Procedure

Power OFF/ON.

N4 (062-500) Firmware Download Fault

IIT FW upgrade download failed.

Procedure

Switch the power off then on. Retry the download.

N4 (116-220) Firmware Download Fault

Downloader Initialize Fail when going to Download mode.

Procedure

Switch the power off then on. Retry the download.

N5 (016-712) Scan Area Fault

The specified document area is too small.

Procedure

Increase the resolution or enlarge the scan area

N5 (016-776) Print Job Image Conversion Fault

An error occurred during image conversion processing

Procedure

Switch the power off then on. Retry the job.

N5 (016-779) Scanned Image Conversion Fault

There is an error in a scanned job.

Procedure

Rescan the job. If a large size document such as A3 fails to scan in 600DPI resolution, scan resolution should be lowered to 400DPI.

N5 (016-788) Scan Job to PC Fault

There is an error when a PC tries to retrieve a scanned job

Initial Actions

- Switch the machine power off then on
- Reboot the PC and reload the browser page
- Retry the retrieval

Procedure

This may be either a Y/N RAP or a narrative RAP.

- Have a different scan job done.
- Have the faulty job sent to a different computer.
- Write up above as Y/N and follow to logical conclusion either job is bad, or the network is bad, or the receiving PC has a problem, or the SLCC PWB is bad - in case where leads to SLCC, try initializing NVM, if still NG, replace SLCC PWB.

Can the requesting PC retrieve a different job?

Y N

There may be a problem with the requesting PC's internet connection or protocol setup; inform the SA. If the problem persists, initialize NVM.

Can the requested job be retrieved by a different PC?

ΥI

The file may be corrupt. have the user rescan and store the job. If the problem persists, initialize NVM.

There may be a problem with the original PC's permissions or security settings; inform the SA

N6 (003-760) Document Scan Settings Fault

Incompatible features are selected in the document scan setup.

Procedure

- Abort the job. Change Job Startup parameters such as Tray No., Paper size etc. and retry.
- Disconnect then reconnect the connectors on the SLCC PWB
- Check the sw version of the controller sw reload Software (GP 15)

N6 (016-701) Out of Memory

PCL decomposer memory shortage.

Procedure

- Increase the allocated memory of the ART EX.
- Lower the resolution.
- Set [Page Print mode] to [Enabled].
- Execute [Image Compression] in the [Graphics] tab of the printer driver.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-702) Page Buffer Memory Full

Page buffer memory is full.

Initial Actions

Power Off/On

Procedure

- Set Print Mode to High Speed and reduce the print resolution before retrying the operation.
- Increase the memory to increase the page buffer.
- Retry the operation in Print Page Mode. (PLW Decomposer (=ART-EX) only)
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-704) Mailbox is Full

Mailbox is full.

Initial Actions

Power Off/On

Procedure

Delete unnecessary documents and then repeat the operation. Refer customer to Mailbox section in User Guide.

N6 (016-709) Print Job Fault

An ART EX command error occurred during PLW processing.

- · Syntax error, undefined command
- Parameter error
- Decomposer internal error

Procedure

This error occurs when some parts of the created print file are missing or abnormal. Switch the power on then on. Retry the job

Disconnect then reconnect the connections on the SLCC PWB. Make sure that the customer network connection is securely fastened.

Check the sw version of the controller sw - update if required

N6 (016-718) Out of Memory

Insufficient PCL6 Decomposer Memory

Procedure

- Lower the resolution.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-719) Out of Memory

PCL decomposer memory shortage.

Procedure

- Lower the resolution.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-720) Print Job Fault

There is an error in a print job. Internal decomposer error

Procedure

- Restart the machine and retry the job.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-721) Print Job Fault

An unexpected error occurred during printing at the PLW decomposer.

- Paper types cannot be determined because all the settings for [Custom Paper Priority] are set to [Disabled] in CWIS, etc.
- This ia an error that is not related to ART system commands/forms.
- ESCP command error.
- Incorrect control code from the input stream, etc.

Procedure

- Check settings for Custom Paper Priority in CWIS, etc.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required

N6 (016-761) Print Job Fault

FIFO Empty. Image expansion error

Procedure

- Print in the Speed Preferred mode.
- Disconnect then reconnect the connections to the SLCC PWB
- Check the sw version of the controller sw update if required (GP 15)

N6 (116-720) Out of Memory

The PCL Memory capacity is insufficient.

Initial Actions

Power Off/On

Procedure

Do not start up ports that are unnecessary. Adjust the various Buffer Memory sizes.

N7 (016-726) Print Job Fault

There is an error in a print job.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N7 (016-749) Print Job Fault

The PJL/XPJL detected a print language that cannot be printed:

- 1. The print language received from the printer driver is a print language that cannot be printed by the machine.
- Contents Bridge was used to attempt to print a PDF file through a machine that cannot process PDF.
- When this happens with a received Internet FAX document, the Internet FAX document that was sent by the other machine is in a print language that cannot be printed by this machine.

Initial Actions

Power Off/On

Procedure

- In the case of 1, use the printer driver of the machine to print. Explanation: Depending on PostScript, etc. options are necessary to print the desired print language. For more details, please contact our sales representatives.
- 2. In the case of 2, do not use Contents Bridge to print a PDF file.
- 3. In case of 3, please request the other party to Send the Internet FAX document using a print language that can be printed by this machine.
- Disconnect then reconnect the SLCC
- 5. Check the sw version of the controller sw update if required

N7 (016-762) Print Job Fault

The specified print language is not installed.

Procedure

In [Specify Print Mode] under [Port Settings], specify another print language.

N7 (016-799) Print Job Fault

The print instruction combination (Stored file size, paper size, Feed tray, Duplex instruction, output tray) is not allowed.

Procedure

Check the print data and options, and print again.

N7 (024-747) Print Job Fault

Job Fail. Operation cannot be continued due to combination of unprintable parameters (stored file size, paper size, paper tray, duplex command, output tray). The specified combination of parameters (stored file size, paper size, paper tray, duplex command, output tray) cannot be executed or continued. When a job cannot continue due to component failure when [Start] button is pressed after a temporary interruption due to a component failure during a print operation, this error is also displayed.

Procedure

Change the print parameter and print again.

N7 (116-701) Out of Memory

BSD-ON: BSD 5.1 Document Set and Interlock

PCL decomposer memory shortage. One-page data was printed on multiple pages during 2-Sided Print (The title with two or more lines was printed on 2 pages).

Procedure

Power Off/On. If the problem persists resend the job when the print queue is shorter.

N9 (003-318) IIT Firmware Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- · Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-319) Video Driver Detect Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-338) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

Reissue

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-339) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-340) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

Check the following:

- Switch off the power and switch on the power.
- · Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-341) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- · Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-342) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- · Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (003-343) Controller to IIT Communication Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (016-311) Scanner is Not Detected

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

The SLCC PWB has detected that an incorrect scanner or no scanner is installed.

Procedure

Check the following:

- Switch off the power and switch on the power.
- · Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- · Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (016-315) IIT Interface Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (016-317) Scanner Page Memory Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- · Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (016-318) Scanner Page Memory Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Communication fault between SLCC PWB and IIT.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

N9 (016-336) Controller ROM Fault

A fault was detected in the Controller ROM.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (016-338) Controller ROM Fault

A fault was detected in the Controller ROM.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (016-347) Controller ROM Fault

A fault was detected in the Controller ROM.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (016-348) Controller ROM Fault

A fault was detected in the Controller ROM.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (016-350) Controller ROM Fault

A fault was detected in the Controller ROM.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (016-351) Controller ROM Fault

A fault was detected in the NVM ROM. This fault may appear if the NVM EEPROMs have been damaged or installed incorrectly during an SLCC PWB replacement.

Procedure

Check the following:

- Switch off the power. Check the three NVM EEPROMs for the following problems:
 - One or more of the EEPROMs installed backwards

NOTE: When installing the NVM EEPROMs, the semi-circular key that is on one end of the EEPROM case must align with the semicircular key on the socket. All three of the EEPROMs on the SLCC PWB are installed with the key on the EEPROM toward the left side of the SLCC PWB (that is, "machine right") where the USB and Ethernet connectors are located.

- A bent or broken leg
- Physical damage to one or more of the NVM EEPROM cases
- Two or more of the EEPROMs installed in the wrong socket
- Electrical damage to one or more of the EEPROMs caused by ESD
- Switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the NVM EEPROMs (PL 8.1).
- Replace the SLCC PWB (PL 8.1)

N9 (016-362) Controller to UI Communication Fault

BSD-ON: BSD 2.1 Control Panel

A Controller to UI fault has been detected

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check SLCC PWB P/J401 to UI PWB P/J710 an open wire or poor contact:
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to UI PWB cable (PL 8.3)
 - 2. UI PWB (PL 8.3)
 - 3. SLCC PWB (PL 8.1)

N9 (016-364) USB Interface Fault

USB Interface fault

Procedure

- Switch off the power and switch on the power.
- Connect the USB cable to a different computer.
- Connect the USB cable to the other USB connector on the 5020/DN.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (016-365) USB Interface Fault

USB Interface fault

Procedure

Check the following:

- Switch off the power and switch on the power.
- Connect the USB cable to a different computer.
- Connect the USB cable to the other USB connector on the 5020/DN.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (024-362) SLCC PWB Video Output to IOT Fault

BSD-ON: BSD 6.3 Laser Control and Scanning

A Communication fault between the SLCC PWB and the ROS Assembly has occurred.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact. If a problem is found, repair the SLCC PWB to ROS cable:
 - SLCC PWB P/J404 to ROS Assembly P/J160
 - SLCC PWB P/J403 to ROS Assembly P/J140
 - SLCC PWB P/J403 to connector P/J620
 - Connector P/J620 to ROS Assembly P/J130
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB (PL 8.1)
 - 2. ROS Assembly (PL 10.3)

N9 (024-363) SLCC PWB Video Output to IOT Fault

BSD-ON: BSD 6.3 Laser Control and Scanning

A Communication fault between the SLCC PWB and the ROS Assembly has occurred.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact. If a problem is found, repair the SLCC PWB to ROS cable:
 - SLCC PWB P/J404 to ROS Assembly P/J160
 - SLCC PWB P/J403 to ROS Assembly P/J140
 - SLCC PWB P/J403 to connector P/J620
 - Connector P/J620 to ROS Assembly P/J130
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB (PL 8.1)
 - 2. ROS Assembly (PL 10.3)

N9 (024-364) Controller Firmware Fault

A fault was detected in a Controller memory operation.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-367) Controller Firmware Fault

A fault was detected in a Controller memory operation.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-368) Controller Firmware Fault

A fault was detected in a Controller memory operation.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-370) Controller Firmware Fault

A fault was detected in a Controller memory operation.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-371) SLCC PWB Internal Communication Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-372) SLCC PWB Internal Communication Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-373) SLCC PWB Internal Communication Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (024-375) SLCC PWB Internal Communication Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (102-356) EWS Firmware Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-314) Ethernet Address Fault

A fault was detected in internal SLCC PWB firmware module communication.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Reprogram the SLCC PWB NVM EEPROMs using GP 8.
- Replace the SLCC PWB (PL 8.1)

N9 (116-315) RAM W/R Check Fail

A fault was detected in SLCC PWB RAM write/read.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-317) ROM W/R Check Fail

A fault was detected in SLCC PWB ROM write/read.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-319) Mismatch Between Controller Firmware and UI Configuration

BSD-ON: BSD 2.1 Control Panel

There is a mismatch between the Controller firmware and the UI configuration.

Procedure

- Switch off the power and switch on the power.
- Check SLCC PWB P/J401 to UI PWB P/J710 an open wire or poor contact:
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to UI PWB cable (PL 8.3)
 - 2. UI PWB (PL 8.3)
 - 3. SLCC PWB (PL 8.1)

N9 (116-321) System Firmware Fault

A fault was detected in internal SLCC PWB firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-322) System Firmware Fault

A fault was detected in internal SLCC PWB firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-323) NVM Fault

A fault was detected in NVM.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-324) System Firmware Fault

A fault was detected in internal SLCC PWB firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-325) System Firmware Fault

A fault was detected in internal SLCC PWB firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-331) NVM Fault

A fault was detected in NVM.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-334) NVM Fault

A fault was detected in NVM.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-337) SNTP Firmware Fault

A fault was detected in SNTP.

Procedure

- Disconnect the Ethernet cable from the 5020/DN.
- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-340) Out of Memory at Startup

A memory fault was detected at startup.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-341) ROM Version Mismatch

A version mismatch between major and minor version of a firmware ROM.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-346) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-348) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-349) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-355) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-356) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-359) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-361) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-364) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-365) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-366) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-368) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-370) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-371) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-372) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-374) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-375) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-376) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-377) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-380) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-385) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-390) NVM and Firmware Version Mismatch

NVM and firmware do not match.

Procedure

Reissue

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-391) NVM Data Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

N9 (116-395) USB Interface Fault

USB Interface fault

Procedure

Check the following:

- Switch off the power and switch on the power.
- Connect the USB cable to a different computer.
- Connect the USB cable to the other USB connector on the 5020/DN.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (116-399) System Does Not Startup Correctly

Initialization does not complete within 10 minute.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (124-329) Serial Number Mismatch

The serial number numbers stored in different firmware modules do not match.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (124-339) Incorrect ROM installed

A ROM for another machine is installed.

Procedure

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly, and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (124-372) Controller Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly. and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (124-373) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly. and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (124-374) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly, and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (127-353) Firmware Fault

A fault has been detected in a firmware module.

Procedure

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly, and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

N9 (127-399) Firmware Fault

A fault has been detected in a firmware module.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check that the NVM ROM is installed correctly, and that a part from another machine has not been installed.
- Initialize NVM using GP 7.
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

U0 (077-329) IOT Motor Stop Fault

BSD-ON: BSD 4.1 Main Drive

The IOT Motor is energized but no paper is fed through the IOT.

Procedure

Go to RAP U1 42-325.

U1 (042-325) IOT Motor Rotation Fault

BSD-ON: BSD 4.1 Main Drive

The IOT Motor is energized but no paper is fed through the IOT.

Procedure

Check the connectors and the wiring between the IOT Motor and the SLCC PWB for a poor connection, or an open or short circuit. If no problem is found, perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the IOT Motor (PL 1.1).
- 4. Replace the SLCC PWB (PL 8.1).

U2 (062-345) IIT EEPROM Fault

Error in writing on or communicating with the IIT EEPROM.

Procedure

Perform the following in order:

- Check the connectors and the Flexible Print Cable between the IIT PWB and the SLCC PWB for a poor connection, or an open or short circuit. If a problem is found replace the Flexible Print Cable (PL 10.3), the IIT Carriage (PL 10.3), or the SLCC PWB (PL 8.1) as appropriate.
- 2. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Flexible Print Cable (PL 10.3).
- 5. Replace the SLCC PWB (PL 8.1).
- 6. Replace the IIT Carriage (PL 10.3).

U2 (062-360) Carriage Position Fault

BSD-ON: BSD 6.2 Carriage Scan

The Carriage Sensor does not detect the carriage position.

Initial Actions

Switch off the power and switch on the power

Procedure

Move the carriage to the right end of travel using GP 5 (062-007), then switch off the power and switch on the power. The carriage moves smoothly to the right end of travel when (062-007) is entered. After the power is switched on, the carriage returns to approximately the start of scan position.

Y N

Disconnect J 409 and output a motor drive signal using GP 5 (062-005) or (062-006). Measure the AC voltage at each of following four locations:

- J 409-12 or J 409-13 to GND
- J 409-14 or J 409-15 to GND
- J 409-16 or J 409-17 to GND
- J 409-18 or J 409-19 to GND

NOTE: Normally, the AC voltage will only appear on the connector pins for approximately 1 second each time the Component Control Code is entered.

The voltage is measured as described.

Y N

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Flexible Print Cable (PL 10.3).
- 4. Replace the Carriage Motor (PL 10.6).
- 5. Replace the IIT Carriage (PL 10.3).
- 6. Replace the SLCC PWB (PL 8.1).

Check the Carriage Sensor level using GP 5 (062-212). A low level (L) is indicated at the UI.

(|

Switch the power off, disconnect J 410, and switch the power on. Measure the voltage between J 410-33 (+) and GND (-). A logic high is measured.

Y N

Perform the following in order:

1. Initialize NVM using GP 7

- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Flexible Print Cable (PL 10.3).
- Replace the Carriage Sensor (PL 10.6).
- 5. Replace the IIT Carriage (PL 10.3).

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

U2 (062-371) Exposure Lamp Fault

BSD-ON: BSD 6.2 Carriage Scan

Detected insufficient light provided from the Exposure Lamp to the CCD.

Initial Actions

- Switch the power off and switch the power on.
- Check for any obstructions in the optical path between the lamp, the lens or the mirror.
- Check that the White Reference is in place and not deteriorated. (PL 10.4).

Procedure

Check the Exposure Lamp using GP 5 (062-002). **The Exposure Lamp intensity appears to be normal.**

Y I

Measure the voltage between P 410-32 (+) and GND (-). Approximately 3.3 VDC is measured.

Y N

Switch the power off, disconnect J 410, and switch the power on. Measure the voltage between J 410-32 (+) and GND (-). **Approximately 3.3 VDC is measured.**

- 1

Perform the following in order:

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- Replace the IIT Carriage (PL 10.3).

Switch the Exposure Lamp on and off using GP 5 (062-002). Measure the signal between INV CN1-2 (+) and GND (-). The signal changes state when the Exposure Lamp is switched on or off.

' N

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- 1. Replace the Exposure Lamp (PL 10.6).
- Replace the Inverter PWB (PL 10.7).
- 3. Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.

- 3. Replace the Flexible Print Cable (PL 10.3).
- 4. Replace the Inverter PWB (PL 10.7).
- 5. Replace the IIT Carriage (PL 10.3).
- 6. Replace the SLCC PWB (PL 8.1).

U2 (062-380) AGC Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Control logic has detected insufficient light from the Illumination Lamp during AGC (Automatic Gain Control) of the auto IIT Calibration at Start.

Initial Actions

- Switch the power off and switch the power on.
- Check for any obstructions in the optical path between the lamp, the lens or the mirror.
- Check that the White Reference is in place and not deteriorated. (PL 10.4).

Procedure

Check the Exposure Lamp using GP 5 (062-002). **The Exposure Lamp intensity appears to be normal.**

Y |

Measure the voltage between P 410-32 (+) and GND (-). Approximately 3.3 VDC is measured.

' N

Switch the power off, disconnect J 410, and switch the power on. Measure the voltage between J 410-32 (+) and GND (-). **Approximately 3.3 VDC is measured.**

, I

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- 2. Replace the IIT Carriage (PL 10.3).

Switch the Exposure Lamp on and off using GP 5 (062-002). Measure the signal between INV CN1-2 (+) and GND (-). The signal changes state when the Exposure Lamp is switched on or off.

/ N

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- Replace the Exposure Lamp (PL 10.6).
- Replace the Inverter PWB (PL 10.7).
- 3. Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Flexible Print Cable (PL 10.3).
- 4. Replace the Inverter PWB (PL 10.7).
- 5. Replace the IIT Carriage (PL 10.3).
- 6. Replace the SLCC PWB (PL 8.1).

U2 (062-386) AOC Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Control logic has detected an output defect of the CCD at AOC (Automatic Offset Control) of the auto IIT Calibration at Start.

Initial Actions

- Switch the power off and switch the power on.
- Check for any obstructions in the optical path between the lamp, the lens or the mirror.
- Check that the White Reference is in place and not deteriorated. (PL 10.4).

Procedure

Check the Exposure Lamp using GP 5 (062-002). **The Exposure Lamp intensity appears to be normal.**

(|

Measure the voltage between P 410-32 (+) and GND (-). Approximately 3.3 VDC is measured.

' N

Switch the power off, disconnect J 410, and switch the power on. Measure the voltage between J 410-32 (+) and GND (-). **Approximately 3.3 VDC is measured.**

, I

Perform the following in order:

- 1. Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- 2. Replace the IIT Carriage (PL 10.3).

Switch the Exposure Lamp on and off using GP 5 (062-002). Measure the signal between INV CN1-2 (+) and GND (-). The signal changes state when the Exposure Lamp is switched on or off.

Y N

Replace the following in order:

- 1. Replace the Flexible Print Cable (PL 10.3).
- Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- Replace the Exposure Lamp (PL 10.6).
- Replace the Inverter PWB (PL 10.7).
- 3. Replace the IIT Carriage (PL 10.3).

Replace the following in order:

- 1. Initialize NVM using GP 7
- 2. Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Flexible Print Cable (PL 10.3).
- 4. Replace the Inverter PWB (PL 10.7).
- 5. Replace the IIT Carriage (PL 10.3).
- 6. Replace the SLCC PWB (PL 8.1).

U2 (062-392) IIT PWB Memory Fault

BSD-ON: BSD 6.2 Carriage Scan

BSD-ON: BSD 6.1 Image Input

Control logic has detected RAM malfunction of IIT PWB.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- · Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

U2 (062-393) IIT PWB Fault

BSD-ON: BSD 6.1 Image Input

BSD-ON: BSD 6.2 Carriage Scan

Control logic has detected a test error or a writing error to the SLCC EEPROMs.

Procedure

- Switch off the power and switch on the power.
- Check the following for an open wire or poor contact:
 - SLCC PWB P/J410 to Lens Assembly P/J720
 - SLCC PWB P/J409 to Lens Assembly P/J721
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to Lens Assembly cable (PL 10.3)
 - 2. SLCC PWB (PL 8.1)
 - 3. IIT Carriage (PL 10.3)

U3 (061-321) Laser Power or ROS Motor Fault

BSD-ON: BSD 6.3 Laser Control and Scanning

The ROS Motor has failed to provide a ROS motor ready signal.

Initial Actions

Switch the power off and switch the power on.

Procedure

Check the operation of the ROS Motor using GP 5 (606-215). The ROS Motor starts and runs normally.

/ |

Perform the following in order:

- Check the connectors and the wiring between the ROS and the SLCC PWB for a
 poor connection, an open or a short circuit. Pay particular attention to the wiring
 associated with the ROS Motor operation.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the ROS (PL 3.1).
- 5. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

U4 (010-313) FS1 Thermistor Defect

BSD-ON: BSD 10.1 Fuser Temperature Control

Thermistor FS1 cannot be monitored any more.

Procedure

Check the condition of the Fuser. The Fuser is installed properly.

ΥI

Install the Fuser properly.

Check the resistance of the Thermistor. There is no open circuit between J 601-1 and J 601-2, and the resistance is a minimum of 228k ohms (cold).

' N

Replace the Fuser (PL 5.1).

Check the wire between J 408-2 and J 601-1. The wire is not shorted or open.

Y

Repair the wire.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Fuser (PL 5.1).
- Replace the SLCC PWB (PL 8.1).

U4 (010-320) Overheat Temp Fault

BSD-ON: BSD 10.1 Fuser Temperature Control

A temperature of 250°C or higher was detected continuously for 480 ms.

Initial Actions

When U4 (010-320) occurs, the NVM value at location (650-020) FSR Reset Fuser Over Temp is changed to "1". Access NVM using GP 6 and change the value to "0" to reset it.

Procedure

Check the condition of the Fuser. The Fuser is installed properly.

Y

Install the Fuser properly.

Check the resistance of the Thermistor. There is no open circuit between J 601-1 and J 601-2, and the resistance is a minimum of 228k ohms (cold).

′ N

Replace the Fuser (PL 5.1).

Check the wire between J 408-2 and J 601-1. The wire is not shorted or open.

ΥI

Repair the wire.

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the Fuser (PL 5.1).
- 4. Replace the LVPS (PL 8.1).
- 5. Replace the SLCC PWB (PL 8.1).

U4 (010-327) Standby Heat Roll Fuser On Time Fault

BSD-ON: BSD 10.1 Fuser Temperature Control

A fault has been detected in the Fuser Heat Roll on time during standby.

Initial Actions

- Switch the power off and switch the power on.
- Remove the Rear Cover.

Procedure

Observe the Fuser Lamp operation from the left rear corner of the machine. **The Fuser Lamp illuminates periodically.**

N

Perform the following in order:

- Check the connectors and the wiring between the Fuser and the SLCC PWB for a poor connection, an open or a short circuit.
- 2. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Fuser (PL 5.1).
- 5. Replace the LVPS (PL 8.1).
- Replace the SLCC PWB (PL 8.1).

Check the operation of the Fuser thermistor using GP 5 (620-320). **The Fuser Thermistor Signal varies as the Fuser Lamp is switched on and off.**

Y N

Perform the following in order:

- Check the connectors and the wiring between the Fuser and the SLCC PWB for a poor connection, an open or a short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the Fuser (PL 5.1).
- 5. Replace the LVPS (PL 8.1).
- Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).

U4 (010-398) NOHAD Fan Fault

BSD-ON: BSD 10.3 Machine Cooling

The control logic has detected a problem with the NOHAD Fan operation.

Initial Actions

- Check that there is no debris or obstruction in the NOHAD fan.
- Switch the power off and switch the power on.

Procedure

The UI is displaying a U4 10-398 fault code.

1

Check the connectors and the wiring between the NOHAD Fan and the SLCC PWB for a intermittent poor connection, or an intermittent open or short circuit. A problem is found with the wiring or connectors.

N

Perform the following in order:

- 1. Initialize NVM using GP 7.
- 2. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the NOHAD Fan (PL 9.2).
- 4. Replace the SLCC PWB (PL 8.1).

Repair the problem.

Perform the following:

- Switch the power off
- Disconnect the connector J 405 from the SLCC PWB
- 3. Switch the power on
- 4. Measure the voltage between P 405-3 (+) and P 405-2 (-) on the SLCC PWB.

+24VDC is measured.

N

Perform the following in order:

- 1. Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the NOHAD Fan (PL 9.2).
- 4. Replace the SLCC PWB (PL 8.1).

U6 (041-340) RAM Read/Write Check Fault

A fault was detected in SLCC PWB RAM write/read.

Procedure

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

U6 (041-362) NVM Read/Write Cannot be Executed

- During NVM read/write, the NVM Ack NG state was detected.
- Or, during NVM repairs, an NVM write error was detected five times.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1)

U6 (041-363) NVM Data Defect

A fault was detected in the NVM ROM. This fault may appear if the NVM EEPROMs have been damaged or installed incorrectly during an SLCC PWB replacement.

- NVM Header data and NVM 3 page data are mismatched.
- Or, the NVM Write & Read area is not found.
- Or, the NVM or Counter area is full.

Procedure

Check the following:

- Switch off the power. Check the three NVM EEPROMs for the following problems:
 - One or more of the EEPROMs installed backwards

NOTE: When installing the NVM EEPROMs, the semi-circular key that is on one end of the EEPROM case must align with the semicircular key on the socket. All three of the EEPROMs on the SLCC PWB are installed with the key on the EEPROM toward the left side of the SLCC PWB (that is, "machine right") where the USB and Ethernet connectors are located.

- A bent or broken leg
- Physical damage to one or more of the NVM EEPROM cases
- Two or more of the EEPROMs installed in the wrong socket
- Electrical damage to one or more of the EEPROMs caused by ESD
- Switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the NVM EEPROMs (PL 8.1).
- Replace the SLCC PWB (PL 8.1)

U6 (041-364) CPU Cannot Access NVM

At NVM write, the NVM queue full state was detected. This fault may appear if the NVM EEPROMs have been damaged or installed incorrectly during an SLCC PWB replacement.

Procedure

Check the following:

- Switch off the power. Check the three NVM EEPROMs for the following problems:
 - One or more of the EEPROMs installed backwards

NOTE: When installing the NVM EEPROMs, the semi-circular key that is on one end of the EEPROM case must align with the semicircular key on the socket. All three of the EEPROMs on the SLCC PWB are installed with the key on the EEPROM toward the left side of the SLCC PWB (that is, "machine right") where the USB and Ethernet connectors are located.

- A bent or broken leg
- Physical damage to one or more of the NVM EEPROM cases
- Two or more of the EEPROMs installed in the wrong socket
- Electrical damage to one or more of the EEPROMs caused by ESD
- Switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the NVM EEPROMs (PL 8.1).
- Replace the SLCC PWB (PL 8.1)

U7 (102-380) Controller or UI Firmware Fault

BSD-ON: BSD 2.1 Control Panel

The control logic has detected a fault in the Controller or the UI.

Procedure

- Switch off the power and switch on the power.
- Check SLCC PWB P/J401 to UI PWB P/J710 an open wire or poor contact:
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the following in order:
 - 1. SLCC PWB to UI PWB cable (PL 8.3)
 - 2. UI PWB (PL 8.3)
 - 3. SLCC PWB (PL 8.1)

U8 (041-313) Billing Counter Defect

BSD-ON: BSD 3.2 Billing and Machine Control

- An illegal Billing Counter value was detected.
- Or, the SLCC PWB failed to read the Billing Counter.

Procedure

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the Billing Counter Harness (PL 8.1).
- Replace the SLCC PWB (PL 8.1)

U9 (042-398) HVPS Fault

BSD-ON: BSD 9.1 Xerographics

A 500 ms cycle of HVPS#ERR=High was detected twice in a row.

Initial Actions

Check the following:

- Switch off the power and switch on the power.
- Initialize NVM using GP 7
- Reload or upgrade Controller firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Open the Left Hand Cover and ensure that the Transfer Corotron is properly seated.
- Open the Front Cover and ensure that the Drum Cartridge is properly seated

Procedure

Measure the voltages between the following locations (+) and GND (-):

- P 406-2
- P 406-4
- P 406-5

All of the voltages are logic high (approximately +5VDC).

ΥI

Perform the following in order:

- 1. Check the connectors and the wiring between the SLCC PWB and the HVPS for a poor connection, or an open or short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).
- 5. Replace the HVPS (PL 8.2).

Switch on the HVPS Low Voltage using GP 5 (609-204). Measure the voltages between the following locations (+) and GND (-):

- P 406-2
- P 406-4
- P 406-5

All of the voltages are logic low (approximately 0VDC).

. .

Perform the following in order:

- 1. Check the connectors and the wiring between the SLCC PWB and the HVPS for a poor connection, or an open or short circuit.
- Initialize NVM using GP 7.
- Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- Replace the SLCC PWB (PL 8.1).
- Replace the HVPS (PL 8.2).

Α

Measure the voltage between P 406-1 (+) and GND (-). The voltage is a logic high (approximately +5VDC).

Y N

Perform the following in order:

- Check the connectors and the wiring between the SLCC PWB and the HVPS for a poor connection, or an open or short circuit.
- 2. Initialize NVM using GP 7.
- 3. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 4. Replace the HVPS (PL 8.2).
- 5. Replace the SLCC PWB (PL 8.1).

Perform the following in order:

- 1. Initialize NVM using GP 7.
- 2. Reload or upgrade the Controller Firmware using GP 15 to ensure that the Controller firmware version is 1.201.6 or higher.
- 3. Replace the SLCC PWB (PL 8.1).
- 4. Replace the HVPS (PL 8.2).

3 Image Quality

Image Quality RAPs

IQ1 IOT Image Quality Entry RAP	3-3
IQ2 IIT Image Quality Entry RAP	3-3
IQ3 Low Image Density RAP	3-4
IQ4 Wrinkled Image RAP	3-4
IQ5 Residual Image (Ghosting) RAP	3-5
IQ6 Background RAP	3-5
IQ7 Deletion RAP	3-6
IQ8 Skew/Misregistration RAP	3-6
IQ9 Process Direction Bands, Streaks, and Smears RAP	3-7
IQ10 Unfused Copy/Toner Offset RAP	3-7
IQ11 Repeating Bands, Streaks, Spots, and Smears RAP	3-8
IQ12 Mottle RAP	3-8
IQ13 Spots RAP	3-9
IQ14 Black Prints RAP	3-9
IQ15 Blank Image RAP	3-10
Copy Quality Specification	3-10
Samples of Image Quality Defects	3-16

IQ1 IOT Image Quality Entry RAP

Initial Actions

Determine whether the image quality problem occurs in Copy Mode or Print Mode. If the problem occurs in Copy Mode, go to IQ2.

Procedure

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

Table 1 IOT Image Quality Problems

Image Quality Problem	Symptom	RAP
Low image density	Overall low density of images.	IQ3
Wrinkled images	The printed paper is creased, folded or torn.	IQ4
Ghost images	Ghost images appear on the paper. Parts of the previous page or current page appear as ghost images on the paper.	IQ5
Background contamination	The whole page or part of the page is contaminated by toner. The contamination appears as a very light grayish color.	IQ6
Deletion	Part of the image is missing.	IQ7
Skew/Misregistration	Printed images are not parallel to the edges of the paper.	IQ8
Black lines, blank areas, or smears in the process direction	Black lines or white streaks running parallel to the direction of paper transport.	IQ9
Improper fusing, offset	Printed images are not properly fused onto the paper. When rubbed, the image comes off easily.	IQ10
Black lines, blank areas, or smears at right angles to the process direction.	Black lines or white streaks running at right angles to the direction of paper transport.	IQ11
Mottle	Uneven printed image density.	IQ12
Spotted blanks	Toner spots and blank areas are spread irregularly over the whole page.	IQ13
Solid black copy	The output is completely black.	IQ14
Blank copy	The output is completely white.	IQ15

IQ2 IIT Image Quality Entry RAP

Initial Actions

Clean the IIT Upper Cover (PL 10.2) (REP 10.2.1).

Clean the mirrors and lens with a lint-free cloth.

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

Table 1 IIT Image Quality Problems

Image Quality Problem	Symptom	RAP
Low image density	Overall low density of images.	IQ3
Background contamination	The whole page or part of the page is contaminated by toner. The contamination appears as a very light grayish color.	IQ6
Black lines, blank areas, or smears in the process direction.	Black lines or white streaks running parallel to the direction of paper transport.	IQ9
Black lines, blank areas, or smears at right angles to the process direction.	Black lines or white streaks running at right angles to the direction of paper transport.	IQ11
Spotted blanks	Toner spots and blank areas are spread irregularly over the whole page.	IQ13
Solid black copy	The output is completely black.	IQ14

IQ3 Low Image Density RAP

Overall low density of images.

Procedure

Check for dirt on the Platen Glass. The Platen Glass is clean.

Y

Clean any dirt on the Platen.

If unable to clean the dirt, replace the IIT Upper Cover (PL 10.2) (REP 10.2.1).

Check the drum ground contact. The drum ground contact is clean and not damaged.

ΥI

Clean the drum ground contact. If necessary, restore it to its proper shape.

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Print a page that is entirely black. During the print cycle, turn OFF the power after you hear the paper feed (to force a stop during image transfer). Check the surface of the Drum. **There is a considerable amount of toner left on the surface of the Drum.**

Y

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

Replace the Transfer Corotron (PL 4.3) (REP 4.3.1), followed by the HVPS (PL 8.2) (REP 8.2.1), and finally the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ4 Wrinkled Image RAP

The output is creased, folded or torn.

Procedure

Check the paper type. The paper used is within specifications.

Υ

Use paper that is within specifications.

Use paper from a freshly opened packet. The problem recurs.

Y N

Completed

Remove the Fuser (PL 5.1) (REP 5.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

' N

Completed

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

Y N

Remove the foreign substances. Reshape or replace any damaged components.

Replace the Fuser (PL 5.1) (REP 5.1.1).

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 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

N

Completed

Remove the Fuser (PL 5.1) (REP 5.1.1), lower the green levers on both sides, turn the Drive Gear of the Heat Roll and check the Heat Roll surface for dirt and/or contamination. **The surface of the Heat Roll is clean.**

Y N

Remove any dirt and/or contamination. If you can't clean the surface of the Heat Roller, replace the Fuser (PL 5.1) (REP 5.1.1).

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ6 Background RAP

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

Procedure

Check for dirt on the Platen Glass. The Platen Glass is clean.

Y

Remove any dirt from the Platen Glass. If you cannot clean the Platen Glass, replace the IIT Upper Cover (PL 10.2) (REP 10.2.1).

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1) and install it properly. Turn the power OFF then ON and make a print.

The problem recurs.

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron (PL 4.3) (REP 4.3.1) is clean and not damaged.

Υ

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Remove the HVPS (PL 8.2) (REP 8.2.1) and reinstall it properly. Turn the power OFF then ON and make a print.

The problem recurs.

Y N

Completed

Replace the SLCC PWB (PL 8.1) (REP 8.1.1), followed by the HVPS (PL 8.2) (REP 8.2.1).

IQ7 Deletion RAP

Part of the image is missing.

Procedure

Check the paper type. The paper used is within specifications.

ΥI

Use paper that is within specifications.

Use paper from a freshly opened packet. The problem recurs.

′

Completed

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

′ N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is not damaged.

Y

Replace the Transfer Corotron (PL 4.3) (REP 4.3.1).

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

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.

/ N

Install the machine on a stable, level surface.

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

/ N

Completed

Check the Paper Cassette. The Paper Cassette is installed properly.

′ N

Install it properly.

Check the paper transport path. There are no obstructions or damaged parts in the paper transport path.

Y N

Remove any obstructions. Reshape or replace any damaged parts.

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ9 Process Direction Bands, Streaks, and Smears RAP

Black lines or white streaks running parallel to the direction of paper transport.

Procedure

Check the IIT Carriage Mirrors. The mirrors are not dirty, scratched, or damaged.

Y N

Clean the mirrors. If the mirrors can't be cleaned, have scratches, or are damaged, replace the IIT Carriage (PL 10.3) (REP 10.3.1).

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is clean and not damaged.

Y N

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Check for dirt in the paper transport path. The paper transport path is clean.

Y N

Clean away the dirt.

Check the IIT Carriage Mirror. The mirror is clean and not damaged.

Y

Clean the IIT Carriage Mirror (PL 10.3) (REP 10.3.1). If it is damaged, replace it.

Remove the Fuser (PL 5.1) (REP 5.1.1), and check the Heat Roll. The surface of the Heat Roll is clean.

Y N

Remove any dirt. If you can't clean the surface of the Heat Roll, replace the Fuser (PL 5.1) (REP 5.1.1).

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is clean and not damaged.

Y N

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Check the ROS (PL 3.1) (REP 3.1.1). The ROS is clean and not scratched.

Y |

Clean the ROS (PL 3.1) (REP 3.1.1). If it is scratched, replace it.

Replace the ROS (PL 3.1) (REP 3.1.1), followed by the SLCC PWB (PL 8.1) (REP 8.1.1).

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. The paper used is within specifications.

Y

Use paper that is within specifications.

Use paper stored under room conditions. The problem recurs.

N

Completed

Check the power supply voltages. The voltages are within the specified range.

′ N

Connect a power supply with voltages within the specified range.

Remove the Fuser (PL 5.1) (REP 5.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Check the fusing temperature using GP 5. A normal fusing temperature is set.

Y

Set a normal fusing temperature using GP 5.

Replace the Fuser (PL 5.1) (REP 5.1.1).

IQ11 Repeating Bands, Streaks, Spots, and Smears RAP

Black lines or white streaks running at right angles to the direction of paper transport.

Procedure

Check the IIT Carriage. The carriage has no foreign substances or damaged parts.

Y N

Remove any foreign substances. If any parts of the IIT Carriage (Capstan Pulley, Capstan Shaft, Carriage Cable, etc.) are damaged, replace them.

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is clean and not damaged.

Y N

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Check the pitch of the black lines or white streaks. The pitch of the black lines is approximately 78mm (circumference of the Heat Roll).

Y N

Clean the surface of the Heat Roll. If you can't, replace the Fuser (PL 5.1) (REP 5.1.1).

Replace the ROS (PL 3.1) (REP 3.1.1), followed by the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ12 Mottle RAP

Procedure

Check the paper type. The paper used is within specifications.

Y

Use paper that is within specifications.

Use paper from a freshly opened packet. The problem recurs.

/ N

Completed

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is clean and not damaged.

Y N

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Remove the HVPS (PL 8.2) (REP 8.2.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

/ N

Completed

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ13 Spots RAP

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

Procedure

Check for dirt on the Platen Glass. The Platen Glass is clean.

/ N

Remove any dirt on the Platen. If you can't remove the dirt, replace the IIT Upper Cover (PL 10.2) (REP 10.2.1).

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

Y N

Completed

Check the Transfer Corotron (PL 4.3) (REP 4.3.1). The Transfer Corotron is clean and not damaged.

Y N

Clean the Transfer Corotron (PL 4.3) (REP 4.3.1). If it is damaged, replace it.

Check for dirt in the paper transport path. The paper transport path is clean.

Y N

Clean away the dirt.

Remove the Fuser (PL 5.1) (REP 5.1.1) and check the surface of the Heat Roll. **The surface** of the Heat Roll is clean.

Y N

Clean away the dirt. If you can't remove the dirt, replace the Fuser (PL 5.1) (REP 5.1.1).

Check the paper type. The paper used is within specifications.

Y N

Use paper that is within specifications.

Use paper from a freshly opened packet. The problem recurs.

/ N

Completed

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ14 Black Prints RAP

The paper is printed completely black.

Procedure

Check the IIT Carriage for foreign substances and damaged parts. The carriage has no foreign substances or damaged parts.

Y N

Remove any foreign substances. If any parts of the IIT Carriage Assembly (cable, capstan, etc.) (PL 10.3) are damaged, replace them.

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. The problem recurs.

Y N

Completed

Remove the HVPS (PL 8.2) (REP 8.2.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

Y N

Completed

Check the connectors of the HVPS (P/J520) and SLCC PWB (P/J406). The connectors are connected securely.

Y N

Connect the connectors securely.

Check the wire between J460-4 and J520-2. The wire between J460-4 and J520-2 is not shorted or open.

Y N

Repair the wire.

Check the wires between the ROS (PL 3.1) (REP 3.1.1) and the SLCC PWB (PL 8.1) (REP 8.1.1). The wires between J140 (ROS) and J403 (SLCC PWB), as well as between J130 (ROS) and J403 (SLCC PCB), are not shorted or open.

Y N

Repair the wire(s).

Replace the ROS (PL 3.1) (REP 3.1.1), followed by the HVPS (PL 8.2) (REP 8.2.1), and finally the SLCC PWB (PL 8.1) (REP 8.1.1).

IQ15 Blank Image RAP

The paper is printed completely white.

Procedure

Check the ROS (PL 3.1) (REP 3.1.1). The ROS is installed correctly.

Y N

Install the ROS (PL 3.1) (REP 3.1.1) correctly.

Check the drum ground contact. The drum ground contact is clean and not damaged.

Y N

Clean the drum ground contact. If it is damaged, reshape or replace it.

Remove the Drum Cartridge (PL 4.1) (REP 4.1.1) and reinstall it properly. Turn the power OFF then ON and make a print. **The problem recurs.**

/ N

Completed

Install a new Drum Cartridge (PL 4.1) (REP 4.1.1). Turn the power OFF then ON and make a print. **The problem recurs.**

YN

Completed

Print a page that is entirely black. During the print cycle, turn OFF the power after you hear the paper feed (to force a stop during the image transfer) and check the surface of the Drum. There is a considerable amount of toner left on the surface of the Drum.

Y N

Check the P/J140, P/J406, J403, and J140 connectors. The connectors are connected securely.

Y N

Connect the connectors securely.

Check the ROS (PL 3.1) (REP 3.1.1). The ROS is installed correctly.

/

Install the ROS (PL 3.1) (REP 3.1.1) correctly.

Measure the voltage between pin 1 and pin 2 of connector P403 on the SLCC PWB (PL 8.1) (REP 8.1.1). **The voltage is +5VDC.**

YN

Replace the SLCC PWB (PL 8.1) (REP 8.1.1).

Check the wire between J140 and J403. The wire between J140 and J403 is not shorted or open.

Y N

Repair the wire.

Replace the ROS (PL 3.1) (REP 3.1.1), followed by the SLCC PWB (PL 8.1) (REP 8.1.1).

Replace the Transfer Corotron (PL 4.3) (REP 4.3.1), followed by the HVPS (PL 8.2) (REP 8.2.1), and finally the SLCC PWB (PL 8.1) (REP 8.1.1).

Copy Quality Specification

1. Copy Alignment

How to measure

Make a copy of the Test Pattern STP3600 (A3) (Figure 1) and measure.

Table 1 Copy Alignment: Measurement

Item	How to measure (Refer to Figure 1)
Lead Edge Registration (mm)	(P1~P2) – Standard Value *1
Side Edge Registration (mm)	(P7~P19) – Standard Value *1: A3S
Lead Skew (mm)	(P5~P6) – (P3~P4)
Vertical Ratio (%)	((P2~P14) - 200) / 200 x 100: A3S
Horizontal Ratio (%)	((P8~P13) - 280) / 280 x 100
Perpendicularity (mm)	Difference between the perpendicular line of the intersection point between the line that connects P4 and P6, and P14.
Linearity (Vertical) (mm) 400mm	Maximum difference between the Intersection point of the vertical line A and each vertical line and the line that connects P2 and P14.
Linearity (Horizontal) (mm) 280mm	Maximum difference between the Intersection point of the horizontal line C and each horizontal line and the line that connects P10 and P15.
Linearity (Skew) (mm) 280mm	Maximum difference between the Intersection point of the skew line D and each line and the line that connects P17 and P13. Or Maximum difference between the Intersection point of the skew line E and each line and the line that connects P8 and P18.
Parallelism (mm)	(P10~P12) – (P15~P16)
*1: Measure the length of the	nosition of FX STP#3600 and use it as the Standard Value

^{*1:} Measure the length of the position of FX STP#3600 and use it as the Standard Value in the table.

Specification

IOT + IIT (Complete System)

Table 2 Copy Alignment: Specification

Item	Specification SYSTEM	Application
Lead Edge Registration (mm)	+/- 2.90	
Side Edge Registration (mm)	+/- 3.40	
Lead Skew (mm)	+/- 2.30	280 mm
Vertical Ratio (%) 100%	+/- 1.40	400 mm
Horizontal Ratio (%) 100%	+/- 1.40	280 mm
Perpendicularity (mm)	+/- 3.40	400 mm
Linearity (Vertical) (mm)	+/- 2.00	400 mm
Linearity (Horizontal) (mm)	+/- 1.40	280 mm
Linearity (Skew) (mm)	+/- 1.42	280 mm
Parallelism	+/- 3.70	400 mm

(DC) IOT + IIT

Table 3 Copy Alignment: Specification

Item	Specification		Measurement Length
	Simplex	MSI	
Skew H	+/-1.9	+/-2.2	200mm
Perpendicularity	+/-2.8	+/-3.0	400mm
Linearity: V	1.4		400mm
Linearity: H	1.4		280mm
Linearity: D	1.4		283mm
Registration: Lead	+/-2.4	+/-3.1	
Registration: Side	+/-3.0	+/-3.2	
Magnification: V (%)	+/-0.95 (100%) +/-1.16 (50%-99%) +/-1.47 (101%-200%)		400mm
Magnification: H (%)	+/-0.95 (100%) +/-1.16 (50%-99%) +/-1.47 (101%-200%)		280mm

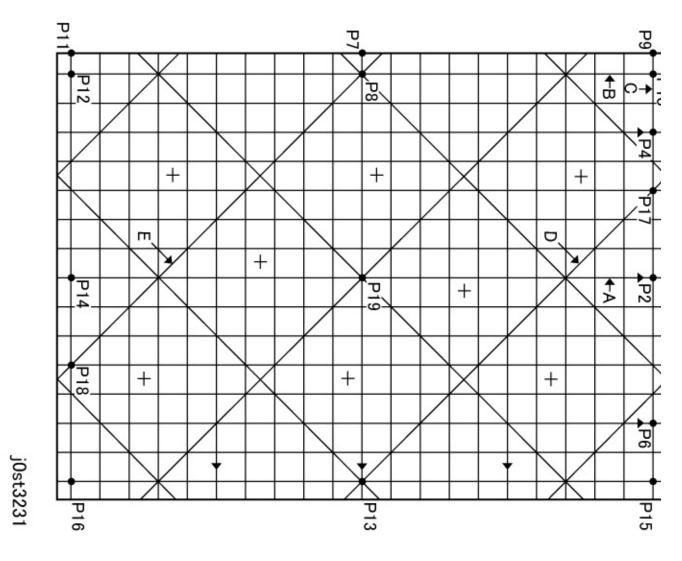


Figure 1 Copy Alignment Measurement Positions (Test Pattern STP3600)

2. Image Quality How to measure

Make a copy of the Test Pattern 499T247 (A3) and measure. See Table 5 for specifications.

Table 4

Item	How to measure (Refer to Figure 2)
Text/Image Density	Measure the 0.7G line image (10) at 3 locations.
`	Determine the maximum and minimum mean value measured (within the same copy).

Table 4

Item	How to measure (Refer to Figure 2)
Low Contrast (100% only)	Normal mode: Check that the 0.2G line image 13 can be read. Darker mode: Measure the 0.2G line image 13 at 3 locations. Determine the maximum and minimum mean value measured (within the same copy).
Reproducibility of the blue color density (100% only)	Normal mode: Check that the 0.2B line image 14 can be read. Darker mode: Measure the 0.2B line image 14 at 3 locations. Determine the maximum and minimum mean value measured (within the same copy).
Solid Density Reproduc- ibility (100%/Normal mode only)	Measure the 1.0G solid 16 at 3 locations. Determine the maximum and minimum mean value measured (within the same copy).
Background	Measure the margin.
Resolution	70.7, 100%: Measure the resolution target 17 at 3 locations. 141.4%: Measure the resolution target 17 at 2 locations.
Skip and Smear	100%: Check that the 2.5lp/mm ladder 18 is resolving across the entire page. 70.7~99%: Check that the 1.8lp/mm ladder 19 is resolving across the entire page.

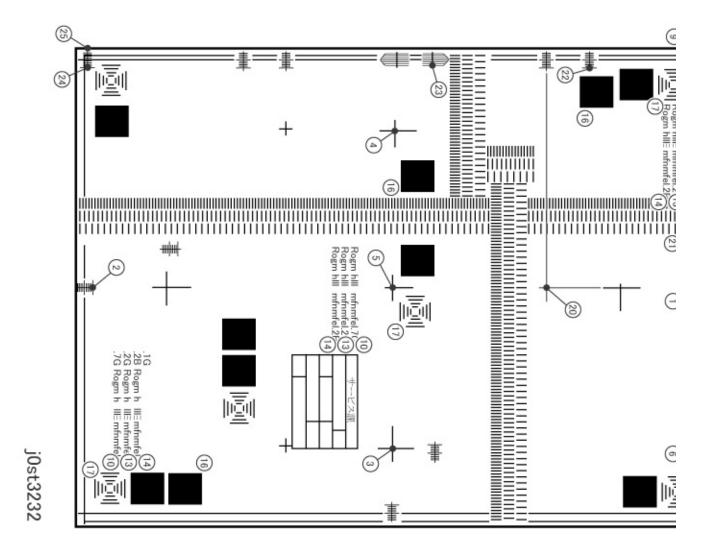


Figure 2 Image Quality Measurement Positions (Test Pattern 499T247)

Image Quality Specification

Total System

Item	Reduce/ Enlarge (%)	INPUT	OUTPUT (Density Settings Button) Lighter 3	OUTPUT (Density Settings Button) Normal	OUTPUT (Density Settings Button) Darker 3	OUTPUT (Density Settings Button) Auto
Text/Image Density	100	0.7 Gray	-	>=1.08	-	>=1.08
Text/Image Density Evenness	100	0.7 Gray	-	=<0.2	-	=<0.2
Low Contrast Reproducibility	100	0.2 Gray	-	>=0.17	>=0.46	>=0.22
Low Contrast Evenness	100	0.2 Gray	-	-	=<0.4	-
Low Contrast Reproducibility	100	0.1 Gray	Does not reproduce	-	-	-
Reproducibility of the blue color density	100	0.2 Blue	-	>=0.17	>=0.57	>=0.22
Blue Color Density Evenness	100	0.2 Blue	-	-	0.4 (Max)	-
Reproducibility of the blue color density	100	0.1 Blue	Does not reproduce	-	-	-
Solid Density Reproducibility	100	1.0 Solid	-	>=1.0	-	>=1.0
Solid Density Evenness	100	1.0 Solid	-	=<0.3	-	=<0.3
Background (SIR#302)	100	-	-	=<1.2	-	=<1.2
Resolution (Excluding Skip/Smear)	100	NBS Target	-	-	-	4.3 Lo/mm (Min)
Resolution (Excluding Skip/Smear)	70	NBS Target	-	-	-	2.5 Lo/mm (Min)
Resolution (Excluding Skip/Smear)	141	NBS Target	-	-	-	3.5 Lo/mm (Min)
Resolution (Excluding Skip/Smear)	200	NBS Target	-	-	-	3.5 Lo/mm
Depth of Focus	100	NBS Target	-	-	-	3 Lo/mm (Min)*1
Skip/Smear	100	Ladder A3 Entire Page	-	-	-	2.5 Lo/mm (Min)*1
Skip/Smear	70	Ladder A3 Entire Page	-	-	-	1.8 Lo/mm (Min)
Skip/Smear	141	Ladder A3 Entire Page	-	-	-	2.5 Lo/mm (Min)
Skip/Smear	200	Ladder A3 Entire Page	-	-	-	2.5 Lo/mm (Min)*1

Samples of Image Quality Defects

IOT Image Quality Defects

These are samples of image quality defects due to IOT problems and their corresponding solutions.

- Auger Marks (Figure 1)
- Strobing (28mm or 14mm Pitch Density) (Figure 2)
- White Streaks (Process Direction) (Figure 3)
- Black Bands (Figure 4)
- Toner Contamination (Figure 5)
- Toner Splattering (Figure 6)
- White Spots (Irregular) (Figure 7)
- Regular Blanks in the Process Direction (Spots, Streaks, Bands etc.) (Figure 8)
- Regular Toner Contamination in the Process Direction (Spots, Streaks, Bands etc.) (Figure 9)

IIT Image Quality Defects

These are samples of image quality defects due to IIT problems and their corresponding solutions.

- Moire Due to Interference with Copy Original
- Fluctuation in Background Suppression Values for Copies of Originals
- Defects Related to Scan Print
- Light Background Due to Background Suppression in Copies of Originals with Frames (Figure 10)

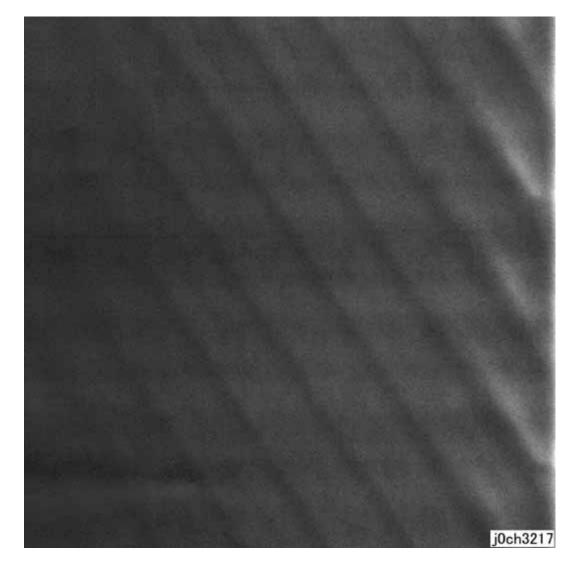


Figure 1 Auger Marks

Cause

- 1. Magnetic field failure in the Developer Magnetic Roll.
- 2. There was a drop in the level of developer material.

Action

 Replace the Drum Cartridge (PL 4.1) (REP 4.1.1). The problem may occur immediately after you install a new Drum Cartridge. This can be corrected by feeding a few sheets of paper.

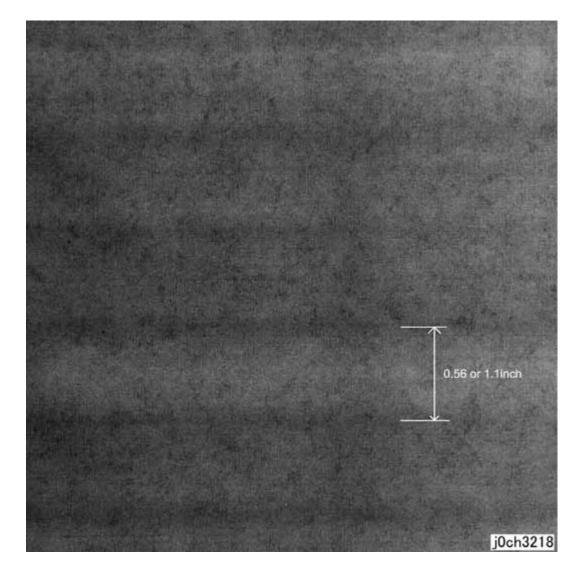


Figure 2 Strobing (28mm or 14mm Pitch Density)

Cause

1. Developer Magnetic Roll bias.

Action

1. Replace the Drum Cartridge (PL 4.1) (REP 4.1.1).

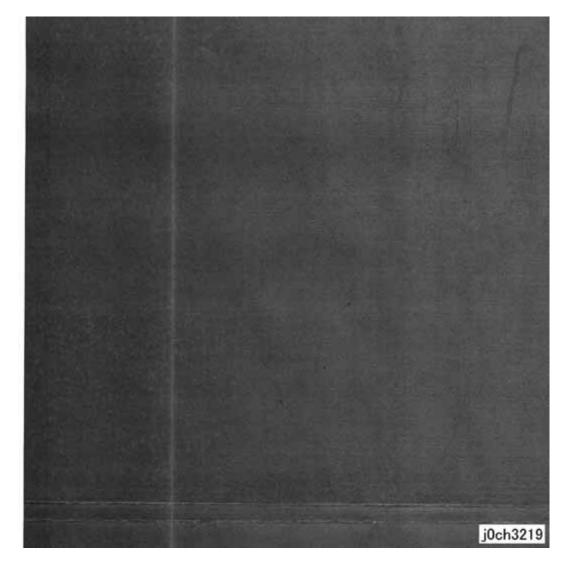


Figure 3 White Streaks (Process Direction)

- 1. Foreign substances are blocking the ROS Laser.
- 2. Developer material clogging on the Developer Magnetic Roll due to foreign substances.

Action

- Clean the optical path between the ROS (PL 3.1) (REP 3.1.1) and the Drum Cartridge (PL 4.1) (REP 4.1.1), and clean the seal glass.
- 2. Replace the Drum Cartridge (PL 4.1) (REP 4.1.1).

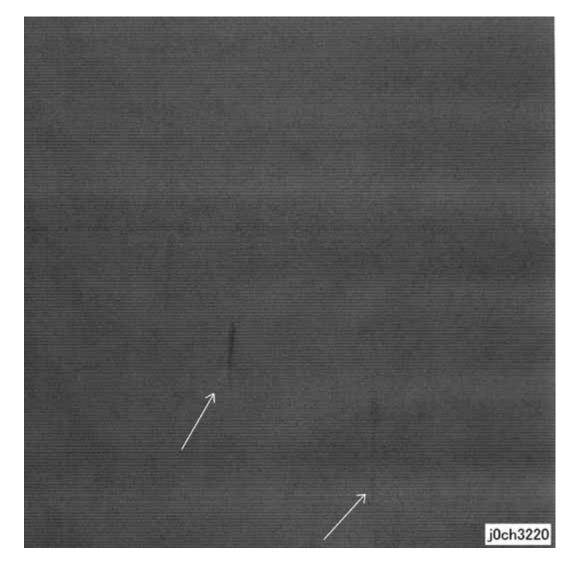


Figure 4 Black Bands

1. The developer material is not well mixed.

Action

1. Mix the developer material by processing blank paper.

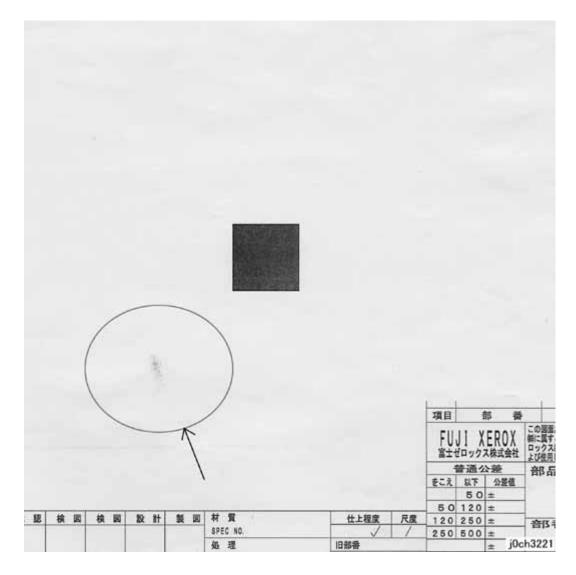


Figure 5 Toner Contamination

1. Cloud of toner falling from the Drum Cartridge (PL 4.1) (REP 4.1.1).

Action

1. Mix the developer material by processing blank paper.

2. Replace the Drum Cartridge (PL 4.1) (REP 4.1.1).



Figure 6 Toner Splattering

- 1. Paper size mismatch (tray settings and paper size are different).
- 2. Increased paper resistance due to dry conditions.

Action

- 1. Check the tray settings.
- 2. Use paper from a freshly opened packet.

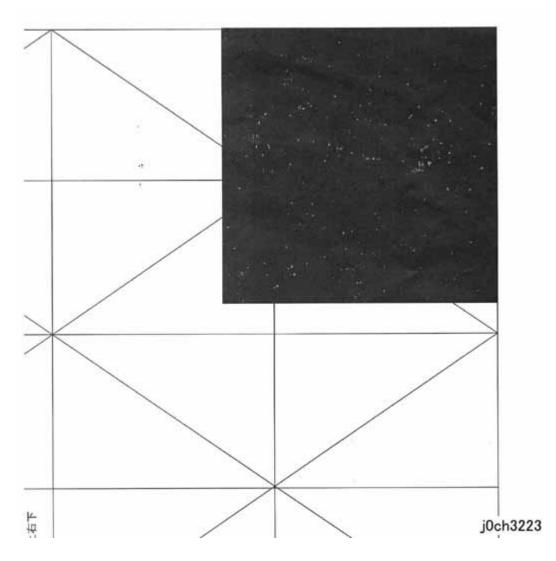


Figure 7 White Spots

1. Increased paper resistance due to dry conditions.

Action

1. Use paper from a freshly opened packet.

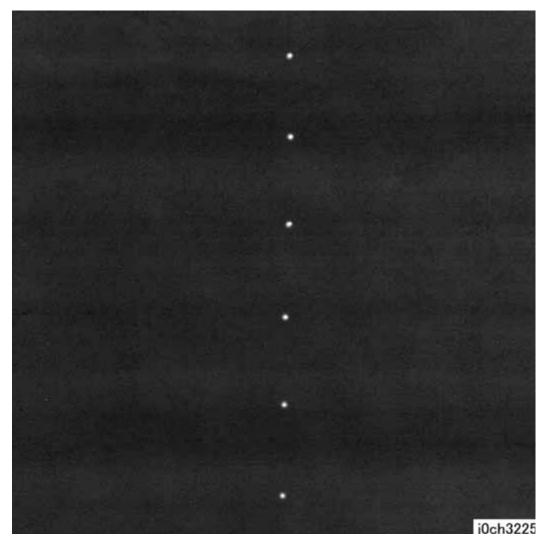


Figure 8 Regular Deletions in the Process Direction (Spots, Streaks, Bands, etc.)

- 1. 94mm Pitch (Drum): Scratches or foreign substances.
- 2. 57mm Pitch (Developer Roll): Developer material clogging on the Magnetic Roll.
- 3. 44mm Pitch (Charger): Scratches or foreign substances.

4. 80mm Pitch (Fuser Heat Roll): Scratches or foreign substances.

Action

- 1. 1,4: Clean or replace the Drum Cartridge (PL 4.1) (REP 4.1.1)/Fuser (PL 5.1) (REP 5.1.1).
- 2. 2,3: Replace the Drum Cartridge (PL 4.1) (REP 4.1.1).

Regular Toner Contamination In the Process Direction (Spots, Streaks, Bands, etc.)

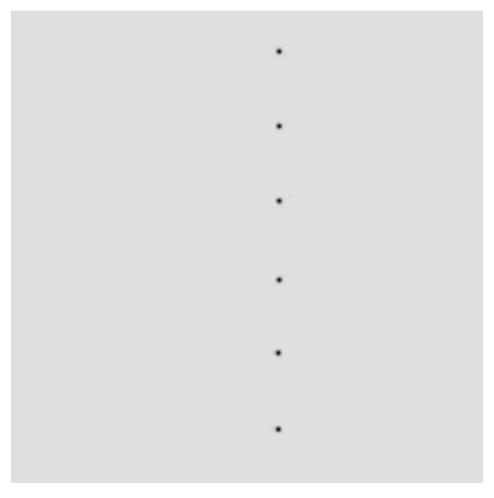


Figure 9 Regular Toner Contamination In the Process Direction (Spots, Streaks, Bands, etc.)

Cause

- 1. 94mm Pitch (Drum): Scratches or foreign substances.
- 2. 57mm Pitch (Magnetic Roll): Developer material clogging on the Magnetic Roll.
- 3. 44mm Pitch (Charger): Scratches or foreign substances.
- 4. 80mm Pitch (Heat Roll): Scratches or foreign substances.
- 5. 19mm Pitch (Fuser Roll-Exit): Dirt.
- 6. 44mm Pitch (Registration): Dirt.

Action

- 1,4,5,6: Clean or replace the Drum Cartridge (PL 4.1) (REP 4.1.1)/Fuser (PL 5.1) (REP 5.1.1).
- 2. 2,3: Replace the Drum Cartridge (PL 4.1) (REP 4.1.1).

Moire Due to Interference with Copy Original

Cause

Copying originals with certain line patterns may cause moire (wavy lines) on the copy. Combinations of certain angles of screen ruling near 150dpi and certain Reduce/Enlarge ratios may also cause moire.

Action

- 1. Reduce sharpness.
 - Secondary defect: Text is blurred.
- Make copies at a different Reduce/Enlarge ratio.
- Change the orientation of the original.

Fluctuation in Background Suppression Values for Copies of Originals of Medium Density

When Auto is selected for originals with a background of medium density (0.5G), the effectiveness of Automatic Exposure fluctuates for each job.

Cause

Since 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, which responds to variations in the original density and how the original is positioned.

Action

Select Off for Auto.

Defects Related to Scan Print

Moire may occur when scanned images are printed.

Cause

This could be due to the resolution conversion process between the original and the printer driver.

Action

Reduce sharpness.

Secondary defect: Text is blurred.

Light Background in Copies of Originals with Frames

When Auto is selected for originals with dark frames along the Lead Registration Edge, the background suppression value is set so large that areas of medium density appear extremely light.



Figure 10 Light Background in Copies of Originals with Frames

Cause

Auto performs background detection of images at a distance of up to 10mm from the Lead Registration Edge. If there are dark frames along the Lead Registration Edge, Automatic Exposure cannot detect the original background density. Therefore, Background Suppression is calculated based on the density of the frames.

Action

Select Off for Auto.

4 Repairs and Adjustments

REP 9.2.2 Right Cover	
REP 10.2.1 IIT Upper Cover (SCC) REP 10.3.1 IIT Carriage (SCC) REP 10.3.2 Flexible Print Cable (SCC) REP 10.6.1 Exposure Lamp REP 10.7.1 Carriage Cable and Drum REP 10.7.2 Inverter PWB	
REP 10.3.1 IIT Carriage (SCC)	
REP 10.3.2 Flexible Print Cable (SCC)	4-74 4-76 4-77
REP 10.6.1 Exposure Lamp REP 10.7.1 Carriage Cable and Drum REP 10.7.2 Inverter PWB 11. Tray 2 Module REP 11.1.1 Remove Tray 2	4-76 4-77
REP 10.7.1 Carriage Cable and Drum REP 10.7.2 Inverter PWB	4-77
REP 10.7.2 Inverter PWB	
11. Tray 2 Module REP 11.1.1 Remove Tray 2	4-80
REP 11.1.1 Remove Tray 2	
REP 11.1.1 Remove Tray 2	
REP 11.4.1 Tray 2 Feed Roll	
REP 11.4.2 Tray 2 Retard Roll	
REP 11.5.1 Tray 2 Feed Sensor	
REP 11.7.1 Tray 2 No Paper Sensor	4-94
12 DADE	
	4-95
'	
REP 13.9.1 Pickup Roll, Feed Roll	4-112
Adjustments	
	<i>1</i> -11 <i>F</i>
ADJ 13.1.1 DADE Positional Adjustment	4-11/
	REP 11.5.2 Tray 2 PWB (SCC). REP 11.6.1 Tray 2 Feed Clutch REP 11.6.2 Tray 2 Feed Motor REP 11.7.1 Tray 2 No Paper Sensor 13. DADF REP 13.2.3Front Cover REP 13.2.4 Rear Cover. REP 13.2.5 Eject Roller Solenoid. REP 13.2.6 DADF Assembly. REP 13.2.7 Document Tray Assembly REP 13.2.8 Feeder Assembly REP 13.3.2 Right Counter Balance (SCC). REP 13.3.3 Left Counter Balance (SCC). REP 13.3.4 DADF PWB. REP 13.4.1 Top Cover. REP 13.9.1 Pickup Roll, Feed Roll. Adjustments ADJ 8.1.1 Edge Erase Adjustment. ADJ 10.3.1 IIT Lead Edge/Side Edge Registration. ADJ 13.1.1 DADF Positional Adjustment (Parallelism). ADJ 13.1.1 DADF Positional Adjustment

Introduction

This section contains procedures required for parts replacement and adjustment.

How to Use the Replacement and Adjustment Section

For installation procedures, only NOTEs are described here since installation procedures are the reverse of removal ones.

- 1. (Figure X) at the beginning of a procedure indicates that its detailed steps are shown in the illustration. Numbers in the illustration indicate the sequence of the steps.
- (REP X.X.X) at the end of a procedure indicates the replacement procedure to be referred to
- Item numbers of replacement and adjustment procedures (i.e. REP/ADJ No.) correlate to the PL No. in Section 5 Parts List. Therefore, an appropriate replacement or adjustment procedure can easily be referred to a PL No. and vice versa. For example, the replacement or adjustment procedure of Component PL 1.1 is REP 1.1.X or ADJ 1.1.X.
- 4. When replacement/adjustment procedures or title items vary by modification or model, the modification number or the model is indicated at the beginning or the end of the respective titles or procedures.
 - Example 1: REP X.X.X Main PWB [Models with 1V] indicates that the entire procedure under this title applies to machines with Tag 1V.

Example 2: See Table 1.

Table 1

Symbol	Description
1	Illustration 1: Indicates that a specific part has been modified by the tag number within the circle.
Figure 1 Illustration 1	
	Illustration 2: Indicates that the configuration of the part shown is the configuration before the part was modified by the number within the circle.
Figure 2 Illustration 2	

- Positions or directions are defined as follows:
 - a. Front: Front of the machine.
 - Right: Right-hand side facing the machine.
 - c. Left: Left-hand side facing the machine.
 - d. Rear: Rear of the machine.

Terms and Symbols

Terms and symbols used throughout this section are explained here.

WARNING

A Warning statement indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in personal injury or loss of life.

CAUTION

A Caution statement indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of, equipment.

NOTE: A Note statement indicates an operating or maintenance procedure, practice, or condition that is necessary to accomplish a task efficiently.

Reference: Used when other explanations are given.

Purpose: Used to describe the purpose of the Adjustment.

Safety Critical Components (SCC):

Safety Critical Components are components, such as static-sensitive integrated circuit chips, that require special precautions to prevent them from being damaged. Follow the regulations regarding Safety Critical Components set by FUJI XEROX Co., Ltd.

Important Information Stored Component (ISC):

This component stores all the important customer information that is input after the installation. When replacing this component, follow the procedures in Section 4 Repairs and Adjustments. Make absolutely sure that no customer information gets revealed.

REP 1.1.1 IOT Motor (SCC)

Parts List on PL 1.1

Removal

WARNING

- 1. Remove the Drum Cartridge (REP 4.1.1).
- 2. Remove the Rear Cover (REP 9.2.1).
- 3. Disconnect the connector (Figure 1).
 - (1) Remove the screw that secures the Ground Wires (2).
 - (2) Disconnect P/J 504.
 - (3) Release the wire harness of the IOT Motor from the hook.
 - (4) Remove the wire harness of the IOT Motor from the slot in the frame.

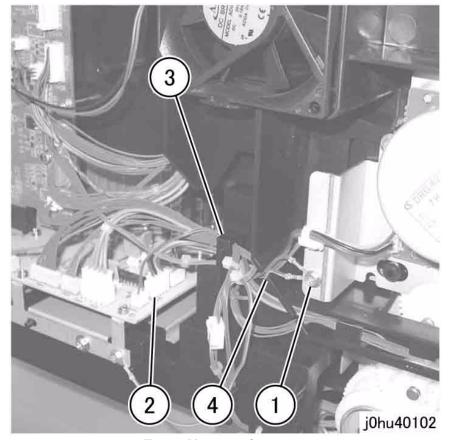


Figure 1 Disconnect Connectors

- 4. Remove the IOT Motor (Figure 2).
 - (1) Remove the Self Tapping Screws (4).
 - (2) Remove the IOT Motor.

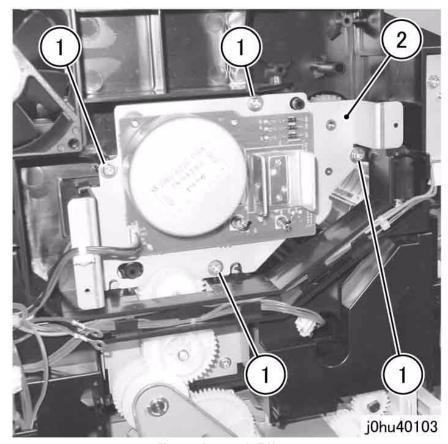


Figure 2 Remove IOT Motor

1. To install, do the removal steps in reverse order.

Reissue

WorkCentre 5020/DN

REP 2.2.1 Tray 1 Feed Clutch (SCC)

Parts List on PL 2.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Disconnect the connector (Figure 1).
 - (1) Disconnect the connector.
 - (2) Release the wire harness from the clamp.

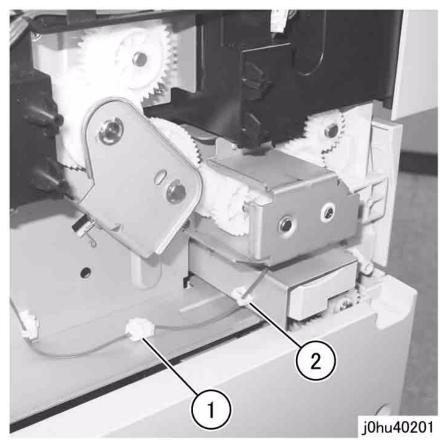


Figure 1 Disconnect the Connector

3. Remove the screws (3) that secure the Clutch Bracket (Figure 2).

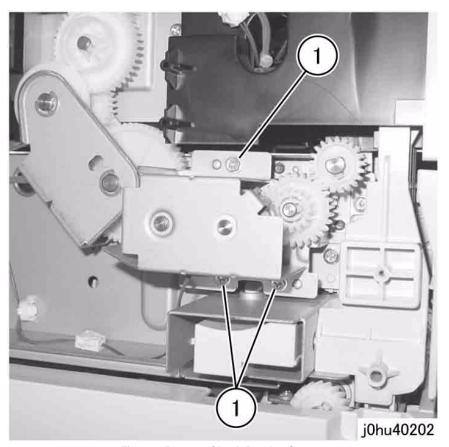


Figure 2 Remove Clutch Bracket Screws

- 4. Remove the Tray 1 Feed Clutch (Figure 3).
 - (1) Remove the Clutch Bracket.
 - (2) Remove the bearing.
 - (3) Remove the Tray 1 Feed Clutch.
 - (4) Pull out the wire harness through the hole.

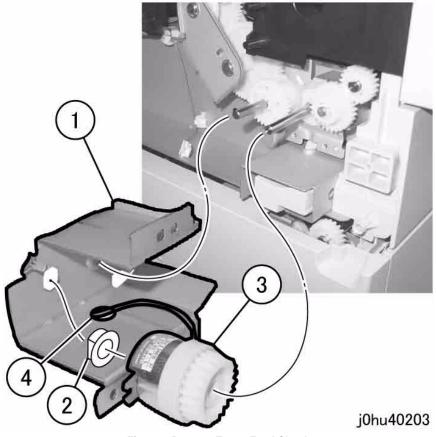


Figure 3 Remove Tray 1 Feed Clutch

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Tray 1 Feed Clutch, place the tab of Clutch Bracket in the notch of Tray 1 Feed Clutch (Figure 4).

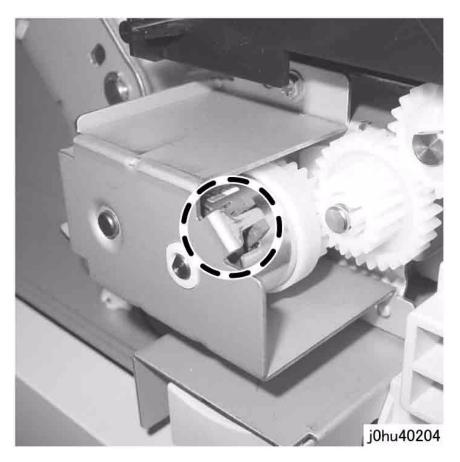


Figure 4 Clutch Bracket Tab Placement

REP 2.3.1 Tray 1 Feed Roll (SCC)

Parts List on PL 2.3

Removal

WARNING

- 1. Remove all paper from Tray 1.
- 2. Remove Tray 1.
- 3. Remove the Feed Shaft (Figure 1).
 - (1) Lower the Bottom Plate.
 - (2) Release the Feed Shaft from the bearing by pressing down on the white tab.
 - (3) Remove the Feed Shaft by pulling it in the direction of the arrow.

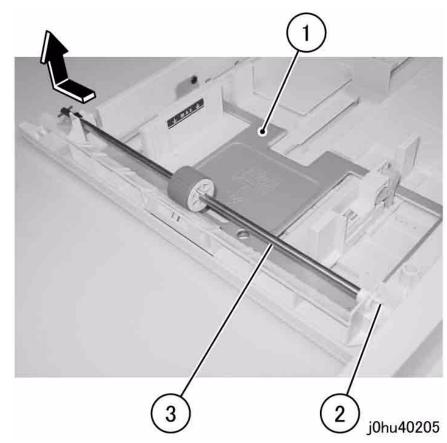


Figure 1 Remove the Feed Shaft

- 4. Remove the Tray 1 Feed Roll (Figure 2).
 - (1) Gently lift up the tab to remove the Tray 1 Feed Roll.

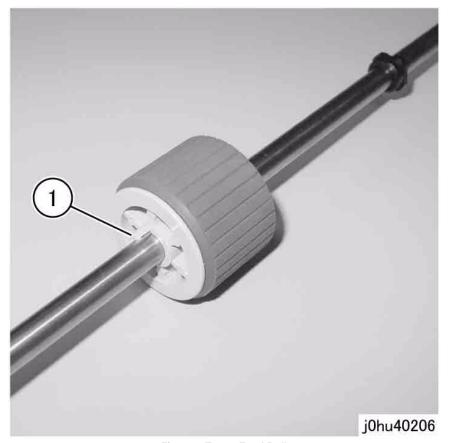


Figure 2 Tray 1 Feed Roll

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Tray 1 Feed Roll, align the pin of the Feed Shaft with the slot in the Tray 1 Feed Roll (Figure 3).

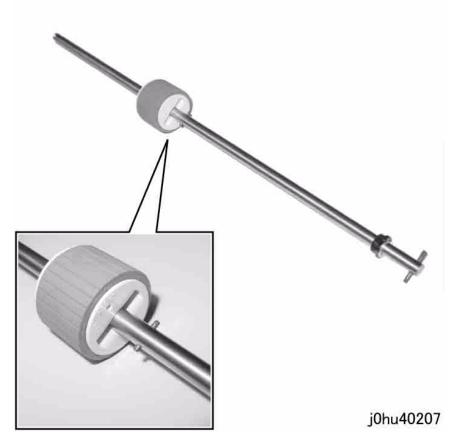


Figure 3 Feed Shaft Pin Alignment

REP 2.5.1 Tray 1 Feed Sensor

Parts List on PL 2.5

Removal

WARNING

- 1. Remove Tray 1.
- 2. Remove Tray 2 (REP 11.1.1).
- 3. Remove the Sensor Housing of the Tray 1 No Paper Sensor (REP 2.7.1).
- 4. Open the Tray 1 Access Cover on the left side of the machine.

- 5. Remove the Tray 1 Feed Sensor (Figure 1).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the cable bands (2).
 - (3) Release the wire harness from the clamps (2).
 - (4) Move the wire harness toward you and disconnect the connector.
 - (5) Remove the Tray 1 Feed Sensor.

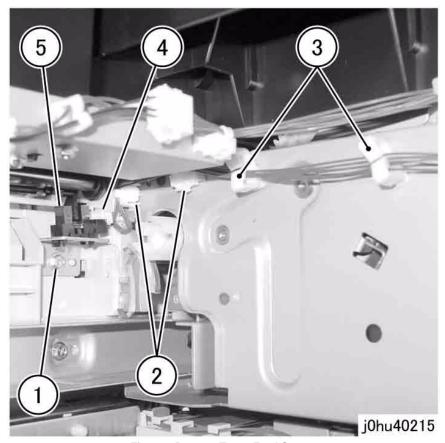


Figure 1 Remove Tray 1 Feed Sensor

- 1. To install, do the removal steps in reverse order.
- 2. Insert the Connector Housing of the Tray 1 Interlock Switch into the square hole of the frame (Figure 2).
 - (A) Square hole

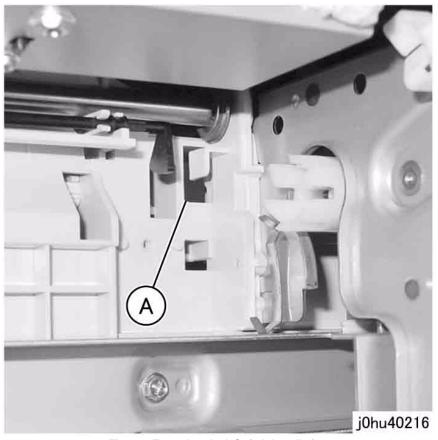


Figure 2 Tray 1 Interlock Switch Installation

REP 2.7.1 Tray 1 No Paper Sensor

Parts List on PL 2.7

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove Tray 1.
- 2. Remove Tray 2 (REP 11.1.1).
- 3. Remove the Sensor Housing (Figure 1).
 - (1) Disconnect the connector.
 - (2) Release the tabs (2) to remove the Sensor Housing.

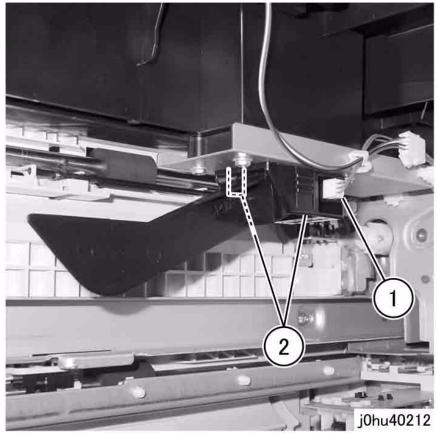


Figure 1 Remove the Sensor Housing

- 4. Remove the Tray 1 No Paper Sensor (Figure 2).
 - (1) Remove the Tray 1 No Paper Actuator.
 - (2) Release the tabs to remove the Tray 1 No Paper Sensor.

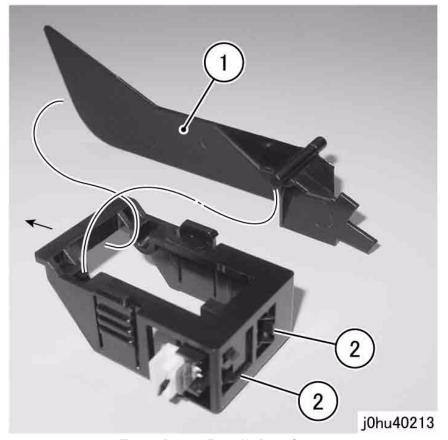


Figure 2 Remove Tray 1 No Paper Sensor

Replacement

1. To install, do the removal steps in reverse order.

REP 2.8.1 Registration Roll Assembly (SCC)

Parts List on PL 2.8

Removal

WARNING

- 1. Remove the Drum Cartridge (REP 4.1.1).
- 2. Remove the Rear Cover (REP 9.2.1).
- 3. Remove the Transfer Corotron Housing (REP 4.3.1).
- 4. Disconnect the connector (Figure 1).
 - (1) Remove the screw to remove the Ground Wire.
 - (2) Remove the screw to remove the Ground Wires (2).
 - (3) Disconnect P/J 503.
 - (4) Remove the wire harness from the hooks (2).
 - (5) Remove the wire harness from the slots (2) in the frame.
 - (6) Remove the wire harness from the guides (3).

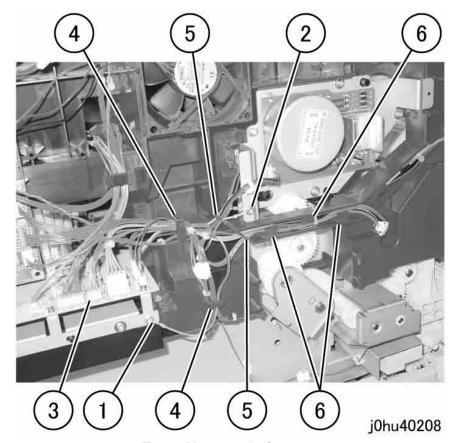


Figure 1 Disconnect the Connector

- 5. Remove the Connector Housing (Figure 2).
 - (1) Remove the wire harness from the guide.
 - (2) Slide the Connector Housing through the hole.

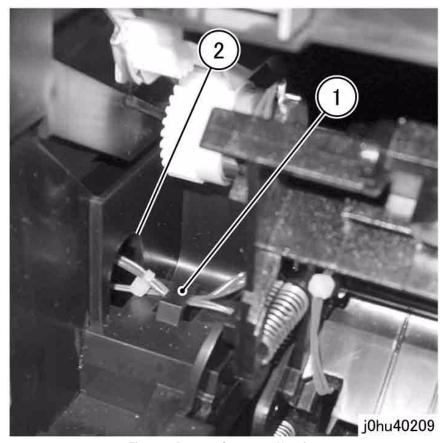


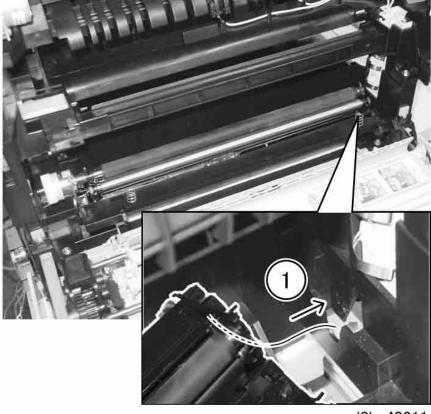
Figure 2 Remove Connector Housing

6. Remove the Front Stopper (Figure 3).



Figure 3 Remove Front Stopper

- 7. Remove the Registration Roll Assembly (Figure 4).
 - (1) Press the tab in the direction of the arrow to remove the boss of the Registration Roll Assembly from the frame



j0hu40211

Figure 4 Remove the Registration Roll Assembly

1. To install, do the removal steps in reverse order.

REP 3.1.1 ROS (SCC)

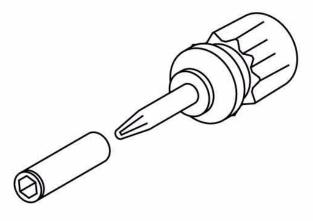
Parts List on PL 3.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

NOTE: Attach the attachment in the ROS Replacement Kit to a Stubby Driver to remove the screws (Figure 1).



j0hu40304

Figure 1 ROS Attachment

- 1. Open the Front Cover.
- 2. Remove the Output Tray (REP 9.1.1).
- 3. Remove the Rear Cover (REP 9.2.1).
- 4. Remove the HVPS and HV Contact Block (REP 8.2.1).
- 5. Remove the Laser Housing (Figure 2).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Laser Housing.

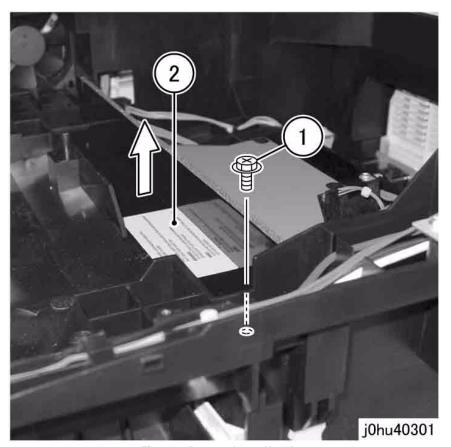


Figure 2 Remove Laser Housing

- 6. Disconnect the ROS connectors (Figure 3).
 - (1) Disconnect the Ground connectors (2).
 - (2) Disconnect the connectors (2).
 - (3) Disconnect the connector.
 - (4) Remove the wire harness from the hook.

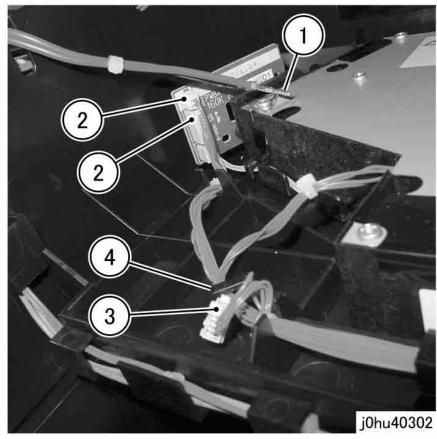


Figure 3 Disconnect ROS Connectors

- 7. Remove the ROS (Figure 4).
 - (1) Remove the Self Tapping Screws (5).
 - (2) Remove the ROS.

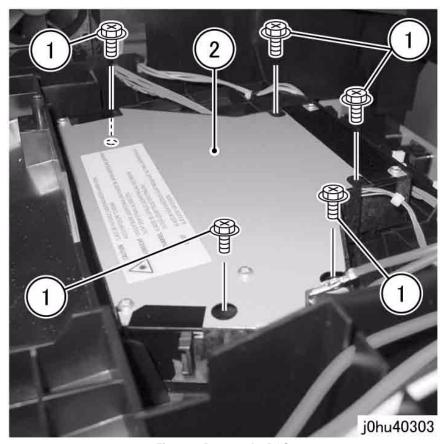


Figure 4 Remove the ROS

1. To install, do the removal steps in reverse order.

NOTE: When powering up to perform operations with the ROS installed, read the warning label pasted on the ROS before proceeding with the operation.

REP 4.1.1 Drum Cartridge

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- Open the Left Hand Cover.
- 2. Open the Front Cover.
- 3. Remove the Drum Cartridge (Figure 1).
 - (1) Release the tab.
 - (2) Remove the Drum Cartridge.

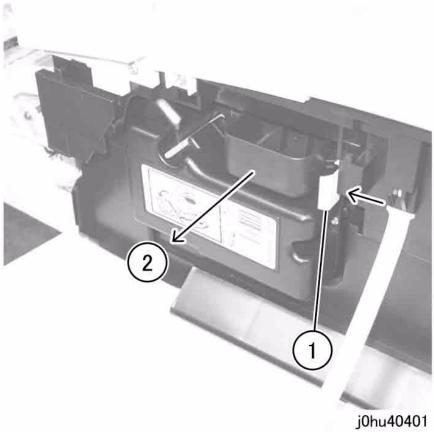


Figure 1 Remove Drum Cartridge

Replacement

1. To install, do the removal steps in reverse order.

2. When installing the Drum Cartridge, align the protruding end of the Drum Cartridge with the cavity in the frame (Figure 2).



Figure 2 Install Drum Cartridge

REP 4.2.1 Toner Empty Sensor

Parts List on PL 4.2

Removal

WARNING

- 1. Remove the Drum Cartridge (REP 4.1.1).
- 2. Remove Tray 1.
- 3. Remove Tray 2 (REP 11.1.1).
- 4. Disconnect the connector (Figure 1).
 - (1) Release the wire harness from the clamp.
 - (2) Disconnect the connector.

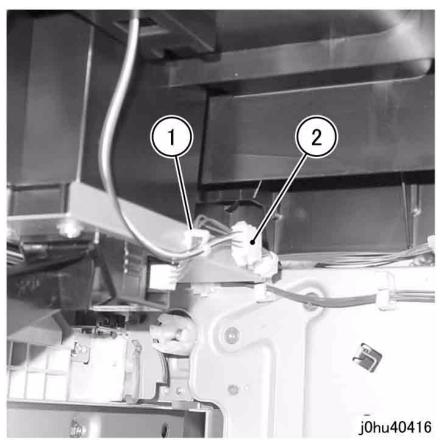


Figure 1 Disconnect the Connector

- 5. Remove the Toner Empty Sensor (Figure 2).
 - (1) Release the tabs (2) to remove the Toner Empty Sensor.

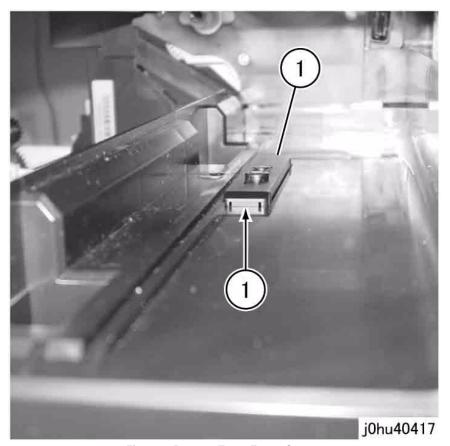


Figure 2 Remove Toner Empty Sensor

- 1. To install, do the removal steps in reverse order.
- 2. Insert the Connector Housing of the Toner Empty Sensor into the square hole of the frame (Figure 3).
 - (A) Square hole

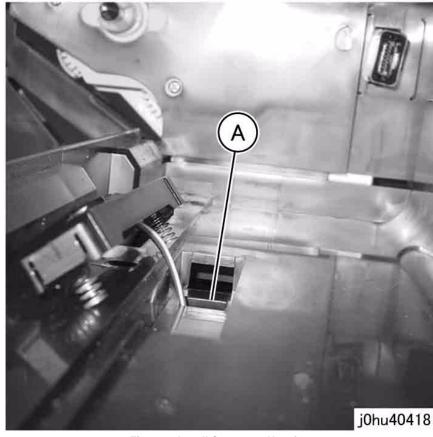


Figure 3 Install Connector Housing

REP 4.2.2 Erase Lamp

Parts List on PL 4.2

Removal

WARNING

- 1. Remove the Drum Cartridge (REP 4.1.1).
- 2. Remove the Output Tray (REP 9.1.1).
- 3. Remove the Rear Cover (REP 9.2.1).
- 4. Remove the Transfer Corotron Housing (REP 4.3.1).
- 5. Remove the HVPS and HV Contact Block (REP 8.2.1).

- 6. Release the Erase Lamp tabs (7) (Figure 1).
 - (1) Release the tabs (upper: 3).
 - (2) Release the tabs (lower: 4).

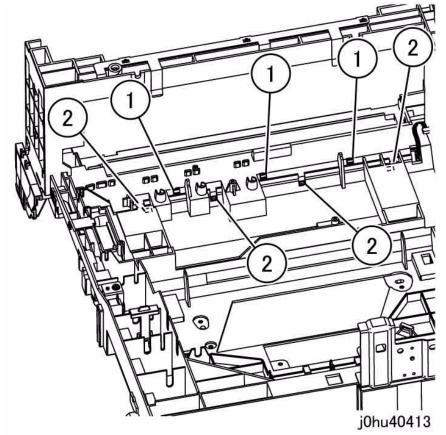


Figure 1 Erase Lamp Tabs

7. Remove the Erase Lamp (Figure 2).

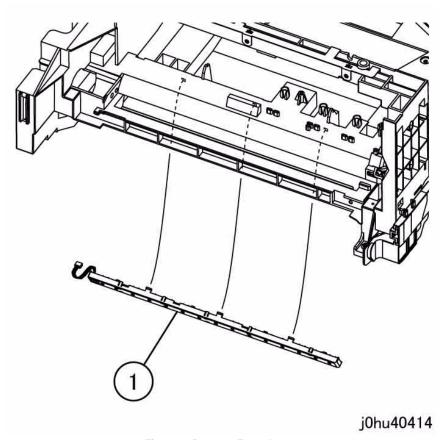


Figure 2 Remove Erase Lamp

- 1. To install, do the removal steps in reverse order.
- 2. Insert the Connector Housing of the Erase Lamp into the square hole in the frame (Figure 3).
 - (A) Square hole

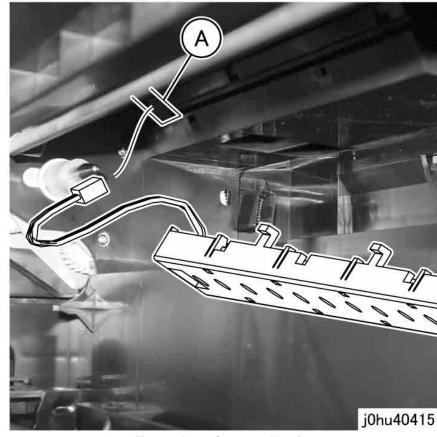


Figure 3 Insert Connector Housing

REP 4.3.1 Transfer Module

Parts List on PL 4.3

Removal

WARNING

- 1. Remove the Drum Cartridge (REP 4.1.1).
- 2. Remove the Output Tray (REP 9.1.1).
- 3. Remove the Rear Cover (REP 9.2.1).
- 4. Remove the Exit Transport (REP 6.1.2).
- 5. Remove the Fuser (REP 5.1.1).

- 6. Remove the Transfer Corotron Housing (Figure 1).
 - (1) Release the hooks (2).
 - (2) Remove the Transfer Corotron Housing by pulling the front side in the direction of the arrow

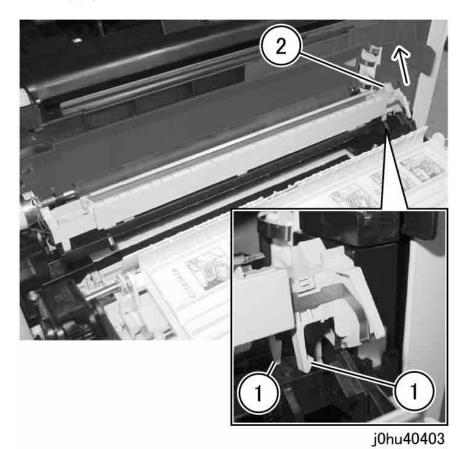


Figure 1 Remove Transfer Corotron Housing

- 7. Remove the Self Tapping Screws that secure the Corotron Block (Figure 2).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Move the Fuser Connector Bracket.
 - (3) Remove the Self Tapping Screw.

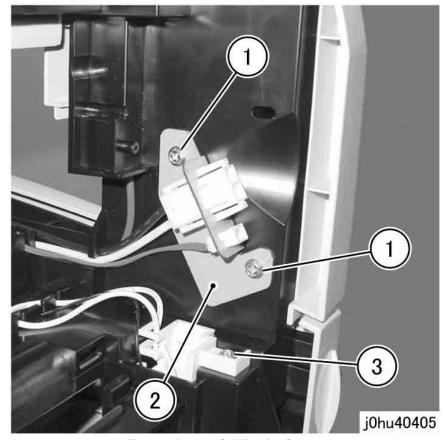


Figure 2 Remove Self Tapping Screws

- 8. Remove the Corotron Block (Figure 3).
 - (1) Press the Spring Plate.
 - (2) Remove the Corotron Block by pulling it in the direction of arrow.

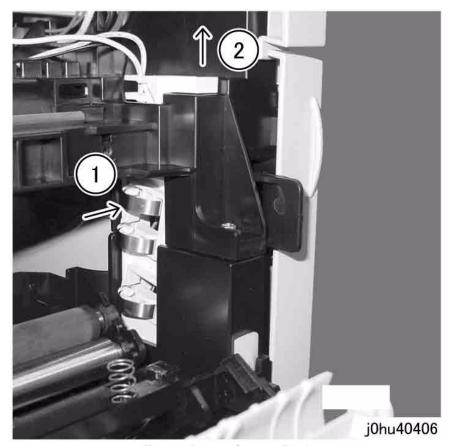


Figure 3 Remove Corotron Block

- 9. Disconnect the Corotron Block cables (3) (Figure 4).
 - (1) Disconnect the Ground Cable (white).
 - (2) Remove the Ground Cable (white) from the guides (2).
 - (3) Remove the Detack Cable (black).
 - (4) Remove the Detack Cable (black) from the guides (2).
 - (5) Disconnect the Transfer Cable (white).
 - (6) Remove the Transfer Cable (white) from the guides (3).

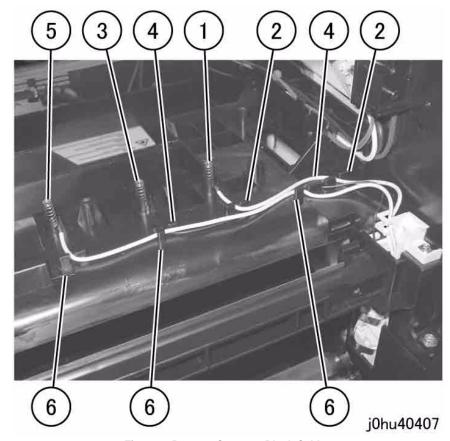


Figure 4 Remove Corotron Block Cables

- 1. To install, do the removal steps in reverse order.
- 2. Perform the following steps to install the Corotron Block (Figure 5).
 - (1) Press the Spring Plate.
 - (2) Install the Corotron Block.

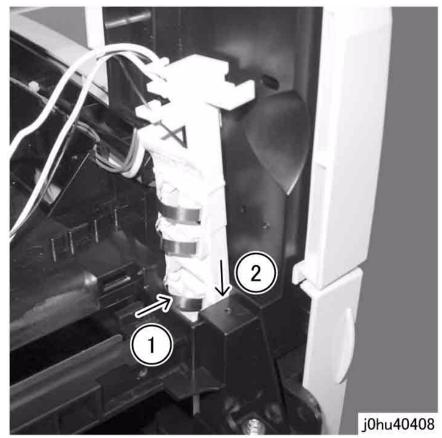


Figure 5 Install Corotron Block

 Attach the cables (Ground/Detack/Transfer) to the Corotron Block hooks as shown in Figure 6.

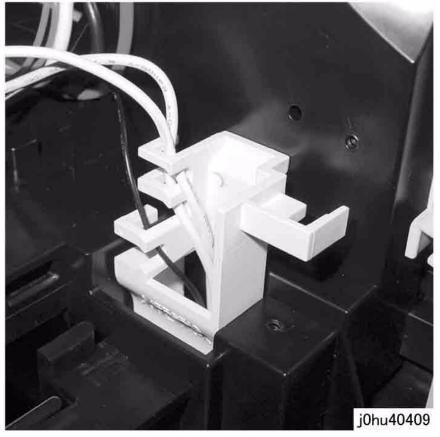


Figure 6 Attach Cables

4. When installing the Transfer Corotron Housing, insert the tabs of Transfer Corotron Housing into the square holes of the Corotron Bracket (Figure 7).

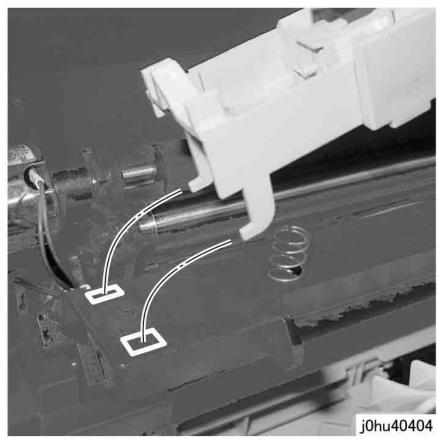


Figure 7 Install Transfer Corotron Housing

REP 4.4.1 Corotron Wire

Parts List on PL 4.4

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Transfer Corotron Housing (Figure 1).
 - (1) Release the hooks (2).
 - (2) Remove the Transfer Corotron Housing by pulling the front side in the direction of the arrow



j0hu40403

Figure 1 Remove Transfer Corotron Housing

- 2. Remove the Front/Rear Covers (Figure 2).
 - (1) Remove the Rear Cover in the direction of the arrow.
 - (2) Release the tabs (2) to remove the Front Cover.

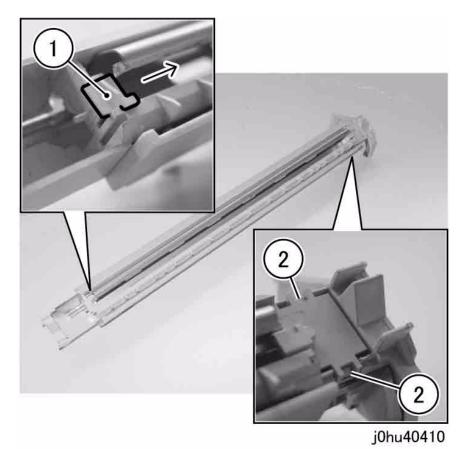


Figure 2 Remove Front/Rear Covers

- 3. Remove the spring (Figure 3).
 - Remove the spring (1) from the tab (2).

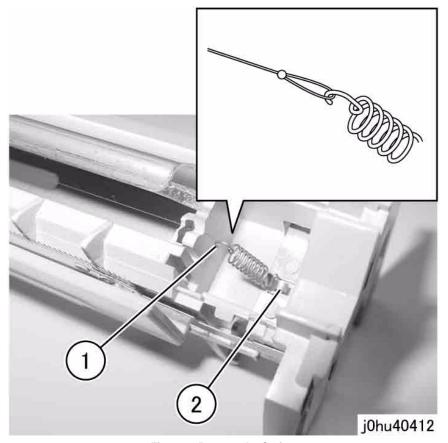


Figure 3 Remove the Spring

4. Remove the Corotron Wire from the post (Figure 4).

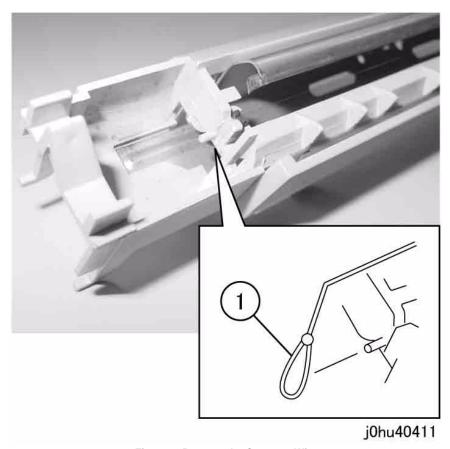


Figure 4 Remove the Corotron Wire

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Transfer Corotron Housing, insert the tabs of Transfer Corotron Housing into the square holes of the Corotron Bracket (Figure 5).

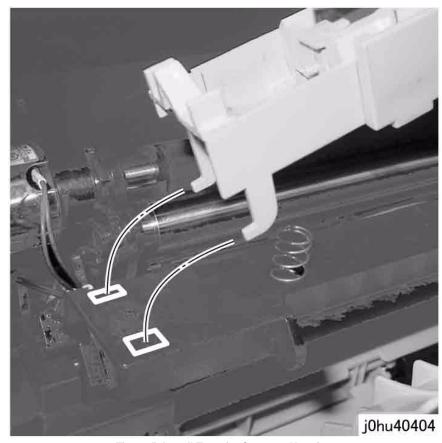


Figure 5 Install Transfer Corotron Housing

REP 5.1.1 Fuser (SCC)

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

- 1. Open the Left Side Cover.
- 2. Remove the Connector Cover (Figure 1).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Connector Cover.

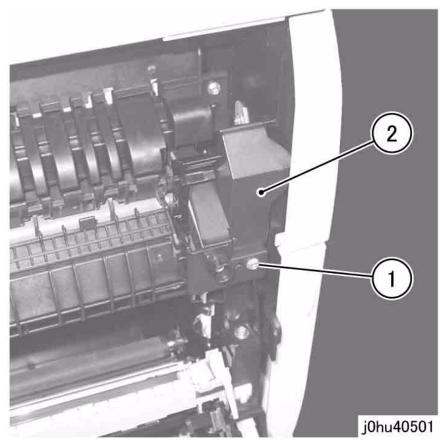


Figure 1 Remove Connector Cover

3. Disconnect the connectors (Figure 2).

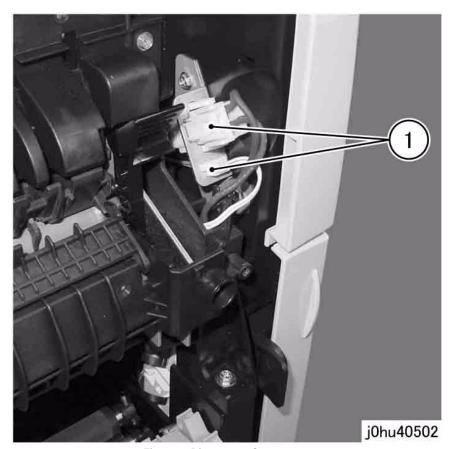


Figure 2 Disconnect Connectors

- 4. Remove the Fuser (Figure 3).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Remove the Fuser by shifting it in the direction of the arrow.

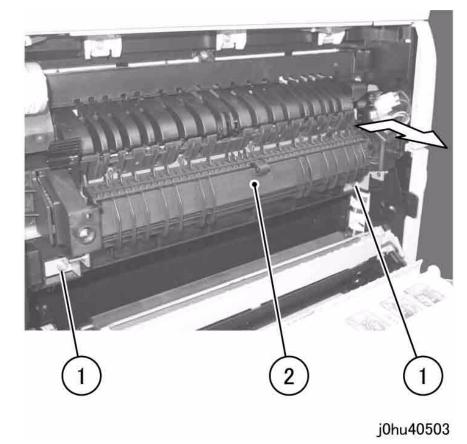


Figure 3 Remove Fuser

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Connector Cover, do the following (Figure 4):
 - (1) Insert the wire harness into the U-groove of the Fuser Frame.
 - (2) Insert the stud of the Connector Cover into the hole in the frame.

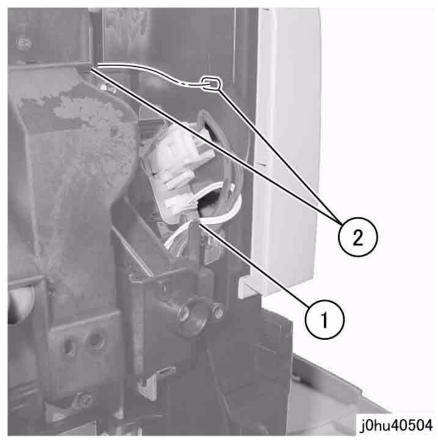


Figure 4 Install Connector Cover

REP 5.1.2 Temperature Control Sensor Assembly

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

- 1. Remove the Fuser (REP 5.1.1).
- 2. Slide the Cover to the left and remove (Figure 1).

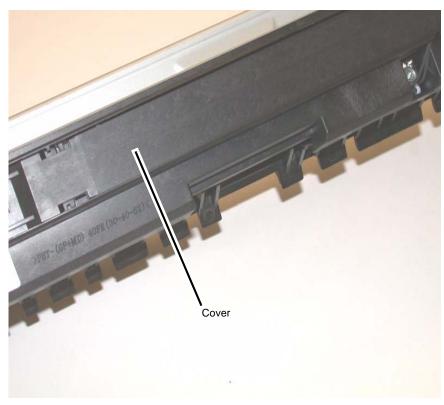


Figure 1 Removing the Cover

- 3. Remove the Temperature Control Sensor Assembly (Figure 2).
 - Remove the Screw.
 - · Remove the Harness.

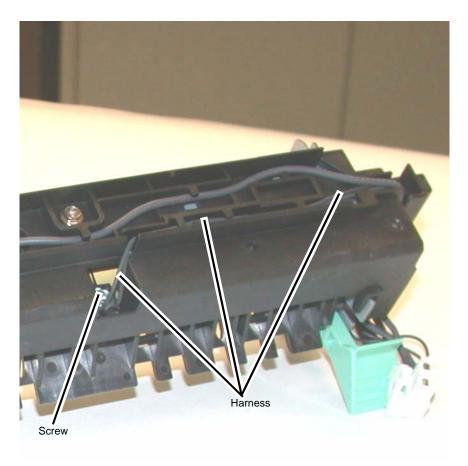


Figure 2 Removing the Temperature Control Sensor Assembly

1. To install, do the removal steps in reverse order.

NOTE: Before tightening the Screw, make sure that the Tab on the Sensor Block is inserted in the notch of the Frame (Figure 3).

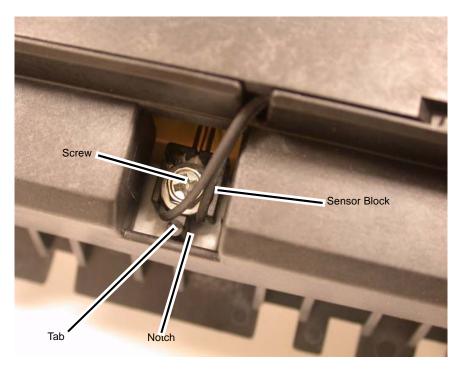


Figure 3 Installing the Temperature Control Sensor Assembly

REP 5.1.3 Fuser Lamp

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

- 1. Remove the Fuser (REP 5.1.1).
- 2. Slide the Cover to the left and remove (Figure 1).

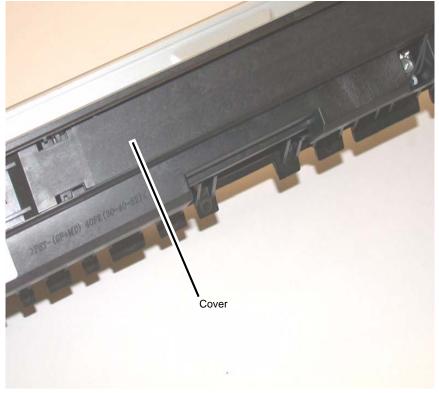


Figure 1 Removing the Cover

- 3. Disconnect the ACH side of the Fuser Lamp (Figure 2).
 - Disconnect the Terminal.
 - Remove the Screw.

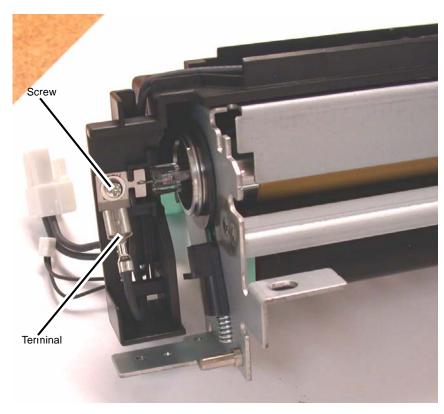


Figure 2 Disconnecting the ACH side of the Fuser Lamp

- 4. Disconnect the ACN side of the Fuser Lamp (Figure 3).
 - Disconnect the white wire from the Terminal.
 - Remove the Screw.

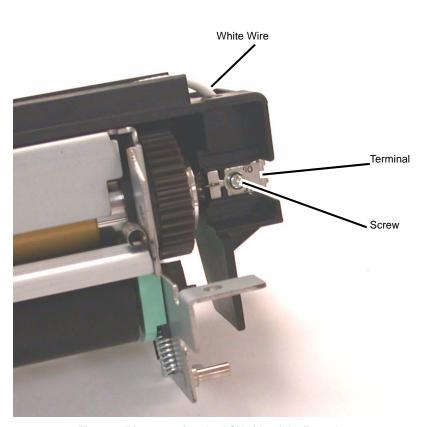


Figure 3 Disconnecting the ACN side of the Fuser Lamp

- 5. Remove the Fuser Lamp Housing (Figure 4).
 - Remove 2 Screws.
 - Carefully remove the Fuser Lamp Housing.

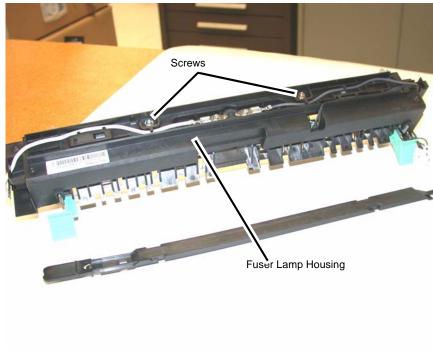


Figure 4 Removing the Fuser Lamp Housing

6. Remove the Fuser Lamp by pulling it through the Fuser Roll (Figure 5).

NOTE: Do not lose the Fuser Lamp Mount.

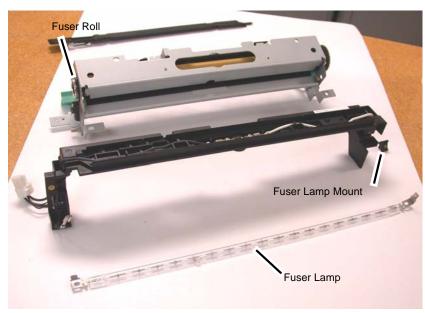


Figure 5 Removing the Fuser Lamp

Replacement

CAUTION

Do not touch the glass part of the Fuser Lamp unless you are wearing gloves.

REP 5.1.4 Fuser Roll

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

CAUTION

Do not touch the glass part of the Fuser Lamp unless you are wearing gloves.

- 1. Remove the Fuser Lamp (REP 5.1.3).
- 2. Remove the Fuser Cover (Figure 1).
 - Remove the 2 Screws.
 - Remove the Fuser Cover.

NOTE: Do not lose the Cover Mount (Figure 2).

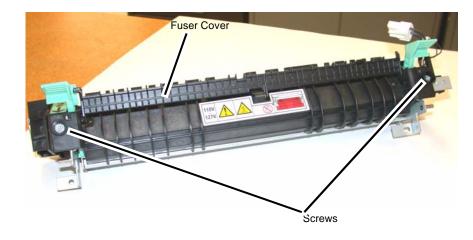


Figure 1 Removing the Fuser Cover

- 3. Remove the Stripper Finger Assembly (Figure 2 and Figure 3).
 - Remove the Screw.
 - Remove the Stripper Finger Assembly.

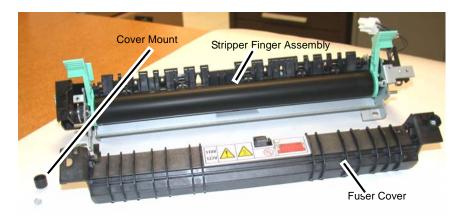


Figure 2 Fuser Cover Removed

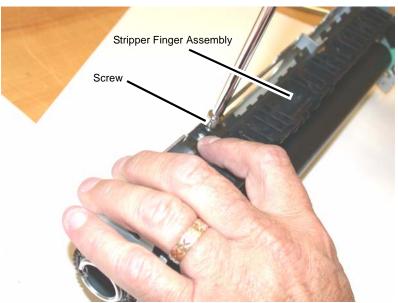


Figure 3 Removing the Stripper Finger Assembly

- 4. Remove the Fuser Roll Retaining Rings and Drive Gear (Figure 4).
 - · Remove the Retaining Ring.
 - Remove the Drive Gear.
 - Remove the Retaining Ring from the other end of the Fuser Roll.

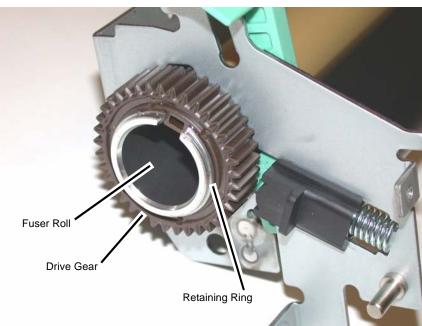


Figure 4 Removing the Retaining Rings and Drive Gear

5. Remove the Fuser Roll by pulling it through the Bushings in the Frame (Figure 5).

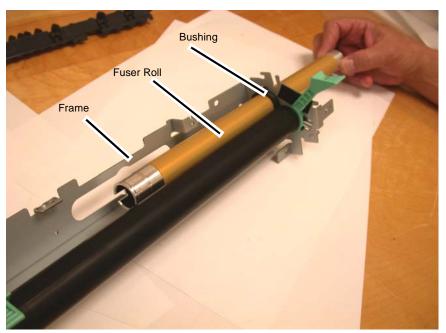


Figure 5 Removing the Fuser Roll

CAUTION

Do not touch the glass part of the Fuser Lamp unless you are wearing gloves.

1. To install, do the removal steps in reverse order.

NOTE: When installing the Drive Gear, make sure that the Locating Key is oriented as shown in Figure 6.

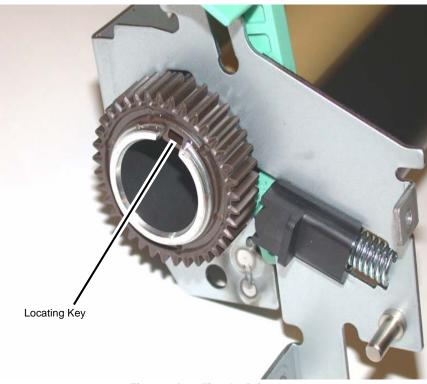


Figure 6 Installing the Drive Gear

CAUTION

Make sure the stripper fingers are oriented correctly when reinstalling the Stripper Finger Assembly, as shown in Figure 7.



Figure 7 Setting the Stripper Fingers

REP 5.1.5 Fuser Pressure Roll

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

CAUTION

Do not touch the glass part of the Fuser Lamp unless you are wearing gloves.

- 1. Remove the Fuser Roll (REP 5.1.4).
- 2. Remove the Bushings (Figure 1).

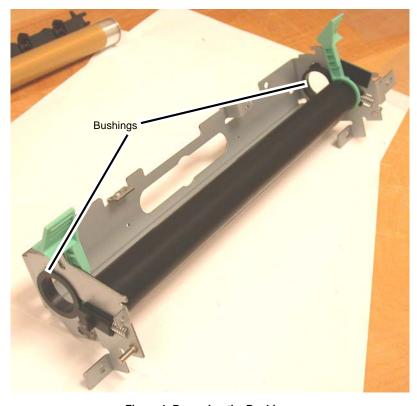


Figure 1 Removing the Bushings

- 3. Remove the Fuser Pressure Roll (Figure 2).
 - Remove the Levers.
 - Remove the Spring Mount Assemblies.
 - Remove the Fuser Pressure Roll.

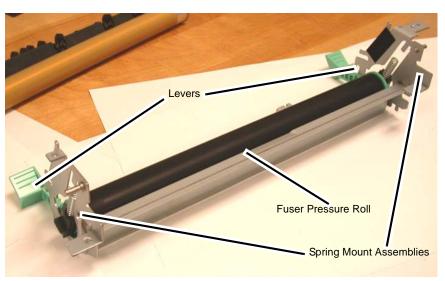


Figure 2 Removing the Fuser Pressure Roll

Replacement

CAUTION

Do not touch the glass part of the Fuser Lamp unless you are wearing gloves.

NOTE: When installing the Fuser Roll, see REP 5.1.4.

REP 6.1.2 Exit Transport

Parts List on PL 6.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The Fuser and Exit Transport are hot. Do not work on them until they are cool enough.

- 1. Open the Left Hand Cover.
- 2. Remove the Rear Cover (REP 9.2.1).

- 3. Disconnect the connectors (Figure 1).
 - (1) Disconnect P/J 505.
 - (2) Disconnect P/J 551.
 - (3) Remove the wire harness from the hook.
 - (4) Remove the wire harness from the guides (2).
 - (5) Release the wire harness from the clamp.

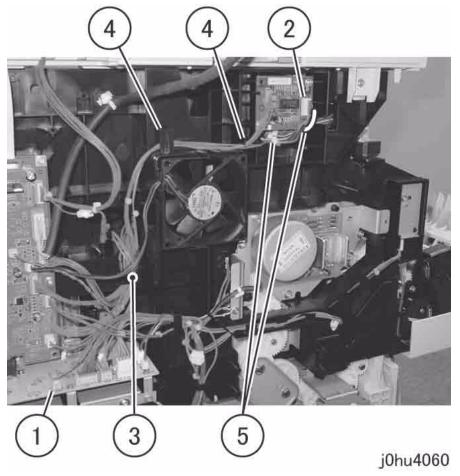


Figure 1 Disconnect Connectors

- 4. Remove the Connector Cover (Figure 2).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Connector Cover.

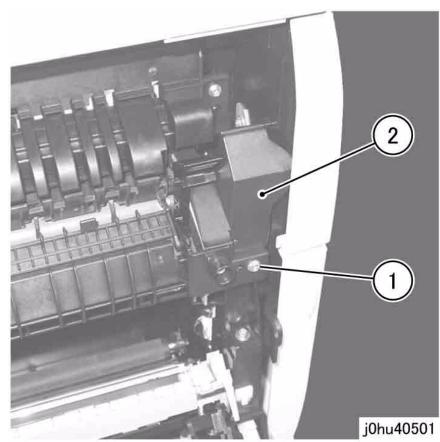
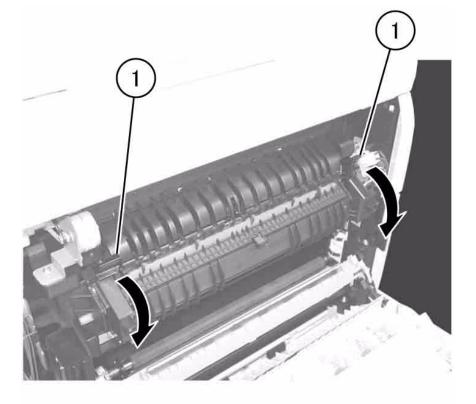


Figure 2 Remove Connector Cover

5. Lower the Fuser levers (2) (Figure 3).



j0hu40602

Figure 3 Lower Fuser Levers

- 6. Remove the Exit Transport (Figure 4).
 - (1) Remove the Self Tapping Screws (3).
 - (2) Remove the Exit Transport.
 - (3) Remove the Wire Harness through the hole.

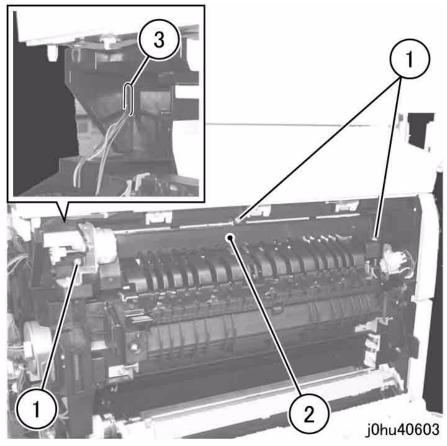


Figure 4 Remove Exit Transport

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Connector Cover, insert the stud of the Connector Cover into the hole in the frame (Figure 5).



Figure 5 Installing Connector Cover

REP 7.1.1 Duplex Module

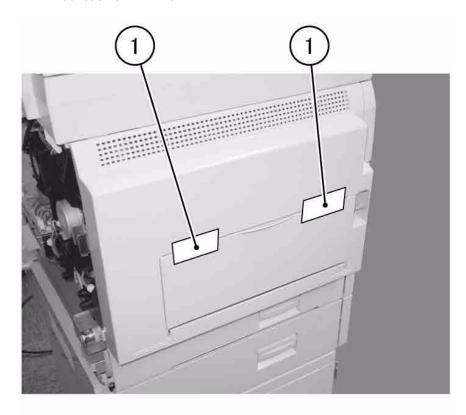
Parts List on PL 7.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Tape the Bypass Tray so that it cannot open by itself (Figure 1).
 - (1) Apply 2 pieces of tape as shown.



j0hu40703

Figure 1 Apply Tape

- 3. Open the Left Hand Cover.
- 4. Disconnect the connector (Figure 2).
 - (1) Disconnect P/J 502.
 - (2) Remove the wire harness from the hook.
 - (3) Remove the wire harness from the groove in the frame.
 - (4) Remove the wire harness from the guides (5).
 - (5) Remove the wire harness from the groove in the frame.
 - (6) Remove the wire harness from the hooks (3).

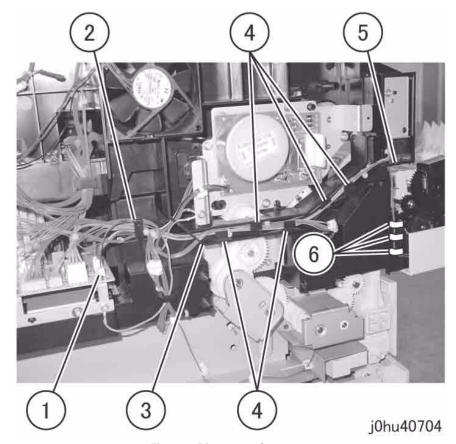


Figure 2 Disconnect Connector

- 5. Remove the Front Stopper (Figure 3).
 - (1) Remove the Front Stopper from the Registration.
 - (2) Release the tab to remove the Front Stopper.

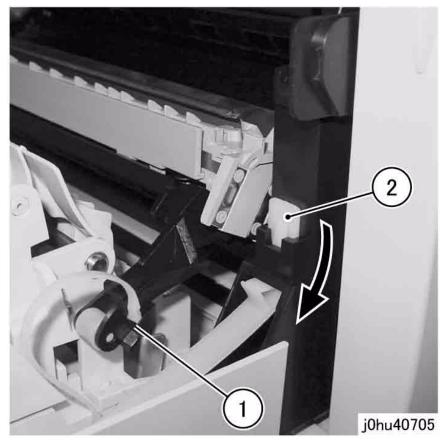


Figure 3 Remove Front Stopper

- 6. Remove the Rear Stopper (Figure 4).
 - (1) Release the tab to remove the Rear Stopper.

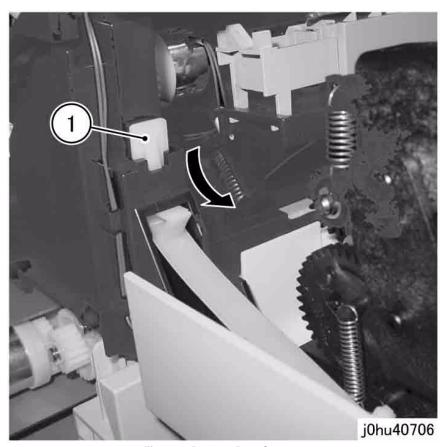


Figure 4 Remove Rear Stopper

- 7. Remove the Duplex Module (Figure 5).
 - (1) Loosen the Self Tapping Screws (2).
 - (2) Move the Pivot Retainers (2) in the direction of the arrow.
 - (3) Remove the Duplex Module.

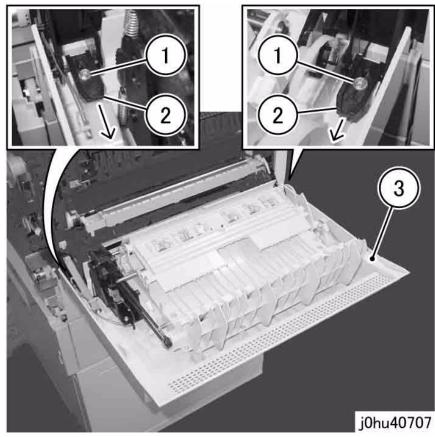


Figure 5 Removing the Left Hand Cover Assembly

1. To install, do the removal steps in reverse order.

REP 7.5.1 Bypass Feed Roll

Parts List on PL 7.5

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Bypass Tray.
- 2. Remove the Feed Roll Cap (Figure 1).
 - (1) Release the tab to remove the Feed Roll Cap.

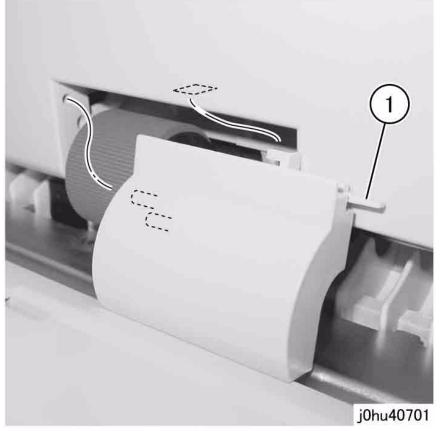


Figure 1 Remove Feed Roll Cap

- 3. Remove the Bypass Feed Roll (Figure 2).
 - (1) Release the hook to remove the Bypass Feed Roll.

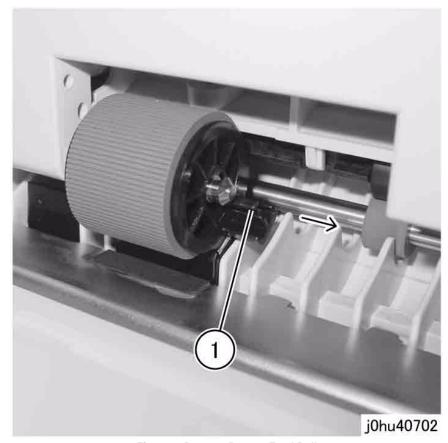


Figure 2 Remove Bypass Feed Roll

REP 8.1.2 LVPS (SCC)

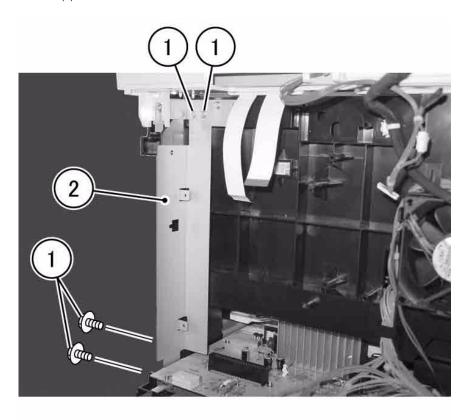
Parts List on PL 8.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Remove the Right Cover (REP 9.2.2).
- 3. Remove the SLCC PWB (REP 8.1.3).
- 4. Remove the PWB Bracket (Figure 1).
 - (1) Remove the screws (4).
 - (2) Remove the PWB Bracket.



j0hu40820

Figure 1 Remove SLCC PWB Bracket

- 5. Remove the IIT Ground Plate (Figure 2).
 - (1) Remove the Screws (4).
 - (2) Remove the IIT Ground Plate.

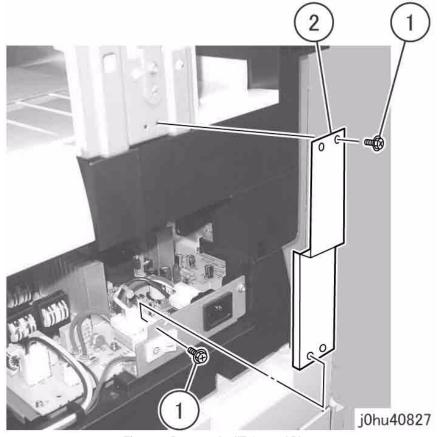


Figure 2 Remove the IIT Ground Plate

- 6. Move the Inlet Bracket (Figure 3).
 - (1) Disconnect the connector (wire: blue).
 - (2) Disconnect the connector (wire: brown).
 - (3) Remove the Self Tapping Screws (2).
 - (4) Remove the screws (2).
 - (5) Move the Power Inlet Bracket.

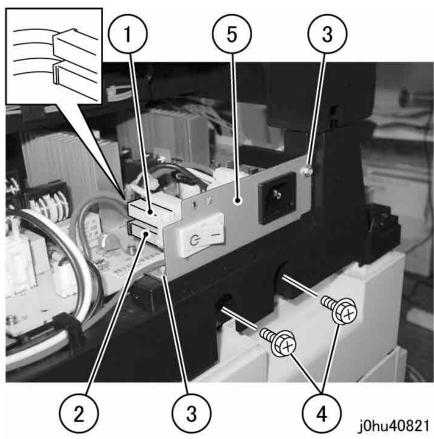


Figure 3 Move the Inlet Bracket

7. Disconnect the connectors (Figure 4).

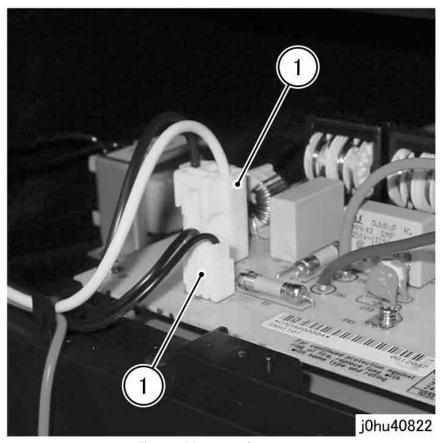


Figure 4 Disconnect Connectors

8. Disconnect the connectors (7) (Figure 5).

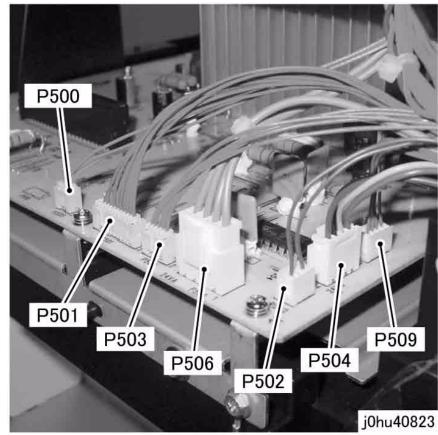


Figure 5 Disconnect Connectors

- 9. Remove the LVPS (Figure 6).
 - (1) Remove the screw to remove the Ground Wire.
 - (2) Remove the Self Tapping Screws (2).
 - (3) Remove the LVPS.

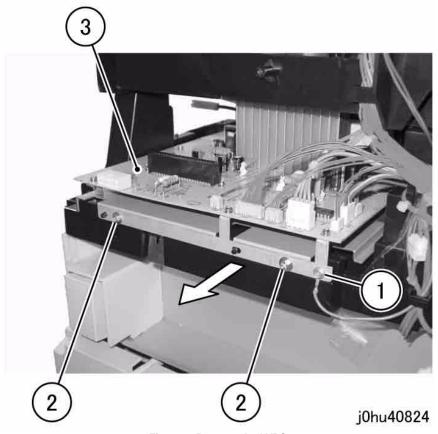


Figure 6 Remove the LVPS

Replacement

REP 8.1.3 SLCC PWB (SCC)

Parts List on PL 8.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

CAUTION

Static electricity may damage electrical parts. Always wear an anti-static wrist band during service. If a wrist band is not available, touch a metallic section to discharge the static electricity.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. On the right of the machine, remove the Screws holding the USB Connectors (Figure 1).

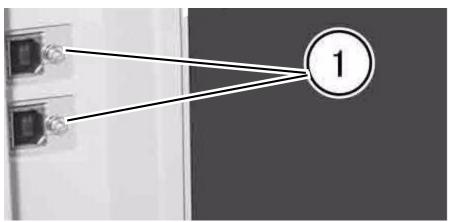


Figure 1 Remove the Screws Holding the USB Connectors

- 3. Remove the EMI Cover (Figure 2).
 - Remove the Screws (10).
 - Remove the EMI Cover.
 - Remove the Cable Clip from the EMI Cover.

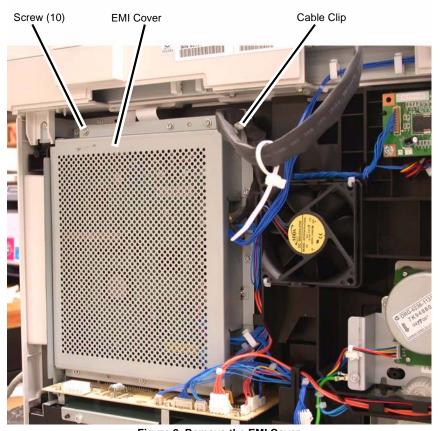
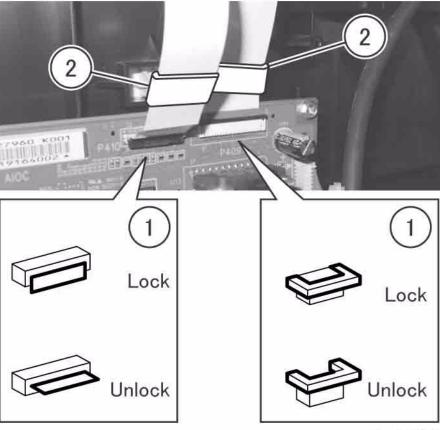


Figure 2 Remove the EMI Cover

- Remove the SLCC PWB (Figure 3).
 - a. Disconnect the Flexible Print Cables (2) from the SLCC PWB (Figure 4).
 - (1) Disconnect the Flexible Print Cables (2).
 - (2) Remove the Core Clip and slide the Cores (2) off of the cables.
 - Disconnect the Connectors (10) from the SLCC PWB.
 - Remove 6 Screws and disconnect the SLCC PWB from the LVPS.







j0hu40802

Figure 4 Disconnect the Flexible Print Cables

Figure 3 SLCC PWB for DADF/Network

CAUTION

While performing the following step, transfer the NVM EEPROMs one at a time to avoid installing the EEPROMs in the wrong locations. If they are installed in the wrong location, the machine will not start.

CAUTION

Ensure the EEPROMs are oriented correctly when installing them in the new SLCC PWB. The semi-circular key on the EEPROM case must align with the semi-circular key on the socket. Failure to orient the EEPROMs correctly and then switching on the power may damage them.

 When replacing the SLCC PWB, transfer the NVM EEPROMs (3) from the old PWB to the new one (Figure 5). **NOTE:** If any of the NVM EEPROMs are damaged during the transfer, or if the machine fails to start up in user mode, replace the EEPROMs (PL 8.1). Reprogram the new NVM EEPROMs using GP 8. Customer settings must be reprogrammed manually.



Figure 5 Transferring the EEPROMs

2. To install the SLCC PWB, do the removal steps in reverse order.

REP 8.2.1 HVPS (SCC)

Parts List on PL 8.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Disconnect the SLCC PWB connector (Figure 1).
 - (1) Disconnect P/J 406.
 - (2) Remove the wire harness from the clamp.
 - (3) Slide the Connector Housing that was removed in step 1 through the square hole.

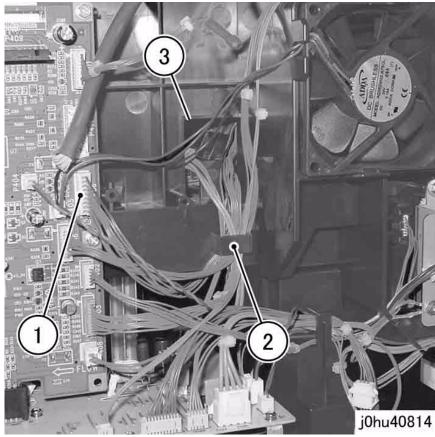


Figure 1 Disconnect SLCC PWB Connector

3. Open the Front Cover.

- 4. Remove the Output Tray (REP 9.1.1).
 - NOTE: When removing the HVPS, use a Stubby Driver (499T00353).
- 5. Remove the Self Tapping Screws that secure the Contact Block (Figure 2).
 - (1) Release the hook to remove the Harness Block.
 - (2) Remove the Self Tapping Screws (2).

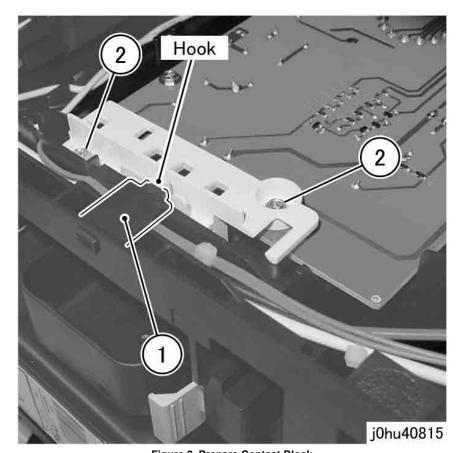


Figure 2 Prepare Contact Block

- 6. Remove the HVPS and Contact Block (Figure 3).
 - (1) Remove the Self Tapping Screws (3).
 - (2) Disconnect the connector at the inner side of the HVPS.
 - (3) Remove the HVPS and Contact Block.

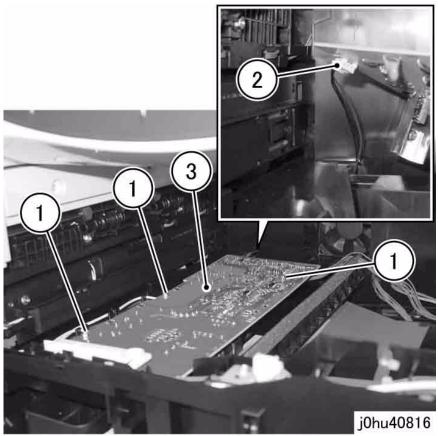


Figure 3 Remove HVPS and Contact Block

- 7. Separate the HVPS from the Contact Block (Figure 4).
 - (1) Remove the Contact Block in the direction of the arrow.

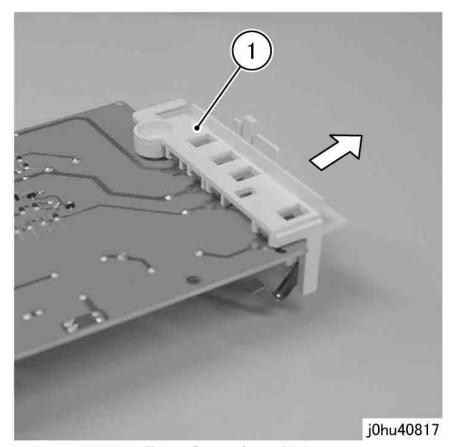
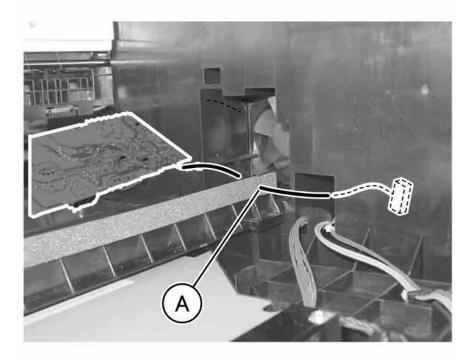


Figure 4 Separate Contact Block

- 1. To install, do the removal steps in reverse order.
- 2. Insert the wire harness of the HVPS into the slot of the Laser Housing (Figure 5).
 - (A) Slot



j0hu40818

Figure 5 Install HVPS Wire Harness

3. When installing the HVPS and Contact Block, insert the slot of the Contact Block into the guide of the frame (Figure 6).

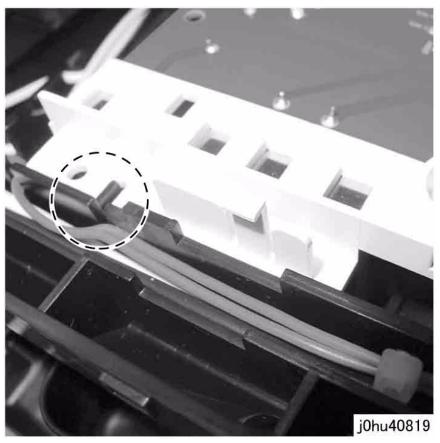


Figure 6 Install HVPS Contact Block

REP 8.2.2 Duplex PWB (SCC)

Parts List on PL 8.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Disconnect the Connector (Figure 1).
 - (1) Disconnect P/J 416.
 - (2) Remove the Wire Harness from the Hook.
 - (3) Remove the Wire Harness from the Guides (3).

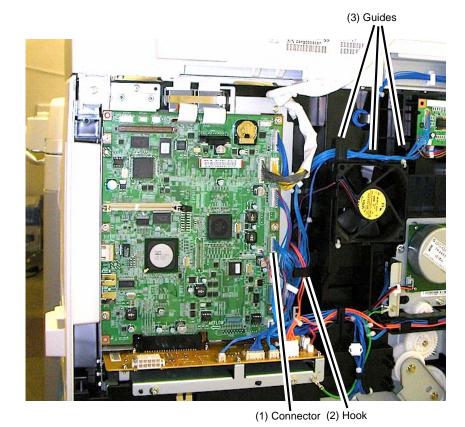


Figure 1 Disconnect Connector

- 3. Remove the Duplex PWB (Figure 2).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Guide.
 - (3) Disconnect the Connector.
 - (4) Remove the Self Tapping Screws (2).
 - (5) Remove the Duplex PWB.

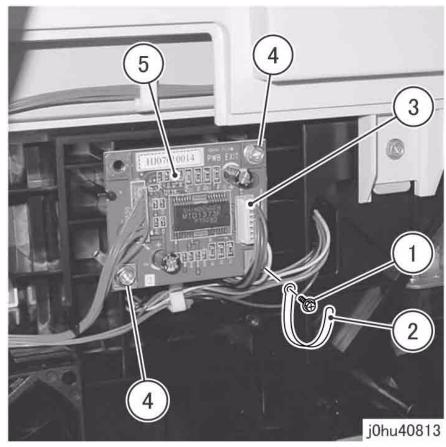


Figure 2 Remove Duplex PWB

Replacement

REP 8.3.1 Control Panel (SCC)

Parts List on PL 8.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Front Left Cover (REP 9.1.2).
- 2. Remove the Control Panel Cover (Figure 1).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Press the tabs (2) to release them.
 - (3) Remove the Control Panel Cover towards the front.

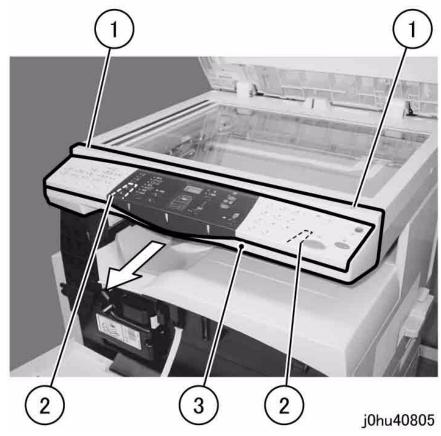


Figure 1 Remove the Control Panel Cover

3. Remove the screws that secure the Control Panel (Figure 2).

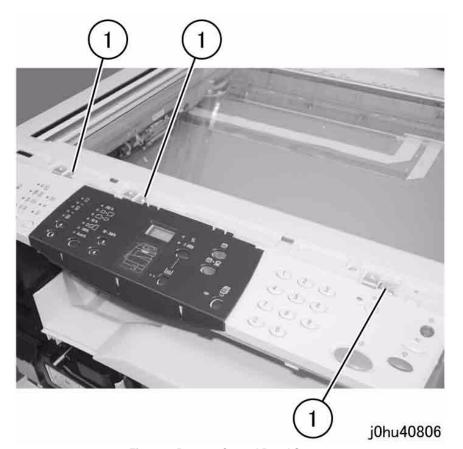


Figure 2 Remove Control Panel Screws

- 4. Remove the Control Panel (Figure 3).
 - 1 Slide the rear of the Control Panel in the direction of the arrow.
 - 2 Disconnect the connectors (2).

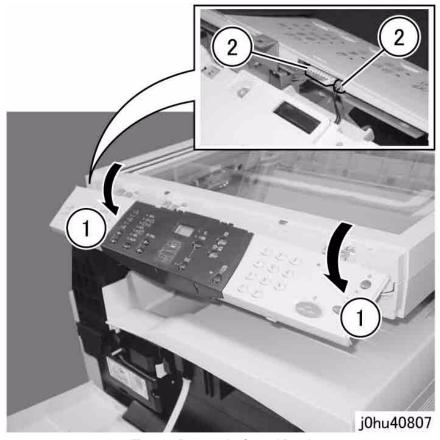


Figure 3 Remove the Control Panel

5. Remove the Cable Band from the Control Panel Hook (Figure 4, B).

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Control Panel, attach the Control Panel hooks (3) to the IIT Frame (Figure 4).
 - (A) Spring On top
 - (B) Hook Below

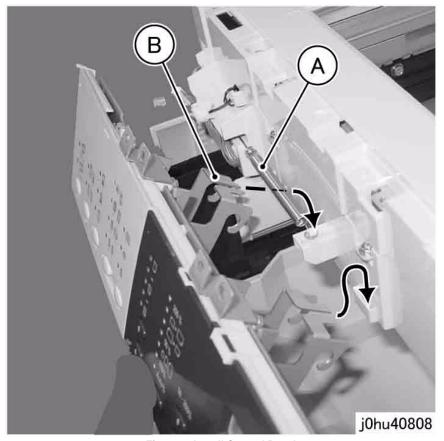


Figure 4 Install Control Panel

3. Thread the wire harness of the Control Panel as shown (Figure 5).



Figure 5 Threading Control Panel Harness

REP 8.4.1 User Interface PWB (SCC)

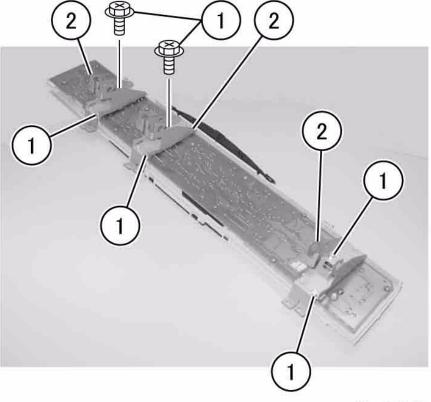
Parts List on PL 8.4

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Control Panel (REP 8.3.1).
- 2. Turn the Control Panel upside down.
- 3. Remove the Support Brackets (Figure 1).
 - (1) Remove the Self Tapping Screws (6).
 - (2) Remove the Support Brackets (3).



j0hu40810

Figure 1 Remove Support Brackets

- 4. Remove the User Interface PWB (Figure 2).
 - (1) Remove the Self Tapping Screws (12).
 - (2) Remove the User Interface PWB.

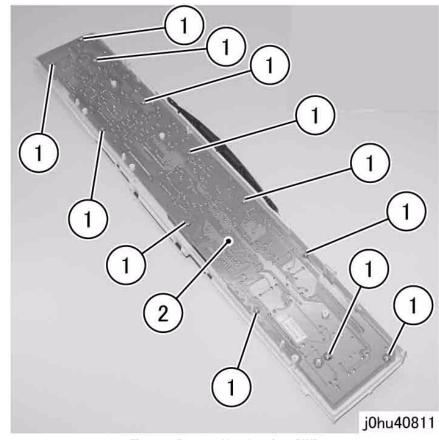


Figure 2 Remove User Interface PWB

REP 9.1.1 Output Tray

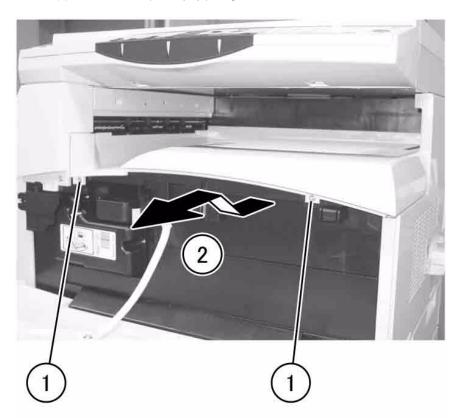
Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Front Cover.
- 2. Remove the Output Tray (Figure 1).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Remove the Output Tray by pulling it in the direction of the arrow.

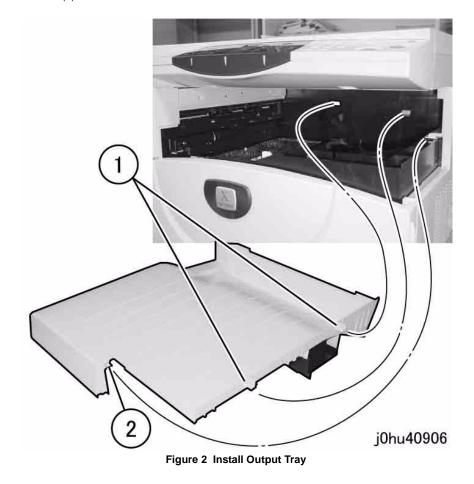


j0hu40905

Figure 1 Remove Output Tray

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. Perform the following steps to install the Output Tray (Figure 2).
 - (1) Insert the tabs (2) into the square hole of the frame.
 - (2) Attach the hook.



Reissue December, 2011 Repairs and Adjustments
WorkCentre 5020/DN 4-63 REP 9.1.1

REP 9.1.2 Front Left Cover

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Front Cover.
- 2. Remove the Front Left Cover (Figure 1).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Front Left Cover by pulling in the direction of the arrow.



Figure 1 Remove Front Left Cover

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Front Left Cover, attach the hooks (Figure 2).
 - (A) Hooks (3)

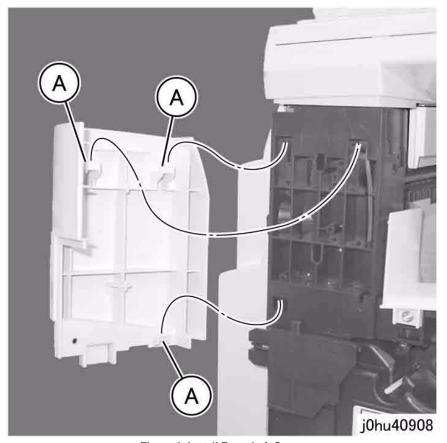


Figure 2 Install Front Left Cover

REP 9.2.1 Rear Cover

Parts List on PL 9.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

NOTE: After removing the Rear Cover, it is not necessary to save the Data Plate with the machine serial number. The serial number can also be obtained by opening Left Side Cover and looking toward the back (bar code label) or by entering Diagnostics. See GP 1.

- 1. Disconnect the connector (Figure 1).
 - (1) Disconnect the connector.
 - (2) Remove the cable band.

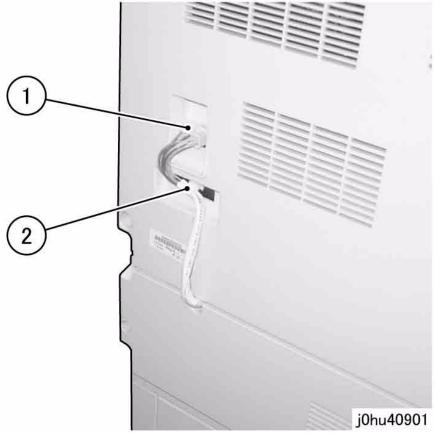


Figure 1 Disconnect Cable Connector

- 2. Remove the Rear Cover (Figure 2).
 - (1) Remove the Self Tapping Screws (4).
 - (2) Remove the Rear Cover.

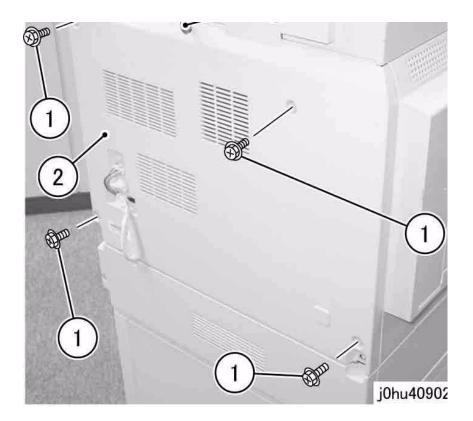


Figure 2 Remove Rear Cover

Replacement

REP 9.2.2 Right Cover

Parts List on PL 9.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.1).
- 2. Open the Front Cover.
- 3. Remove the Right Cover (Figure 1).
 - (1) Unplug the Power Cord.
 - (2) Unplug the USB connector.
 - (3) Remove the Self Tapping Screws (2).
 - (4) Remove the Right Cover by pulling it in the direction of the arrow.

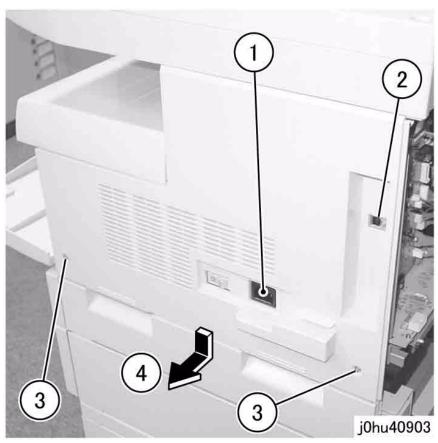
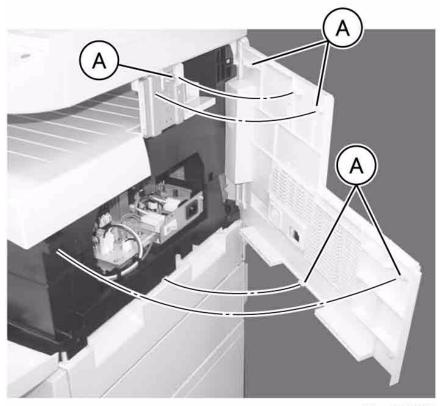


Figure 1 Remove Right Cover

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Right Cover, insert the tabs (Figure 2).
 - (A) Tabs (5)



j0hu40904

Figure 2 Install Right Cover

REP 10.2.1 IIT Upper Cover (SCC)

Parts List on PL 10.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
 - DADF Assembly (REP 13.2.6)
- 2. Remove the screws that secure the IIT Upper Cover (Figure 1).
 - (1) Remove the screws (7).
 - (2) Remove the Self Tapping Screws (2).
 - (3) Remove the cap.

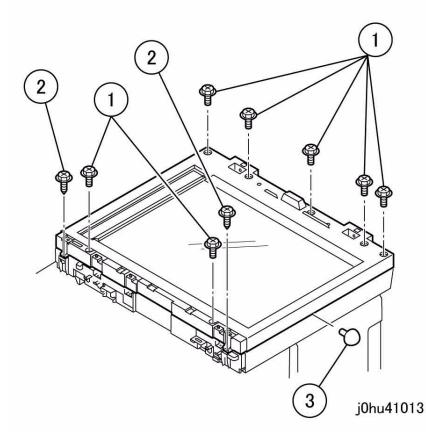


Figure 1 Remove IIT Upper Cover Screws and Cap

- 3. Remove the IIT Upper Cover (Figure 2).
 - (1) Press the tabs (2) to release them.

NOTE: The tabs are visible through the Platen Glass.

- (2) Open the right side of the IIT Upper Cover.
- (3) Press the tabs (2) to release them, and remove the IIT Upper Cover.

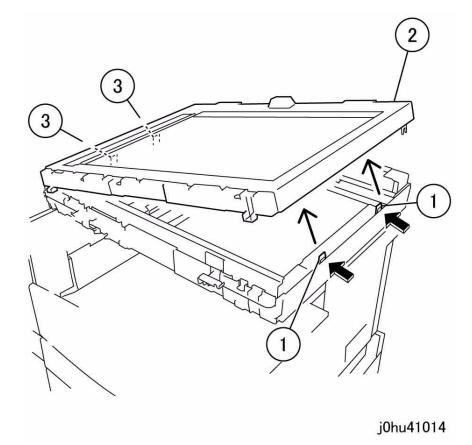


Figure 2 Remove IIT Upper Cover

Replacement

REP 10.3.1 IIT Carriage (SCC)

Parts List on PL 10.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
- 2. Remove the IIT Upper Cover (REP 10.2.1).
- 3. At the left side of the IIT Carriage, secure the Carriage Cable with tape so that it does not come loose (Figure 1).
 - (1) Move the IIT Carriage to the rear notch of the IIT Frame.
 - (2) Secure the Carriage Cable with 2 pieces of tape.
- 2

j0hu41001

Figure 1 Secure Carriage Cable Left

- 4. At the right side of the IIT Carriage, secure the Carriage Cable with tape so that it does not come loose (Figure 2).
 - (1) Secure the Carriage Cable with 2 pieces of tape.

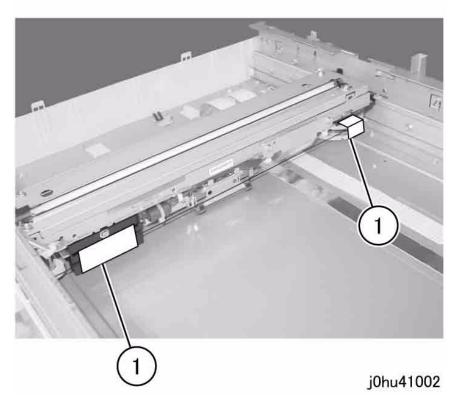


Figure 2 Secure Carriage Cable Right

- 5. While maintaining tension on the Carriage Cable (silver) at the front left side, disconnect it (Figure 3).
 - (1) Disconnect the Carriage Cable.
 - (2) Remove the Cable Spring.
 - (3) Remove the Carriage Cable from the pulley.
 - (4) Remove the Carriage Cable from the guide.

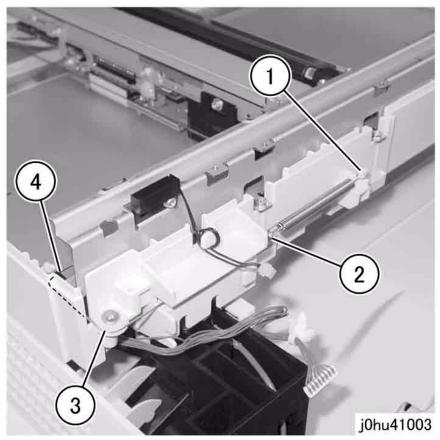


Figure 3 Disconnect Silver Carriage Cable

- 5. Use pieces of tape to secure the Carriage Cable (silver) that was disconnected in step 5 so that it does not get separated from the pulley of the IIT Carriage (Figure 4).
 - (A) Secure the Carriage Cable with tape
 - (1) Pulley

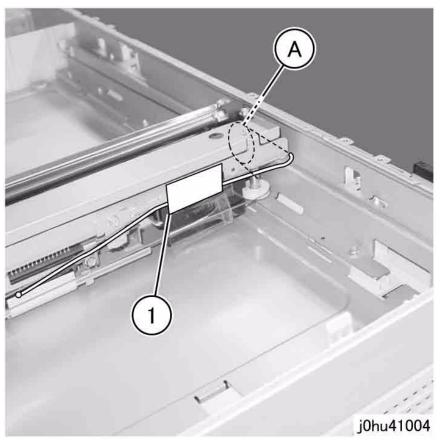


Figure 4 Secure Disconnected Silver Carriage Cable

- 7. While maintaining tension on the Carriage Cable (black) at the front right side, disconnect it (Figure 5).
 - (1) Disconnect the Carriage Cable (black).
 - (2) Remove the Carriage Cable (black) from the guide.
 - (3) Remove the Carriage Cable (black) from the guide.

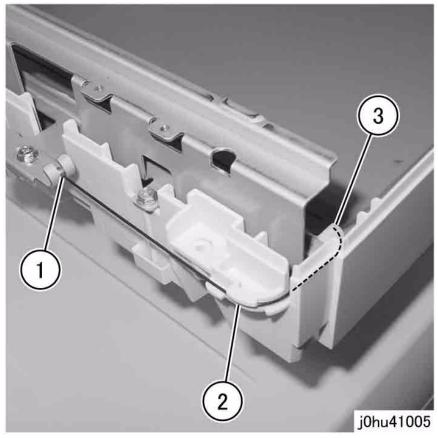


Figure 5 Disconnect Black Carriage Cable

- Use pieces of tape to secure the Carriage Cable (black) that was disconnected in step 7 so that it does not get separated from the pulley of the IIT Carriage (Figure 6).
 - (A) Pulley
 - (1) Secure the Carriage Cable with tape

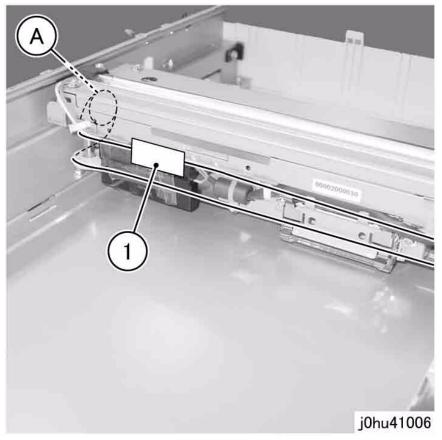


Figure 6 Secure Disconnected Black Carriage Cable

- While maintaining tension on the Carriage Cable (black) at the rear left side, disconnect it (Figure 7).
 - (1) Remove the Cable Spring.
 - (2) Disconnect the Carriage Cable.
 - (3) Remove the Carriage Cable from the pulley.
- j0hu41007

Figure 7 Disconnect Black Carriage Cable

- 10. Use tape to secure the Carriage Cable (black) that was disconnected in step 9 so that it does not get separated from the Cable Supply Drum (Figure 8).
 - (1) Secure the Carriage Cable with tape.

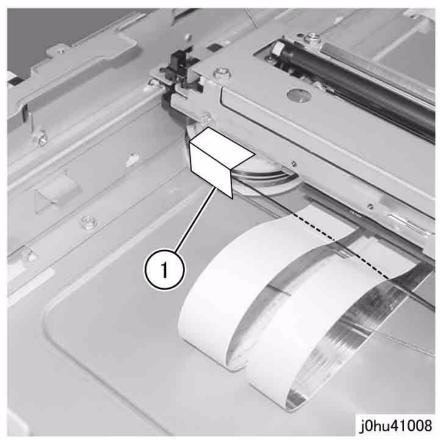


Figure 8 Secure Black Carriage Cable

- 11. While maintaining tension on the Carriage Cable (silver) at the rear right side, disconnect it (Figure 9).
 - (1) Disconnect the Carriage Cable.

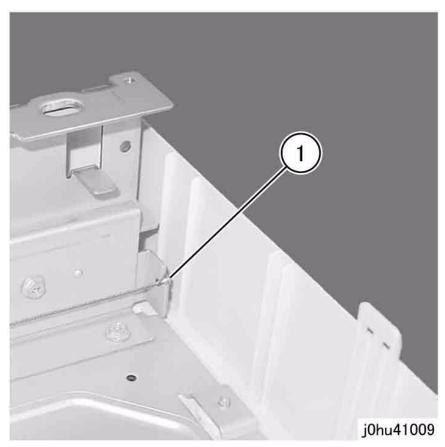


Figure 9 Disconnect Silver Carriage Cable

- 12. Use tape to secure the Carriage Cable (silver) that was disconnected in step 11 so that it does not get separated from the Cable Supply Drum (Figure 10).
 - (1) Secure the Carriage Cable with tape.

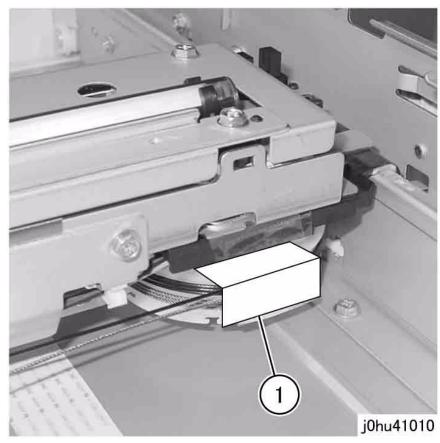


Figure 10 Secure Silver Carriage Cable

- 13. Turn the left side of the IIT Carriage face up.
- 14. Disconnect the Flexible Print Cable connectors (2) (Figure 11).

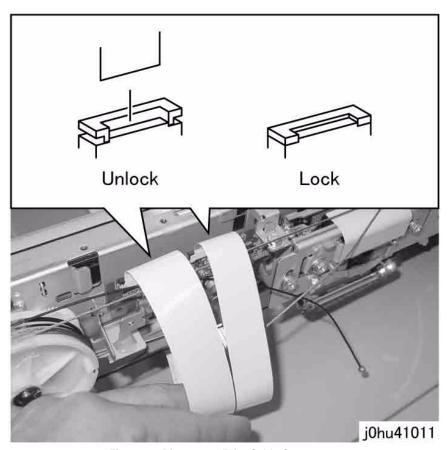


Figure 11 Disconnect Print Cable Connectors

- 1. To install, do the removal steps in reverse order.
- Do not allow the Rail Contact of the IIT Carriage to bend in the direction of the arrow (Figure 12).
 - (A) Rail Contact



Figure 12 Avoid Bending the Rail Contact

Attach the Carriage Cables (black and silver) to the IIT Frame in the sequence shown (Figure 13).

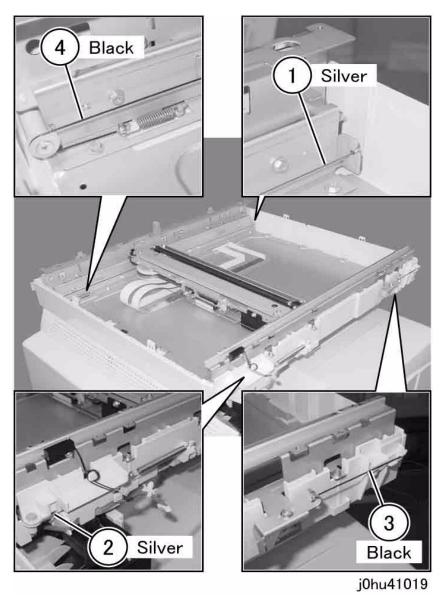


Figure 13 Attach Black and Silver Carriage Cables

REP 10.3.2 Flexible Print Cable (SCC)

Parts List on PL 10.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
- 2. Remove the IIT Upper Cover (REP 10.2.1).
- 3. Remove the IIT Carriage (REP 10.3.1).
- 4. Remove the Core Clip (Figure 1).

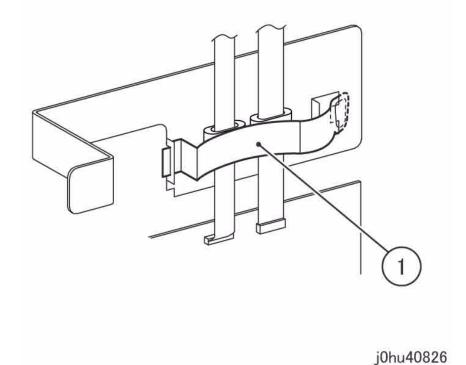


Figure 1 Remove the Core Clip

- 5. Disconnect the Flexible Print Cables (2) from the SLCC PWB (Figure 2).
 - (1) Disconnect the Flexible Print Cables (2).

• (2) Remove the Cores (2).

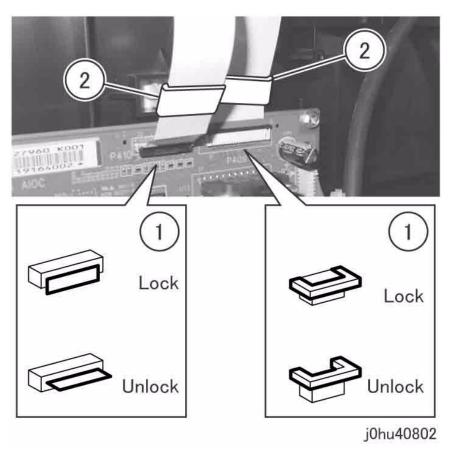


Figure 2 Disconnect Print Cables

- 6. Remove the Flexible Print Cable (Figure 3).
 - (1) Peel off the pieces of tape to remove the Flexible Print Cable.
 - (2) Slide the Flexible Print Cable through the hole in the IIT Frame.

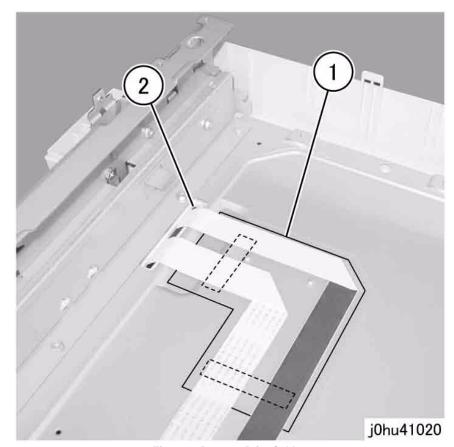


Figure 3 Remove Print Cables

Replacement

REP 10.6.1 Exposure Lamp

Parts List on PL 10.6

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
- 2. Remove the IIT Upper Cover (REP 10.2.1).
- 3. Remove the Inverter PWB Bracket 2 (Figure 1).
 - (1) Remove the screw.
 - (2) Remove the Inverter PWB Bracket 2.

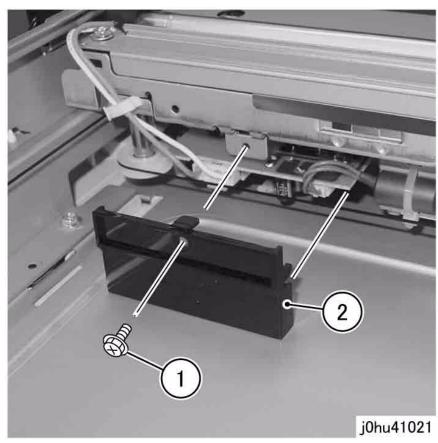


Figure 1 Remove Inverter PWB Bracket

4. Disconnect the connector (Figure 2).

- (1) Release the wire harness from the clamp.
- (2) Disconnect the connector.

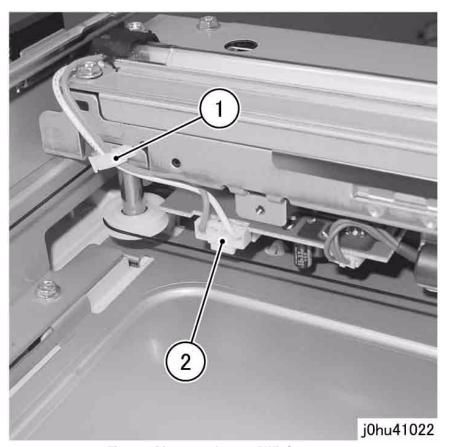


Figure 2 Disconnect Inverter PWB Connector

- Remove the Exposure Lamp (Figure 3).
 - 1 Remove the screw.
 - 2 Remove the Exposure Lamp from the Lamp Holder.



Figure 3 Remove Exposure Lamp

1. To install, do the removal steps in reverse order.

REP 10.7.1 Carriage Cable and Drum

Parts List on PL 10.7

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
- 2. Remove the IIT Upper Cover (REP 10.2.1).
- Remove the IIT Carriage (REP 10.3.1).
- Turn the IIT Carriage upside down.

- 5. Remove the Carriage Cables (black and silver) (Figure 1).
 - (1) Peel off the pieces of tape to remove the Carriage Cables.

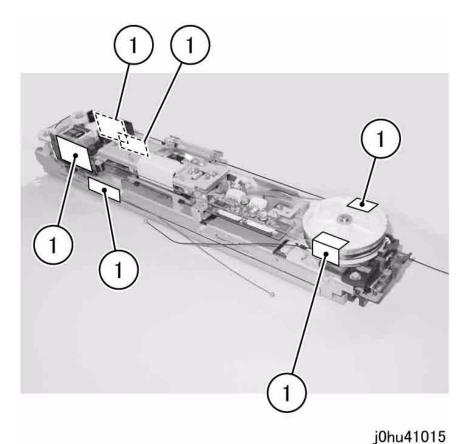


Figure 1 Remove Carriage Cables

- 1. To install, do the removal steps in reverse order.
- 2. Attach the Carriage Cables (black/silver) to the holes in the Drum (Figure 2).

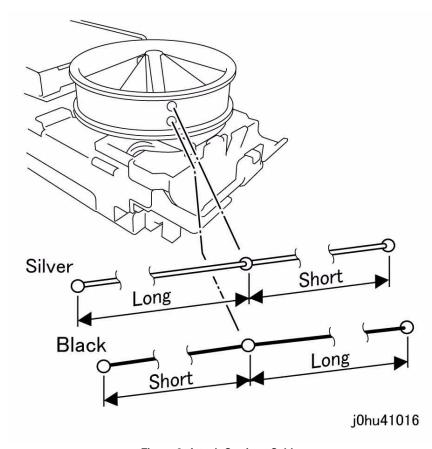


Figure 2 Attach Carriage Cables

3. Wind the Carriage Cables around the Drum and secure them with tape (Figure 3).

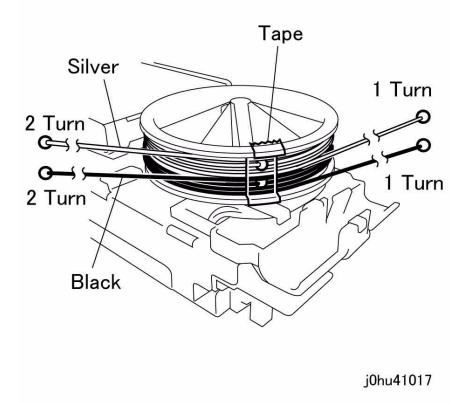


Figure 3 Wind Carriage Cables Around the Drum

- Wind the Carriage Cables around the pulleys (Figure 4). See also the Cable Winding Schematic (Figure 5).
- 5. Secure the Cables with pieces of tape so that they do not become loose (see Figure 1).

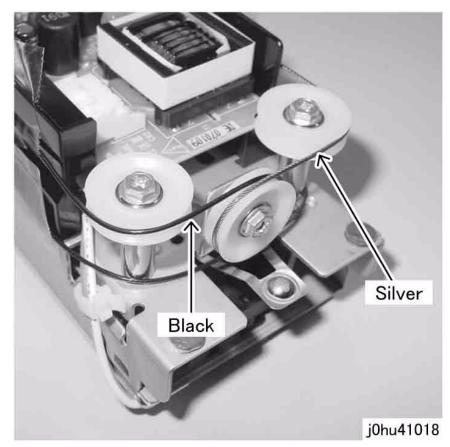


Figure 4 Wind Carriage Cables Around Pulleys

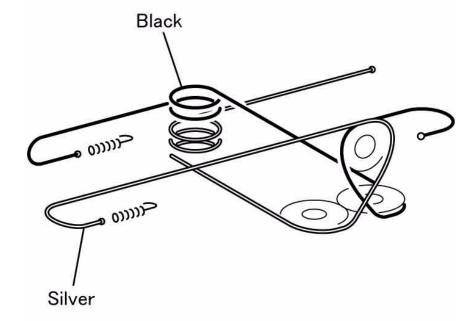




Figure 5 Cable Winding Schematic

REP 10.7.2 Inverter PWB

Parts List on PL 10.7

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Control Panel (REP 8.3.1)
- 2. Remove the IIT Upper Cover (REP 10.2.1).
- 3. Remove the Inverter PWB Bracket 2 with Carriage fully to the left (Figure 1).
 - (1) Remove the screw.
 - (2) Remove the Inverter PWB Bracket 2.

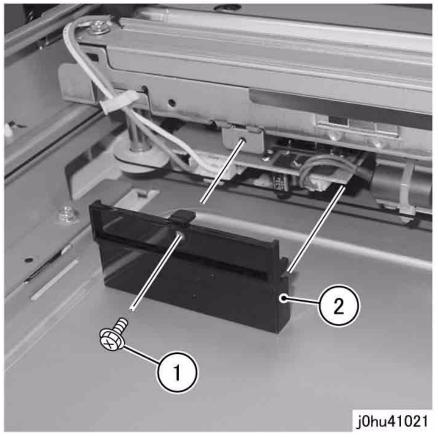


Figure 1 Remove Inverter PWB Bracket 2

4. Disconnect the connector (Figure 2).

Reissue

- (1) Release the wire harness from the clamp.
- (2) Disconnect the connectors (2).

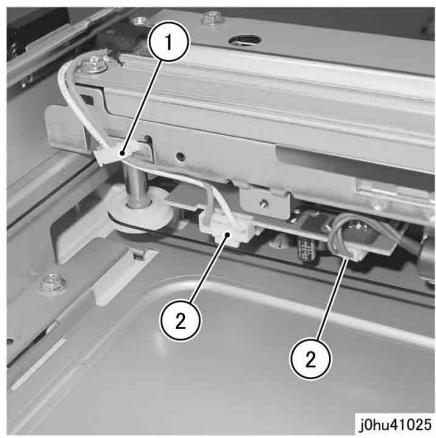


Figure 2 Remove Inverter PWB Connectors

- 5. Move Carriage fully to the right to expose Inverter PWB Bracket 1 (Figure 3).
 - (1) Remove the screw.
 - (2) Remove the Inverter PWB Bracket 1.

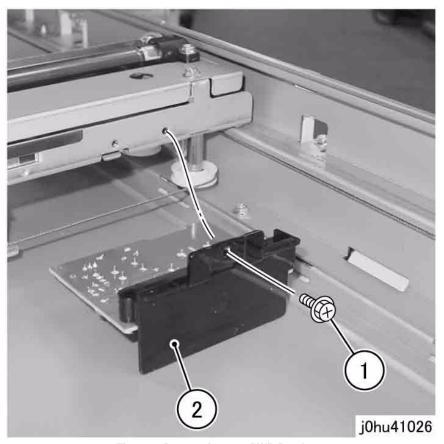


Figure 3 Remove Inverter PWB Bracket 1

- 6. Remove the Inverter PWB from Bracket 1 (Figure 4).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Inverter PWB.

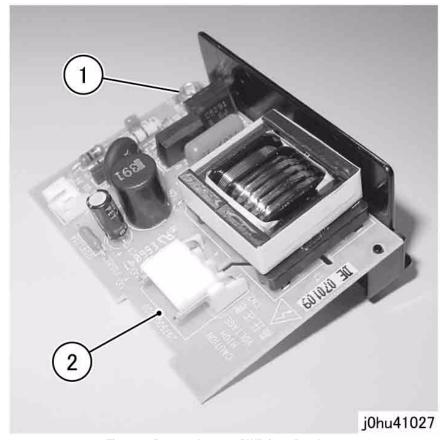


Figure 4 Remove Inverter PWB from Bracket 1

REP 11.1.1 Remove Tray 2

Parts List on PL 11.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove all paper from Tray 2.
- 2. Pull out Tray 2.
- 3. Lift the front side of Tray 2 and remove the tray (Figure 1).

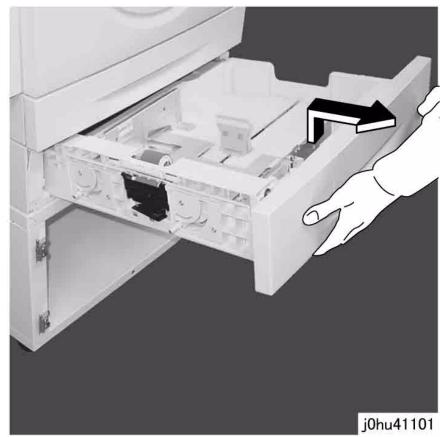


Figure 1 Remove Tray 2

Replacement

1. To install, do the removal steps in reverse order.

REP 11.1.2 Tray 2 Module (Separation from IOT)

Parts List on PL 11.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The IOT is heavy. Do this procedure with 2 persons.

- 1. Disconnect the connector on Rear Cover. (Figure 1).
 - (1) Disconnect the connector.
 - (2) Pull out the cable clamp.

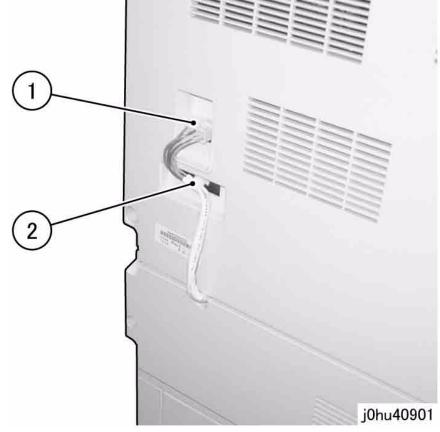


Figure 1 Disconnect Rear Cover Cable

- 2. Remove the Countersunk Head Screws at the rear (Figure 2).
 - (1) Remove the Countersunk Head Screws (2).

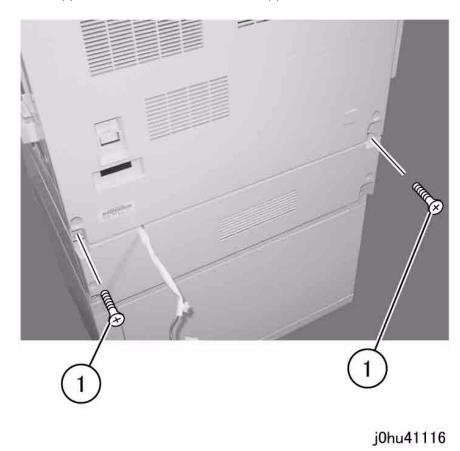


Figure 2 Remove Countersunk Head Screws (Rear)

- 3. Remove the Countersunk Head Screws at the front (Figure 3).
 - 1 Pull out Tray 1.
 - 2 Remove the Countersunk Head Screws (2).



Figure 3 Remove Countersunk Head Screws (Front)

4. Hold onto A (2) and B (2), and remove the IOT from the Tray 2 Module (Figure 4).



Figure 4 Remove IOT from Tray 2 Module

Replacement

1. To install, do the removal steps in reverse order.

REP 11.4.1 Tray 2 Feed Roll

Parts List on PL 11.4

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove Tray 2 (REP 11.1.1).
- 2. Remove the Feed Shaft from Tray 2t (Figure 1).
 - (1) Remove the KL-Clip.
 - (2) Remove the bearing.
 - (3) Slide the Feed Shaft towards the rear to remove it.

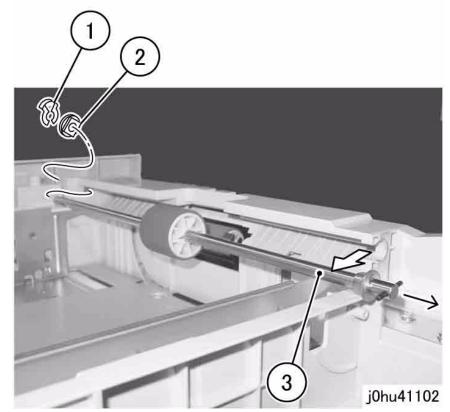
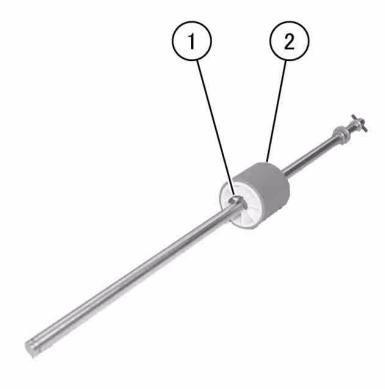


Figure 1 Remove Tray 2 Feed Shaft

- 3. Remove the Tray 2 Feed Roll (Figure 2).
 - (1) Remove the KL-Clip.
 - (2) Remove the Tray 2 Feed Roll.



j0hu41103

Figure 2 Remove Tray 2 Feed Roll

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Tray 2 Feed Roll, align the pin on the Feed Shaft with the groove in the Tray 2 Feed Roll (Figure 3).

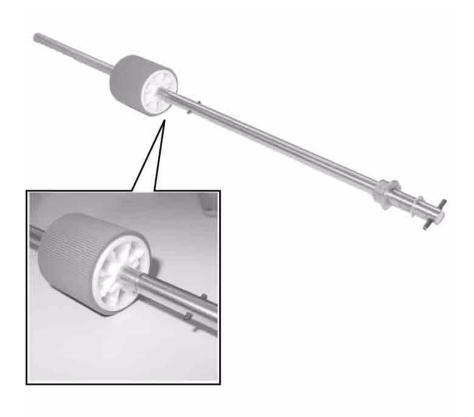


Figure 3 Feed Roll installation Alignment

j0hu41104

REP 11.4.2 Tray 2 Retard Roll

Parts List on PL 11.4

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove Tray 2 (REP 11.1.1).
- 2. Remove the Tray 2 Feeder (Figure 1).
 - (1) Remove the Self Tapping Screws (4).
 - (2) Remove the Tray 2 Feeder.

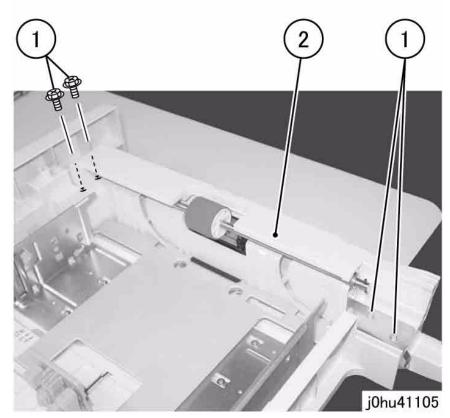


Figure 1 Remove Tray 2 Feeder

- 3. Remove the Tray 2 Retard Roll Housing (Figure 2).
 - (1) Release the hooks (2).
 - (2) Remove the Tray 2 Retard Roll Housing from the tabs (2).

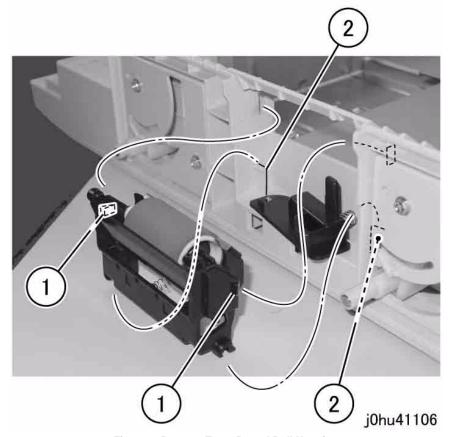


Figure 2 Remove Tray2 Retard Roll Housing

4. Remove the Tray 2 Retard Shaft and Roll (Figure 3).

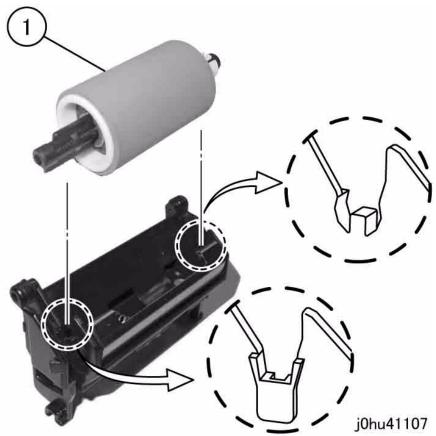


Figure 3 Remove Tray 2 Retard shaft and Roll

- 5. Remove the Tray 2 Retard Roll (Figure 4).
 - (1) Release the tab to remove the Tray 2 Retard Roll from the Retard Shaft.

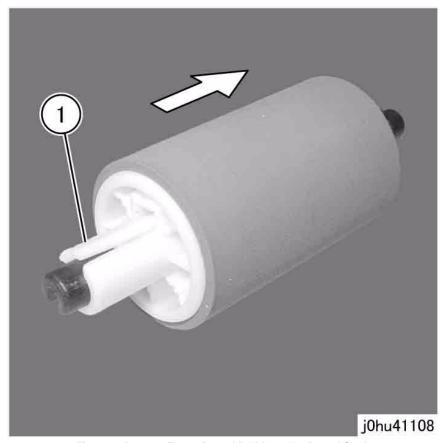
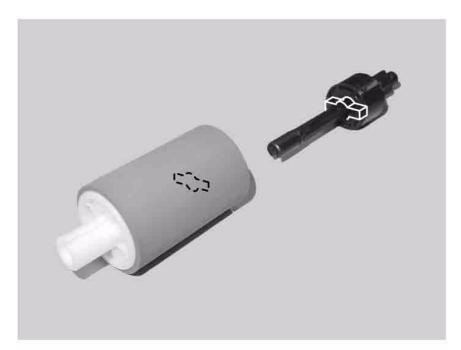


Figure 4 Remove Tray 2 Retard Roll from the Retard Shaft

- 1. To install, do the removal steps in reverse order.
- 2. When installing the Tray 2 Retard Roll, align the coupling of the Friction Clutch with the Tray 2 Retard Roll (Figure 5).



j0hu41109

Figure 5 Friction Clutch and Tray2 Retard Roll Alignment

- 3. When installing the Tray 2 Retard Roll Housing, check that the Tray 2 Retard Roll rises when the Holder Arm is pressed (Figure 6).
 - (A) Holder Arm
 - (B) Tray 2 Retard Roll

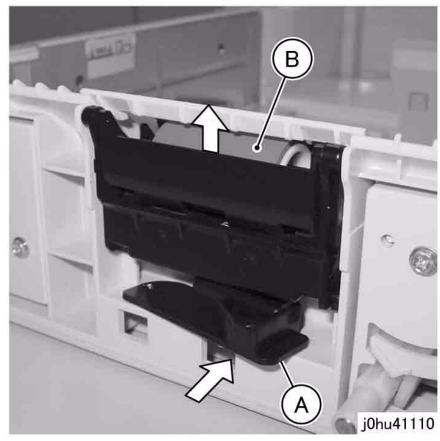


Figure 6 Installing Tray 2 Retard Roll Housing

REP 11.5.1 Tray 2 Feed Sensor

Parts List on PL 11.5

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the IOT from the Single Tray Module (REP 11.1.2).
- 2. Remove Tray 2 (REP 11.1.1).
- 3. Open Access Cover 2.
- 4. Remove the Tray 2 Feed Sensor (Figure 1).
 - (1) Pull out the cable clamp.
 - (2) Disconnect the connector.
 - (3) Release the tabs, and remove the Tray 2 Feed Sensor.

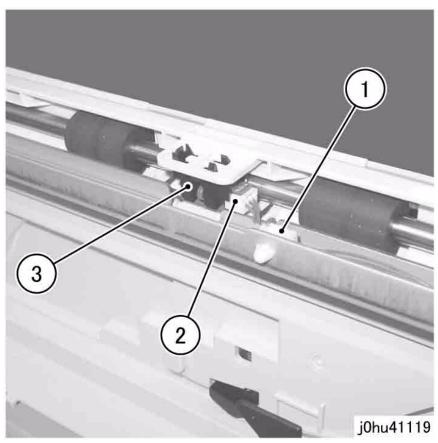


Figure 1 Remove Tray 2 Feed Sensor

Replacement

REP 11.5.2 Tray 2 PWB (SCC)

Parts List on PL 11.5

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Tray 2 Rear Cover (PL 11.5).
- 2. Remove the Tray 2 PWB (Figure 1).
 - (1) Disconnect the connectors (3).
 - (2) Remove the screws (2).
 - (3) Remove the Tray 2 PWB.

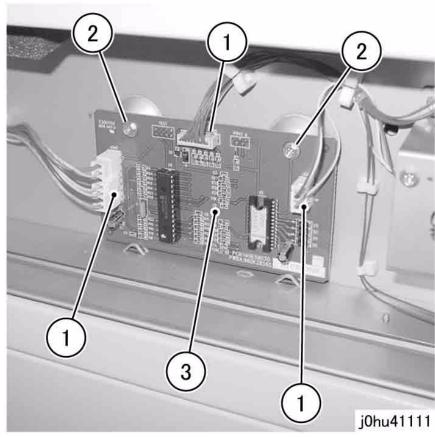


Figure 1 Remove Tray 2 PWB

Replacement

REP 11.6.1 Tray 2 Feed Clutch

Parts List on PL 11.6

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Tray 2 Rear Cover (PL 11.5).
- 2. Remove the gears (Figure 1).
 - (1) Remove the E-rings.
 - (2) Release the tabs.

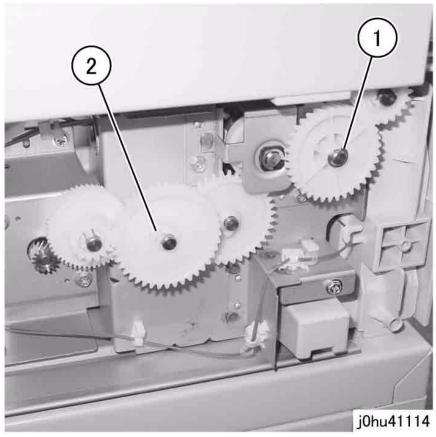


Figure 1 Remove Gears

- 3. Remove the Tray 2 Feed Clutch (Figure 2).
 - (1) Release the wire harness from the clamp.
 - (2) Disconnect the connector.
 - (3) Remove the screws (2).
 - (4) Release the tab on the gear, and remove the gear together with the Tray 2 Feed Clutch.
 - (5) Slide the wire harness through the hole.

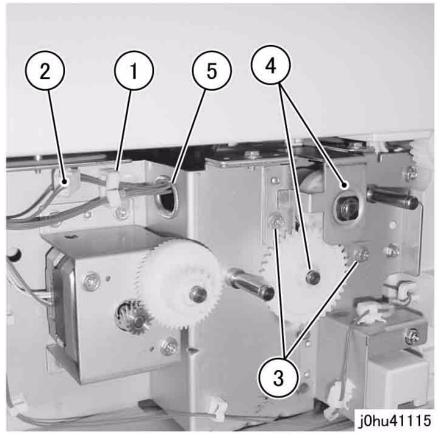


Figure 2 Remove Tray 2 Feed Clutch

Replacement

REP 11.6.2 Tray 2 Feed Motor

Parts List on PL 11.6

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Tray 2 Rear Cover (PL 11.5).
- 2. Remove the gears (Figure 1).
 - (1) Release the tab, and remove the gear.
 - (2) Release the tab, and remove the gear.

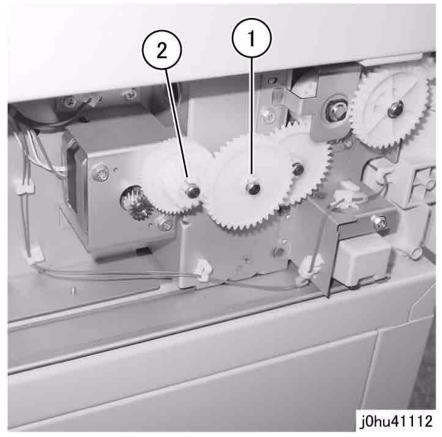


Figure 1 Remove Gears

- 3. Remove the Tray 2 Feed Motor (Figure 2).
 - (1) Release the wire harness from the clamp.
 - (2) Disconnect the connector.
 - (3) Remove the screws (4).
 - (4) Remove the Tray 2 Feed Motor.

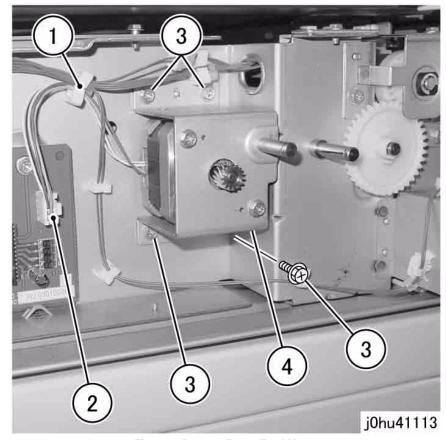


Figure 2 Remove Tray 2 Feed Motor

Replacement

REP 11.7.1 Tray 2 No Paper Sensor

Parts List on PL 11.7

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- Remove Tray 1.
- Remove Tray 2 (REP 11.1.1). 2.
- Remove the Tray 2 No Paper Sensor (Figure 1).
 - (1) Disconnect the connector.
 - (2) Release the tabs, and remove the Tray 2 No Paper Sensor.

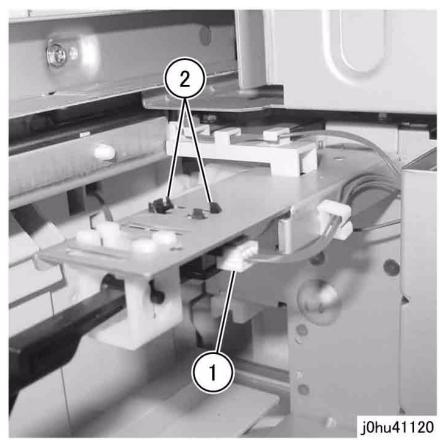


Figure 1 Remove Tray 2 No Paper Sensor

Replacement

REP 13.2.3 Front Cover

Parts List on PL 13.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Front Cover while pressing the sections indicated by the arrows (Figure 1).
 - (1) Remove the Self Tapping Screws (3).
 - (2) Remove the Screw.
 - (3) Remove the Front Cover.

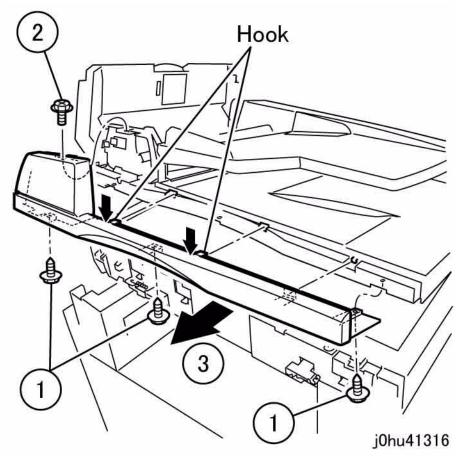


Figure 1 Remove Front Cover

Replacement

REP 13.2.4 Rear Cover

Parts List on PL 13.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover while pressing the sections indicated by the arrow (Figure 1).
 - (1) Remove the Screw.
 - (2) Remove the Self Tapping Screws (2).
 - (3) Remove the Rear Cover.

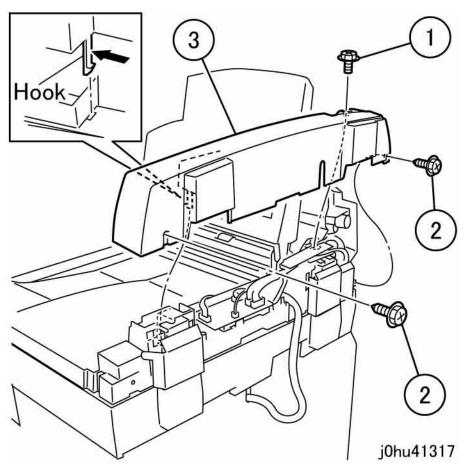


Figure 1 Remove Rear Cover

Replacement

REP 13.2.5 Eject Roller Solenoid

Parts List on PL 13.7

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Front Cover. (REP 13.2.3)
- 2. Remove the Eject Roller Solenoid. (Figure 1)
 - (1) Disconnect the connector.
 - (2) Remove the screws (2).
 - (3) Remove the wire from the harness clamp.
 - (4) Remove the Solenoid.

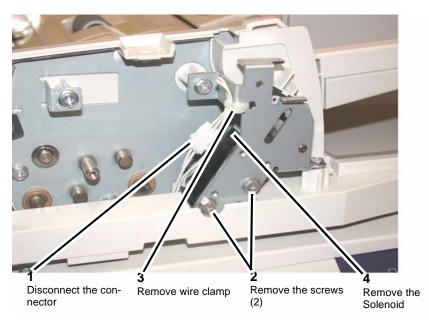


Figure 1 Remove Eject Roller Solenoid

Replacement

- Install the Eject Roller Solenoid and ensure that the Solenoid linkage is properly installed into the Eject Roller control arm.
- Perform the remainder of the replacement procedure in reverse order of the removal procedure.

REP 13.2.6 DADF Assembly

Parts List on PL 13.1

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 9.2.2).
- If you have a WorkCentre 5020 (DADF/Network), you must remove the EMI Cover (10 Screws) and then remove the Cable Band from the EMI Cover (REP 8.1.3)
- 3. Disconnect the Connector (Figure 1).
 - Disconnect the Connectors (2).
 - Remove the DADF Cable.

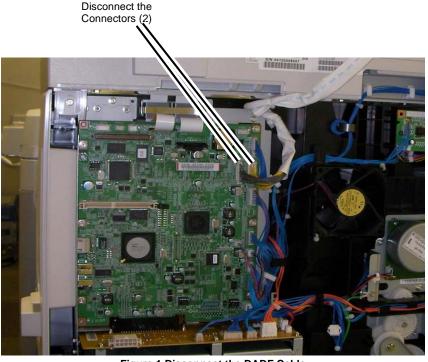
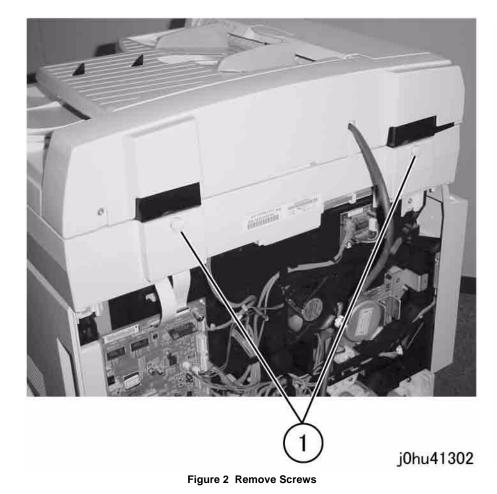
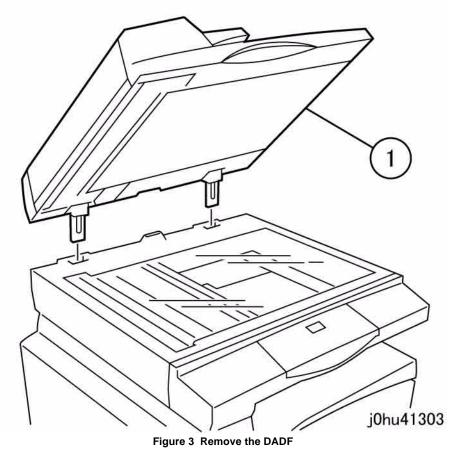


Figure 1 Disconnect the DADF Cable

4. Remove the Screws (2) (Figure 2).



5. Remove the DADF (Figure 3).



Replacement

REP 13.2.7 Document Tray Assembly

Parts List on PL 13.2

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following parts:
 - Front Cover (REP 13.2.3)
 - Rear Cover (REP 13.2.4)
- 2. Open the Top Cover.
- 3. Loosen the Self Tapping Screw (Figure 1).

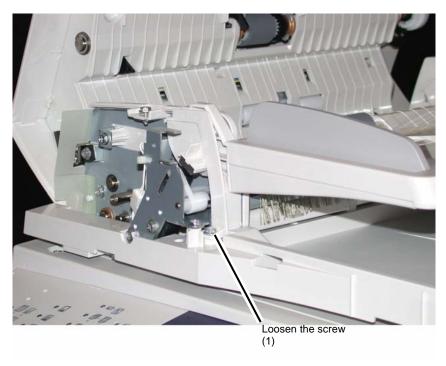


Figure 1 Loosen the Screw

- 4. Remove the Support Bracket (Figure 2).
 - (1) Release the Wire Harness from the Clamps.
 - (2) Remove the Self Tapping Screw.
 - (3) Remove the Self Tapping Screw.
 - (4) Remove the Ground Wires.
 - (5) Remove the Support Bracket.

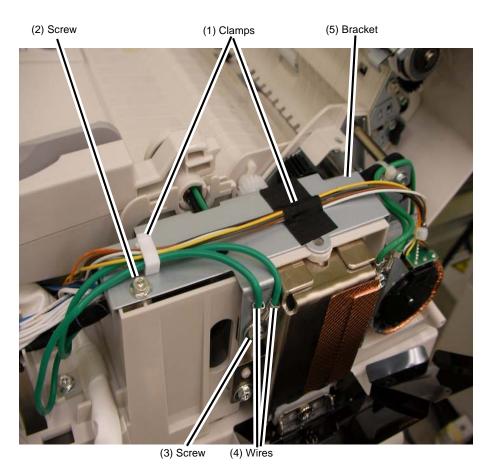


Figure 2 Remove the Support Bracket

- 5. Disconnect the Connector (Figure 3).
 - Disconnect the Connector.
 - Remove the Cable Tie.

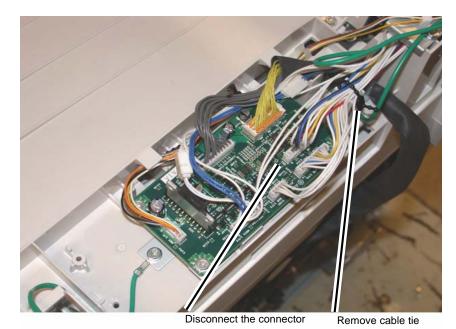
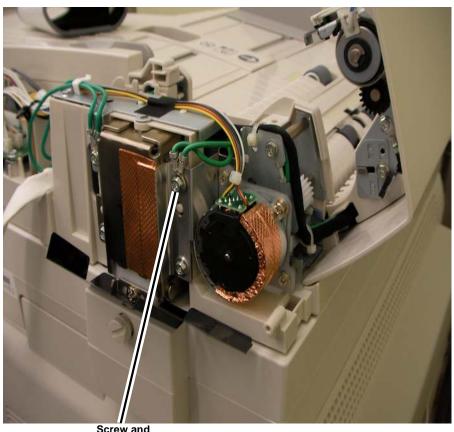


Figure 3 Disconnect the Connector

- 6. Remove the Ground Wires (Figure 4).
 - Remove the Screw to remove the Ground Wires (2).



Screw and Ground Wires

Figure 4 Remove the Ground Wires

7. Remove the Document Tray Assembly (Figure 5).

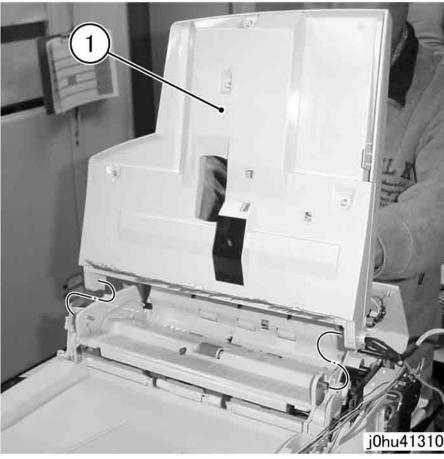


Figure 5 Remove document Tray Assembly

Replacement

1. To install, do the removal steps in reverse order.

REP 13.2.8 Feeder Assembly

Parts List on PL 13.4

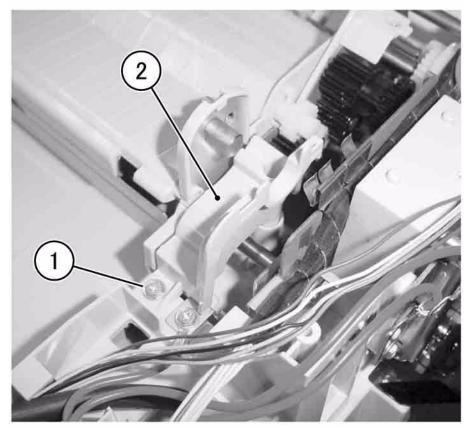
Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the following covers.
 - Front Cover (REP 13.2.3)
 - Rear Cover (REP 13.2.4)
- 2. Open the Top Cover.
- 3. Remove the Document Tray Assembly (REP 13.2.7).

- Remove the Rear Blind Cover (Figure 1).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Rear Blind Cover.



j0hu41311

Figure 1 Remove Rear Blind Cover

- 5. Disconnect the DADF PWB Connectors (Figure 2):
 - CN2
 - CN3
 - CN5
 - CN7
 - Disconnect the Connectors (4).

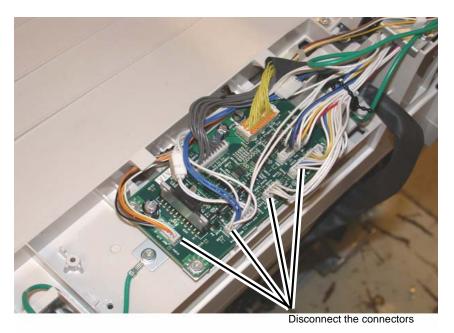


Figure 2 Disconnect the Connectors (4)

- Remove the Eject Roller Solenoid.
 - (1) Disconnect the connector.
 - (2) Remove the screws (3).
 - (3) Remove the Eject Roller Solenoid and Bracket.

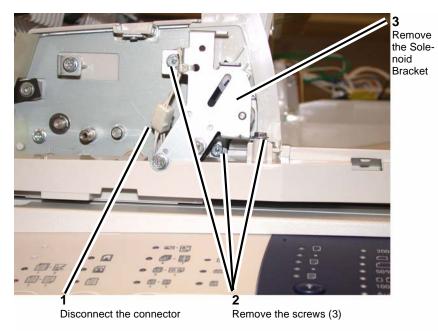


Figure 3 Remove the Eject Roller Solenoid Bracket

- Remove the Screws at the front (Figure 3).
 - (1) Remove the Screw (short).
 - (2) Remove the Screw (long).

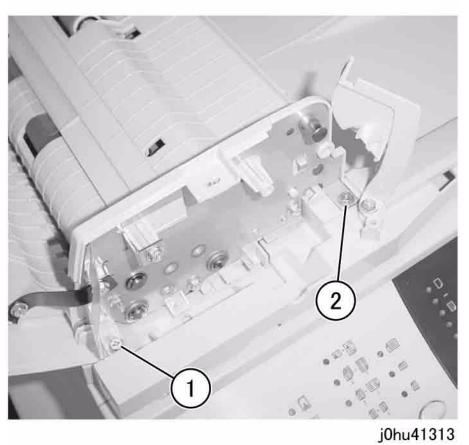


Figure 4 Remove the Screws

- 8. Remove the Self Tapping Screws.
 - (1) Remove the Screws at the rear (Figure 4).
 - (2) Remove the Screw (long).
 - (3) Remove the Screw to remove the Ground Wire.



Figure 5 Remove the Screws

9. Remove the Feeder Assembly (Figure 5).

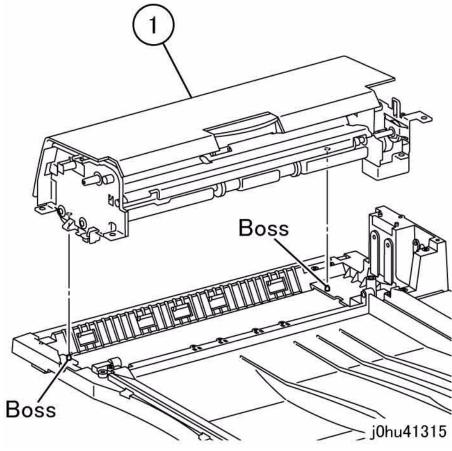


Figure 6 Remove the Feeder Assembly

Replacement

1. To install, do the removal steps in reverse order.

REP 13.3.2 Right Counter Balance (SCC)

Parts List on PL 13.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The DADF must be removed. There is danger when removing a Counter Balance that is in closed state because the compressed spring may get released suddenly.

- 1. Remove the DADF (REP 13.2.6).
- 2. Remove the Rear Cover (REP 13.2.4).
- 3. Open the Top Cover.
- 4. Remove the Film Cover (Figure 1).

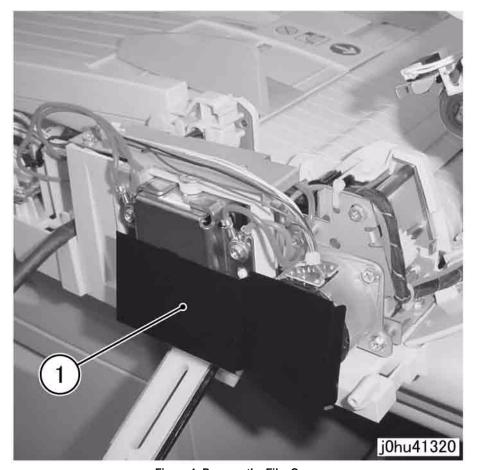


Figure 1 Remove the Film Cover

- 5. Remove the Right Counter Balance (Figure 2).
 - (1) Remove the Self Tapping Screws (4).
 - (2) Remove the Right Counter Balance.

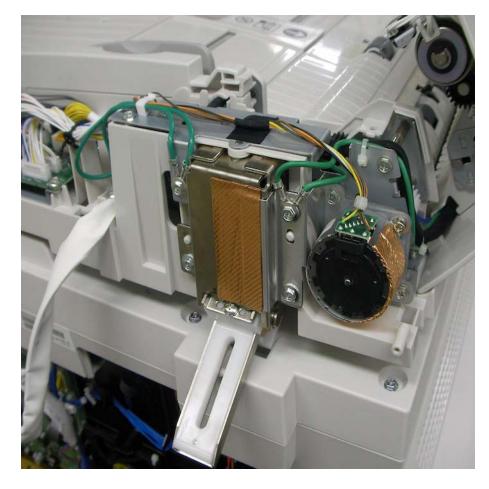


Figure 2 Remove Right Counter Balance

Replacement

1. To install, do the removal steps in reverse order.

REP 13.3.3 Left Counter Balance (SCC)

Parts List on PL 13.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

WARNING

The DADF must be removed. There is danger when removing a Counter Balance that is in closed state because the compressed spring may get released suddenly.

- 1. Remove the DADF (REP 13.2.6).
- 2. Remove the Rear Cover (PL 13.2).

3. Remove the Film Cover (Figure 1).

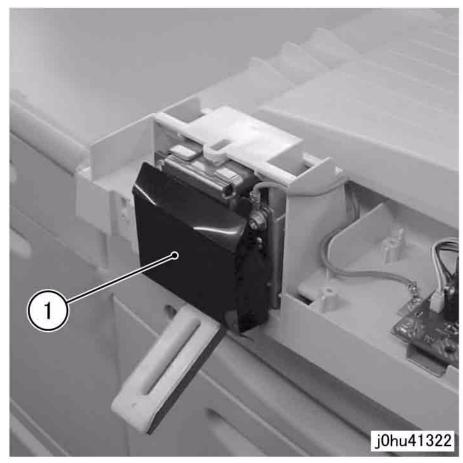


Figure 1 Remove Film Cover

- 4. Remove the screws that secure the Left Counter Balance (Figure 2).
 - (1) Use the marking tool and make a marking line.
 - (2) Remove the screws (4).
 - (3) Remove the Left Counter Balance.

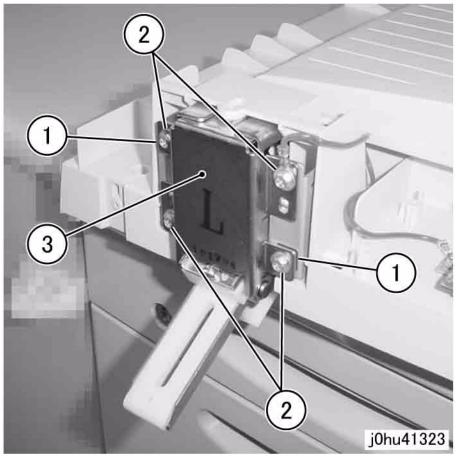


Figure 2 Remove Left Counter Balance

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. Check the DADF Positional Adjustment (ADJ 13.1.1).

REP 13.3.4 DADF PWB

Parts List on PL 13.3

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Remove the Rear Cover (REP 10.2.1).
- 2. Raise the Document Tray Assembly in the direction of the arrow (Figure 1).

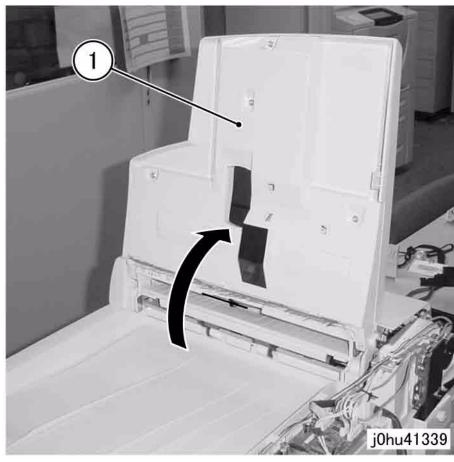


Figure 1 Raise the Document Tray Assembly

3. Disconnect the DADF PWB Connectors (7) (Figure 2).

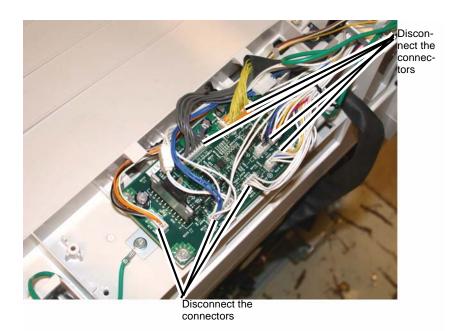


Figure 2 Disconnect DADF PWB Connectors

- 4. Remove the DADF Control PWB (Figure 3).
 - (1) Remove the Screws (2).
 - (2) Remove the Self Tapping Screw.
 - (3) Remove the Self Tapping Screw to remove the Ground Wire.
 - (4) Remove the DADF Control PWB.

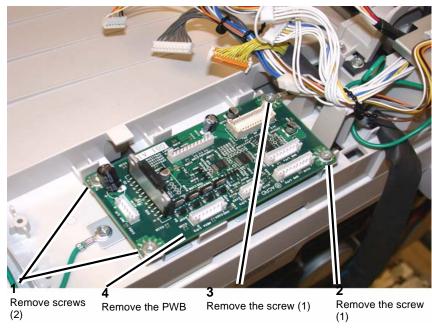


Figure 3 Removing the DADF Control PWB

Replacement

1. To install, do the removal steps in reverse order.

REP 13.4.1 Top Cover

Parts List on PL 13.4

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Upper Feeder Assembly.
- 2. Remove the Top Cover (Figure 1).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Release the Hooks (2).
 - (3) Push in the Hooks (3).
 - (4) Remove the Top Cover.

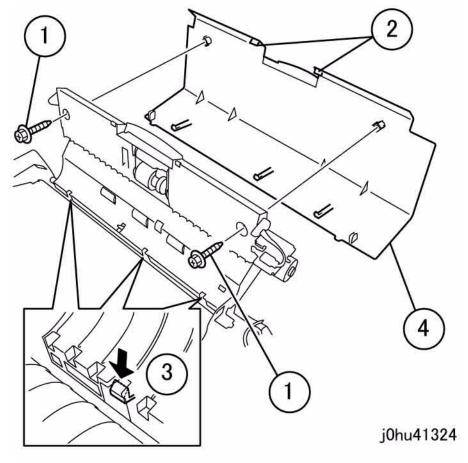


Figure 1 Remove the Top Cover

Replacement

1. To install, do the removal steps in reverse order.

REP 13.8.1 Retard Roll

Parts List on PL 13.8

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Top Cover.
- 2. Open the Retard Roll Assembly (Figure 1).

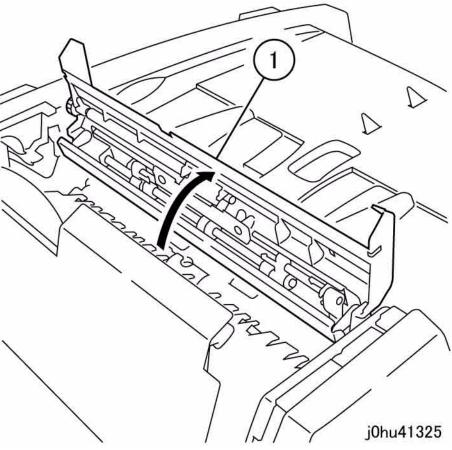


Figure 1 Open the Retard Roll Assembly

Reissue

- 3. Remove the Plate (Figure 2).
 - (1) Remove the Self Tapping Screws (2).
 - (2) Remove the Plate.

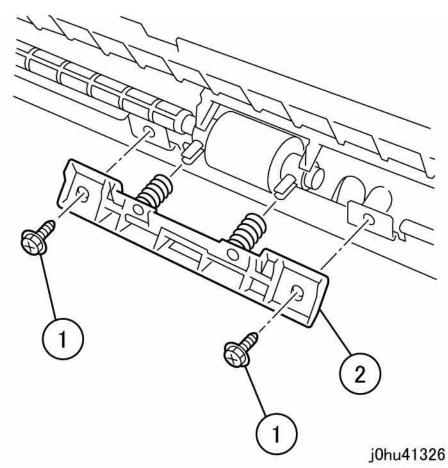


Figure 2 Remove the Plate

4. Remove the Retard Roll together with the Bearings (Figure 3).

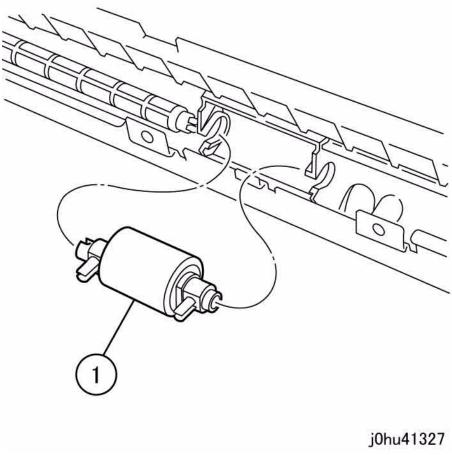
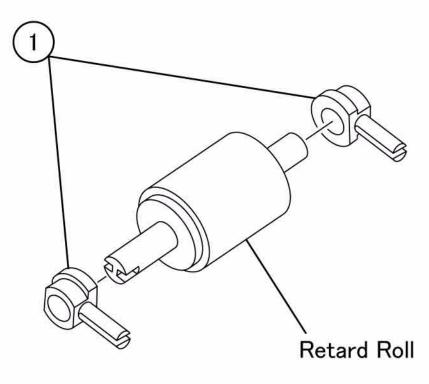


Figure 3 Remove the Retard Roll

5. Remove the Retard Roll Bearings (2) (Figure 4).



j0hu41328

Figure 4 Remove the Retard Roll Bearings

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. After a replacement, enter the Diagnostic Mode (GP 1) and clear the duplex feed counter.

REP 13.9.1 Pickup Roll, Feed Roll

Parts List on PL 13.9

Removal

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

- 1. Open the Upper Feeder Assembly.
- 2. Remove the Top Cover (REP 13.4.1).
- 3. Remove the Sensor Holder (Figure 1).
 - (1) Remove the Self Tapping Screw.
 - (2) Remove the Sensor Holder.

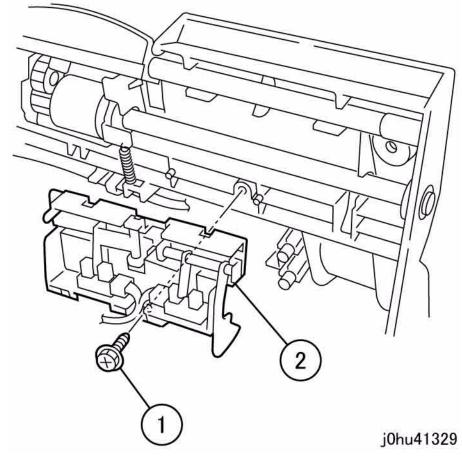


Figure 1 Remove Sensor Holder

- Remove the E-Clips, Bearing and Spring (Figure 2).
 - (1) Remove the E-Clip and Bearing.
 - (2) Remove the E-Clips (2).
 - (3) Remove the Spring.

- 5. Remove the Feed Roll Assembly (Figure 3).
 - (1) Move the Shaft.
 - (2) Remove the Feed Roll Assembly.

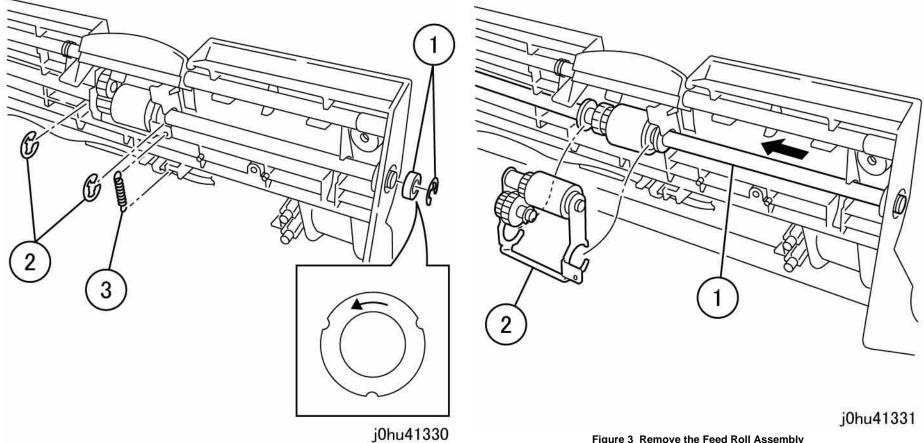
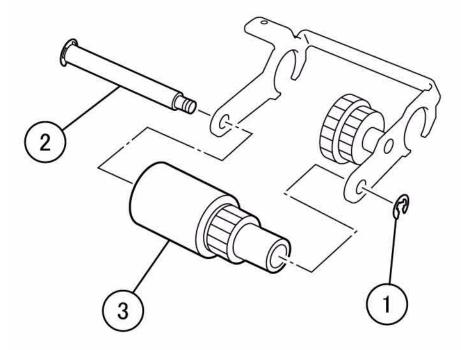


Figure 2 Remove the E-Clips, Bearing and Spring

Figure 3 Remove the Feed Roll Assembly

- 6. Remove the Feed Roll (Figure 4).
 - (1) Remove the E-Clip.
 - (2) Remove the Shaft.
 - (3) Remove the Feed Roll.



j0hu41332

Figure 4 Remove the Feed Roll

- 7. Remove the Pickup Roll (Figure 5).
 - (1) Remove the Bearing.
 - (2) Remove the Pickup Roll.

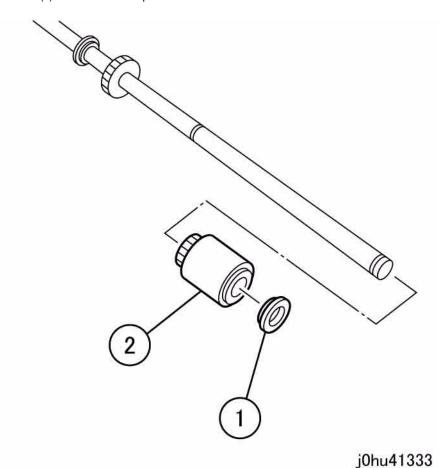


Figure 5 Remove the Pickup Roll

Replacement

- 1. To install, do the removal steps in reverse order.
- 2. After a replacement, enter the Diagnostic Mode (GP 1) and clear the duplex feed counter.

ADJ 8.1.1 Edge Erase Adjustment

Purpose

To set the right amount of edge erase at the lead edge and trail edge, as well as at both sides (left/right) of the image.

NOTE: Do the IOT Lead Edge/Side Edge Registration adjustment first.

Check

- 1. Specify a tray that contains paper, leave the platen cover open, and make a completely black copy by not putting any document on the glass.
- Check that the white portion at the lead edge, trail edge, and both sides of the copy are all 2mm wide.

Adjustment

 Enter the Diagnostics Mode (GP 1) and adjust the following NVM. Increasing the value will increase the amount of edge erase.

Table 1

Chain	Link	Name	Min	Initial	Max	Step
606	059	Normal Side Edge Erase Adjust- ment	0	16	32	0.254mm
606	060	Normal Lead Edge Erase Adjust- ment	0	16	32	0.145mm
606	063	Normal Trail Edge Erase Adjust- ment	0	16	32	0.145mm

ADJ 10.3.1 IIT Lead Edge/Side Edge Registration

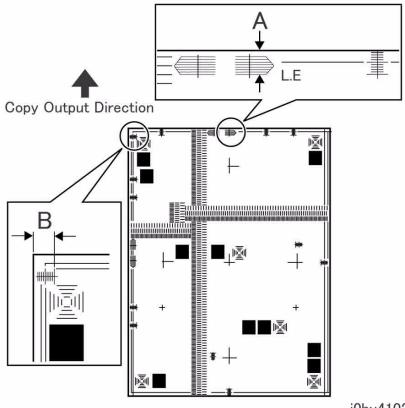
Purpose

To obtain the home position in the IIT lead edge (slow scan)/IIT side edge (fast scan) direction.

Check

- 1. Set the Test Pattern 499T247 (A3) on the platen, so that there is no gap between it and the Rear Registration Guide. Make 3 copies using 100% R/E and A3 SEF paper.
- 2. Measure the lead edge and side edge of the 3rd copy (Figure 1).

Lead edge: part A in the figure Side edge: part B in the figure



j0hu4102

Figure 1 IIT Lead Edge/Side Edge Registration

3. Check that the measured values for lead edge (A) and side edge (B) meet the specifications of the corresponding mode.

Table 1 Specification

Item	Simplex	MSI
Lead edge (A)	10 1.6mm	10 2.2mm
Side edge (B)	5 2.1mm	5 3.0mm

Adjustment

1. Enter the Diagnostics Mode (GP 1), and use the following Chain Functions to perform adjustments until the measured values for lead edge (A) and side edge (B) registration are within the specifications.

When the measured value is short, reduce the setting value.

When the measured value is long, increase the setting value.

Table 2

Chain	Chain Link Sub Name		Value		Initial	1 Count	
		System		Min.	Max.	Value	
620	001	PH	REGI ADJUSTMENT - ALL	0	60	30	0.146mm
620	041	PH	TRAY 1 for Normal LEAD REGIADJ	0	60	30	0.146mm
620	042	PH	TRAY 2 for Normal LEAD REGI ADJ	0	60	30	0.146mm
620	043	PH	MSI for Normal LEAD REGI ADJ	0	60	30	0.146mm
606	020	ROS	ALL TRAY - LASER SIDE REGI ADJUSTMENT	1	99	50	0.254mm
606	021	ROS	TRAY 1 - LASER SIDE REGI ADJUSTMENT	1	99	50	0.254mm
606	022	ROS	TRAY 2 - LASER SIDE REGI ADJUSTMENT	1	99	50	0.254mm
606	026	ROS	MSI - LASER SIDE REGI ADJUSTMENT	1	99	50	0.254mm

- After the adjustment, again set the Test Pattern 499T247 (A3) on the platen so that there
 is no gap between it and the Rear Registration Guide. Make a copy using 100% R/E and
 A3 SEF paper.
- 3. Repeat the procedure until the measured values for lead edge (A) and side edge (B) are within the specifications.

ADJ 11.1.1 Carriage Assembly Alignment (Parallelism)

Purpose

- To align the Carriage Assembly with the IIT Upper Cover.
- To prevent optical image skew in Platen Glass Mode.

WARNING

To avoid personal injury or electrical shock, ensure that the machine is completely off before disassembling or adjusting. Turn OFF the power and unplug the machine.

Adjustment

- 1. Remove the following parts:
 - Platen Cover (PL 10.1)
 - Control Panel (REP 8.3.1)
 - IIT Upper Cover (REP 10.2.1)
- 2. Adjust until the Carriage Assembly and the IIT Under Cover are parallel (Figure 1).
 - (1) Loosen the Stop Screw.
 - (2) Move the Carriage Assembly all the way to the right.
 - (3) Turn the Adjustment Screw to adjust.
 - (4) Tighten the Stop Screw.
 - Reference: Turning the Adjustment Screw counterclockwise moves the front of the Carriage Assembly to the left.

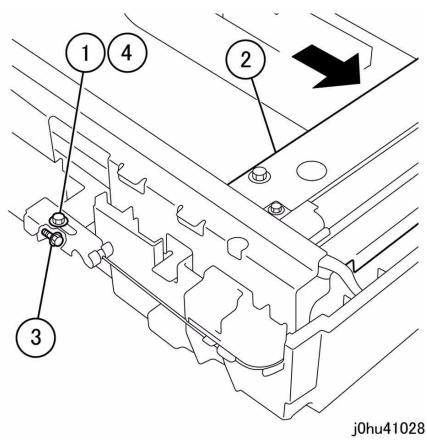


Figure 1 Carriage Assembly Alignment (Parallelism)

- 3. Return the machine to its original state, and make a copy in Platen Mode.
- 4. Check for optical skew, and repeat from step 1 as needed.

ADJ 13.1.1 DADF Positional Adjustment

Purpose

To correct the alignment of the DADF and correct the movement of the document.

Adjustment

- 1. Remove the DADF Rear Cover (PL 13.2).
- 2. Change the position of the Left Counter Balance to adjust the skew amount (Figure 1).
 - (1) Loosen the Screws (4).
 - (2) Move the DADF in direction of A or B.
 - (3) Tighten the Screws (4).

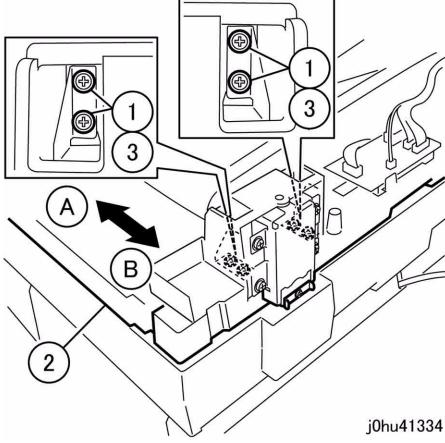
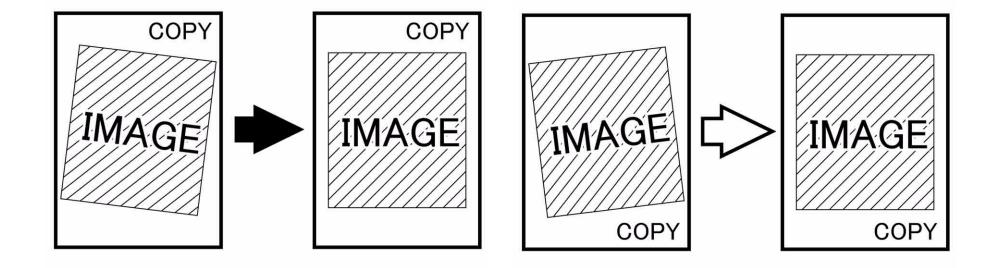


Figure 1 DADF Adjustment - 1 (j0hu41334)

3. Result when the DADF is moved in direction A (Figure 2):



j0hu41335

j0hu41336

Figure 2 DADF Adjustment - Direction A (j0hu41335)

Figure 3 DADF Adjustment - Direction B (j0hu41336)

4. Result when the DADF is moved in direction B (Figure 3):

5 Parts List

Overview		Cover	
Introduction	5-3	PL 9.1 Front / Top Cover	5-34
Subsystem Information	5-4	PL 9.2 Rear / Right Cover and NOHAD Fan	5-35
Symbology	5-5	IIT	
Parts Lists		PL 10.1 IIT	5-36
		PL 10.2 IIT Assembly (1 OF 2)	
Drive		PL 10.3 IIT Assembly (2 OF 2)	5-38
PL 1.1 IOT Motor	5-7	PL 10.4 IIT Upper Cover Component	5-39
Paper Transport		PL 10.5 IIT Under Cover Assembly	5-40
PL 2.1 Tray 1	5-8	PL 10.6 IIT Carriage Assembly	
PL 2.2 Tray 1 Frame Assembly		PL 10.7 Center Plate Assembly	5-42
PL 2.3 Tray 1 Components (1 OF 2)		Tray 2 Module	
PL 2.4 Tray 1 Components (2 OF 2)			5-43
PL 2.5 Tray 1 Frame Components		PL 11.1 Tray 2 Module	5-43
PL 2.6 Tray 1 Frame Components (2 OF 2)		Single Tray Module	
PL 2.7 Tray 1 No Paper Sensor Housing	5-14	PL 11.2 Tray 2 Assembly (1 OF 3)	5-44
PL 2.8 Registration		PL 11.3 Tray 2 Assembly (2 OF 3)	
PL 2.9 Registration Assembly		PL 11.4 Tray 2 Assembly (3 OF 3)	
·		PL 11.5 Tray 2 Module Assembly (1 OF 2)	
ROS		PL 11.6 Tray 2 Module Assembly (2 OF 2)	
PL 3.1 ROS	5-17	PL 11.7 Tray 2 No Paper Sensor	
CRU		Stand	
PL 4.1 Drum Cartridge	5-18		F F0
PL 4.2 Toner Empty Sensor and Erase Lamp	5-19	PL 12.1 Stand Assembly	5-50
PL 4.3 Transfer		DADF	
PL 4.4 Transfer Corotron Housing Assembly		PL 13.1 DADF	5-51
Fuser		ADF/DADF	
PL 5.1 Fuser	5-22	PL 13.2 Cover Assembly	5-52
		PL 13.3 Base Cover Assembly	
Exit Transport		PL 13.4 Upper Feeder Assembly	
PL 6.1 Exit Transport	5-23	•	
PL 6.3 Exit Transport Assembly	5-24	DADF	
Simpley / Dupley Medule and Byness Tray		PL 13.5 Lower Feeder Drive Components	
Simplex / Duplex Module and Bypass Tray	F 0F	PL 13.6 Retard Roll Assembly	5-56
PL 7.2 Left Hand Cover Assembly		ADF/DADF	
PL 7.3 Duplex Module Assembly (1 OF 2)PL 7.4 Duplex Module Assembly (2 OF 2)		PL 13.7 Lower Feeder Assembly	5-57
PL 7.5 Bypass Tray Assembly		PL 13.8 Retard Roll Assembly	
PL 7.6 Bypass Tray Assembly	5-29	PL 13.9 Upper Feeder Assembly	
Electrical		PL 13.10 Document Tray	5-60
PL 8.1 SLCC PWB, LVPS, Power Switch	5-30	Common Hardware	
PL 8.2 HVPS, Interlock Switch, Duplex PWB		Common Hardware	5-61
PL 8.3 Control Panel Assembly		Part Number Index	
PL 8.4 Control Panel Assembly			

Introduction

Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

Organization

Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

Part Number Index

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

Other Information

Abbreviations

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

Table 1

Abbreviation	Meaning	
A3	297 x 594 Millimeters	
A4	210 x 297 Millimeters	
A5	148 x 210 Millimeters	
AD	Auto Duplex	
AWG	American Wire Gauge	
EMI	Electro Magnetic Induction	
GB	Giga Byte	
KB	Kilo Byte	
МВ	Mega Byte	
MM	Millimeters	
MOD	Magneto Optical Drive	
NOHAD	Noise Ozone Heat Air Dirt	
PL	Parts List	
P/O	Part of	

Table 1

Abbreviation	Meaning
R/E	Reduction/Enlargement
REF:	Refer to
SCSI	Small Computer Systems Interface
W/	With
W/O	Without

Table 2

	Operating Companies
Abbreviation	Meaning
AO	Americas Operations
NASG - US	North American Solutions Group - US
NASG - Canada	North American Solutions Group - Canada
XE	Xerox Europe

Symbology

Symbology used in the Parts List section is identified in the Symbology section.

Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

Subsystem Information

Use of the Term "Assembly"

The term "assembly" will be used for items in the part number listing that include other itemized parts in the part number listing. When the word "assembly" is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

Tag

The notation "W/Tag" in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as "W/Tag", install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

WorkCentre 5020/DN

Symbology

A Tag number within a circle pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1). Information on the modification is in the Change Tag Index.

A Tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the Tag number within the circle (Figure 2).

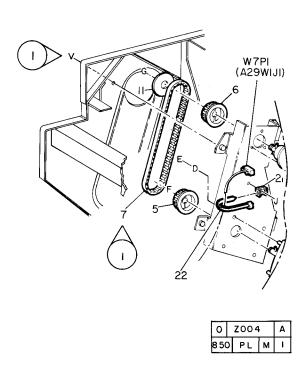


Figure 1 With Tag Symbol

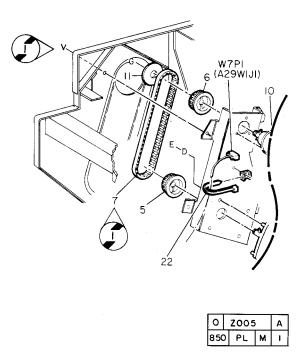


Figure 2 Without Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3). Information on the modification is in the Change Tag Index.

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4).

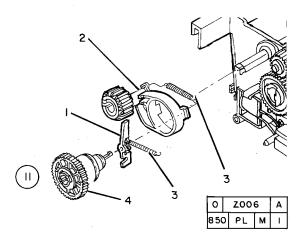


Figure 3 Entire Drawing With Tag Symbol

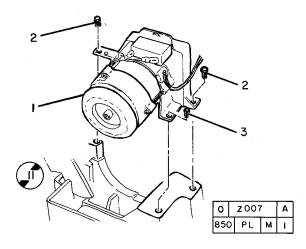
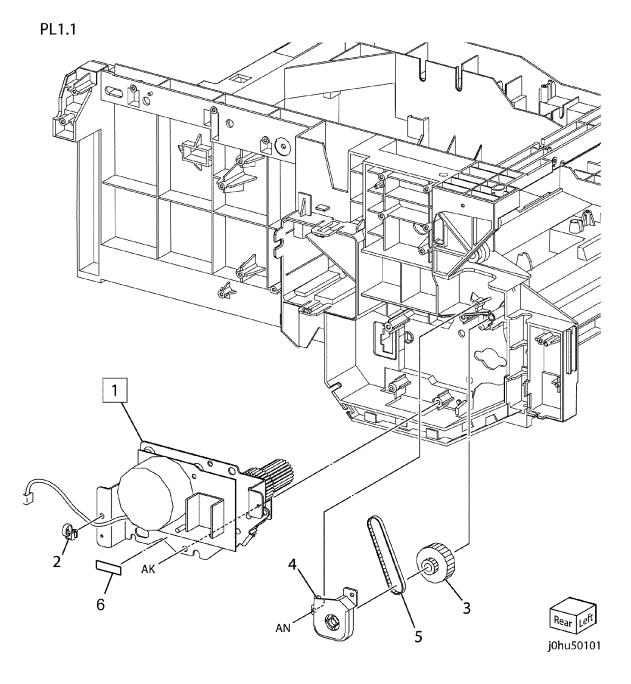


Figure 4 Entire Drawing Without Tag Symbol

PL 1.1 IOT Motor

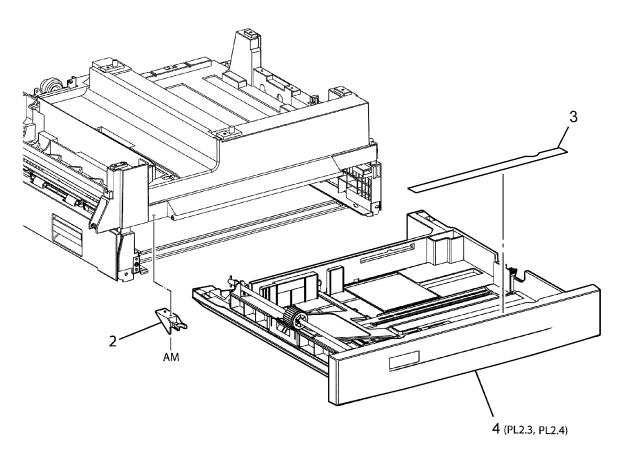
Item	Part	Description
1	007K94880	IOT Motor (REP 1.1.1)
2	120E22470	Push Tie
3	_	Gear Pulley (Not Spared)
4	_	Cover (Not Spared)
5	_	Belt (Not Spared)
6	_	Traceability Label (Not Spared)



PL 2.1 Tray 1

tem	Part	Description
1	050K62940	Tray 1 Assembly
2	_	Tray Stopper (Not Spared)
3	_	Label (P/O Item 1)
4	_	Tray 1 (P/O Item 1)

PL2.1



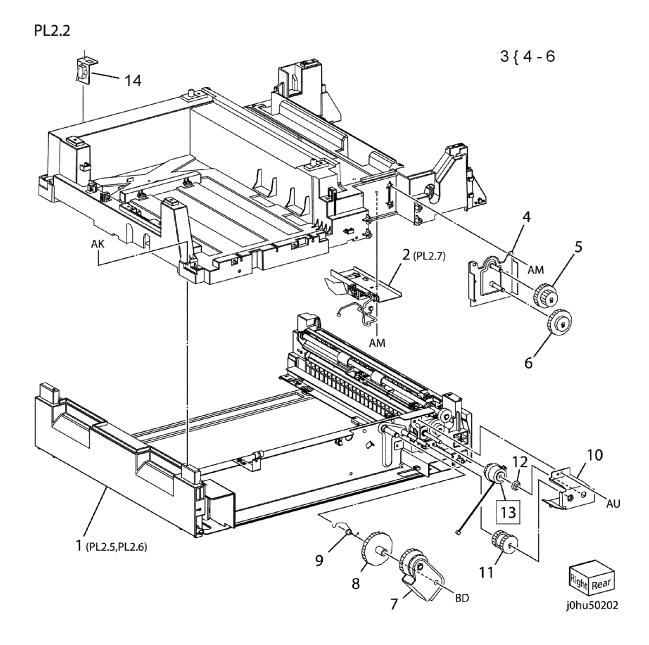


1 { 3, 4

Reissue

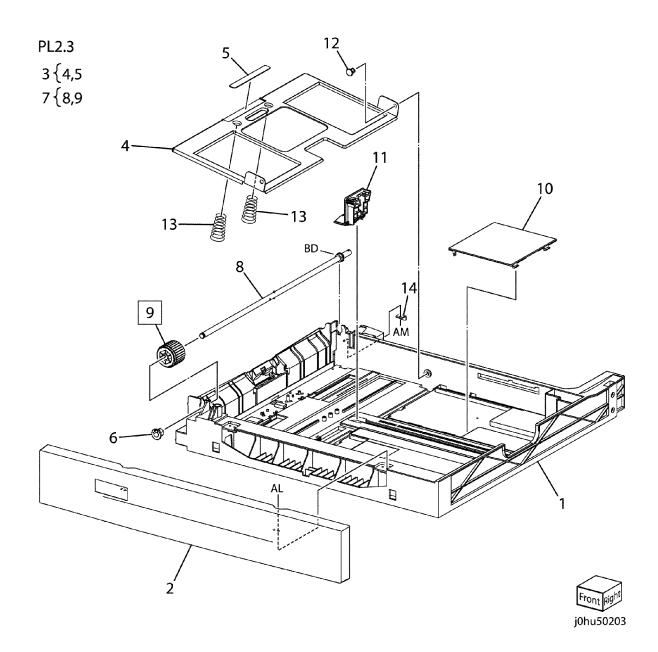
PL 2.2 Tray 1 Frame Assembly

	,	•
Item	Part	Description
1	_	Tray 1 Frame (P/O PL2.1 Item 1)
2	848K01660	Tray 1 No Paper Sensor
3	007K97780	Drive Gear Assembly
4	_	Bracket (P/O Item 3)
5	_	Gear (37T/23T) (P/O Item 3)
6	_	Gear (41T/22T) (P/O Item 3)
7	007K97790	Link Gear
8	807E19430	Gear (61T)
9	809E73520	Link Spring
10	_	Clutch Bracket (Not Spared)
11	807E19440	Gear (29T/29T)
12	013E25920	Bearing
13	121K40770	Tray 1 Feed Clutch (REP 2.2.1)
14	801K25580	Access Cover 1 Interlock Switch
		Bracket Assembly



PL 2.3 Tray 1 Components (1 OF 2)

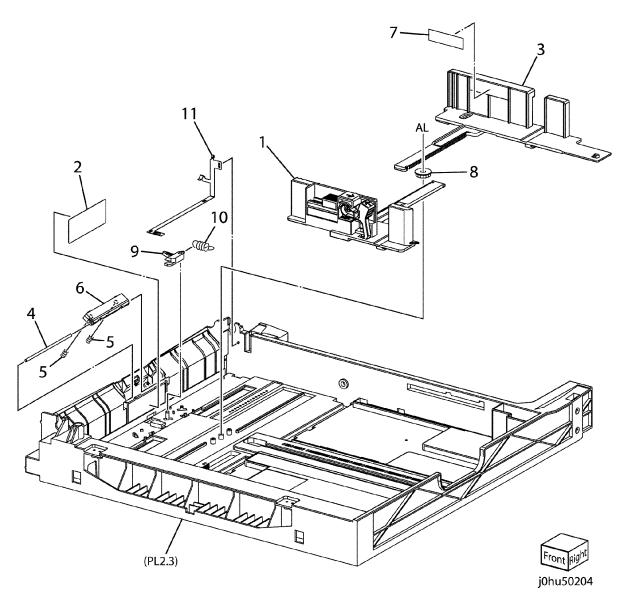
	•	- ` ` `
Item	Part	Description
1	_	Tray (Not Spared)
2	_	Tray Front Cover (Not Spared)
3	_	Bottom Plate Assembly (Not
		Spared)
4	_	Bottom Plate (P/O Item 3)
5	_	Bottom Pad (P/O Item 3)
6	013E25881	Bearing
7	059K33051	Roll And Shaft Assembly
8	_	Feed Shaft (P/O Item 7)
9	059K32773	Feed Roll (REP 2.3.1)
10	_	Cover (Not Spared)
11	_	End Guide (Not Spared)
12	_	Pivot (Not Spared)
13	_	Spring (Not Spared)
14	_	Stopper (Not Spared)



PL 2.4 Tray 1 Components (2 OF 2)

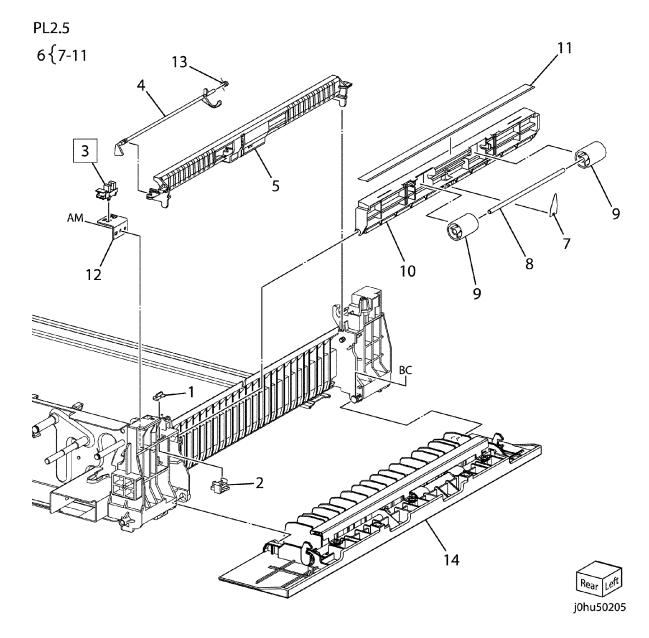
Item	Part	Description
1	_	Front Side Guide (Not Spared)
2	_	Paper Guide (Not Spared)
3	_	Rear Side Guide (Not Spared)
4	_	Retard Shaft (Not Spared)
5	_	Pad Spring (Not Spared)
6	019K09420	Retard Pad
7	_	Label (Max) (Not Spared)
8	_	Pinion Gear (Not Spared)
9	_	Bottom Stopper (Not Spared)
10	809E54170	Stopper Spring
11	_	Ground Plate (Not Spared)





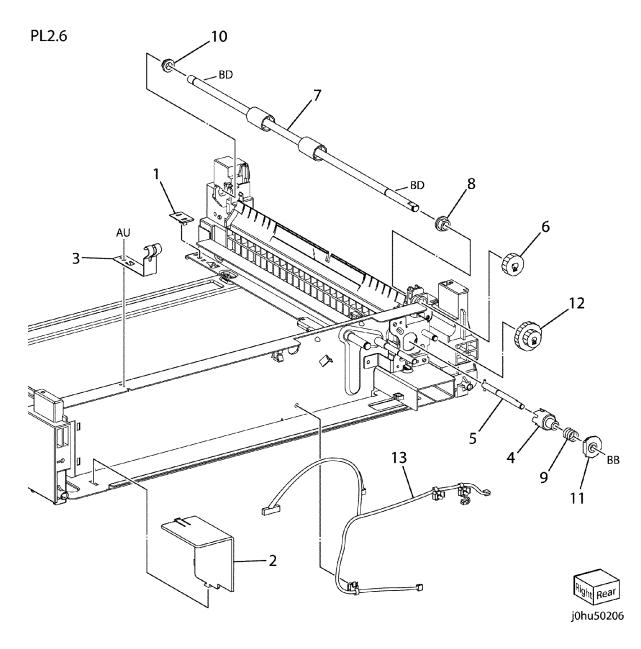
PL 2.5 Tray 1 Frame Components

	•	•
Item	Part	Description
1	_	Sensor Block (Not Spared)
2	110E11580	Access Cover 1 Interlock Switch
3	130E87090	Tray 1 Feed Sensor (REP 2.5.1)
4	120E29540	Actuator
5	_	Feed Chute (Not Spared)
6	_	Upper Baffle (Not Spared)
7	_	Plate Spring (P/O Item 6)
8	_	Shaft (P/O Item 6)
9	_	Roll (P/O Item 6)
10	_	Upper Baffle (P/O Item 6)
11	_	Eliminator (Not Spared)
12	_	Sensor Bracket (Not Spared)
13	_	Feed Sensor Spring (Not Spared)
14	802K97520	Access Cover 1 (Not Spared)



PL 2.6 Tray 1 Frame Components (2 OF 2)

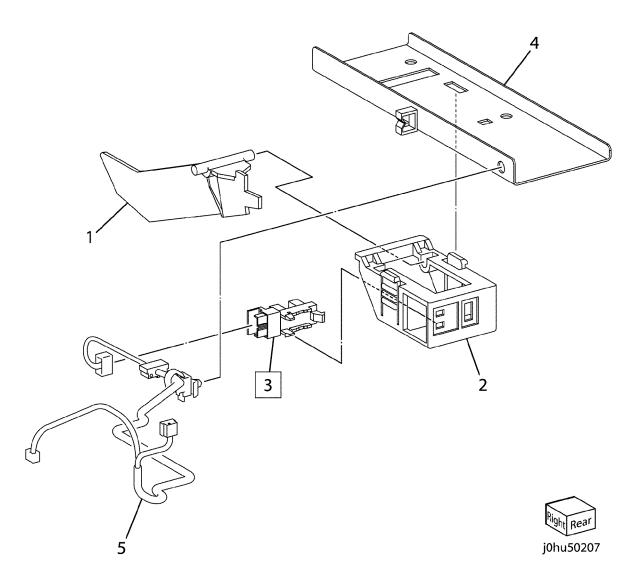
Item	Part	Description
1	_	Tray Spacer (Not Spared)
2	_	Enclosure Plate (Not Spared)
3	_	Ground Plate (Not Spared)
4	005E26740	Coupling Clutch
5	006K25751	Drive Feed Shaft
6	807E19460	Gear (21T)
7	059K48200	Take Away Roll Assembly
8	413W77559	Bearing
9	809E54180	Coupling Spring
10	013E90840	Bearing
11	013E32690	Coupling Bearing
12	807E19450	Gear (16T/29T)
13	_	Sensor Wire Harness (Not Spared)



PL 2.7 Tray 1 No Paper Sensor Housing

PL2.7

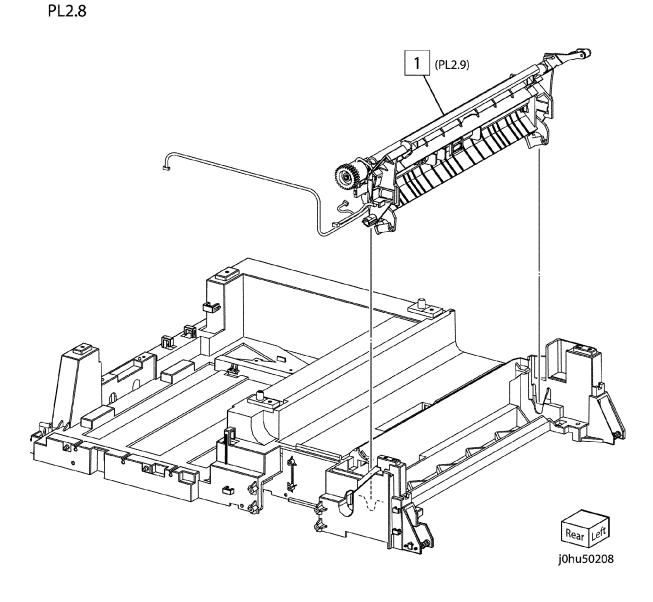
110000119				
Item	Part	Description		
1	120E23791	Tray 1 No Paper Actuator		
2	_	Sensor Housing (Not Spared)		
3	130E87090	Tray 1 No Paper Sensor (REP		
		2.7.1)		
4	_	Bracket (Not Spared)		
5	_	Sensor Wire Harness (Not Spared)		



PL 2.8 Registration

Part Description Item Registration Roll Assembly (REP 059K48250

2.8.1)

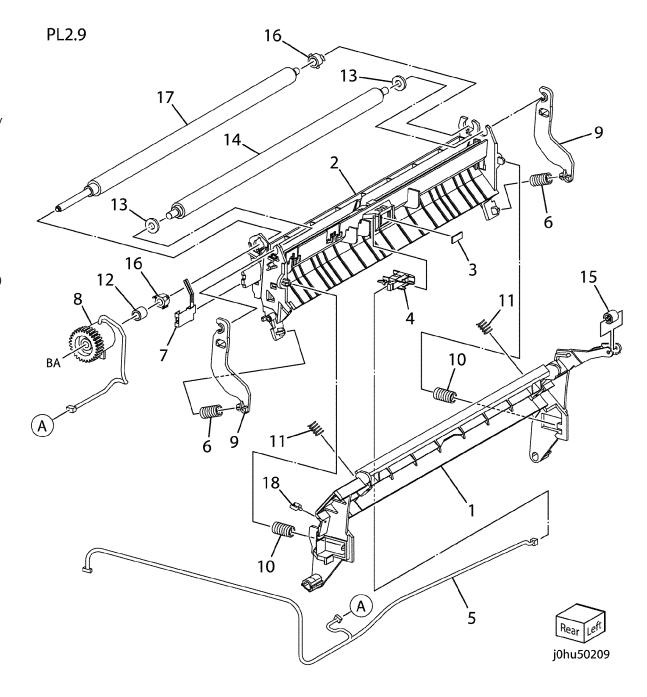


Reissue

Parts Lists December, 2011 PL 2.8 5-15

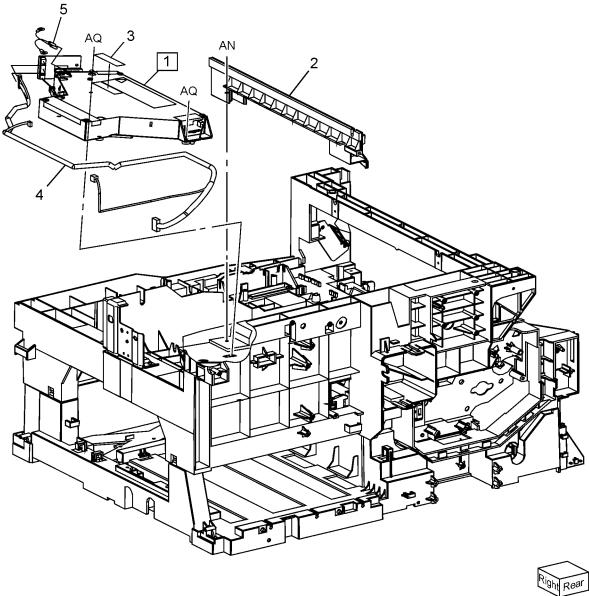
PL 2.9 Registration Assembly

Part	Description			
-	Corotron Bracket (P/O PL2.8 Item 1)			
_	Registration Frame (P/O PL2.8 Item 1)			
_	Sensor Plate (P/O PL2.8 Item 1)			
130K71230	IOT Registration Sensor Assembly			
_	Wire Harness (P/O PL2.8 Item 1)			
_	Registration Press Spring (P/O PL2.8 Item 1)			
_	Ground Spring (P/O PL2.8 Item 1)			
121K39710	Registration Clutch Assembly			
_	Press Level Arm (P/O PL2.8 Item 1)			
_	Corotron Press Spring (P/O PL2.8 Item 1)			
_	Transfer Corotron Spring (P/O PL2.8 Item 1)			
_	Ground Sleeve (P/O PL2.8 Item 1)			
_	Washer (P/O PL2.8 Item 1)			
_	Press Roll (P/O PL2.8 Item 1)			
_	Closing Roll (P/O PL2.8 Item 1)			
_	Bearing (P/O PL2.8 Item 1)			
059K53230	Registration Roll			
-	Clamp (P/O PL2.8 Item 1)			
	Part 130K71230 121K39710			



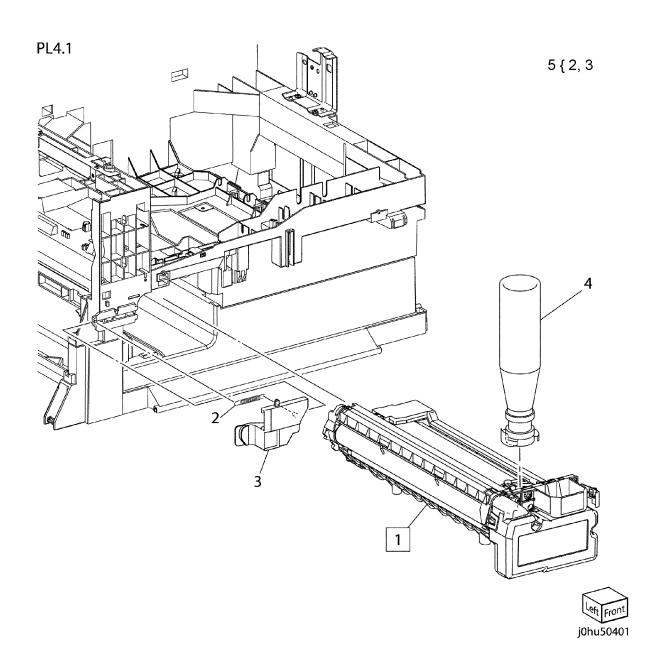
PL 3.1 ROS

ltem	Part	Description
1	062K18161	ROS Assembly (REP 3.1.1)
2	_	Laser Housing (Not Spared)
3	_	Label (Not Spared)
4	_	ROS Wire Harness (Not Spared)
5	_	Ground Harness (Not Spared)



PL 4.1 Drum Cartridge

ltem	Part	Description
1	101R00432	Drum Cartridge (REP 4.1.1)
2	_	Spring (P/O Item 5)
3	_	CRU Block (P/O Item 5)
4	106R01277	Toner Bottle
5	604K43851	CRU Blocker Kit

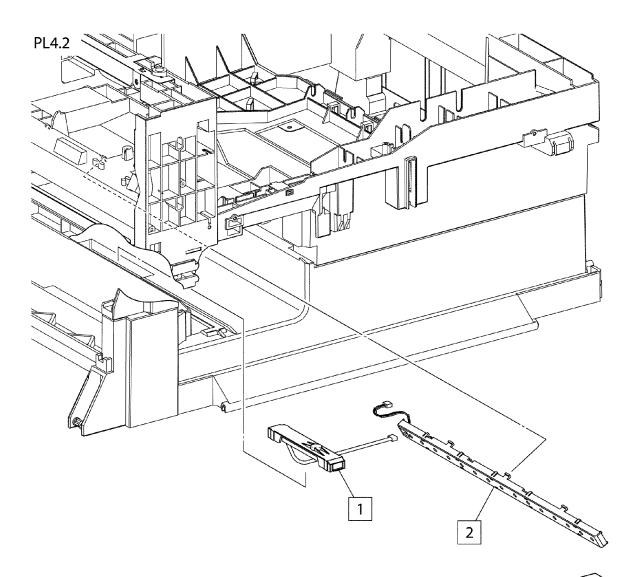


PL 4.2 Toner Empty Sensor and Erase Lamp

 Item
 Part
 Description

 1
 130K71400
 Toner Empty Sensor (REP 4.2.1)

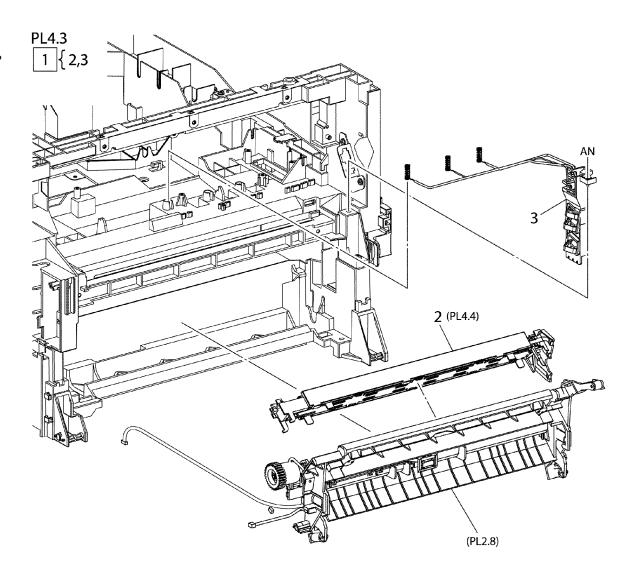
 2
 122K94091
 Erase Lamp (REP 4.2.2)





PL 4.3 Transfer

ltem	Part	Description
1	_	Transfer Module (Not Spared) (REP 4.3.1)
2	125K93752	Transfer Corotron Housing
3	014K83124	Corotron Block Assembly

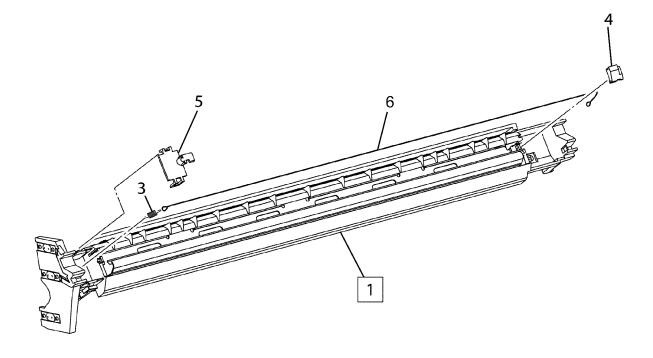




PL 4.4 Transfer Corotron Housing Assembly

Item	Part	Description
1	125K93752	Transfer Corotron Housing
2	604K43810	Corotron Wire Kit (REP 4.4.1)
3	_	Spring (P/O Item 2)
4	_	Rear Cover (Not Spared)
5	_	Front Cover (Not Spared)
6	_	Corotron Wire (P/O Item 2)

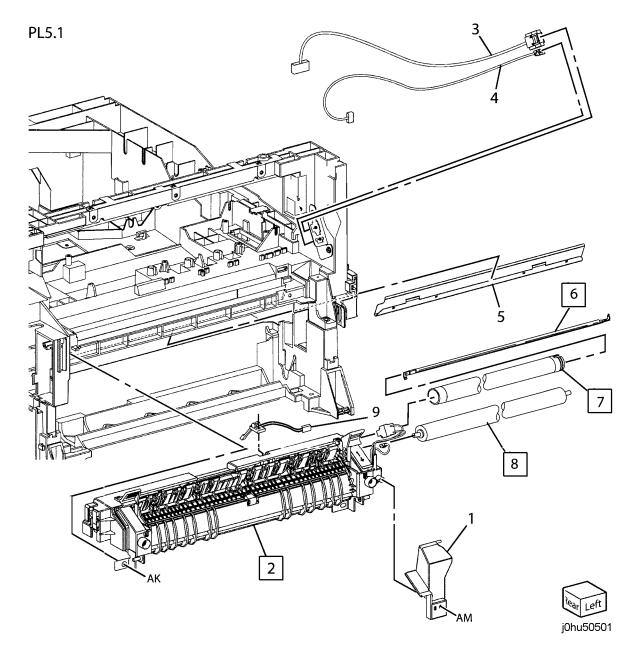
PL4.4





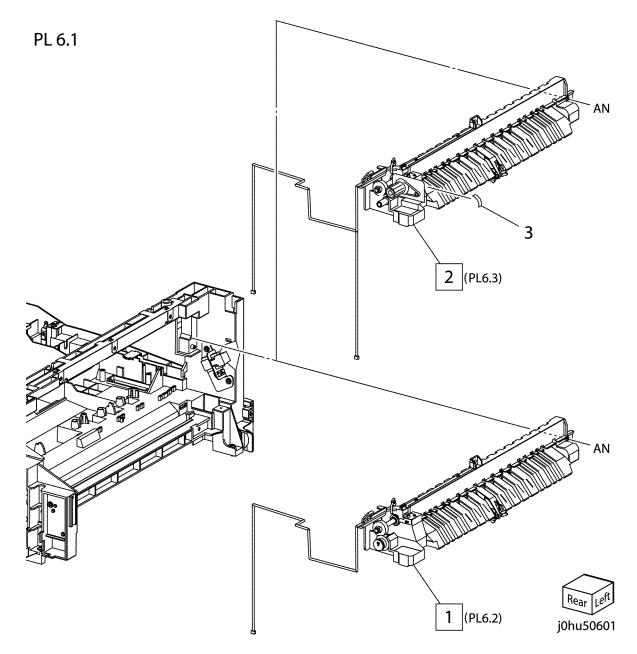
PL 5.1 Fuser

_		
Item	Part	Description
1	_	Connector Cover (Not Spared)
2	126K23583	Fuser Assembly (220V) (REP 5.1.1)
-	126K24413	Fuser Assembly (110V) (REP 5.1.1)
3	_	AC Fuser Harness (Not Spared)
4	_	DC Fuser Harness (Not Spared)
5	_	Baffle Clip (Not Spared)
6	122E92530	Fuser Lamp (220V) (REP 5.1.3)
-	122E92550	Fuser Lamp (110V) (REP 5.1.3)
7	022E30121	Fuser Roll (REP 5.1.4)
8	022K74110	Pressure Roll Assembly (REP 5.1.5)
9	130K71361	Temperature Control Sensor (REP 5.1.2)



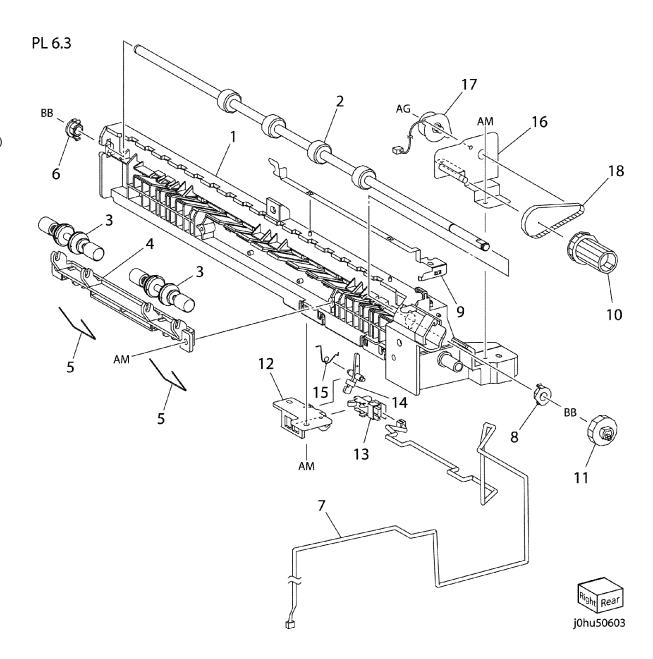
PL 6.1 Exit Transport

tem	Part	Description
2	059K48230	Exit Transport Assembly (Duplex) (REP 6.1.2)
-	059K48240	Exit Transport Assembly (Duplex) (REP 6.1.2)
3	_	Label (Not Spared)



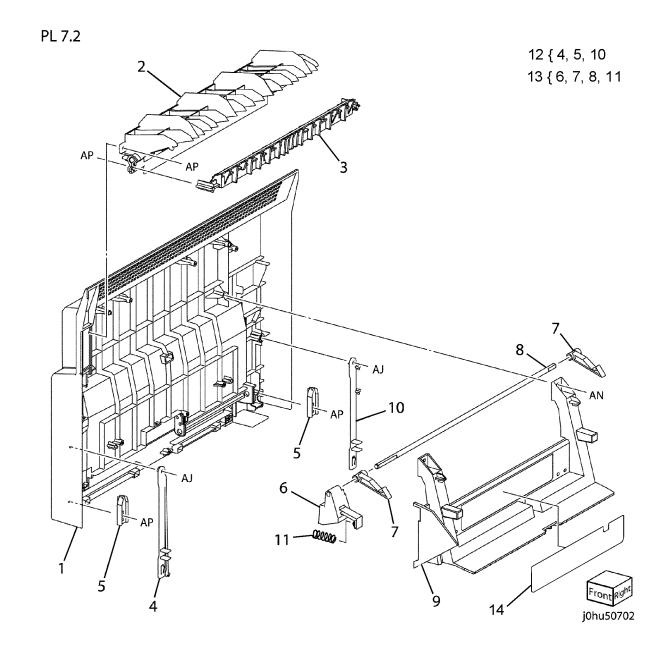
PL 6.3 Exit Transport Assembly

		•
Item	Part	Description
1	_	Lower Chute (Not Spared)
2	059K43000	Exit Roll
3	059E99331	Pinch Roll
4	_	Pinch Roll Support (Not Spared)
5	809E76520	Pinch Spring
6	013E30050	Bearing
7	_	Sensor Wire Harness (Not Spared)
8	_	Bearing (Not Spared)
9	_	Ground Plate (Not Spared)
10	_	Gear Pulley
11	_	Gear (24T) (Not Spared)
12	_	Sensor Support (P/O Item 20)
13	130E87090	Fuser Exit Sensor
14	_	Actuator (P/O Item 20)
15	_	Actuator Spring (P/O Item 60)
16	_	Motor Frame (Not Spared)
17	127K51590	Exit Motor
18	423W06555	Belt
19	_	Insulator (P/O Item 20)
20	604K43840	Exit Sensor Kit



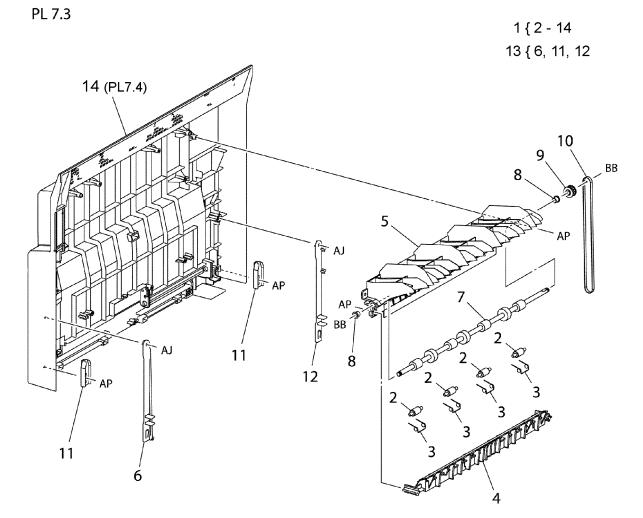
PL 7.2 Left Hand Cover Assembly

	,
Part	Description
_	Left Hand Cover (Not Spared)
_	Left Hand Upper Chute (Not
	Spared)
_	Left Hand Lower Chute (Not
	Spared)
_	Front Stopper (P/O Item 12)
_	Pivot Retainer (P/O Item 12)
_	Latch Handle (P/O Item 13)
_	Latch (P/O Item 13)
_	Latch Shaft (P/O Item 13)
_	Main Baffle (Not Spared)
_	Rear Stopper (P/O Item 12)
_	Latch Spring (P/O Item 13)
604K43860	Left Hand Cover Kit
604K43870	Left Hand Cover Latch Kit
_	Jam Clear Label (P/O Item 1)
	- - - - - - - - - - - - - - - - - - -



PL 7.3 Duplex Module Assembly (1 OF 2)

Item	Part	Description
1	802K97500	Left Hand Cover Assembly (REP
		7.1.1)
2	059E03090	Pinch Roll
3	_	Pinch Spring (P/O Item 1)
4	_	Left Hand Lower Chute (P/O Item
		1)
5	_	Left Hand Upper Chute (P/O Item
		1)
6	_	Front Stopper (P/O Item 13)
7	_	Duplex Roll 1 (P/O Item 1)
8	013E33260	Bearing
9	_	Pulley (P/O Item 1)
10	023E26660	Belt
11	_	Pivot Retainer (P/O Item 13)
12	_	Rear Stopper (P/O Item 13)
13	604K43860	Left Hand Cover Kit
14	_	Left Hand Cover (P/O Item 1)



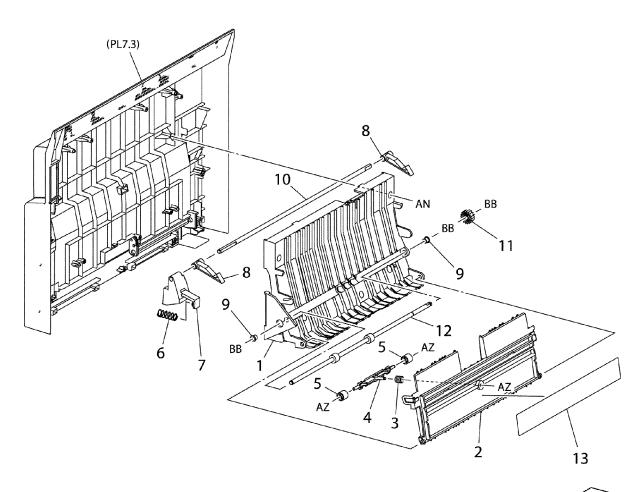


PL 7.4 Duplex Module Assembly (2 OF

2)

Part	Description
_	Duplex Main Baffle (P/O PL7.3 Item 1)
_	Duplex in Chute (P/O PL7.3 Item 1)
809E76630	Idler Spring
_	Idler Shaft (P/O PL7.3 Item 1)
059E03650	Idler Roll
-	Latch Spring (P/O Item 14)
_	Latch Handle (P/O Item 14)
-	Latch (P/O Item 14)
013E33260	Bearing
-	Latch Shaft (P/O Item 14)
807E21180	Gear (18T)
006K86440	Duplex Roll 2
-	Label (Jam Clear) (Not Spared)
604K43870	Left Hand Cover Latch Kit
	- 809E76630 - 059E03650 - - - 013E33260 - 807E21180 006K86440

PL 7.4



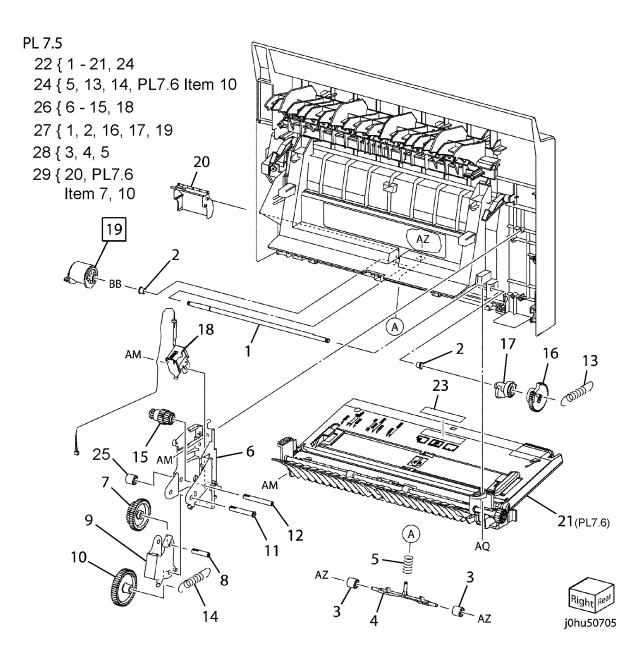


14 { 6, 7, 8, 10

j0hu50704A

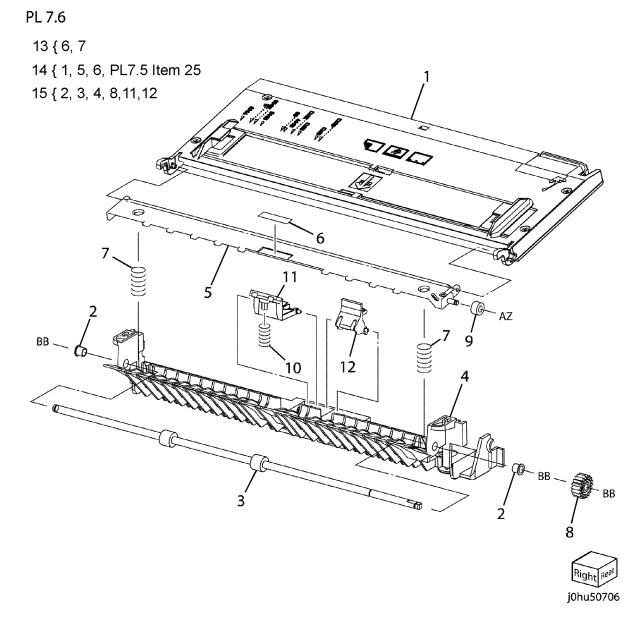
PL 7.5 Bypass Tray Assembly

I L /	рразэ	ITAY ASSEMBLY
Item	Part	Description
1	_	Bypass Feed Shaft (P/O Item 22)
2	_	Bearing (P/O Item 22, Item 27)
3	_	Idler Roll (P/O Item 22, Item 28)
4	_	Idler Shaft (P/O Item 22, Item 28)
5	_	Bypass Idler Spring (P/O Item 22, Item 24, Item 28)
6	-	Drive Support Bracket (P/O Item 22, Item 26)
7	-	Gear (42/30T) (P/O Item 22, Item 26)
8	_	Shaft (P/O Item 22, Item 26)
9	_	Idler Arm (P/O Item 22, Item 26)
10	_	Gear (49T) (P/O Item 22, Item 26)
11	_	Shaft (P/O Item 22, Item 26)
12	_	Shaft (P/O Item 22, Item 26)
13	-	Sector Gear Spring (P/O Item 22, Item 24, Item 26)
14	_	Idler Arm Spring (P/O Item 22, Item 24, Item 26)
15	807E17870	Gear Pulley
16	_	Sector Gear (P/O Item 22, Item 27)
17	_	Cam (P/O Item 22, Item 27)
18	121E20950	Bypass Solenoid
19	059K54730	Bypass Feed Roll (REP 7.5.1)
20	_	Feed Roll Cap (P/O Item 22, Item 29)
21	_	Bypass Tray (P/O Item 22)
22	059K48260	Bypass Feeder Assembly
23	_	Label (Not Spared)
24	604K43820	Bypass Spring Kit
25	022E29860	Nudge Roller
26	604K45750	Bypass Assembly No. 2 Repair Kit
27	604K45770	Bypass Assembly No. 4 Repair Kit
28	604K45780	Bypass Assembly No. 5 Repair Kit
29	604K45790	Bypass Assembly No. 6 Repair Kit



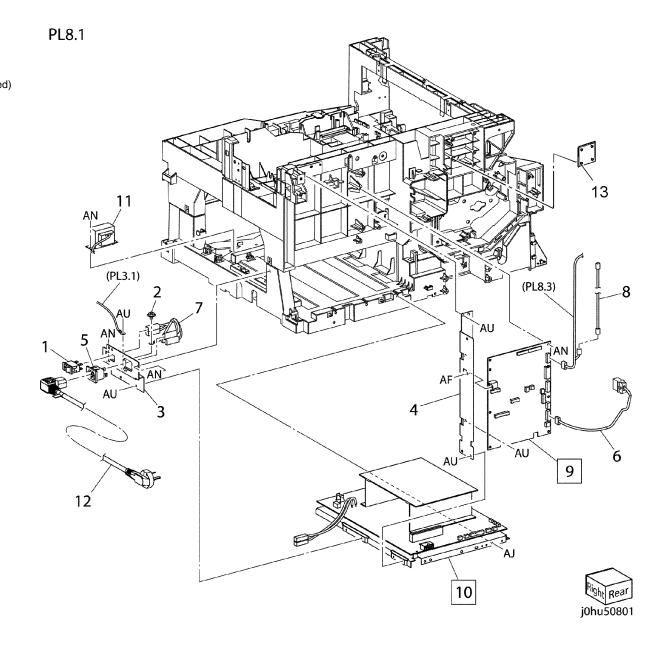
PL 7.6 Bypass Tray Assembly

	<i>,</i> .	,
Item	Part	Description
1	050K58051	Bypass Tray Assembly
2	_	Bearing (P/O Item 15)
3	_	Bypass Take Away Roll (P/O Item
		15)
4	_	Lower Baffle (P/O Item 15)
5	_	Nudger Plate (P/O Item 14)
6	_	Nudger Pad (P/O Item 13, Item 14)
7	_	Nudger Spring (P/O Item 13, PL7.5
		Item 29)
8	_	Gear (18T) (P/O Item 15)
9	_	Roll (Not Spared)
10	_	Retard Spring (P/O PL7.5 Item 24)
11	019K08891	Retard Pad Assembly
12	_	Pre Shingler Bracket (P/O Item 15)
13	604K43830	Bypass Retard Kit
14	604K45740	Bypass Assembly No. 1 Repair Kit
15	604K45760	Bypass Assembly No. 3 Repair Kit



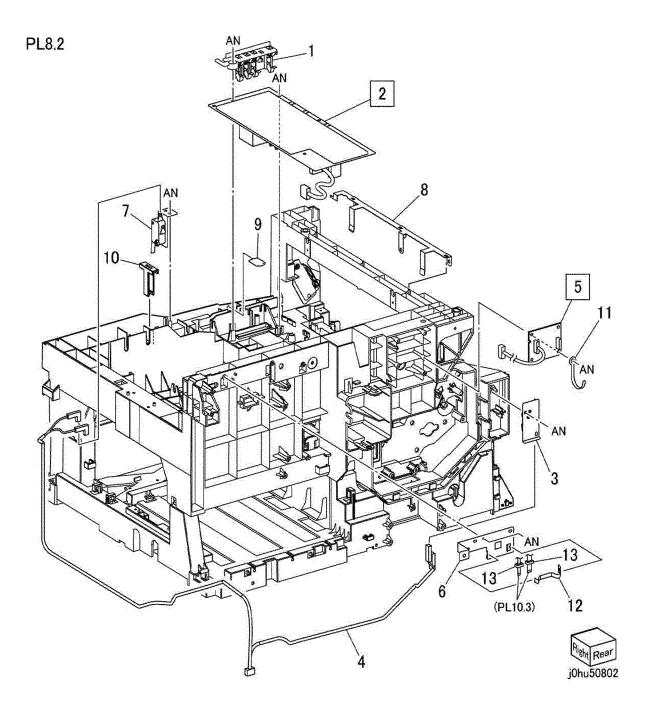
PL 8.1 SLCC PWB, LVPS, Power Switch

Item	Part	Description
1	110E11320	Power Switch
2	_	Screw (With Washer) (Not Spared
3	_	Inlet Bracket (Not Spared)
4	_	PWB Bracket (Not Spared)
5	_	Inlet (Not Spared)
6	_	CRUM ID Harness (Not Spared)
7	_	Inlet Wire Harness (Not Spared)
8	962K72400	Billing Counter Harness (Not
		Spared)
9	960K44946	SLCC PWB (REP 8.1.1)
10	105E18011	DADF LVPS (220V) (REP 8.1.2)
_	105E18021	DADF LVPS (110V) (REP 8.1.2)
11	_	Choke Coil (Not Spared)
12	_	Power Cord (Not Spared)
13	960K28611	Exit PWB



PL 8.2 HVPS, Interlock Switch, Duplex PWB

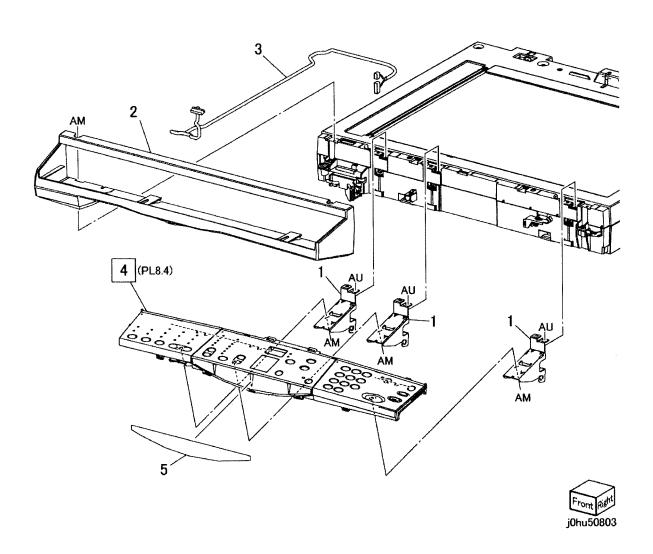
Item	Part	Description
1	014K83141	HV Contact Block
2	105E17402	HVPS (REP 8.2.1)
3	801K25570	Left Hand Cover Interlock Switch
4	_	Interlock Switch Wire Harness (Not
		Spared)
5	960K28610	Duplex PWB (REP 8.2.2)
6	_	Ground Plate (Not Spared)
7	_	Front Cover Interlock Switch (Not
		Spared)
8	_	Ground Plate (Not Spared)
9	_	Harness Block (Not Spared)
10	_	Harness Block (Not Spared)
11	_	Harness Clip (Not Spared)
12	_	Core Clip
13	_	Core (Not Spared)



PL 8.3 Control Panel Assembly

ltem	Part	Description
1	_	Support Bracket (Not Spared)
2	_	Control Panel Cover (Not Spared)
3	962K66150	Control Panel Wire Harness
4	802K97693	Control Panel (REP 8.3.1)
-	802K97695	Control Panel (REP 8.3.1)
-	802K97696	Control Panel (REP 8.3.1
-	802K97692	Control Panel (REP 8.3.1)
5	896E58070	Label (WorkCentre 5020)

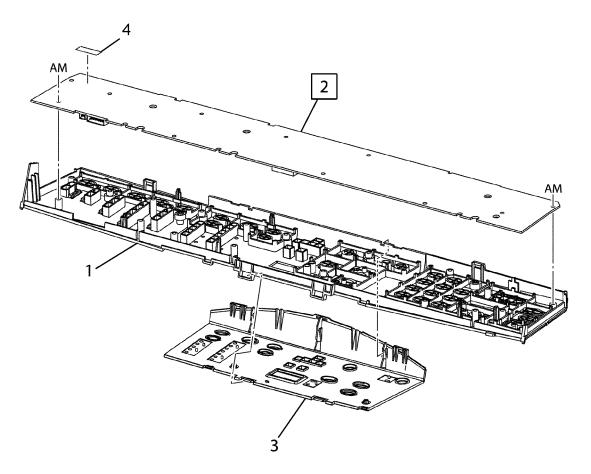
PL8.3



PL 8.4 Control Panel Assembly

Item	Part	Description
1	-	Control Panel Case (With Key) (P/O PL8.3 Item 4)
2	960K38303	UI PWB Assembly (REP 8.4.1)
3	_	Middle Panel (P/O PL8.3 Item 4)
4	_	Label (P/O PL8.3 Item 4)

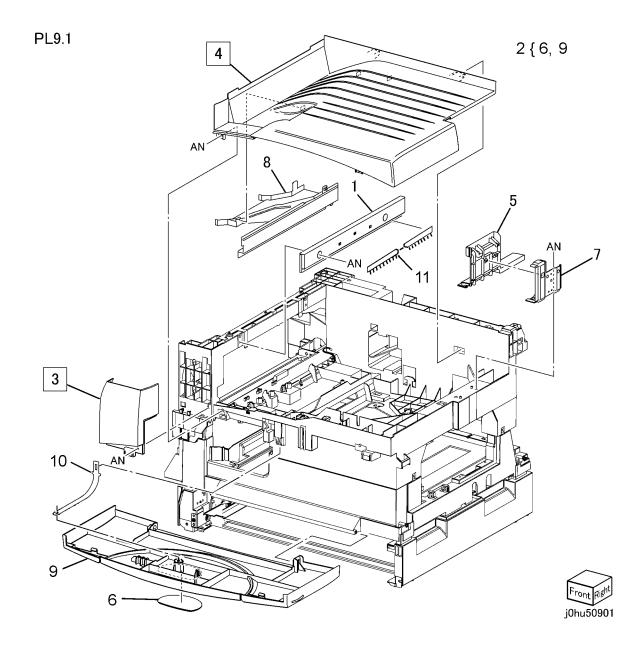
PL8.4





PL 9.1 Front / Top Cover

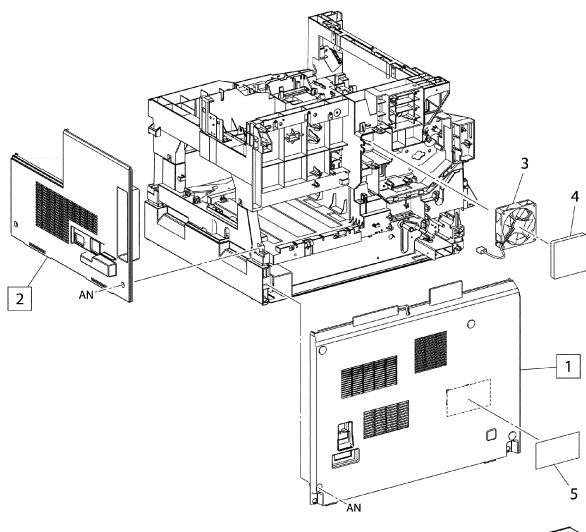
		•
Item	Part	Description
1	848E04481	Exit Cover
2	848K17300	Front Cover Assembly
3	_	Front Left Cover (REP 9.1.2)
4	_	Output Tray (Not Spared) (REP
		9.1.1)
5	_	Right Top Cover (Not Spared)
6	_	Xerox Badge Plate (P/O Item 2)
7	_	IIT Support Bracket (Not Spared)
8	_	Duct (Not Spared)
9	848E04511	Front Cover
10	801E04660	Tether Strap
11	105E19750	Static Eliminator



PL 9.2 Rear / Right Cover and NOHAD Fan

ltem	Part	Description
1	848E04501	Rear Cover (Remove Data Plate and Place on New Rear Cover) (REP 9.2.1)
2	848E04451	Right Cover (REP 9.2.2)
3	127K51632	NOHAD Fan
4	053E93650	Ozone Filter
5	_	Data Plate (Not Spared) (Remove Data Plate and Place on New Rear Cover)

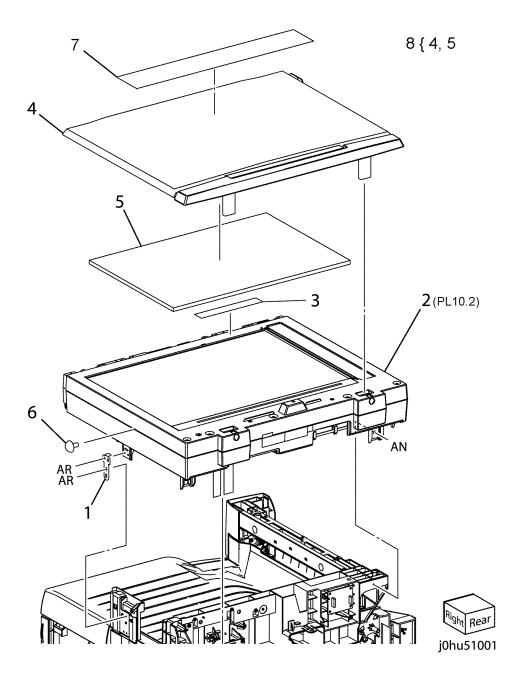
PL9.2





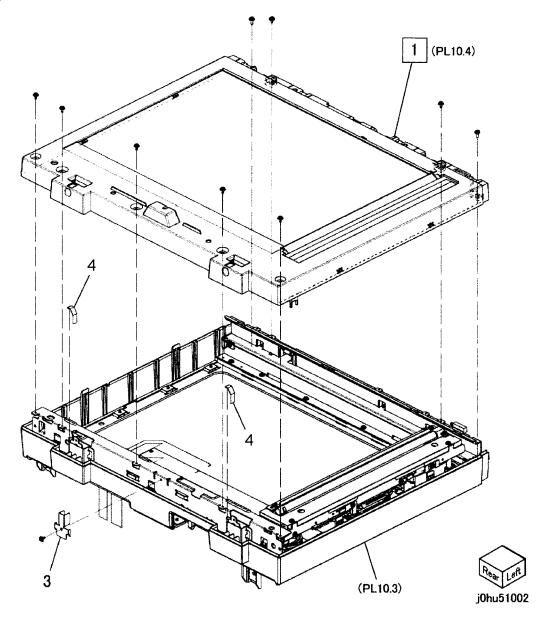
PL 10.1 IIT

Item	Part	Description	PL 10.1
1	_	IIT Right Bracket (Not Spared)	1 L 10.1
2	_	IIT (Not Spared)	
3	_	Label (Not Spared)	
4	_	Platen Cover (Not Spared)	
5	_	Platen Cushion (Not Spared)	
6	_	Cap (Not Spared)	
7		Error Code Label Kit (NOT Spared)	
8	604K46501	Platen Cover Kit (REP 10.1.1)	



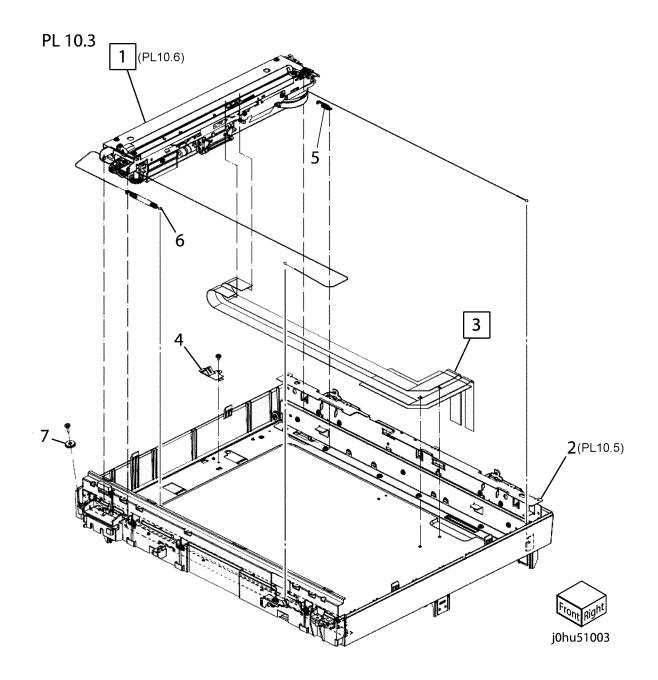
PL 10.2 IIT Assembly (1 OF 2)

Item	Part	Description	PL 10.2
1	848K07410	IIT Upper Cover (REP 10.2.1)	
2	604K44330	Hinge Kit	
3	_	Blind Cover (Not Spared)	2 { 4
4	_	Plate Spring (P/O Item 2)	•



PL 10.3 IIT Assembly (2 OF 2)

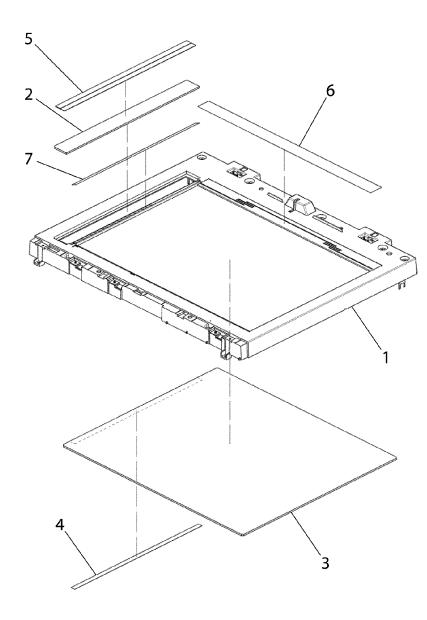
Item	Part	Description
1	041K95870	IIT Carriage (REP 10.3.1)
2	_	IIT Under Cover (Not Spared)
3	962K59950	Flexible Print Cable (REP 10.3.2)
4	_	Plate Spring (Not Spared)
5	809E79910	Cable Spring (Rear)
6	809E79920	Cable Spring (Front)
7	_	Pulley (Not Spared)



PL 10.4 IIT Upper Cover Component

Item	Part	Description
1	802K71882	IIT Upper Cover
2	090E02380	Small Platen Glass
3	090E91720	Platen Glass
4	815E08650	White Reference
5	815E42250	Sheet (Black and White)
6	_	Label (Not Spared)
7	_	Label (Not Spared)

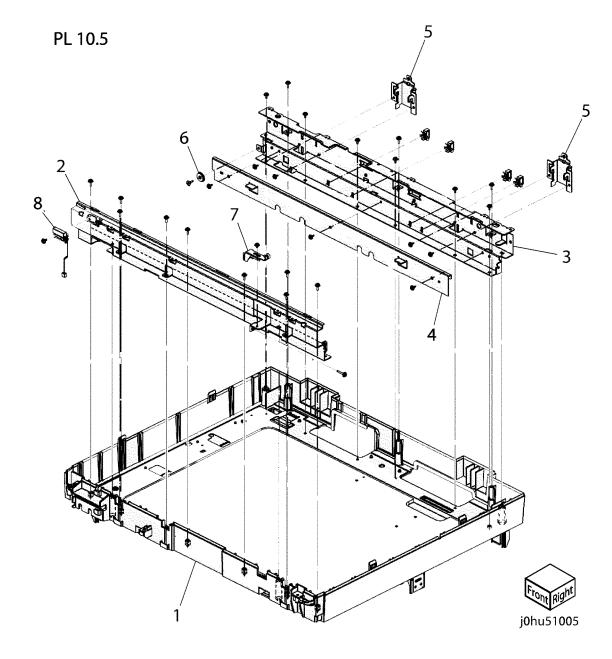
PL 10.4





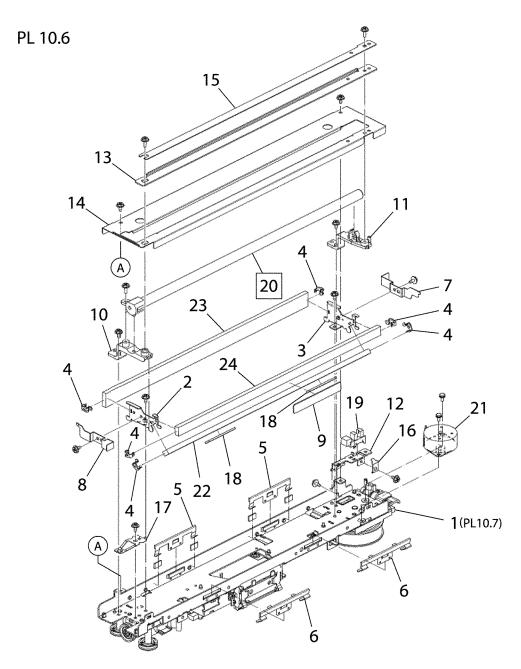
PL 10.5 IIT Under Cover Assembly

Item	Part	Description
1	_	Under Cover (P/O PL10.3 Item 2)
2	801K30780	Front Rail
3	_	Rear Frame (P/O PL10.3 Item 2)
4	801E05970	Rear Rail
5	_	Hinge Sleeve (P/O PL10.3 Item 2)
6	_	Pulley (P/O PL10.3 Item 2)
7	_	Cable Bracket (P/O PL10.3 Item 2)
8	110E11551	Platen Open Switch



PL 10.6 IIT Carriage Assembly

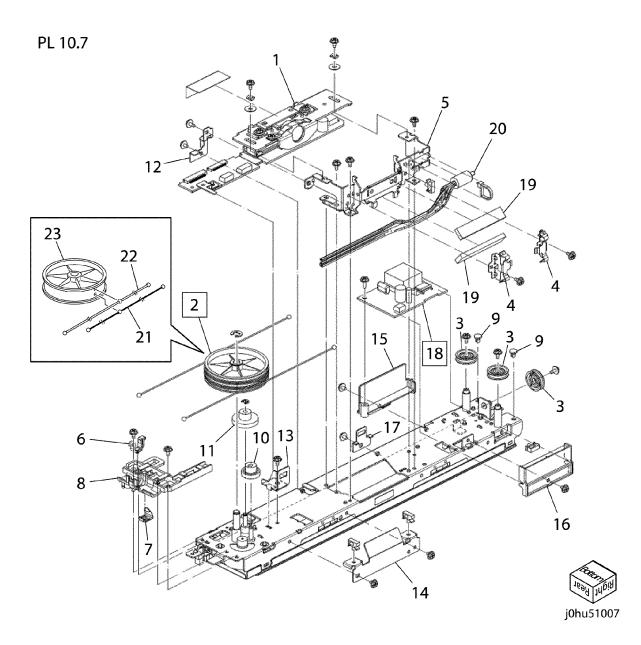
	o.o ii i Cai	nage Assembly
Item	Part	Description
1	_	Center Plate (P/O PL10.3 Item 1)
2	_	Front Mirror Frame (P/O PL10.3
		Item 1)
3	_	Rear Mirror Frame (P/O PL10.3
		Item 1)
4	_	Mirror Clip (P/O PL10.3 Item 1)
5	_	Mirror 2 Damper (P/O PL10.3 Item
		1)
6	-	Mirror 3 Damper (P/O PL10.3 Item
		1)
7	_	Rear Mirror Stopper (P/O PL10.3
		Item 1)
8	_	Front Mirror Stopper (P/O PL10.3
_		Item 1)
9	-	Label (P/O PL10.3 Item 1)
10	_	Front Lamp Holder (P/O PL10.3
		Item 1)
11	_	Rear Lamp Holder (P/O PL10.3
40		Item 1)
12	_	Sensor Plate (P/O PL10.3 Item 1)
13	_	Reflector (P/O PL10.3 Item 1)
14	_	IIT Carriage Cover (P/O PL10.3 Item 1)
15		Reflector Cover (P/O PL10.3 Item
13	_	1)
16	868E12730	Sensor Plate Spring
17	-	Rail Contact (P/O PL10.3 Item 1)
18	_	Mirror Weight (P/O PL10.3 Item 1)
19	121K41690	Carriage Sensor
20	122E92570	Exposure Lamp (REP 10.6.1)
21	127K57140	Carriage Motor
22	_	Mirror 1 (P/O PL10.3 Item 1)
23	_	Mirror 2 (P/O PL10.3 Item 1)
24	_	Mirror 3 (P/O PL10.3 Item 1)
		(





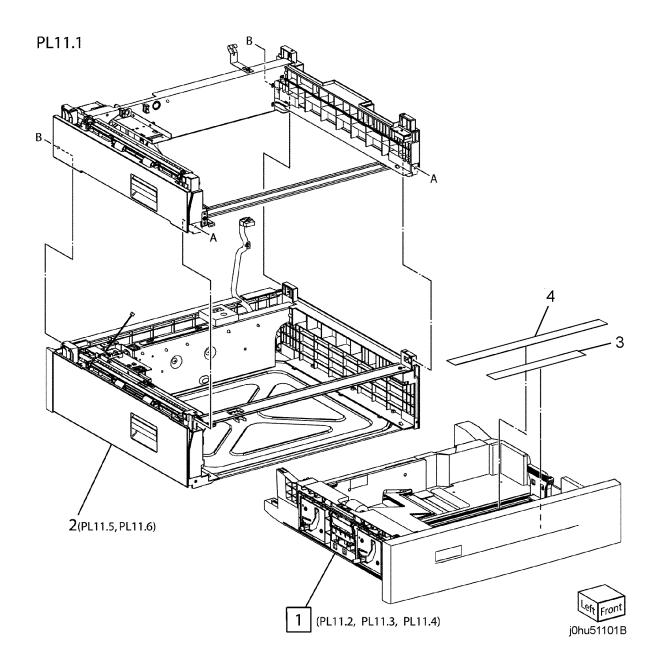
PL 10.7 Center Plate Assembly

	U.I Center	i late Assembly
Item	Part	Description
1	_	Lens Assembly (P/O PL10.3 Item
		1)
2	_	Drum and Carriage Cable (P/O
		PL10.3 Item 1) (ACO) (REP 10.7.1)
3	_	Pulley (P/O PL10.3 Item 1)
4	_	Mirror Clip (P/O PL10.3 Item 1)
5	_	Mirror Frame (P/O PL10.3 Item 1)
6	_	Side Slider (P/O PL10.3 Item 1)
7	_	Rail Contact (P/O PL10.3 Item 1)
8	_	Rail Slider (P/O PL10.3 Item 1)
9	_	Front Slider (P/O PL10.3 Item 1)
10	_	Gear (P/O PL10.3 Item 1)
11	_	Gear (P/O PL10.3 Item 1)
12	_	Mirror Frame Bracket (P/O PL10.3
		Item 1)
13	_	CCD Support (P/O PL10.3 Item 1)
14	_	Lock Plate (P/O PL10.3 Item 1)
15	_	Inverter PWB Bracket 1 (P/O
		PL10.3 Item 1)
16	_	Inverter PWB Bracket 2 (Not
		Spared)
17	_	Bracket (P/O PL10.3 Item 1)
18	140E88751	Inverter PWB (REP 10.7.2)
19	_	Mirror 4 (P/O PL10.3 Item 1)
20	_	Wire Harness (P/O PL10.3 Item 1)
21	_	Carriage Cable (Black) (Not
		Spared)
22	_	Carriage Cable (Silver) (P/O
		PL10.3 Item 1)
23	_	Drum (P/O PL10.3 Item 1)



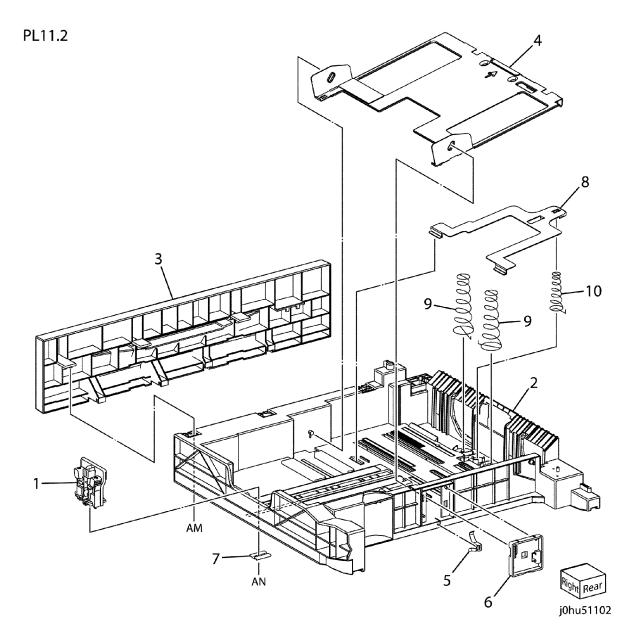
PL 11.1 Tray 2 Module

Item	Part	Description
1	050K57701	Tray 2 (REP 11.1.1)
2	_	Tray 2 Frame (Not Spared)
3	896E41981	End Guide Label
4	896E42140	Install Label



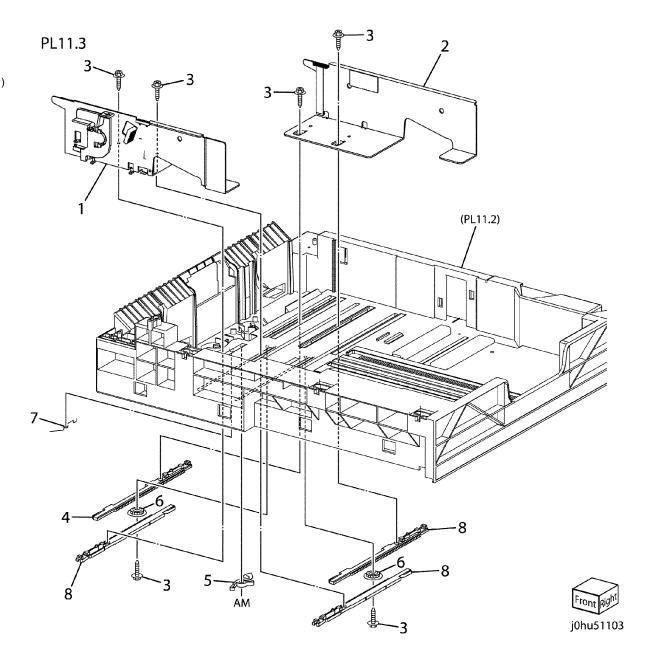
PL 11.2 Tray 2 Assembly (1 OF 3)

Item	Part	Description
1	_	End Guide (P/O PL11.1 Item 1)
2	_	Tray (P/O PL11.1 Item 1)
3	_	Tray Front Cover (P/O PL11.1 Item
		1)
4	_	End Guide Spring (P/O PL11.1 Item
		1)
5	_	Ground Plate (P/O PL11.1 Item 1)
6	_	Cover (P/O PL11.1 Item 1)
7	_	End Guide Lock (P/O PL11.1 Item
		1)
8	_	Mini Bottom Plate (P/O PL11.1 Item
		1)
9	_	Spring (Side) (P/O PL11.1 Item 1)
10	_	Spring (Center) (P/O PL11.1 Item 1)



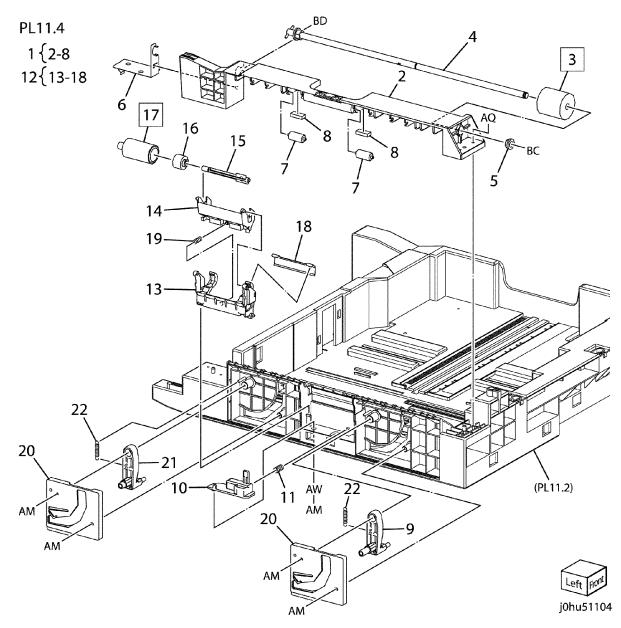
PL 11.3 Tray 2 Assembly (2 OF 3)

Item	Part	Description
1	038K89761	Front Side Guide
2	038K89821	Rear Side Guide
3	_	Tapping Screw (P/O PL11.1 Item 1)
4	_	Rack (P/O PL11.1 Item 1)
5	_	Latch (P/O PL11.1 Item 1)
6	_	Pinion (P/O PL11.1 Item 1)
7	_	Latch Spring (P/O PL11.1 Item 1)
8	_	Rack (P/O PL11.1 Item 1)



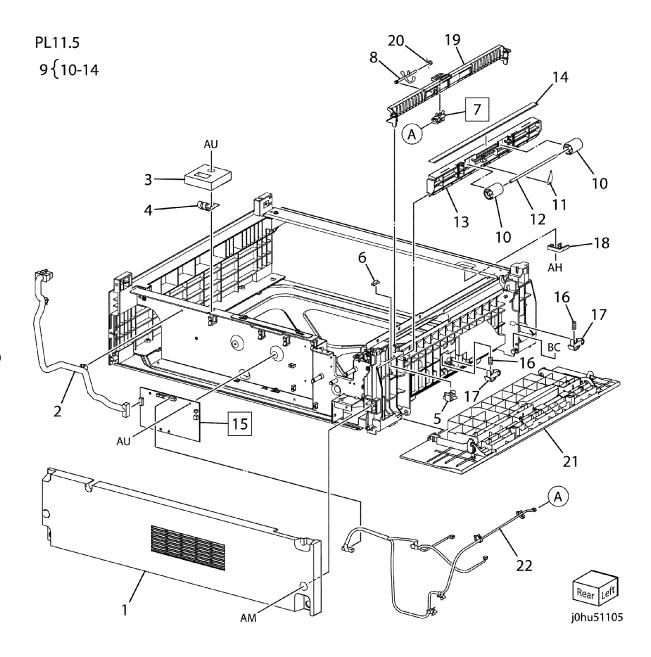
PL 11.4 Tray 2 Assembly (3 OF 3)

Item	Part	Description
1	059K48430	Tray 2 Feeder Assembly
2	_	Feed Chute (P/O Item 1)
3	059K48660	Tray 2 Feed Roll (REP 11.4.1)
4	_	Feed Shaft (P/O Item 1)
5	013E90840	Bearing
6	_	Ground Spring (P/O Item 1)
7	_	Core Roll (P/O Item 1)
8	_	Holder Seal (P/O Item 1)
9	003K15530	Front Latch Assembly
10	_	Holder Arm (Not Spared)
11	_	Spring (Not Spared)
12	019K09250	Retard Roll Housing
13	_	Retard Housing (P/O Item 12)
14	_	Retard Holder (P/O Item 12)
15	_	Retard Shaft (P/O Item 12)
16	_	Friction Clutch (P/O Item 12)
17	_	Tray 2 Retard Roll (P/O Item 12)
		(REP 11.4.2)
18	_	Retard Plate (P/O Item 12)
19	_	Retard Spring (P/O PL11.1 Item 1)
20	_	Latch Cover (P/O PL11.1 Item 1)
21	003K15540	Rear Latch Assembly
22	_	Spring (P/O PL11.1 Item 1)



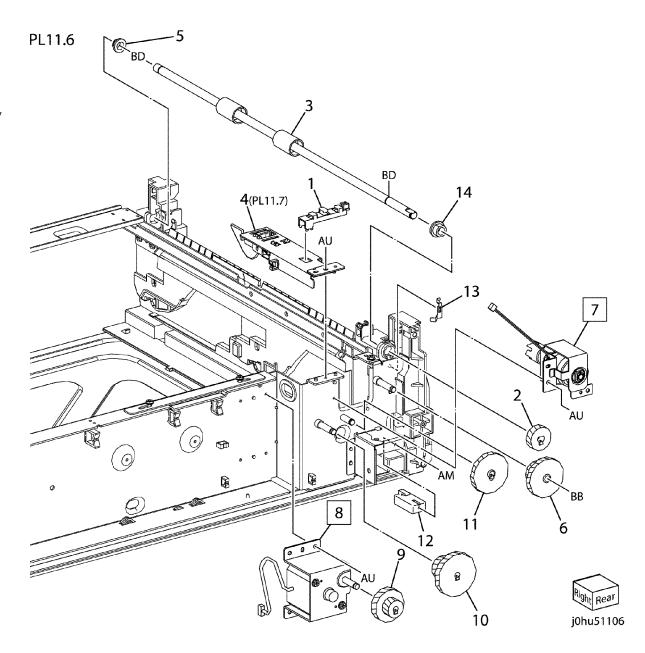
PL 11.5 Tray 2 Module Assembly (1 OF 2)

Item	Part	Description
1	_	Tray 2 Rear Cover (Not Spared)
2	_	Tray 2 Wire Harness (Not Spared)
3	_	Ground Cushion (Not Spared)
4	_	Ground Plate (Not Spared)
5	110E11580	Tray 2 Interlock Switch
6	_	Tray 2 Sensor Block (Not Spared)
7	130E87090	Tray 2 Feed Sensor (REP 11.5.1)
8	120E28091	Feed Sensor Actuator
9	055K31090	Tray 2 Baffle Assembly
10	_	Roll (P/O Item 9)
11	_	Plate Spring (P/O Item 9)
12	_	Shaft (P/O Item 9)
13	_	Baffle (P/O Item 9)
14	_	Eliminator (P/O Item 9)
15	960K28563	Tray 2 PWB (REP 11.5.2)
16	_	Guide Spring (Not Spared)
17	_	Arm Guide (Not Spared)
18	_	Tray Stopper (Not Spared)
19	_	Upper Feed Chute (Not Spared)
20	809E74030	Feed Sensor Spring
21	802K99050	Access Cover 2 (Not Spared)
22	_	Sensor Wire Harness (Not Spared)



PL 11.6 Tray 2 Module Assembly (2 OF 2)

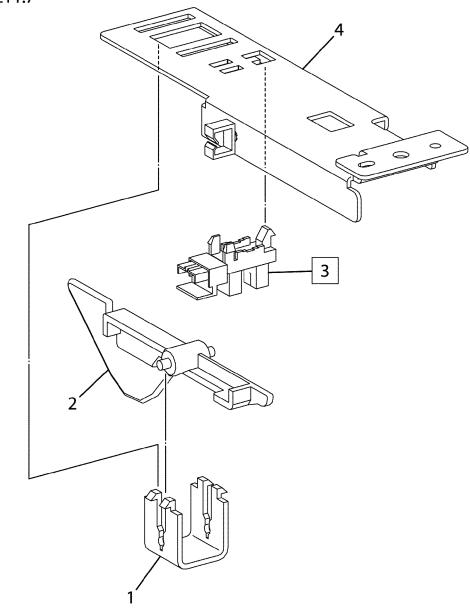
	=	
Item	Part	Description
1	_	Harness Holder (Not Spared)
2	807E18360	Gear (Helical 21T)
3	059K48440	Take Away Roll
4	848K02140	Tray 2 No Paper Sensor Assembly
5	013E32180	Bearing (220v)
-	013E90840	Bearing (110V)
6	807E18410	Gear (Helical 20T/36T)
7	068K53590	Tray 2 Feed Clutch (REP 11.6.1)
8	127K52180	Tray 2 Feed Motor (REP 11.6.2)
9	807E18380	Gear (Helical 51T/15T)
10	807E18390	Gear (Helical 40T/18T)
11	807E18400	Gear (Helical 37T)
12	_	Tray Rear Stopper (Not Spared)
13	_	Ground Plate (Not Spared)
14	_	Bearing (Not Spared)



PL 11.7 Tray 2 No Paper Sensor

Item	Part	Description
1	-	Actuator Support (P/O PL11.6 Item 4)
2	120E29630	Tray 2 No Paper Sensor Actuator
3	130E87090	Tray 2 No Paper Sensor (REP 11.7.1)
4	_	Tray 2 Sensor Housing (P/O PL11.6 Item 4)

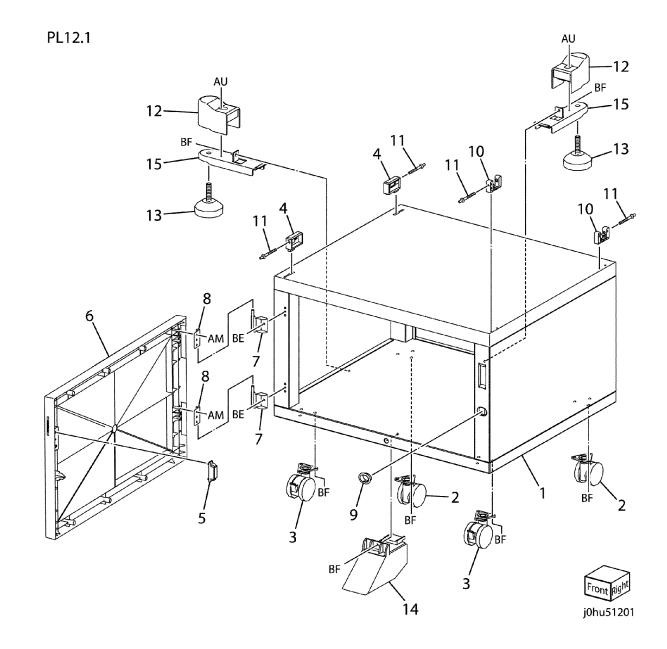
PL11.7





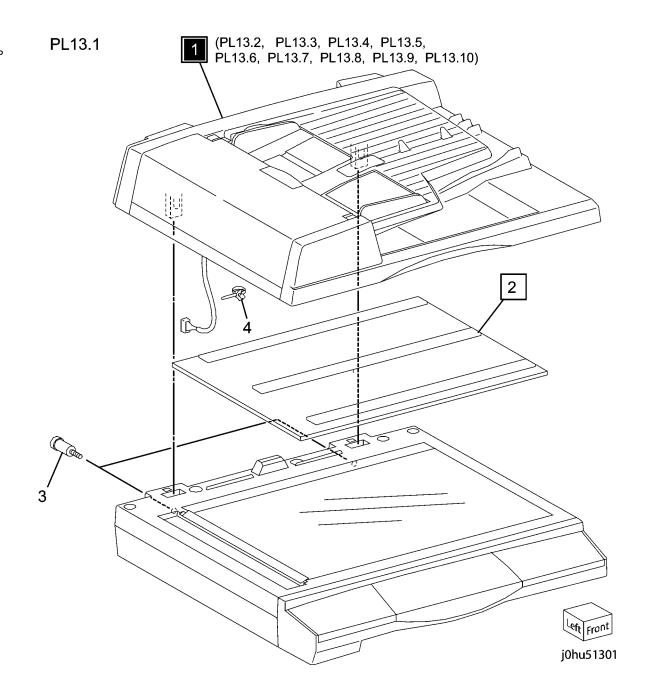
PL 12.1 Stand Assembly

		•
Item	Part	Description
1	_	Stand (Not Spared)
2	017K93121	Caster
3	017K93132	Caster (With Stopper)
4	017E12010	Locator Peg
5	121E93360	Catch Magnet
6	_	Front Door (Not Spared)
7	_	Stand Hinge (Not Spared)
8	_	Door Hinge (Not Spared)
9	_	Guide (Not Spared)
10	017E98760	Support
11	_	Screw (Not Spared)
12	_	Foot Cover (Not Spared)
13	_	Adjuster Foot (Not Spared)
14	_	Front Foot (Not Spared)
15	_	Foot Bracket (Not Spared)



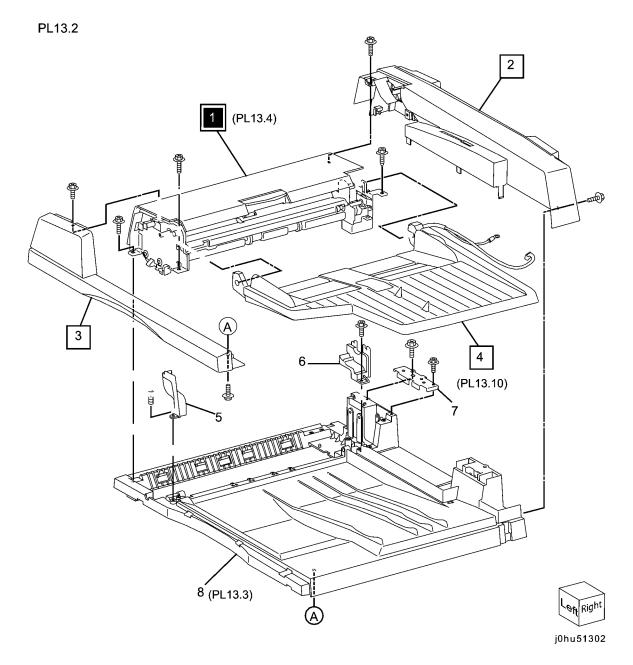
PL 13.1 DADF

Item	Part	Description
1	022K75730	DADF Assembly (with Item 2) (REF
		13.1.1, ADJ 13.1.1)
2	004E17510	Platen Cushion (REP 13.1.2)
3	_	Screw (Not Spared)
4	_	Push Tie (Not Spared)



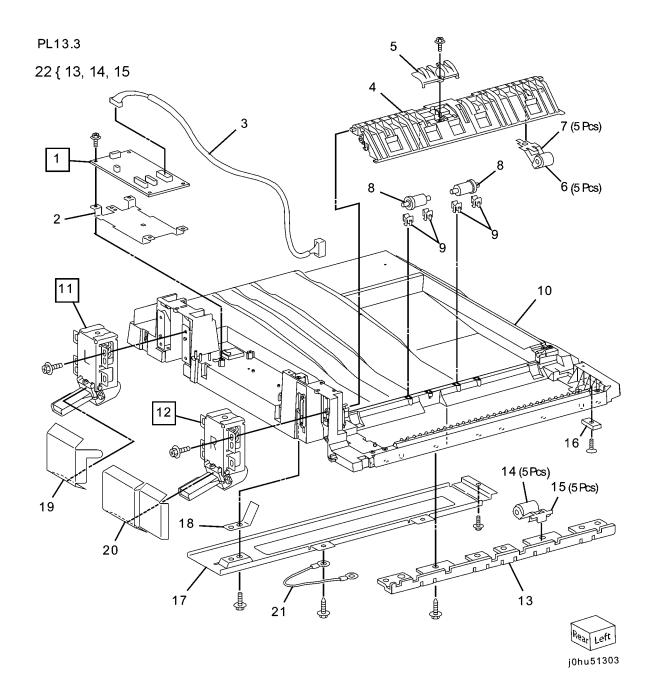
PL 13.2 Cover Assembly

ltem	Part	Description
1	022K75730	DADF Scanner Assembly
2	_	Rear Cover (Not Spared)
3	_	Front Cover (Not Spared)
4	050K63270	DADF Document Tray Assembly
5	_	Front Blind Cover (Not Spared)
6	_	Rear Blind Cover (Not Spared)
7	_	Support Bracket (Not Spared)
8	_	Base Cover Assembly (Not Spared)



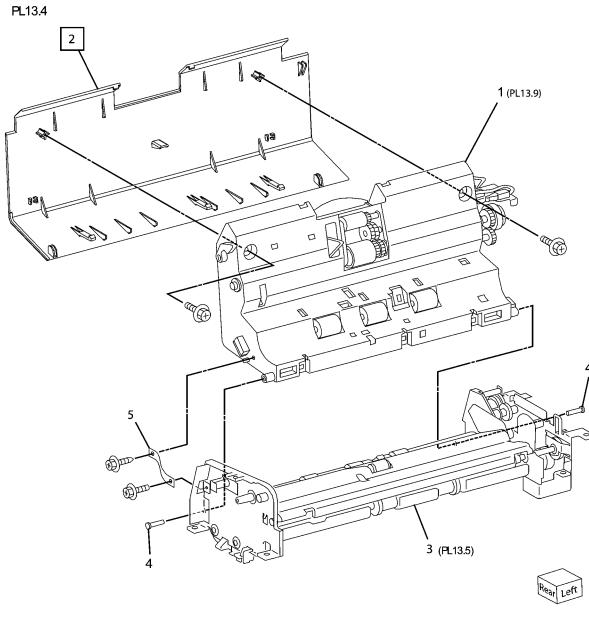
PL 13.3 Base Cover Assembly

Part	Description
960K42980	DADF PWB (REP 13.3.4)
_	Bracket (Not Spared)
962K60980	DADF Cable
_	Exit Chute (Not Spared)
_	Stamp Cover (Not Spared)
_	Lead In Pinch Roller (Not Spared)
604K44340	Spring Plate Kit (5/Kit)
059K55600	Exit Pinch Roller
016E93560	Bushing
_	Base Cover (Not Spared)
003K86761	Right Counter Balance (REP
	13.3.3)
003K15950	Left Counter Balance (REP 13.3.2)
_	Pinch Roll Bracket (Not Spared)
604K44350	Lead Out Pinch Roller Kit (5/Kit)
_	Spring Plate (Read Out) (Not
	Spared)
_	Interlock Magnet (Not Spared)
_	Bottom Plate (Not Spared)
_	Ground Spring (Not Spared)
_	Film Cover (Not Spared)
_	Film Cover (Not Spared)
_	Ground Wire (Not Spared)
059K55860	Pinch Roll Assembly
	- 962K60980 604K44340 059K55600 016E93560 - 003K86761 003K15950 - 604K44350



PL 13.4 Upper Feeder Assembly

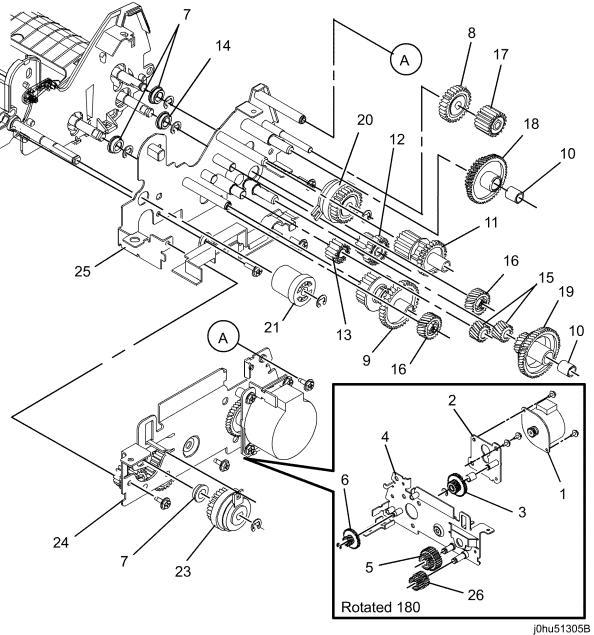
Item	Part	Description
1	_	Upper Feeder Assembly (P/O PL13.2 Item 1)
2	_	Top Cover (Not Spared)
3	_	Lower Feeder Assembly (P/O PL13.2 Item 1)
4	_	Pin (P/O PL13.2 Item 1)
5	-	Stopper Strap (P/O PL13.2 Item 1



j0hu51304

PL 13.5 Lower Feeder Drive Components

Item	• Part	Description
1	_	Document Drive Motor (P/O Item
		24)
2	_	Motor Plate (P/O Item 24)
3	_	Gear (40T-21T) (P/O Item 24)
4	_	Bracket (P/O Item 24)
5	_	Gear (30T-21T) (P/O Item 24)
6	_	Gear (16T-35T) (P/O Item 24)
7	_	Bearing (P/O PL13.4 Item 3)
8	_	Gear (28T) (P/O PL13.4 Item 3)
9	_	Gear (39T-26T) (P/O PL13.4 Item
10		3) Bushing (P/O PL13.4 Item 3)
10	_	,
11	_	Gear (28T-18T) (P/O PL13.4 Item 3)
12	_	Gear (22T-16T) (P/O PL13.4 Item
		3)
13	_	Gear (16T) (P/O PL13.4 Item 3)
14	_	Bearing (P/O PL13.4 Item 3)
15	_	Gear (17T) (P/O PL13.4 Item 3)
16	_	Gear (24T) (P/O PL13.4 Item 3)
17	_	Gear (19T) (P/O PL13.4 Item 3)
18	_	Gear (51T-30T) (P/O PL13.4 Item
		3)
19	-	Gear (52T-21T) (P/O PL13.4 Item 3)
20		Registration Clutch (P/O PL13.4
20	_	Item 3)
21	_	Eject Torque Limiter (P/O PL13.4
		Item 3)
22	-	Cable Fence (P/O PL13.4 Item 3)
23	-	Exit/Invert Clutch (P/O PL13.4 Item
		3)
24	127K58701	Motor Assembly
25	_	Gear Plate (P/O PL13.4 Item 3)
26	_	Gear (21T-18T) (P/O Item 24)

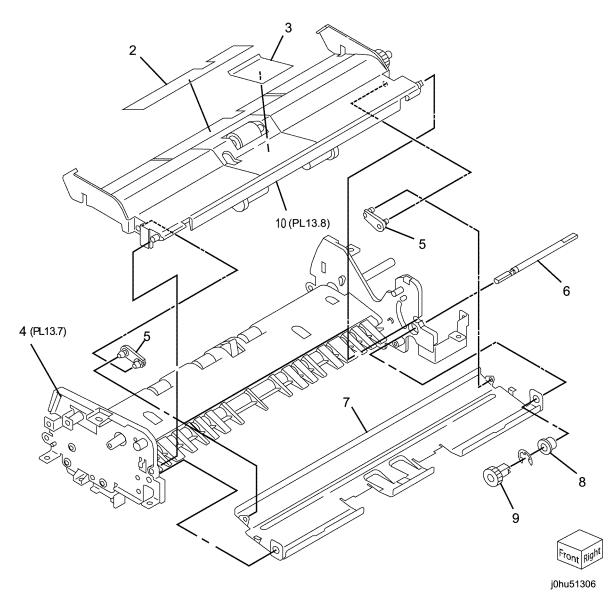


PL 13.6 Retard Roll Assembly

Item	Part	Description
1	_	Retard Roll Assembly (Not Spared)
2	_	Registration Mylar (P/O Item 1)
3	_	Retard Mylar (P/O Item 1)
4	_	Base Lower Feeder Assembly (Not
		Spared)
5	_	Arm Pin (Not Spared)
6	_	Shaft (Not Spared)
7	_	Paper Guide Plate (Not Spared)
8	_	Bearing (Oil Less) (Not Spared)
9	_	Gear (15T) (Not Spared)
10	_	Roll Assembly (P/O Item 1)

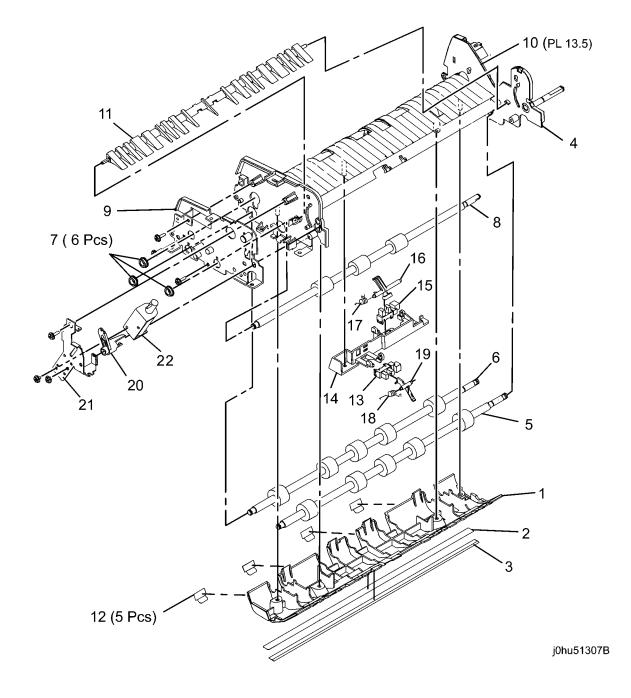
PL13.6





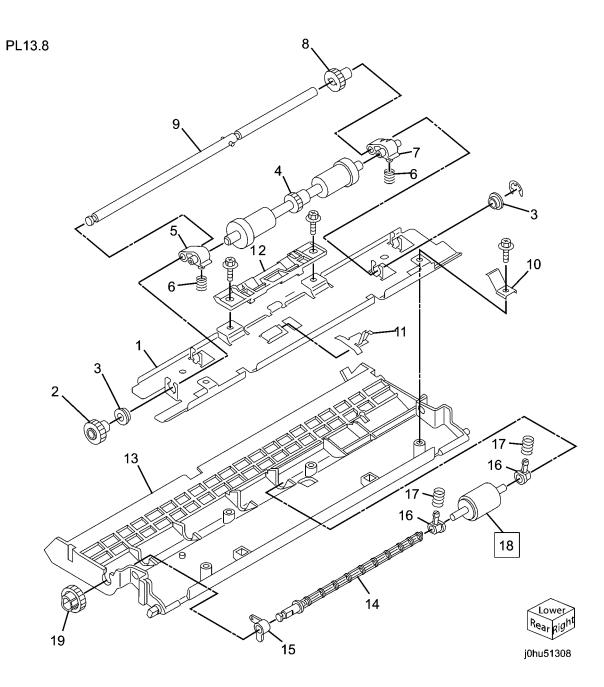
PL 13.7 Lower Feeder Assembly

	J.,	i doddi 7 tocoiiibiy
Item	Part	Description
1	_	Bottom Chute (Not Spared)
2	_	White Sheet (Not Spared)
3	_	Bottom Sheet (Not Spared)
4	_	Base Frame (Not Spared)
5	059K55620	Lead In Roll
6	059K55630	Lead Out Roll
7	_	Bearing (Not Spared)
8	059K55610	Registration Roll
9	_	Front Bracket (Not Spared)
10	_	Rear Bracket (Not Spared)
11	_	Inverter Gate (Not Spared)
12	_	Seal (Not Spared)
13	_	Exit/Invert Sensor (Not Spared)
14	_	Sensor Holding Bracket (Not
		Spared)
15	_	Document Feeder Sensor (Not
		Spared)
16	_	Document Feeder Sensor Actuator
		(Not Spared)
17	_	Document Feeder Sensor Spring
		(Not Spared)
18	_	Exit/Invert Sensor Spring (Not
		Spared)
19	_	Exit/Invert Sensor Actuator (Not
		Spared)
20	_	Exit/Invert Solenoid Bracket (Not
		Spared)
21	_	Solenoid Bracket (Not Spared)
22	_	Exit/Invert Solenoid (Not Spared)



PL 13.8 Retard Roll Assembly

		•
Item	Part	Description
1	_	Plate (Not Spared)
2	_	Gear (18T) (Not Spared)
3	_	Bearing (Not Spared)
4	_	Exit Roller (Not Spared)
5	_	Rear Exit Arm (Not Spared)
6	809E56440	Spring (Coil)
7	_	Front Exit Arm (Not Spared)
8	_	Gear (18T) (Not Spared)
9	_	Exit Roll Drive Shaft (Not Spared)
10	_	Spring Plate (Not Spared)
11	_	Spring Plate (Not Spared)
12	_	Plate (Not Spared)
13	_	Retard Roll Chute (Not Spared)
		(REP 13.8.1)
14	_	Retard Roll Drive Shaft (Not
		Spared)
15	_	Bushing (Not Spared)
16	_	Bushing (Not Spared)
17	_	Spring (Coil) (Not Spared)
18	059E04080	Retard Roll (REP 13.8.1)
19	_	Gear (20T) (Not Spared)

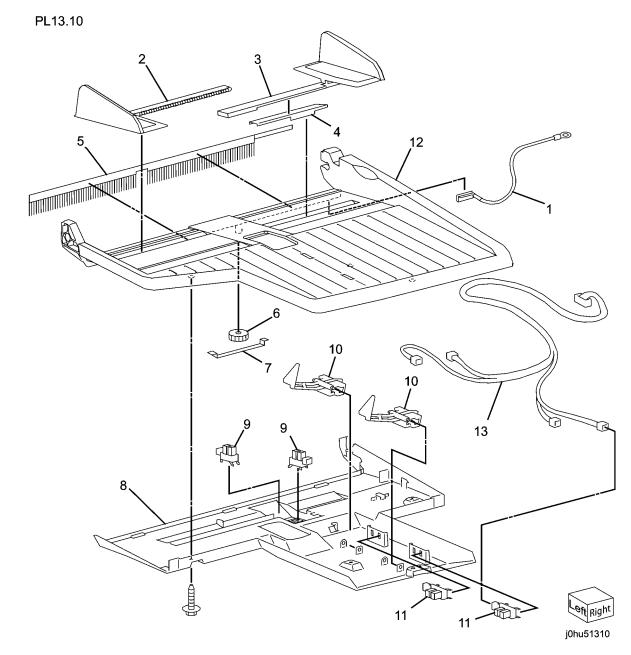


PL 13.9 Upper Feeder Assembly

	old obbol		
Item	Part	Description	PL13.9
1	-	Lock Lever (P/O PL13.4 Item 1)	
2	-	Spring (P/O PL13.4 Item 1)	22 (2 10
3	_	Main Shaft (P/O Item 22)	22 { 3 - 10
4	_	Bearing (P/O Item 22)	32 { 18 - 21
5	_	Pickup Roll (P/O Item 22) (REP	
		13.9.1)	37 { 23 - 26
6	_	Pickup Roll Shaft (P/O Item 22)	
7	_	Housing (P/O Item 22)	2
8	_	Gear (18T-22T) (P/O Item 22)	
9	_	Feed Roll (P/O Item 22) (REP	DC-62
		13.9.1)	3
10	_	Gear (22T) (P/O Item 22)	
11	_	Plate (P/O PL13.4 Item 1)	[5] 11 19 19
12	_	Spring Box (P/O PL13.4 Item 1)	[5]
13	_	Spring (Coil) (P/O PL13.4 Item 1)	$\frac{1}{2}$
14	_	Spring Housing (P/O PL13.4 Item	6, 20
		1)	
15	_	Front Lock Arm (P/O PL13.4 Item	
		1)	13 18
16	_	Top Frame (P/O PL13.4 Item 1)	12 14
17	_	Rear Lock Arm (P/O PL13.4 Item 1)	7 12 14
18	_	Sensor Holder (P/O Item 32)	4 15 113
19	_	Document Set Sensor Actuator	
		(P/O Item 32)	
20	_	Document Feeder Width Sensor	27
		Actuator (P/O Item 32)	
21	_	Document Feeder Width Sensor,	8 9 9
		Document Set Sensor (P/O Item	10 16,
		32)	
22	059K55640	Feeder Assembly	17
23	_	Sensor Holder (P/O Item 37)	
24	_	Document Registration Sensor	30 \ 24
		(P/O Item 37)	31
25	_	Document Registration Sensor	
		Actuator (P/O Item 37)	32
26	_	Spring (P/O Item 37)	32
27	121K41670	Clutch (One Way)	33
28	_	Shaft (P/O PL13.4 Item 1)	25
29	059E99690	Registration Pinch Roller	
30	_	Plate (P/O PL13.4 Item 1)	23 26
31	110E11570	Top Cover Switch	
32	121K41650	Document Set Sensor Assembly	35
33	121K41600	Document Feed Clutch	
34	_	Gear (20T) (P/O PL13.4 Item 1)	Mear Len't
35	_	Adjust Plate (P/O PL13.4 Item 1)	29 j0hu51309
36	-	Spring (P/O PL13.4 Item 1)	,
37	121K41660	Read Sensor Assembly	

PL 13.10 Document Tray

Item	Part	Description	
1	_	Ground Plate (P/O PL13.2 Item 4)	
2	_	Front Side Guide (P/O PL13.2 Item	
		4)	
3	_	Rear Side Guide (P/O PL13.2 Item	
		4)	
4	_	Width Sensor Actuator (P/O PL13.2	
		Item 4)	
5	_	Eliminator (P/O PL13.2 Item 4)	
6	_	Pinion Gear (P/O PL13.2 Item 4)	
7	_	Pinion Spring (P/O PL13.2 Item 4)	
8	_	Lower Document Tray (P/O PL13.2	
		Item 4)	
9	_	Document Tray Width Sensor 1,	
		Document Tray Width Sensor 2	
		(P/O PL13.2 Item 4)	
10	_	Actuator (P/O PL13.2 Item 4)	
11	_	Document Tray Length Sensor 1,	
		Document Tray Length Sensor 2	
		(P/O PL13.2 Item 4)	
12	_	Upper Document Tray (P/O PL13.2	
		Item 4)	
13	_	Wire Harness (P/O PL13.2 Item 4)	



Common Hardware

Item	Part	Description
AA	102W37178	Countersunk Head Screw (M4x25)
AB	102W38278	Countersunk Head Screw (M4x45)
AC	112W27898	Pan Head Screw (M3x8)
AD	113W20878	Screw (M3x8)
ΑE	113W21478	Screw (M3x14)
AF	113W27688	Pan Head Screw (M3x6)
AG	114W27678	Bind Head Tapping Screw (M3x6)
AH	114W27878	Bind Head Tapping Screw (M3x8)
AJ	153W16088	Tapping Screw (M4x10)
AK	153W16288	Tapping Screw (4Mx12)
AL	153W17688	Tapping Screw (3Mx6)
AM	153W17888	Tapping Screw (3Mx8)
AN	153W18088	Tapping Screw (3Mx10)
AP	153W18288	Tapping Screw (3Mx12)
AQ	153W18488	Tapping Screw (3Mx14)
AR	153W27678	Bind Head Tapping Screw (M3x6)
AS	153W27878	Bind Head Tapping Screw (M3x8)
AT	153W28078	Bind Head Tapping Screw (M3x10)
AU	158W27678	Screw (M3x6)
ΑV	158W27878	Screw (M3x8)
AW	252W27450	Nylon Washer (6)
AX	354W15278	E-Clip
AY	354W18278	E-Clip
ΑZ	354W19278	E-Clip
BA	354W21278	E-Clip
BB	354W24278	E-Clip
BC	354W27254	KL-Clip
BD	354W27278	E-Clip
BE	158W36878	Screw (M4x8)
BF	158W36078	Screw (M4x10)

Part Number Index

Table 1 Part Number Index

Table	1	Part	Num	hor	Inday
lable		rail	Nulli	Dei	muez

Part Number	Part List
003K13560	PL 13.3
003K15530	PL 11.4
003K15540	PL 11.4
003K15950	PL 13.3
003K86761	PL 13.3
004E17510	PL 13.1
005E26740	PL 2.6
006K25751	PL 2.6
006K86440	PL 7.4
007K94880	PL 1.1
007K97780	PL 2.2
007K97790	PL 2.2
013E25881	PL 2.3
013E25920	PL 2.2
013E30050	PL 6.3
013E30050	PL 6.2
013E32180	PL 11.6
013E32690	PL 2.6
013E33260	PL 7.3
013E33260	PL 7.4
013E90840	PL 11.6
013E90840	PL 2.6
013E90840	PL 11.4
014K83124	PL 4.3
014K83141	PL 8.2
016E93560	PL 13.3
017E12010	PL 12.1
017K93121	PL 12.1
017K93132	PL 12.1
017E98760	PL 12.1
019K08891	PL 7.6
019K09250	PL 11.4
019K09420	PL 2.4
022E29860	PL 7.5
022E30121	PL 5.1
022K74110	PL 5.1
022K74860	PL 13.1
022K75730	PL 13.2
023E26660	PL 7.3

Part Number	Part List
038K89761	PL 11.3
038K89821	PL 11.3
041K95870	PL 10.3
050K57701	PL 11.1
050K58051	PL 7.6
050K60800	PL 13.2
050K62940	PL 2.1
050K63270	PL 13.2
053E93650	PL 9.2
055K31090	PL 11.5
059E03090	PL 7.3
059E03650	PL 7.4
059E04080	PL 13.8
059K32773	PL 2.3
059K33051	PL 2.3
059K43000	PL 6.3
059K43000	PL 6.2
059K48200	PL 2.6
059K48230	PL 6.1
059K48240	PL 6.1
059K48250	PL 2.8
059K48260	PL 7.5
059K48430	PL 11.4
059K48440	PL 11.6
059K48660	PL 11.4
059K53230	PL 2.9
059K54730	PL 7.5
059K55590	PL 13.2
059K55600	PL 13.3
059K55610	PL 13.7
059K55620	PL 13.7
059K55630	PL 13.7
059K55640	PL 13.9
059K55860	PL 13.3
059E99331	PL 6.2
059E99331	PL 6.3
059E99690	PL 13.9
062K18161	PL 3.1
068K53590	PL 11.6
090E02380	PL 10.4
090E91720	PL 10.4

Reissue

Part Number	Part List
101R00432	PL 4.1
105E17391	PL 8.1
105E17402	PL 8.2
105E17411	PL 8.1
105E18011	PL 8.1
105E18021	PL 8.1
105E19750	PL 9.1
106R01277	PL 4.1
110E11320	PL 8.1
110E11551	PL 10.5
110E11570	PL 13.9
110E11580	PL 2.5
110E11580	PL 11.5
120E22470	PL 1.1
120E23791	PL 2.7
120E28091	PL 11.5
120E29540	PL 2.5
120E29630	PL 11.7
121E20950	PL 7.5
121K39710	PL 2.9
121K40770	PL 2.2
121K41600	PL 13.9
121K41650	PL 13.9
121K41660	PL 13.9
121K41670	PL 13.9
121K41690	PL 10.6
121E93360	PL 12.1
122E92530	PL 5.1
122E92550	PL 5.1
122E92570	PL 10.6
122K94091	PL 4.2
125K93752	PL 4.3
125K93752	PL 4.4
126K23583	PL 5.1
126K24413	PL 5.1
127K51590	PL 6.3
127K51632	PL 9.2
127K52180	PL 11.6
127K57120	PL 13.5
127K57140	PL 10.6
127K58701	PL 13.5

Part Number	Part List
130K71230	PL 2.9
130K71361	PL 5.1
130K71400	PL 4.2
130E87090	PL 2.7
130E87090	PL 11.7
130E87090	PL 6.3
130E87090	PL 6.2
130E87090	PL 2.5
130E87090	PL 11.5
140E88751	PL 10.7
413W77559	PL 2.6
423W06555	PL 6.3
604K43810	PL 4.4
604K43820	PL 7.5
604K43830	PL 7.6
604K43840	PL 6.2
604K43840	PL 6.3
604K43851	PL 4.1
604K43860	PL 7.2
604K43860	PL 7.3
604K43870	PL 7.4
604K43870	PL 7.2
604K44330	PL 10.2
604K44340	PL 13.3
604K44350	PL 13.3
604K45740	PL 7.6
604K45750	PL 7.5
604K45760	PL 7.6
604K45770	PL 7.5
604K45780	PL 7.5
604K45790	PL 7.5
604K46501	PL 10.1
604K47130	PL 10.1
801E04660	PL 9.1
801E05970	PL 10.5
801K25570	PL 8.2
801K25580	PL 2.2
801K30780	PL 10.5
802K71882	PL 10.4
802K97500	PL 7.3
802K97520	PL 2.5

Table 1 Part Number Index

Part Number	Part List
802K97692	PL 8.3
802K97693	PL 8.3
802K97695	PL 8.3
802K97696	PL 8.3
802K99050	PL 11.5
802K99450	PL 7.1
807E17870	PL 7.5
807E18360	PL 11.6
807E18380	PL 11.6
807E18390	PL 11.6
807E18400	PL 11.6
807E18410	PL 11.6
807E19430	PL 2.2
807E19440	PL 2.2
807E19450	PL 2.6
807E19460	PL 2.6
807E21180	PL 7.4
809E54170	PL 2.4
809E54180	PL 2.6
809E56440	PL 13.8
809E73520	PL 2.2
809E74030	PL 11.5
809E76520	PL 6.2
809E76520	PL 6.3
809E76630	PL 7.4
809E79910	PL 10.3
809E79920	PL 10.3
815E08650	PL 10.4
815E42250	PL 10.4
848K01660	PL 2.2
848K02140	PL 11.6
848E04451	PL 9.2
848E04481	PL 9.1
848E04501	PL 9.2
848E04511	PL 9.1
848K07410	PL 10.2
848K17300	PL 9.1
868E12730	PL 10.6
896E41981	PL 11.1
896E42140	PL 11.1
896E58070	PL 8.3

Table 1 Part Number Index

Part Number	Part List
960K28563	PL 11.5
960K28610	PL 8.2
960K28611	PL 8.1
960K32370	PL 13.3
960K32604	PL 8.4
960K32785	PL 8.4
960K38303	PL 8.4
960K42980	PL 13.3
960K44946	PL 8.1
960K50443	PL 8.1
962K59950	PL 10.3
962K60840	PL 13.3
962K60980	PL 13.3
962K66150	PL 8.3
962K72400	PL 8.1

6 General Procedures

General Procedures

GP 1 Entering and Exiting the Diagnostics Mode	6-3
GP 2 Entering Chain and Link Codes	6-3
GP 3 Checking Fault Code History	6-4
GP 4 Clearing Fault Code History	6-4
GP 5 Component Control	6-5
GP 6 Accessing NVM	6-8
GP 7 Initializing NVM	6-23
GP 8 Reprogramming the NVM EEPROMs on the SLCC PWB	6-23
GP 9 Printing Internal Test Patterns	6-26
GP 10 Printing a Configuration Report	6-26
GP 11 Checking Firmware Versions	6-27
GP 12 Checking Serial Number and Product Code	6-28
GP 13 Checking Total Print Count	6-30
GP 15 Upgrading or Re-loading the Controller Firmware	6-30
GP 16 Checking HFSI Item Counters	6-31
General Information	
Specifications	6-33
Tools	6-39
Consumables	6-39
Glossary of Terms	6-40

GP 1 Entering and Exiting the Diagnostics Mode

Purpose

This procedure describes how to enter and exit the Diagnostics Mode. It is necessary to enter the Diagnostics Mode in order to perform most diagnostic procedures. It is not necessary to enter the Diagnostics Mode to print a Configuration Page.

Entering the Diagnostics Mode

To enter the Diagnostics Mode, perform the following procedure:

- If the 5020/DN is in Low Power Mode or Sleep Mode (the UI Display is blank and no buttons or LEDs are lit on the control panel except for the Power Saver button), press the Power Saver button.
- 2. Press and hold the (0) button on the numeric keypad for a minimum of four seconds.
- While continuing to press the (0) button, press the Start button. The UI display will show three dashes.
- 4. Enter (6), (7), (8), (9) on the numeric keypad.

NOTE: The numbers will not appear on the UI Display to prevent unauthorized persons from learning the passcode.

5. Press the Start button. The UI Display will show the chain prompt with a (C) in the left digit, and the bottom segment in the right digit blinking slowly.

Exiting the Diagnostics Mode

To exit the Diagnostic Mode, switch off the power, wait at least five seconds, then switch on the power. The 5020/DN will return to the user mode.

GP 2 Entering Chain and Link Codes

Purpose

This procedure describes how to enter chain and link codes. Chain and link codes must be entered when using all of the General Procedures, with the exceptions of GP 1 and GP 10:

Overview

A chain or a link code may be one, two or three digits. However, all chain or link codes must be entered as three digit numbers. Zeros must be entered to the left of the code number for any codes with less than three digits. For example, the DADF Chain 5 code (5-62), must be entered as (005-062).

To clear a chain or a link code, press the yellow AC button.

The entered digits will be cleared, and the UI Display will return to the chain prompt with a (C) in the left digit, and the bottom segment in the right digit blinking slowly.

When inputting the link code, pressing the Start button after inputting an invalid link code, or a link code that is out of the specified range, returns the UI Display to the link prompt.

Entering the Chain and Link Codes

To enter a chain code, perform the following procedure:

- 1. Use GP 1 to enter the Diagnostics Mode.
- When the chain prompt is displayed, enter the chain code using the numeric keypad. Enter zeros first for codes with less than three digits to make the entry a three digit number.
- Press the Start button after the three digits have been entered. If the entry is a valid chain code, the display will change to show the link prompt with an L in the left digit, and the bottom segment in the right digit blinking slowly.
- 4. Enter the link code, again entering zeros first for any codes that are less than three digits to make the entry a three digit number.
- Press the Start button after the three digits have been entered. There will be somewhat different responses, depending on the process being done. To determine if the response is correct, refer to the particular general procedure being done.

GP 3 Checking Fault Code History

Purpose

The purpose of this procedure is to check fault code history for the last 20 faults that have occurred.

Overview

Fault code history contains the two character alpha-numeric error code, the three digit chain code, and three digit link code, for up to 20 faults. When the history is being read out, fault data will be displayed in order from the newest to the oldest.

If more than 20 faults have occurred since the history was last cleared, the oldest faults will have been deleted from the recorded history.

To exit the process of reading out the fault code history while reading out data from the fault history, press the Stop button, then press the AC button. The chain prompt will appear.

NOTE: After resolving all problems with the 5020/DN, clear fault code history using GP 4 before concluding the service call.

Procedure

Read out fault code history using this procedure. Before beginning the procedure, make a table with 4 columns and 21 rows. The column headings (entered in the first row) are as follows:

- Number
- UI Error Code
- Chain Code
- Link Code

As each fault is being read out, record the number of the fault from 1 (first out) to 20 (last out).

Perform the following steps to read out the data for each fault code:

- Enter the Diagnostics Mode using GP 1.
- 2. At the chain prompt, enter the chain number (998).
- Press the Start button.
- 4. At the link prompt, enter the link number (966).
- Press the Start button.
- In the first row of the table under "UI Display", record the two character alpha-number code that appears.
- 7. Press the Display button (the button immediately to the right of the UI Display).
- 8. In the first row of the table under "Chain Code", record the number that appears.
- Press the Display button again.
- 10. In the first row of the table under "Link Code", record the number that appears.
- 11. Press the Start button. The UI error code for the next fault in the fault history will appear.
- Repeat steps 5 to 11. After the last entry in the fault history has been read out, the UI Display will return to the link prompt when the Start button is pressed.

GP 4 Clearing Fault Code History

Purpose

The information needed to complete this procedure was not available when the reissue of the 5020/DN manual was published. This procedure will be completed and published as a Bulletin when the information becomes available.

GP 5 Component Control

Purpose

This procedure uses input component control codes to check the state of passive components such as switches and sensors as they are energized or de-energized, and output component control codes to independently operate and check the status of active components such as motors, solenoids and clutches.

Input Diagnostics Overview

Input Diagnostics checks the status of sensors and switches in the IOT, the IIT, and the paper trays as they are manually actuated and de-energized.

Entering the input diagnostics chain and link codes enables the state of particular components to be checked. Pressing the Stop button returns the UI Display to the link prompt. When the link prompt is showing on the UI Display, pressing the AC button returns the UI Display to the chain prompt.

Input Diagnostics Procedure

Perform the following steps to use the input component control codes for diagnostics:

- 1. Enter the Diagnostics Mode using GP 1.
- At the chain prompt, enter the chain number of the component as listed in the Input Component Control Codes table.
- 3. Press the Start button.
- At the link prompt, enter the link number of the component as listed in the Input Component Control Codes table.
- 5. Press the Start button. The state of the component is displayed on the UI Display.
- 6. If possible, manually actuate the component. If the component is inaccessible or cannot otherwise be manually actuated, move the part of the 5020/DN that actuates the component (for example, open and close the access cover that actuates the component). Observe the UI Display. If both the actuated and de-energized states shown in the Input Component Control Codes table are indicated correctly in the display, the component is good.
- 7. Press the Stop button to return to the link prompt.
- 8. Press the AC button to return to the chain prompt.
- 9. If there is a list of components to check, repeat steps 2 to 8 to check each in turn. If the other checks in the RAP call for operating an active component such as a motor, solenoid or clutch, use the Output Diagnostics Procedure listed in this general procedure to make the check. When all components have been checked, or when a faulty component is found, return to the RAP that called this procedure.

Table 1 Input Component Control Codes

Chain	Link	Sub- System	Component	Indication
005	102	DADF	Document Set Sensor (PL 13.9)	L: No Set present h: Set present
005	204	DADF	Document Feed Sensor (PL 13.9)	L: No document at sensor h: Document at sensor

Table 1 Input Component Control Codes

Chain	Link	Sub- System	Component	Indication
005	205	DADF	DADF Exit Invert Sensor (PL 13.7)	L: No document at sensor h: Document at sensor
005	206	DADF	DADF Document Registration Sensor (PL 13.7)	L: No document at sensor h: Document at sensor
005	212	DADF	Top Cover Open Switch	L: Cover is closed h: Cover is open
005	215	DADF	Doc Feeder Width Sensor (PL 13.9)	L: Refer to table on h: BSD 5.9
005	216	DADF	Doc Tray Width Sensor 1 (PL 13.10)	L: Refer to table on h: BSD 5.9
005	217	DADF	Doc Tray Width Sensor 2 (PL 13.10)	L: Refer to table on h: BSD 5.9
005	218	DADF	Doc Tray Length Sensor 1 (PL 13.10)	L: Refer to table on h: BSD 5.9
005	219	DADF	Doc Tray Length Sensor 2 (PL 13.10)	L: Refer to table on h: BSD 5.9
062	212	IIT	Carriage Sensor (PL 10.6)	L: Sensor Unblocked (carriage is not at left end of travel) h: Sensor Blocked (only when carriage is at extreme left end of travel)
062	300	IIT	Platen Open Switch (PL 10.5)	L: Cover is closed h: Cover is open
601	101	PH	Left Hand Cover Interlock Switch (PL 8.2)	L: Cover is closed h: Cover is open
601	110	PH	Access Cover 2 Interlock Switch (PL 11.5)	L: Cover is closed h: Cover is open
601	111	PH	Access Cover 1 Interlock Switch (PL 2.5)	L: Cover is closed h: Cover is open
601	112	PH	Front Cover Interlock Switch (PL 8.2)	L: Cover is closed h: Cover is open
607	107	PH	Tray 1 No Paper Sensor (PL 2.2)	L: Paper present h: No paper
607	108	PH	Tray 2 No Paper Sensor (PL 11.7)	L: Paper present h: No paper
608	105	PH	IOT Registration Sensor (PL 2.9)	L: No paper h: Paper present

Table 1 Input Component Control Codes

Chain	Link	Sub- System	Component	Indication
608	106	PH	Tray 2 Feed Sensor (PL 11.5)	L: No paper h: Paper present
608	107	PH	Tray 1 Feed Sensor (PL 2.5)	L: No paper h: Paper present
609	102	XERO	Drum Cartridge Detected (BSD 9.2)	L: No Drum Cartridge h: Cartridge present
609	107	XERO	Toner Empty Sensor (PL 4.2) (To exit this check switch power off then switch power on)	L: Toner available h: Toner depleted
610	123	PH	Fuser Exit Sensor (PL 6.3)	L: No paper h: Paper present
610	160	FUSER	Nohad Fan Fail Monitor (PL 9.2)	Alternating L and h = OK Constant h = Fault

Table 2 Analog Input Component Control Codes

Chain	Link	Sub- System	Component	Indication
610	320	Fuser	Fuser Thermistor (PL 5.1) (BSD 10.1)	Value should be between 0 and 1024 and should vary as Fuser temperature changes. Remove Rear Cover and observe from left rear corner of machine to see when Fuser Lamp is on. Observe that value changes when Fuser Lamp is turned on or turned off.

Output Diagnostics Overview

Output Diagnostics provides component control codes that independently operate and check the status of active components such as motors, solenoids and clutches.

Entering output diagnostics chain and link codes actuates particular components. Pressing the Stop button deenergizes the component and returns the UI Display to the link prompt. When the link prompt is showing on the UI Display, pressing the AC button returns the UI Display to the chain prompt.

Output Diagnostics Procedure

Perform the following steps to use the output component control codes for diagnostics:

1. Enter the Diagnostics Mode using GP 1.

- At the chain prompt, enter the chain number of the component as listed in the Output Component Control Codes table.
- 3. Press the Start button.
- At the link prompt, enter the link number of the component as listed in the Input Component Control Codes table.
- Press the Start button. The component will be energized and "run" will be displayed on the UI Display. Some components are energized continuously and others operate for a specified period of time and are then automatically deenergized.
- Evaluate the operation of the component by observation. The Action column names the component that will be operated and the name of the operation. The Description column provides details of the operation if appropriate.

For components such as clutches and solenoids that cannot be seen, listen for a sound. If there is a sound, it is likely that the component is good. In some cases there may be a clicking sound or some other audible indication, but the component may still be bad. For example a solenoid or a clutch may make a noise, but if there is a mechanical binding or a partial short the component may not traveling over the full range required for proper operation, or may be allowing slippage.

For motors and components that can be visually observed, watch for gears and rolls to turn, or movement of an assembly such as the IIT Carriage. If the motor cannot be seen and there is no external motion to observe, again use audible indications to evaluate the operation of the component. Listen for abnormal sounds such as grinding noises, of variations in the sound when it should be a constant pitch.

In a few cases, it may not be possible to hear or see anything that will verify proper operation. In those cases, it may necessary to use a meter to measure the signal at the component.

- 7. Press the Stop button to stop the operation of the component. The UI Display will return to the link prompt.
- 8. Press the AC button to return to the chain prompt.
- 9. If there is a list of components to check, repeat steps 2 to 8 to check each in turn. If the other checks in the RAP call for operating a passive component such as a switch or sensor, use the Input Diagnostics Procedure listed in this general procedure to make the check. When all components have been checked, or when a faulty component is found, return to the RAP that called this procedure.

Table 3 Output Component Control Codes

Chain	Link	Sub- System	Action	Description
005	001	DADF	Document Drive Motor (PL 13.5)	The Document Drive Motor runs for 0.5 seconds and is automatically turned off.
005	062	DADF	Document Feed Clutch (PL 13.9) (BSD 5.7)	Requires measurement with meter
005	063	DADF	DADF Registration Clutch (PL 13.5) (BSD 5.8)	Requires measurement with meter
005	064	DADF	Exit/Invert Clutch (PL 13.5) (BSD 5.8)	Requires measurement with meter
005	065	DADF	Exit/Invert Solenoid (PL 13.7)	The Exit/Invert Solenoid is energized for 2 secs and is automatically turned off.

Chain	Link	Sub- System	Action	Description
062	002	IIT	Exposure Lamp (PL 10.6)	The Exposure Lamp illuminates until the Stop button is pressed.
062	005	IIT	Carriage Motor, scan direction (PL 10.6)	The carriage moves 50 mm in the scan direction at 30 mm/sec, then stops. To return to home position, either execute the next procedure, "Carriage Motor, return direction", or switch off the power, then switch on the power. CAUTION
				Do not execute this code if the carriage is at the right end of travel. The carriage will continue to drive after reaching the normal end of travel and damage to the carriage drive components may occur.
062	006	IIT	Carriage Motor, return direction (PL 10.6)	The carriage moves 50 mm in the return direction at 30 mm/sec, then stops. To return to home position, switch on the power, then switch on the power. CAUTION
				Do not execute this code if the carriage is at the home position. The carriage will continue to drive after reaching the normal end of travel and damage to the carriage drive components may occur.
062	007	IIT	Scan Locking Position (PL 10.6)	The carriage moves 442.9 mm in the scan direction at 30 mm/sec, then stops. To return to home position, switch off the power, then switch on the power. CAUTION
				Do not execute this code if the carriage is not at the home position. The carriage will continue to drive after reaching the normal end of travel and damage to the carriage drive components may occur.
062	086	IIT	IIT Image Output (BSD 6.1)	The image signal is sent to SLCC PWB from the IIT until the Stop button is pressed.
604	201	PH	IOT Motor ON (PL 1.1)	The IOT Motor runs until the Stop button is pressed.
				Before starting this procedure ensure that clothing and fingers are clear of the IOT Main Motor and all gearing. The IOT Main Motor runs until the Stop button is pressed.

	1	1		
Chain	Link	Sub- System	Action	Description
606	215	ROS	ROS Motor ON (PL 3.1) (BSD 6.3)	The ROS Motor runs until the Stop button is pressed.
608	210	PH	IOT Registration Clutch (PL 2.9)	The IO Registration Clutch is energized for 2 secs and is automatically turned off.
608	211	TRAY	Tray 2 Feed Clutch (PL 11.6)	The Tray 2 Feed Clutch is energized for 2 secs and is automatically turned off.
608	212	TRAY	Tray 1 Feed Clutch (PL 2.2)	The Tray 1 Feed Clutch is energized for 2 secs and is automatically turned off.
608	213	TRAY	Tray 2 Feed Motor (PL 11.6)	The Tray 2 Feed Motor runs until the Stop button is pressed.
608	217	PH	Bypass Solenoid (PL 7.5)	The Bypass Solenoid energized for 2 secs and is automatically turned off.
609	204	XERO	HVPS ON (Low Voltage) (PL 8.2) (BSD 9.1)	Requires measurement with meter CAUTION
				Do not execute this code if the carriage is at the home position. The carriage will continue to drive after reaching the normal end of travel and damage to the carriage drive components may occur.
609	205	XERO	HVPS ON (High Voltage) (PL 8.2) (BSD 9.1)	Requires measurement with meter
609	206	XERO	Erase Lamp ON (PL 4.2) (BSD 9.3)	Requires measurement with meter
610	204	FUSER	NOHAD Fan (High Speed) (PL 9.2)	The NOHAD Fan runs at High speed until the Stop button is pressed
610	208	PH	Exit Motor ON Forward (PL 6.3)	Ejects paper. The Exit Motor runs until the Stop button is pressed.
610	209	PH	Exit Motor ON Reverse (PL 6.3)	The Exit Motor runs until the Stop button is pressed.

Table 4 Analog Output Component Control Codes

Chain	Link	Sub- System	Action	Description
606	416	ROS	ROS Vref Out (analog output) (PL 3.1) (BSD 6.3)	Requires measurement with meter
606	417	ROS	Exit Vref Out (analog output) (PL 3.1) (BSD 6.3)	Requires measurement with meter

GP 6 Accessing NVM

Purpose

The purpose of this procedure is to enable access to the current values of various NVM parameters and to edit those values that can be changed.

NVM Access Procedure

Perform the following steps to access NVM parameter values and to change those values that are editable:

- 1. Enter the Diagnostics Mode using GP 1.
- Refer to Table 1 IOT NVM Parameters or Table 2 IIT and DADF NVM Parameters to find the chain and link numbers for the parameter value to be accessed.

NOTE: Parameters listed in the tables are in chain-link order.

- At the chain prompt, enter the chain number of the parameter as listed in the NVM parameters table.
- Press the Start button.
- At the link prompt, enter the link number of the value as listed in the NVM parameters table.
- Press the Start button. A one, two or three digit number will appear in the UI Display. This is the current value of the NVM parameter.
- 7. Refer to Table 1 IOT NVM Parameters or Table 2 IIT and DADF NVM Parameters to determine if the value is editable. If the value is editable, "O" will be shown in the W column under the CE heading. If it is editable and you wish to change it, enter the new value using the Numeric Keypad.

8. Press the Start button to store the new value. If the new value is stored successfully, after a few seconds the UI Display will return to the link prompt. Enter the link value for the parameter to check that the new value has been stored correctly. If an error is made when entering the new number, press the AC button to return to the chain prompt, then repeat steps 3 to 8.

NOTE: If the number entered on the keypad is out of the acceptable range, or if the parameter is not editable, the UI Display will show Err for a few seconds and then return to the link prompt.

- 9. To continue checking or editing NVM parameters, press the AC button to return to the chain prompt, then repeat steps 3 to 8.
- To perform other diagnostic procedures, press the AC button to return to the chain prompt.
- 11. To exit from the diagnostic mode, switch off the power, then switch on the power.

IOT and DADF NVM Parameters

NOTE: A "O" in the W column indicates that the value is editable. An "X" indicates that the value is not editable.

NOTE: A "O" in the Init column indicates that even if the value has been changed during service, the value will return to the initial value after performing an NVM initialization. An "X" indicates that the value will not be initialized. In the case of parameters such as serial number, the value is pre-programmed. In the case of parameters such as counters, the value will change with machine usage, but will not be affected by NVM initialization.

NOTE: Parameters are listed in chain-link order.

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
606	020	ROS	Figure 1 ALL TRAY-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	021	ROS	TRAY1-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	022	ROS	TRAY2-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	026	ROS	Bypass Tray-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	028	ROS	DUP ALL TRAY-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	029	ROS	DUP TRAY1-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	030	ROS	DUP TRAY2-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
606	034	ROS	DUP Bypass Tray-LASER SIDE REGI ADJUSTMENT	1~99	0.254 mm	50	0	0	
606	052	ROS	IMAGE AREA	0~1	-	0	0	0	0:Normal Image Area 1:Wide Image Area
606	059	ROS	Side NOMAL Erase Adjustment	0~33	0.254 mm	16->8	0	0	Nominal = 4.064 mm
606	060	ROS	Top NOMAL Erase Adjustment	0~33	0.254 mm	16->8	0	0	Nominal = 4.064 mm
606	063	ROS	End NOMAL Erase Adjustment	0~33	0.254 mm	16->8	0	0	Nominal = 4.064 mm
607	046	TRAY	Tray1-paper size	0~254	1mm	2	0	0	value paper type 1: 11"x17" SEF 2: A3 SEF 3: 8K SEF*1 5: B4SEF 6: 8.5"x14" SEF (Legal) 7: 8.5"x13.4" SEF (Mexico Folio) 8: 8.5"x13" (Folio) 10: A4 SEF 11: 8.5"x11" SEF (Letter) 12: 16K SEF*1 15: B5 SEF 17: 8.5"x11" LEF (Letter)
607	047	TRAY	Tray2-paper size	0~254	1mm	2	0	0	value paper type 1: 11"x17" SEF 2: A3 SEF 3: 8K SEF*1 5: B4SEF 6: 8.5"x14" SEF (Legal) 7: 8.5"x13.4" SEF (Mexico Folio) 8: 8.5"x13" (Folio) 10: A4 SEF 11: 8.5"x11" SEF (Letter) 12: 16K SEF*1 15: B5 SEF 17: 8.5"x11" LEF (Letter)

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
607	048	TRAY	Bypass Tray Paper size	0~254	1mm	2	0	0	value paper type 1: 11"x17" SEF 2: A3 SEF 3: 8K SEF*1 5: B4SEF 6: 8.5"x14" SEF (Legal) 7: 8.5"x13.4" SEF (Mexico Folio) 8: 8.5"x13" (Folio) 10: A4 SEF 11: 8.5"x11" SEF (Letter) 12: 16K SEF*1 15: B5 SEF 17: 8.5"x11" LEF (Letter) 18: 5.5"x8.5" S 19: A5 S
620	001	PH	LEAD REGI ADJUSTMENT - ALL TRAY	0~60	0.146 mm	30	0	0	Image input is delayed when Set Value is increased. Min(0)=-4.46mm, Max(66)=4.46mm, Initial(33)=0mm
620	041	PH	TRAY1 for Normal LEAD REGI ADJ	0~60	0.146 mm	30	0	0	Image input is delayed when Set Value is increased.
620	042	PH	TRAY2 for Normal LEAD REGI ADJ	0~60	0.146 mm	30	0	0	Image input is delayed when Set Value is increased.
620	043	PH	SMH for Normal LEAD REGI ADJ	0~60	0.146 mm	30	0	0	Image input is delayed when Set Value is increased.
620	045	PH	DUP ALL SIZE for Normal LEAD REGI ADJ	0~60	0.146 mm	30	0	0	Image input is delayed when Set Value is increased.
620	046	PH	ALL TRAY - REGI LOOP TIMER	0~66	0.438 mm	33	0	0	Loop increases when Set Value is increased.
620	047	PH	TRAY1 for Normal Paper - REGI LOOP TIMER	0~66	0.438 mm	33	0	0	Loop increases when Set Value is increased.
620	048	PH	TRAY2 for Normal Paper - REGI LOOP TIMER	0~66	0.438 mm	33	0	0	Loop increases when Set Value is increased.
620	049	PH	SMH for Normal Paper - REGI LOOP TIMER	0~66	0.438 mm	11	0	0	Loop increases when Set Value is increased.
620	051	PH	DUP for Normal Paper - REGI LOOP TIMER	0~66	0.438 mm	33	0	0	Loop increases when Set Value is increased.
623	020	PH	Simplex/Duplex	0~1		1	0	0	0: Simplex 1: Duplex
623	021	PH	Feed Tray	1~6		1	0	0	1: Tray1. 2: Tray2. 3: Tray3. 4: Tray4. 5: HCF. 6: Bypass Tray

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
623	022	PH	Output Tray	0~4		0	0	О	0: FACE DOWN TRAY#1. 1: FACE DOWN TRAY#2. 2: FACE UP TRAY. 3: FINISHER Bin1. 4: FINISHER Top Tray
623	026	PH	Test Print Run Length Low Byte	0~99		1	0	0	Number of Test Prints
623	027	PH	Test Print Run Length High Byte	0~99		0	0	0	Number of Test Prints
629	001	Billing	Last 2 Digits Total Copy Counter (6 Digits)	0~99		0	Х	Х	
629	011	Billing	3rd & 4th Digits Total Copy Counter (6 Digits)	0~99		0	Х	Х	
629	021	Billing	1st & 2nd Digits Total Copy Counter (6 Digits)	0~99		0	Х	Х	
630	004	HFSI	Last 2 Digits of Bypass Tray Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	014	HFSI	5th & 6th Digits of Bypass Tray Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	024	HFSI	3rd & 4th Digits of Bypass Tray Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	034	HFSI	1st 2 Digits of Bypass Tray Feed Capacity (8 Digits)	0~3	1	0	Х	Х	
630	005	Recycle	Last 2 of IOT Starting Number	0~99	1	0	Х	Х	
630	015	Recycle	3rd & 4th IOT Starting Number	0~99	1	0	Х	Х	
630	025	Recycle	1st 2 of IOT Starting Number	0~99	1	0	Х	Х	
630	006	HFSI	Tray1 Last 2 Digits of Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	016	HFSI	Tray1 5th & 6th Digits of Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	026	HFSI	Tray1 3rd & 4th Digits of Feed Capacity (8 Digits)	0~99	1	0	Х	Х	
630	036	HFSI	Tray1 1st 2 Digits of Feed Capacity (8 Digits)	0~3	1	0	Х	Х	
630	007	HFSI	Tray2 Last 2 Digits of Feed Capacity (6 Digits)	0~99	1	0	Х	Х	
630	017	HFSI	Tray2 5th & 6th Digits of Feed Capacity (6 Digits)	0~99	1	0	Х	Х	

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
630	027	HFSI	Tray2 3rd & 4th Digits of Feed Capacity (6 Digits)	0~99	1	0	Х	Х	
630	037	HFSI	Tray2 1st 2 Digits of Feed Capacity (8 Digits)	0~3	1	0	Х	Х	
630	061	Recycle	Tray Feed Capacity MAX Over	0~1	1	0	Х	Х	It is shown whether the Recycle Tray Feed Capacity NVM was written more than 4000000 times. 0: not exceed 1: exceeded.
630	062	Recycle	IOT Starting Number MAX Over	0~1	1	0	Х	Х	It is shown whether the IOT Starting Number NVM was written more than 1000000 times. 0: not exceed 1: exceeded.
633	004	CRU	CRU Remain	0~100	1%	100	Х	Х	CRU Remain percentage
633	005	ESS IF	UI Auto Clear Time	0~4	-	3	0	0	0=OFF(Disabled), 1=20sec 2=30sec, 3=60sec, 4=90sec
633	006	ESS IF	Priority Paper Tray	1~3	-	1	0	0	1=Tray1 2=Tray2 3=Bypass Tray
633	007	ESS IF	Document Type	1~3	-	1	0	0	1=Text 2=Text & Photo 3=Photo
633	008	ESS IF	Density Adjustment	0~4	-	2	0	0	0=Lightest 1=Light 2=Normal 3=Dark 4=Darkest
633	009	ESS IF	Default Reduction / Enlargement	0~4	-	0	0	0	0=100% 1=50% 2=70% (Metric), 78% (Inch13&14) 3=129% (Metric),141% (Inch13&14) 4=200%
633	011	ESS IF	Auto Tray Switch	0~1	-	1	0	0	0=Disable 1=Enable
633	012	ESS IF	Auto Paper Selection	0~1	-	1	0	0	0=Disable 1=Enable
633	013	ESS IF	Default Customizing Reduction / Enlargement	50~200	-	82	0	0	China 82=82%(=82) XC 64=64%(=64)

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
633	014	ESS IF	Sharpness Adjustment for Copy Job	0~4	-	2	0	0	0=Weakest 1=Weaker 2=Normal 3=Stronger 4=Strongest
633	015	ESS IF	Sharpness Adjustment for Scan Job	0~4	-	2	0	0	0=Weakest 1=Weaker 2=Normal 3=Stronger 5=Strongest
633	016	ESS IF	MCU Low Power Mode	1~254	-	2	0	0	0=0min (Shift immediately) 1=5min 2=20min 3=60min 4=120min 5=240min 254=OFF(Disable)
633	017	ESS IF	MCU Sleep Mode	0~254	-	2	0	0	0=0min (Shift immediately) 1=5min 2=20min 3=60min 4=120min 5=240min 254=OFF (Disable)
633	018	ESS IF	Device Power Off Mode	0~254	-	0	0	0	0=0min (Shift immediately) 1=5min 2=20min 3=60min 4=120min 5=240min 254=OFF (Disable)
633	019	ESS IF	Background removal for COPY	0~5	-	2	0	0	0=OFF 1=Level1 2=Level2 3=Level3 4=Level4 5=Level5
633	020	ESS IF	Background removal for SCAN	0~5	-	2	0	0	0=OFF 1=Level1 2=Level2 3=Level3 4=Level4 5=Level5

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
633	021	ESS IF	Account Mode	0~2	-	0	0	0	0=Disable 1=Single User Password Mode 2=Multi User Password Mode
633	022	ESS IF	Paper Class	0~2	-	0	0	0	0=Metric 1=Inch13 2=Inch14
633	023	ESS IF	Add Original Auto Clear Time	0~4	-	3	0	0	0=OFF (Disabled) 1=20sec 2=30sec 3=60sec 4=90sec
633	024	ESS IF	Wait Time After Bypass Tray Jam Clear	0~60	1sec	8	0	0	0- 60sec
633	025	ESS IF	Carriage Return Default Position	0~60	1sec	7	0	0	0- 60sec
633	026	ESS IF	Platen Fast Scan REGI Adjustment	0~144	1dot (600dpi)	72	0	0	0-71=-72 to -1dot 72=0dot 73-144=1 to 72dot
633	027	ESS IF	Platen Slow scan REGI Adjustment	0~151	1dot (600dpi)	24	0	0	0-23=-24 to -1dot 24=0dot 25-144=1 to 151dot
633	033	ESS IF	Platen Slow Scan scale Adjust- ment	0~20	0.10%	10	0	0	0-9=-1.0% to -0.1% 10=0% 11-20=0.1% to 1.0%
633	037	ESS IF	M/C config	0~1	-	1	Х	Х	0: DC 1: CPS
633	038	ESS IF	ADF installation	0~1	-	0	0	Х	0: not installed 1: installed
650	015	EXIT	Enable OCT & Inverter	0~2	-	2	0	0	0:Disable 1:Inverter+OCT 2:Inverter Only
650	020	FUSER	FSR Reset Fuser Over Temp	0~3	-	0	0	0	0:reset 1:FS1 Detected over temp 2:FS2 Detected over temp 3:On time Fail 5:Cold Sagging Fail (Only reset is possible in the diagnostics mode.)
660	001	ESS IF	MCU VERSION	0~1	-	-	Х	Х	
660	002	ESS IF	MCU Release Number	0~99	-	-	Х	Х	

Chain	Link	Sub- System	Parameter	Range	Unit	Initial Value	w	Init	Remarks
660	003	ESS IF	MCU Patch Level	0~99	-	-	Х	Х	
660	006	ESS IF	Tray 2 Module Version	0~99	-	-	Х	Х	
660	007	ESS IF	Tray 2 Module Release Number	0~99	-	-	Х	Х	
660	018	General	СРМ	0~99	-	-	Х	Х	20:20PPM Other: PPM NG
660	019	General	Market Identity	0~254	-	-	Х	Х	22: DMO
660	026	MC Code	Serial Code1	0~254	1	0	Х	Х	
660	027	MC Code	Serial Code2	0~254	1	0	Х	Х	
660	028	MC Code	Serial Code3	0~254	1	0	Х	Х	
660	029	MC Code	Serial Code4	0~254	1	0	Х	Х	
660	030	MC Code	Serial Code5	0~254	1	0	Х	Х	
660	031	MC Code	Serial Code6	0~254	1	0	Х	Х	
660	032	MC Code	Serial Code7	0~254	1	0	Х	Х	
660	033	MC Code	Serial Code8	0~254	1	0	Х	Х	
660	034	MC Code	Serial Code9	0~254	1	0	Х	Х	
660	035	MC Code	Serial Code10	0~254	1	0	Х	Х	
660	036	Product	Product code 1	0~254	1	0	Х	Х	
660	037	Product	Product code 2	0~254	1	0	Х	Х	
660	038	Product	Product code 3	0~254	1	0	Х	Х	
660	039	Product	Product code 4	0~254	1	0	Х	Х	
660	040	Product	Product code 5	0~254	1	0	Х	Х	
660	041	Product	Product code 6	0~254	1	0	Х	Х	
660	042	Product	Product code 7	0~254	1	0	Х	Х	
660	043	Product	Product code 8	0~254	1	0	Х	Х	

Chain	Link	Name of data	Range	Unit	Initial Value	w	Init	Remarks
715	001	IISS Major Version	0 ~ 65535	-	65535	0	0	IISS Major Version number
715	002	IISS Minor Version	0 ~ 65535	-	65535	0	0	IISS Minor Version number
715	003	IISS Revision Version	0 ~ 65535	-	65535	0	0	IISS Revision Version number

					Initial			
Chain	Link	Name of data	Range	Unit	Value	w	Init	Remarks
715	010	Platen/DADF	0 ~ 1	-	1	0	0	Switch Platen model and DADF Model 0: Platen 1: DADF
715	011	Change Size Table	0 ~ 3	-	0	0	0	Switch document size detection table of DADF 0: mm (AP) 1: inch 13-12 (EU/South America) 2: inch 14 (North America) 3: Mexico
715	020	Platen SS Registration Adjustment	80 ~ 260	1 dot	120	0	0	Platen SS Registration Correction Value. NVM initial value is Adjustment Value 0. Adjust by 1 dot. (Not include the adjustment value from Module Sensor ~ Registration)
715	021	Platen PR adj F	0 ~ 240	1 dot	120	0	0	Platen FS Registration Correction Value. NVM value 120 is Adjustment Value 0. Adjust by 1 dot.
715	022	CVT Image Reading Position	0 ~ 500	0.1 mm	100	0	0	DADF Reading Position Correction Value
715	023	SS Feed Position Correction (Side 1)	400 ~ 600	0.1 mm	505	0	0	SS Feed Position Correction Value (Side 1) Includes the adjustment value from Doc Regi Sensor (SNS8) ON ~Start of Reading Side 1
715	024	SS Feed Position Correction (Side 2)	400 ~ 600	0.1 mm	505	0	0	SS Feed Position Correction Value (Side 2) Includes the adjustment value from Doc Regi Sensor (SNS8) ON ~Start of Reading Side 2.
715	025	SS Tail Registration Correction (Side 1)	400~600	0.1 mm	446	0	0	Includes the adjustment value from Doc Regi Sensor (SNS8) OFF ~Finish of Reading Side 1.
715	026	SS Tail Registration Correction (Side 2)	400~600	0.1 mm	446	0	0	Includes the adjustment value from Doc Regi Sensor (SNS8) Off ~Finish of Reading Side 2.
715	027	Registration Loop Degree Adjustment A	50~200	0.1 mm	89	0	0	Feed Sensor (SNS7) ON ~Feed CL (EMC1) OFF after feeding the document (Adjustment Value A)
715	028	Registration Loop Degree Adjustment B	50~200	0.1 mm	150	0	0	Feed Sensor (SNS7) ON ~Regi Cl (ENC2) ON when inverting document. (Adjustment Value B)
715	029	Feed Clutch Timing Adjustment (output)	700~1000	0.1 mm	940	0	0	Feed out Sensor OFF ~Feed out Clutch OFF when outputting
715	030	Feed out Clutch Timing Adjustment (invert)	0~500	0.1 mm	210	0	0	Feed out Sensor) OFF ~Feed out Clutch OFF when inverting
715	031	CVT FS OFFset Side 1	0~240	1 dot	120	0	0	CVT FS Registration Correction Value for Side 1 (front side) NVM value 120 is Adjustment Value 0. Adjust by 1 dot.
715	032	CVT FS OFFset Side 2	0~240	1 dot	120	0	0	CVT FS Registration Correction Value for Side 2 (back side) NVM value 120 is Adjustment Value 0. Adjust by 1 dot.
715	040	FS Magnification Adjustment	0~100	0.1%	50	0	0	Fine Adjustment Value of FS magnification. Shows =/- 5% (by 0.1%) fine adjustment value with 50 for 0%,) for -5% and 100 for 5%.
715	041	Platen SS Magnification Adjustment	40~60	0.1%	50	0	0	Fine Adjustment Value of Platen SS Magnification. Shows +/- 1% (by 0.1%) fine adjustment value with 50 for 0%, 40 for -1% and 60 for +1%/
715	042	CVT SS Magnification Adjustment	40~60	0.1%	50	0	0	Fine Adjustment Value of CVT SS Magnification. Shows +/- 1% (by 0.1%) fine adjustment value with 50 for 0%, 40 for -1% and 60 for +1%.
715	090	Fail Bypass	0 ~ 1	-	0	0	0	0: With out Fail Bypass 1: With Fail Bypass
715	091	Error Information	0~65535	-	0	0	0	Debug information

					Initial				
Chain	Link	Name of data	Range	Unit	Value	W	Init	Remarks	
715	092	Size detection: Sensor Information of Cus-	0~65535	-	0	0	0	Sensor information in the case of the size detection result being	
		tom Size						"Custom Size". If the result is not "Custom Size", this NVM update	
								will not be done.	
								bit 0: Sensor 6 bit 1: Sensor 5	
								bit 2: Sensor 4	
								bit 3: Sensor 3	
								bit 4: Sensor 2	
								bit 5-15: (spare)	
								Meaning of bit = 0: Sensor OFF, 1: Sensor ON	
715	100	WREF ADJ Platen	50~255	-	111	0	0	Correction Factor of Blue W-Fef (for Platen)	
715	101	Density Level ADJ RGBK	80~120	-	100	0	0	Highlight Fine Adjustment (x 1/100, dommon to RGBK)	
715	102	102WDL STD CL 30 B	0~1023	-	0	0	0	Standard Data of White Variation Correction.	
715	103	WREF ADJ CVT	50~255	-	78	0	0	Correction factor of Blue W-Fef (for CVT)	
715	110	AGOC SHD NVM	0~8	-	0	0	0	0: PROM used	
715	111	 FBLM	0~1023		984	0	0	1: NVM of (*1) enabled. AGC Maximum Allowable Value (*1)	
715	112	FBLI	0~1023	-	64	0	0	AGC Minimum Allowable Value (1)	
715	113	PLSnCL	0~1023	-	32	0	0	Reading Line Number of Shading RGB. (*1)	
715	114	FL CHK NG Count	0~65535	Once	0	0	0	Number of Lamp Check Failure (Reset by lamp replacement)	
715	115	FL CHK NG Data	0~65535	Office	0	0	0	Downloaded Data at Lamp Check Failure (Get data when white is	
715	113	FE CHR NG Data	0~1023	-	U		U	read, which is compared at the check)	
715	120	AGC ADJ BW	1~200	-	100	0	0	AGC BW for Target Value Correction (x1/100: 100=x1)	
715	121	Gap (1)	0~1023	-	128	0	0	CCD Ch-1 Gain Value	
715	122	Gap (2)	0~1023	-	128	0	0	CCD Ch-2 Gain Value	
715	123	AGCP (1)	0~511	-	128	0	0	CCD Ch-1 AGC Setting Value	
715	124	AGCP (2)	0~511		128	0	0	CCD Ch-2 AGC Setting Value	
715	125	Gsmp (1)	0~1023		0	0	0	CCD Ch-1 AGC Downloaded Data	
715	126	Gsmp (2)	0~1023		0	0	0	CCD Ch-2 AGC Downloaded Date	
715	127	Gloop (1)	0~255		0	0	0	CCD CH-1 AGC Loop Number	
715	128	Gloop (2)	0~255		0	0	0	CCD CH-2 AGC Loop Number	
715	130	Oadj	0~255		0	0	0	AOC BW Level Correction Value (Complement of 2: -128" +127")	
715	131	AOCP (1)	0~1023		128	0	0	CCD Ch-1 AOC Setting Value	
715	132	AOCP (2)	0~1023		128	0	0	CCD Ch-2 AOC Setting Value	
715	133	Osmp (1)	0~1023		0	0	0	CCD Ch-1 AOC Downloaded Average Data	
715	134	Osmp (2)	0~1023		0	0	0	CCD Ch-2 AOC Downloaded Average Data	
715	135	Osmpx (1)	0~1023		0	0	0	CCD Ch-1 AOC Max Value Downloaded Average Data	
715	136	Osmpx (2)	0~1023		0	0	0	CCD Ch-2 AOC Max Value Downloaded Average Data	
715	137	Osmpn (1)	0~1023		0	0	0	CCD Ch-1 AOC Max Value Downloaded Average Data	
715	138	Osmpn (2)	0~1023		0	0	0	CCD Ch-2 AOC Max Value Downloaded Average Data	
715	139	AOCerr	0~255		0	0	0	Number of AOC Plow Abnormal End	
715	150	BWPG Density	0~255		128	0	0	PG Density of Entire Solid Image (0: white)	

		1	1	T and DADI				1
Chain	Link	Name of data	Range	Unit	Initial Value	w	Init	Remarks
715	161	PreIPS_Through 1	Range 0~65535	Unit	Value 0	w	O	Remarks bit 0: ALLCBTF bit 1: ALLKTF bit 2: ALLCTF bit 3: SSFCTF bit 4: MRCTF bit 5: WDVCTF0 bit 6: WDVCTF1 bit 7: DKCTF bit 8: FSFTF0 bit 9: FSFTF1 bit 10: DCBCTF bit 11: DCACTF bit 12: GPCTF
715	162	PreIPS_Through2	0~65535		0	0	0	bit 13: (SPARE) bit 14: (SPARE) bit 15: (SPARE) meaning of Bit 0: Through (Skip) Valid. 1: Through (Skip) Invalid bit 0: FMTF bit 1: IPCTF bit 2: EBTF bit 3: EATF bit 4: MKATF bit 5: GFATF bit 6: BFATF
								bit 7: (Spare) bit 8: (Spare) bit 9: WDVTF0 bit 10: WDVTF1 bit 11: DKBTF bit 12: DCBKTF bit 13: DCAKTF bit 14: GPBTF bit 15: (spare) Meaning of Bit 0: Through Valid, 1: Through Invalid

				TI AND DADE	Initial		1	
Chain	Link	Name of data	Range	Unit	Value	w	Init	Remarks
715	163	PreIPS_Through3	0~65535		0	0	0	bit 0: BWTF bit 1: IPKTF bit 2: EETF bit 3: EDTF bit 4: MKKTF bit 5: GFBTF bit 6: BTBTF bit 7: MWTF bit 8: ECTF bit 9: MKBTF bit 10: FOBTF bit 11: SSRTF bit 12: (spare) bit 13: (spare) bit 14: (spare) bit 15: (spare) Meaning of Bit 0: Through Valid, 1: Through Invalid
715	200	Post IPS Bypass Setting	0~65535		0	0	0	Make each function of image process block forcibly "through" (skipped). Change values at S/W & H/W DEBUG. Should be "0" for usual use without fail. (Careful handling required). "Through setting" of each function is allocated by bit and multiple bit can be specified at once. D'0: AES D'1: DF39 D'2: SSR D'3: FSRE D'4: NSP D'5: 4DLUT D'6: 5AER D'7: 5MUL D'8: 5MWA D'9: 4AER D'10: 4MIL D'11: TRC D'12: ED D'13: DIRECT * D'14: AMAOSEL D'15: (SPARE) Meaning of Bit 0: Forcible Through Invalid, 1: Forcible Through Valid. *If D'13 is "1", release all Masks.

					Initial					
Chain	Link	Name of data	Range	Unit	Value	w	Init	Remarks		
715	201	S2X_OUT CONTROL	0~7		0	0	0	Specify the intake of image for scanning jig. 0: AMAO intake (Lab)* 1: AMAO intake (Shipping Inspection)* 2: DAIMAJIN intake 3: PRIDE intake 4: TOTODB intake (CMY) 5: WOZDB intake 6: FLC intake 7: TOTODB intake (YMC) *If NVM value is "0" or "1", release the Mask for AMAO.		
715	202	VIPOUT Select	0~255		255	0	0	Switch the image path of VIPOUT. If this value is 255, nothing should be done. (Keep current SET VIP) VDO-MASK release will be carried out according to the setting. Related register: SETVIP		
715	205	AE FS External Area	0~65535	1dot	255	0	0	AE-FS Undetected Area INSTV For AES parameter calculation Related Register: SMPST, SMPED		
715	206		0~65535	0.16mm	60	0	0	AE-SS Variation Fix Line-NCON AE detected amount of SS lead edge Sep number of NCON register=0.16mm		
715	207	AE Detect Variation Control	0~1		1	0	0	LIM Control Mode 0: Variable Mode 1: Fixed Mode (NCON preferred mode) Related register: AESMOD		
715	208	AE Control of FS Length	0~1		1	0	0	Minimum length of FS detection size will FS detection length Input the document size or regard the result of automatic size detection as FS detected length. For AES parameter calculation Related register: SMPST, SMPED		
715	209	Minimum FS Length for AE	0~65535	0.1mm	500	0	0	Minimum FS detection length (1 step=0.1mm) For AES parameter calculation		
715	210	AE Upper Limit of SS Magnification adjusting	0~4000	0.1%	4000	0	0	Maximum SS detection length (1 step=0.1%) For RAE.		
715	211	SS Not Detect Area for Platen Job	0~65535		0	0	0	SS Dead Zone Setting Value at REal-Time AE for Platen Job Related register: BASE		
715	212	SS Not Detect Area for ADF Job	0~65535		0	0	0	SS Dead Zone Setting Value at REal-Time AE for DADF Job Related register: BASE		
715	213	Background removal for COPY	0~4		1	0	0	AE Remval Level for Copy Job 0: Standard 1: High +1 2: High +2 3: High +3 4: High +4 Since this NVM is written by Controller, direct modification of this value will be invalid. (Overwritten later) Refer to the procedure of Cont. side of Removal Level change.		

Chain	Link	Name of data	Range	Unit	Initial Value	w	Init	Remarks	
715	219	Background removal for SCAN	0~4		1	0	0	AE Removal Level for Copy Job 0: Standard 1: High +1 2: High +2 3: High +3 4: High +4 Since the NVM is written by Controller, direct modification of this value will be invalid. (Overwritten Later) Refer to the procedure of Cont. Side of Removal Level change.	
715	230	AE Detection Level (Copy Platen)	0~4		2	0	0	Parameter Level of Detected Background Amount. (For Platen copy Job) 1: Low ~4: High 0: Ruby 1 Compatible Mode (not fully correspond)	
715	231	AE Detection Level (Copy ADF)	0~4		2	0	0	Parameter Level of Detected Background Amount (For ADF copy job) 1: Low ~4: High 0: Ruby 1 Compatible Mode (Not fully correspond)	
715	232	AE Detection Level (SCAN Platen)	0~4		2	0	0	Parameter Level of Detected Background Amount (For Platen scanning job) 0: Low ~4: High 0: Ruby 1 Compatible Mode (Not fully correspond)	
715	233	AE Detection Level (SCAN ADF)	0~4		2	0	0	Parameter Level of Detected Background Amount (For ADF scanning job) 0: Low ~4: High 0: Ruby 1 Compatible Mode (Not fully correspond)	
715	240	Density Correction LUT enabling flag for Job Type	0~3		0	0	0	Select the job type applying the corrective LUT of A*X+B. 0(0x00)~3(0x03) Bit assign 0 bit: Copy Job 1 bit: Scan Job 2 - 7 bit: Not use. (0=disable, 1=enable)	
715	241	Density Corrective LUT enabling flag for Org Type	0~7		0	О	O	Select the document mode applying the corrective LUT of A*X+B. 0(0x00)~7(0x07) Bit assign Obit: TX Mode 1bit: T/P Mode 2bit: Photo Mode 3-7bit: Not use. (0=disable 1=enable)	

Chain	Link	Name of data	Range	Unit	Initial Value	w	Init	Remarks
715	242	Density Corrective LUT enabling flag for Density	0~31		0	0	0	Select the density level applying the corrective LUT of A*X+B. 0(0x00)~31(0x1f) Bit assign 0bit: Lighter2 1bit: Lighter1 2bit: Normal Density 3bit: Darker1 4bit: Darker2 5-7bit: Not use. (0=disable, 1=enable)
715	243	Density Corrective LUT Parameter A	0~255		64	0	0	Parameter A to create the corrective LUT of A*X+B. Settable range of A is 0~3.984375. 0(0x00)~3.984375(0xff) Bit assign 7-6bit: Integer number area. 5-0bit: decimal number area.
715	244	Density Corrective LUT Parameter B	0~255		0	0	Ο	Parameter B to create the corrective LUT of A*X+B. Settable range of B is -128~+127.Minus value shows complement number of 2128(0x80)~+127(0x7f)

GP 7 Initializing NVM

Purpose

This procedure is used to initialize NVM.

Overview of Initializing NVM

Initialing NVM restores the initial values for some of the NVM parameters. Other parameters such as counters, the serial number and software revision levels are not changed. Refer to the NVM parameter tables in GP 6 for specific information on which values are changed and which are unchanged when NVM is initialized.

Procedure

CAUTION

Some of the values that are initialized during this procedure are set by the user. Before performing this procedure, inform the customer that the user programmable settings for the machine may be changed. If possible, provide the customer with the opportunity to record their settings.

NOTE: Fault Code history is not changed by this procedure.

Perform the following steps to initialize NVM:

- 1. Enter the Diagnostics Mode using GP 1.
- 2. At the chain prompt, enter the chain number (999).
- 3. Press the Start button.
- 4. At the link prompt, enter the link number (993).
- Press the Start button. The UI Display will show "run" for a few seconds while the initialization is occurring.
- 6. To perform other diagnostic procedures, press the AC button to return to the chain prompt.
- 7. To exit from the diagnostic mode, switch off the power, then switch on the power.

GP 8 Reprogramming the NVM EEPROMs on the SLCC PWB

Purpose

This procedure is used to restore NVM when an NVM EEPROM fails or is damaged and must be replaced.

Procedure

CAUTION

Do not use this procedure unless there are new or replacement NVM EEPROMs installed on the SLCC PWB per REP 8.1.3, and it is necessary to perform this procedure to complete the repair. Some of the values that are initialized during this procedure are set by the user. This procedure will reset all of these values to the initial settings.

1. Switch on power.

NOTE: If the machine does not start up in normal user mode, resolve any problems as indicated by the fault codes showing on the UI Display before continuing.

- 2. Enter the diagnostic mode using GP 1.
- Initialize NVM.
 - a. Enter the chain-link code (999-990) using GP 2.
 - b. Enter the chain-link code (999-991) using GP 2.
 - Enter the chain-link code (999-992) using GP 2.
 - d. Enter the chain-link code (999-993) using GP 2.
- Refer to Table 1 Reprogramming the NVM EEPROMs on the SLCC PWB. Using GP 2, enter the appropriate values for Country Code (700-165) and Territory (700-338).
- Partially initialize NVM.
 - a. Enter the chain-link code (999-990) using GP 2.
 - b. Enter the chain-link code (999-991) using GP 2.
- Refer to Table 1 Reprogramming the NVM EEPROMs on the SLCC PWB. Enter the appropriate values for all other parameters as listed on the table.
- 7. Switch off the power, then switch on the power to exit from diagnostics mode.

NOTE: If the machine does not start up in normal user mode, resolve any problems as indicated by the fault codes showing on the UI Display before continuing. After resolving the problems, it may be necessary to repeat this procedure. Determine whether this is necessary by checking the NVM values that were entered, and verifying that they are all as listed in the table.

Table 1 Reprogramming the NVM EPROMS on the SLCC PWB

			Machine Configuration				
Parameter Name	Chain	Link	XC(DMO-W)	XC(DMO-W)	XC(DMO-E)	Remarks	Reference
XJ Code			UCN	UCP	UCM		
Machine Part Number			100S12656	100S12657	100S12655		
Product Code			KMA	KMX	KLB		
First 3 Characters of Serial Num-			KMA	KMX	331		
ber							

Table 1 Reprogramming the NVM EPROMS on the SLCC PWB

			Machine Con	figuration				
Parameter Name	Chain	Link	XC(DMO-W) XC(DMO-W)		XC(DMO-E)	Remarks	Reference	
Model Code			KMA	KMX	KLB			
Serial Number Range			KMA469001 -	KMX484001 -	331494001x-			
			KMA484000	KMX494000	331524000x			
Device Type			CPFS	CPFS	CPFS			
Power Supply Voltage			110 V	220 V	220 V			
Download Product ID (Write to PWB)			Ruby2XCb	Ruby2XCb	Ruby2XCb	"Ruby2XCb" is ASCII Code (b = space)		
Configuration			CPS-DD	CPS-DD	CPS-DD			
СРМ			20 ppm	20 ppm	20 ppm			
Country Code	700	165	840	840	826	840:USA 826:UK	Enter appropriate value from Remarks column	
Paper Size Group	700	402	2	2	4	1: Japan, 2:NA, 4:AP, 5:SA	Enter appropriate value from Remarks column	
Device Type	700	337	15	15	15	CPFS:15	Enter appropriate value from Remarks column	
Territory	700	338	2	2	2	0x01:FX 0x02:XC 0x03:XE 0x04:AP	Enter appropriate value from Remarks column	
Machine serial number format	700	700	6	6	6	6	Enter appropriate value from Remarks column	
Product Code #1	700	329	75	75	75			
Product Code #2	700	330	77	77	76			
Product Code #3	700	331	65	88	66			
Product Code #4	700	332	0	0	0		Enter appropriate value as listed in the 3	
Product Code #5	700	333	0	0	0		machine configuration.columns	
Product Code #6	700	334	0	0	0			
Product Code #7	700	335	0	0	0			
Product Code #8	700	336	0	0	0			
DMP Indication	700	701	3	3	3	2:DMP5/6 3:DMP7	Enter appropriate value from Remarks column	
XJ Code #1	709	011	85	85	85			
XJ Code #2	709	012	67	67	67			
XJ Code #3	709	013	78	80	77		Enter appropriate value as listed in the 3	
XJ Code #4	709	014	0	0	0		machine configuration.columns	
Upper 3Byte Serial No. #1	700	297	75	75	51			
Upper 3Byte Serial No. #2	700	298	77	77	51		Enter appropriate value as listed in the 3	
Upper 3Byte Serial No. #3	700	299	65	88	49		machine configuration.columns	
Tray 1 Standard paper size-Orien-	780	203	1:LEF	1:LEF	1:LEF	0:none specified, 1:LEF, 2:SEF	Enter appropriate value from Remarks column	
tation								
Tray 1 Standard paper size-Size	780	204	4:8.5x11 (Let- ter)	4:8.5x11 (Let- ter)	5:A4		Enter appropriate value as listed in the 3 machine configuration.columns	
Tray2 Standard paper size-Orientation	780	205	1:LEF	1:LEF	1:LEF		Enter appropriate value as listed in the 3 machine configuration.columns	
Tray2 Standard paper size-Size	780	206	5:A4	5:A4	5:A4		Enter appropriate value as listed in the 3 machine configuration.columns	
Bypass Tray Standard paper size- Orientation	780	232	2:SEF	2:SEF	2:SEF		Enter appropriate value as listed in the 3 machine configuration.columns	

Table 1 Reprogramming the NVM EPROMS on the SLCC PWB

				Machine Configuration			
Parameter Name	Chain	Link	XC(DMO-W)	XC(DMO-W)	XC(DMO-E)	Remarks	Reference
Bypass Tray Standard paper size- Size	780	233	39:11x17	39:11x17	4:A3		Enter appropriate value as listed in the 3 machine configuration.columns
Platen Fast Scan REGI Adjustment	715	021				Initial Value: 120	Refer to the NEC Serial Number Plate which is on the back of the IIT
Platen Slow Scan REGI Adjust- ment	715	020				Initial Value: 120	Refer to the NEC Serial Number Plate which is on the back of the IIT
EXIT	650	015	2	2	2	0: Simplex M/C 1: - 2: Duplex M/C	Enter appropriate value as listed in the 3 machine configuration.columns
All Tray-Laser Side REGI	606	020				Initial Value: 50	Adjust using ADJ 10.3.1
Lead REGI Adjustment-All Tray	620	001				Initial Value: 50	
END Video Enable Timing Adjustment	606	058	14	14	14	Initial Value: 6	Enter appropriate value as listed in the 3 machine configuration.columns

GP 9 Printing Internal Test Patterns

Purpose

This procedure describes how to print test patterns stored in memory.

Test Pattern Overview

Seven test patterns are stored in machine memory. These can be used for the following purposes:

- to check image quality
- to verify the operation of IOT components independently from the IIT
- to check IOT alignment

Test Pattern Printing Procedure

Perform the following steps to print the test patterns:

- 1. Enter the Diagnostics Mode using GP 1.
- 2. At the chain prompt, enter 998.
- 3. Press the Start button.
- At the link prompt, enter the link number of the desired test pattern as listed in Table 1 Internal Test Patterns.
- 5. Press the Start button. The UI will display run and the test pattern will print. When the test pattern printing has completed, the UI display will return to the link prompt.
- To print another test pattern enter the link number of the desired test pattern as listed in Table 1 Test Print Codes and press the Start button.
- 7. To return to the chain prompt, press the AC button.

Table 1 Internal Test Patterns

Chain	Link	Sub- System	Test Pattern Name	Description		
998	901	IOT	Blank Sheet	Blank sheet for IOT test		
998	921	Controller	Controller Test Print	20 mm grid		
998	941	IPS	IPS/FS increment	Density gradient bars - process direction		
998	942	IPS	IPS/SS increment	Density gradient bars - cross process direction		
998	943	IPS	Whole Consistent Density	Entire sheet is same density		
998	944	IPS	IPS Shading	Shading gradient across entire sheet		
998	945	IPS	IPS Grid	approximately 11mm grid		

GP 10 Printing a Configuration Report

Purpose

This procedure describes how to print a Configuration Report.

Configuration Report Overview

The Configuration Report provides data for the 5020/DN in the following categories:

- System Settings
 - Machine Information

Model

Serial Number

Product Code

Machine Name

Software Version

Controller ROM

IOT ROM

II KOW

SJFI (firmware module not used in 5020/DN)

SSMI (firmware module not used in 5020/DN)

- Machine Configuration
- Maintenance (this section does not include counters)
- Print Service Settings
 - General

Number of Impressions (The total number of sides printed in user mode. It does not include pages printed in Diagnostic Mode.)

Page Description Language

Fonts

- Memory
- Paper Tray Attributes
- Banner Sheet Settings
- Copy Service Settings
 - Copy Defaults
 - Copy Control
- Communication Settings

Ethernet Rated Speed

Connection Type

MAC Address

- TCP/IP
- WebDAV
- SNMP
- Internet Services
- SOAP
- USB 2.0
- LPD

Port 9100

Procedure

The Configuration Report is printed without entering into Diagnostic Mode.

- 1. Switch on the power and wait until the machine has completed startup.
- 2. Press and hold the 2 button on the Numeric Keypad for at least 5 seconds.
- 3. While continuing to press the 2 button, press the Stop button.
- 4. The word "run" will appear on the UI Display.
- 5. The Configuration Report will then print to the output tray.

GP 11 Checking Firmware Versions

Purpose

This procedure provides two methods for checking the firmware versions of the machine.

Procedure Overview

There are two methods of checking the firmware versions of the machine. The first method is to read the version levels from a Configuration Report. The second method is to read the values directly from NVM.

Procedure

Method 1: Determining Firmware Versions Using the Configuration Report

- 1. Print a Configuration Report using GP 10.
- Read the firmware versions from the "Software Versions" section of "System Settings".
 The versions of the following firmware modules are available:
 - Controller ROM
 - IOT ROM
 - IIT ROM
 - SJFI (this firmware module is not used in the 5020/DN)
 - SSM (this firmware module is not used in the 5020/DN)

Method 2: Determining Firmware Versions Directly from NVM

- Access NVM using GP 6.
- 2. Refer to Table 1 Firmware Revision Levels. Using GP 2, enter the chain-link codes listed in the table to read the firmware revision levels
- After entering the chain-link code and pressing the Start button, the Major Version level will be displayed on the UI.
- 4. Press the Start button a second time to display the Minor Version level.
- 5. Press the Start button a third time to display the Revision level.
- 6. Press the Start button a fourth time to return the display to the link prompt.

Table 1 Firmware Revision Levels

Firmware Module Name	Chain	Link
Controller Firmware	998	961
IIT (IISS) Firmware	998	962
IOT (MCU) Firmware	998	963

GP 12 Checking Serial Number and Product Code

Purpose

This procedure provides four methods of determining the serial number and two methods of determining the product code.

Checking the Serial Number

The serial number is located in three places on the machine:

On the Data Plate on the Rear Cover.

NOTE: If the Rear Cover must be replaced, it is not necessary to save the data plate which has the machine serial number on it, since the serial number can be found in two other locations.

- On a bar code sticker at the left rear of the machine, which can be seen by opening the Left Hand Cover and looking toward the back.
- In NVM on the machine (two methods).

Method 1: Determining the Serial Number Using the Configuration Report

Print a Configuration Report using GP 10. The serial number is listed under System Settings on the Configuration Report.

Method 2: Determining the Serial Number Directly from NVM

- 1. Print or make a copy of Table 1 Checking the Serial Number and Product Code.
- 2. Enter the diagnostic mode using GP 1.
- 3. Refer to Table 1 Checking the Serial Number and Product Code. Enter the chain-link codes for the three NVM parameters named Serial Number 1, Serial Number 2 and Serial Number 3 in the machine using the Numeric Keypad. As each code is entered, record the value in NVM at that location in the blank columns of the table printed or copied in the previous step, and note the column(s) that contain that number.
- Compare the numbers from the previous step, to the column entries. One of the columns will contain all three of the numbers.
- Refer to Table 1 and the parameter named "First 3 Characters of Serial Number". The three character code listed in the column with the three matching numbers is the code for the first three characters of the serial number.
- 6. Enter the chain-link code for the parameter named "Serial Number 4" and record that NVM value at that location. Repeat this for the remaining rows of the serial number.
- 7. Refer to Table 2 Conversion Table NVM Value to Digit. Find the entry in the column named "NVM Data" for the first of the numbers recorded in the previous step, and record the number for that row from the next column named "Numeric Equivalent". Repeat this process for the remaining 5 values. The 6 numbers in order from the 4th to 10th are the unique numeric serial number of the particular machine you are working with.

Checking the Product Code

The Product Code can be determined using either of two methods:

Method 1: Determining the Product Code Using the Configuration Report

Print a Configuration Report using GP 10. The Product Code is listed under System Settings on the Configuration Report.

Method 2: Determining the Product Code Directly from NVM

- Print or make a copy of Table 1 Checking the Serial Number and Product Code.
- 2. Enter the diagnostic mode using GP 1.
- 3. Refer to Table 1 Checking the Serial Number and Product Code. Enter the chain-link codes for the three NVM parameters named "Product Code 1", "Product Code 2" and "Product Code 3" in the machine using the Numeric Keypad. As each code is entered, record the value in NVM at that location in the blank columns of the table printed or copied in the previous step, and note the column(s) that contain that number.
- Compare the numbers from the previous step, to the column entries. One of the columns will contain all three of the numbers.
- 5. Refer to Table 1 and the parameter named "Product Code". The three character code listed in the column with the three matching numbers is the Product Code.

NOTE: If none of the three columns matches the numbers from the previous step, determine which is the correct product code for the machine using Method 1 of this procedure, and enter the appropriate numbers into NVM.

Table 1 Checking the Serial Number and Product Code

			Machine Config		
Parameter Name	Chain	Link	XC(DMO-W)	XC(DMO-W)	XC(DMO-E)
Product Code			KMA	KMX	KLB
Product Code 1	700	329	75	75	75
Product Code 2	700	330	77	77	76
Product Code 3	700	331	65	88	66
First 3 Characters of Serial Number			KMA	KMX	331
Serial Number 1 (alpha-numeric)	700	297	75	75	51
Serial Number 2 (alpha-numeric)	700	298	77	77	51
Serial Number 3 (alpha-numeric)	700	299	65	88	49
Serial Number 4 (digit)	660	032			
Serial Number 5 (digit)	660	033			
Serial Number 6 (digit)	660	034			
Serial Number 7 (digit)	660	032			
Serial Number 8 (digit)	660	033			
Serial Number 9 (digit)	660	034			
Serial Number 10 (digit)	660	035			

Table 2 Conversion Table - NVM Value to Digit

NVM Data	Numeric Equivalent
48	0
49	1
50	2
51	3
52	4
53	5
54	6

Table 2 Conversion Table - NVM Value to Digit

NVM Data	Numeric Equivalent
55	7
56	8
57	9

GP 13 Checking Total Print Count

Purpose

This procedure provides two methods of determining the total machine print count.

Procedure

Method 1: Checking Total Print Count Using the Configuration Report

Print a Configuration Report using GP 10. The total print count is listed as "Number of Impressions" under Print Service Settings.

Method 2: Determining Total Print Count Directly From NVM

- Enter the diagnostic mode using GP 1.
- 2. Enter the chain code 998 and press the Start button.
- Enter the link code 960 and press the Start button. The number that appears in the UI display will be the left 3 digits of the total print count.

NOTE: The number may be 1, 2 or 3 digits. For example if the number is 22, then there have been at least 22,000 prints made.

Press the Start button a second time. The number that appears in the UI display is the right 3 digits of the total print count.

NOTE: The number may be 1, 2 or 3 digits. For example if the number is 305, then, using the number from the example in the previous step, there have been at 22,305 prints made.

5. Press the Start button a third time to return to the link prompt.

GP 15 Upgrading or Re-loading the Controller Firmware

Purpose

To enable usable fault code presentation, the Controller Firmware module must be version 1.201.6 or higher. The Controller Firmware module is loaded into one of the EEPROMs soldered onto the SLCC PWB.

- This procedure provides a process for downloading and installing an upgrade to machine control firmware.
- This procedure may also be used to re-load the firmware as part of a troubleshooting and repair process.

NOTE: This procedure requires the use of a computer that meets one or both of the following criteria:

- The computer can be connected to the internet.
- The computer has a USB interface and a cable is available to connect between the computer and the machine.

Procedure

Overview

The upgrade process is done in several steps as follows:

- 1. Obtain firmware upgrade package
- 2. Decompress firmware package
- 3. Determine upgrade package file type
- Download to machine via USB Connection or via Internet Connection (Ethernet)

Obtain Firmware Upgrade Package

The firmware may be obtained in several ways as follows:

- Download from the website http://www.support.xerox.com.
- 2. On CD (via service distribution channels)
- 3. Some other form of media such as a USB Flash Drive (via service distribution channels)

Decompress Firmware Package

If the firmware package is compressed, it must be decompressed. After the file is decompressed, place the decompressed file in a know location.

Determine Upgrade Package File Type

The upgrade package file may be one of two types. Check the file name extender or the file Properties to determine which type the file is.

- If the package has a ".EXE" name extender, (the file type is "application" in Properties), use the "Down Load Firmware to Machine (via USB)" process.
- If the package is a ".BIN" type file, use the "Down Load Firmware to Machine (via internet)" process.

Down Load Firmware to Machine (via USB)

- Connect the computer to the USB connector at the right rear corner of the machine.
- 2. If the Add USB Device window appears on the computer, click the Cancel button when the New Hardware Detected Wizard window is displayed.
- 3. Double-click the executable file of the decompressed Firmware to run it.

- 4. When the Xerox System Software Download Tool window is displayed, ensure that the Device Type is "WorkCentre 5020/DN" and that the "USB" radio button is selected, then click the Update button.
- The Xerox System Software Download Tool Status window will display "Transferring", then "Updating".

NOTE: If a problem is encountered during the firmware download, the Status window will display "Failed". If that occurs, perform the following steps:

- a. Check the USB connection and replace the cable if possible
- b. Repeat the download procedure
- c. If the procedure fails a second time, download or otherwise obtain a new copy of the firmware package, and attempt the firmware download using a different computer.
- d. If the firmware download fails again, replace the SLCC PWB (PL 8.1).
- When the firmware download is finished, the Status window will display "Completed" and the machine will restart. After the machine has restarted, the firmware upgrade will be complete.

Down Load Firmware to Machine (via Internet)

- 1. Connect the computer to the same LAN that the machine is connected to.
- Use GP 10 to print a Configuration Report. Note the machine IP address that is listed on the Configuration Report.
- Open a web browser on your computer, and enter the machine's IP address in the Address box to access CentreWare Internet Services.
- 4. Click the Properties tab.
- On the collapsible menu of the Menu Panel, click the Services folder, and then the Machine Software folder.
- Click on the Upgrades icon, then click on the Enabled check box and click the Apply button

NOTE: If prompted, enter the System Administrator user ID and password and click OK. By default the user ID is 11111 and the password is not set (do not enter anything into the password box).

- 7. Click on the Manual Upgrades icon and browse to the location of the BIN file.
- 8. Select the file, and click on the Open button.
- Click on the Install Software button. After a few seconds, a window will appear with instructions for completing the process.

NOTE: If a problem is encountered during the firmware download, perform the following steps:

- a. Check the connection to the LAN.
- b. Repeat the download procedure.
- c. If the procedure fails a second time, download or otherwise obtain a new copy of the firmware package, and attempt the firmware download using a different computer.
- d. If the firmware download fails again, replace the SLCC PWB (PL 8.1).
- 10. When the firmware download is finished, the machine will restart. After the machine has restarted, the firmware upgrade will be complete.

NOTE: The CentreWare Internet Services window will not indicate the update progress, nor will it show when the upgrade is complete.

GP 16 Checking HFSI Item Counters

Purpose

This procedure provides a means of checking HFSI counters for paper feeding components and the Drum Cartridge CRU.

Procedure

Read out the HFSI counters using this procedure. Before beginning the procedure either print or copy Table 2 HFSI Items Fill In Table

Perform the following steps to read out the data for each counter:

- 1. Enter the Diagnostics Mode using GP 1.
- 2. At the chain prompt, enter the chain number (630).
- Refer to Table 1 HFSI Items or Table 2 HFSI Items Fill In Table to find the link numbers for the counters. Start at the first entry in the table and proceed in consecutive order. Enter the link number of the item.
- 4. Press the Start button.
- In the second row and second column of the table, record the two digit number that appears.

NOTE: HFSI counters are listed as a series of two digit numbers. Enter "0 0" if the number is "0". If the number is a single digit, enter the number into the table with a leading "0" as "0 (digit)".

- 6. Press the Start button. The link prompt will appear.
- 7. Repeat Steps 3 to 6 and proceed with entering data into the table for each chain link code in Table 1 HFSI Items, in order from left to right, and top to bottom.
- 8. When the table is complete and the 12 Tray Counter cells are filled, you can read the HFSI counter values in each row from left to right as 8 digit numbers.
- 9. Press the AC button to return to the chain prompt.
- 10. Enter the chain number (633) for the remaining percentage of the CRU.
- 11. Press the Start button.
- 12. Enter the link number (004) for the remaining percentage of the CRU.
- 13. Press the Start button.
- 14. Record the number that appears in the UI Display, in the table of HFSI counter values as the "Drum Cartridge Remaining Percentage".

Table 1 HFSI Items

Chain	Link	Parameter	Range
630	006	Tray 1 - 1st and 2nd digits of HFSI counter	0~99
630	016	Tray 1 - 3rd and 4th digits of HFSI counter	0~99
630	026	Tray 1 - 5th and 6th digits of HFSI counter	0~99
630	036	Tray 1 - 7th digit of HFSI counter	0~3
630	007	Tray 2 - 1st and 2nd digits of HFSI counter	0~99
630	017	Tray 2 - 3rd and 4th digits of HFSI counter	0~99
630	027	Tray 2 - 5th and 6th digits of HFSI counter	0~99
630	037	Tray 2 - 7th digit of HFSI counter	0~3
630	004	Bypass Tray - 1st and 2nd digits of HFSI counter	0~99
630	014	Bypass Tray - 3rd and 4th digits of HFSI counter	0~99
630	024	Bypass Tray - 5th and 6th digits of HFSI counter	0~99
630	034	Bypass Tray - 7th digit of HFSI counter	0~3
633	004	Drum CRU Remain Percentage	0~100

Table 2 HFSI Items Fill-In Table

Chain-Link	630-036	630-026	630-016	630-006
Tray 1 Counter				
Chain-Link	630-037	630-027	630-017	630-007
Tray 2 Counter				
Chain-Link	630-034	630-024	630-014	630-004
Bypass Tray Counter				
Chain-Link		633-004		
Drum Cartridge Remaining Percentage				

Specifications

This subsection contains the performance specifications of the WorkCentre 5020/DN, the multifunctional machine that has copier, printer, and scanner functions.

System Overview

The WorkCentre 5020/DN consists of IIT, IOT, PANEL, Controller, and Printer I/F. The summary of each system is as follows:

1. IIT (Image Input Terminal)

Scans documents for copying and scanning. The IIT resolution is 600 dpi at multi-level.

2. IOT (Image Output Terminal)

Writes video data on paper for copying and printing. A laser xerography system is applied. Images can be written at 600dpi on paper up to 11"x 17"/ A3 size.

3. UI (User Interface)

Displays various settings, errors.

4. Controller

Controls the whole machine. Processes and stores input from IIT, printer I/F, and images to be output to IOT. Controls UI as well.

5. Printer I/F (GDI)

Receives data from the computer and passes it to the IOT (printer). In scan mode, outputs image data to the computer.

6. I/F (NetWork)

Network I/F receives data from the computer and passes the data to IOT (printer).

For scanning, Network I/F outputs image data to the network.

7. User Registration and Department Management

Administrators can register users who can use a machine, so that only limited users can use the machine and that each user's operation history can be managed and recorded.

GDI

Number of Account: 10 users

Password: 3 digits, Numerical only

Network

Number of Account: 99

Password: 4-12 columns digits, Numerical only.

8. Duplex Copy

Duplex copies can be made using simplex documents or duplex documents. Simplex copies can be made using duplex documents.

Side images (input: output): Simp:simp, *Dup:Simp, Simp:Dup, *Dup:Dup.

*Dup (DADF needed)

Standard Specification of IIT, IOT, and Control UI

Table 1

IIT	CCD Image Sensor capable of scanning at multi-level 600 dpi
IOT	20 PPM 600 dpi Paper Feeding: 1 tray 250 sheets Bypass Tray 50 sheets Paper Output: Face down tray (250 sheet capacity)
PANEL	LED

Standard Specification of Controller

Table 2

Item	NW Controller	Notes
CPU	MPC8311E	
Standard memory	SDRAM 128M	
	Serial EEPROM 4Mbit	
Extended slot	Not supported	

Standard Specification of Host

Table 3

Item	Description	GDI
Host I/F	USB (2.0) x 1	Yes

Product Codes

Table 4

Product Code	CODE	_	Prt/ Scan	Dup	IIT	Platen	DADF	FINAL ASSY

Options

Table 5

Product name	Installation	
	User	Code

Table 5

Tray 2 Module	0	EL200735
Stand	0	EL200736

Warm-up Time

In an ambient environment of 22°C and 55% R.H. and in the power off or power save mode, the machine will reach a "ready to copy" condition within 45 seconds.

Low Power Mode

When the machine is not operated for a certain period of time, the machine enters Low Power Mode automatically.

Control Panel: LED: ON

Device Control: The fuser reduces its temperature.

Printer I/F: Activated status.

After a certain amount of time in Standby Mode, the machine enters Low Power Mode. This time can be changed by a software program (setting range: 0-240 minutes). The factory default is 5 minutes.

Low Power Mode is cancelled when a button is pressed on the Control Panel or when a printer iob is received.

Sleep Mode (Off Mode)

The machine operates as follows to save power when the machine is in Low Power Mode for a specified time:

- Control Panel: LED: OFF, Power Save Button: ON
- Device Control: Power is turned off (except for warm-up).

After a certain amount of time in Low Power Mode, the machine enters Sleep Mode. This time can be changed by a software program (setting range: 0-240 minutes). The factory default is 5 minutes.

Sleep mode is cancelled when a button is pressed on the Control Panel or when a printer job is received. When Sleep Mode is cancelled, the machine returns to Standby Mode.

Time to transfer to Standby Mode shall be 45 seconds or less (on standard configuration).

FCOT (Warm Start)

FCOT: First Copy Output Time

FCOT shall be 7.5 sec or less. FCOT (Warm Start) is measured from the time the Start button is pressed (when the engine receives a START command in the "STAND-BY" state) till the trail edge of the first sheet is fed out, under the following conditions:

- Documents are placed on Platen
- Power is on

- Engine motor is not running
- Fuser is ready
- Laser scanner motor (ROS: Raster Output Scanner) is ready
- Paper size and feeding orientation: A4 or 8.5x11 LEF
- Paper tray: Tray 1

FPOT

FPOT: First Print Output Time

FPOT shall be 12sec or less

Resolution

Copy print: 600 X 600 dpi. Printer print: 600 X 600 dpi.

Software Download

Controller Part: User can upgrade the software by downloading the object from the PC.

IOT Engine Part

MCU: Replacing the board. Optional Tray: Replacing the board.

Count-up for Print/Copy jobs: GDI

The purpose of the Count-up Meter is to categorize the number of sheets of print output by print job, copy job, and test prints (Diagnostic Mode). The Count-up Meter is not guaranteed as a meter for billing purposes. The Count-up Meter is managed by the device unit and can be confirmed with device UI.

The Count-up Meter has only one total counter.

Table 6

Job type	Counter type	Description
Сору	Total Counter	Counter of copy job
Print		Counter of print job
Diagnostic		Test print in Diagnostic mode (It doesn't contain the Diagnostic test print with Type-Di.)

Report: One (Printer).

GDI: not supported.

Timing of Count-up

MCU increments the billing counter when the trail edge of the paper passes the Exit Sensor.

The number of counter increments is as follows:

Table 7

Paper size	Number of counter increments	
	Billing	Life
A3, B4, 8K, 11x17, Non-fixed	1	2
A4 or less (A4, Letter,)	1	1

Electrical/Mechanical Characteristics

Flectrical Characteristics

Table 8

	Input Voltage (VAC)	Frequency (Hz)	Rated input cur- rent Max (A)	Power Consumption* Spec (VA)	Sleep Mode (Off Mode) Reference
220 - 240V	240+10% 220-10%	50/60+/-3 Hz	6A	1320VA (Max)	6 W (Max)
110 - 127V	110+10% 110-10%	50/60 +/-3 Hz	12A	1320VA (Max)	6 W (Max)

^{*}Power consumption is specified assuming full configuration.

Rated Power Consumption

GDI

Table 9 GDI

Mode	Power consumption	Configuration
In Low Power Mode	CP: 107W or less 91W or less	20cpm 16cpm
In Sleep Mode (Off Mode)	DC: 6W or less CP: 20W or less	
At operation (During printing operation)	110V 12A, 1320VA (Max) 220/240V 6A, 1320VA (Max)	Full configuration

Network

Table 10 NetWork

Mode	Power consumption	Configuration
In Low Power Mode	CP: 107W or less	
In Sleep Mode (Off Mode)	CP: 20W or less	

Table 10 NetWork

Mode	Power consumption	Configuration
At operation	110V	Full configuration
(During printing operation)	12A, 1320VA (Max)	
	220/240V	
	6A, 1320VA (Max)	

TEC Method (New E-Star)

Table 11

Config	TEC	
	GDI	Network
	3.0Kwh	-
CP20	6.0Kwh	-

Machine Size/Weight

The machine specified below does not include a drum and toner cartridge.

1. Size

Table 12

Туре	Width (mm)	Depth (mm)	Height (mm)
IOT+IIT+DADF	595+/-5	532+/-5	605+/-5

(Optional Devices)

Table 13

	Width (mm)	Depth (mm)	Height (mm)
Tray 2 Module	551+/-5	522+/-5	130+/-5
Stand	551+/-5	506+/-5	385+/-5

Size of Package:

IBG ADF, DADF: 710x660x840 (mm)

2. Weight

Table 14

	Main body	Configuration
Tray 2 Module	8.8 Kg	Optional tray: 500sheets
Toner cartridge	1.2 Kg	
5020/DN	39 Kg	DADF/IIT/Bypass Tray/Std. tray/Dup including Consumables
Stand	18 Kg	

Storage Environment (According to Egret)

A machine (without CRU and Toner Cartridge) which has been stored in the following environment shall attain the specified performance when installed in the environment specified.

- 1. In operation (guaranteed copy quality environment): 10 32 degrees C @ 15 85% RH
- 2. Shipping and storage conditions:

Table 15

Туре	Transit (48 hrs)	Storage (18 mo)	Comments
Temperature	-29 to 66 degrees C (-20 to 150 degrees F)	-29 to 66 degrees C (-20 to 150 degrees F)	After storage or transit, the machine must normalize to the operating environment before power is applied (this could take up to 4 hours maximum at extreme values).
Humidity	10 - 95% RH	20 - 80% RH	
Altitude	Up to 12,000 m	Up to 3,000 m	

Noise (Sound Power Level: LWAd)

Unit: B

Table 16

	Standby Mode	Operation Mode
Base Machine	4.0	6.8
Full System	4.0	6.8

Impulse Sound Power (FX) Impulse Sound Power Level (LWAI)

LWAI B(A)

Table 17

Base Machine	6.6
Full system	7.1

Chemical Substances

1. Levels of Ozone:

Ozone formed from this product: less than 0.02 mg/m3 (according to C11-705)

Eco-Mark Requirement: 0.02 mg/m3

2004 Version Green Target A Limit: 0.015 mg/m3

2. Airborne Dust Concentration:

Inhaled airborne dust from this product: less than 0.08 mg/m3 (according to C11-705)

Eco-Mark Requirement: 0.075 mg/m3

2004 Version Green Target A Limit: 0.04 mg/m3

Copy Speed

Continuous copy speed at 100% magnification.

Measurement method: Make 11 continuous copies. Measure the time (T, in seconds) from the output of the trail edge of the first sheet of paper to the output of the trail edge of 11th sheet of paper, and convert into copies per 60 seconds: CPM = T/60 (normal paper mode).

Table 18

Paper Size	Paper Tray			
and	Tray 1	Tray 2	Bypass Tray	
Paper Orientation	Plain Paper	Plain Paper	Fixed Mode	
A4 LEF	20	20	10	
8.5" x 11" LEF				
16K LEF				
B5 LEF				
A4 SEF	15	15	10	
8.5" x 11" SEF				
16K SEF				
B5 SEF				
8.5"x 13"SEF 8.5"x	12	12	10	
14" SEF				
Mexico Folio (8.5" x 13.4")				
A3 SEF	10	10	10	
11" x 17" SEF				
8K SEF B4 SEF				
A5 SEF	Not s	upported	10	
5.5" (8.5" SEF)			10	
A5 LEF			Not supported	
5.5" x 8.5" LEF				

Alignment

1. (Full System) IOT + IIT + ADF + DADF

Table 19 Copy Alignment: Specification

Item	Specification SYSTEM 1 Sided	Specification SYSTEM 2 Sided	Application
Lead Edge Registra- tion (mm)	+/- 2.90	+/- 3.80	
Side Edge Registra- tion (mm)	+/- 3.40	+/- 3.90	
Lead Skew (mm)	+/- 2.30	+/- 2.70	280 mm

Table 19 Copy Alignment: Specification

Item	Specification SYSTEM 1 Sided	Specification SYSTEM 2 Sided	Application
Vertical Ratio (%) 100%	+/- 1.40	-1.72	400 mm
Horizontal Ratio (%) 100%	+/- 1.40	-1.72	280 mm
Perpendicularity (mm)	+/- 3.40	+/- 4.00	400 mm
Linearity (Vertical) (mm)	+/- 2.00	-	400 mm
Linearity (Horizontal) (mm)	+/- 1.40	-	280 mm
Linearity (Skew) (mm)	+/- 1.42	-	280 mm
Parallelism	+/- 3.70	-4.00	400 mm

2. (DC) IOT+IIT

Table 20 Copy Alignment: Specification

Item	Specification SYSTEM		Measurement Length
]
	Simplex	Duplex	
Skew H	+/-2.3	+/-2.7	200mm
Perpendicularity	+/-3.7	+/-4.0	400mm
Linearity: V	2.3		400mm
Linearity: H	2.3		280mm
Linearity: D	2.3		283mm
Registration: Lead	+/-2.9	+/-3.8	
Registration: Side	+/-3.4	+/-3.9	
Magnification: V (%)	+/-1.4 (100%) +/-1.56 (50%-99%) +/-1.8 (101%-200%)	+/-1.72 (100%) +/-1.89 (50%-99%) +/-2.42 (101%- 200%)	400mm
Magnification: H (%)	+/-1.4 (100%) +/-1.56 (50%-99%) +/-1.8 (101%-200%)	+/-1.72 (100%) +/-1.89 (50%-99%) +/-2.42 (101%- 200%)	280mm

Paper Supply

All paper trays (excluding Bypass Tray) are universal trays, which are front-loading trays.

1. Capacity

Tray 1: 250 sheets (Business 80gsm/sheet).

The height of a stack of paper shall be 27mm or less.

Tray 2 (optional): 500 sheets (Business 70gsm/sheet).

450 sheets (Business 80gsm/sheet).

The height of a stack of paper shall be 54mm or less.

2. Standard paper

Standard paper is indicated by "Standard Paper" on "Paper List."

Weight

Tray 1: 60gsm to 90gsm

Tray 2: 60gsm to 90gsm

4. Size

Standard paper sizes: A4L/S, A3, B5L/S, B4, 8K, 16KL/S, $8.5 \times 11L/S$, 8.5×13 , 8.5×13.4 (Mexico Folio), 8.5×14 , 11×17

5. Usage rate

Tray 1: 60%

Tray 2: 30%

Bypass Tray (Bypass Tray)

1. Capacity

50 sheets of paper (70 gsm)

2. Paper size and paper orientation

Size and orientation of paper set on Bypass Tray shall be as follows: A4L/S, A3, B5L/S, B4, 8K, 16KL/S, $8.5 \times 11L/S$, 8.5×13 , 8.5×13.4 (Mexico Folio), 8.5×14 , 11×17 , 5.5×8.5 "S, A5S

3. Paper weight

Weight of paper that can be supplied from Bypass Tray is 60g/m2 to 110g/m2.

4. Usage rate

10%

Paper List

Table 21

Media Type	Paper	Code	CIM	Bypass
	Flag Ship (80 gsm)		0	0
Baseline Paper	Xerox Business Multipurpose 4200 20 lb		О	О
	Xerox Xcite (80 gsm)		0	0
	Xerox Xplore (70 gsm)		0	0
	Xerox Premier (80 gsm)		0	0
	Xerox Business (80 gsm)		0	0
	Flag Ship (70/80 gsm)		0	0
Ota e da e d Danier				
Standard Paper	Canary (70/80 gsm)		0	0
	Transmate (70/80 gsm)		0	0
	Jetset (70/80 gsm)		0	0
	HOOPOE(70/80 gsm) (APP Co)		0	0
	Colotec+ 90 gsm		0	0
	Colotec+ 100 gsm			0
	Topgun (70/80 gsm)		0	0
	Plain	3R96002		0
Transparency	Removable Bar Stripe	3R96023	0	
	Xerox	3R12050	0	0
Label			0	0
Recycle Paper			0	0
	Business 80 gsm-4 Hole (Hole on TE)	3R91823		0
Other	Premier A4 80 gsm-4 Hole (Hole on TE)	3R91723		0
	3- Hole (hole on TE)	3R2193		0

Paper backed OHP is out of quality assurance.

Paper Selection

There are two methods of Paper Tray selection:

Direct selection

User selects the paper tray that contains the required type of paper (size and orientation).

2. APS (Automatic Paper Selection) (ADF/DADF only)

MC automatically selects the paper that matches the image size.

Tools

Most maintenance procedures can be done with the following standard tools:

Table 1

No.	TOOL NO. /TOOL NAME	No.	TOOL NO. /TOOL NAME
1	499T 1423 BOX DRIVER 5.5	8	499T 247 TEST PATTERN (A3)
2	499T 355 SCREWDRIVER (+)	9	499T 301 MINI DRIVER
3	499T 2004 ROUND NOSE PLIERS	10	499T 1901 SIDE CUTTING NIPPER
4	499T 2320 S/E TESTER SET		
5	499T 2601 SILVER SCALE (ISO M/N)	12	499T 9507 TESTER LEAD WIRE (Red)
6	499T 8104 FLASHLIGHT (UM-2)	13	499T 9508 TESTER LEAD WIRE (Black)
7	499T 8902 BRUSH	14	499T 353 * STUBBY DRIVER

^{* 499}T 353 STUBBY DRIVER should be used when replacing the ROS ASSEMBLY.

Consumables

Machine CRU Strategy

Machine LCB is designed to interface with a CRUM and Billing Counter on all configurations. The CRUM can be used to provide a "hard stop" capability for markets requiring this feature. The primary uses of the CRUM are to ensure that the CRU being used is correct for the market and service/warranty agreements, store the number of copies made on the CRU, and enforce the end-of-life point. The primary uses of the Counter are to identify the machine's market location, electronically store the machine's serial number, and store the number of copies made on the machine.

Consumable Replacement Intervals

Table 1

ITEM	YIELD/LIFE	STRATEGY/REPLACEMENT
Toner	6K @ 5% area coverage of A4 size Test pattern	Warning/Hard Stop - Warning with approximately 100 copies of toner remaining.
Drum Car- tridge	Hard Stop: 22K @ 5% A4 area coverage for XC Job Size = 4 pages	End of life Warning/Hard Stop - Warning at 16K Hard Stop at 22K (XC)

This specification is applied when the machine is operated under the following conditions:

- Paper: A4 LEF
- Paper Tray: Tray 1
- Copy Mode (not Print Mode)

Glossary of Terms

Table 1

Term	Description
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
AC	Alternating Current is type of current available at power source for machine.
ACT	Advanced Customer Training: teaches customers to perform some of service that is normally performed by Xerox Service Representative.
A/D	Analog to Digital refers to conversion of signal
ADF	Automatic Document Feeder
ADJ	Adjustment Procedure
Bit	Binary digit, either 1 or 0, representing an electrical state.
CCD	Charge Coupled Device (Photoelectric Converter)
CD	1: Circuit Diagram; 2: Compact Disc
CF	Copier Fax
CP	Copier Printer
CPF	Copier Printer Fax
Chip	Integrated Circuit (IC)
CRU	Customer Replaceable Unit
CVT	Constant Velocity Transport
DADF	Duplexing Automatic Document Feeder
DC	Direct Current is type of power for machine components. Machine converts AC power from power source to DC power.
DC	Digital Copier
DMM	Digital Multimeter is generic name for meter that measures voltage, current, or elec-
DIVIIVI	trical resistance.
Duplex	2-sided printing or copying
EME	Electromagnetic Emissions are emitted from machine during normal operation and power of these emissions are reduced by machine design features.
ERU	Engineer Replaceable Unit
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostatic potential.
FS	Fax Scanner
FS	Fast Scan (direction) - Inboard - to - Outboard
ESS	Electronic Sub-System
ENG	English
2TM	Two Tray Module
FAX	Facsimile
FIC	Final Integration Center
GND	Ground
HFSI	High Frequency Service Item
	High Voltage Power Supply

Table 1

Term	Description
Hz	Hertz (Cycles per second)
IIT	Image Input Terminal - the Scanner/CCD portion of the machine
IOT	Image Output Terminal - the ROS/Xero/paper handling/ fusing portion of the machine
IQ	Image Quality
KC	1000 copies
LCD	Liquid Crystal Display
LE	Lead Edge of copy or print paper, with reference to definition of term TE
LED	Light Emitting Diode
LEF	Long Edge Feed
LTR	Letter size paper (8.5 x 11 inches)
LUT	Look Up Table - array of NVM locations that store process control data
LVPS	Low Voltage Power Supply
MF	Multi-Function
MN	Multinational
MPT	Multi Purpose Tray
NBCR	New Book Scanner Control Relay
NIC	Network Interface Card
NSC	New Scanner Controller
NVM	Non Volatile Memory
OEM	Original equipment manufacturer
OGM	On-going Maintenance
PC	Personal Computer
PL	Parts List
PO	Part of (Assembly Name)
PS	Post Script
PSW	Portable Standard Workstation
PWB	Printed Wiring Board
PWS	Portable Workstation for Service
PJ	Plug Jack (electrical connections)
RAM	Random Access Memory
RAP	Repair Analysis Procedure for diagnosis of machine status codes and abnormal conditions
R/E	Reduction/Enlargement refers to features selection or components that enable reduction or enlargement
REP	Repair Procedure for disassembly and reassembly of component on machine
RIS	Raster Input Scanner
ROM	Read Only Memory
ROS	Raster Output Scanner - Device that transfers digitally processed image, using laser light, to photoreceptor.
SAD	Solid Area Density

Table 1

Term	Description
SCP	Service Call Procedure
SEF	Short Edge Feed
Self- test	An automatic process that is used to check Control Logic circuitry. Any fault that is detected during self-test is displayed by fault code or by LEDs on PWB.
SIMM	Single Inline Memory Module used to increase printing capacity
Simplex	Single sided copies
FS	Fast Scan (direction) - LE - to - TE
TE	Trail Edge of copy or print paper, with reference to definition of term LE
UM	Unscheduled Maintenance
UI	User Interface
USB	Universal Serial Bus
W/	With - indicates machine condition where specified condition is present
W/O	Without - indicates machine condition where specified condition is not present
XBRA	Xerox Brazil
XC	Xerox Corporation
XE	Xerox Europe - also referred to as ESG (European Solutions Group)
XLA	Xerox Latin America
XMEX	Xerox Mexico

7 Wiring Data

85119	:

Chain 1 Standby Power	7-3
Chain 2 Mode Selection	7-5
Chain 3 Machine Run Control	7-6
Chain 4 Start Power	7-8
Chain 5 DADF	7-9
Chain 6 Imaging	7-14
Chain 7 Paper Supplying	7-17
Chain 8 Paper Transportation	7-19
Chain 9 Marking	7-24
Chain 10 Fusing and Copy Transportation	7-27
Wirenets	
Wirenets	7-31
P/J Locations	
P/J Locations	7-41

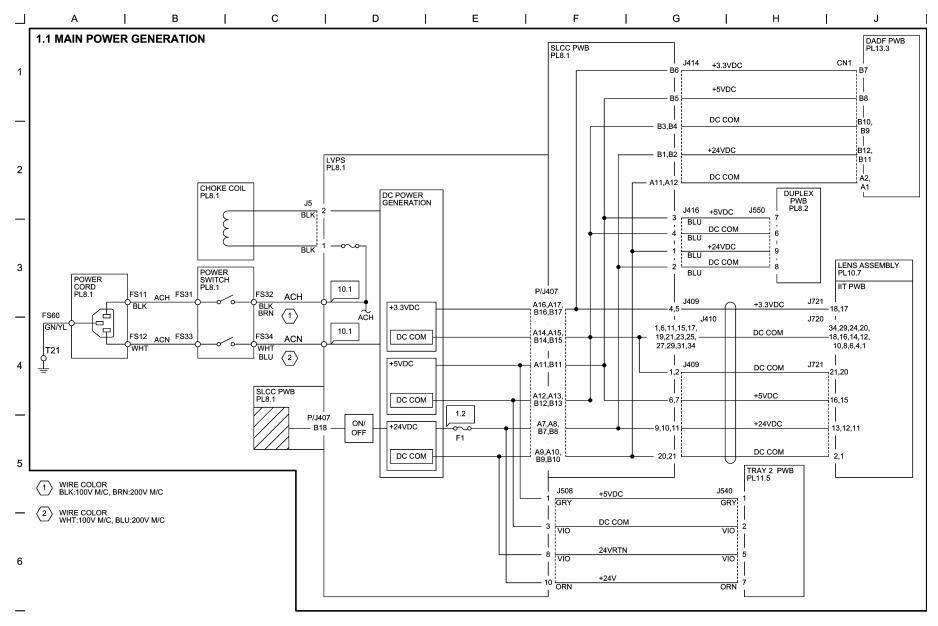


Figure 1 BSD 1.1 Main Power Generation

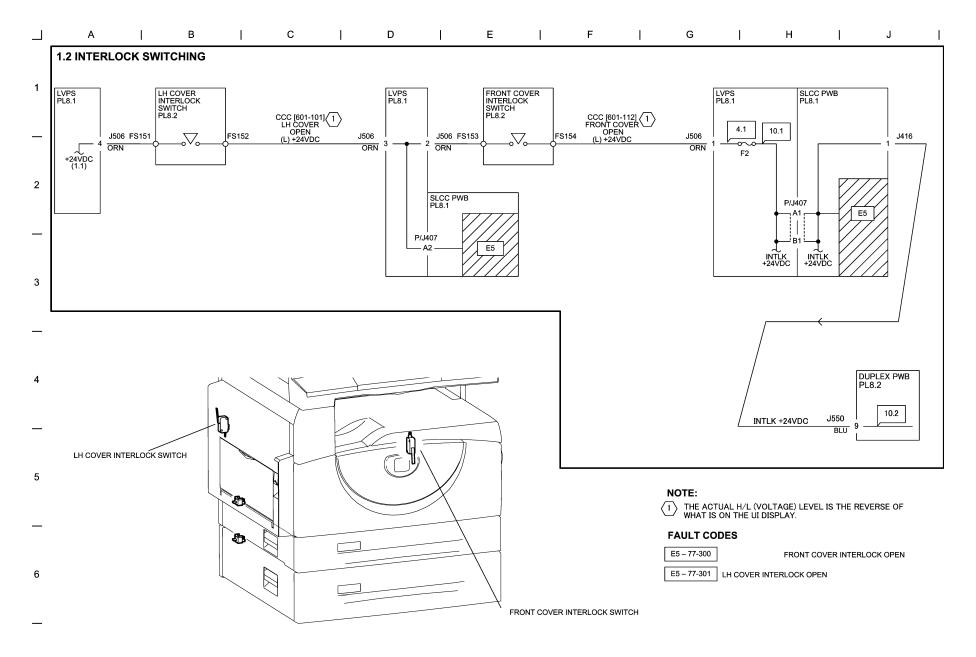


Figure 2 BSD 1.2 Interlock Switching

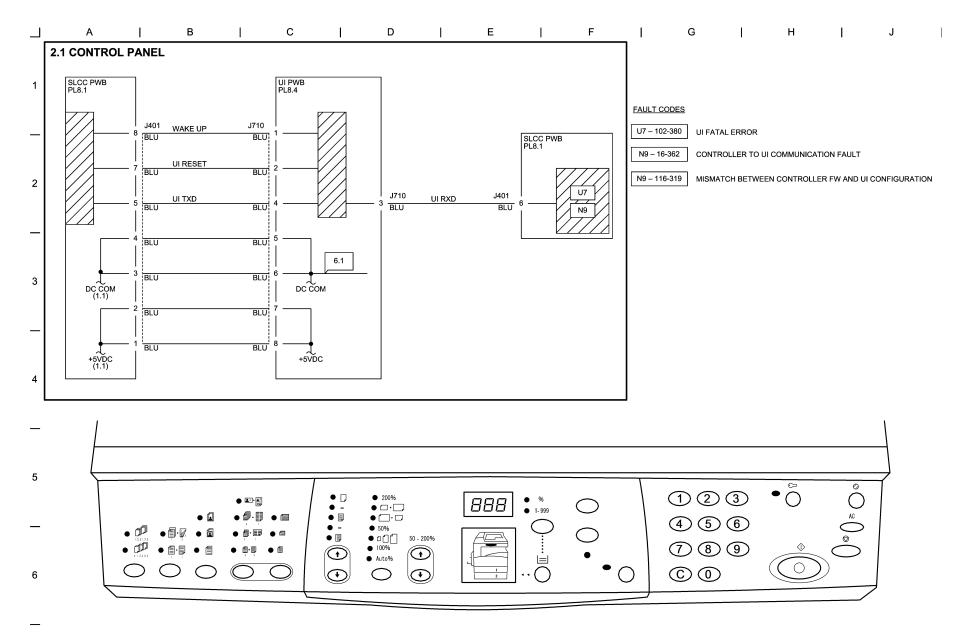


Figure 1 BSD 2.1 Control Panel

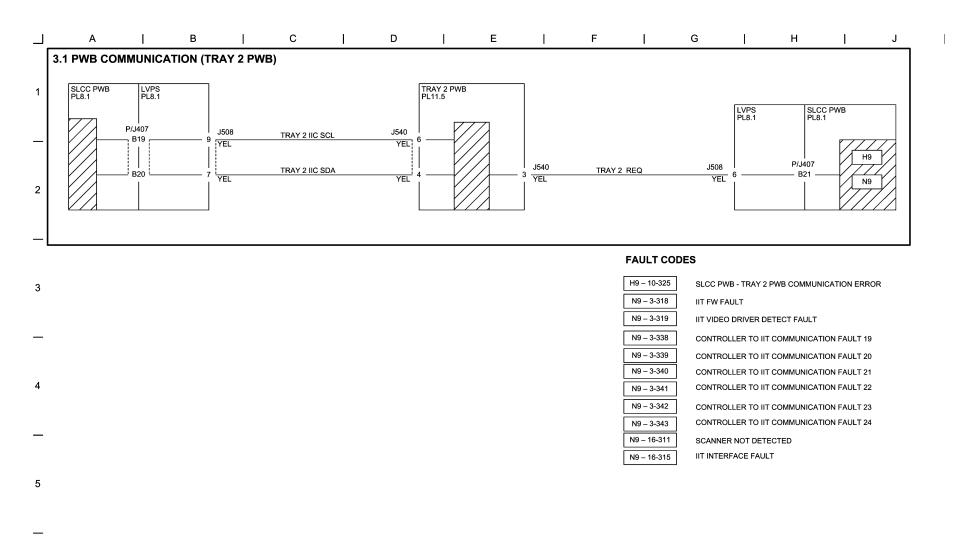


Figure 1 BSD 3.1 PWB Communication (Tray 2 PWB)

6

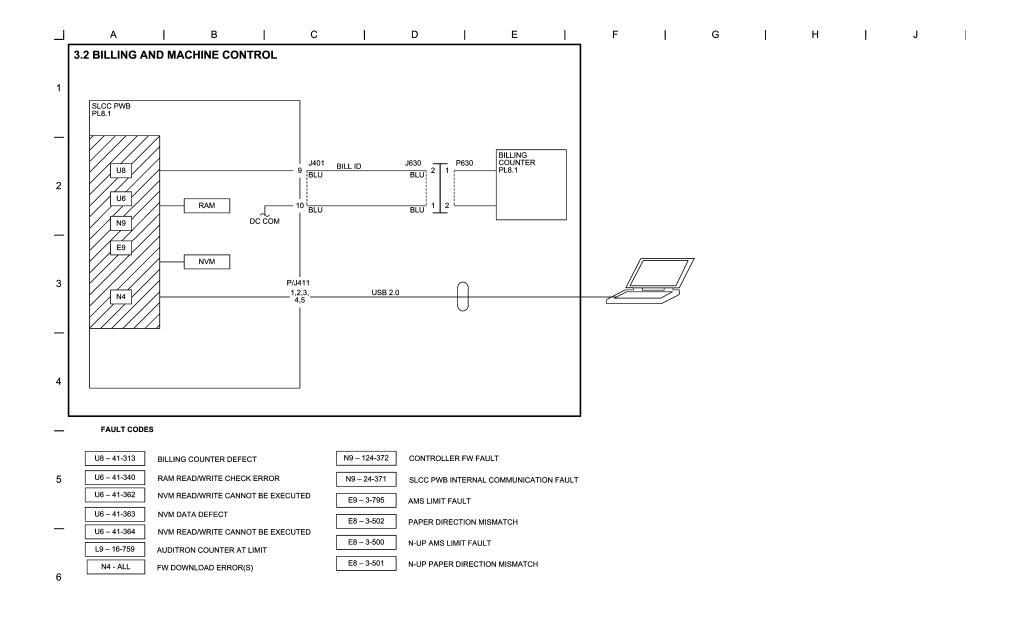


Figure 2 BSD 3.2 Billing and Machine Control

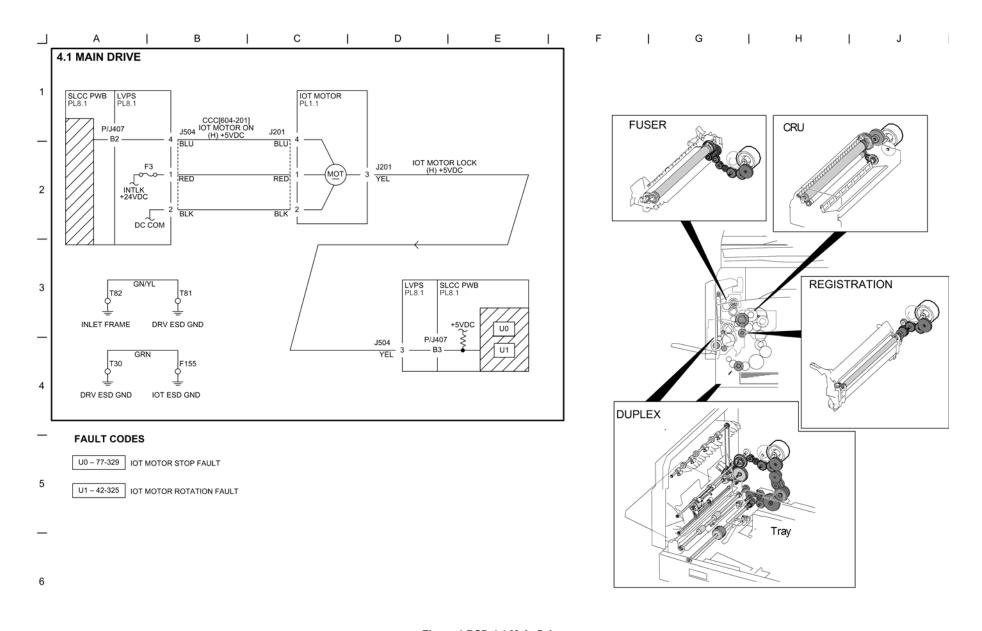


Figure 1 BSD 4.1 Main Drive

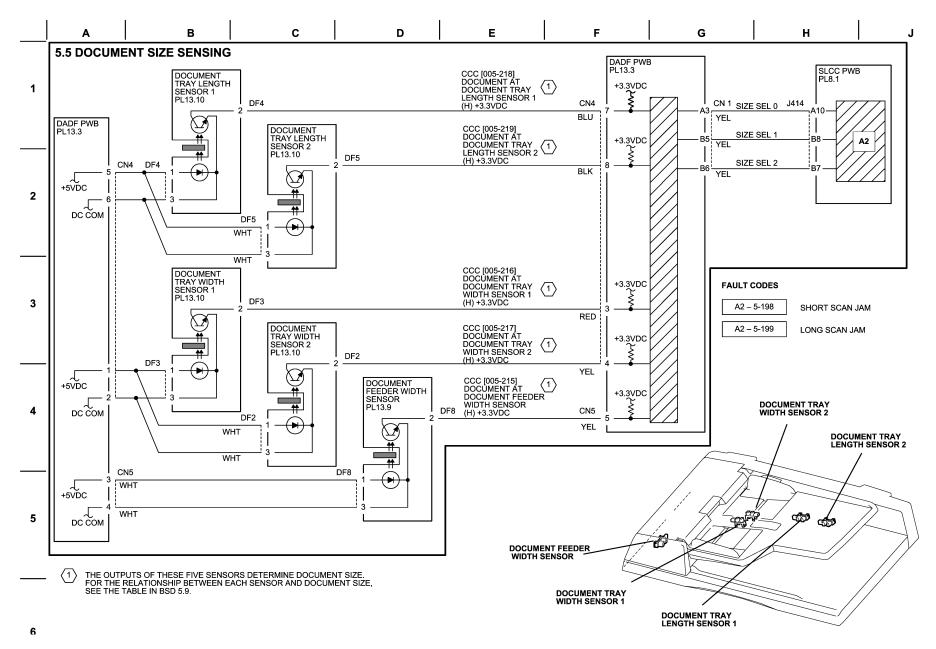


Figure 1 BSD 5.5 Document Size Sensing

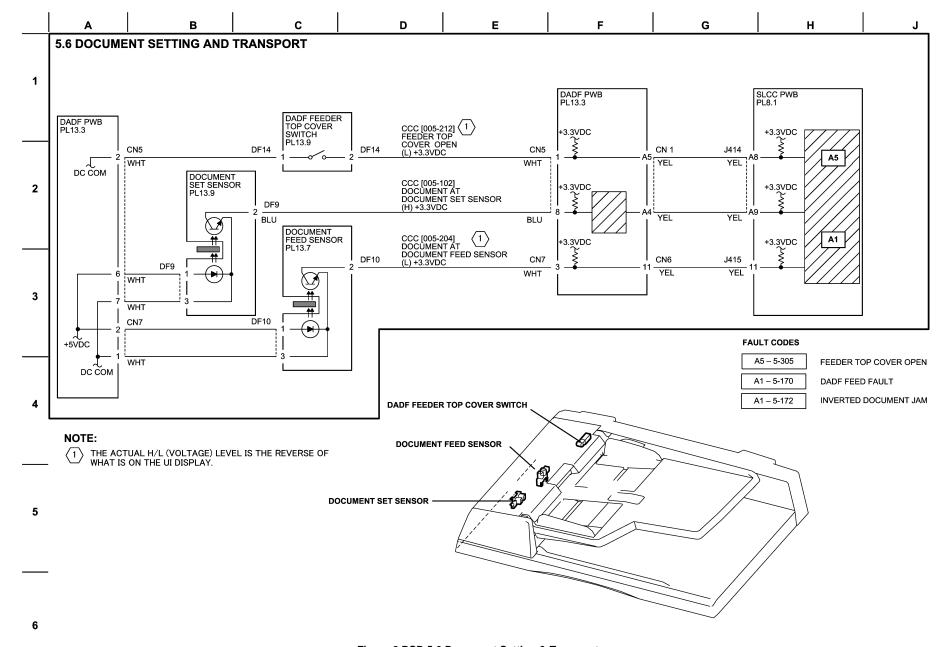


Figure 2 BSD 5.6 Document Setting & Transport

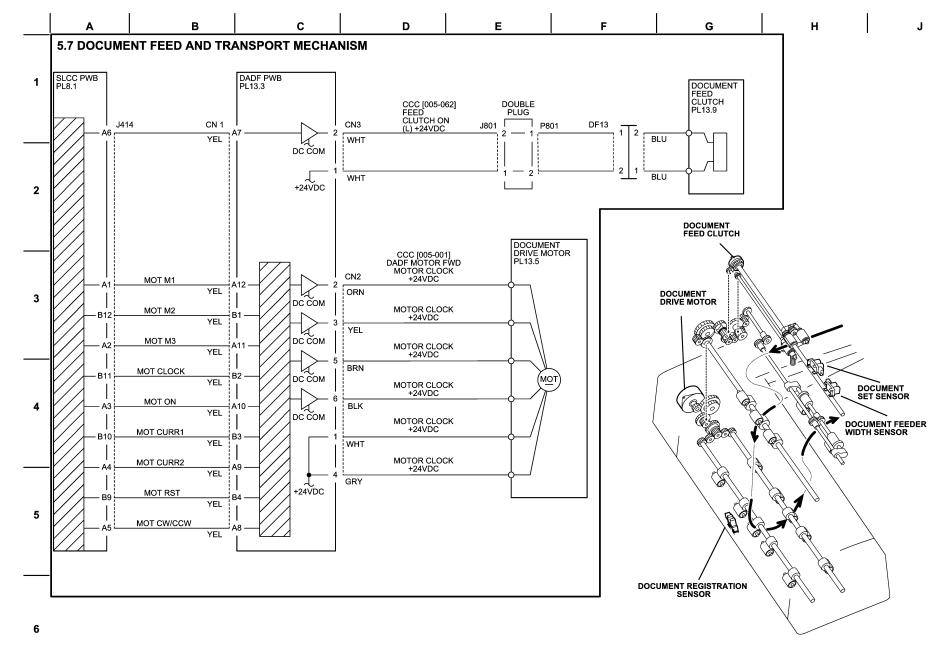


Figure 3 BSD 5.7 Document Feed & Transport Mechanism

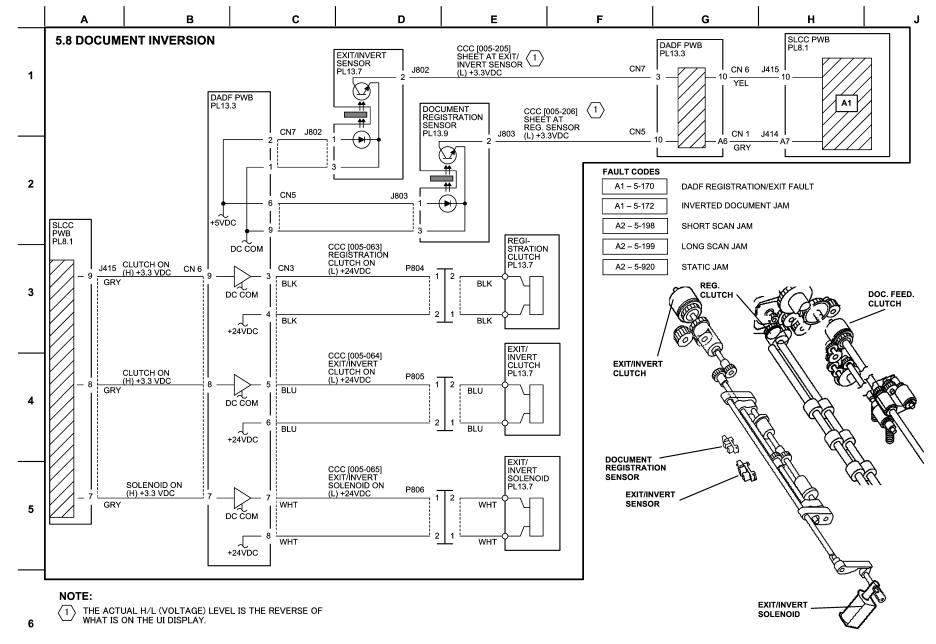
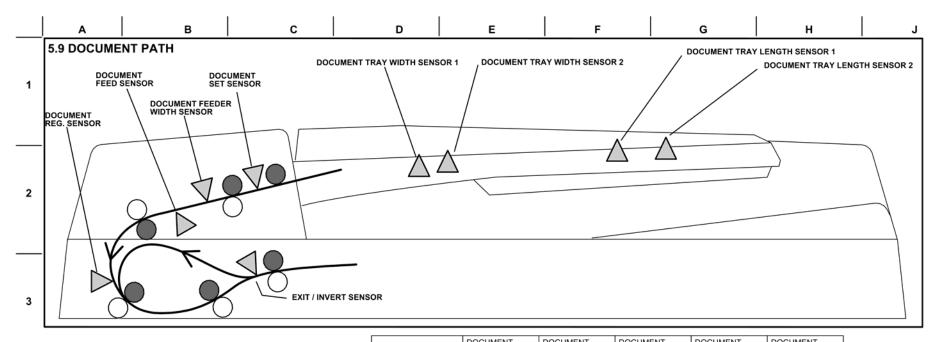


Figure 4 BSD 5.8 Document Inversion



THE RIGHT TABLE SHOWS THE RELATION BETWEEN HIGH/LOW OF EACH DOCUMENT SIZE SENSOR AND DOCUMENT SIZE.

THE STANDARD SIZE OF A DOCUMENT IS SENSED AT THE TIMING DOCUMENT FEEDER WIDTH SENSOR DETECTS IT AFTER IT IS FED.

DOCUMENT SIZE	DOCUMENT FEEDER WIDTH SENSOR	DOCUMENT TRAY WIDTH SENSOR 1	DOCUMENT TRAY WIDTH SENSOR 2	DOCUMENT TRAY LENGTH SENSOR 1	DOCUMENT TRAY LENGTH SENSOR 2
5.5"X8.5"SEF	L	L	L	L	L
A5 SEF	L	н	L	L	L
B5 SEF	L	н	L	н	L
A4 SEF	L	н	н	н	L
A5 LEF	L	н	н	L	L
5.5"X8.5"LEF	L	L	н	L	L
8.5"X11"SEF	L	L	н	н	L
8.5"X13"SEF	L	L	н	н	н
8.5"X14"SEF	L	L	н	н	н
B5 LEF	Н	н	н	L	L
B4 SEF	Н	н	н	н	Н
EXECUTIVE LEF	Н	L	н	L	L
16K LEF	н	L	н	L	L
8K SEF	Н	L	н	н	Н
8.5"X11"LEF	Н	н	L	L	L
11"X17"SEF	Н	н	L	н	н
A4 LEF	Н	L	L	L	L
A3 SEF	Н	L	L	н	Н

Figure 5 BSD 5.9 Document Path

5

6

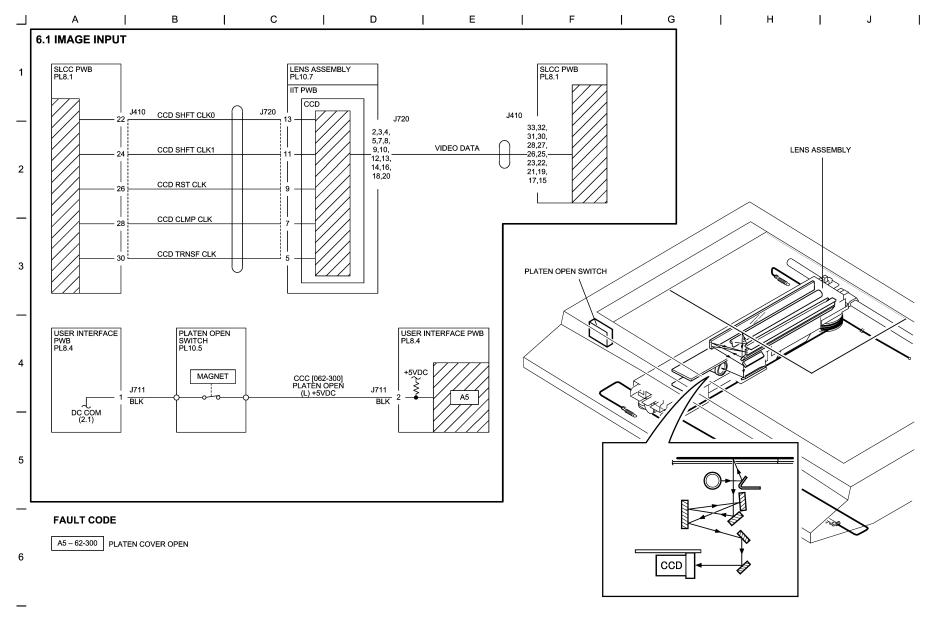


Figure 1 BSD 6.1 Image Input

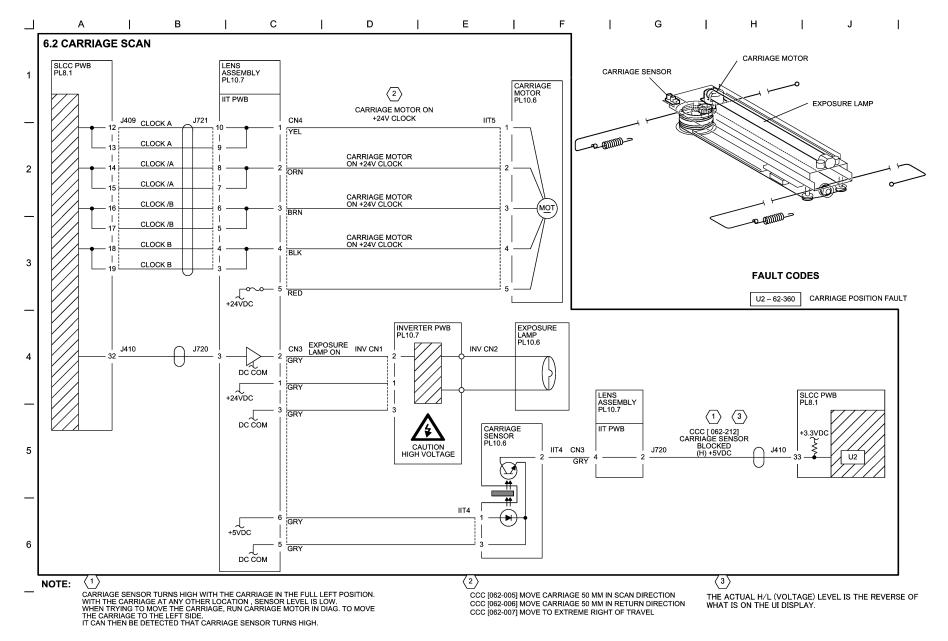


Figure 2 BSD 6.2 Carriage Scan

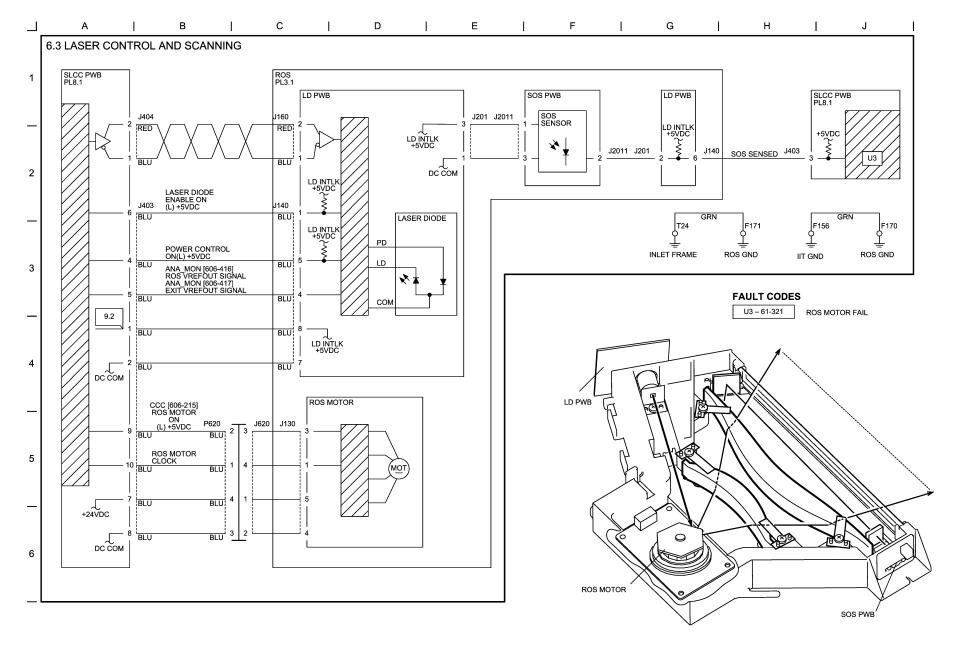


Figure 3 6.3 BSD Laser Control and Scanning

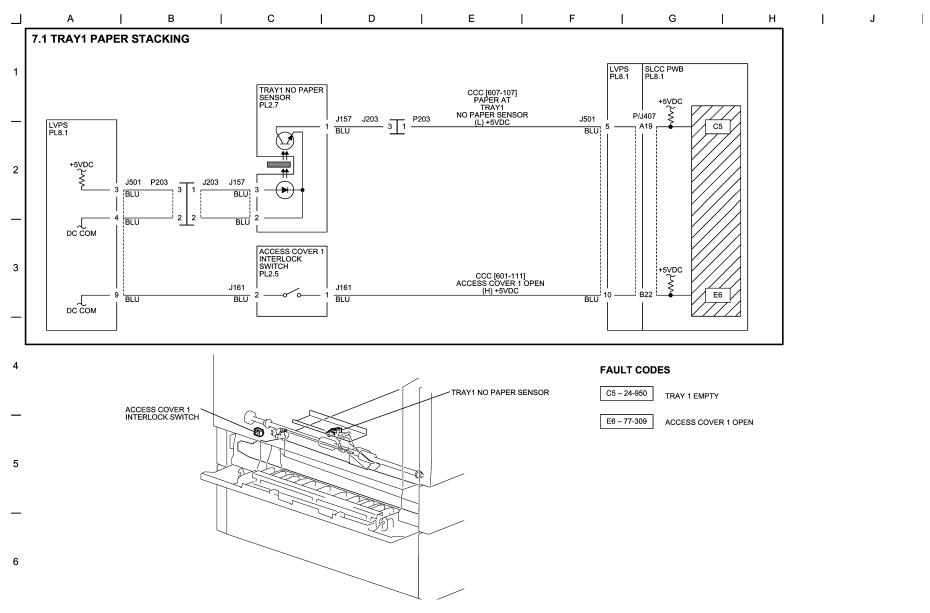


Figure 1 BSD7.1 Tray 1 Paper Stacking

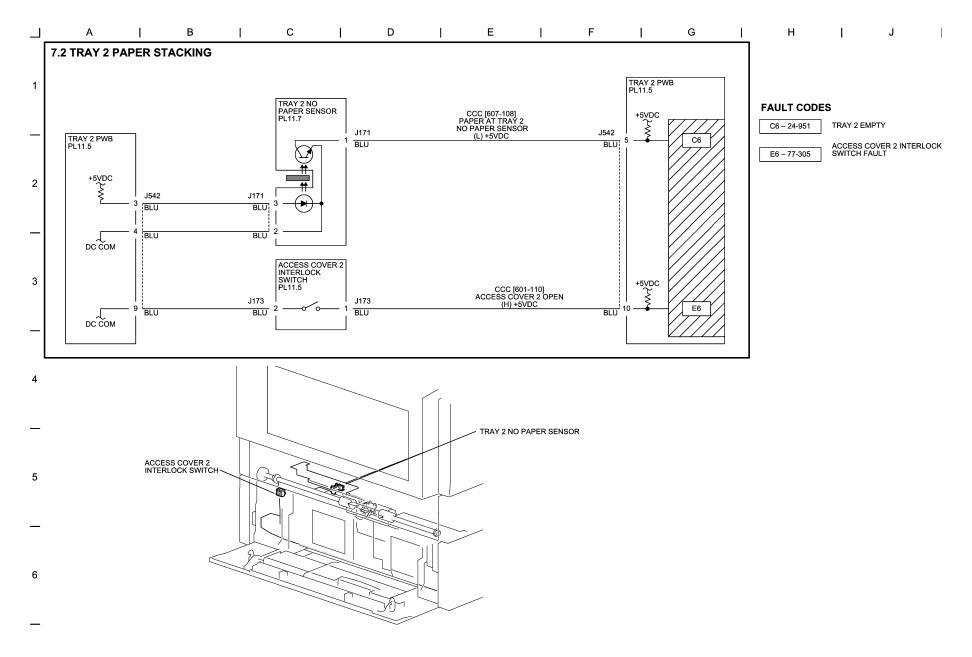


Figure 2 BSD 7.2 Tray 2 Paper Stacking

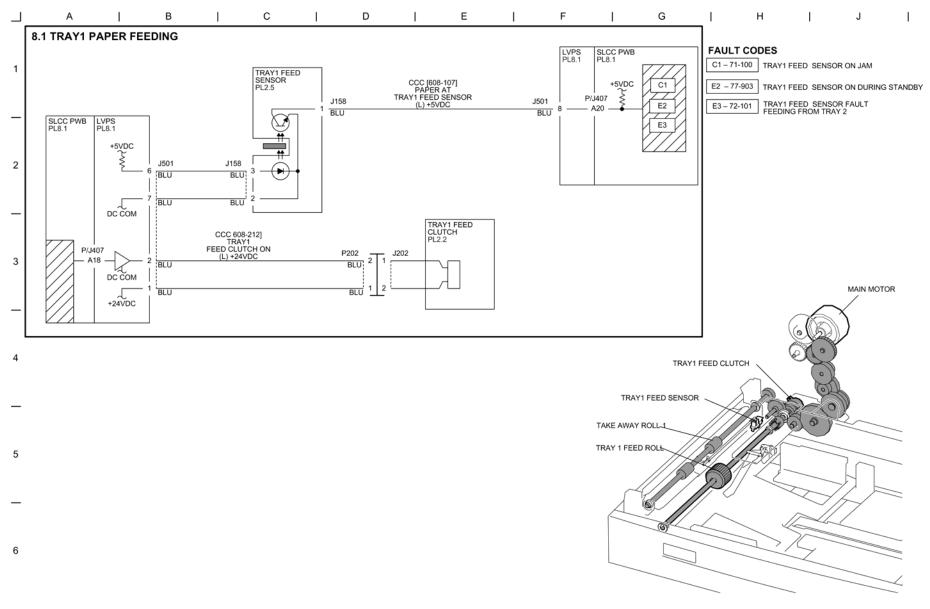


Figure 1 BSD 8.1 Tray 1 Paper Feeding

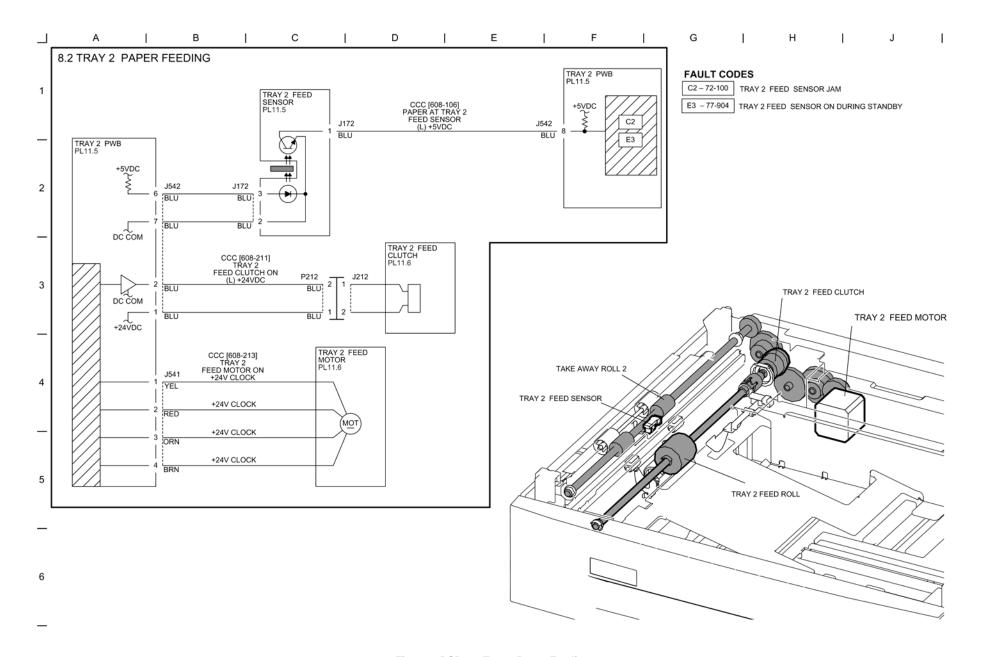


Figure 2 BSD 8.2 Tray 2 Paper Feeding

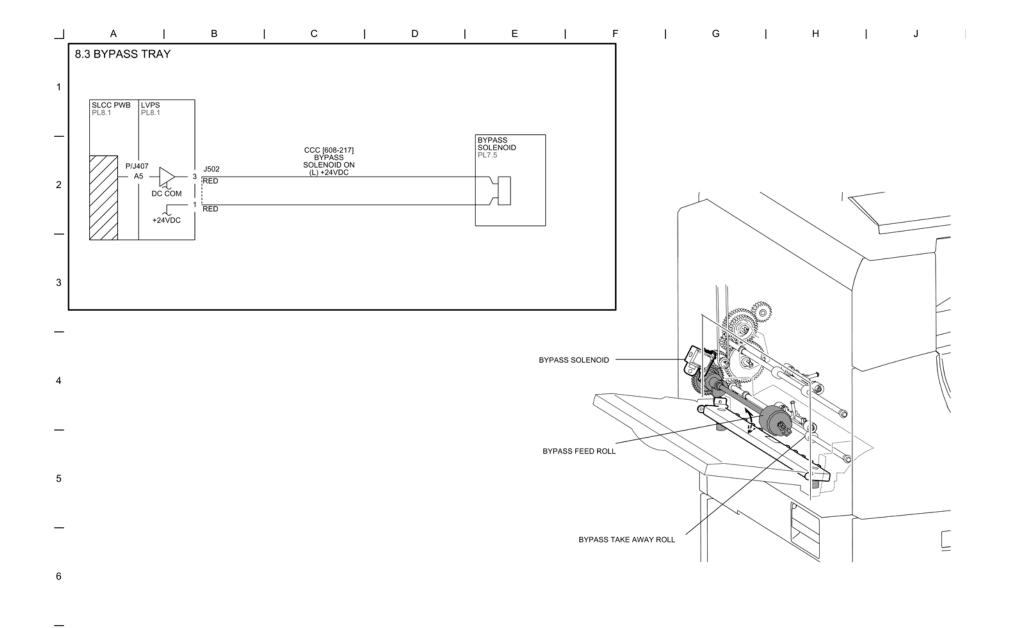


Figure 3 BSD 8.3 Bypass Tray

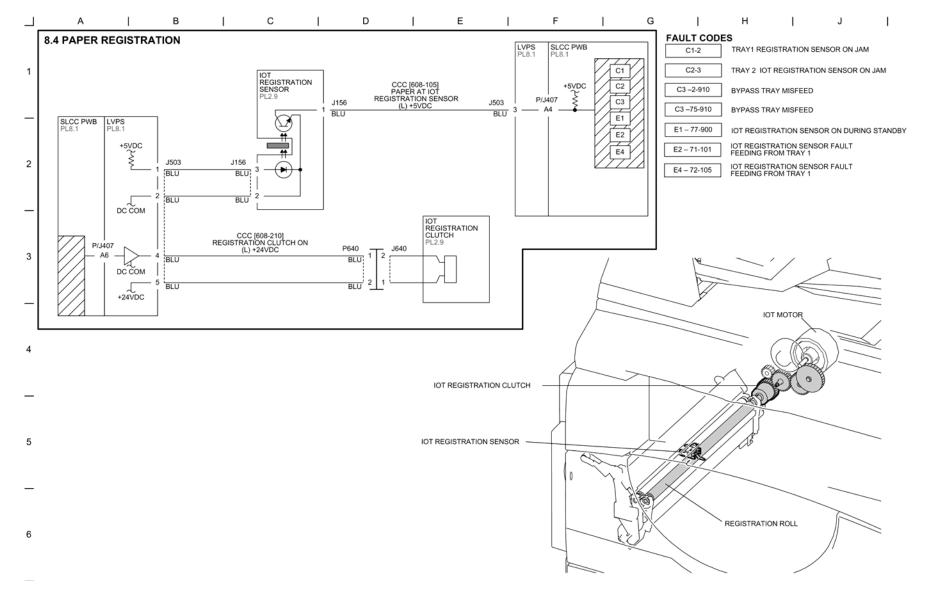


Figure 4 BSD 8.4 Paper Registration

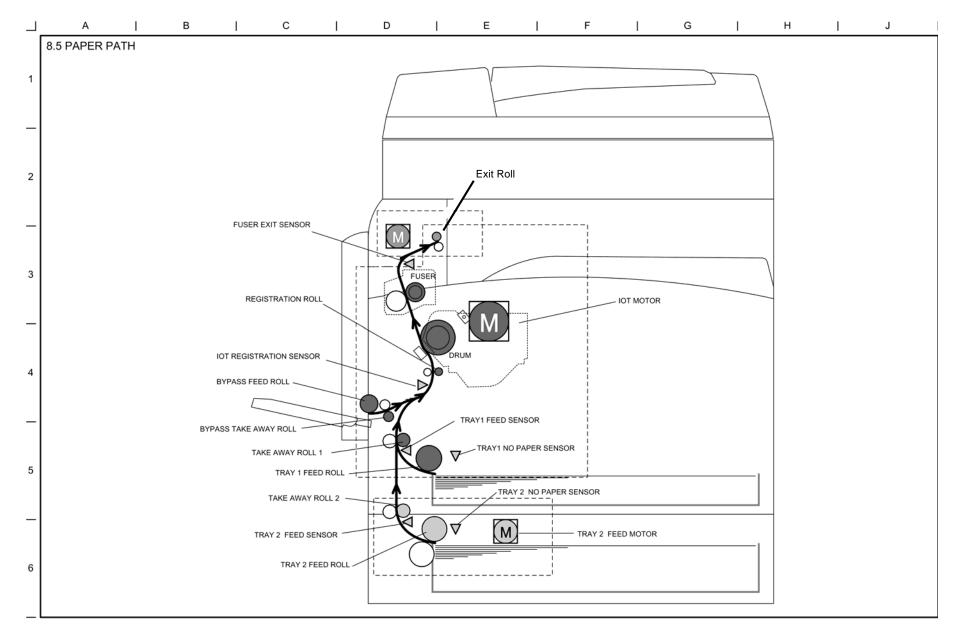
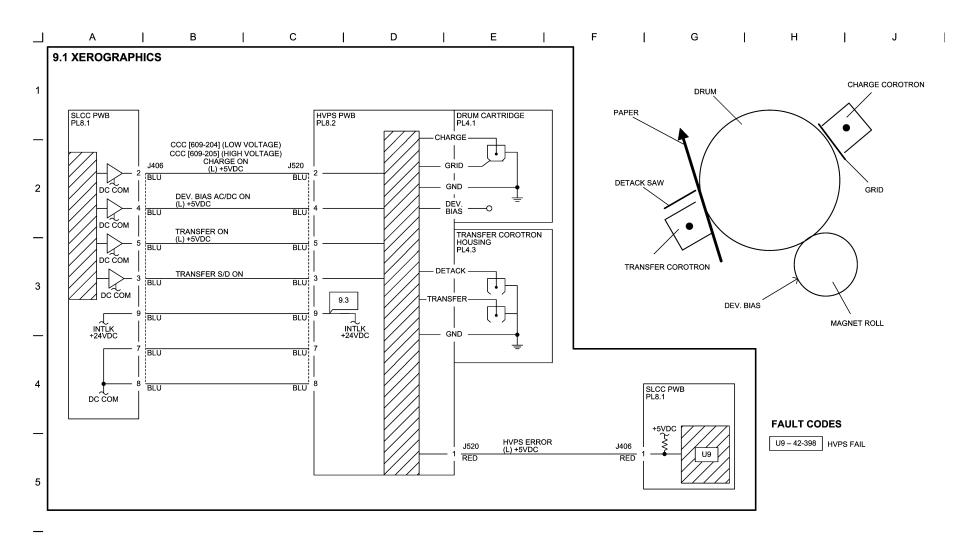


Figure 5 8.5 Paper Path



6

Figure 1 BSD 9.1 Xerographics

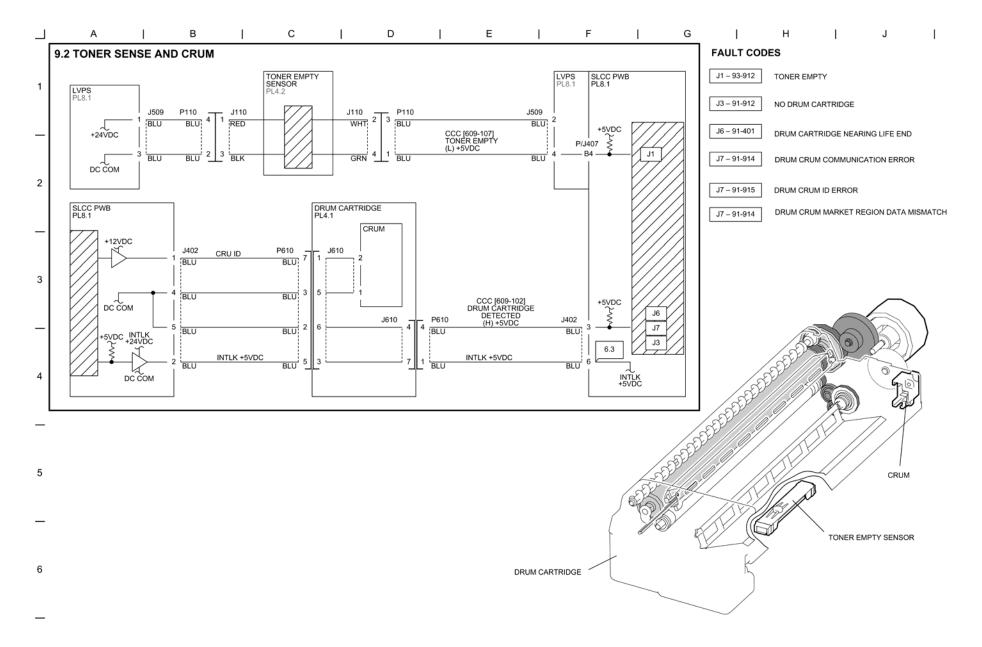


Figure 2 BSD 9.2 Toner Sense and CRUM

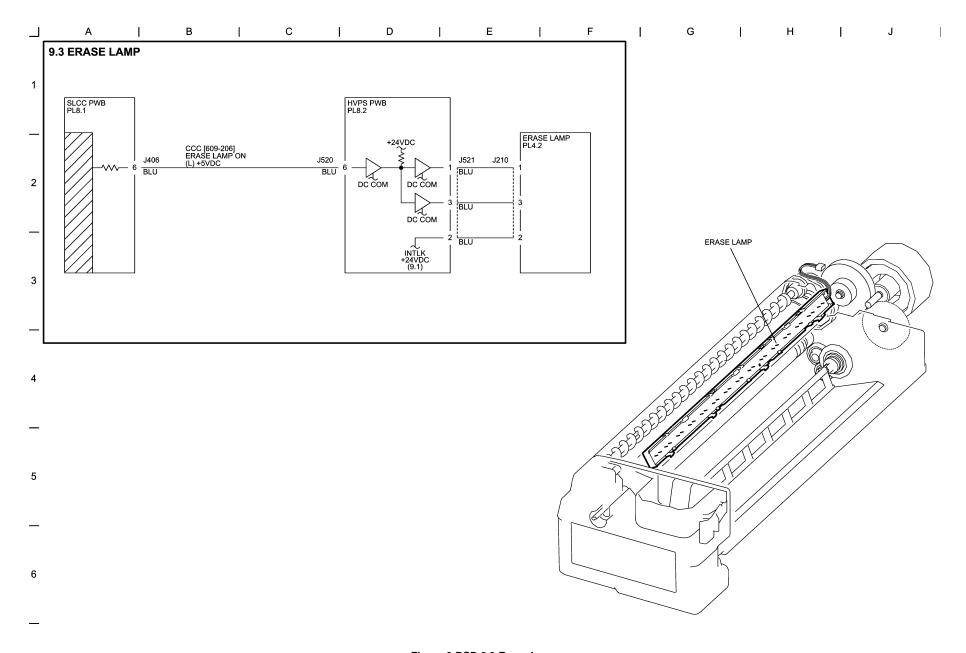


Figure 3 BSD 9.3 Erase Lamp

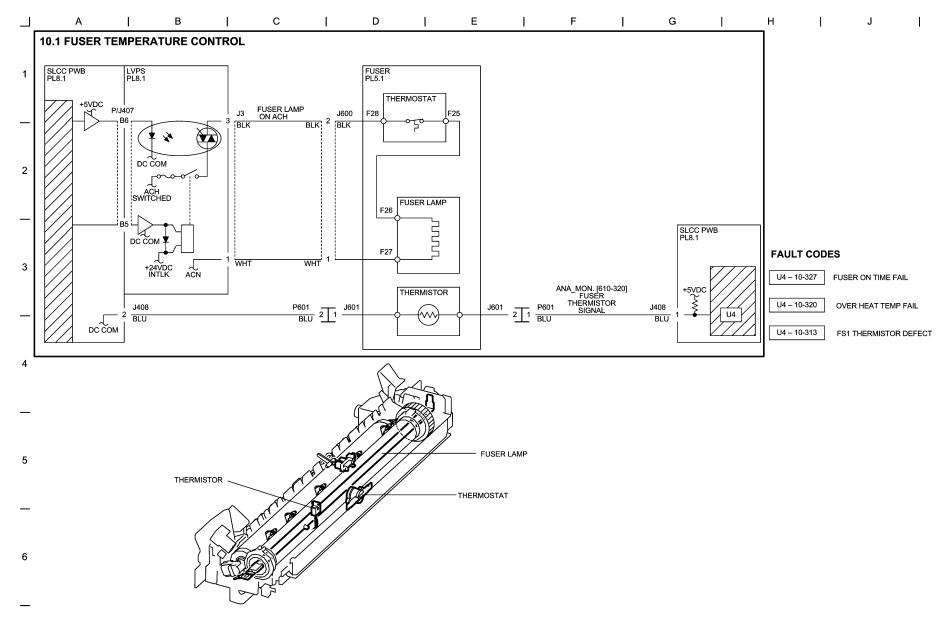
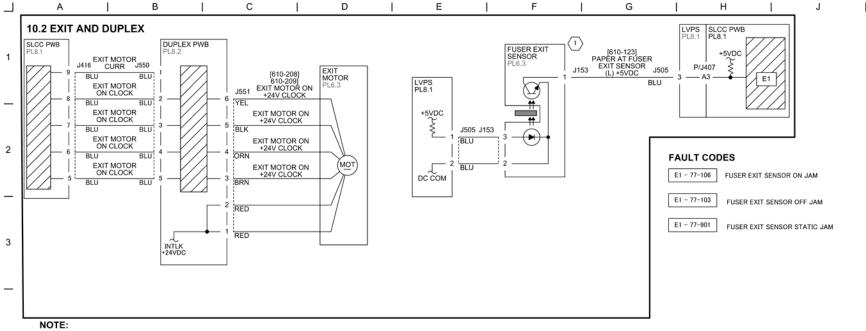


Figure 1 BSD 10.1 Fuser Temperature Control



THE ACTUAL H/L (VOLTAGE) LEVEL IS THE REVERSE OF WHAT IS ON THE UI DISPLAY.

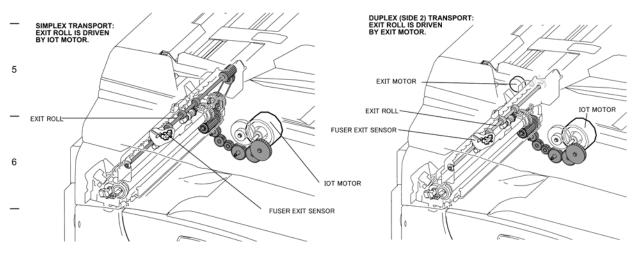


Figure 2 BSD 10.2 Exit and Duplex

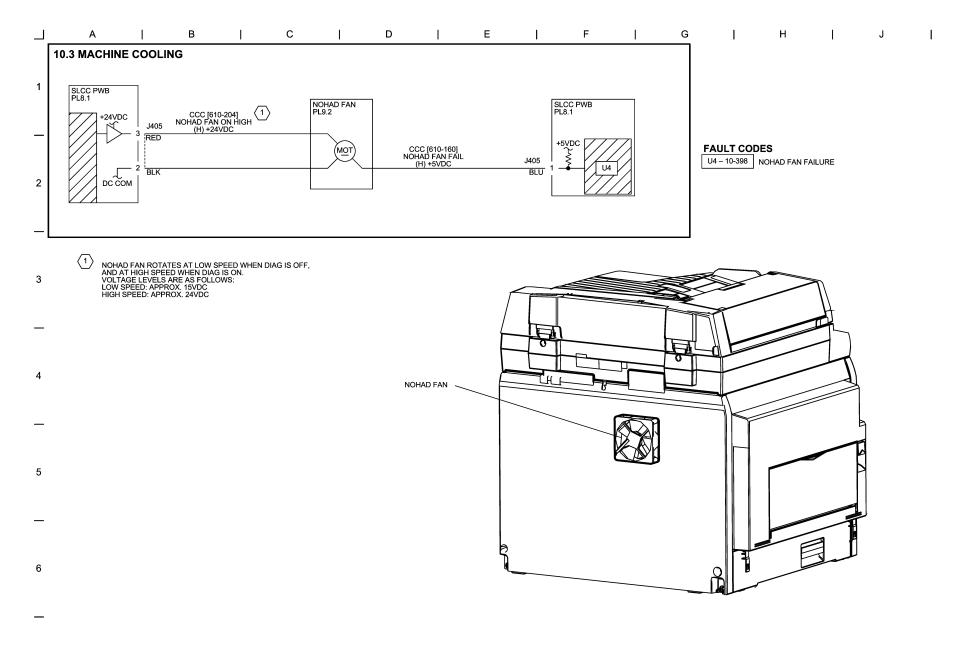
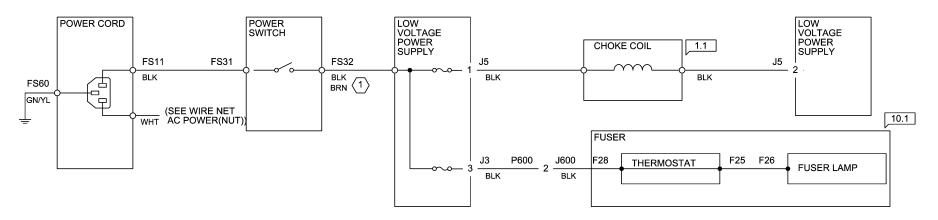


Figure 3 BSD 10.3 Machine Cooling

Wirenets

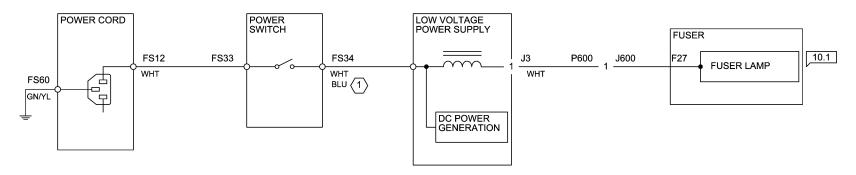
AC POWER (HOT) WIRENET



WIRE COLOR BLK=100V M/C, BRN=200V M/C

Figure 1 ACH Wirenet

AC NEUTRAL WIRENET



WIRE COLOR WHT = 100V M/C, BLU = 200V M/C

Figure 2 ACN Wirenet

3.3VDC WIRENET

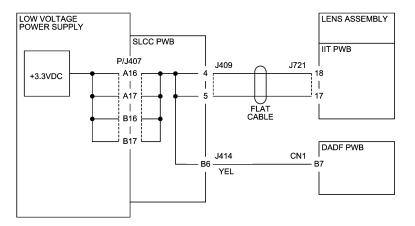


Figure 3 +3.3V Wirenet

+5VDC WIRENET (1 OF 2)

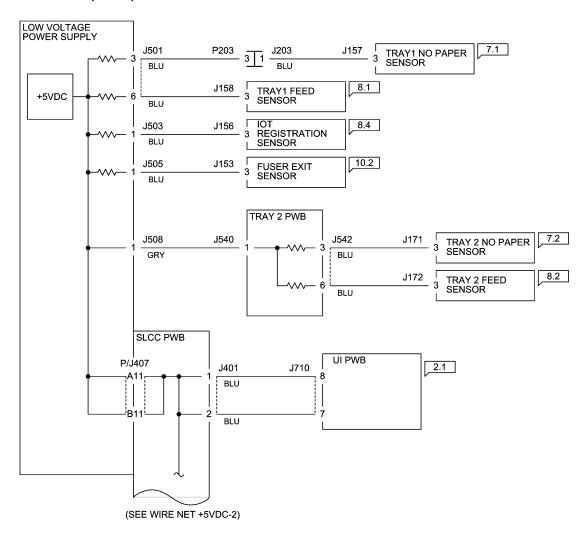


Figure 4 +5VDC Wirenet (1 of 2)

+5VDC WIRENET (2 OF 2)

(FROM WIRE NET +5VDC-1) LENS ASSEMBLY IIT PWB J409 J721 CN3 GRY FLAT CABLE J416 J550 7 DUPLEX PWB BLU DADF PWB CN1 J414 CN4 · B5 B8-YEL WHT WHT SLCC PWB WHT WHT

Figure 5 +5VDC Wirenet (2 of 2)

+5V RTN WIRENET (1 OF 3)

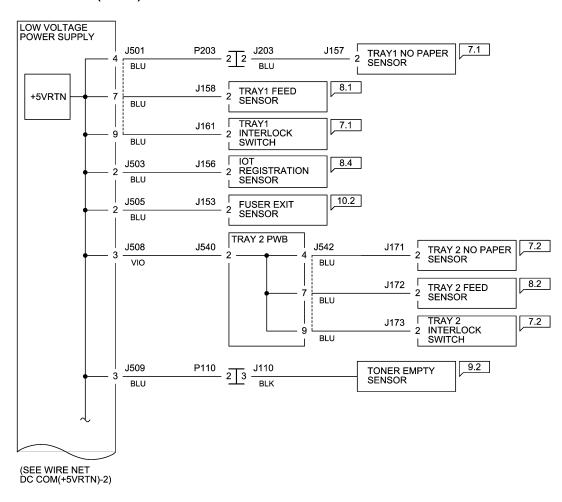


Figure 6 5V RTN Wirenet (1 of 3)

+5V RTN WIRENET (2 OF 3)

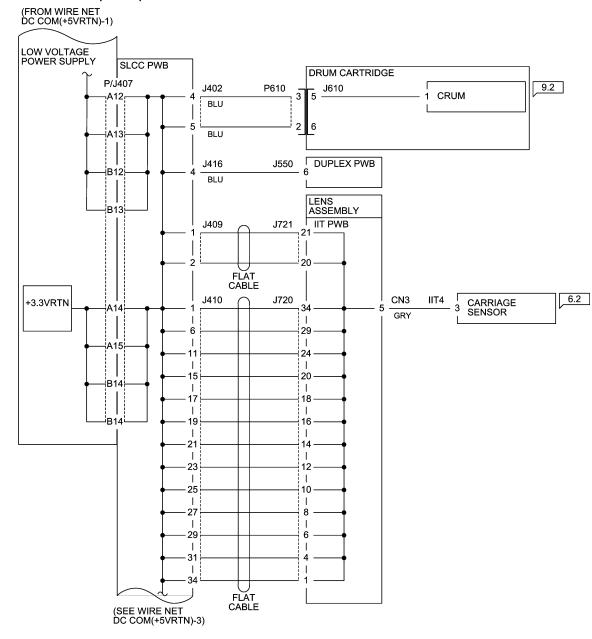


Figure 7 5V RTN Wirenet (2 of 3)

+5V RTN WIRENET (3 OF 3)

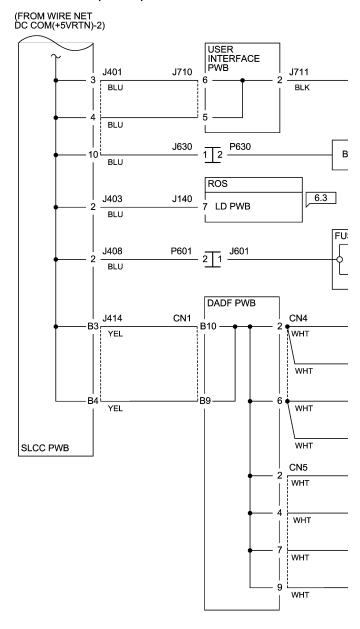


Figure 8 5V RTN Wirenet (3 of 3)

+24VDC WIRENET (1 OF 2)

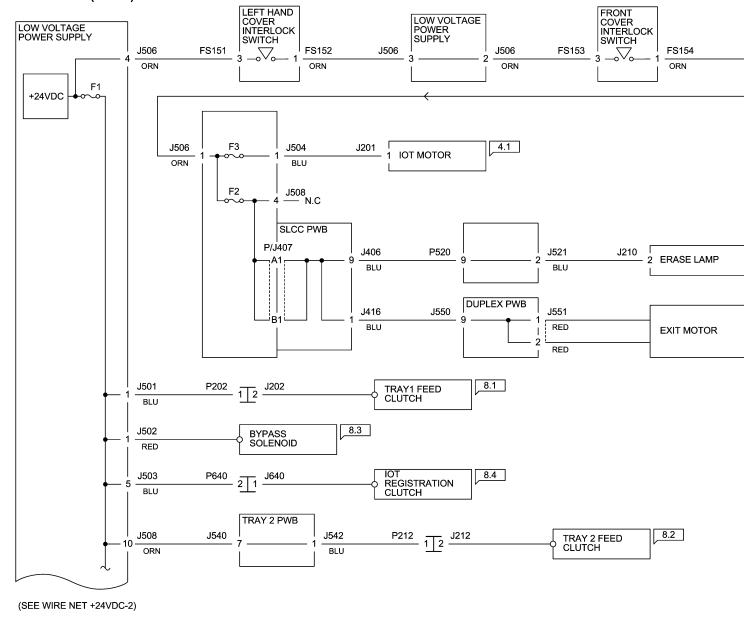


Figure 9 +24VDC Wirenet (1 of 2)

+24VDC WIRENET (2 OF 2)

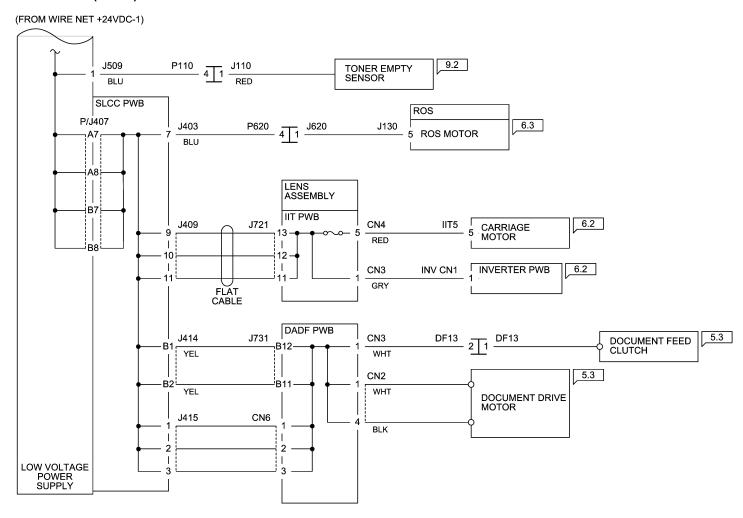


Figure 10 +24VDC Wirenet (2 of 2)

+24V RTN WIRENET

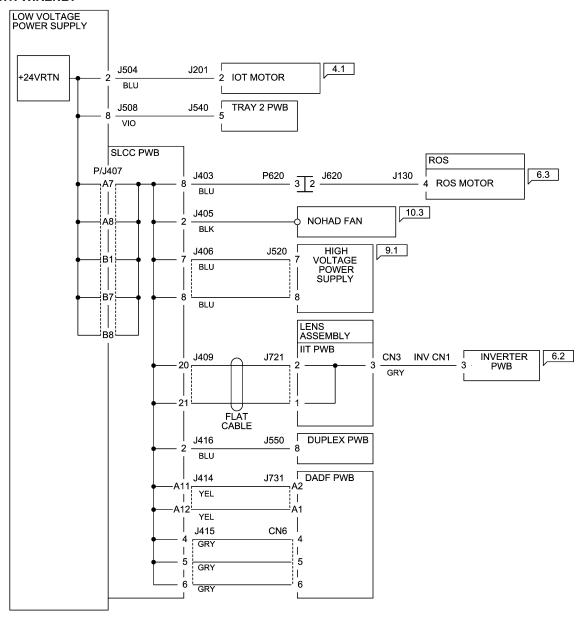


Figure 11 24VRTN Wirenet

P/J Locations

How to Use the P/J Locations

The installation location of a connector can be checked by referring to its Fig No. and Item No. from the P/J No. in the PJ List.

Table 1 Connector List

	rable i Connector List				
P/J No.	Figure No.	Item No.	Description		
CN1	Figure 10	1	DADF Control PWB		
CN2	Figure 10	6	DADF Control PWB		
CN3	Figure 10	5	DADF Control PWB		
CN4	Figure 10	2	DADF Control PWB		
CN5	Figure 10	4	DADF Control PWB		
CN6	Figure 10	3	DADF Control PWB		
CN7	Figure 10	7	DADF Control PWB		
DF2	Figure 9	3	Document Tray Width Sensor 2		
DF3	Figure 9	2	Document Tray Width Sensor 1		
DF4	Figure 9	4	Document Tray Length Sensor 1		
DF5	Figure 9	5	Document Tray Length Sensor 2		
DF8	Figure 9	6	Document Feeder Width Sensor		
DF9	Figure 9	7	Document Tray Set Sensor		
DF10	Figure 9	8	Document registration Sensor		
DF13	Figure 9	1	DADF Top Cover Switch		
DF14	Figure 10	14	Feeder Cover Switch		
F25	Figure 5	1	Fuser Thermostat		
F26	Figure 5	4	Fuser Lamp		
F27	Figure 5	3	Fuser Lamp		
F28	Figure 5	2	Fuser Thermostat		
FS11	Figure 8	4	Inlet		
FS12	Figure 8	6	Inlet		
FS151	Figure 4	8	LH Cover Interlock Switch		
FS152	Figure 4	7	LH Cover Interlock Switch		
FS153	Figure 3	4	Front Cover Interlock Switch		
FS154	Figure 3	5	Front Cover Interlock Switch		
FS31	Figure 8	7	Power Switch		
FS32	Figure 8	1	Power Switch		
FS33	Figure 8	3	Power Switch		
FS34	Figure 8	2	Power Switch		
FS60	Figure 8	5	Inlet GND		
IIT4	Figure 1	5	Carriage Sensor		
IIT5	Figure 1	6	Carriage Motor		
INV CN1	Figure 1	2	Inverter PWB		
INV CN2	Figure 1	1	Inverter PWB		
J333	Figure 11	23	SLCC PWB		
J340	Figure 11	22	SLCC PWB		
J341	Figure 11	21	SLCC PWB		
			ı		

P/J No.	Figure No.	Item No.	Description
J342	Figure 11	20	SLCC PWB
J508	Figure 6	8	Tray 2 Module
J610	Figure 7	2	CRU
NBCR CN6	Figure 1	7	NBCR PWB
NSC CN1	Figure 1	8	NSC PWB
P508	Figure 8	15	LVPS
P610	Figure 7	9	CRU
P/J3	Figure 8	18	Fuser Lamp
P/J5	Figure 8	17	Choke Coil
P/J5	Figure 11	3	SLCC PWB
P/J110	Figure 3	6	Toner Empty Sensor
P/J130	Figure 2	2	ROS MPA
P/J140	Figure 2	5	ROS
P/J153	Figure 4	1	Fuser Exit Sensor
P/J156	Figure 4	4	IOT Regi. Sensor
P/J157	Figure 3	7	Tray 1 No Paper Sensor
P/J158	Figure 4	6	Tray 1 Feed Sensor
P/J160	Figure 2	6	ROS, Video
P/J161	Figure 4	5	Tray 1 Interlock Sensor
P/J171	Figure 6	2	Tray 2 No Paper Sensor
P/J172	Figure 6	1	Tray 2 Feed Sensor
P/J173	Figure 6	3	Tray 2 Interlock Switch
P/J201	Figure 7	6	IOT Motor
P/J201	Figure 2	4	ROS, SOS PWB
P/J2011	Figure 2	1	ROS, SOS PWB
P/J202	Figure 7	7	Tray 1 Feed Clutch
P/J203	Figure 7	8	Tray 1 No Paper Sensor
P/J210	Figure 3	1	Erase Lamp
P/J212	Figure 6	4	Tray 2 Feed Clutch
P/J380	Figure 11	6	SLCC PWB
P391	Figure 11	24	SLCC PWB
P/J401	Figure 11	7	SLCC PWB
P/J402	Figure 11	13	SLCC PWB
P/J403	Figure 11	14	SLCC PWB
P/J404	Figure 11	19	SLCC PWB
P/J405	Figure 11	12	SLCC PWB
P/J406	Figure 11	10	SLCC PWB
P/J407	Figure 8	16	LVPS
P/J407	Figure 11	18	SLCC PWB
P/J408	Figure 11	15	SLCC PWB

Table 1 Connector List

Figure Figure				
P/J No.	No.	Item No.	Description	
P/J409	Figure 11	5	SLCC PWB	
P/J410	Figure 11	4	SLCC PWB	
P/J412	Figure 11	16	SLCC PWB	
P/J414A/B	Figure 11	8	SLCC PWB	
P/J415	Figure 11	9	SLCC PWB	
P/J416	Figure 11	11	SLCC PWB	
P/J418	Figure 11	17	SLCC PWB	
P/J501	Figure 8	13	LVPS	
P/J502	Figure 8	10	LVPS	
P/J503	Figure 8	12	LVPS	
P/J504	Figure 8	9	LVPS	
P/J505	Figure 8	14	LVPS	
P/J506	Figure 8	11	LVPS	
P/J509	Figure 8	8	LVPS	
P/J520	Figure 3	3	HVPS	
P/J521	Figure 3	2	HVPS	
P/J540	Figure 6	7	Tray 2	
P/J541	Figure 6	5	Tray 2 Feed Motor	
P/J542	Figure 6	6	Tray 2 (TOTAL CL, SNR, SW)	
P/J550	Figure 7	3	Duplex PWB	
P/J551	Figure 7	4	Duplex PWB	
P/J600	Figure 4	2	Fuser Lamp	
P/J601	Figure 4	3	Fuser Thermistor	
P/J620	Figure 2	3	ROS MPA	
P/J630	Figure 7	1	Billing ID	
P/J640	Figure 7	5	IOT Regi Clutch	
P/J710	Figure 1	9	UI	
P/J711	Figure 1	10	Platen Switch	
P/J720	Figure 1	4	IIT Data	
P/J721	Figure 1	3	IIT Power	
P/J801	Figure 10	11	Document Feed Clutch	
P/J802	Figure 10	12	Exit/Invert Sensor	
P/J803	Figure 10	13	Document Feed Sensor	
P/J804	Figure 10	10	Registration Clutch	
P/J805	Figure 10	9	Exit/Invert Clutch	
P/J806	Figure 10	8	Exit/Invert Solenoid	

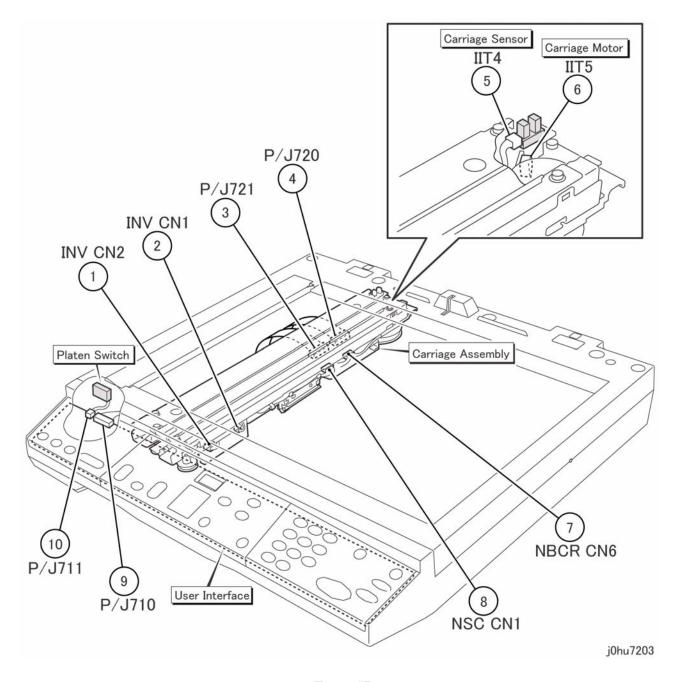


Figure 1 IIT

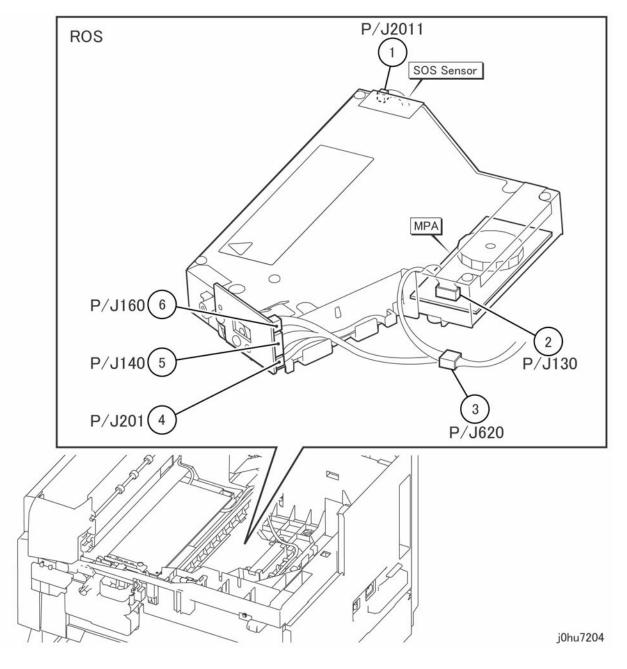


Figure 2 ROS

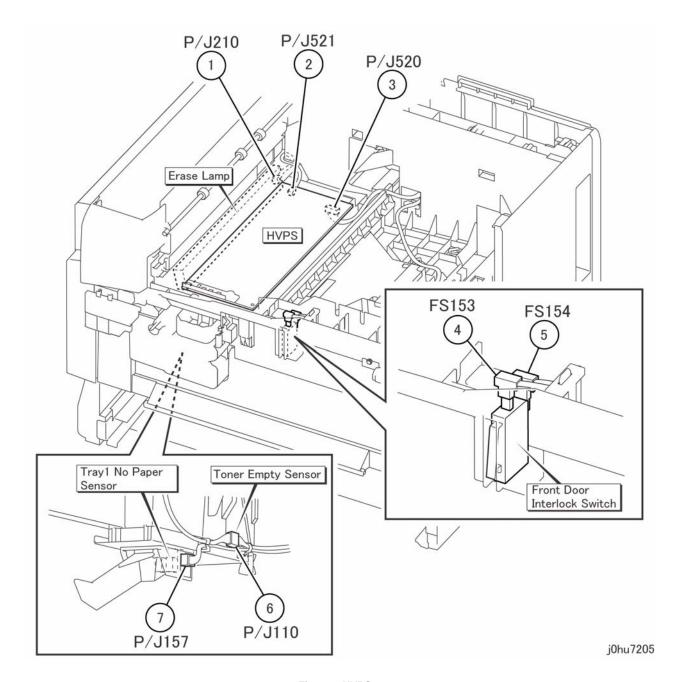


Figure 3 HVPS

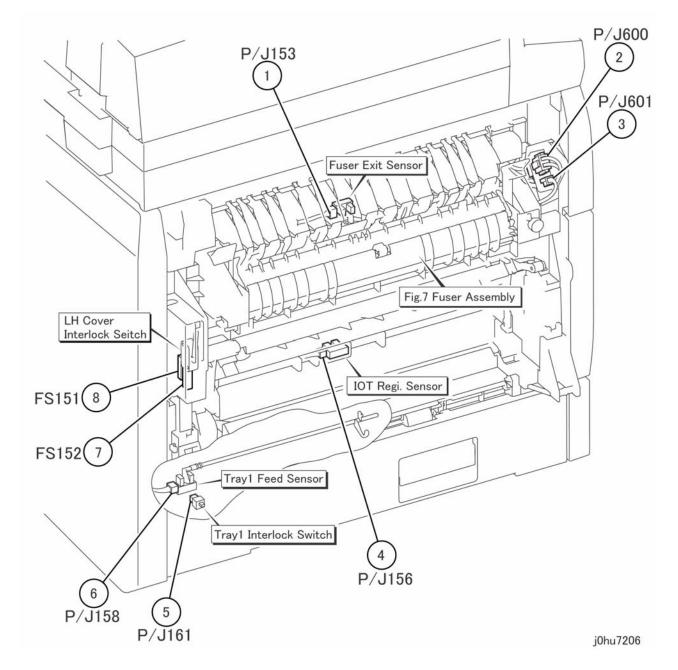


Figure 4 Left Side

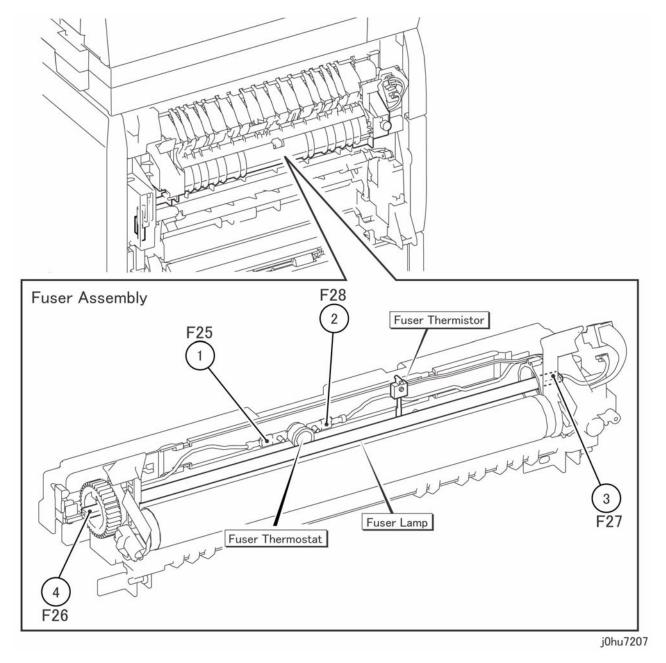


Figure 5 Fuser

7-48

Reissue

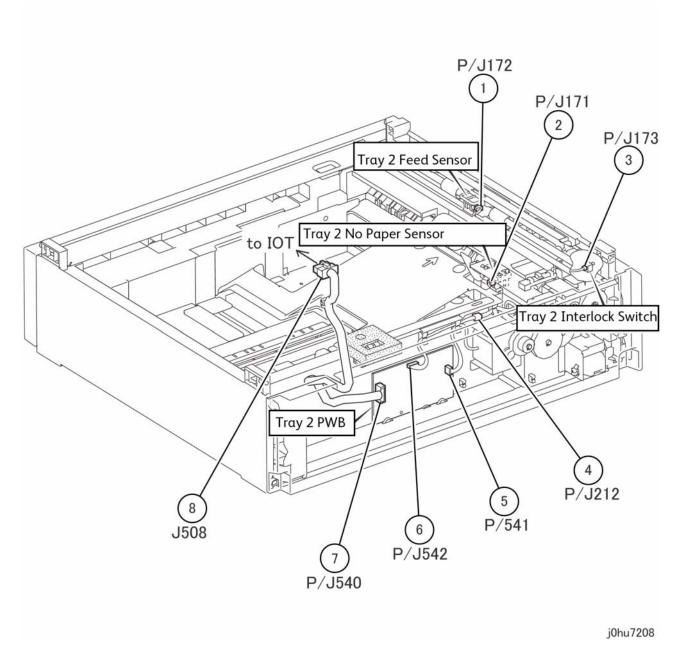


Figure 6 Tray 2 Module

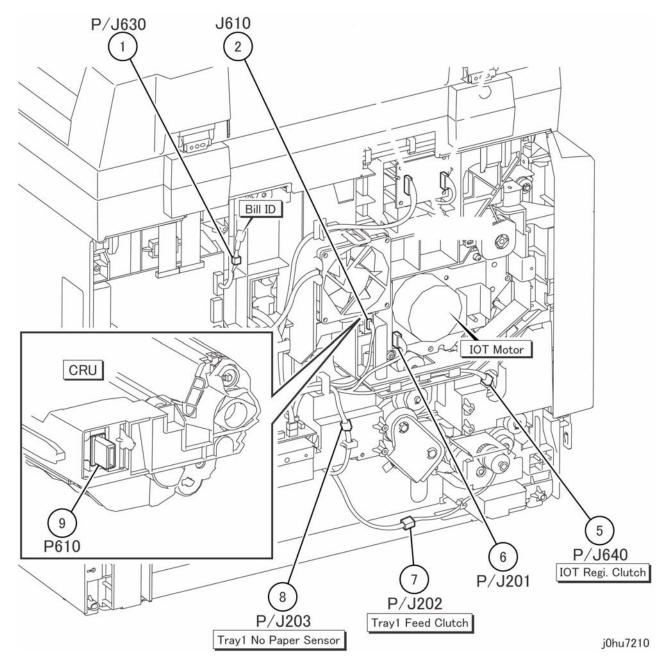


Figure 7 Rear

7-50

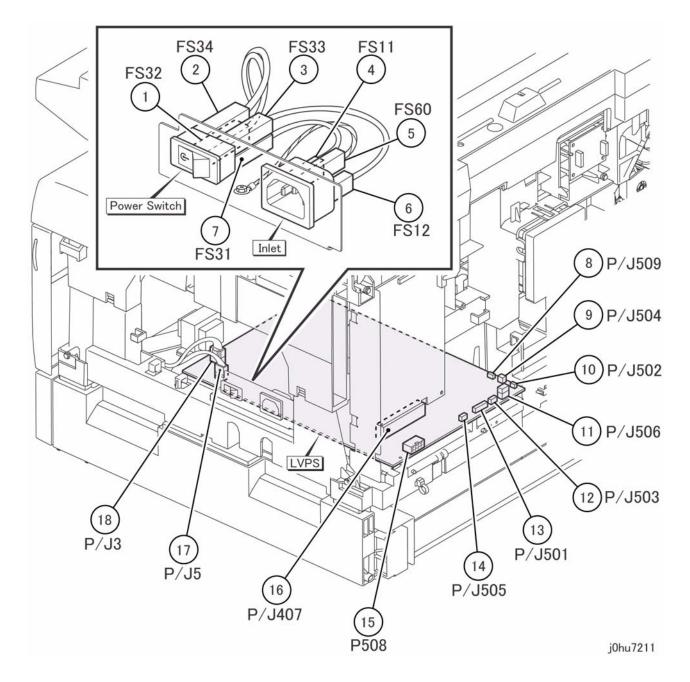


Figure 8 Inlet & LVPS

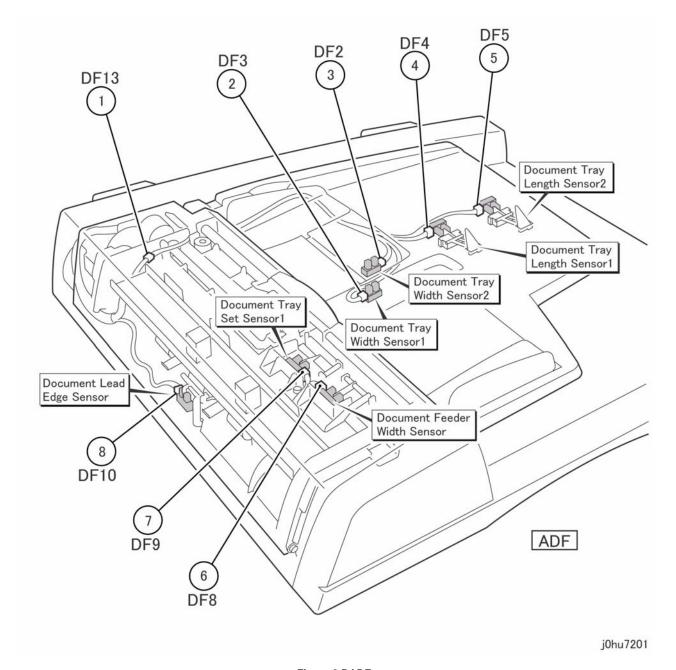


Figure 9 DADF

Reissue

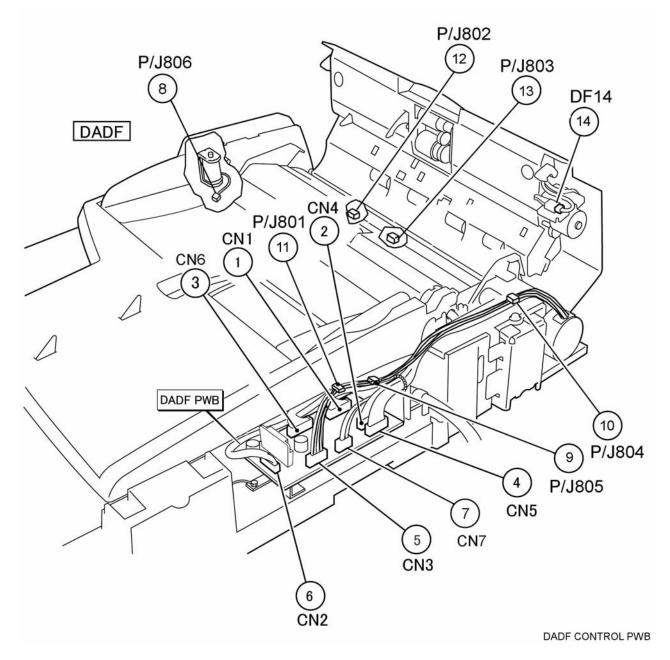


Figure 10 DADF Control PWB

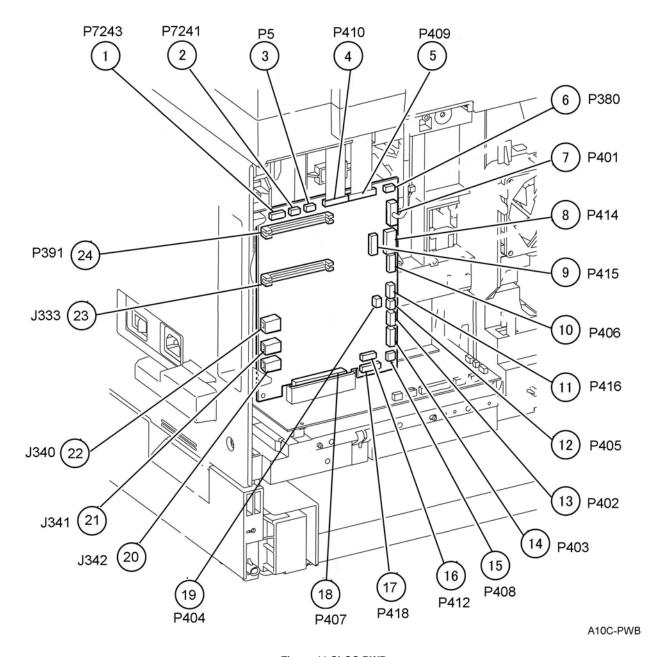


Figure 11 SLCC PWB

7-54