# WorkCentre 7855 Family Service Documentation

# November 9, 2012

**ECAT** Version



WorkCentre 7855 Family Service Documentation

Service Documentation

WorkCentre 7855 Family Service Documentation

705Pxxxxx

ECAT Issue

November 9, 2012

#### \*\*\*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 Content Development & Language Services - North America

800 Phillips Road, Building 218-01A

Webster, New York 14580

ISO9001 and ISO27001 Certified

©2012 Xerox Corporation. All rights reserved. Xerox®, and Xerox and Design® are trademarks of Xerox Corporation in the United States and/or other countries.

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
Translated Warnings	viii

# About this Manual

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

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

### Service Manual Revision

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

# Organization

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

# Section 1 Service Call Procedures

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

#### Section 2 Status Indicator RAPs

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

#### Section 3 Image Quality

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

# Section 4 Repairs/Adjustments

This section contains all the Adjustments and Repair procedures.

#### Repairs

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

When there is a personnel or machine safety issue.

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

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

When the part requires an adjustment after replacement.

When a special tool is required for removal or replacement.

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

#### Adjustments

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

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

#### Section 5: Parts Lists

This section contains the Copier/Printer Parts List.

#### Section 6: General Procedures/Information

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

# Section 7: Wiring Data

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

# How to Use this Documentation

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

# **Use of the Block Schematic Diagrams**

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

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

# Symbology and Nomenclature

The following reference symbols are used throughout the documentation.

# Warnings, Cautions, and Notes

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

# WARNING

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

# CAUTION

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

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

# **Machine Safety Icons**

The following safety icons are displayed on the machine:



# Figure 1 Customer Access Label

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



# Figure 2 Heated Surface Label

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



Figure 3 Shock Hazard Label

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



Figure 4 ESD warning Label

# Electrostatic Discharge (ESD) Field Service Kit

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

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

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

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

# **Illustration Symbols**

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

#### **REFERENCE SYMBOLOGY**

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

TEST	POINTS



Figure 5 Illustration Symbols

# **Signal Nomenclature**

Refer to Figure 6 for an example of Signal Nomenclature used in Circuit Diagrams and BSDs.



#### Figure 6 Signal Nomenclature

#### **Voltage Measurement and Specifications**

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

Table 1 Voltage Measurement and Specifications	ge Measurement and Specifications
--	-----------------------------------

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

#### Logic Voltage Levels

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

#### **Table 2 Logic Levels**

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

# **DC Voltage Measurements in RAPs**

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

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

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

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

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

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

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

# **Translated Warnings**

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

# **1 Service Call Procedures**

Service Call Procedures	1-3
Initial Actions	1-3
Call Flow	1-4
Detailed Maintenance Activities (HFSI) - TBD see note	1-5
Cleaning Procedures	1-7
Final Actions	1-7

# **Service Call Procedures**

# Service Strategy

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

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

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

# **Service Call Procedures**

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

#### **Initial Actions**

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

#### **Call Flow**

Call Flow summarizes the sequence of the Service Call Procedures.

#### **Detailed Maintenance Activities**

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

#### **Cleaning Procedures**

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

#### **Final Actions**

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

# **Initial Actions**

#### Purpose

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

#### Procedure

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

**NOTE:** If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to Diagnostics and continue with the dC procedure that you were performing.

- i. Determine what HSFI action is required based on the customer output volume. Refer to the Detailed Maintenance Activities (HFSI) section for the detailed HSFI information. Record any items that require action.
- j. Access UI Diagnostics (UI Diagnostic (CSE) Mode). Select the Service Info tab and use dC120 Fault Counters and dC122 Fault History to display fault information. Classify this information into categories and record the appropriate fault codes:

Information that is related to the problem that caused the service call.

Information that is related to secondary problems.

Information that does not require action, such as a single occurrence of a problem.

- k. Check the Service Log for any recent activities that are related to the problem that caused the service call or any secondary problem.
- 2. Perform any required HSFI activities identified above. Refer to Detailed Maintenance Activities (HFSI).
- 3. Exit diagnostics. Try to duplicate the problem by running the same jobs that the customer was running.
- 4. Go to Call Flow.

# **Call Flow**

This procedure should be performed at every service call.

# **Initial Actions**

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

# Procedure

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

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

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

N Go to the Machine Not Ready RAP.

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

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

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

ΎΝ

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

# Y N

The problem is related to a specific paper tray (for example, erroneous "Tray X out of Paper" message).

Y N For intermittent problems, Go to GP 23.

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

Go to the RAP for the displayed fault.

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

Y N

A fault code is displayed.

С | Y

Ν

В

Δ

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

Go to the RAP for the displayed fault code.

Check the image quality in the Basic Copier Mode:

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

# Table 1 Basic Copier Mode Settings

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

• Run four copies of the Color Test Pattern.

The Image Quality of the copies produced is acceptable.

N Go to the IQ1 Image Quality Entry RAP.

Go to Final Actions.

The problem is with wireless printing.

#### Y N

Υ

The problem occurs in all print jobs.

Y N

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

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

- Y N
  - verify machine settings

A D

F

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

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

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

When resolved, go to Final Actions.

Go to OF 19 Wireless Connectivity RAP.

Go to the Xerographic Messages RAP.

# Detailed Maintenance Activities (HFSI) - TBD see note

# Procedure

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

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

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

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

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

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

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

# **Cleaning Procedures**

# Purpose

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

# Procedure

#### CAUTION

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

#### **General Cleaning**

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

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

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

2. LPH

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

#### 3. Toner Dispense Units

Vacuum the Toner Dispense units.

#### 4. Jam Sensors

Clean the sensors with a dry cotton swab.

#### 5. Transfer Belt Cleaning

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

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

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

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

Wipe with a lint free cloth.

#### 7. Scanner

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

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

#### 9. Finisher

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

# **Final Actions**

# Purpose

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

# Procedure

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

# **2 Status Indicator RAPs**

# Chain 302 UI

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

# Chain 303 MRC

303-306 Downgrade Not Permitted	2-15
303-307 Upgrade Synchronization Failure	2-15
303-316 CCM Cannot Communicate with IOT	2-16
303-317 IOT NVM Save Failure	2-16
303-318 IOT NVM Init Failure	2-17
303-319 IOT NVM Restore Failure	2-17
303-320 Incompatible Product Type	2-18
303-324 Software Upgrade File Transfer Failure	2-18
303-325 Wall Clock Timeout During Power Up	2-19
303-326 Upgrade is not Required	2-19
303-327 Upgrade Failure	2-20
303-329 Upgrade Request During Diagnostics	2-20
303-330 Upgrade Request During Active Security Feature	2-21
303-331 Communication Fault With NC	2-21
303-332 NC Communications Timeout	2-22
303-338 Main Controller Has Been Reset	2-22
303-346 Communication fault with UI RAP	2-23
303-347 UI Communication Fault	2-23
303-355 CCM POST Failure During NVM Test/NVM Battery Dead	2-24
303-380 Distribution PWB Missing or Disconnected	2-24
303-390 Upgrade Automation Failed	2-25
303-397 System Configuration is lost	2-25
303-398 SOK 1 Not Detected	2-26
303-399 SOK 1 Not Detected	2-26
303-401 Basic FAX Not Detected or Confirmed	2-27
303-403 Extended FAX Not Detected or Confirmed	2-27
303-405 Failed to Recover Machine Class	2-28
303-406 SIM Speed Does not Match Machine Class	2-28
303-417 Incompatible FAX SW Detected at Power Up	2-29
303-777 Power Loss Detected	2-29
303-788 Failed to Exit Power Save Mode	2-30
303-790 Timezone File Cannot be Set	2-30

#### Chain 305 DADF

2-9	305-121 (7830/35)	DADF Feed Out Sensor On Jam	2-31
2-9	305-121 (7845/55)	DADF Feed Out Sensor On Jam	2-31
2-10	305-122 (7830/35)	DADF Simplex/Side 1 Pre Reg Sensor On Jam	2-32
2-10	305-122 (7845/55)	DADF Simplex/Side 1 Pre Reg Sensor On Jam	2-32
2-11	305-123 (7830/35)	DADF Simplex/Side 1 Reg Sensor On Jam	2-33
2-11	305-123 (7845/55)	DADF Simplex/Side 1 Reg Sensor On Jam	2-33
2-12	305-125 (7830/35)	DADF Reg Sensor Off Jam	2-34
2-12	305-125 (7845/55)	DADF Reg Sensor Off Jam	2-34
2-13	305-126 (7845/55)	DADF Out Sensor On Jam	2-35
2-13	305-127 (7845/55)	DADF Out Sensor Off Jam	2-35
2-14	305-128 (7845/55)	DADF Simplex Exit Sensor On Jam	2-36
2-14	305-129 (7845/55)	DADF Simplex Exit Sensor Off Jam	2-36
	305-130 (7830/35)	DADF Invert Sensor On Jam	2-37
	305-131 (7830/35)	DADF Invert Sensor On Jam (During Invert)	2-37
2-15	305-132 (7830/35)	DADF Invert Sensor On Jam	2-38
2-15	305-134 (7830/35)	DADF Inverter Sensor Off Jam (During Invert)	2-38
2-16	305-135 (7830/35)	DADF Side 2 Pre Reg Sensor On Jam	2-39
2-16	305-136 (7830/35)	DADF Side 2 Reg Sensor On Jam	2-39
2-17	305-139 (7830/35)	DADF Invert Sensor Off Jam	2-40
2-17	005-141 (7845/55)	DADF Feed Out Sensor Off Jam	2-40
2-18	305-145 (7830/35)	DADF Reg Sensor Off Jam (Invert)	2-41
2-18	305-146 (7830/35)	DADF Pre Reg Sensor Off Jam	2-41
2-19	305-146 (7845/55)	DADF Pre Reg Sensor Off Jam	2-42
2-19	305-147 (7830/35)	DADF Pre Reg Sensor Off Jam (Invert)	2-42
2-20	305-194 (7830/35)	Mixed Size Mismatch Jam	2-43
2-20	305-194 (7845/55)	Mixed Size Mismatch Jam	2-43
2-21	305-196 (7830/35)	Size Mismatch Jam On No Mix-Size	2-44
2-21	305-196 (7845/55)	Size Mismatch Jam On No Mix-Size	2-44
2-22	305-197 (7830/35)	Prohibit Combine Size Jam	2-45
2-22	305-197 (7845/55)	Prohibit Combine Size Jam	2-45
2-23	305-198 (7830/35)	Too Short Size Jam	2-46
2-23	305-198 (7845/55)	Too Short Size Jam	2-46
2-24	305-199 (7830/35)	Too Long Size Jam	2-47
2-24	305-199 (7845/55)	Too Long Size Jam	2-47
2-25	305-210 (7830/35)	DADF Download Fail	2-48
2-25	305-210 (7845/55)	DADF Download Fail	2-48
2-26	305-253 IIT- DADH	Communication Error	2-49
2-26	305-280 (7830/35)	DADF EEPROM Fail	2-49
2-27	305-280 (7845/55)	DADF EEPROM Fail	2-50
2-27	305-305 (7830/35)	DADF Feeder Cover Interlock Open (when running)	2-50
2-28	305-305 (7845/55)	DADF Feeder Cover Interlock Open (when running)	2-51
2-28	305-905 (7845/55)	DADF Feed Out Sensor Static Jam	2-51
2-29	305-906 (7830/35)	DADF Feed Out Sensor Static Jam	2-52
2-29	305-906 (7845/55)	DADF Feed Out Sensor Static Jam	2-52
2-30	305-907 (7830/35)	DADF Pre Reg Sensor Static Jam	2-53
2-30	305-907 (7845/55)	DADF Pre Reg Sensor Static Jam	2-53

ECAT Issue

305-908 (7830/35) DADF Reg Sensor Static Jam	2-54
305-908 (7845/55) DADF Reg Sensor Static Jam	2-54
305-910 (7845/55) DADF Out Sensor Static Jam	2-55
305-911 (7845/55) DADF Exit Sensor Static Jam	2-55
305-913 (7830/35) DADF Inverter Sensor Static Jam	2-56
305-915 (7830/35) DADF APS Sensor 1 Static Jam	2-56
305-915 (7845/55) DADF APS Sensor 1 Static Jam	2-57
305-916 (7830/35) DADF APS Sensor 2 Static Jam	2-57
305-916 (7845/55) DADF APS Sensor 2 Static Jam	2-58
305-917 (7830/35) DADF APS Sensor 3 Static Jam	2-58
305-917 (7845/55) DADF APS Sensor 3 Static Jam	2-59
305-940 (7830/35) DADF No Original	2-59
305-940 (7845/55) DADF No Original	2-60
305-941 (7830/35) Doc number of sheets is insufficient	2-60
305-941 (7845/55) Doc number of sheets is insufficient	2-61
305-945 (7830/35) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size (Cont)	2-61
305-945 (7845/55) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size (Cont)	2-62
305-946 (7830/35) SS-Size Mismatch Jam On No Mix-Size (Cont)	2-62
305-946 (7845/55) SS-Size Mismatch Jam On No Mix-Size (Cont)	2-63
305-947 (7830/35) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size	2-63
305-947 (7845/55) FS-Size Mismatch Jam On No Mix-Size or SS Mix-Size	2-64
305-948 (7830/35) SS-Size Mismatch Jam On No Mix-Size	2-64
305-948 (7845/55) SS-Size Mismatch Jam On No Mix-Size	2-65
Chain 310 Fusing	
310-329 Fuser Fuse Cut Fail	2-67
310-330 Fuser Motor Fault	2-67

	= 0.
310-330 Fuser Motor Fault	2-67
310-360 IH Driver Input High Voltage Fault	2-68
310-361 IH Driver Input Low Voltage Fault	2-68
310-362 IH Driver Surge Fault	2-69
310-363 IGBT Temperature High Fault	2-69
310-364 IGBT Temperature Sensor Fault	2-70
310-367 Input Low Current Fault	2-70
310-368 Encoder Pulse Fault	2-71
310-369 IH Driver Communication Fault	2-71
310-370 IH Driver Freeze Fault	2-72
310-371 Heat Belt STS Center Disconnection Fault	2-72
310-372 Heat Roll STS Center Over Temperature Fault	2-73
310-373 Heat Belt STS Rear Disconnection Fail	2-73
310-374 Heat Belt STS Rear Over Temperature Fail	2-74
310-375 Heat Belt STS Center Warm Up Time Fault	2-74
310-376 Heat Belt STS Rear Warm Up Time Fault	2-75
310-377 Fusing Unit On Time Fail	2-75
310-378 Heat Belt Rotation Fault	2-76
310-379 Fusing Unit Hot Not Ready Return Time Fail	2-76
310-380 P/Roll Latch Motor Fault	2-77
310-381 Fuser Assy Illegal Fault	2-78
310-382 Fuser Thermostat Fault	2-79
310-398 Fuser Fan Fault	2-79
310-420 Fuser Assembly Near Life Warning	2-80
310-421 Fuser Assembly Life Over Warning	2-80

#### Chain 312 Finisher (LX)

:	312-111 (LX) H-Transport Entrance Sensor Off Jam A	2-81
:	312-132 (LX) Finisher Entrance Sensor On Jam	2-81
:	312-151 (LX) Compiler Exit Sensor Off Jam	2-82
	312-152 (LX) Compiler Exit Sensor On Jam	2-82
:	312-161 (LX) Finisher Set Eiect Jam	2-83
-	312-210 (LX) NVM Fail RAP	2-84
2	312-211 (LX) Stacker Trav Fault	2-85
-	312-212 (LX) Stacker Tray Upper Limit Fault	2-86
-	312-213 (LX) Stacker Tray Lower Limit Fault	2-87
-	312-221 (LX) Front Tamper Home Sensor On Fault	2-88
-	312-223 (LX) Front Tamper Home Sensor Off Fault	2-89
-	312-224 (LX) Rear Tamper Home Sensor Off Fault	2-90
2	312-243 (LX) Booklet Folder Home Sensor On Fault	2-91
-	312-249 (LX) Booklet Front Stapler Fault	2-91
2	312-260 (LX) Elect Clamp Home Sensor On Fault	2-92
-	312-263 (LX) Rear Tamper Fault	2-93
2	312-265 (LX) Booklet Folder Home Sensor OFF Fault	2-94
2	312-268 (LX) Booklet Rear Stapler Fault	2-94
	312-282 (LX) Elect Clamp Home Sensor Off Fault	2-95
2	312-283 (LX) Set Clamp Home Sensor On Fault	2-96
2	312-284 (LX) Set Clamp Home Sensor Off Fault	2.00
2	312-291 (LX) Stanler Fault	2-98
2	312-295 (LX) Stapler Move Position Sensor On Fault	2-98
2	312-296 (LX) Staple Move Sensor Off Fault	2-99
2	312-300 (LX) Elect Cover Open	2-100
2	312-302 (LX) Einisher Front Cover Open	2-100
2	312-302 (LX) Finisher H-Transnort Cover Open	2-100
	312-320 (LX) Punch Home Sensor On Fault	2-101
	312-334 (LX) Download Mode Fault	2-102
2	312-700 (LX) Punch Box Nearly Full	2-102
-	312-900 (LX) H-Transport Entrance Sensor On Jam	2-103
-	312-903 (LX) Paper Remains at Compiler Exit Sensor	2-103
	312-905 (LX) Compiler Tray No Paper Sensor On JAM	2-104
2	312-916 (LX) Stacker Mix Stack Detection RAP	2-104
-	312-917 (LX) Stacker Trav Stapled Set Over Count	2-105
	312-930 (LX) Stacker Tray Full RAP	2-105
2	312-949 (LX) Punch Box Missing	2-106
-	312-976 (LX) Staple Fail	2-106
-	312-977 (LX) Staple Ready Fail	2-107
2	312-978 (LX) Staple Fail	2-107
-	312-979 (LX) Stapler near empty	2-108
	312-982 (LX) Stacker Lower Safety Warning	2-108
	312-984 (LX) Booklet Low Staple F RAP	2-109
	312-989 (LX) Booklet Low Staple R RAP	2-109
	Chain 312 Professional Finisher	
:	312-112 (Pro) H-Transport Entrance Sensor On Jam	2-111

312-113 (Pro) Booklet In Sensor On Jam2-111312-114 (Pro) Booklet In Sensor Off Jam2-112312-115 (Pro) Booklet Folder Roll Exit Sensor On Jam2-112312-125 (Pro) Gate Sensor On Jam2-113

312-132 (Pro) Transport Entrance Sensor On Jam	2-113
312-142 (Pro) Buffer Path Sensor On Jam	2-114
312-151(Pro) Compiler Exit Sensor Off Jam	2-114
312-152 (Pro) Compiler Exit Sensor On Jam	2-115
312-161 (Pro) Set Eject Jam	2-116
312-162 (Pro) H-Transport Exit Sensor On Jam	2-117
312-171 (Pro) Top Tray Exit Sensor On Jam	2-117
312-172 (Pro) Top Tray Exit Sensor Off Jam	2-118
312-180 (Pro) Booklet Folder Roll Exit Sensor Off Jam	2-119
312-211(Pro) Stacker Tray Fault	2-120
312-212 (Pro) Stacker Upper Limit Fault	2-120
312-213 (Pro) Stacker Lower Limit Fault	2-121
312-221 (Pro) Front Tamper Home Sensor On Fault	2-121
312-223(Pro) Front Tamper Home Sensor Off Fault	2-122
312-224 (Pro) Rear Tamper Home Sensor Off Fault	2-122
312-225 (Pro) Booklet Tamper F Home Sensor On Fault	2-123
312-226 (Pro) Booklet Tamper F Home Sensor Off Fault	2-123
312-227 (Pro) Booklet End Guide Home Sensor Off Fault	2-124
312-228 (Pro) Booklet End Guide Home Sensor On Fault	2-124
312-229 (Pro) Booklet Tamper R Home Sensor On Fault	2-125
312-230 (Pro) Booklet Tamper R Home Sensor Off Fault	2-125
312-243 (Pro) Booklet Knife Home Sensor On Fault	2-126
312-246 (Pro) Booklet Stapler Fault	2-127
312-247 (Pro) Side Registration Sensor Off Fault	2-129
312-260 (Pro) Elect Clamp Home Sensor On Fault	2-130
312-261 (Pro) Booklet Knife Folding Sensor Fault	2-130
312-263 (Pro) Bear Tamper Home Sensor On Fault	2-131
312-264 (Pro) Rocklet Drawer Broken Fault	2-132
312-265 (Pro) Booklet Knife Home Sensor Off Fault	2-132
312-266 (Pro) Booklet Compiler No Paper Sensor Fault	2-132
312-269 (Pro) Booklet Sub-CPU Communications Fault	2-134
312-282 (Pro) Elect Clamp Home Sensor Off Fault	2-136
312-283 (Pro) Set Clamp Home Sensor On Fault	2-130
312-284 (Pro) Set Clamp Home Sensor Off Fault	2-137
312-201 (Pro) Stanler Fault	2-137
312-295 (Pro) Stapler Move Position Sensor On Fault	2-138
312-296 (Pro) Stapler Move Position Sensor Off Fault	2-138
312-300 (Pro) Elect Cover Open	2-130
312-302 (Pro) Eject Cover Open	2-139
312-303 (Pro) H-Transport Cover Open	2-135
212-303 (Fro) Reaklet Drawer Set Fault	2 1 4 0
312-307 (FT0) DOONEL DIdwel Set Fault	2-140
312-320 (FIO) Function Home Sensor On Fault	2-141
212-321 (FIO) Function Home Sensor Off Fault	2-141
312-322 (Pro) Puncher Move Home Sensor On Fault	2-142
312-323 (Pto) Pullicier Move Home Sensor Off Fault	2-142
312-330 (FIO) Decurier Carri Home Sensor On Fault	2-143
312-332 (FIU) Deculier Galii Fiolite Serisor On Fault	2-143
312-334 (FIU) FIIIISHEI DUWIII0du Fall KAP	2-144
312-700 (FID) FUIICII DUSI NEATIN FUII KAP	2-144
312-900 (PIO) Paper at Butter Path Sensor	2-145
312-901 (PIO) Paper at H-Fransport Entrance Sensor	2-145
312-902 (Pro) Paper at H-1 ransport Exit Sensor	2-146

312-903 (Pro) Paper at Compiler Exit Sensor	2-146
312-905 (Pro) Paper at Compiler Tray No Paper Sensor	2-147
312-907 (Pro) Paper at Top Tray Exit Sensor	2-147
312-916 (Pro) Stapler NG	2-148
312-920 (Pro) Paper at Gate Sensor (Top Tray Job)	2-148
312-930 (Pro) Full Stack Detected	2-149
312-932 (Pro) Paper Remain at Gate SNR	2-149
312-935 (Pro) Paper at Transport Entrance Sensor	2-150
312-936 (Pro) Paper Remains at Booklet In Sensor	2-150
312-946 (Pro) Top Tray Full	2-151
312-949 (Pro) Puncher Waste Bin Open	2-151
312-963 (Pro) Puncher Waste Bin Full	2-152
312-976 (Pro) Staple Fault RAP	2-152
312-982 (Pro) Stacker Lower Safety Warning RAP	2-153
312-983 (Pro) Booklet Tray Full was detected	2-153
312-984 (Pro) Booklet Low Staple F	2-154
312-989 (Pro) Booklet Low Staple R	2-154

# Chain 312 Integrated Finisher

312-132 (Int) Entrance Sensor ON Jam	2-155
312-151 (Int) Compiler Exit Sensor OFF Jam	2-156
312-152 (Int) Compiler Exit Sensor ON Jam	2-157
312-161 (Int) Set Eject Jam	2-158
312-211 (Int) Stacker Tray Fault	2-159
312-221 (Int) Front Tamper Home Sensor ON Fault	2-161
312-223 (Int) Front Tamper Home Sensor OFF Fault	2-162
312-224 (Int) Rear Tamper Home Sensor OFF Fault	2-163
312-259 (Int) Eject Home Sensor ON Fault	2-164
312-263 (Int) Rear Tamper Home Sensor ON Fault	2-165
312-280 (Int) Eject Home Sensor OFF Fault	2-166
312-283 (Int) Set Clamp Home Sensor ON Fault	2-167
312-284 (Int) Set Clamp Home Sensor OFF Fault	2-168
312-291 (Int) Stapler Fault	2-169
312-301 (Int) Top Cover Interlock OPEN	2-170
312-302 (Int) Front Cover Interlock OPEN	2-171
312-903 (Int) Paper Remains at Compiler Exit Sensor	2-171
312-917 (Int) Stacker Tray Staple Set Over Count RAP	2-172
312-928 (Int) Scratch Sheet Compile	2-172
312-930 (Int) Stacker Tray Full RAP	2-173
312-976 (Int) Staple Fail	2-173
312-977 (Int) Staple Ready Fail	2-174
312-979 (Int) Stapler Near Empty RAP	2-174
312-982 (Int) Stacker Lower Safety Warning RAP	2-175
Chain 313 Finisher (PRO)	

313-902 Paper remains at Booklet Compiler No Paper Sensor	2-177
313-903 Paper remains at Booklet Folder Roll Exit Sensor	2-177

# Chain 313 Finisher (LX)

313-210 (LX) Booklet Staple Move Home Sensor ON RAP	2-179
313-211 (LX) Booklet Staple Move Home Sensor OFF	2-180
313-212 (LX) Booklet Staple Move Position Sensor On Fault	2-181

ECAT Issue

313-213 (LX) Booklet Staple Move Position Sensor Off Fault	2-182
313-220 (LX) Booklet Creaser Detect Fault	2-183
313-306 (LX) Booklet Safety Switches Open	2-183
313-307 (LX) Booklet Cover Open	2-184

# Chain 316 Controller

316-XXX Faults Entry RAP	2-185
316-1 RAP	2-189
316-2 RAP	2-190
316-3 RAP	2-190
316-4 RAP	2-191

# Chain 319 Image Processing

319-300 RAP	2-193
319-301 RAP	2-193
319-302 RAP	2-194
319-303 RAP	2-194
319-310 RAP	2-195
319-401 RAP	2-195
319-402 RAP	2-196
319-403 RAP	2-196
319-409 RAP	2-197
319-410-0 RAP	2-197
319-410-1 RAP	2-198
319-410-2 RAP	2-198
319-410-3 RAP	2-199
319-410-4 RAP	2-199
319-410-5 RAP	2-200
319-410-6 RAP	2-200
319-410-7 RAP	2-201
319-410-8 RAP	2-201
319-410-9 RAP	2-202
319-410-10 RAP	2-202
319-410-11 RAP	2-203
319-410-12 RAP	2-203
319-410-13 RAP	2-204
319-750 RAP	2-204
319-752 RAP	2-205
319-754 RAP	2-205
319-760 RAP	2-206

# Chain 320 Imbedded Fax

320-302 RAP	2-207
320-303 RAP	2-207
320-305 RAP	2-208
320-320 RAP	2-208
320-322 RAP	2-209
320-323 RAP	2-209
320-324 RAP	2-210
320-327 RAP	2-210
320-331 RAP	2-211
320-332 RAP	2-211

320-338 RAP Fax Communication Fault	2-212
320-339 RAP	2-212
320-340 RAP	2-213
320-341 RAP	2-213
320-342 RAP	2-214
320-345 RAP	2-214
320-701 RAP	2-215
320-710 RAP	2-215
320-711 RAP	2-216

# Chain 322 System Faults

322-300-05 RAP	2-217
322-300-10 RAP	2-217
322-300-16 RAP	2-218
322-301 RAP	2-218
322-309 RAP	2-219
322-310 RAP	2-219
322-311 RAP	2-220
322-314 RAP	2-220
322-315 RAP	2-221
322-316 RAP	2-221
322-317 RAP	2-222
322-318 RAP	2-222
322-319 RAP	2-223
322-320 RAP	2-223
322-321-01 RAP	2-224
322-321-04 RAP	2-224
322-322 RAP	2-225
322-323 RAP	2-225
322-324 RAP	2-226
322-325 RAP	2-226
322-326 RAP	2-227
322-327 RAP	2-227
322-328 RAP	2-228
322-330-00 RAP	2-228
322-330-01 RAP	2-229
322-330-02 RAP	2-229
322-330-03 RAP	2-230
322-330-04 RAP	2-230
322-330-05 RAP	2-231
322-330-06 RAP	2-231
322-332 Invalid Plan Conversion	2-232
322-335 RAP	2-232
322-336 RAP	2-233
322-337 RAP	2-233
322-338 RAP	2-234
322-339 RAP	2-234
322-340 RAP	2-235
322-350-1 RAP	2-235
322-350-2 RAP	2-236
322-351-1 RAP	2-236
322-351-2 RAP	2-237

322-351-3 RAP	2-237
322-352-00 RAP	2-238
322-352-01 RAP	2-239
322-360 RAP	2-239
322-370 RAP	2-240
322-371 RAP	2-240
322-372 RAP	2-241
322-407 RAP	2-241
322-417 RAP	2-242
322-419 RAP	2-242
322-421 RAP	2-243
322-701 RAP	2-243
322-720 RAP	2-244
322-721 RAP	2-244
322-750-04 RAP	2-245
322-750-17 RAP	2-245
322-751 RAP	2-246
322-754 RAP	2-246
322-755 RAP	2-247

# Chain 322 System Faults

324-923 Y Toner Cartridge Empty	2-249
324-924 M Toner Cartridge Empty	2-249
324-925 C Toner Cartridge Empty	2-250

# Chain 341

341-310 IM Logic Fail	2-251
341-316 IH Driver Interface Fault	2-251
341-317 MDM IH Interface Fault	2-252
341-340 MDM NVM EEPROM Data Fault	2-252
341-341 MDM NVM EEPROM Access Fault	2-253
341-351 MDS Detect Fault	2-253
341-368 MCU-SW Firmware Mismatch	2-254
341-369 MDM Type Mismatch	2-254
341-371 Speed Update Required Fault	2-255
341-388 MK Logic Fail	2-255
341-391 Finisher Module Logic Fail	2-256
341-393 Motor Driver Sub PWB F1 Fuse Fail	2-256
341-394 Motor Driver Sub PWB F2 Fuse Fail	2-257
341-397 (7845/55) Motor Driver Main PWB F4 Fuse Fail	2-258
341-398 Motor Driver Main PWB F5 Fuse Fail	2-259
341-399 Motor Driver Main PWB F6 Fuse Fail	2-260

# Chain 342

342-319 (7830/35) Drum Y, M, C Motor Fail	2-261
342-319 (7845/55) Drum Y, M, C Motor Fail	2-261
342-320 (7830/35) Drum Y Motor Fail	2-262
342-320 (7845/55) Drum Y Motor Fail	2-262
342-323 Drum K Motor Fail	2-263
342-324 IBT Motor Fail	2-263
342-325 Main Motor Fail	2-264
342-330 (7845/55) IH Exhaust Fan Fail	2-265

342-332 IH Intake Fan Fail	2-265
342-334 (7830/35) IBT Fan Fail	2-266
342-335 (7845/55) Process 1 Fan Fail	2-266
342-336 Process 2 Fan Fail	2-267
342-338 LVPS Front Fan Fail	2-267
342-340 (7845/55) Cartridge Fan Fail	2-268
342-341 Marking/HV Fan Fail	2-268
342-342 (7845/55) Suction Fan Fail	2-269
342-343 Rear Bottom Fan Fail	2-269
342-344 (7845/55) C Exhaust Fan Fail	2-270
342-400 Deodorant Filter Life End	2-270
342-604 NOHAD Temperature Sensor Fail	2-271
342-605 (7830/35) Suction Drive Fan Fail	2-271
342-609 LH Fan Fail	2-272

# Chain 345

345-310 Image Ready NG	2-273
345-311 Controller Communication Fault	2-273
345-320 Motor Driver Main PWB F8 Fuse Fail	2-274
345-343 Motor Driver Main PWB F9 Fuse Fail	2-274
345-345 Motor Driver Sub PWB F3 Fuse Fail	2-275
345-346 (7830/35) Motor Driver Main PWB F3 Fuse Fail	2-276
345-347 Motor Driver Main PWB F10 Fuse Fail	2-277
345-348 Motor Driver Main PWB F11 Fuse Fail	2-277
345-349 Motor Driver Main PWB F13 Fuse Fail	2-278
345-353 Motor Driver Main PWB F14 Fuse Fail	2-279
345-354 Motor Driver Main PWB F15 Fuse Fail	2-279
345-355 Motor Driver Main PWB F16 Fuse Fail	2-280
345-356 Motor Driver Main PWB F17 Fuse Fail	2-280
345-357 Motor Driver Main PWB F22 Fuse Fail	2-281
345-358 Motor Driver Main PWB F23 Fuse Fail	2-281
345-359 EEPROM Config Mismatch	2-282
345-368 SBM Initialize Fail	2-282
345-369 SBM Master Communication Fail	2-283
345-370 LPH Power On Fault Multi	2-283
345-371 LPH Download Data Fault Multi	2-284
345-372 LPH Mismatch Fault Multi	2-285
345-373 LPH Read Fault Multi	2-286
345-374 LPH Write Fault Multi	2-287
345-375 LPH Act Fault Multi	2-288
345-376 LPH PLL Lock Fault Multi	2-289
345-377 SBM Slave Communication Fail	2-290
345-378 MCU-PF Config Mismatch	2-290
345-379 Motor Driver Main/Sub PWB Type Mismatch	2-291

347-211 Exit 1 OCT Home Fault	2-293 2-293
347-213 Finisher Type Mismatch	2-294
347-310 Finisher Communication Fault	2-294 2-295

#### Chain 361

361-350 LPH Power On Fault Y	2-297
361-351 LPH Power On Fault M	2-297
361-352 LPH Power On Fault C	2-298
361-353 LPH Power On Fault K	2-298
361-354 LPH Download Data Fault Y	2-299
361-355 LPH Download Data Fault M	2-299
361-356 LPH Download Data Fault C	2-300
361-357 LPH Download Data Fault K	2-300
361-358 LPH Mismatch Fault Y	2-301
361-359 LPH Mismatch Fault M	2-301
361-360 LPH Mismatch Fault C	2-302
361-361 LPH Mismatch Fault K	2-302
361-362 LPH Read Fault Y	2-303
361-363 LPH Read Fault M	2-303
361-364 I PH Read Fault C	2-304
361-365 I PH Read Fault K	2-304
361-366 LPH Write Fault Y	2-305
361-367 I PH Write Fault M	2-305
361-368 LPH Write Fault C	2-306
361-360 LPH Write Fault K	2-306
361-370 I DH Act Fault V	2-307
361-371 I DH Act Fault M	2-307
361-372   DH Act Fault C	2-307
261 272 LPH Act Foult K	2-300
261 274 LPH Chip Fault V	2-300
261 275 LDH Chip Fault M	2-309
301-375 LPH Chip Fault M	2-309
301-370 LPH Chip Fault C	2-310
301-377 LPH Chip Fault N	2-310
301-370 LPH Llig Fault M	2-311
301-379 LPH Llig Fault C	2-311
361-384 LPH Ltrg Fault C	2-312
361-385 LPH Ltrg Fault K	2-312
361-386 LPH PLL LOCK FAUIT Y	2-313
361-387 LPH PLL LOCK Fault M	2-313
361-388 LPH PLL Lock Fault C	2-314
361-389 LPH PLL Lock Fault K	2-314
361-390 LPH FFC Connect Positive Fault Y	2-315
361-391 LPH FFC Connect Positive Fault M	2-315
361-392 LPH FFC Connect Positive Fault C	2-316
361-393 LPH FFC Connect Positive Fault K	2-316
361-394 LPH FFC Connect Negative Fault Y	2-317
361-395 LPH FFC Connect Negative Fault M	2-317
361-396 LPH FFC Connect Negative Fault C	2-318
361-397 LPH FFC Connect Negative Fault K	2-318
361-398 ASIC 1 Initialize Fault	2-319
361-399 ASIC 2 Initialize Fault	2-319
361-610 Bitz1 CONTIF Fault	2-320
361-611 Bitz2 CONTIF Fault	2-320
Chain 362 IIT	
262 ywy Chain 62 Entrance Don	0.004
JUZ-XXX GHAIH UZ EHURAHUE KAP	Z-32 I

362-396 CCD Cable Connection Fault	2-321
362-397 IIT-Cont Video Cable Connection Fault	2-322
362-398 IIT-Cont I/O Cable Connection Fault	2-322
362-468 Color State Errors	2-323
362-476 Stepper Home Error	2-323
362-481 (7830/35) DADF Communication Timeout	2-324
362-481 (7845/55) DADF Communication Timeout	2-324
362-486 Supply 24 Volt Error	2-325
362-490 Data Steerer Error	2-325
362-779 FPGA not loaded	2-326
362-780 FPGA CRC Error	2-326
362-900 IIT Calibration RAP	2-327
362-901 (7830/35) IPS-DADF Communication Fault	2-328
362-901 (7845/55) IPS-DADF Communication Fault	2-328
362-902 (7830/35) IIT PWB Power Cable Connection Fault	2-329
362-903 (7845/55) IIT PWB Power Cable Connection Fault	2-329
362-904 Lamp Illumination Fault	2-330
362-905 Platen AOC Fault	2-330

# Chain 365

366-xxx Chain 66 Entry Rap	2-331
366-490 Data Steerer Error - Taurus 2 (DADF-130 / 1 Pass)	2-331
366-779 FPGA Not Loaded (Side 2) (DADF-130 / 1 Pass)	2-332
366-780 FPGA CRC Error (Side 2) (DADF-130 / 1 Pass)	2-332
366-900 IIT Side 2 Calibration RAP (DADF-130 / 1 Pass)	2-333

# Chain 371

371-105 (7830/35) Regi Sensor On Jam (Tray 1/2/3/4)	2-335
371-105 (7845/55) Regi Sensor On Jam (Tray 1/2/3/4)	2-336
371-210 Tray 1 Lift Up Fault	2-337
371-212 Tray 1 Paper Size Sensor Broken	2-337

# Chain 372

372-101 Tray 2 Misfeed	2-339
372-102 Feed Out Sensor On Jam (Tray 2)	2-340 2-341
372-212 Tray 2 Paper Size Sensor Broken	2-341
372-900 Tray 2 Feed Out Sensor Static Jam	2-342

# Chain 373

373-101 (7830/35) Tray 3 Misfeed	2-343
373-101 (7845/55) Tray 3 Misfeed	2-344
373-102 Feed Out Sensor 3 On Jam (Tray 3)	2-345
373-210 Tray 3 Lift Up Fault	2-345
373-212 Tray 3 Paper Size Sensor Broken	2-346
373-900 Tray 3 Feed Out Sensor Static Jam	2-346

374-101 (7830/35) Tray 4 Misfeed	2-347
374-101 (7845/55) Tray 4 Misfeed	2-348
374-210 Tray 4 Lift Up Fault	2-349
374-212 Tray 4 Paper Size Sensor Broken	2-349
374-900 Tray 4 Feed Out Sensor Static Jam	2-350

# Chain 375

375-100 Tray 5 (MSI) Misfeed	2-351
375-103 (7830/35) Tray 5 Feed Out Sensor Off Jam	2-352
375-103 (7845/55) Tray 5 Feed Out Sensor Off Jam	2-352
375-135 (7830/35) Reg Sensor On Jam (Tray 5)	2-353
375-135 (7845/55) Reg Sensor On Jam (Tray 5)	2-353
375-212 Tray 5 Nudger Up/Down Fault	2-354

# Chain 377

377-101 Regi Sensor Off Jam	2-355
377-103 Fuser Exit Sensor Off Jam	2-355
377-104 Fuser Exit Sensor Off Jam (Too Short)	2-356
377-105 Exit Sensor 2 Off Jam	2-357
377-106 Fuser Exit Sensor On Jam	2-358
377-109 Exit Sensor 2 On Jam	2-358
377-110 POB Sensor On Jam	2-359
377-130 Reg Sensor On Jam (Duplex Direct)	2-359
377-131 Duplex Wait Sensor On Jam	2-360
377-211 Tray Module Kind Mismatch	2-360
377-212 Tray Module Reset Fault	2-361
377-214 Tray Module Logic Fault	2-361
377-215 Tray Module Communication Fault	2-362
377-300 Front Cover Interlock Open	2-362
377-301 L/H Cover Interlock Open	2-363
377-305 Tray Module L/H Cover Open	2-363
377-307 Duplex Cover Open	2-364
377-308 L/H High Cover Open	2-364
377-312 Feeder Comm Fail	2-365
377-314 P/H Module Logic Fail	2-365
377-320 All Feed Tray Broken	2-366
377-900 Reg Sensor Static Jam	2-366
377-901 Exit Sensor 1 Static Jam	2-367
377-902 Exit Sensor 2 Static Jam	2-367
377-903 POB Sensor Static Jam	2-368
377-907 Duplex Path Sensor Static Jam	2-368

# Chain 378

378-151 HCF Feed Out Sensor Fault RAP	2-369
378-210 Tray 3 (TTM) Lift Failure RAP	2-370
378-216 Logic Failure RAP	2-371
378-219 HCF PF2 Soft Download Fail	2-371
378-250 HCF Lift Fault RAP	2-372
378-300 HCF Top Cover Interlock Open RAP	2-373
378-301 HCF Docking interlock Open RAP	2-373
378-901 HCF Feed Out Sensor Static Jam RAP	2-374

# Chain 389

ECAT Issue

389-600 RC Sample Lateral Fail-A1	2-375
389-601 RC Sample Block Fail-A1-In	2-375
389-603 RC Sample Block Fail-A1-Out	2-376
389-604 RC Sample Block Fail-B-#1-In	2-376
389-606 RC Sample Block Fail-B-#1-Out	2-377

389-607 RC Sample Block Fail-B-#2-In	2-378
389-609 RC Sample Block Fail-B-#2-Out	2-379
389-610 RC Sample Block Fail-B-#3-In	2-380
389-612 RC Sample Block Fail-B-#3-Out	2-381
389-613 RC Sample Block Fail-B-#4-In	2-382
389-615 RC Sample Block Fail-B-#4-Out	2-383
389-616 RC Data Over Flow Fail	2-384
389-617 RC Lead Regi Over Range Fail	2-385
389-623 Vsout Stability Fail-In	2-386
389-625 RC Data Linearity Fail Y	2-387
389-626 RC Data Linearity Fail M	2-388
389-627 RC Data Linearity Fail C	2-389
389-628 RC Data Linearity Fail K	2-390
389-629 Vsout Stability Fail-Out	2-391
389-666 TMA LED Fail-In	2-392
389-667 TMA LED Fail-Out	2-393
389-668 TMA Thresh Hold Fail-In	2-394
389-669 TMA Thresh Hold Fail-Out	2-395

391-313 CRUM ASIC Communication Fault	2-397
391-400 Waste Toner Bottle Near Full	2-397
391-401 Drum Cartridge K Near Life	2-398
391-402 Drum Cartridge K Life Over	2-398
391-411 Drum Cartridge Y Near Life	2-399
391-421 Drum Cartridge M Near Life	2-399
391-431 Drum Cartridge C Near Life	2-400
391-480 Drum Cartridge Y Life Over	2-400
391-481 Drum Cartridge M Life Over	2-401
391-482 Drum Cartridge C Life Over	2-401
391-910 Waste Toner Bottle Not In Position	2-402
391-911 Waste Toner Bottle Full	2-402
391-913 Drum Cartridge K Life End	2-403
391-914 Drum CRUM K Communication Fault	2-403
391-915 Drum CRUM K Data Broken	2-404
391-916 Drum CRUM K Data Mismatch	2-404
391-917 Drum CRUM Y Communication Fault	2-405
391-918 Drum CRUM M Communication Fault	2-405
391-919 Drum CRUM C Communication Fault	2-406
391-920 Drum CRUM Y Data Broken	2-406
391-921 Drum CRUM K Not In Position	2-407
391-922 Drum CRUM M Data Broken	2-407
391-923 Drum CRUM C Data Broken	2-408
391-924 Drum CRUM Y Data Mismatch	2-408
391-925 Drum CRUM M Data Mismatch	2-409
391-926 Drum CRUM C Data Mismatch	2-409
391-927 Drum CRUM Y Not In Position	2-410
391-928 Drum CRUM M Not In Position	2-410
391-929 Drum CRUM C Not In Position	2-411
391-932 Drum Cartridge Y Life End	2-411
391-933 Drum Cartridge M Life End	2-412
391-934 Drum Cartridge C Life End	2-412

#### Chain 392

392-312 ATC Fault [Y]	2-413
392-313 ATC Fault [M]	2-413
392-314 ATC Fault [C]	2-414
392-315 ATC Fault [K]	2-414
392-649 ADC Shutter Open Fault	2-415
392-650 ADC Shutter Close Fault	2-415
392-651 ADC Sensor Fault	2-416
392-657 ATC Amplitude Fault [Y]	2-416
392-658 ATC Amplitude Fault [M]	2-417
392-659 ATC Amplitude Fault [C]	2-417
392-660 ATC Amplitude Fault [K]	2-418
392-661 Temperature Sensor Fault	2-418
392-662 Humidity Sensor Fault	2-419
392-665 ATC Average Fail Y	2-419
392-666 ATC Average Fail M	2-420
392-667 ATC Average Fail C	2-420
392-668 ATC Average Fail K	2-421
392-670 ADC Patch Fault [Y]	2-421
392-671 ADC Patch Fault [M]	2-422
392-672 ADC Patch Fault [C]	2-422
392-673 ADC Patch Fault [K]	2-423
392-675 ADC Mini Setup Fault [Y]	2-423
392-676 ADC Mini Setup Fault [M]	2-424
392-677 ADC Mini Setup Fault [C]	2-424
392-678 ADC Mini Setup Fault [K]	2-425

393-314 Y Dispense Motor Fault	2-427
393-315 M Dispense Motor Fault	2-427
393-316 C Dispense Motor Fault	2-428
393-317 K Dispense Motor Fault	2-428
093-324 Deve Y, M, C Motor Fail (7845/55)	2-429
393-400 Y Toner Cartridge Near Empty RAP	2-429
393-423 M Toner Cartridge Near Empty RAP	2-430
393-424 C Toner Cartridge Near Empty RAP	2-430
393-425 K Toner Cartridge Near Empty RAP	2-431
393-912 K Toner Cartridge Empty	2-431
393-924 Toner K CRUM Communication Fault	2-432
393-925 Toner K CRUM Data Broken Fault	2-432
393-926 Toner K CRUM Data Mismatch Fault	2-433
393-927 Toner Y CRUM Communication Fault	2-434
393-928 Toner M CRUM Communication Fault	2-435
393-929 Toner C CRUM Communication Fault	2-435
393-933 Toner Y CRUM Data Broken Fault	2-436
393-934 Toner M CRUM Data Broken Fault	2-436
393-935 Toner C CRUM Data Broken Fault	2-437
393-937 Toner Y CRUM Data Mismatch Fault	2-437
393-938 Toner M CRUM Data Mismatch Fault - TBD verify this for Spyglass	2-438
393-939 Toner C CRUM Data Mismatch Fault	2-439
393-956 Deve install Mode Fail K	2-440
393-959 Deve Install Times Over Fail K	2-441

393-970 Toner Y CRUM Not In Position	2-441
393-971 Toner M CRUM Not In Position	2-442
393-972 Toner C CRUM Not In Position	2-442
393-973 Toner K CRUM Not In Position	2-443
<b>0</b>     004	
Chain 394	
394-300 IBT Front Cover Open	2-445
394-320 1st BTR Contact/Retract Fail 2	2-445
394-417 IBT Unit Near End Warning	2-446
394-418 IBT CLN Unit Near End Warning 2	2-446
394-419 2nd BTR Unit Near End Warning 2	2-447
394-420 IBT Unit End Warning 2	2-447
394-421 IBT CLN Unit End Warning	2-448
394-422 2nd BTR Unit End Warning 2	2-448
Chain 05 Controller	
	- 440
95-AAA Faulis Enliy RAP	2-449
Other Faults	
AC Power RAP	2-453
STBY +5VDC Power RAP	2-453
+5VDC Power RAP	2-454
+24VDC Power RAP (7830/35)	2-454
+24VDC Power RAP (7845/55)	2-455
OF 2 UI Touch Screen Failure RAP	2-455
Machine Not Ready RAP	2-456
Unresettable Machine Status Messages	2-459
OF 3.3 Power On Self Test RAP	2-467
Toner CRIIM Mismatch RAP	2-470
USB Port Disabled	2-470
No-Run RAP	2_470
Yorographic Mossages DAD	2-471 2 /71
OE 16 1 Notwork Printing Problems Entry PAP	2-411 2 172
OF 16-2 Novell Netware Checkout PAP	2 472
OF 16-2 TOP/ID Checkout DAD	2-413
OF 16-3 TCF/IF Checkout RAP	2-4/4
	2-470
OF 10-5 NETBIOS Checkoul RAP	2-4//
OF 16-8 Problem Printing Job RAP	2-478
OF 16-9 JOD Prints incorrectly RAP	2-478
OF 17-1 FAX Entry RAP	2-479
OF 18-1 Secure Access RAP	2-480
OF 19 Wireless Connectivity RAP	2-482
OF 99-1 Reflective Sensor RAP	2-483
OF 99-2 Transmissive Sensor	2-484
OF 99-3 Switch	2-485
OF 99-4 Generic Solenoid/Clutch RAP	2-486
OF 99-6 2 Wire Motor Open	2-487
OF 99-7 2 Wire Motor On	2-487
OF 99-8 Set Gate Solenoid Open	2-488
OF 99-9 Multiple Wire Motor	2-488

# **302-302 Flash Rewrite Failure**

Flash Rewrite Failure

# **Initial Actions**

Power Off and On

# Procedure

Perform the following in order:

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

# 302-306 Flash Erase Failure

Flash Erase Failure

# **Initial Actions**

Power Off and On

# Procedure

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

# 302-308 Flash Download Failure

Flash Download Failure

# **Initial Actions**

Power Off and On

# Procedure

Perform the following in order:

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

# 302-312 Application SW Checksum Failure

Application SW Checksum Failure

# **Initial Actions**

Power Off and On

# Procedure

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

# 302-315 RAP

Service Registry Bad data / Corrupted

# Procedure

Perform the following in order:

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

# 302-316 RAP

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

# Procedure

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

# 302-317 RAP

UI gets no response from SRS

# Procedure

Perform the following in order:

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

# 302-320 UI Data Time Out Error

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

# Procedure

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

# 302-321 RAP

XEIP Browser Dead

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

# Procedure

Perform the following in order:

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

# 302-380 UI Communication Fault RAP

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

# Procedure

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

# 302-381 UI Communication Fault RAP

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

### Procedure

Go to 302-380 UI Communication Fault RAP

# 302-390 RAP

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

# Procedure

Go to the Machine Not Ready RAP.

# 303-306 Downgrade Not Permitted

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

# Procedure

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

# 303-307 Upgrade Synchronization Failure

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

# **Initial Actions**

Power off and power on the machine.

# Procedure

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

# 303-316 CCM Cannot Communicate with IOT

Controller cannot communicate with IOT.

The scanner and copier are disabled but printing is operational.

# **Initial Actions**

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

[616-116] = 2

# Procedure

Switch the power off then on. If the problem continues, perform GP 9.

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

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

# 303-317 IOT NVM Save Failure

IOT NVM Save Failure

# Procedure

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

### Y N

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

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

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

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

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

# 303-318 IOT NVM Init Failure

IOT NVM Init Failure

# **Initial Actions**

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

# Procedure

Perform dC301 NVM Initialization for the IOT.

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

# 303-319 IOT NVM Restore Failure

IOT NVM Restore Failure

# Procedure

Perform dC361 NVM Restore for the IOT Critical NVM.

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

- 1. Replace the MDM PWB (PL 18.2A -7830/35, PL 18.2B 7845/55).
- 2. Replace the SBC SD Card (PL 35.2).
- 3. Replace the Hard Drive (PL 35.2).
- 4. Replace the SBC PWB (PL 35.2).
# 303-320 Incompatible Product Type

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

## Procedure

Perform GP 9 Software Upgrade with the correct Software module or select the correct .dlm file using the Web UI to upgrade the machine.

# 303-324 Software Upgrade File Transfer Failure

SW Upgrade File Transfer failure

## **Initial Actions**

Power off and power on the machine.

## Procedure

Perform the following in order:

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

# 303-325 Wall Clock Timeout During Power Up

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

### Procedure

Power OFF and then ON.

If the problem continues, call service support for assistance.

# 303-326 Upgrade is not Required

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

## Procedure

If a software reinstallation is required, perform GP 9 Forced Altboot.

# 303-327 Upgrade Failure

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

## **Initial Actions**

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

## Procedure

The problem is still present:

Y N

Return to Service Call Procedures.

Call service support for assistance.

# 303-329 Upgrade Request During Diagnostics

Upgrade request received during active diagnostics.

## Procedure

Exit Diagnostics and perform GP 9 Software Upgrade.

# 303-330 Upgrade Request During Active Security Feature

Upgrade request received during active Security function.

## Procedure

Wait until Security function (Image Overwrite) is completed and perform GP  ${\rm 9}$  Software Upgrade.

# 303-331 Communication Fault With NC

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

## Procedure

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

If the fault persists, go to 303-332.

# 303-332 NC Communications Timeout

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

## Procedure

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

Return to Service Call Procedures.

Go to the Machine Not Ready RAP.

# 303-338 Main Controller Has Been Reset

 $\ensuremath{\mathsf{CCS}}$  has been reset; either the watch dog timer timed out or the application SW wrote to an illegal address.

## **Initial Actions**

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

## Procedure

Switch the power off then on.

Perform dC361 to restore NVM.

If the problem continues, perform GP 9 SW upgrade.

# 303-346 Communication fault with UI RAP

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

### Procedure

Go to the 303-347.

# 303-347 UI Communication Fault

BSD-ON: BSD 3.4 PWB Communication (4 of 7)

The SBC cannot communicate with UI PWB.

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

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

## Procedure

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

Perform GP 9. If the problem persists, go to the Machine Not Ready RAP.

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

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

## Procedure

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

# 303-380 Distribution PWB Missing or Disconnected

BSD-ON: BSD 3.5 PWB Communication (5 of 7)

PWBA is missing or disconnected.

## Procedure

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

Power OFF and then ON.

If the problem continues, call service support for assistance.

# 303-390 Upgrade Automation Failed

Upgrade Automation failed

## Procedure

Call service support for assistance.

# 303-397 System Configuration is lost

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

## Procedure

Call service support for assistance.

# 303-398 SOK 1 Not Detected

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

## Procedure

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

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

# 303-399 SOK 1 Not Detected

SIM Card data cannot be processed

## Procedure

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

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

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

# 303-401 Basic FAX Not Detected or Confirmed

Basic FAX not detected/confirmed

## Procedure

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

# 303-403 Extended FAX Not Detected or Confirmed

Extended FAX not detected/confirmed

## Procedure

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

# **303-405 Failed to Recover Machine Class**

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

## Procedure

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

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

# 303-406 SIM Speed Does not Match Machine Class

SIM speed does not match machine class

## Procedure

Remove incompatible SIM (and Insert compatible SIM).

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

# 303-417 Incompatible FAX SW Detected at Power Up

Incompatible FAX software detected at power on

## Procedure

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

# 303-777 Power Loss Detected

Input Power loss detected or software corruption.

## Procedure

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

# 303-788 Failed to Exit Power Save Mode

CCS Runtime could not enter power saver mode S3.

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

### Procedure

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

# 303-790 Timezone File Cannot be Set

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

## Procedure

Switch the power off then on.

Perform dC361 to restore NVM.

If the problem continues, perform GP 9 SW upgrade.

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

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

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

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

## **Cause/Action**

Check the following:

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

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

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

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

## **Cause/Action**

### Check the following:

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

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

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

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

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

### **Cause/Action**

Check the following:

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

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

#### **BSD-ON: 5.12 DADF Pre Registration**

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

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

### **Cause/Action**

Check the following:

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

## **Cause/Action**

Check the following:

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

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

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

Jam

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.13 DADF Registration**

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

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

## **Cause/Action**

Check the following:

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

## Cause/Action

Check the following:

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

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

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

BSD-ON: 5.12 DADF Pre Registration

### **BSD-ON: 5.13 DADF Registration**

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

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

## **Cause/Action**

### Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Regi Roll, DADF Out Roll, DADF CIS Roll, and DADF Exit Roll for foreign substances.
- The surface of the DADF Regi Roll, DADF Out Roll, DADF CIS Roll, and DADF Exit Roll for wear.
- The DADF Regi Sensor (dC330 [005-110]) for operation failure. (PL 55.16)
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
- The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 55.5) The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor P/J782 pin-2 and P/J782 pin-1/3
  - Between DADF Regi Motor P/J782 pin-5 and P/J782 pin-4/6
- The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. (PL 55.2)

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

BSD-ON: 5.12 DADF Pre Registration

### **BSD-ON: 5.13 DADF Registration**

BSD-ON: 5.15 DADF Document Exit

### BSD-ON: 5.16 DADF Document Exit

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

## **Initial Actions**

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

## **Cause/Action**

Check the following:

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

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

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

**BSD-ON: 5.13 DADF Registration** 

### BSD-ON: 5.15 DADF Document Exit

## BSD-ON: 5.16 DADF Document Exit

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

## **Initial Actions**

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

## **Cause/Action**

Check the following:

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

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

BSD-ON: 5.13 DADF Registration

### BSD-ON: 5.15 DADF Document Exit

### BSD-ON: 5.16 DADF Document Exit

The DADF  $\mbox{Exit}$  Sensor did not turn ON within the specified time after the DADF Out Sensor On in Simplex Mode.

## **Initial Actions**

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

## **Cause/Action**

Check the following:

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

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

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

**BSD-ON: 5.13 DADF Registration** 

**BSD-ON: 5.15 DADF Document Exit** 

### BSD-ON: 5.16 DADF Document Exit

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

## **Initial Actions**

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

## Cause/Action

Check the following:

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

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

## **BSD-ON: 5.5 DADF Document Scan and Invert**

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

## Procedure

When the trouble occurs frequently, verify the following:

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

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

### **BSD-ON: 5.5 DADF Document Scan and Invert**

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

## **Cause/Action**

### Check the following:

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

The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)

- Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
- The Drive Gear for wear and damage.

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

**BSD-ON: 5.5 DADF Document Scan and Invert** 

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

### Cause/Action

Check the following:

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

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

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

**BSD-ON: 5.5 DADF Document Scan and Invert** 

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

## **Cause/Action**

Check the following:

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

The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)

- Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9

• The Drive Gear for wear and damage.

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

## **Cause/Action**

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Exit Roll for foreign substances.
- The surface of the DADF Exit Roll for wear.
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
- The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
  - Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
- The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid (DC330 [005-072]) operation failure). (PL 51.6)

The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)

- Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
- The Drive Gear for wear and damage.

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

**BSD-ON: 5.5 DADF Document Scan and Invert** 

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

## Cause/Action

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Exit Roll and DADF Takeaway Roll for foreign substances.
- The surface of the DADF Exit Roll and DADF Takeaway Roll for wear.
- The DADF Regi Sensor (dC330 [005-110]) for operation failure. (PL 51.17)
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
- The DADF Feed Motor (dC330 [005-001]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor P/J776 pin-2 and P/J776 pin-1/3
  - Between DADF Feed Motor P/J776 pin-5 and P/J776 pin-4/6
- The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
  - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-4/6
    Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
- The Exit Pinch Roll for operation failure (including the Exit Nip/Release Solenoid (dC330 [005-072]) operation failure). (PL 51.6)

The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)

- Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
- The Drive Gear for wear and damage.

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

**BSD-ON: 5.5 DADF Document Scan and Invert** 

### **BSD-ON: 5.6 DADF Document Exit Transportation**

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

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

## **Cause/Action**

Check the following:

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

The coil resistance of the Exit Nip/Release Solenoid: approx. 50 Ohm (when coil temperature is 20 degrees celsius)

- Between DADF PWB P/J754 pin-B8 and P/J754 pin-B9
- The Drive Gear for wear and damage.

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

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

### **Initial Actions**

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

## **Cause/Action**

Check the following:

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

## **Cause/Action**

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Regi Sensor (dC330 [005-110]) for operation failure. (PL 51.17)
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
- The DADF Feed Motor (dC330 [005-001]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor P/J776 pin-2 and P/J776 pin-1/3
  - Between DADF Feed Motor P/J776 pin-5 and P/J776 pin-4/6
- The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
  - Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
- The Drive Gear for wear and damage.
- If no problem is found, replace the DADF PWB. (PL 51.2)

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

## **Cause/Action**

Check the following:

- Transportation failure due to foreign substance on the document path.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for foreign substances.
- The surface of the DADF Feed Roll, DADF Nudger Roll, DADF Retard Roll, DADF Takeaway Roll, DADF Regi Roll, and DADF Out Roll for wear.
- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 51.17)
- The DADF Feed Out Sensor (dC330 [005-205]) for operation failure. (PL 51,6)
- The DADF Feed Motor (dC330 [005-001]) for operation failure. (PL 51.5)
  The wire wound resistance of the DADF Feed Motor: approx. 1.15 Ohm
  - Between DADF Feed Motor P/J776 pin-2 and P/J776 pin-1/3
  - Between DADF Feed Motor P/J776 pin-5 and P/J776 pin-4/6
- The DADF Regi Motor (dC330 [005-026]) for operation failure. (PL 51.5) The wire wound resistance of the DADF Regi Motor: approx. 2.7 Ohm
  - Between DADF Regi Motor P/J777 pin-2 and P/J777 pin-1/3
  - Between DADF Regi Motor P/J777 pin-5 and P/J777 pin-4/6
- The Drive Gear for wear and damage.

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.12 DADF Pre Registration**

### BSD-ON: 5.13 DADF Registration

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

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

## **Cause/Action**

Check the following:

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

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

## **Cause/Action**

### Check the following:

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

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

### **BSD-ON: 5.2 DADF Document Size Sensing**

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

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

## **Cause/Action**

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

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

### **BSD-ON: 5.9 DADF Document Size Sensing**

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

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

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

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

BSD-ON: 5.2 DADF Document Size Sensing

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

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

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

### **Cause/Action**

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

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

**BSD-ON: 5.9 DADF Document Size Sensing** 

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

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

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

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

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

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

A prohibited size combination was detected.

## **Cause/Action**

Explain to the customer that the following combinations are prohibited.

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

A prohibited size combination was detected.

## **Cause/Action**

Explain to the customer that the following combinations are prohibited.

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

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

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

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

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

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

### **Cause/Action**

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

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

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.12 DADF Pre Registration**

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

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

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

### **Cause/Action**

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

- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
- The DADF Feed Out Sensor (dC330 [005-205]) for operation failure. (PL 55.7) If no problem is found, replace the DADF PWB. (PL 55.2)

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

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

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

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

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

### **Cause/Action**

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

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

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

### **BSD-ON: 5.12 DADF Pre Registration**

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

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

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

## **Cause/Action**

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

- The DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
- The DADF Feed Out Sensor (dC330 [005-205]) for operation failure. (PL 55.7) If no problem is found, replace the DADF PWB. (PL 55.2)

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

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

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

## **Cause/Action**

Perform the DADF software download.

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

BSD-ON: 3.3 PWB Communication (7845/55)

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

## **Cause/Action**

Perform the DADF software download.

# 305-253 IIT- DADH Communication Error

BSD-ON: 3.3 PWB Communication (7845/55)

A communication error occurred between the IIT and DADH.

## **Cause/Action**

Power off and Power On.

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

BSD-ON: 3.2 PWB Communication (7830/35)

The DADF EEPROM Read/Write operation failed.

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

## **Cause/Action**

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

• 7830/35 DADF PWB - (PL 51.2)

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

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

### The DADF EEPROM Read/Write operation failed.

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

## **Cause/Action**

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

• 7845/55 DADF PWB - (PL 55.2)

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

### BSD-ON: 5.1 DADF Document Setting

The Feeder Cover Interlock was opened during DADF operation.

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

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

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

### BSD-ON: 5.8 DADF Interlock & Document Setting

The Feeder Cover Interlock was opened during DADF operation.

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

### **Cause/Action**

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

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

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

### **Initial Actions**

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

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

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

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

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

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

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

## **Cause/Action**

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

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

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

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

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

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

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

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

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

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

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

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

## **Cause/Action**

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

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

### **BSD-ON: 5.12 DADF Pre Registration**

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

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

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

- 1. Check the DADF Pre Regi Sensor for remaining paper, the Actuator for return failure, foreign substances, contamination on sensors, and etc.
- 2. Check the DADF Pre Regi Sensor (dC330 [005-206]) for operation failure. (PL 55.16)
- 3. If no problem is found, replace the DADF PWB. (PL 55.2)
# 305-908 (7830/35) DADF Reg Sensor Static Jam

#### **BSD-ON: 5.5 DADF Document Scan and Invert**

The DADF Reg Sensor turns ON at the following timings:

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

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

### **Cause/Action**

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

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

#### BSD-ON: 5.13 DADF Registration

The DADF Reg Sensor turns ON at the following timings:

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

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

#### **Cause/Action**

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

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

#### BSD-ON: 5.15 DADF Document Exit

The DADF Out Sensor turns ON at the following timings:

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

## **Initial Actions**

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

## **Cause/Action**

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

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

BSD-ON: 5.15 DADF Document Exit

The DADF Exit Sensor turns ON at the following timings:

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

## **Initial Actions**

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

## **Cause/Action**

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

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

#### **BSD-ON: 5.5 DADF Document Scan and Invert**

The DADF Invert Sensor turns On at the timings below.

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

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

### **Cause/Action**

Check the following:

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

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

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

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

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

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

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

## **Cause/Action**

Check the following:

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

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

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

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

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

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

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

## **Cause/Action**

Check the following:

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

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

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

BSD-ON:5.4 Document Feeding (2 of 2)

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

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

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

## **Cause/Action**

Check the following:

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

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

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

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

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

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

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

## **Cause/Action**

Check the following:

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

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

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

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

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

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

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

## **Cause/Action**

Check the following:

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

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

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

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

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

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

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

### **Cause/Action**

Check the following:

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

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

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

BSD-ON: 5.1 DADF Document Setting (7830/35)

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

#### **Cause/Action**

Reload the document.

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

BSD-ON: 5.8 DADF Interlock & Document Feeding (7845/55)

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

## **Cause/Action**

Reload the document.

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

BSD-ON: 5.1 DADF Document Setting (7830/35)

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

## **Cause/Action**

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

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

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

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

## **Cause/Action**

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

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

**BSD-ON: 5.2 DADF Document Size Sensing** 

#### **BSD-ON: 5.4 DADF Document Feeding**

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

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

## **Cause/Action**

Check the following:

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

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

#### **BSD-ON: 5.9 DADF Document Size Sensing**

#### **BSD-ON: 5.11 DADF Document Feeding**

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

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

#### Cause/Action

Check the following:

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

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

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

**BSD-ON: 5.2 DADF Document Size Sensing** 

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

#### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

#### Cause/Action

Check the following:

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

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

**BSD-ON: 5.9 DADF Document Size Sensing** 

BSD-ON: 5.10 DADF Document Feeding (1 of 2)

#### **BSD-ON: 5.13 DADF Registration**

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

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

## **Cause/Action**

Check the following:

- Document Tray Size Sensor 1/2: dC330 [005-221/222] (PL 55.10)
- Check the circuit between the Document Tray Size Sensor 1/2 and the DADF PWB.
- DADF Feed Out Sensor: dC330 [005-205] (PL 55.7)
- DADF Reg Sensor: dC330 [005-110] (PL 55.16)
- DADF APS Sensors 1-3: dC330 [005-218/219/220] (PL 55.16)
- Check the circuit between the DADF APS Sensors 1-3 and the DADF PWB.
- If no problems are found, replace the DADF PWB (PL 55.2).

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

**BSD-ON: 5.2 DADF Document Size Sensing** 

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

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

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

## **Cause/Action**

Check the following:

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

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

#### **BSD-ON: 5.9 DADF Document Size Sensing**

#### **BSD-ON: 5.11 DADF Document Feeding**

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

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

#### Cause/Action

Check the following:

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

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

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

**BSD-ON: 5.2 DADF Document Size Sensing** 

BSD-ON: 5.3 DADF Document Feeding (1 of 2)

#### **BSD-ON: 5.5 DADF Document Scan and Invert**

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

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

#### **Cause/Action**

Check the following:

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

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

**BSD-ON: 5.9 DADF Document Size Sensing** 

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

#### BSD-ON: 5.13 DADF Registration

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

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

### **Cause/Action**

Check the following:

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

# 310-329 Fuser Fuse Cut Fail

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

## Procedure

3.3 VDC is measured from P/J431 to GND.

Y N

Disconnect P/J431. P/J431 pin 2 measures shorted to ground.

- Y N
  - Replace the MDM PWB:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

Replace / repair the wire connection.

Replace the MDM PWB:

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

# 310-330 Fuser Motor Fault

BSD-ON: 10.1 Fuser Drive Control (1 of 2)

## BSD-ON: 9.22 First BTR Contact/Retract Control

The Fuser Drive Motor revolution failure was detected.

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

## **Initial Actions**

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

## Procedure

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

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

Is the voltage between the Fuser Drive Motor J242-1 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Is the voltage between the Fuser Drive Motor J243-1 (+) and the GND (-) +5VDC? Y N

Go to +5VDC Power +5VDC Power RAP.

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

- If no problems are found, replace the following parts in sequence:
- Fuser Drive Motor (PL 3.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

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

Y N

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

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

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

# 310-360 IH Driver Input High Voltage Fault

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

#### BSD-ON: 1.1 Main Power On

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

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

#### Procedure

Turn the power OFF. Remove the Right Cover and remove the Front LVPS Fan. Turn the main power ON (turn ON the Main Power Switch). Is the voltage between the Main LVPS J6-1 and J6-3 100VAC?

#### Y N

Go to AC Power RAP.

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

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

# 310-361 IH Driver Input Low Voltage Fault

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

#### BSD-ON: 1.1 Main Power On

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

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

#### Procedure

Turn the power OFF. Remove the Right Cover and remove the Front LVPS Fan. Turn the main power ON (turn ON the Main Power Switch). Is the voltage between the Main LVPS J6-1 and J6-3 100VAC?

Y N

Go to AC Power RAP.

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

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

# 310-362 IH Driver Surge Fault

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

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

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

## **Cause/Action**

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

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

# 310-363 IGBT Temperature High Fault

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

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

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

## Procedure

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

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

Y N

```
Proceed to the 342-332 RAP.
```

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

Y N

Proceed to the 342-330 (7845/55) RAP.

#### Press the Stop button.

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

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

# 310-364 IGBT Temperature Sensor Fault

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

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

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

## **Cause/Action**

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

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

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

# 310-367 Input Low Current Fault

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

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

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

## **Initial Actions**

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

### Procedure

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

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

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

# 310-368 Encoder Pulse Fault

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

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

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

#### **Initial Actions**

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

### Procedure

Check the following connections for short circuits and poor contacts.

- Between MDM PWB J431-12 and Fuser Assembly DJ600-B7
- Between MDM PWB J431-13 and Fuser Assembly DJ600-B6
- Between MDM PWB J431-14 and Fuser Assembly DJ600-B5

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

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

# **310-369 IH Driver Communication Fault**

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

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

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

#### **Cause/Action**

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

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

# 310-370 IH Driver Freeze Fault

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

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

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

## **Cause/Action**

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

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

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

# **310-371 Heat Belt STS Center Disconnection Fault**

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

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

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

#### **Initial Actions**

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

#### Procedure

Measure the resistance between Fuser Assembly P/J530-A7 and P/J530-A8. The resistance is infinite.

Y N

- Check the following connections for open circuits, short circuits, and poor contacts.
- Between DJ600-A5 and MDM PWB J431-7
- Between DJ600-A4 and MDM PWB J431-8

If no problems are found, replace the MDM PWB.

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

Replace the Fuser Assembly (PL 7.1).

# 310-372 Heat Roll STS Center Over Temperature Fault

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

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

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

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

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

#### **Initial Actions**

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

#### Procedure

Check the following connections for short circuits and poor contacts.

- Between DJ600-A5 and MDM PWB J431-7
- Between DJ600-A4 and MDM PWB J431-8

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

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

# 310-373 Heat Belt STS Rear Disconnection Fail

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

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

#### **Initial Actions**

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

#### **Cause/Action**

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

# 310-374 Heat Belt STS Rear Over Temperature Fail

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

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

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

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

#### **Initial Actions**

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

### **Cause/Action**

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

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

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

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

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

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

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

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

#### Procedure

Enter dC122 Fault History. Check whether IH Driver Input Low Voltage Fault has occurred. Has Fault 310-361 occurred?

Y N

- Turn the power OFF and check the following:
- Remove the Fuser Assembly. Check the Drawer Connector between the Fuser Assembly and the Main Unit ( P/DJ600) for broken/bent pins, foreign substances, burns, and etc.
- Check the connection between the DJ600-A4/A5 and the MDM PWB J431-8/7 for open circuit, short circuit, and poor contact
- If no problems are found, replace the following parts in sequence:
- Fuser Assembly (PL 7.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 310-361 RAP.

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

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

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

- **NOTE:** •This Fault may occur when the temperature in the installation environment is low (10 degree or lower)
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### **Cause/Action**

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

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

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

# 310-377 Fusing Unit On Time Fail

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

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

#### **Initial Actions**

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

## **Cause/Action**

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

# 310-378 Heat Belt Rotation Fault

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

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

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

#### **Cause/Action**

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

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

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

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

#### **Initial Actions**

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

## **Cause/Action**

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

# 310-380 P/Roll Latch Motor Fault

BSD-ON: 10.2 Fuser Drive Control (2 of 2)

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

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

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

## **Initial Actions**

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

## Procedure

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

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

#### Y N

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

Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

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



Figure 1 Fuse 1

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

- Y N
  - Replace the following parts:
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

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

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

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

Y N

Replace the P/R Latch Motor (PL 7.1).

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

Y N

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

If no problems are found, replace the following parts:

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

Α

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

Y N

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

Y N

Press the Stop button and turn the power OFF.

Remove the Fuser Assembly and check the connection between the DJ600-A8/A7 and the MDM PWB J431-4/5 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

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

Press the Stop button and turn the power OFF.

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

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

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

Turn the power OFF and check the Latch Motor Gear for wear or damage. If no problems are found, replace the following parts in sequence:

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

# 310-381 Fuser Assy Illegal Fault

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

An incorrect type of Fuser Assembly was installed. 7830/35 uses a different Fuser than 7845/ 55. Fuser can be identified by the barcode label on the bottom of the Fuser.

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- Turn the power OFF and replace with the correct Fuser Assembly; check the part number on the barcode label located on the bottom of the Fuser for parts compatibility (PL 7.1). In the lower left corner of the barcode is a letter followed by a number, which translates to the following:
  - B = Low Speed Machine (7830/35)
  - C = High Speed Machine (7845/55)
  - 100 = 110 VAC
  - 200 = 220 VAC

# 310-382 Fuser Thermostat Fault

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

The Fuser Assembly Thermostat is broken or software fix is required.

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

#### **Initial Actions**

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

#### Procedure

Measure the resistance between DP600 pin-A11 and DP600 pin-B9. Is the resistance infinite?

Y N

- Check the following connections for open circuits, short circuits, and poor contacts.
- Between DJ600-A1 and MDM PWB J431-11
- Between DJ600-B1 and MDM PWB J431-18

If no problems are found, replace the MDM PWB.

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

Replace the Fuser Assembly (PL 7.1).

# 310-398 Fuser Fan Fault

BSD-ON: 10.6 Fusing

The Fuser Fan error was detected.

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

#### **Initial Actions**

Rotate the Fuser Fan manually to check for loading.

### Procedure

Enter DC122 Fault History. Has 041-393 faults (MDS PWB F1 Open) occurred?

Y N

Enter the Diag Mode, turn ON dC330 [042-011] (Fuser Fan). Is the Fuser Fan rotating? Y N

Turn the power OFF and check the connection between the Fuser Fan J230-4/3/1 and the MDS PWB P/J524-10/11/13 for open circuit, short circuit, and poor contact. Check the Fusing Unit Fan for foreign substances.

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

- Fuser Fan (PL 4.1)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF.

Check the connection between the Fuser Fan J230-2 and the MDS PWB P/J524-12 for open circuit, short circuit, and poor contact.

If no problems are found, replace the following parts:

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

Go to the 341-393 RAP.

# 310-420 Fuser Assembly Near Life Warning

## BSD-ON: 10.6 Fusing

The Fuser Assembly is near the end of its life span.

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

## **Cause/Action**

Replace the Fuser Assembly (PL 7.1) with a new one and clear dC135 [954-850].

If the problem persists, replace the MDM PWB.

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

# 310-421 Fuser Assembly Life Over Warning

#### BSD-ON: 10.6 Fusing

The Fuser Assembly has reached the end of its life span.

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

## Cause/Action

Replace the Fuser Assembly (PL 7.1) with a new one and clear dC135 [954-850].

If the problem persists, replace the MDM PWB.

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

# 312-111 (LX) H-Transport Entrance Sensor Off Jam A

#### BSD-ON:BSD 12.14 Office Finisher LX Horizontal Transportation

The H-Transport Entrance Sensor did not turn off within the specified time after it turned on.

## Procedure

Procedure Check the H-Transport Drive Rolls (PL 23.4) and Pinch Rolls (PL 23.3) for wear or contamination. Check for obstructions or damage in the paper path. The Paper Path is OK. Υ Ν Clean or replace as required. Y N Execute dC330 [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor (PL 23.4). The display changes. Υ Ν Y N Check the wire between J8861 pin 2 and J8987 pin 6 for an open or short circuit, or a loose or damaged connector. The wire is OK. Y N Υ Ν Repair/reconnect as required. Measure the voltage between J8987, pins 4 and 5 on the Finisher PWB (BSD 12.14 Office Finisher LX Horizontal Transportation). The voltage is approx. +5VDC. Y N Replace the Finisher PWB (PL 23.16). changes. Υ Ν Measure the voltage between J8987, pin 6 on the Finisher PWB and GND (BSD 12.14 Office Finisher LX Horizontal Transportation). Actuate the H-Transport Entrance Sensor. The voltage changes. Y N Replace the H-Transport Entrance Sensor (PL 23.4). Υ Ν Replace the Finisher PWB (PL 23.16). Power OFF. Open the H-Transport Top Cover. Cheat the H-Transport Interlock Sensor. Power Υ Ν ON. The H-Transport Belt rotates. Y N Check the wires between P/J8862 on the H-Transport Motor and J8987 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. The wires are OK. Y N Y N Repair/reconnect as required. Measure the resistance of the H-Transport Motor between each pin J8862-1/2/5/6 (BSD 12.14 Office Finisher LX Horizontal Transportation). The resistance is approx. 20 Ohm. Y N Replace the H-Transport Motor (PL 23.4). 23.13). Replace the Finisher PWB (PL 23.16). If the problem persists, replace the H-Transport Motor (PL 23.4).

Check the H-Transport Entrance Sensor and H-Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB (PL 23.16).

## 312-132 (LX) Finisher Entrance Sensor On Jam

BSD-ON: BSD 12.16 Office Finisher LX Transportation

After the Fuser Exit Sensor turned On, the Finisher Entrance Sensor did not turn On within the specified time.

Execute dC330 [012-100], Finisher Entrance Sensor. Actuate the Finisher Entrance Sensor (PL 23.14). The display changes.

Check the wire between J8868 pin 2 and P/J8988 pin 2 for an open or short circuit, or a loose or damaged connector. **The wire is OK.** 

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 3 and 1 on the Finisher PWB (BSD 12.16 Office Finisher LX Transportation). The voltage is approx. +5VDC.

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 2 on the Finisher PWB and GND (BSD 12.16 Office Finisher LX Transportation). Actuate the Finisher Entrance Sensor. The voltage changes.

Replace the Finisher Entrance Sensor (PL 23.14).

Replace the Finisher PWB (PL 23.16).

#### Execute dC330 [012-038], Transport Motor. The Transport Motor rotates.

Check the wires between P/J8879 on the Transport Motor and P/J8983 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wires are OK.** 

Repair/reconnect as required.

Measure the resistance of the Transport Motor between each pin J8879-1/2/5/6 (BSD 12.16 Office Finisher LX Transportation). The resistance is approx. 20 Ohm.

Replace the Transport Motor (PL 23.13).

Replace the Finisher PWB (PL 23.16). If the problem persists, replace the Transport Motor (PL 23.13).

Check the Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination (PL 23.13).

Check the return Spring (PL 23.11) item 38 and replace if damaged or missing. Check the Finisher Entrance Sensor and Transport Motor circuits for an intermittent condition. If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-151 (LX) Compiler Exit Sensor Off Jam

#### BSD-ON: BSD 12.16 Office Finisher LX Transportation

After the Compiler Exit Sensor turned On, the Compiler Exit Sensor did not turn Off within the specified time.

### Procedure

Execute dC330 [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL 23.14). The display changes.

Check the wire between J8869 pin 2 and P/J8988 pin 5 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 6 and 4 on the Finisher PWB (BSD 12.16 Office Finisher LX Transportation). **The voltage is approx. +5VDC.** 

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 5 on the Finisher PWB and GND (BSD 12.16 Office Finisher LX Transportation).Actuate the Compiler Exit Sensor. The voltage changes.

#### Y N

Replace the Compiler Exit Sensor (PL 23.4).

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-038], Transport Motor. The Transport Motor rotates.

Y N	
Check the wires between P/J8879 on the Transport Motor and P/J8983 on the Finisher	Replace the Finisher PWB (PL 23.16).
PWB for an open or short circuit, or a loose or damaged connector. The wires are OK.	Execute dC330 [012-038] Transport Motor The Transport Motor rotates
	Y N
Repair/reconnect as required.	Check the wires between P/J8879 on the Transport Motor and P/J8983 on the Finisher
Measure the resistance of the Transport Motor between each pin J8879-1/2/5/6 (BSD	PWB for an open or short circuit, or a loose or damaged connector. The wires are OK.
12.16 Office Einisher I X Transportation). The resistance is approx. 20 Ohm.	Y N
Y N	Repair/reconnect as required.
Replace the Transport Motor (PL 23.13).	
	Measure the resistance of the Transport Motor between each pin J8879-1/2/5/6 (BSD
Replace the Finisher PWB (PL 23.16). If the problem persists, replace the Transport	12.16 Office Finisher LX Transportation). The resistance is approx. 20 Ohm.
Motor (PL 23.13).	Y N
	Replace the Transport Motor (PL 23.13).
Check the Exit Roller, Paddle Shaft and Eject Belt for wear, damage or contamination (PL	Replace the Finisher PWB (PL 23.16). If the problem persists, replace the Transport
23.13).	Motor (PL 23.13).
Check the return Spring (PL 23.11) item 38 and replace it damaged or missing.	
Check the Compiler Exit Sensor and Transport Motor circuits for an intermittent condition.	Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or con-
If the problem continues, replace the Finisher PWB (PL 23.16).	tamination (PL 23.13).
	Check the return Spring (PL 23.11) item 38 and replace if damaged or missing

312-152 (LX) Compiler Exit Sensor On Jam

After the H-Transport Exit Sensor turned On, the Compiler Exit Sensor did not turn On within

Execute dC330 [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL

Check the wire between J8869 pin 2 and P/J8988 pin 5 for an open or short circuit, or a

Measure the voltage between P/J8988, pins 6 and 4 on the Finisher PWB (BSD 12.16

Measure the voltage between P/J8988, pin 5 on the Finisher PWB and GND (BSD 12.16

Office Finisher LX Transportation). The voltage is approx. +5VDC.

Office Finisher LX Transportation). Actuate the Compiler Exit Sensor. The

**BSD-ON: BSD 12.16 Office Finisher LX Transportation** 

loose or damaged connector. The wire is OK.

Replace the Finisher PWB (PL 23.16).

Replace the Compiler Exit Sensor (PL 23.14).

Repair/reconnect as required.

the specified time.

Initial Actions
 Power OFF/ON

23.14). The display changes.

Procedure

Y N

Y N

changes.

Y N

Y N

voltage

Initial Issue

## 312-161 (LX) Finisher Set Eject Jam

BSD-ON:BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

#### BSD-ON:BSD 12.22 Office Finisher LX Eject Control (1 of 2)

After the Eject Motor turned On, the Compiler Tray No Paper Sensor did not turn Off within the specified time.

#### Procedure

Enter dC330 [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes**.

```
Y N
```

Check the wire between J8880 pin 2 and J8984 pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.** 

```
Y N
```

Repair/reconnect as required.

Measure the voltage between J8984 pins 3 and 1 on the Finisher PWB (BSD 12.22 Office Finisher LX Eject Control (1 of 2)). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984 pin 2 on the Finisher PWB and GND (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)). Actuate the Compiler Tray No Paper Sensor. **The voltage changes.** 

Y N

Replace the Compiler Tray No Paper Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-054 Eject Motor FORWARD LO] and dC330 [012-055 Eject Motor FORWARD HI]. **The Eject Motor starts up.** 

#### Y N

Check the wires between P/J8878 on the Eject Motor and P/J8983 on the Finisher PWB (BSD 12.22 Office Finisher LX Eject Control (1 of 2)) for an open or short circuit, or a loose or damaged connector. **The wires are OK.** 

```
Y N
```

Repair/reconnect as required.

Measure the resistance of the Eject Motor between each point of J8878-1/3/4/6 (BSD 12.22 Office Finisher LX Eject Control (1 of 2)). The resistance is approx. 20 Ohm.

Y N

Replace the Eject Motor (PL 23.11).

Replace the Eject Motor (PL 23.11). If the problem persists, replace the Finisher PWB (PL 23.16).

Check the Exit Roller, Entrance Roller, Paddle Shaft and Eject Belt for wear, damage or contamination (PL 23.13).

Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.

Check the Compiler Tray No Paper Sensor and Eject Motor circuits for an intermittent condition.

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-210 (LX) NVM Fail RAP

BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

NVM Fail

## Procedure

Power OFF and then ON.

If the problem persists, replace the Finisher PWB (PL 23.16).

# 312-211 (LX) Stacker Tray Fault

## BSD-ON:BSD 12.24 Office Finisher LX Stacker Tray Control

Stack Height Sensor 1 is not ON within the specified time after stacker tray starts elevating.While Stacker Tray is elevating or lowering, the state of the Encoder Sensor does not change within the specified time.

## **Initial Actions**

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor 1 actuator.
- Check the tray raise/lower mechanism for damage or contamination.

## Procedure

Execute dC330 [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. The display changes.

Y N

Check the wire between J8873 pin 2 and P/J8988 pin 17 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 16 and 18 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Y N

Y

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 17 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker Height Sensor 1. The voltage changes.

N Replace the Stacker Height Sensor 1 (PL 23.11).

```
Replace the Finisher PWB (PL 23.16).
```

Execute dC330 [012-263], Stacker Encoder Sensor. Manually rotate the Encoder (PL 23.7) to block and unblock the sensor. **The display changes.** 

```
Y N
```

Check the wire between J8875 pin 2 and P/J8988 pin 23 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 22 and 24 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 23 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. **The voltage changes.** 

```
Y
```

Ν

Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-060], Stacker Motor Up, and [012-061], Stacker Motor Down. The Stacker Motor (PL 23.7) Moves.

## Y N

There is +24 VDC from P/J8986 pin 12 to GND (BSD 12.24 Office Finisher LX Stacker Tray Control)

Y N

Replace the Finisher PWB (PL 23.16).

Check the wires between P/J8986 pins 11 and 12, and the Stacker Motor for an open or short circuit, or a loose or damaged connector. **The wires are OK.** 

Y N

Repair/reconnect as required.

Replace the Stacker Elevator Motor (PL 23.7). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Δ

# 312-212 (LX) Stacker Tray Upper Limit Fault

## BSD-ON: BSD 12.24 Office Finisher LX Stacker Tray Control

The stacker has continued to elevate after the defined period of time has passed since Stacker No Paper Sensor is ON during stacker elevation.

#### Initial Actions

• Check for obstructions under the tray.

**NOTE:** If the carriage is uneven due to contact with an obstruction, go to REP 23.29 and follow to make tray sit evenly.

- Check the operation of the Stacker Height Sensor actuators. ٠
- Check the tray raise/lower mechanism for damage or contamination.

## Procedure

Υ N

Execute dC330 [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. The display changes.

Check the wire between J8873 pin 2 and P/J8988 pin 17 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Ν Y

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 16 and 18 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Υ Ν

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 17 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker Height Sensor 1. The voltage changes.

Y Ν

Υ

Replace the Stacker Height Sensor 1 (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. The display changes.

Ν Check the wire between J8874 pin 2 and P/J8988 pin 20 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 19 and 21 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Δ B

> Measure the voltage between P/J8988, pin 20 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker Height Sensor 1. The voltage changes.

Υ Ν

Replace the Stacker Height Sensor 2 (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-263], Stacker Encoder Sensor. Manually rotate the Encoder (PL 23.7) to block and unblock the sensor. The display changes. Υ Ν

Check the wire between J8875 pin 2 and P/J8988 pin 23 for an open or short circuit, or a loose or damaged connector. The wire is OK. Υ

Ν

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 22 and 24 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Ν Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 23 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. The voltage changes.

Υ Ν

Υ

Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-262], Stacker No Paper Sensor. Block and unblock the Sensor (PL 23.7). The display changes.

Ν

Υ

Υ

Check the wire between J8872 pin 2 and P/J8988 pin 14 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Ν Repair/reconnect as required.

Measure the voltage between P/J8988, pins 13 and 15 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

```
Υ
    Ν
    Replace the Finisher PWB (PL 23.16).
```

Measure the voltage between P/J8988, pin 14 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker No Paper Sensor. The voltage changes.

Ν Υ

Replace the Stacker No Paper Sensor (PL 23.7).

Replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

# 312-213 (LX) Stacker Tray Lower Limit Fault

## BSD-ON:BSD 12.24 Office Finisher LX Stacker Tray Control

Stacker descended lower than normal levels, below low limit height.

#### **Initial Actions**

- Check for obstructions under the tray.
- Check the operation of the Stacker Height Sensor actuators.
- Check the tray raise/lower mechanism for damage or contamination.

## Procedure

Execute dC330 [012-264], Stacker Height Sensor 1. Actuate the Stacker Height Sensor 1. The display changes.

Y N

Check the wire between  $\,$  J8873 pin 2 and  $\,$  P/J8988 pin 17 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 16 and 18 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). **The voltage is approx. +5VDC.** 

#### Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 17 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker Height Sensor 1. The voltage changes.

Y N

Replace the Stacker Height Sensor 1 (PL 23.11).

```
Replace the Finisher PWB (PL 23.16).
```

Execute dC330 [012-265], Stacker Height Sensor 2. Block and unblock the Stacker Height Sensor 2. **The display changes.** 

```
Y N
```

Check the wire between J8874 pin 2 and P/J8988 pin 20 for an open or short circuit, or a loose or damaged connector. The wire is OK.

N Repair/reconnect as required.

Measure the voltage between P/J8988, pins 19 and 21 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). **The voltage is approx. +5VDC.** 

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 20 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker Height Sensor 1. The voltage changes.

#### Y N

Replace the Stacker Height Sensor 2 (PL 23.11).

```
A B
Initial Issue
```

A B

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-263], Stacker Encoder Sensor. Manually rotate the Encoder (PL 23.7) to block and unblock the sensor. **The display changes.** 

#### Y N

Check the wire between J8875 pin 2 and P/J8988 pin 23 for an open or short circuit, or a loose or damaged connector. **The wire is OK.** 

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 22 and 24 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). **The voltage is approx. +5VDC.** 

## Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 23 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Manually rotate the Encoder (PL 23.7) to block and unblock the Stacker Encoder Sensor. **The voltage changes.** 

Y N

Replace the Stacker Encoder Sensor (PL 23.7).

Replace the Finisher PWB (PL 23.16).

Execute dC330 [012-262], Stacker No Paper Sensor. Block and unblock the Sensor (PL 23.7). The display changes.

#### Y N

Check the wire between J8872 pin 2 and P/J8988 pin 14 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8988, pins 13 and 15 on the Finisher PWB (BSD 12.24 Office Finisher LX Stacker Tray Control). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 14 on the Finisher PWB and GND (BSD 12.24 Office Finisher LX Stacker Tray Control). Actuate the Stacker No Paper Sensor. The voltage changes.

Y N

Replace the Stacker No Paper Sensor (PL 23.7).

Replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

# 312-221 (LX) Front Tamper Home Sensor On Fault

BSD-ON:BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)

## BSD-ON:BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

After the Front Tamper started moving to the home position, the Front Tamper Home Sensor did not turn On within 800ms.

## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.

Y N

Replace the parts that are interfering with operation.

Execute dC330 [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.** 

```
Y N
Check the wire between J8881 pin 2 and J8984 pin 5 for an open or short circuit, or a loose or damaged connector. The wire is OK.
```

Y N

Repair/reconnect as required.

Measure the voltage between J8984, pins 6 and 4 on the Finisher PWB (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)). The voltage is approx. +5VDC.

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984, pin 5 on the Finisher PWB and GND (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)).Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.** 

Y N

Replace the Front Tamper Home Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.** 

```
Υ
    Ν
    There is +24 VDC from J8984 pin 19 to GND on the Finisher PWB to GND
    Υ
        Ν
         There is +24 VDC from J8982 pin 4 to GND on the Finisher PWB to GND
         Υ
             Ν
              Go to BSD 12.12 Office Finisher LX Interlock Switching and check the +24V cir-
             cuit feeding pin 4. Repair/reconnect as required.
         Replace the Finisher PWB (PL 23.16).
    Check the wires between J8984, pins 18 ~ 22 on the Finisher PWB, and the Front
    Tamper Motor J8984 for an open or short circuit, or a loose or damaged connector. The
    wires are OK.
    Υ
        Ν
```

Repair/reconnect as required.

```
Status Indicator RAPs 312-221 (LX)
```

 $\stackrel{l}{\mathsf{R}}$  eplace the front Tamper Motor (PL 23.12). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

A B

# 312-223 (LX) Front Tamper Home Sensor Off Fault

BSD-ON: BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)

### BSD-ON: BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

After the Front Tamper started moving away from the home position, the Front Tamper Home Sensor did not turn Off within the specified time.

## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.

Y N

Replace the parts that are interfering with operation.

Execute dC330 [012-220], Front Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.** 

```
Y N
Check the wire between J8881 pin 2 and J8984 pin 5 for an open or short circuit, or a
loose or damaged connector. The wire is OK.
Y N
```

Repair/reconnect as required.

Measure the voltage between J8984, pins 6 and 4 on the Finisher PWB (BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)). The voltage is approx. +5VDC.

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984, pin 5 on the Finisher PWB and GND (BSD 12.18 Office Finisher LX Tamping and Offset (1 of 2). Manually operate the Tamper mechanism to block and unblock the Front Tamper Home Sensor. **The voltage changes.** 

Y N

Replace the Front Tamper Home Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-020], Front Tamper Motor Front and [012-023], Front Tamper Motor Rear. **The Front Tamper Motor moves.** 

```
Υ
    Ν
    There is +24 VDC from J8984 pin 19 on the Finisher PWB to GND
    Υ
        Ν
         There is +24 VDC from J8982 pin 4 on the Finisher PWB to GND
         Υ
             Ν
              Go toBSD 12.12 Office Finisher LX Interlock Switching and check the +24V cir-
              cuit feeding pin 4. Repair/reconnect as required.
         Replace the Finisher PWB (PL 23.16).
    Check the wires between J8984, pins 18 ~ 22 on the Finisher PWB, and the Front
    Tamper Motor J8984 for an open or short circuit, or a loose or damaged connector. The
    wires are OK.
    Υ
        Ν
         Repair/reconnect as required.
```

```
<u>A B</u>
```

Replace the Front Tamper Motor (PL 23.12). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

A B
# 312-224 (LX) Rear Tamper Home Sensor Off Fault

BSD-ON: BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)

### BSD-ON: BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn Off within the specified time.

# Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.

Y N

Replace the parts that are interfering with operation.

Execute dC330 [012-221], Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.** 

```
Y N
Check the wire between J8882 pin 2 and J8984 pin 8 for an open or short circuit, or a loose or damaged connector. The wire is OK.
```

Y N

Repair/reconnect as required.

Measure the voltage between J8984, pins 9 and 7 on the Finisher PWB (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)). **The voltage is approx. +5VDC.** 

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984, pin 8 on the Finisher PWB and GND (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)).Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.** 

Y N

Replace the Rear Tamper Home Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-026], Rear Tamper Motor Front and [012-029], Rear Tamper Motor Rear. **The Rear Tamper Motor moves.** 

```
Υ
    Ν
    There is +24 VDC from J8984 pin 14 on the Finisher PWB to GND
    Υ
        Ν
         There is +24 VDC from J8982 pin 4 on the Finisher PWB to GND
         Υ
             Ν
              Go to BSD 12.12 Office Finisher LX Interlock Switching and check the +24V cir-
              cuit feeding pin 4. Repair/reconnect as required.
         Replace the Finisher PWB (PL 23.16).
    Check the wires between J8984, pins 13 ~ 17 on the Finisher PWB, and the Rear
    Tamper Motor P/J8883 for an open or short circuit, or a loose or damaged connector.
    The wires are OK.
    Υ
        Ν
         Repair/reconnect as required.
```

```
Status Indicator RAPs 312-224 (LX)
```



Replace the Rear Tamper Motor (PL 23.12). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

# 312-243 (LX) Booklet Folder Home Sensor On Fault

### BSD-ON:BSD 12.17 Office Finisher LX Folding

Folder Home Sensor is not turned on after the lapse of 500ms from Motor ON while Folder Knife is returning to Home.

## **Initial Actions**

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Folder Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

## Procedure

Enter dC330 [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select Start. **The Fold Knife Motor energizes.** 

Y N

Select Stop. Refer to (BSD 12.17 Office Finisher LX Folding). Check continuity between the Booklet Folder Knife Motor (P/J8905) and the Finisher PWB (P/J8990), and between the Booklet PWB (P/J8994) and the Finisher PWB (P8985). The continuity check is **OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Knife Motor (PL 23.15). If the problem continues, replace the Booklet PWB (PL 23.21).

Select Stop. Enter dC330 [13-101], Folder Home Sensor. Select Start. Block/unblock the Folder Home Sensor. The display changes.

Y N

Check the wire between J8904 pin 2 and P/J8990 pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8990, pins 3 and 1 on the Finisher PWB (BSD 12.17 Office Finisher LX Folding). **The voltage is approx. +5VDC.** 

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8990, pin 2 on the Finisher PWB and GND (BSD 12.17 Office Finisher LX Folding Block/unblock the Folder Home Sensor. The voltage changes.

### Y N

Replace the Folder Home Sensor (PL 23.15).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-249 (LX) Booklet Front Stapler Fault

BSD-ON:BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)

### BSD-ON:BSD 12.13 Office Finisher LX Booklet Interlock Switching

The Booklet Front Staple Home Switch is not ON (does not return to home position) within the specified time after the Booklet Front Staple Motor starts to reverse.

# **Initial Actions**

Check the Booklet Front Stapler for jammed staples or an incorrectly installed staple cartridge.

### Procedure

Y N

Enter dC330 [12-046], Staple Motor FWD. and then [12-047], Staple Motor REV. **The Front Booklet Stapler cycles normally.** 

There is +24 VDC from P/J8993 pin 5 on the Booklet PWB to GND.

Y N

Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch (BSD 12.13 Office Finisher LX Booklet Interlock Switching). Repair/replace as required (PL 23.21).

Switch off the power. Check the wires between P/J8994 on the Booklet PWB and J8894 on the Front Booklet Stapler (BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly (PL 23.19). If the problem remains, replace the Booklet PWB (PL 23.21).

Switch off the power. Check the wire between P/J8995, pin 5 on the Booklet PWB and P/J8994 pin 3 on the Front Booklet Stapler (BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Front Booklet Stapler Assembly (PL 23.19). If the problem remains, replace the Booklet PWB (PL 23.21).

# 312-260 (LX) Eject Clamp Home Sensor On Fault

# BSD-ON:BSD 12.22 Office Finisher LX Eject Control (1 of 2)

After the Eject Clamp started ascending, the Eject Clamp Home Sensor did not turn On within 500ms.

### **Initial Actions**

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Eject Clamp Home Sensor b for damage

# Procedure

Execute dC330 [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor  $\mbox{The display changes.}$ 

Y N

Check the wire between J8870 pin 2 on the Eject Clamp Home Sensor and P/J8988 pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.** 

Y N

Repair/replace as required.

Measure the voltage between P/J8988, pins 9 and 7 on the Finisher PWB. **The voltage is approx. +5VDC.** 

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988 pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.** 

```
Y N
```

Replace the Eject Clamp Home Sensor (PL 23.11).

```
Replace the Finisher PWB (PL 23.16).
```

Alternately execute dC330 [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. The Eject Motor (PL 22.9) starts up.

```
Y N
```

Check the wires between P/J8878 pins 1~6 on the Eject Motor and P/J8983 pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (BSD 12.22 Office Finisher LX Eject Control (1 of 2)). The wires are OK.

```
Y N
```

Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of P/J8878-1/3/4/6. The resistance is approx. 20hm.

#### Y N

Replace the Eject Motor (PL 23.11).

Replace the Finisher PWB (PL 23.16). If the problem remains, replace the Eject Motor (PL 23.11)

Α

# 312-263 (LX) Rear Tamper Fault

BSD-ON: BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)

# BSD-ON: BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

After the Rear Tamper started moving to the home position, the Rear Tamper Home Sensor did not turn On within 800ms.

# Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.

Y N

Replace the parts that are interfering with operation.

Execute dC330 [012-221], Rear Tamper Home Sensor. Manually operate the Tamper mechanism to block and unblock the sensor. **The display changes.** 

```
Y N
Check the wire between J8882 pin 2 and J8984 pin 8 for an open or short circuit, or a loose or damaged connector. The wire is OK.
```

Y N Boppir/record

Repair/reconnect as required.

Measure the voltage between J8984, pins 9 and 7 on the Finisher PWB (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)). The voltage is approx. +5VDC.

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984, pin 8 on the Finisher PWB and GND (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2). Manually operate the Tamper mechanism to block and unblock the Rear Tamper Home Sensor. **The voltage changes.** 

Y N

Replace the Rear Tamper Home Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-026], Rear Tamper Motor Front and [012-029], Rear Tamper Motor Rear. **The Rear Tamper Motor moves.** 

```
Υ
    Ν
    There is +24 VDC from J8984 pin 14 on the Finisher PWB to GND
    Υ
        Ν
         There is +24 VDC from J8982 pin 4 on the Finisher PWB to GND
         Υ
             Ν
              Go to BSD 12.12 Office Finisher LX Interlock Switching: and check the +24V
             circuit feeding pin 4. Repair/reconnect as required.
         Replace the Finisher PWB (PL 23.16).
    Check the wires between J8984, pins 13 ~ 17 on the Finisher PWB, and the Rear
    Tamper Motor P/J8883 for an open or short circuit, or a loose or damaged connector.
    The wires are OK.
    Υ
        Ν
         Repair/reconnect as required.
```

A B Initial Issue Replace the Finisher PWB (PL 23.16).

A B

# 312-265 (LX) Booklet Folder Home Sensor OFF Fault

## BSD-ON: BSD 12.17 Office Finisher LX Folding

When the Booklet Home moves from Home position, the Folder Home Sensor did not turn OFF within the specified time.

## **Initial Actions**

- The Folder Home Sensor for improper installation
- The Folder Home Sensor connectors for connection failure
- The Booklet Fold Knife Motor connectors for connection failure
- The Knife drive mechanism for a foreign substance

## Procedure

Enter dC330 [013-022], Folder Knife Motor FWD and [013-023], Folder Knife Motor REV alternately. Select Start. **The Fold Knife Motor energizes.** 

Y N

Select Stop. Refer to BSD 12.17 Office Finisher LX Folding. Check continuity between the Folder Knife Motor (P/J8905) and the Finisher PWB (P/J8990), and between the Booklet PWB (P/J8994) and the Finisher PWB (P8985). **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Folder Knife Motor (PL 23.15). If the problem continues, replace the Booklet PWB (PL 23.21).

Select Stop. Enter dC330 [13-101], Folder Home Sensor. Select Start. Block/unblock the Folder Home Sensor. **The display changed.** 

Y N

Check the wire between J8904 pin 2 and P/J8990 pin 2 on the Flnisher PWB for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8990, pins 3 and 1 on the Finisher PWB BSD 12.17 Office Finisher LX Folding. The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8990, pin 2 on the Finisher PWB and GND (BSD 12.17 Office Finisher LX Folding).Block/unblock the Folder Home Sensor. The voltage changes.

### Y Ň

Replace the Folder Home Sensor (PL 23.15).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-268 (LX) Booklet Rear Stapler Fault

BSD-ON: BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)

#### BSD-ON: BSD 12.13 Office Finisher LX Booklet Interlock Switching

The Booklet Rear Staple Home Switch is not ON (does not return to home position) within the specified time after the Booklet Rear Staple Motor starts to reverse.

# **Initial Actions**

Check the Booklet Rear Stapler for jammed staples or an incorrectly installed staple cartridge.

### Procedure

Y N

Enter dC330 [12-026], Staple Motor FWD. and then [12-027], Staple Motor REV. The Rear Booklet Stapler cycles normally.

There is +24 VDC from P/J8993 pin 5 on the Booklet PWB to GND.

Y N

Check the circuit from the Booklet PWB to the Booklet Stapler Cover Switch BSD 12.13 Office Finisher LX Booklet Interlock Switching). Repair/replace as required (PL 23.21).

Switch off the power. Check the wires between P/J8995 on the Booklet PWB and J8895 on the Rear Booklet Stapler (BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly (PL 23.20). If the problem remains, replace the Booklet PWB (PL 23.21).

Switch off the power. Check the wire between P/J8995, pin 12 on the Booklet PWB and J8895 pin 3 on the Rear Booklet Stapler (BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)) for a loose or damaged connector, or an open or short circuit. If the wires are OK, replace the Rear Booklet Stapler Assembly (PL 23.20). If the problem remains, replace the Booklet PWB (PL 23.21).

# 312-282 (LX) Eject Clamp Home Sensor Off Fault

# BSD-ON:BSD 12.22 Office Finisher LX Eject Control (1 of 2)

After the Eject Clamp started descending, the Eject Clamp Home Sensor did not turn Off within 200ms.

### **Initial Actions**

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Eject Clamp Home Sensor for damage
- Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.

## Procedure

Execute dC330 [012-250], Eject Clamp Home Sensor. Block and unblock the Eject Clamp Home Sensor **The display changes.** 

```
Y N
```

Check the wire between J8870 pin 2 on the Eject Clamp Home Sensor and P/J8988 pin 8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.** 

Y N

Repair/replace as required.

Measure the voltage between P/J8988, pins 9 and 7 on the Finisher PWB. **The voltage** is approx. +5VDC.

YN

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988 pin 8 on the Finisher PWB and GND. Actuate the Eject Clamp Home Sensor. **The voltage changes.** 

Y N

Replace the Eject Clamp Home Sensor (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. The Eject Motor starts.

#### Ν

Υ

Check the wires between P/J8878 pins 1~6 on the Eject Motor and P/J8983 pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors BSD 12.22 Office Finisher LX Eject Control (1 of 2)). **The wires are OK.** 

```
Y N
```

Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of P/J8878-1/3/4/6. The resistance is approx. 20hm.

#### Y N

Replace the Eject Motor (PL 23.11).

Replace the Finisher PWB (PL 23.16). If the problem remains, replace the Eject Motor (PL 23.11)

Go to BSD 12.22 Office Finisher LX Eject Control (1 of 2). Check for an intermittent circuit or intermittent mechanical problem. If the check is OK, replace the Finisher PWB (PL 23.16).

Α

# 312-283 (LX) Set Clamp Home Sensor On Fault

BSD-ON:BSD 12.22 Office Finisher LX Eject Control (1 of 2)

# BSD-ON: BSD 12.23 Office Finisher LX Eject Control (2 of 2)

After the Set Clamp started, the Set Clamp Home Sensor did not turn On within 200ms.

# Initial Actions

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage. .
- Check the actuator for the Set Clamp Home Sensor for damage
- Check the return Spring (PL 23.11) item 38 and replace if damaged or missing. .
- Make sure there is good meshing between Gear (PL 23.11) item 10 and the Set Clamp Clutch. item 12.
- Remove the Gear Select Actuator (PL 23.11) item 21 and check the drive dogs for damage.

# Procedure

Execute dC330 [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. The display changes.

Ν Υ

Check the wire between J8871 pin 2 on the Set Clamp Home Sensor and P/J8988 pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. The wire is OK.

Ν Y

Repair/replace as required.

Measure the voltage between P/J8988, pins 12 and 10 on the Finisher PWB. The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between the P/J8988 pin 11 on the Finisher PWB and GND).Actuate the Eject Clamp Home Sensor. The voltage changes.

Υ Ν

Replace the Eiect Clamp Home Sensor (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. The Eject Motor starts.

```
Υ
  N
```

Check the wires between P/J8878 pins 1~6 on the Eject Motor and P/J8983 pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (BSD 12.22 Office Finisher LX Eject Control (1 of 2)). The wires are OK.

Y N

Repair/replace as required.

Measure the resistance of the Eject Motor between each pin of P/J8878-1/3/4/6. The resistance is approx. 2 Ohm.

Δ

Replace the Eject Motor (PL 23.11).

Replace the Finisher PWB (PL 23.16). If the problem remains, replace the Eject Motor (PL 23.11)

Execute dC330 [012-050 Set Clamp Clutch ON]. The Set Clamp Clutch energizes. Υ

#### Ν

Select Stop. Check the wires between P/J8877 pins 1 and 2 on the Set Clamp Clutch and P/J8983 pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (BSD 12.23 Office Finisher LX Eject Control (2 of 2)). The wires are OK.

Υ

Repair/replace as required.

Measure the voltage between the Finisher PWB P8983-4 (+) and GND (-). The voltage is approx. +24VDC.

Y N

Ν

Replace the Set Clamp Clutch (PL 23.11). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

# 312-284 (LX) Set Clamp Home Sensor Off Fault

BSD-ON:BSD 12.22 Office Finisher LX Eject Control (1 of 2)

### BSD-ON:BSD 12.23 Office Finisher LX Eject Control (2 of 2)

After the Set Clamp completed operation, the Set Clamp Home Sensor did not turn Off within the specified time.

# **Initial Actions**

- Manually operate the Eject mechanism. Check for binding, a dirty sensor, or damage.
- Check the actuator for the Set Clamp Home Sensor for damage
- Check the return Spring (PL 23.11) item 38 and replace if damaged or missing.
- Make sure there is good meshing between Gear (PL 23.11) item 10 and the Set Clamp Clutch item 12.
- Remove the Gear Select Actuator (PL 23.11) item 21 and check the drive dogs for damage.

# Procedure

Execute dC330 [012-251], Set Clamp Home Sensor. Actuate the Set Clamp Home Sensor. The display changes.

Y N

Check the wire between J8871 pin 2 on the Set Clamp Home Sensor and P/J8988 pin 11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.** 

#### Y N

Repair/replace as required.

Measure the voltage between P/J8988, pins 12 and 10 on the Finisher PWB. **The voltage is approx. +5VDC.** 

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between the pin 11 and GND on the Finisher PWB and GND). Actuate the Eject Clamp Home Sensor. **The voltage changes.** 

Y N

Replace the Eject Clamp Home Sensor (PL 23.11).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-052], Eject Clamp Up and [012-053], Eject Clamp Down. The Eject Motor starts.

### Y N

Check the wires between P/J8878 pins 1~6 on the Eject Motor and P/J8983 pins 5~8 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (BSD 12.22 Office Finisher LX Eject Control (1 of 2)). The wires are OK.

Y N

Repair/replace as required.

<u>A</u>\_\_\_E

A B

Measure the resistance of the Eject Motor between each pin of P/J8878-1/3/4/6. The resistance is approx. 20hm.

Y N

Replace the Eject Motor (PL 23.11).

Replace the Finisher PWB (PL 23.16). If the problem remains, replace the Eject Motor (PL 23.11)

Execute dC330 [012-050 Set Clamp Clutch ON]. The Set Clamp Clutch energizes.

Y N

Select Stop. Check the wires between P/J8877 pins 1 and 2 on the Set Clamp Clutch and P/J8983 pins 3 and 4 on the Finisher PWB for an open or short circuit, or loose or damaged connectors (BSD 12.23 Office Finisher LX Eject Control (2 of 2)). The wires are OK.

Y N

Repair/replace as required.

Measure the voltage between the Finisher PWB P/J8983-4 (+) and GND (-). The voltage is approx. +24VDC.

Y N

Replace the Set Clamp Clutch (PL 23.11). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

# 312-291 (LX) Stapler Fault

### BSD-ON:BSD 12.21 Office Finisher LX Staple Control

- After the Stapler Motor turned On (Forward rotation), the Staple Head Home Sensor did not switch from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.

### **Initial Actions**

Check the Stapler for jammed staples or an incorrectly installed staple cartridge.

# Procedure

Execute dC330 [012-046], Staple Motor FWD, and [012-047], then Staple Motor REV. The Stapler cycles.

Y N

Check the wires between J8887, pins 1~4 on the Stapler Assembly and P/J8981 pins 9~11 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. If the wires are OK, the Stapler Assembly (PL 23.8). If the problem continues, replace the Finisher PWB (PL 23.16).

Select Stop. Execute dC330 [012-244], Staple Home Switch. The display is "Low."

#### Y N

There is +5 VDC from pin 5 to pin 1 of  $\,$  J8886 on the Stapler Assembly.

Y N

Check the wires from P/J8981, pins 4 and 8, to J8886 pins 5 and 1 for an open circuit. If the wires are OK, replace the Finisher PWB (PL 23.16).

Check the wire from J8886 pin 4 to P/J8981 pin 5 for an open circuit. If the wire is OK, replace the Stapler Assembly (PL 23.8).

Go to BSD 12.21 Office Finisher LX Staple Control. Check for an intermittent connection. If the check is good, replace the Stapler Assembly (PL 23.8). If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-295 (LX) Stapler Move Position Sensor On Fault

#### BSD-ON:BSD 12.20 Office Finisher LX Staple Positioning

- After the Stapler started moving to the staple position, the Stapler Move Position Sensor did not turn On within 2sec.
- After the Stapler completed moving to the Staple Position, the Stapler Move Position Sensor did not turn On.

### **Initial Actions**

Check the Stapler, Base Frame, and Rail (PL 23.8) for freedom of movement.

### Procedure

Execute dC330 [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.** 

Y N

Check the wire between J8885 pin 2 on the Stapler Move Position Sensor and P/J8981 pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.** 

Y N

Repair/replace as required.

Measure the voltage between P/J8981, pins 3 and 1 on the Finisher PWB (BSD 12.20 Office Finisher LX Staple Positioning). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8981 pin 2 on the Finisher PWB and GND (BSD 12.20 Office Finisher LX Staple Positioning). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.** 

YN

Replace the Stapler Move Position Sensor (PL 23.8).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-043], Staple Move Motor Rear and [012-040], Staple Move Motor Front. The Stapler Move Motor moves.

Y N

Check the wires between P/J8981 pins 13~16 on the Finisher PWB and P/J8888 on the Stapler Move Motor (BSD 12.20 Office Finisher LX Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK.** 

Y N

Repair/replace as required.

Replace the Staple Move Motor (PL 23.8). If the problem persists, replace the Finisher PWB (PL 23.16).

Go to (BSD 12.20 Office Finisher LX Staple Positioning). Check for an intermittent connection. If the check is good, replace the Stapler Assembly (PL 23.8). If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-296 (LX) Staple Move Sensor Off Fault

### BSD-ON:BSD 12.20 Office Finisher LX Staple Positioning

- After the Stapler started moving to the Staple Position and the Staple Move Sensor turned Off, the Staple Move Sensor did not turn Off within 500ms.
- After the Staple Position had been fixed, the Staple Move Sensor turned Off.
- After the Staple Move Sensor turned On when paper passed through the Dual Staple 1
  Position while moving to the Rear Staple Position, the Staple Move Sensor did not turn Off
  within 500ms.

### **Initial Actions**

Check the Stapler, Base Frame, and Rail (PL 23.8) for freedom of movement.

Check to see if the shipping screw was removed from the stapler.

## Procedure

Execute dC330 [012-241], Stapler Move Position Sensor. Move the Stapler by hand from the Home position to the staple position and back. **The display changes.** 

Y N

Check the wire between J8885 pin 2 on the Stapler Move Position Sensor and P/J8981 pin 2 on the Finisher PWB for an open or short circuit, or loose or damaged connectors. **The wire is OK.** 

#### Y N

Repair/replace as required.

Measure the voltage between P/J8981, pins 3 and 1 on the Finisher PWB (BSD 12.20 Office Finisher LX Staple Positioning). The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8981 pin 2 on the Finisher PWB and GND (BSD 12.20 Office Finisher LX Staple Positioning). Move the Stapler by hand from the Home position to the staple position and back. **The voltage changes.** 

Y N

Replace the Stapler Move Position Sensor (PL 23.8).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [012-043], Staple Move Motor Rear and [012-040], Staple Move Motor Front. **The Stapler Move Motor moves.** 

```
Y N
```

Check the wires between P/J8981 pins 13~16 on the Finisher PWB and P/J8888 on the Stapler Move Motor (BSD 12.20 Office Finisher LX Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK.** 

Y N

Repair/replace as required.

Replace the Staple Move Motor (PL 23.8). If the problem persists, replace the Finisher PWB (PL 23.16).

Go to BSD 12.20 Office Finisher LX Staple Positioning. Check for an intermittent connection. If the check is good, replace the Stapler Assembly (PL 23.8). If the problem continues, replace the Finisher PWB (PL 23.16).

Δ

# 312-300 (LX) Eject Cover Open

# BSD-ON:BSD 12.12 Office Finisher LX Interlock Switching

Eject Cover Switch open was detected.

# **Initial Actions**

- Ensure that the Eject Cover is down
- Check Eject Cover Switch for improper installation
- Check Eject Cover Switch connectors for connection failure
- Check Actuator part for deformation

# Procedure

Enter dC330 [012-300], Eject Cover Switch (PL 23.11). Select Start. Actuate the Eject Cover Switch. The display changes

Y N

Select Stop. Check continuity of the Eject Cover Switch (  $\mathsf{J8889}, \mathsf{pin}\ 1$  to  $\mathsf{pin}\ 2$ ). The continuity check is OK.

Y N

Replace the Eject Cover Switch (PL 23.11).

Check continuity between the Eject Cover Switch and the Finisher PWB (J8982 pin 1 to. J8889 pin 1, and J8889 pin2 to J8982 pin 7). If the check is OK, replace the Finisher PWB (PL 23.16).

Select Stop. If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-302 (LX) Finisher Front Cover Open

BSD-ON:BSD 12.12 Office Finisher LX Interlock Switching

The Finisher Front Cover is open.

# **Initial Actions**

- Check the installation of the H-Transport Open Sensor
- Opening/closing of the Finisher H-Transport Cover.

# Procedure

Execute dC330 [012-302], Front Door Interlock Switch. Open/close the Finisher Front Cover. The display changes.

#### Y N

Open the Front Door and cheat the Front Door Interlock Switch  $\ensuremath{\text{The display changes.}}$ 

#### Y N

Check the wires between J8982 pin 3 and J8891 pin 2B, and from J8891 pin 2A to J8982 pin 2 for an open or short circuit, or a loose or damaged connector. The wires are OK.

#### Y N

Repair/reconnect as required.

Remove the cheater. Measure the voltage between J8891 pin 2A on the Front Door Interlock Switch and GND (BSD 12.12 Office Finisher LX Interlock Switching). **The voltage is approx. +5VDC.** 

### Y N

Check the wire from J8891 pin 2A to J8982 pin 2 for an open or short circuit, or a loose or damaged connector. If the wires are OK, replace the Finisher PWB (PL 23.16).

### Cheat the Interlock Switch. The voltage drops to 0 VDC.

Y N

Replace the Front Door Interlock Switch (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Check the actuator for damage or misalignment

Check the Interlock circuit for an intermittent condition (BSD 12.12 Office Finisher LX Interlock Switching). If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-303 (LX) Finisher H-Transport Cover Open

BSD-ON:BSD 12.14 Office Finisher LX Horizontal Transportation

The Finisher H-Transport Cover is open.

# Initial Actions

- Check the installation of the H-Transport Open Sensor ٠
- Opening/closing of the Finisher H-Transport Cover. ٠

# Procedure

Execute dC330 [012-303], H-Transport Open Sensor. Actuate the H-Transport Open Sensor (PL 23.4). The display changes.

Y N

Check the wire between J8860 pin 2 and J8987 pin 2 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y Ν

Repair/reconnect as required.

Measure the voltage between J8987, pins 3 and 1 on the Finisher PWB (BSD 12.14 Office Finisher LX Horizontal Transportation) The voltage is approx. +5VDC.

Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8987, pin 2 on the Finisher PWB and GND (BSD 12.14 Office Finisher LX Horizontal Transportation). Actuate the H-Transport Open Sensor. The voltage changes.

Y Ν

Replace the H-Transport Open Sensor (PL 23.4).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-320 (LX) Punch Home Sensor On Fault

# BSD-ON: BSD 12.15 Office Finisher LX Punch

The Punch Home Sensor did not turn ON within the specified time after the Punch Motor started running.

# Initial Actions

Check the following:

- Punch Home Actuator for deformation ٠
- Punch Home Sensor for proper installation
- Punch Home Sensor connectors
- ٠ Punch Motor for proper operation
- Punch Motor connectors ٠

# Procedure

Enter dC330 [12-074] and [12-078], Punch Motor (PL 23.5), alternately. Select Start. The Punch Motor runs.

Υ Ν

Select Stop. Check circuit of the Punch Motor. Refer to BSD 12.15 Office Finisher LX Punch to troubleshoot the circuit.

Select Stop. Select [12-271], Punch Home Sensor (PL 23.5). Select Start. Actuate the sensor with a piece of paper. The display changes. N

Υ

Go to BSD 12.15 Office Finisher LX Punch. Check circuit of the Punch Home Sensor.

# 312-334 (LX) Download Mode Fault

### BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

Failure in previous download (abnormal termination during download); can only start in Download Mode upon turning power on.

## Procedure

Download defective; check the following:

- Cable connection between Finisher and IOT is not connected or defective
- Finisher power cable is plugged in properly

# 312-700 (LX) Punch Box Nearly Full

BSD-ON:BSD 12.15 Office Finisher LX Punch

Punch Box nearly full.

# Procedure

Empty the Punch Box and re-insert. If the fault remains, check the circuit of the Punch Box Set Sensor (BSD 12.15 Office Finisher LX Punch).

# 312-901 (LX) H-Transport Entrance Sensor On Jam

BSD-ON:BSD 12.14 Office Finisher LX Horizontal Transportation

Paper remains on the H-Transport Entrance Sensor.

# **Initial Actions**

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

# Procedure

Execute dC330 [012-190], H-Transport Entrance Sensor. Actuate the H-Transport Entrance Sensor (PL 23.4). **The display changes.** 

Y N

Check the wire between J8861 pin 2 and J8987 pin 6 for an open or short circuit, or a loose or damaged connector. **The wire is OK.** 

Y N

Repair/reconnect as required.

Measure the voltage between J8987, pins 4 and 5 on the Finisher PWB (BSD 12.14 Office Finisher LX Horizontal Transportation). **The voltage is approx. +5VDC.** 

## Y N

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8987, pin 6 on the Finisher PWB and GND (BSD 12.14 Office Finisher LX Horizontal Transportation).Actuate the H-Transport Entrance Sensor. **The voltage changes.** 

Y N

Replace the H-Transport Entrance Sensor (PL 23.4).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-903 (LX) Paper Remains at Compiler Exit Sensor

BSD-ON:BSD 12.16 Office Finisher LX Transportation

Paper remains on the Compiler Exit Sensor.

# **Initial Actions**

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

# Procedure

Execute dC330 [012-150], Compiler Exit Sensor. Actuate the Compiler Exit Sensor (PL  $\ensuremath{\text{23.14}}\xspace$ ). The display changes.

Y N

Check the wire between J8869 pin 2 and P/J8988 pin 5 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N Repair/reconnect as required.

Measure the voltage between P/J8988, pins 4 and 6 on the Finisher PWB (BSD 12.16 Office Finisher LX Transportation). The voltage is approx. +5VDC.

N Replace the Finisher PWB (PL 23.16).

Measure the voltage between P/J8988, pin 5 on the Finisher PWB and GND (BSD 12.16 Office Finisher LX Transportation). Actuate the Compiler Exit Sensor. The voltage changes.

Y N

Replace the Compiler Exit Sensor (PL 23.14).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-905 (LX) Compiler Tray No Paper Sensor On JAM

BSD-ON: BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)

Paper remains on the Compiler Tray No Paper Sensor.

# **Initial Actions**

Check the paper path. If no paper is found continue with this RAP.

Clean the sensor.

# Procedure

Enter dC330 [012-151], Compiler Tray No Paper Sensor. Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes**.

```
YN
```

Check the wire between J8880 pin 2 and J8984 pin 2 on the Finisher PWB for an open or short circuit, or a loose or damaged connector. **The wire is OK.** 

Y N

Repair/reconnect as required.

Measure the voltage between J8984 pins 3 and 1 on the Finisher PWB (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)). The voltage is approx. +5VDC.

```
Y N
```

Replace the Finisher PWB (PL 23.16).

Measure the voltage between J8984 pin 2 on the Finisher PWB and GND (BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2). Actuate the Compiler Tray No Paper Sensor. The voltage changes.

## Y N

Replace the Compiler Tray No Paper Sensor (PL 23.12).

Replace the Finisher PWB (PL 23.16).

If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-916 (LX) Stacker Mix Stack Detection RAP

BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

A stack of mixed sizes detected.

# **Initial Actions**

- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

# Procedure

Enter dC330 [012-061] Elevator Motor Down and [012-060] Elevator Motor UP (PL 23.7), alternately. Select Start. The Elevator Motor energizes.

Y N

Select Stop. Go to BSD 12.24 LX Finisher Stacker Drive. Check continuity between the Elevator Motor and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 23.7). If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-917 (LX) Stacker Tray Stapled Set Over Count

BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

The Staple Set Count of the Stacker Tray has exceeded 50 sets during the Staple Set Eject operation.

# Procedure

Remove all paper from the Stacker. If the problem continues, go to the 312-161 (LX) RAP.

# 312-930 (LX) Stacker Tray Full RAP

BSD-ON:BSD 12.24 LX Finisher Stacker Drive.

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size).

# **Initial Actions**

- Remove the paper from the Stacker Tray
- Power Off/On

If the fault remains, perform the Procedure

## Procedure

Go to the 312-211 (LX) RAP.

# 312-949 (LX) Punch Box Missing

BSD-ON: BSD 12.15 Office Finisher LX Punch

Punch Box Set Sensor detected Punch Box to be missing.

# **Initial Actions**

• Ensure that the Punch Box is present and installed properly

# Procedure

Enter dC330 [012-275], Punch Box Set Sensor (PL 23.5). Select **Start**. Remove and insert the Punch Box manually. **The display changes** 

Y N

Select Stop. Check continuity between the Punch Box Set Sensor (J8866); P8863; and the Finisher PWB (J8987). **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Punch Box Set Sensor (PL 23.5). If the problem continues, replace the Finisher PWB (PL 23.16).

Check the Punch Box Set Sensor Actuator and Punch Box Guide for deformation. **The Punch Box can be removed and inserted properly.** 

#### Y N

Repair or replace the Punch Box (PL 23.2).

Select Stop. If the problem continues, replace the Finisher PWB (PL 23.16).

# 312-976 (LX) Staple Fail

**BSD-ON: 12.21 Office Finisher LX Staple Control** 

Staple Head Home Sensor is not turned on within 450msec after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

### Procedure

Go to the 312-291 (LX) RAP.

# 312-977 (LX) Staple Ready Fail

### BSD-ON: 12.21 Office Finisher LX Staple Control

Staple Head void stapling reached a specified number of times during the Staple Head initialization.

### Procedure

Check that staples are present and correctly installed. If the problem continues, go to the 312-291 (LX) RAP.

# 312-978 (LX) Staple Fail

BSD-ON: 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)

#### BSD-ON: 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)

Booklet Stapler started operating, but Ready signal did not turn to Ready state in a specified period of time.

### Procedure

Go to the 312-291 (LX) RAP.

# 312-979 (LX) Stapler near empty

### BSD-ON: 12.21 Office Finisher LX Staple Control

- Low Staple Sensor ON is detected during power ON and Interlock Close
- Low Staple Sensor ON is detected right before the Staple Head Close operation

### Procedure

Check the Staple Cartridge. If the Staples are NOT low, go to the 312-291 (LX) RAP.

# 312-982 (LX) Stacker Lower Safety Warning

BSD-ON: 12.24 Office Finisher LX Stacker Tray Control

The Height Alignment was not successful within 250msec when the Height Adjustment was performed for output paper to the Stacker Tray (Tray lowering down) in the middle of a job.

## Procedure

Remove all paper from the Stacker. If the problem continues, go to the 312-213 (LX) RAP.

# 312-984 (LX) Booklet Low Staple F RAP

### BSD-ON: 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)

One of the following was detected

- Booklet Stapler Low Staple F signal was found to be on when staple started working.
- Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.

### Procedure

Refill the Front Stapler.

# 312-989 (LX) Booklet Low Staple R RAP

#### BSD-ON: 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)

One of the following was detected

- Booklet Stapler Low Staple R signal was found to be on when staple started working.
- Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.

# Procedure

Refill the Rear Stapler.

# 312-112 (Pro) H-Transport Entrance Sensor On Jam

BSD-ON:BSD 12.32 H-Transport Drives

### BSD-ON:BSD 12.33 Horizontal Transportation (1 of 2)

H-Transport Entrance Sensor is not turned on within a specified time.

# **Initial Actions**

- Check for obstructions in the paper path
- Check the H-Transport Motor Belt for wear or damage
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation

# Procedure

Enter dC330 [012-190], H-Transport Entrance Sensor (PL 21.25). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes**.

Y N

Go to BSD 12.33 Horizontal Transportation (1 of 2) Check the circuit of the H-Transport Entrance Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

# Select [012-090], H-Transport Motor (PL 21.28). Select Start. The motor energizes.

Y N

Select **Stop**. Go to Go to BSD 12.32 H-Transport Drives. Check the circuit of the H-Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select **Stop**. Close the H-Transport Cover. Select [012-086] or [012-087], Gate Solenoid (PL 21.25). Select **Start**. **The Gate Solenoid actuates**.

Y N

Select **Stop**. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

## Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged.
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment.

If the above checks are OK, then replace the H-Transport Entrance Sensor (PL 21.28). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-113 (Pro) Booklet In Sensor On Jam

**BSD-ON: BSD 12.36 Professional Finisher Drives** 

# BSD-ON: BSD 12.37 Professional Finisher Booklet/Punch Transport

# BSD-ON: BSD 12.41 Booklet Transportation

The Booklet In Sensor did not turn on within the specified time after Punch Out Sensor On.

# **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet In Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet In Roll for wear or damage

# Procedure

Enter dC330 [013-135], Booklet In Sensor (PL 21.21). Select Start. Actuate the Booklet In Sensor. The display changes.

Y N

Go to BSD 12.41 Booklet Transportation. Check the circuit of the Booklet In Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid (PL 21.10). Select Start. The Booklet Gate Solenoid actuates.

### Y N

Select **Stop**. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport Check the circuit of the Booklet Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor (PL 21.10). Select Start. The motor energizes.

Y N

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

# Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet In Sensor (PL 21.12). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-114 (Pro) Booklet In Sensor Off Jam

BSD-ON: BSD 12.37 Professional Finisher Booklet/Punch Transport

#### BSD-ON: BSD 12.40 Booklet Drive

#### BSD-ON:BSD 12.41 Booklet Transportation

The Booklet In Sensor did not turn off within the specified time.

### **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet In Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet In Roll for wear or damage

# Procedure

Enter dC330 [013-135], Booklet In Sensor (PL 21.21). Select Start. Actuate the Booklet In Sensor. The display changes.

#### Y N

Go to BSD 12.41 Booklet Transportation. Check the circuit of the Booklet In Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [013-068] and/or [013-069], Booklet Gate Solenoid (PL 21.10). Select Start. **The Booklet Gate Solenoid actuates.** 

Y N

Select **Stop**. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport. Check the circuit of the Booklet Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. The motor energizes.

#### Y N

Select **Stop**. Go to BSD 12.40 Booklet Drive. Check the circuit of the Booklet Paper Path Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

## Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet In Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-115 (Pro) Booklet Folder Roll Exit Sensor On Jam

BSD-ON:BSD 12.40 Booklet Drive

### BSD-ON:BSD 12.41 Booklet Transportation

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

### **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the Booklet Folder Roll Exit Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet Folding Roll for wear or damage
- Check the Booklet Eject Roll Drive rolls for wear or damage

## Procedure

Enter dC330 [013-103], Booklet Folder Roll Exit Sensor (PL 21.21). Select Start. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.** 

Y N

Go to BSD 12.41 Booklet Transportation. Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. The motor energizes.

Y N

Select Stop. Go to BSD 12.40 Booklet Drive. Check the circuit of the Booklet Paper Path Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [013-008], Booklet Folder Roll Motor (PL 21.22). Select Start. The motor energizes.

#### Y N

Select Stop. Go to BSD 12.40 Booklet Drive. Check the circuit of the Booklet Folder Roll Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

#### Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-125 (Pro) Gate Sensor On Jam

BSD-ON:BSD 12.33 Horizontal Transportation (1 of 2)

### BSD-ON: BSD 12.38 Professional Finisher Transport Top Tray Gating

Gate Sensor is not turned on within a specified time.

# **Initial Actions**

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

# Procedure

Enter dC330 [012-191], H-Transport Exit Sensor (PL 21.28). Select Start. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.** 

Y N

Go to BSD 12.33 Horizontal Transportation (1 of 2). Check the circuit of the H-Transport Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Enter [012-102], Gate Sensor (PL 21.11). Select Start. Actuate the Gate Sensor. **The display changes.** 

### Y N

Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Gate Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1Speed (PL 21.10). Select Start. The motor energizes.

#### Y N

Select Stop. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Gate Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-132 (Pro) Transport Entrance Sensor On Jam

BSD-ON:BSD 12.36 Professional Finisher Drives

### BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

Transport Entrance Sensor is not turned on within a specified time.

# **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation

# Procedure

Enter dC330 [012-100], Transport Entrance Sensor (PL 21.10). Select Start. Actuate the Transport Entrance Sensor. **The display changes.** 

Y N

Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Entrance Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor Speed (PL 21.10). Select Start. The motor energizes.

### Y N

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Transport Entrance Sensor (PL 21.10). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-142 (Pro) Buffer Path Sensor On Jam

**BSD-ON: BSD 12.36 Professional Finisher Drives** 

#### BSD-ON: BSD 12.39 Professional Finisher Buffer Transport

Buffer Path Sensor is not turned on within a specified time.

# **Initial Actions**

- Check for obstructions in the paper path
- Check the Finisher Transport Motor Belt, Gears and Drive Rolls for wear or damage

# Procedure

Enter dC330 [012-101], Buffer Path Sensor (PL 21.10). Select Start. Actuate the Buffer Path Sensor. **The display changes.** 

Y N

Go to BSD 12.39 Professional Finisher Buffer Transport. Check the circuit of the Buffer Path Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor 1Speed (PL 21.10). Select Start. The motor energizes.

#### Ϋ́Ν

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] and/or [012-016], Buffer Gate Solenoid (PL 21.10). Select Start. **The Gate Solenoid actuates.** 

Y N

Select Stop. Go to BSD 12.39 Professional Finisher Buffer Transport. Check the circuit of the Buffer Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Buffer Rolls for obstructions
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Buffer Path Sensor (PL 21.10). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-151(Pro) Compiler Exit Sensor Off Jam

BSD-ON:BSD 12.36 Professional Finisher Drives

BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

BSD-ON:BSD 12.39 Professional Finisher Buffer Transport

#### BSD-ON:BSD 12.51 Professional Finisher Compiling

The Compiler Exit Sensor did not turn Off within the specified time after Compiler Exit Sensor On.

### **Initial Actions**

- Check the Buffer Reverse Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter dC330 [012-150], Compiler Exit Sensor (PL 21.9). Select Start. Actuate the Compiler Exit Sensor. **The display changes.** 

#### Ν

Go to BSD 12.51 Professional Finisher Compiling Check the circuit of the Compiler Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10), and Select Start. **The Transport Gate Solenoid actuates**.

Y N

Υ

Select **Stop**. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid (PL 21.10), and Select Start. **The Buffer Gate Solenoid actuates.** 

#### Y N

Υ

Select **Stop**. Go to BSD 12.39 Professional Finisher Buffer Transport Check the circuit of the Buffer Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [012-007], Exit Motor (PL 21.8). Select Start. The motor energizes.

Ν

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Exit Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

Initial Issue

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-152 (Pro) Compiler Exit Sensor On Jam

BSD-ON:BSD 12.36 Professional Finisher Drives

BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

**BSD-ON:BSD 12.39 Professional Finisher Buffer Transport** 

#### BSD-ON:BSD 12.51 Professional Finisher Compiling

Not in the Punch mode: The Compiler Exit Sensor did not turn On within the specified time after Punch Out Sensor On.

In Punch mode: The Compiler Exit Sensor did not turn On within the specified time after the punching operation had begun.

#### **Initial Actions**

- Check the Buffer Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter dC330 [012-150], Compiler Exit Sensor (PL 21.9). Select Start. Actuate the Compiler Exit Sensor. **The display changes.** 

```
Y N
```

Go to BSD 12.51 Professional Finisher Compiling Check the circuit of the Compiler Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select **Stop**. Select [012-015] or [012-016], Buffer Gate Solenoid (PL 21.10), and Select Start. **The Buffer Gate Solenoid actuates.** 

### Y N

Select **Stop**. Go to BSD 12.39 Professional Finisher Buffer Transport. Check the circuit of the Buffer Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates.** 

#### Y N

Select **Stop**. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating Check the circuit of the Transport Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [012-007], Exit Motor (PL 21.11). Select Start. The motor energizes.

#### Y N

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Exit Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

#### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-161 (Pro) Set Eject Jam

BSD-ON:BSD 12.36 Professional Finisher Drives

### BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

#### BSD-ON:BSD 12.51 Professional Finisher Compiling

The Compiler Exit Sensor did not turn off within the specified time after the Eject operation has begun.

### **Initial Actions**

- Check the Buffer Reverse Roll for wear or damage
- Check the Compile Exit Roll for wear or damage
- Check for paper transportation failure due to a foreign substance/burr on the paper path
- Check for transportation failure of non-standard paper

### Procedure

Enter dC330 [012-150], Compiler Exit Sensor (PL 21.9). Select Start. Actuate the Compiler Exit Sensor. **The display changes.** 

Y N

Go to BSD 12.51 Professional Finisher Compiling Check the circuit of the Compiler Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-007] Exit Motor (PL 21.11). Select Start. The motor energizes.

Y N

Select **Stop**. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Exit Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates.** 

Y N

Select **Stop**. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or tension

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-162 (Pro) H-Transport Exit Sensor On Jam

BSD-ON:BSD 12.32 H-Transport Drives

#### BSD-ON:BSD 12.33 Horizontal Transportation (1 of 2)

H-Transport Exit Sensor is not turned on within a specified time.

### **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is dock correctly to ensure proper Transport Gate operation
- Check the H-Transport Motor Belt for wear or damage
- Check the Guides on the H-Transport Cover for damage, wear or faulty installation
- Check the Fuser Exit Switch actuator for damage, installed properly, or actuator spring damaged or missing

### Procedure

Enter dC330 [012-191], H-Transport Exit Sensor (PL 21.28). Select Start. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes.** 

Y N

Select Stop. Go to BSD 12.33 Horizontal Transportation (1 of 2). Check the circuit of the H-Transport Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-091], H-Transport Motor (PL 21.28). Select Start. The motor energizes.

Y N

Select **Stop**. Go to BSD 12.32 H-Transport Drives. Check the circuit of the H-Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Exit Sensor (PL 21.28). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-171 (Pro) Top Tray Exit Sensor On Jam

**BSD-ON:BSD 12.36 Professional Finisher Drives** 

### BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

#### BSD-ON:BSD 12.48 Professional Finisher Top Tray Stacking

Not in the Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after Punch Out Sensor on.

In Punch mode: The Top Tray Exit Sensor did not turn on within the specified time after the punching operation had begun.

### **Initial Actions**

- Check Top Tray Exit for operation failure
- Check paper transportation failure due to a foreign substance/burr on the paper path
- Check transportation failure of non-standard paper

### Procedure

Enter dC330 [012-115], Top Tray Exit Sensor (PL 21.11). Select Start. Actuate the Top Tray Exit Sensor. **The display changes.** 

#### Y N

Go to BSD 12.48 Professional Finisher Top Tray Stacking Check the circuit of the Top Tray Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

#### Select [012-007], Exit Motor (PL 21.11). Select Start. The motor energizes.

Ν

Υ

Select Stop. Go to BSD 12.36 Professional Finisher Drives Check the circuit of the Exit Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. The Transport Gate Solenoid actuates.

#### Y N

Select Stop. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor (PL 21.10). Select Start. The motor energizes.

Y N

Select Stop. Go to BSD 12.36 Professional Finisher Drives Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

#### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment
- Exit Drive Shaft for wear and a revolution failure

The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the Top Tray Exit Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-172 (Pro) Top Tray Exit Sensor Off Jam

**BSD-ON:BSD 12.36 Professional Finisher Drives** 

#### BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

#### BSD-ON:BSD 12.48 Professional Finisher Top Tray Stacking

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after Punch Out Sensor detected at the leading edge of the same paper.

Top Tray Exit Sensor Off was not detected at the rear edge of paper within the specified time after the punching operation had begun.

#### **Initial Actions**

- Check Top Tray Exit for operation failure
- Check paper transportation failure due to a foreign substance/burr on the paper path
- Check transportation failure of non-standard paper

### Procedure

Enter dC330 [012-115], Top Tray Exit Sensor (PL 21.11). Select Start. Actuate the Top Tray Exit Sensor. **The display changes.** 

#### Y N

Go to BSD 12.48 Professional Finisher Top Tray Stacking. Check the circuit of the Top Tray Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-007], Exit Motor (PL 21.11). Select Start. The motor energizes.

Y N

Select Stop. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Exit Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select **Stop**. Select [012-011] or [012-012], Transport Gate Solenoid (PL 21.10). Select Start. **The Transport Gate Solenoid actuates**.

#### Y N

Select Stop. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

Select [012-001], Finisher Transport Motor (PL 21.10). Select Start. The motor energizes.

Y N

Select Stop. Go to BSD 12.36 Professional Finisher Drives. Check the circuit of the Finisher Transport Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

#### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Exit Motor and its associated gears and belts for damage, contamination or misalignment
- Exit Drive Shaft for wear and a revolution failure

The Exit Pinch Rolls for wear and/or damage

If the above checks are OK, then replace the top Tray Exit Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-180 (Pro) Booklet Folder Roll Exit Sensor Off Jam

BSD-ON:BSD 12.40 Booklet Drive

#### BSD-ON:BSD 12.41 Booklet Transportation

Booklet Folder Roll Exit Sensor is not turned off within a specified time.

### **Initial Actions**

- Check for obstructions in the paper path
- Check the Booklet Folder Roll Exit Sensor for obstructions (PL 21.21)
- Check for transportation failure of non-standard paper
- Check the Booklet Folding Roll for wear or damage
- Check the Booklet Eject Roll Drive rolls for wear or damage

### Procedure

Enter dC330 [013-103], Booklet Folder Roll Exit Sensor (PL 21.21). Select Start. Actuate the Booklet Folder Roll Exit Sensor. **The display changes.** 

Y N

Go to BSD 12.41 Booklet Transportation. Check the circuit of the Booklet Folder Roll Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. The motor energizes.

Y N

Select **Stop**. Go to BSD 12.40 Booklet Drive. Check the circuit of the Booklet Paper Path Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [013-008], Booklet Folder Roll Motor (PL 21.22). Select Start. The motor energizes.

Y N

Select **Stop**. Go to BSD 12.40 Booklet Drive Check the circuit of the Booklet Folder Roll Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Booklet Paper Path Motor and its associated gears and belts for damage, contamination or alignment
- Check the Booklet Folder Roll Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Booklet Folder Roll Exit Sensor (PL 21.21). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-211(Pro) Stacker Tray Fault

BSD-ON:BSD 12.58 Professional Finisher Stack Height Detection

#### BSD-ON:BSD 12.57 Professional Finisher Stacker Drive

The Stack Height Sensor did not turn Off in 500msec after the Stacker Tray started to drive down.

The Tray Height Sensor Lower did not turn On in 5000msec after the Stacker Tray started lifting up.

### **Initial Actions**

- The Stack Height Sensor for improper installation
- The Stack Height Sensor connectors for connection failure
- The Tray Height Sensor Lower for improper installation
- The Tray Height Sensor Lower connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure
- The Elevator Gear for deformation

## Procedure

Enter dC330 [012-061] Elevator Motor Down and [012-060] Elevator Motor UP (PL 21.4), alternately. Select Start. **The Elevator Motor runs.** 

```
Y N
```

Select **Stop.** Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 21.4). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-212 (Pro) Stacker Upper Limit Fault

BSD-ON:BSD 12.57 Professional Finisher Stacker Drive

When Stack Height Sensor 2 On was detected after the Stacker Tray had started lifting up.

### **Initial Actions**

Check Items

- The Upper Limit SW for improper installation
- The Upper Limit SW connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

### Procedure

Y N

Υ

Enter dC330 [012-061] Elevator Motor Down and [012-060], Elevator Motor UP (PL 21.4), alternately. Select Start. The Elevator Motor runs.

Select **Stop.** Go to BSD 12.57 Professional Finisher Stacker Drive. Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.** 

Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 21.4). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-262], Stacker No Paper Sensor (PL 21.4). Select **Start**. Block/unblock the Stacker No Paper Sensor. **The display changes.** 

```
      N

      Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive. Check continuity between the Stacker No Paper Sensor and Finisher PWB. The continuity check is OK.

      Y
      N

      Repair the open circuit or short circuit.
```

Replace the Stacker No Paper Sensor (PL 21.4). If the problem continues, replace the Finisher PWB (PL 21.12).

Select [012-260], Upper Limit Sensor (PL 21.4). Block/unblock the Upper Limit Sensor. Select **Start. The display changes.** 

Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Upper Limit Sensor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Upper Limit Sensor (PL 21.4). If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-213 (Pro) Stacker Lower Limit Fault

BSD-ON:BSD 12.57 Professional Finisher Stacker Drive

### BSD-ON: BSD 12.58 Professional Finisher Stack Height Detection

When Lower Limit Sensor On was detected after the Stacker Tray had started driving down.

### **Initial Actions**

Check Items

- The Upper Limit SW for improper installation
- The Upper Limit SW connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

# Procedure

Enter dC330 [012-061] Elevator Motor Down and [012-060] Elevator Motor UP (PL 21.4), alternately. Select Start. The Elevator Motor runs.

Y N

Select **Stop.** Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 21.4). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-221 (Pro) Front Tamper Home Sensor On Fault

## BSD-ON:BSD 12.52 Professional Finisher Tamper Control

The Front Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

# **Initial Actions**

Check the following:

- Front Tamper Actuator for deformation
- Front Tamper Home Sensor for proper installation
- Front Tamper Home Sensor connectors
- Front Tamper Motor for proper operation
- Front Tamper Motor connectors

# Procedure

Enter dC330 [012-020] and [012-023], Front Tamper Motor (PL 21.8), alternately. Select Start. The Front Tamper Motor runs.

Υ

N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control Check circuit of the Front Tamper Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-220], Front Tamper Home Sensor (PL 21.8). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.** 

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control. Check circuit of the Front Tamper Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

# 312-223(Pro) Front Tamper Home Sensor Off Fault

### BSD-ON:BSD 12.52 Professional Finisher Tamper Control

Front Tamper Home Sensor is not turned off within a specified time. Front Tamper Home Sensor is not turned off after the stop following Front Tamper Home Sensor Off.

### **Initial Actions**

Check the following:

- Front Tamper Actuator for deformation
- Front Tamper Home Sensor for proper installation
- Front Tamper Home Sensor connectors
- Front Tamper Motor for proper operation
- Front Tamper Motor connectors

## Procedure

Enter dC330 [012-020] and [012-023], Front Tamper Motor (PL 21.8), alternately. Select Start. The Front Tamper Motor runs.

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control Check circuit of the Front Tamper Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-220], Front Tamper Home Sensor (PL 21.8). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.** 

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control Check circuit of the Front Tamper Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-224 (Pro) Rear Tamper Home Sensor Off Fault

### BSD-ON:BSD 12.52 Professional Finisher Tamper Control

Rear Tamper Home Sensor is not turned off within a specified time. Rear Tamper Home Sensor is not turned off after the stop following Rear Tamper Home Sensor Off.

# **Initial Actions**

Check the following:

- Rear Tamper Actuator for deformation
- Rear Tamper Home Sensor for proper installation
- Rear Tamper Home Sensor connectors
- Rear Tamper Motor for proper operation
- Rear Tamper Motor connectors

### Procedure

Ν

Enter dC330 [012-026] and [012-029], Rear Tamper Motor (PL 21.8), alternately. Select Start. The Rear Tamper Motor runs.

Y

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control. Check circuit of the Rear Tamper Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-221], Rear Tamper Home Sensor (PL 21.8). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.** 

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control. Check circuit of the Rear Tamper Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

# 312-225 (Pro) Booklet Tamper F Home Sensor On Fault

BSD-ON:BSD 12.42 Booklet Tamper Control (1 of 2)

### BSD-ON: BSD 12.43 Booklet Tamper Control (2 of 2)

Tamper Home Sensor Front is not turned on within 1000msec from motor On while Booklet Tamper Front is returning to Home.

# Initial Actions

- The Booklet Tamper Home Sensor Front for improper installation ٠
- The Booklet Tamper Home Sensor Front connectors for connection failure ٠
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

# Procedure

Enter dC330 [013-048] Booklet Tamper Motor F Rear 1 and dC330 [013-052], Booklet Tamper Motor Front (PL 21.19), alternately. Select Start. The Booklet Tamper Motor Front energizes.

Υ Ν

Select Stop. Go to BSD 12.42 Booklet Tamper Control (1 of 2) Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop, Select [013-134], Booklet Tamper Home Sensor Front (PL 21.19), Select Start. Block/unblock the Booklet Tamper Home Sensor Front. The display changes.

Υ Ν

Select Stop, Go to BSD 12,43 Booklet Tamper Control (2 of 2) Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-226 (Pro) Booklet Tamper F Home Sensor Off Fault

BSD-ON:BSD 12.42 Booklet Tamper Control (1 of 2)

# BSD-ON:BSD 12.43 Booklet Tamper Control (2 of 2)

Even when Booklet tamper Front motor outputs 75pulse, Tamper Front Home Sensor is not turned off.

# Initial Actions

- The Booklet Tamper Home Sensor Front for improper installation
- The Booklet Tamper Home Sensor Front connectors for connection failure
- The Booklet Tamper Motor Front connectors for connection failure
- The Booklet Tamper Motor Front for improper installation
- The gear part for wear or damage
- The Booklet Tamper Front for deformation

# Procedure

Enter dC330 [013-048] Booklet Tamper Motor F Rear 1 and dC330 [013-052], Booklet Tamper Motor Front (PL 21.19), alternately. Select Start. The Booklet Tamper Motor Front energizes.

#### Υ Ν

Υ

Select Stop. Go to BSD 12.42 Booklet Tamper Control (1 of 2) Check continuity between the Booklet Tamper Motor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Front (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop, Select [013-134], Booklet Tamper Home Sensor Front (PL 21.19), Select Start. Block/unblock the Booklet Tamper Home Sensor Front. The display changes.

Ν Select Stop, Go to BSD 12.43 Booklet Tamper Control (2 of 2), Check continuity between the Booklet Tamper Home Sensor Front and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK. Ν

Y

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Front (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

# 312-227 (Pro) Booklet End Guide Home Sensor Off Fault

### BSD-ON: BSD 12.46 Booklet End Guide Control

Even when Booklet End Guide motor outputs 200 pulse after the start, Booklet End Guide Home Sensor is not turned off.

### **Initial Actions**

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

## Procedure

Enter dC330 [013-013] and [013-016], Booklet End Guide Motor (PL 21.17), alternately. Select Start. The Booklet End Guide Motor energizes.

Y N

Select Stop. Go to **BSD 12.46 Booklet End Guide Control**. Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK**.

Y N

Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor (PL 21.17). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select [013-137] Booklet End Guide Home Sensor. Block/unblock the Booklet End Guide Home Sensor to the light with paper strip. Select **Start**. **The display changes**.

Y N

Select Stop. Go to **BSD 12.46 Booklet End Guide Control**. Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor (PL 21.17). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-228 (Pro) Booklet End Guide Home Sensor On Fault

### BSD-ON: BSD 12.46 Booklet End Guide Control

Booklet End Guide Home Sensor is not turned on within 2000ms from motor On while Booklet End Guide is returning to Home.

# **Initial Actions**

- The Booklet End Guide Home Sensor for improper installation
- The Booklet End Guide Home Sensor connectors for connection failure
- The Booklet End Guide Motor connectors for connection failure
- The Guide for deformation
- The Guide for a foreign substance

## Procedure

Enter dC330 [013-013] and [013-016], Booklet End Guide Motor (PL 21.17), alternately. Select **Start**. **The Booklet End Guide Motor energizes.** 

Y N

Select Stop. Go to **BSD 12.46 Booklet End Guide Control**. Check continuity between the Booklet End Guide Motor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK**.

Y N Repair the open circuit or short circuit.

Replace the Booklet End Guide Motor (PL 21.17). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Enter dC330 [013-137] Booklet End Guide Home Sensor. Select Start. Block/ unblock the Booklet End Guide Home Sensor. The display changes.

Y N

Select Stop. Go to **BSD 12.46 Booklet End Guide Control**. Check continuity between the Booklet End Guide Home Sensor and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet End Guide Home Sensor (PL 21.17). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Check the following:

- The Booklet End Guide Motor for proper installation
- Booklet End Guide Belt for proper tension
- Booklet End Guide Belt for wear or damage

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-229 (Pro) Booklet Tamper R Home Sensor On Fault

BSD-ON:BSD 12.42 Booklet Tamper Control (1 of 2)

### BSD-ON:BSD 12.43 Booklet Tamper Control (2 of 2)

Tamper Home Sensor Rear is not turned on within 1000msec from motor On while Booklet Tamper Rear is returning to Home.

# **Initial Actions**

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

# Procedure

Enter dC330 [013-056] and dC330 [013-060], Booklet Tamper Motor Rear (PL 21.19), alternately. Select Start. The Booklet Tamper Motor Rear energizes.

Y N

Select Stop. Go to BSD 12.42 Booklet Tamper Control (1 of 2). Check continuity between the Booklet Tamper Motor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Rear (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select [013-136], Booklet Tamper Home Sensor. Select **Start**. Block/unblock the Booklet Tamper Home Sensor Front. **The display changes.** 

Y N

Select Stop. Go to BSD 12.43 Booklet Tamper Control (2 of 2). Check continuity between the Booklet Tamper Home Sensor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Rear (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-230 (Pro) Booklet Tamper R Home Sensor Off Fault

BSD-ON:BSD 12.42 Booklet Tamper Control (1 of 2)

## BSD-ON:BSD 12.43 Booklet Tamper Control (2 of 2)

Even when Booklet tamper Rear motor outputs 75pulse, Tamper Rear Home Sensor is not turned off.

# **Initial Actions**

- The Booklet Tamper Home Sensor Rear for improper installation
- The Booklet Tamper Home Sensor Rear connectors for connection failure
- The Booklet Tamper Motor Rear connectors for connection failure
- The Booklet Tamper Motor Rear for improper installation
- The gear part for wear or damage
- The Booklet Tamper Rear for deformation

# Procedure

Enter dC330 [013-056] and [013-060], Booklet Tamper Motor Rear (PL 21.19), alternately. Select Start. The Booklet Tamper Motor Rear energizes.

Y N

Select Stop. Go to BSD 12.42 Booklet Tamper Control (1 of 2) Check continuity between the Booklet Tamper Motor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Motor Rear (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select [013-136], Booklet Tamper Home Sensor (PL 21.19). Select Start. Block/ unblock the Booklet Tamper Home Sensor Front. The display changes.

## Y N

Select Stop. Go to BSD 12.43 Booklet Tamper Control (2 of 2) Check continuity between the Booklet Tamper Home Sensor Rear and the Booklet PWB and the Booklet PWB and the Finisher PWB. The continuity check is OK.

## Y N

Repair the open circuit or short circuit.

Replace the Booklet Tamper Home Sensor Rear (PL 21.19). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).
# 312-243 (Pro) Booklet Knife Home Sensor On Fault

BSD-ON:BSD 12.40 Booklet Drive

### BSD-ON: BSD 12.44 Booklet Knife Control

Knife Home Sensor is not turned on after the lapse of 500ms from Clutch On while Booklet Knife is returning to Home.

# **Initial Actions**

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Clutch connectors for connection failure
- The Knife Clutch for improper installation
- The Knife drive mechanism for a foreign substance

# Procedure

Manually move the Booklet Tamper to both ends. Enter dC330 [013-008] and [013-009], Booklet Folder Roll Motor (PL 21.22), alternately. Select Start. The Booklet Folder Roll Motor energizes.

# Y N

Select Stop. Go to BSD 12.40 Booklet Drive. Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select [013-010], Knife Solenoid, (PL 21.22). Select Start. The Knife Solenoid actuates.

# Y N

Select Stop. Go to BSD 12.44 booklet Knife Control. Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB. **The continuity check is OK.** 

### Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select **Stop**. Select [013-101], Booklet Knife Home Sensor (PL 21.18). Select **Start**. Block/ unblock the Knife Home Sensor. **The display changed**.

Y N

Select Stop. Go to BSD 12.44 Booklet Knife Control. Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

Υ

Ν

Repair the open circuit or short circuit.

Replace the Knife Home Sensor (PL 21.18). If the problem continues, replace the Booklet

PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-246 (Pro) Booklet Stapler Fault

### BSD-ON:BSD 12.45 Booklet Staple Control

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Booklet Stapling operation.

The Stapler Ready signal did not turn to 'Not Ready' within the specified time after Booklet Stapler Start signal On.

Error signal On and Ready signal Off output from the Booklet Stapler were detected after Stapler Power On check was performed at Power On or when the interlock was closed.

Error signal On was detected just before the Booklet Stapling operation.

### Procedure

Ν

Check continuity between the Staple and Booklet PWB. The continuity check is OK.

Υ

Repair the open circuit or short circuit.

Go to Figure 1. Check continuity between the Booklet PWB and Finisher PWB. **The continuity check is OK.** 

#### Y N

Repair the open circuit or short circuit.

### Replace the Stapler (PL 21.16). The problem is resolved.

Y N

Replace the Booklet PWB (PL 21.13). If the problem continues, replace the Finisher PWB (PL 21.12).

If the problem continues, replace the Finisher PWB (PL 21.12).



T712143A-COP.VSD.

Figure 1 Finisher, Booklet PWBs

# 312-247 (Pro) Side Registration Sensor Off Fault

BSD-ON: BSD 12.37 Professional Finisher Booklet/Punch Transport

#### BSD-ON:BSD 12.49 Professional Finisher Punch Drive

Side Registration Sensor not turned off after the lapse of 500msec from operation start. Side Registration Sensor is not turned off after the stop following Side Registration Sensor Off. Target Side Registration Sensor1 or Side Registration Sensor2 is not turned off at operation start.

### **Initial Actions**

- The Actuator for deformation
- The Side Reg 1 and 2 Sensors for improper installation
- The Side Reg 1 and 2 Sensors connectors for connection failure
- The Puncher Move Motor connectors for connection failure

### Procedure

Enter dC330 [012-071] and [012-073], Puncher Move Motor (PL 21.5), alternately. Select Start. The Puncher Move Motor run.

Y N

Select Stop. Go to BSD 12.49 Professional Finisher Punch Drive. Check continuity between the Puncher Move Motor and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Puncher Move Motor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-200], Side Registration 1 Sensor (PL 21.5). Select **Start**. Block/ unblock the Side Reg 1 Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport. Check continuity between the Side Reg 1 Sensor and Finisher PWB. The continuity check is OK. Y N

Repair the open circuit or short circuit.

Replace the Side Reg 1 Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select [012-201], Side Reg 2 Sensor (PL 21.5). Select **Start**. Block/unblock the Side Reg 2 Sensor. **The display changes.** 

Y N

Select Stop. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport. Check continuity between the Side Reg 2 Sensor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Side Reg 2 Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Α

Select Stop. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-260 (Pro) Eject Clamp Home Sensor On Fault

#### **BSD-ON: BSD 12.55 Professional Finisher Eject Drive**

Eject Clamp Home Sensor is not turned on within a specified time.

### Initial Actions

٠ Check for obstructions in the Clamp area

### Procedure

Enter dC330 [012-250], Eject Clamp Home Sensor (PL 21.7). Select Start. Actuate the Eject Clamp Home Sensor. The display changes.

#### Υ Ν

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Clamp Home Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-052]. Eject Clamp Motor (PL 21.7). Select Start. The Eject Clamp moves up.

Υ Ν

The Eject Motor energized.

Υ Ν

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Clamp Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Eject Clamp Motor and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.7).

Select Stop.

Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that ٠ the wires are not damaged
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires • are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor (PL 21.7). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-261 (Pro) Booklet Knife Folding Sensor Fault

BSD-ON:BSD 12.40 Booklet Drive

### BSD-ON: BSD 12.44 booklet Knife Control

When the Booklet Knife performs folding operation, the Knife Folding Sensor did not turn On within 400 msec after Knife Solenoid On.

### Initial Actions

- The Knife Folding Sensor for improper installation
- The Knife Folding Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure ٠
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance ٠

### Procedure

Manually move the Booklet Tamper to both ends. Enter dC330 [013-008] and [013-009], Booklet Folder Roll Motor (PL 21.22), alternately. Select Start. The Booklet Folder Roll Motor energizes.

#### Υ Ν

Select Stop. Go to BSD 12.40 Booklet Drive. Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select dC330 [013-010], Knife Solenoid, (PL 21.22). Select Start. The Knife Solenoid actuates. Υ

#### Ν

Select Stop. Go to BSD 12.44 booklet Knife Control. Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

#### Y Ν

Repair the open circuit or short circuit.

Replace the Knife Solenoid (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select dC330 [013-101], Booklet Knife Home Sensor (PL 21.18). Select Start. Block/unblock the Knife Home Sensor. The display changed.

Υ Ν

Select Stop. Go to BSD 12.44 booklet Knife Control. Check continuity between the Knife Home Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

Υ

#### N Repair the open circuit or short circuit.

Replace the Knife Home Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-263 (Pro) Rear Tamper Home Sensor On Fault

### BSD-ON:BSD 12.52 Professional Finisher Tamper Control

The Rear Tamper Home Sensor did not turn On within the specified time after the Tamper Motor had started running.

### **Initial Actions**

Check the following:

- Rear Tamper Actuator for deformation
- Rear Tamper Home Sensor for proper installation
- Rear Tamper Home Sensor connectors
- Rear Tamper Motor for proper operation
- Rear Tamper Motor connectors

### Procedure

Enter dC330 [012-026] and [012-029], Rear Tamper Motor (PL 21.8), alternately. Select Start. The Rear Tamper Motor runs.

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control Check circuit of the Rear Tamper Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-221], Rear Tamper Home Sensor (PL 21.8). Select **Start**. Actuate the sensor with a piece of paper. **The display changes.** 

Y N

Select Stop. Go to BSD 12.52 Professional Finisher Tamper Control Check circuit of the Rear Tamper Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-264 (Pro) Booklet Drawer Broken Fault

### BSD-ON:BSD 12.40 Booklet Drive

Booklet Drawer Set Sensor Open was detected when the Finisher Front Door Interlock was closed.

### **Initial Actions**

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Booklet Drawer Actuator part for a foreign substance and deformation
- The Drawer mechanism for a foreign substance and deformation

### Procedure

Enter dC330 [013-104], Booklet Drawer Set Sensor (PL 21.15). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes**.

Y N

Go to BSD 12.40 Booklet Drive. Check the circuit of the Booklet Drawer Set Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-265 (Pro) Booklet Knife Home Sensor Off Fault

BSD-ON:BSD 12.40 Booklet Drive

#### BSD-ON: BSD 12.44 booklet Knife Control

When the Booklet Knife moves from Home position, the Knife Home Sensor did not turn Off within the specified time after Knife Solenoid On.

### **Initial Actions**

- The Knife Home Sensor for improper installation
- The Knife Home Sensor connectors for connection failure
- The Booklet Fold Motor connectors for connection failure
- The Knife Solenoid connectors for connection failure
- The Knife Solenoid for improper installation
- The Knife drive mechanism for a foreign substance

### Procedure

Manually move the Booklet Tamper to both ends. Enter dC330 [013-008] and [013-009], Booklet Folder Roll Motor (PL 21.22), alternately. Select Start. The Booklet Folder Roll Motor energizes.

#### ΥŇ

Select Stop. Go to BSD 12.40 Booklet Drive. Check continuity between the Booklet Folder Roll Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Folder Roll Motor (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select dC330 [013-010], Booklet Knife Solenoid, (PL 21.22). Select Start. The Knife Solenoid actuates.

#### Ν

Υ

Select Stop. Go to BSD 12.44 booklet Knife Control. Check continuity between the Knife Solenoid and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

#### Y N

Repair the open circuit or short circuit.

Replace the Knife Solenoid (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. Select dC330 [013-140], Booklet Knife Folding Sensor (PL 21.18). Select Start. Block/unblock the Knife Folding Sensor. The display changed.

Y N

Select Stop. Go to BSD 12.44 booklet Knife Control. Check continuity between the Knife Folding Sensor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

γ

#### Ν Repair the open circuit or short circuit.

Replace the Knife Folding Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-266 (Pro) Booklet Compiler No Paper Sensor Fault

BSD-ON:BSD 12.40 Booklet Drive

### BSD-ON:BSD 12.41 Booklet Transportation

The Booklet Compile No Paper Sensor did not turn On within the specified time.

### Procedure

Enter dC330 [013-102], Booklet Compile No Paper Sensor (PL 21.18). Select Start. Block/ unblock the Booklet Compile No Paper Sensor. The display changed.

Y N

Select Stop. Go to BSD 12.51 Professional Finisher Compiling. Check continuity between the Booklet Compile No Paper and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK.

Υ Ν

Repair the open circuit or short circuit.

Replace the Booklet Compile No Paper Sensor (PL 21.18). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select [013-064], Booklet Paper Path Motor (PL 21.22). Select Start. The Motor energizes.

#### Υ Ν

Select Stop. Go to BSD 12.40 Booklet Drive. Check continuity between the Booklet Paper Path Motor and the Booklet PWB and between the Booklet PWB and the Finisher PWB. The continuity check is OK. Ν

Y

Repair the open circuit or short circuit.

Replace the Booklet Paper Path Motor (PL 21.22). If the problem continues, replace the Booklet PWB (PL 21.13). If the problem persists, replace Finisher PWB (PL 21.12).

Select Stop. If the problem persists, replace Finisher PWB (PL 21.12).

# 312-269 (Pro) Booklet Sub-CPU Communications Fault

BSD-ON:BSD 12.31 Professional Finisher PWB Communication

Communications between the Finisher PWB and the Booklet PWB Failed

### **Initial Actions**

- Check the connectors at the Finisher PWB and the Booklet PWB are connected or seated properly (Figure 1)
- Check the wiring between the Finisher PWB and the Booklet PWB for damage (Figure 1)

# Procedure

Power Off and Power On the Printer. The problem is resolved.

Y N

Reload the Software. The problem is resolved.

Y N

Replace the Finisher PWB (PL 21.12). If the problem continues, replace the Booklet PWB (PL 21.13).

Rerun the job.

kerun the job.



T712143A-COP.VSD.

Figure 1 Finisher, Booklet PWBs

# 312-282 (Pro) Eject Clamp Home Sensor Off Fault

### BSD-ON: BSD 12.55 Professional Finisher Eject Drive

Eject Clamp Home Sensor is not turned off within a specified time.

### **Initial Actions**

• Check for obstructions in the Clamp area

### Procedure

Enter dC330 [012-250], Eject Clamp Home Sensor (PL 21.7). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes.** 

#### Y N

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Clamp Home Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-052], Eject Clamp Motor (PL 21.7). Select Start. The Eject Clamp moves up.

Y N

The Eject Motor energized.

Y N

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Clamp Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Eject Clamp Motor and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.7).

Select Stop.

Check the

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Clamp Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor (PL 21.7). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-283 (Pro) Set Clamp Home Sensor On Fault

BSD-ON: BSD 12.55 Professional Finisher Eject Drive

### BSD-ON: BSD 12.56 Professional Finisher Set Clamp Control

Set Clamp Home Sensor is not turned on within a specified time.

### **Initial Actions**

Check for obstructions in the Clamp area

### Procedure

Enter dC330 [012-250], Eject Clamp Home Sensor (PL 21.7). Select **Start**. Actuate the Eject Clamp Home Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.56 Professional Finisher Set Clamp Control. Check the circuit of the Eject Clamp Home Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-052], Eject Motor (PL 21.8). Select Start. The Eject moves up.

Ν

Υ

#### The Eject Motor energized.

Y N

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Eject Motor and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.8).

Select Stop. The following codes will be stacked. Select [012-052], Eject Motor (PL 21.8). Select Start. Select [012-050], Set Clamp Clutch (PL 21.8). Select Start. The Eject Roll Shaft rotates.

### Y N

#### The Set Clamp Clutch energized.

Y N

Select Stop. Go to BSD 12.56 Professional Finisher Set Clamp Control. Check the circuit of the Set Clamp Clutch. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Set Clamp Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.8).

Select Stop. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Eject Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor (PL 21.7). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-284 (Pro) Set Clamp Home Sensor Off Fault

**BSD-ON: BSD 12.55 Professional Finisher Eject Drive** 

### BSD-ON: BSD 12.56 Professional Finisher Set Clamp Control

Set Clamp Home Sensor is not turned off within a specified time.

### Initial Actions

Check for obstructions in the Clamp area .

### Procedure

Enter dC330 [012-250], Eject Clamp Home Sensor (PL 21.7). Select Start. Actuate the Eject Clamp Home Sensor. The display changes.

Ν Υ

Select Stop. Go to BSD 12.56 Professional Finisher Set Clamp Control. Check the circuit of the Eject Clamp Home Sensor, Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-052], Eject Motor (PL 21.8). Select Start. The Eject moves up.

- Υ Ν
  - The Eject Motor energized.
  - Y N

Select Stop. Go to BSD 12.55 Professional Finisher Eject Drive. Check the circuit of the Eject Motor. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Eject Motor and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.8).

Select Stop. Select [012-050], Set Clamp Clutch (PL 21.8). Select Start. The Eject Roll Shaft rotates.

#### Υ Ν

### The Set Clamp Clutch energized.

Υ Ν

Select Stop, Go to BSD 12.56 Professional Finisher Set Clamp Control, Check the circuit of the Set Clamp Clutch. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Set Clamp Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.8).

Select Stop. Check the following:

- Ensure that the Eject Clamp Home Sensor connectors are securely connected and that ٠ the wires are not damaged
- Ensure that the Eiect Motor connectors are securely connected and that the wires are not damaged

If the above checks are OK, replace the Eject Clamp Home Sensor (PL 21.7). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-291 (Pro) Stapler Fault

**BSD-ON:BSD 12.53 Professional Finisher Stapler Control** 

### BSD-ON:BSD 12.54 Professional Finisher Staple Positioning

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor had started rotating forward.

The Staple Home Sensor did not turn On within the specified time after the Staple Motor had started rotating backward.

### Initial Actions

Check the Stapler Head for obstructions

### Procedure

Enter dC330 [012-042] and [012-045]. Staple Move Motor, (PL 21.6), alternately, Select Start. The Staple Motor runs.

Υ N

> Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Head and Finisher PWB. The continuity check is OK.

Υ

Ν

Repair the open circuit or short circuit.

Replace the Stapler Head (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-244], Staple Home Sensor. Select [012-042] and [012-045]. Staple Move Motor, (PL 21.6), alternately. Select Start. The display changes. Υ

#### Ν

Select Stop. Go to BSD 12.53 Professional Finisher Stapler Control. Check continuity between the Stapler Home Sensor and Finisher PWB. The continuity check is OK.

Υ Ν

Repair the open circuit or short circuit.

Replace the Stapler Head (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Check the following:

The wire between the Staple Head and the Finisher PWB for damage

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-295 (Pro) Stapler Move Position Sensor On Fault

### **BSD-ON: BSD 12.54 Professional Finisher Staple Positioning**

Stapler Move Position Sensor is not turned on within a specified time.

Stapler Move Position Sensor not turned on when home operation is completed.

Stapler Move Position Sensor is not turned on after the stop following Stapler Move Position Sensor On.

### Initial Actions

- ٠ Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure .
- Check Staple Guide for deformation

# Procedure

Enter dC330 [012-042] and [012-045], Stapler Move Motor (PL 21.6), alternately. Select Start. The Staple Move Motor energizes.

Υ Ν

Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Move Motor and Finisher PWB. The continuity check is OK.

Υ Ν

Repair the open circuit or short circuit.

Replace the Staple Move Motor (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select dC330 [012-241], Stapler Move Position Sensor (PL 21.6). Select Start. Block/unblock the Stapler Move Position Sensor. The display changed.

#### Υ Ν

Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Move Position Sensor and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Check the following:

Obstructions on the Stapler Upper Rail

Stapler Move Motor Gear

If the above checks are OK. replace the Finisher PWB (PL 21.12).

# 312-296 (Pro) Stapler Move Position Sensor Off Fault

**BSD-ON: BSD 12.54 Professional Finisher Staple Positioning** 

Stapler Move Position Sensor is not turned off within a specified time

Stapler Move Position Sensor is not turned off when home operation is completed.

Stapler Move Position Sensor is not turned off after the stop following Stapler Move Position Sensor Off.

### Initial Actions

- Check Actuator for deformation
- Check Stapler Move Position Sensor for improper installation
- Check Stapler Move Position Sensor connectors for connection failure
- Check Staple Move Motor connectors for connection failure
- Check Staple Guide for deformation
- Check to see if the shipping screw was removed from the stapler

### Procedure

Enter dC330 [012-042] and [012-045], Stapler Move Motor (PL 21.6), alternately. Select Start. The Staple Move Motor energizes.

Υ Ν

Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Move Motor and Finisher PWB. The continuity check is OK. Ν

Υ

Repair the open circuit or short circuit.

Replace the Staple Move Motor (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop, Select dC330 [012-241]. Stapler Move Position Sensor (PL 21.6), Select Start. Block/unblock the Stapler Move Position Sensor. The display changed.

Ν

Υ

Select Stop, Go to BSD 12.54 Professional Finisher Staple Positioning, Check continuity between the Stapler Move Position Sensor and Finisher PWB. The continuity check is OK.

Υ N

Repair the open circuit or short circuit.

Replace the Stapler Move Position Sensor (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Check the following:

- Obstructions on the Stapler Upper Rail
- Stapler Move Motor Gear

If the above checks are OK. replace the Finisher PWB (PL 21.12).

# 312-300 (Pro) Eject Cover Open

### BSD-ON:BSD 12.29 Professional Finisher Interlocks

Eject Cover Switch open was detected.

### **Initial Actions**

- Ensure that the Eject Cover is down
- Check Eject Cover Switch for improper installation
- Check Eject Cover Switch connectors for connection failure
- Check Actuator part for deformation

# Procedure

Enter dC330 [012-300], Eject Cover Switch (PL 21.7). Select Start. Actuate the Eject Cover Switch. The display changes

Y N

Select Stop. Check continuity of the Eject Cover Switch. The continuity check is OK. Y  $\ N$ 

Replace the Eject Cover Switch (PL 21.7).

Go to BSD 12.29 Professional Finisher Interlocks Check continuity between the Eject Cover Switch and the Finisher PWB. If the check is OK, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-302 (Pro) Finisher Front Door Interlock Open

**BSD-ON:BSD 12.29 Professional Finisher Interlocks** 

Finisher Front Door Switch Open was detected.

# **Initial Actions**

Check the following:

- Finisher Front Door Switch for proper installation
- Finisher Front Door Switch connectors for connection failure
- Actuator part for deformation
- Ensure that the Eject Cover is in the closed/down position

# Procedure

Y N

Υ

Enter dC330 [012-302], Front Door Interlock Switch (PL 21.3). Select **Start**. Open and close the Front Door. **The display changes**.

Go to BSD 12.29 Professional Finisher Interlocks Disconnect P8314 on the Finisher PWB. +5 VDC is measured between the Finisher PWB, P8314-2 and P8314-3.

Replace the Finisher PWB (PL 21.12).

There is less than 5 ohms between P8314-3 and the finisher frame.

N Replace the Finisher PWB (PL 21.12).

Go to BSD 12.29 Professional Finisher Interlocks Check the wires between the Finisher PWB, the Eject Cover Switch, and the Finisher Front Door Switch for an open circuit or poor contact.

If the wires are good, replace the Front Door Interlock Switch (PL 21.3).

Select Stop. Check the following:

- Alignment between the Front Door and the Front Door Interlock Switch
- Front Door and Front Cover for proper installation
- Actuator for damage or bent
- Magnet for proper mounting

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-303 (Pro) H-Transport Cover Open

BSD-ON: BSD 12.34 Horizontal Transportation (2 of 2)

H-Transport Interlock Sensor-L Open was detected.

### **Initial Actions**

Check Items

- The H-Transport Interlock Sensor-L for improper installation
- Check for obstruction in between the H-Transport Cover and the H-Transport paper transport area
- The H-Transport Cover Interlock Sensor connectors for connection failure
- The Actuator for deformation

### Procedure

Υ

Enter dC330 [012-303], H-Transport Interlock Sensor (PL 21.26). Select **Start**. Block and unblock the H-Transport Interlock Sensor-L. **The display changes.** 

N +5 VDC is measured between the H-Transport Interlock Sensor P/J8445--1 and -3. Y N Go to BSD 12.34 Horizontal Transportation (2 of 2). Disconnect J8310 on Finisher PWB. +5 VDC is measured between H Transport Interlock Sensor P/J8445-1 and -3. Y N Replace the H Transport PWB (PL 21.12).

Check for an open circuit between H-Transport PWB  $\,$  P/J8396-3 and -1 and H-Transport Interlock Sensor  $\,$  P/J8445-1 and -3.

### +5 VDC is measured between Finisher PWB P/J8310-20 and ground.

Y N

Replace the Finisher PWB (PL 21.12)

### +5 VDC is measured at the H-Transport Interlock Sensor P/J8445-2 and ground.

Y N

Check for an open circuit between Finisher PWB P/J8310-20 and H-Transport Interlock Sensor P/J8445-2.

Replace the H-Transport Interlock Sensor (PL 21.26).

Select Stop. Check the following:

- Alignment between the H-Transport Cover and the H-Transport Interlock Sensor.
- The H-Transport Cover for proper installation
- The Actuator for bending or alignment
- The Magnets for proper mounting

# 312-307 (Pro) Booklet Drawer Set Fault

BSD-ON:BSD 12.40 Booklet Drive

Booklet Drawer Set Sensor Open was detected.

# **Initial Actions**

- The Booklet Drawer Set Sensor for improper installation
- The Booklet Drawer Set Sensor connectors for connection failure
- The Actuator part for deformation

# Procedure

Enter dC330 [013-104], Booklet Drawer Set Sensor (PL 21.15). Select **Start**. Remove and insert the Booklet Drawer manually. **The display changes.** 

Y N

Select Stop. Go to BSD 12.40 Booklet Drive. Check continuity between the Booklet Drawer Set Sensor and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Drawer Set Sensor (PL 21.15). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-320 (Pro) Puncher Home Sensor On Fault

**BSD-ON: BSD 12.49 Professional Finisher Punch Drive** 

#### **BSD-ON: BSD 12.50 Professional Finisher Punch Hole Control**

The Puncher Home Sensor did not turn On within the specified time after the Puncher Motor started running.

### **Initial Actions**

Check the following:

- Puncher Home Actuator for deformation
- Puncher Home Sensor for proper installation
- Puncher Home Sensor connectors
- Puncher Motor for proper operation
- Puncher Motor connectors

# Procedure

Enter dC330 [012-078] and [012-075], Puncher Motor (PL 21.5), alternately. Select Start. The Puncher Motor runs.

Y N

Select Stop. Go to BSD 12.49 Professional Finisher Punch Drive. Check circuit of the Punch Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-271], Puncher Home Sensor (PL 21.5). Select **Start**. Actuate the sensor with a piece of paper. **The display changes**.

#### Y N

Go to BSD 12.50 Professional Finisher Punch Hole Control. Check circuit of the Puncher Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-321 (Pro) Puncher Home Sensor On Fault

**BSD-ON: BSD 12.49 Professional Finisher Punch Drive** 

### **BSD-ON: BSD 12.50 Professional Finisher Punch Hole Control**

The Puncher Home Sensor did not turn On within the specified time after the Puncher Motor started running.

### **Initial Actions**

Check the following:

- Puncher Home Actuator for deformation
- Puncher Home Sensor for proper installation
- Puncher Home Sensor connectors
- Puncher Motor for proper operation
- Puncher Motor connectors

### Procedure

Enter dC330 [012-078] and [012-075], Puncher Motor (PL 21.5), alternately. Select Start. The Puncher Motor runs.

Y N

Select Stop. Go to BSD 12.49 Professional Finisher Punch Drive. Check circuit of the Punch Motor. Refer to OF 99-9 RAP for troubleshooting procedure.

Select Stop. Select [012-271], Puncher Home Sensor (PL 21.5). Select **Start**. Actuate the sensor with a piece of paper. **The display changes**.

### Y N

Go to BSD 12.50 Professional Finisher Punch Hole Control. Check circuit of the Puncher Home Sensor. Refer to OF 99-2 RAP for troubleshooting procedure.

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-322 (Pro) Puncher Move Home Sensor Off Fault

**BSD-ON: BSD 12.49 Professional Finisher Punch Drive** 

#### **BSD-ON: BSD 12.50 Professional Finisher Punch Hole Control**

Puncher Move Home Sensor not turned off after the lapse of 1000 (100\*) msec from operation start. Puncher Move Home Sensor is not turned off after the Stop following Puncher Move Home Sensor Off.

#### **Initial Actions**

- The Actuator for deformation
- The Puncher Move Home Sensor for improper installation
- The Puncher Move Home Sensor connectors for connection failure
- The Puncher Move Motor connectors for connection failure

### Procedure

Enter dC330 [012-071] and [012-073], Puncher Move Motor (PL 21.5), alternately. Select Start. The Puncher Move Motor run.

Y N Select Stop. Go to BSD 12.49 Professional Finisher Punch Drive. Check continuity between the Puncher Move Motor and Finisher PWB. The continuity check is OK. Y N

Repair the open circuit or short circuit.

Replace the Puncher Move Motor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-270], Puncher Move Home Sensor (PL 21.5). Select Start. Block/ unblock the Puncher Move Home Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.50 Professional Finisher Punch Hole Control. Check continuity between the Puncher Move Home Sensor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Puncher Move Home Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Check the following:

- The Puncher Move Motor Belt for improper tension
- The Puncher Move Motor Belt for disengagement

If the above checks are OK, replace the Finisher PWB (PL 21.12).

# 312-323 (Pro) Puncher Move Home Sensor On Fault

BSD-ON: BSD 12.49 Professional Finisher Punch Drive

#### **BSD-ON: BSD 12.50 Professional Finisher Punch Hole Control**

Puncher Move Home Sensor is not turned on after the lapse of 400 (300\*500\*\*)msec from operation start. Puncher Move Home Sensor is not turned on after the stop following Puncher Move Home Sensor On.

### **Initial Actions**

Check the following:

- Actuator for deformation
- Puncher Move Home Sensor for improper installation
- Puncher Move Home Sensor connectors for connection failure
- Puncher Move Motor connectors for connection failure

### Procedure

Enter dC330 [012-071] and [012-073], Puncher Move Motor (PL 21.5), alternately. Select **Start**. **The Puncher Move Motor energizes.** 

Y N

Υ

Select Stop. Go to BSD 12.49 Professional Finisher Punch Drive. Check continuity between the Puncher Move Motor and Finisher PWB. **The continuity check is OK.** 

N

Repair the open circuit or short circuit.

Replace the Puncher Move Motor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-270], Puncher Move Home Sensor (PL 21.5). Select Start. Block/ unblock the Puncher Move Home Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.50 Professional Finisher Punch Hole Control. Check continuity between the Puncher Move Home Sensor and Finisher PWB. The continuity check is OK.

```
Y N
```

Repair the open circuit or short circuit.

Replace the Puncher Move Home Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Check the following:

Puncher Move Motor rack and gear for binding, wear, or damage

If the above check is OK, replace the Finisher PWB (PL 21.12).

# 312-330 (Pro) Decurler Cam Home Sensor Off Fault

#### BSD-ON: BSD 12.35 Professional Finisher Decurling

Decurler Move Home Sensor is not turned off after the lapse of 1000msec from the detection of Decurler Cam Home Sensor On.

### **Initial Actions**

• Check for obstructions in the Decurler area

### Procedure

Enter dC330 [012-282], Decurler Cam Home Sensor (PL 21.27). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.35 Professional Finisher Decurling. Check the circuit of the Decurler Cam Home Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Select [012-099], Decurler Cam Clutch (PL 21.27). Select Start. The Roll Shaft rotates.

Y N

The Decurler Cam Clutch energized.

Y

Ν

Select Stop. Go to BSD 12.35 Professional Finisher Decurling. Check the circuit of the Decurler Cam Clutch. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Decurler Cam Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.26, PL 21.27).

Select Stop. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged

If the above checks are OK, replace the Decurler Cam Home Sensor (PL 21.27). If the problem continues, replace the H-Transport PWB (PL 21.12). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-332 (Pro) Decurler Cam Home Sensor On Fault

### BSD-ON: BSD 12.35 Professional Finisher Decurling

Decurler Cam Home Sensor is not turned on after the lapse of 1000msec from the detection of Decurler Cam Home Sensor Off.

### **Initial Actions**

• Check for obstructions in the Decurler area

### Procedure

Enter dC330 [012-282], Decurler Cam Home Sensor (PL 21.27). Select **Start**. Actuate the Decurler Cam Home Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.35 Professional Finisher Decurling. Check the circuit of the Decurler Cam Home Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-099], Decurler Cam Clutch (PL 21.27). Select Start. The Decurler Roll Shaft rotates.

#### Y N

#### The Decurler Cam Clutch energized.

Y N

Select Stop. Go to BSD 12.35 Professional Finisher Decurling. Check the circuit of the Decurler Cam Clutch. Refer to the OF 99-9 RAP for troubleshooting procedure.

Check the Decurler Cam Clutch and its associated gears, pulleys and belts for damage, contamination and misalignment (PL 21.26)(PL 21.27).

Select Stop. Check the following:

- Ensure that the Decurler Cam Home Sensor connectors are securely connected and that the wires are not damaged
- Ensure that the Decurler Cam Clutch connectors are securely connected and that the wires are not damaged
- H-Transport Motor Drive belt for wear, damage, or loose
- H-Transport Motor connections are securely connected and that the wires are not damaged

If the above checks are OK, replace the Decurler Cam Home Sensor (PL 21.27). If the problem continues, replace the H-Transport PWB (PL 21.12). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-334 (Pro) Finisher Download Fail RAP

Abnormal end during Download. After that, at Power On, can start only in Download Mode

### Procedure

Check the following:

- Finisher-IOT cable connection failure
- Finisher power cable insertion failure

# 312-700 (Pro) Punch Dust Nearly Full RAP

BSD-ON:BSD 12.37 Professional Finisher Booklet/Punch Transport

Cumulative punching count reached the specified times (2-hole punching: 5000 times, 4-hole punching: 2500 times).

### Procedure

Remove the Puncher Waste Bin and discard the waste. Reinstall the Puncher Waste Bin. **The problem is resolved.** 

Y N

Enter dC330 [012-275], Puncher Box Set Sensor (PL 21.5). Select **Start**. Remove and reinsert the Puncher Waste Bin. **The display changes.** 

#### Y N

Select **Stop**. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport Check continuity between the Puncher Box Set Sensor and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Replace the Finisher PWB (PL 21.12).

Ensure the Puncher Waste Bin is installed properly.

# 312-900 (Pro) Paper at Buffer Path Sensor

BSD-ON: BSD 12.39 Professional Finisher Buffer Transport

Control logic reports paper at the Buffer Path Sensor.

# **Initial Actions**

Check the following:

- Paper on the Buffer Path Sensor
- Obstructions in the paper path

# Procedure

Enter dC330 [012-101], Buffer Path Sensor (PL 21.10). Select Start. Actuate the Buffer Path Sensor. The display changes.

### Y N

Select Stop. Go to BSD 12.39 Professional Finisher Buffer Transport. Check the circuit of the Buffer Path Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Finisher for a docking failure

If the above checks are OK, then replace the Buffer Path Sensor (PL 21.10). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-901 (Pro) Paper at H-Transport Entrance Sensor

BSD-ON: BSD 12.33 Horizontal Transportation (1 of 2)

Control logic reports paper at the H-Transport Entrance Sensor.

# **Initial Actions**

Check the following:

- Paper on the H-Transport Entrance Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

# Procedure

Enter dC330 [012-190], H-Transport Entrance Sensor (PL 21.26). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Entrance Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.33 Horizontal Transportation (1 of 2). Check the circuit of the H-Transport Entrance Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Entrance Sensor (PL 21.26). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-902 (Pro) Paper at H-Transport Exit Sensor

BSD-ON:BSD 12.33 Horizontal Transportation (1 of 2)

Control logic reports paper at the H-Transport Exit Sensor.

### **Initial Actions**

Check the following:

- Paper on the H-Transport Exit Sensor
- Obstructions in the paper path
- H-Transport Motor Belt for wear or damage
- Guides on the H-Transport Cover for damage, wear or faulty installation

# Procedure

Enter dC330 [012-191], H-Transport Exit Sensor (PL 21.28). Select **Start**. Open the H-Transport Cover and actuate the H-Transport Exit Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.33 Horizontal Transportation (1 of 2). Check the circuit of the H-Transport Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- H-Transport and Finisher for a docking failure
- H-Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the H-Transport Exit Sensor (PL 21.28). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-903 (Pro) Paper at Compiler Exit Sensor

### BSD-ON:BSD 12.51 Professional Finisher Compiling

Control logic reports paper at the Compiler Exit Sensor.

### **Initial Actions**

- Paper on the Compiler Exit Sensor
- Obstructions in the paper path

# Procedure

Enter dC330 [012-150], Compiler Exit Sensor (PL 21.9). Select **Start**. Open the H-Transport Cover and actuate the Compiler Exit Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.51 Professional Finisher Compiling. Check the circuit of the Compiler Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Exit Sensor (PL 21.9). If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-905 (Pro) Paper at Compiler Tray No Paper Sensor

BSD-ON:BSD 12.51 Professional Finisher Compiling

Control logic reports paper at the Compiler Tray No Paper Sensor.

### **Initial Actions**

- Paper on the Compiler Tray Paper Sensor
- Obstructions in the paper path

# Procedure

Enter dC330 [012-151], Compiler Tray No Paper Sensor (PL 21.8). Select **Start**. Actuate the Compiler Tray No Paper Sensor. **The display changes**.

Y N

Select Stop. Go to BSD 12.51 Professional Finisher Compiling Check the circuit of the Compiler Tray No Paper Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Pinch Rollers 1 and 2 for damage
- Lower Exit Roller for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Compiler Tray No Paper Sensor (PL 21.8). If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-907 (Pro) Paper at Top Tray Exit Sensor

BSD-ON:BSD 12.48 Professional Finisher Top Tray Stacking

Control logic reports paper at the Top Tray Exit Sensor.

# **Initial Actions**

- Paper on the Top Tray Exit Sensor
- Obstructions in the paper path

# Procedure

Enter dC330 [012-115], Top Tray Exit Sensor (PL 21.11). Select Start. Actuate the Top Tray Exit Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.48 Professional Finisher Top Tray Stacking. Check the circuit of the Top Tray Exit Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Exit Motor Belt for wear or damage
- Exit Drive Shaft Rolls for wear or damage
- Exit Pinch Rollers for wear or damage
- Synchronous Belt for wear or damage

If the above checks are OK, then replace the Top Tray Exit Sensor (PL 21.11). If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-916 (Pro) Stapler NG

**BSD-ON: BSD 12.53 Professional Finisher Stapler Control** 

### BSD-ON:BSD 12.54 Professional Finisher Staple Positioning

The Staple Home Sensor has not switched from Off to On within the specified time after the Staple Motor started rotating forward.

The Staple Head Home Sensor turned On within xxx msec. after the Staple Motor reversed.

### **Initial Actions**

- The Actuator for deformation
- The Staple Home Sensor for improper installation
- The Staple Home Sensor connectors for connection failure
- The Staple Guide for a foreign substance and deformation
- The Staple Motor for operation failure
- The Staple Motor connectors for connection failure

### Procedure

Enter dC330 [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select Start. The Staple Motor energizes.

```
Ϋ́Ν
```

Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Head and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Stapler (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-244], Staple Home Sensor, (part of Stapler Assembly) (PL 21.6). Select [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select **Start**. **The display changes.** 

### Y N

Select Stop. Go to BSD 12.53 Professional Finisher Stapler Control. Check continuity between the Stapler and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Stapler Head (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-920 (Pro) Paper at Gate Sensor (Top Tray Job)

BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

Control logic reports paper at the Gate Sensor.

### **Initial Actions**

- Check for obstructions in the paper path
- Check the Finisher Drive Motor Gears and Drive rolls for wear or damage

# Procedure

Enter dC330 [012-102], Gate Sensor (PL 21.11). Select Start. Actuate the Gate Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Gate Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the Finisher is docked properly
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or misalignment

If the above checks are OK, then replace the Gate Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-930 (Pro) Full Stack Detected

### BSD-ON:BSD 12.57 Professional Finisher Stacker Drive

Stacker No Paper Sensor On was detected during the Stacker Tray height adjusting operation.

### **Initial Actions**

- The Stacker No Paper Sensor for improper installation
- The Stacker No Paper Sensor connectors for connection failure
- The Elevator Motor for operation failure
- The Elevator Motor connectors for connection failure

# Procedure

Enter dC330 [012-061] Elevator Motor Down and [012-060] Elevator Motor UP (PL 21.4), alternately. Select Start. The Elevator Motor energizes.

Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive. Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK**,

Y N

Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 21.4). If the problem continues, replace the Finisher PWB

Select Stop. Select [012-262], Stacker No Paper Sensor (PL 21.4). Select Start. Block/unblock the Stacker No Paper Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Stacker No Paper Sensor and Finisher PWB. The continuity check is OK, Y N

Repair the open circuit or short circuit.

Replace the Stacker No Paper Sensor (PL 21.4). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor (PL 21.4). Select **Start**. Block/unblock the Stacker Encoder Sensor. **The display changes**.

#### Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Stacker Encoder Sensor and Finisher PWB. The continuity check is OK,

Y N

Repair the open circuit or short circuit.

Replace the Stacker Encoder Sensor (PL 21.4). If the problem continues, replace the Finisher PWB

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-932 (Pro) Paper Remain at Gate SNR

BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

Gate SNR (Compile Path Job) has detected paper

## Procedure

Enter [012-102], Gate Sensor (PL 21.11). Select Start. Actuate the Gate Sensor. **The display changes**.

### Y N

Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Gate Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select [012-086] or [012-087], Gate Solenoid (PL 21.25). Select Start. The Gate Solenoid actuates.

Y N

Select **Stop**. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Gate Solenoid. Refer to the OF 99-8 RAP for troubleshooting procedure.

### Select Stop.

Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- If the above checks are OK, then replace the Gate Sensor (PL 21.11). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-935 (Pro) Paper at Transport Entrance Sensor

BSD-ON:BSD 12.38 Professional Finisher Transport Top Tray Gating

Control logic reports paper at the Transport Entrance Sensor.

### **Initial Actions**

- Check for obstructions in the paper path
- Check that the Finisher is docked correctly to ensure proper Transport Gate operation

# Procedure

Enter dC330 [012-100], Transport Entrance Sensor (PL 21.10). Select **Start**. Actuate the Transport Entrance Sensor. **The display changes.** 

Y N

Select Stop. Go to BSD 12.38 Professional Finisher Transport Top Tray Gating. Check the circuit of the Transport Entrance Sensor. Refer to the OF 99-2 RAP for troubleshooting procedure.

Select Stop. Check the following:

- Ensure that the connectors shown in the circuit diagrams are securely connected and that the wires are not damaged
- Check the H-Transport Motor and its associated gears and belts for damage, contamination or alignment
- Check the Finisher Transport Motor and its associated gears and belts for damage, contamination or alignment

If the above checks are OK, then replace the Transport Entrance Sensor (PL 21.10). If the problem persists, replace the Finisher PWB (PL 21.12).

# 312-936 (Pro) Paper Remains at Booklet In Sensor

BSD-ON:BSD 12.41 Booklet Transportation

Booklet Input SNR has detected paper

# Procedure

Go to 312-113 (Pro) .

# 312-946 (Pro) Top Tray Full

## BSD-ON: BSD 12.48 Professional Finisher Top Tray Stacking

The Top Tray Full Sensor was turned On for 10sec continuously.

# **Initial Actions**

- The Top Tray Full Sensor for improper installation ٠
- The Top Tray Full Sensor connectors for connection failure
- The Top Tray Full Sensor Actuator for deformation and operation failure

# Procedure

Enter dC330 [012-215], Top Tray Full Sensor, (PL 21.11). Select Start. Actuate the Top Tray Full Sensor. The display changes.

Υ Ν

Select Stop. Go to BSD 12.48 Professional Finisher Top Tray Stacking Check continuity between the Top Tray Full Sensor and Finisher PWB. The continuity check is OK.

Υ Ν

Repair the open circuit or short circuit.

Replace the Top Tray Full Sensor (PL 21.11). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-949 (Pro) Puncher Waste Bin Open

### **BSD-ON:BSD 12.37 Professional Finisher Booklet/Punch Transport**

The Puncher Waste Bin Set Sensor detected Off (No Puncher Waste Bin).

### Initial Actions

- The Puncher Waste Bin Set Sensor for improper installation ٠
- The Puncher Waste Bin Set Sensor connectors for connection failure
- The Puncher Waste Bin Actuator part for deformation and damage
- The Guide for deformation
- The Guide for a foreign substance

# Procedure

Enter dC330 [012-275], Puncher Box Set Sensor (PL 21.5). Select Start. Remove and insert the Puncher Waste Bin manually. The display changes Υ

N

Select Stop. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport Check continuity between the Puncher Box Set Sensor and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Check the Puncher Waste Box Actuator and Guide for deformation. The Puncher Waste Bin can be removed and inserted properly.

Υ Ν

Repair or replace the Puncher Waste Bin (PL 21.5).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-963 (Pro) Puncher Waste Bin Full

### **BSD-ON:BSD 12.37 Professional Finisher Booklet/Punch Transport**

Cumulative punching count reached the specified times (2-hole punching: 5000 times, 4-hole punching: 2500 times).

### Procedure

Remove the Puncher Waste Bin and discard the waste. Reinstall the Puncher Waste Bin. The problem is resolved. Υ Ν

Enter dC330 [012-275], Puncher Box Set Sensor (PL 21.5). Select Start. Remove and reinsert the Puncher Waste Bin. The display changes.

#### Υ Ν

Select Stop. Go to BSD 12.37 Professional Finisher Booklet/Punch Transport Check continuity between the Puncher Box Set Sensor and Finisher PWB. The continuity check is OK.

#### Y N

Repair the open circuit or short circuit.

Replace the Puncher Box Set Sensor (PL 21.5). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Replace the Finisher PWB (PL 21.12).

Ensure the Puncher Waste Bin is installed properly.

# 312-976 (Pro) Staple Fault RAP

**BSD-ON: BSD 12.53 Professional Finisher Stapler Control** 

### BSD-ON:BSD 12.54 Professional Finisher Staple Positioning

Staple Head Home Sensor is not turned on within 450ms after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

### Initial Actions

- . The Actuator for deformation
- The Staple Home Sensor for improper installation
- The Staple Home Sensor connectors for connection failure ٠
- The Staple Guide for a foreign substance and deformation
- The Staple Motor for operation failure ٠
- The Staple Motor connectors for connection failure ٠

### Procedure

Enter dC330 [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select Start. The Staple Motor energizes.

Υ N

Select Stop. Go to BSD 12.54 Professional Finisher Staple Positioning. Check continuity between the Stapler Head and Finisher PWB. The continuity check is OK.

Υ Ν

Repair the open circuit or short circuit.

Replace the Stapler (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Select [012-244], Staple Home Sensor, (part of Stapler Assembly) (PL 21.6). Select [012-042] and [012-045], Staple Motor (PL 21.6), alternately. Select Start. The display changes.

#### Ν Υ

Select Stop, Go to BSD 12.53 Professional Finisher Stapler Control, Check continuity between the Stapler and Finisher PWB. The continuity check is OK. Ν

```
Υ
```

Repair the open circuit or short circuit.

Replace the Stapler Head (PL 21.6). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-982 (Pro) Stacker Lower Safety Warning RAP

### BSD-ON:BSD 12.57 Professional Finisher Stacker Drive

The Stacker Lower Safety Warning occurs when the following happens four time successively:

Stacker tray height adjustment was not completed successfully within a specified time period when running a job.

# Procedure

Υ

Enter dC330 [012-061] Elevator Motor Down and [012-060] Elevator Motor UP (PL 21.4), alternately. Select Start. The Elevator Motor energizes.

Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive. Check continuity between the Elevator Motor and Finisher PWB. **The continuity check is OK**,

N Repair the open circuit or short circuit.

Replace the Elevator Motor (PL 21.4). If the problem continues, replace the Finisher PWB

Select [012-263], Stacker Encoder Sensor (PL 21.4). Select Start. Block/unblock the Stacker Encoder Sensor. The display changes.

Y N

Select Stop. Go to BSD 12.57 Professional Finisher Stacker Drive Check continuity between the Stacker Encoder Sensor and Finisher PWB. The continuity check is OK, Y N

Repair the open circuit or short circuit.

Replace the Stacker Encoder Sensor (PL 21.4). If the problem continues, replace the Finisher PWB

Select Stop. If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-983 (Pro) Booklet Tray Full was detected

BSD-ON:BSD 12.47 Booklet Tray Control

Booklet Tray Full was detected.

### Procedure

Remove all sets. Perform the job again. The problem is resolved.

Y N Replace the Finisher PWB (PL 21.12).

If the problem continues, replace the Finisher PWB (PL 21.12).

# 312-984 (Pro) Booklet Low Staple F

### BSD-ON:BSD 12.45 Booklet Staple Control

Booklet Stapler Low Staple Front signal was detected just before Stapling operation.

Booklet Stapler Low Staple Front signal was detected at Power On, at initialization, or when the interlock was closed.

### Procedure

Supply the staples. The problem is resolved.

Y N

Enter dC330 [013-107], Booklet Low Staple Front. Select Start. 'LOW' (staples available) is displayed

Y N

Select Stop. Go to BSD 12.45 Booklet Staple Control Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. The continuity check is OK.

Y N

Repair the open circuit or short circuit.

Replace the Booklet Stapler Low Staple Front (PL 21.16). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Replace the Finisher PWB (PL 21.12). If the problem continues, replace the Booklet PWB (PL 21.13).

If the problem continues, replace the Finisher PWB (PL 21.12). If the problem persists, replace the Booklet PWB (PL 21.13).

# 312-989 (Pro) Booklet Low Staple R

BSD-ON:BSD 12.45 Booklet Staple Control

Booklet Stapler Low Staple Rear signal was detected just before Stapling operation.

Booklet Stapler Low Staple Rear signal was detected at Power On, at initialization, or when the interlock was closed.

### Procedure

Supply the staples. The problem is resolved.

Y N

Enter dC330 [013-108], Booklet Low Staple Rear. Select Start. 'LOW' (staples available) is displayed

Y N

Select **Stop.** Go to BSD 12.45 Booklet Staple Control Check continuity between the Staple and Booklet PWB, and between the Booklet PWB and Finisher PWB. **The continuity check is OK.** 

Y N

Repair the open circuit or short circuit.

Replace the Booklet Stapler Low Staple Rear (PL 21.16). If the problem continues, replace the Finisher PWB (PL 21.12).

Select Stop. Replace the Finisher PWB (PL 21.12). If the problem continues, replace the Booklet PWB (PL 21.13).

If the problem continues, replace the Finisher PWB (PL 21.12). If the problem persists, replace the Booklet PWB (PL 21.13).

# 312-132 (Int) Entrance Sensor ON Jam

### BSD-ON: BSD 12.3 Integrated Finisher Transportation

Finisher Entrance Sensor does not turn On within a specified time after receiving the Sheet Exit command (the sheet to be ejected has turned ON the IOT Exit Sensor 1).

### **Initial Actions**

- Check that the Finisher Entrance Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- Power Off/On.

### Procedure

Check the specifications of paper. Paper is in spec.

Y N

Replace the paper with new paper that is in spec.

Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.

Y N

Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. **The transport path is in normal condition.** 

Y N

Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check that the Finisher is installed properly. The Finisher is properly installed and properly connected to the IOT.

Y N

Reinstall the Finisher properly.

Enter dC330 [012-140]. Actuate the Finisher Entrance Sensor. The display changes.

#### Y N

Check the connections of P/J8709 and P/J8729. P/J8709 and P/J8729 are securely connected.

Y N

Connect P/J8709 and P/J8729 securely.

Check for an open or short circuit between J8709 and J8729. The wires between J8709 and J8729 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-6 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8709-5 (+) and GND (-). Actuate the Finisher Entrance Sensor. **The voltage changes.** 

Δ.



Ν

Δ

Replace the Finisher Entrance Sensor (PL 22.5).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

# 312-151 (Int) Compiler Exit Sensor OFF Jam

### BSD-ON:BSD 12.3 Integrated Finisher Transportation

The Compiler Exit Sensor does not turn Off within a specified time after it has turned On.

### **Initial Actions**

- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/On.

# Procedure

Check the specifications of paper. Paper is in spec.

Y N

Replace the paper with new paper that is in spec.

Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.

Y N

Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust.	The	transport		
path is in normal condition with no foreign object, deformed part and paper dust.				

#### Y N

Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check the Transport Roll for wear, deterioration and paper dust. The Transport Roll is in normal condition, not worn and deteriorated and with no paper dust.

Y N

Remove the paper dust and replace the worn or deteriorated Transport Roll.

Check the drive mechanism to the Transport Roll for a deformed, broken part, and/or belt damage. The drive mechanism is free of defects.

#### Y N

Repair defects or damage to the drive mechanism.

Enter dC330 [012-150]. Actuate the Compiler Exit Sensor. The display changes.

Y N

Check the connections of  $\mbox{ P/J8709}$  and  $\mbox{ P/J8728}.$   $\mbox{ P/J8709}$  and  $\mbox{ P/J8728}$  are securely connected.

Y N

Connect P/J8709 and P/J8728 securely.

Check for an open or short circuit between P/J8709 and P/J8728. The wire J8709 and J8728 are OK.

### Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB P/J8709-3 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Δ

Go to Finisher (Int) +24VDC/24VDC RTN and check the +5VDC circuit.

Measure the voltage between Finisher PWB P/J8709-2 (+) and GND (-). Actuate the Compiler Exit Sensor. The voltage changes. N Υ Replace the Compiler Exit Sensor (PL 22.5). Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7). Enter dC330 [012-095]. The Finisher Transport Motor rotates. Υ Ν Check the connections of P/J8706 and P/J8739. P/J8706 and P/J8739 are securely connected. Υ Ν Connect P/J8706 and P/J8739 securely. Check for an open or short circuit between P/J8706 and P/J8739. The wire between J8706 and J8739 are OK. Y N Repair the open or short circuit. Measure the voltage between Finisher PWB J8706-5 (+) and GND (-), and between Finisher PWB J8706-7 (+) and GND (-). Each voltage is approx. +24VDC. Y N Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor (PL 22.4). If the problem persists, replace the Finisher PWB (PL 22.7). Enter dC330 [012-013]. When the Sub Paddle Solenoid is turned On/Off, the Sub Paddle Shaft Assembly goes down/up. Υ Ν Check the Sub Paddle mechanism for a deformed or broken part and not-seated gears. The Sub Paddle mechanism is free from defects and gears are seating properly. Υ Ν Repair defeats to the Sub Paddle mechanism. Check the connections of P/J8705 and P/J8734. P/J8705 and P/J8734 are securely connected. Υ Ν Connect P/J8705 and P/J8734 securely. Check for an open or short circuit between J8705 and J8734. The between wires J8705 and J8734 are OK. Y N Repair the open or short circuit. Measure the voltage between Finisher PWB J8705-1 (+) and GND (-). The voltage is approx. +24VDC.

Initial Issue

В

v Ν

> Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the circuit is OK, replace the Finisher PWB (PL 22.7).

Enter dC330 [012-013], measure the voltage between Finisher PWB J8705-2 (+) and GND (-). The voltage changes.

Y N

Replace the Finisher PWB (PL 22.7).

Replace the Sub Paddle Solenoid (PL 22.3).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

# 312-152 (Int) Compiler Exit Sensor ON Jam

**BSD-ON:BSD 12.3 Integrated Finisher Transportation** 

The Compiler Exit Sensor does not turn On within a specified time after receiving the Sheet Exit command (the paper to be ejected has turned On the IOT Exit Sensor 1).

### Initial Actions

- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- ٠ Power Off/On.

### Procedure

Υ

Υ

Υ Ν

Υ Ν

Check the specifications of paper. Paper is in spec.

Ν

Replace the paper with new paper that is ins spec.

Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.

Ν Resolve any problem that causes the paper to be bent or caught.

Check the transport path for a foreign object, deformed part, and paper dust. The transport path is in normal condition with no foreign object, deformed part and paper dust. Y N

Repair the deformed part(s) and remove the foreign object(s) and paper dust.

Check the Transport Roll for wear, deterioration and paper dust. The Transport Roll is in normal condition.

Remove the paper dust and replace the worn or deteriorated Transport Roll.

Check the drive mechanism to the Transport Roll for a deformed parts, broken parts, and/or belt damage. The drive mechanism free from defects.

Repair defects or damage to the drive mechanism.

Check that the Finisher is installed properly. The Finisher is properly installed and properly connected to the IOT.

Reinstall the Finisher properly.

Enter dC330 [012-150]. Actuate the Compiler Exit Sensor. The display changes.

#### Υ Ν

Y N

Check the connections of P/J8709 and P/J8728. P/J8709 and P/J8728 are securely connected.

```
Ν
Υ
```

Connect P/J8709 and P/J8728 securely.

Check for an open or short circuit between J8709 and J8728. The wires between J 8709 and J8728 are OK.

A

v

N Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). The voltage is approx. +5VDC.

### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8709-2 (+) and GND (-). Actuate the Compiler Exit Sensor. The voltage normally changes.

Y N

Replace the Compiler Exit Sensor (PL 22.5).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter dC330 [012-095]. The Finisher Transport Motor rotates.

#### Y N

Check the connections of P/J8706 and P/J8739. P/J8706 and P/J8739 are securely connected.

Y N

Connect P/J8706 and P/J8739 securely.

Check for an open or short circuit between J8706 and J8739. The wire between J8706 and J8739 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-5 (+) and GND (-), and J8706-7 (+) and GND (-). Each voltage is approx. +24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor (PL 22.4). If the problem persists, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

# 312-161 (Int) Set Eject Jam

BSD-ON:BSD 12.6 Integrated Finisher Set Eject (1 of 2)

In the Eject Motor's ejecting operation, Eject Home Sensor ON was detected within a specified time after the start of the reverse operation of the Eject Motor.

(The Eject Motor should have ejected paper, but returned Home earlier than specified.)

### **Initial Actions**

- Check the Eject Home Sensor is properly installed, not broken, and has no foreign object.
- Power Off/On.

### Procedure

Check the specifications of paper. Paper is in spec.

Y N

Replace the paper with new paper that is in spec.

Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.

Y N

Resolve any problem that causes the paper to be bent or caught.

Check the Eject mechanism for deformed parts, broken parts, and/or belt damage. The Eject mechanism free from defects.

Y N

Repair the Eject mechanism.

Enter dC330 [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. The display changes.

#### YN

Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected.

Y N

Connect P/J8700 and P/J8725 securely.

Check for an open or short circuit between J8700 and J8725. The wires between J8700 and J8725 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). The voltage is approx. +5VDC.

#### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. **The voltage changes.** 

Y N

Replace the Eject Home Sensor (PL 22.10).

A B

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

### Enter [012-054] and [012-056] alternately. The Eject Motor rotates.

Y N

Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected.

Y N

Connect P/J8706 and P/J8741 securely.

Check for an open or short circuit between J8706 and J8741. The wires between J8706 and J8741 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). The voltage is approx. +24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit.

Check the Eject Motor drive mechanism for deformed parts, broken parts, and/or belt damage **The drive mechanism free from defects.** 

Y N

Repair defects or damage to the drive mechanism.

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

# 312-211 (Int) Stacker Tray Fault

### BSD-ON: BSD 12.8 Integrated Finisher Stacker Tray Control

- Within a specified time after the Stacker Tray started lifting up, the Stack Height Sensor did not detect the lifting up of the Stacker Tray.
- Within a specified time after the Stacker Tray started going down at initialization and during a job, the lower position of the tray (Full) could not be detected based on the changes in the Stacker Stack Sensor 1 and the Stacker Stack Sensor 2.

### Initial Actions

- Check the Stack Height Sensor is properly installed, not broken, and has no foreign
   object.
- Check the Stacker Stack Sensors 1 and 2 are properly installed and have no foreign objects and that their actuators are not broken.
- Power Off/On.

### Procedure

Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The mechanism is free from defects and the gears seat properly.

Y N

Repair the mechanism.

Enter dC330 [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.

#### Y N

Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.

Y N

Connect P/J8708 and P/J8727 securely.

Check for an open or short circuit between J8708 and J8727. The wire between J8708 and J8727 are OK.

#### Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8708-3 (+) and GND (-). The voltage is approx. +5VDC.

### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8708-2 (+) and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. **The voltage changes.** 

### Y N

Replace the Stack Height Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-278]. Block and unblock the Stacker Stack Sensor 1 by rotating the actuator. **The display changes.** 

Y N		Y N	
C C	heck the connections of P/J8707 and P/J8722. <b>P/J8707 and P/J8722 are securely</b> onnected.	Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.	
Y	Ń N	Y N	
İ	Connect P/J8707 and P/J8722 securely.	Connect P/J8711 and P/J8736 securely.	
C Ji	heck for an open or short circuit between J8707 and J8722. The wires between 8707 and J8722 are OK.	Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.	
Y		Y N	
	Repair the open or short circuit.	Repair the open or short circuit.	
N a	leasure the voltage between Finisher PWB J8707-6 (+) and GND (-). The voltage is pprox. +5VDC.	Enter [012-060], measure the voltage between Finisher PWB J8711-1 (+) and GND (-). The voltage changes.	
Y	N	Y N	
	Go to Finisher (Int) +24VDC/24VDC RTN and check the +5VDC circuit.	Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the prob- lem continues, replace the Finisher PWB (PL 22.7).	
N	leasure the voltage between Finisher PWB J8707-5 (+) and (-). Block and unblock the		
S Y	tacker Stack Sensor 1 by rotating the actuator. The voltage changes. N	Enter [012-061], measure the voltage between Finisher PWB J8711-2 (+) and GND (-). The voltage changes.	
	Replace the Stacker Stack Sensor 1 (PL 22.8).	Y N	
	heck the wires and connectors for an intermittent open or short circuit. If the problem	Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the prob- lem continues, replace the Finisher PWB (PL 22.7).	
	bindinges, replace the finisher FWD ( $F \perp 22.7$ ).	Check the wires and connectors for an intermittent open and short circuit. If the problem	
 Enter [	1949, 9791 Disch and unblack the Otecher Steel, Concern 9 by retation the activation <b>Th</b> e	Check the wires and connectors for an intermittent open and short circuit. If the problem	
displa	y changes.	continues, replace the Stacker Motor (PL 22.8).	
Y N		Check the wires and connectors for an intermittent open or short circuit. If the problem contin-	
C C	heck the connections of P/J8707 and P/J8721. <b>P/J8707 and P/J8721 are securely</b> onnected.	ues, replace the Finisher PWB (PL 22.7).	
Y	N		
	Connect P/J8707 and P/J8721 securely.		
, C	heck for an open or short circuit between J8707 and J8721. The wires between 8707 and J8721 are OK.		
Y	N		
	Repair the open or short circuit.		
N A	leasure the voltage between Finisher PWB J8707-3 (+) and GND (-). The voltage is pprox. +5VDC.		
Y	N		
	Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.		
N   th	leasure the voltage between Finisher PWB J8707-2 (+) and GND (-). Block and unblock ne Stacker Stack Sensor 2 by rotating the actuator. <b>The voltage changes.</b>		
Y	N		
	Replace the Stacker Stack Sensor 2 (PL 22.8).		
C	heck the wires and connectors for an intermittent open or short circuit. If the problem ontinues, replace the Finisher PWB (PL 22.7).		
∣ Enter [	012-060] and [012-061] alternately. The Stacker Motor rotates.		

# 312-221 (Int) Front Tamper Home Sensor ON Fault

### BSD-ON:BSD 12.4 Integrated Finisher tamping and Offset

During the moving of the Front Tamper, when the Front Tamper Home Sensor was Off, to the home position, the Front Tamper Home Sensor did not detected turning On within a specified time after the Front Tamper started moving.

### **Initial Actions**

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

### Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. **The Front Tamper is defects and binding.** 

Y N

Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and the gears seat properly.

Y N

Repair the Front Tamper mechanism.

Enter dC330 [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The display changes.** 

Y N

Check the connections of P/J8700 and P/J8724. P/J8700 and P/J8724 are securely connected.

Y N

Connect P/J8700 and P/J8724 securely.

Check for an open or short circuit between J8700 and J8724. The wires between J8700 and J8724 are OK.

### Y N

Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The voltage changes.** 

ΥŇ

Replace the Front Tamper Home Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-020] and [012-023] alternately. The Front Tamper Motor rotates.

Check the connections of P/J8710, J8738A and J8738B. P/J8710, J8738A, and P/J8738B are securely connected.

### Ν

Connect P/J8710, J8738A and J8738B securely.

Check for an open or short circuit between J8710, P/J8738A and J8738B. **The wires** between are OK.

Y N

Υ

Δ

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). The voltage is approx.+24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Front Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).
## 312-223 (Int) Front Tamper Home Sensor OFF Fault

## BSD-ON:BSD 12.4 Integrated Finisher tamping and Offset

- At the end of the operation to turn Off the Front Tamper Home Sensor that was On, the Front Tamper Home Sensor was not detected being Off.
- The Front Tamper Home Sensor should have turned Off and then the Front Tamper Motor stopped, but the Front Tamper Home Sensor was On.

## **Initial Actions**

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

## Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. **The Front Tamper free from defects and binding.** 

Y N

Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and the gears seat properly.

Y N

Repair the Front Tamper drive mechanism.

Enter dC330 [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The display changes.** 

Y N

Check the connections of P/J8700 and P/J8724. P/J8700 and P/J8724 are securely connected.

Y N

Connect P/J8700 and P/J8724 securely.

Check for an open or short circuit between J8700 and J8724. The wires between J8700 and J8724 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. **The voltage changes.** 

## Y N

Replace the Front Tamper Home Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-020] and [012-023] alternately. The Front Tamper Motor rotates.

Check the connections of P/J8710, J8738A and J8738B. P/J8710, J8738A and P/J8738B are securely connected.

## Ν

Connect P/J8710, P/J8738A and J8738B securely.

Check for an open wire or short circuit between J8710, P/J8738A and J8738B. The wire between J8710, P/J8738A and J8738B are OK.

Y N

Υ

Δ

Y N

Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). Each voltage is approx. +24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Front Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-224 (Int) Rear Tamper Home Sensor OFF Fault

## BSD-ON:BSD 12.4 Integrated Finisher tamping and Offset

- At the end of the operation of trying to turn Off the Rear Tamper Home Sensor that was On, the Rear Tamper Home Sensor was not detected being Off.
- The Rear Tamper Home Sensor should have turned Off and then the Rear Tamper Motor stopped, but the Rear Tamper Home Sensor was On.

## **Initial Actions**

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

## Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. **The Rear Tamper is free from defects and binding.** 

Y N

Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. The drive mechanism is in normal condition, not deformed or broken and with no not-seated gears.

#### Y N

Repair the Rear Tamper drive mechanism.

Enter dC330 [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The display of changes.** 

#### Y N

Check the connections of  $\mbox{ P/J8700}$  and  $\mbox{ P/J8700}$  and  $\mbox{ P/J8726}$  are securely connected.

Y N

Connect P/J8700 and P/J8726 securely.

Check for an open or short circuit between J8700 and J8726. The wires between J8700 and J8726 are OK.

#### Y N

Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-12 (+) and GND (-). The voltage is approx. +5VDC.

#### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-11 (+) and GND (-). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The voltage changes.** 

#### ΥŇ

Δ.

Replace the Rear Tamper Home Sensor (PL 22.9).

A B

Υ

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

#### Enter [012-026] and [012-029] alternately. The Rear Tamper Motor rotates.

N Check the connections of P/J8710, J8738A and J8738B. **J8738A**, **J8738A** and **J8738B are securely connected**.

## Y N

Υ

Connect P/J8710, P/J8737A and J8738B securely.

Check for an open wire or short circuit between J8710, P/J8737A and J8737B. The wire between J8710, P/J8737A and J8737B are OK.

N Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). The voltage is approx.+24VDC.

#### Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Repair the Rear Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-259 (Int) Eject Home Sensor ON Fault

## BSD-ON:BSD 12.6 Integrated Finisher Set Eject (1 of 2)

In the Eject Motor's initializing operation and ejecting operation, one of the following is met.

- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. ٠ Within a specified time after that, the Eject Home Sensor was not detected turning On.
- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. The ٠ Eject Home Sensor should have been detected turning On and then the Eject Motor stopped, but then the Eject Home Sensor was not On.

## Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object.
- Power Off/ON.

## Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

Υ Ν

Repair the mechanism.

Enter dC330 [012-252]. Block and unblock the Eject Home Sensor. The display changes.

```
Υ
   Ν
```

Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected.

Y Ν

Connect P/J8700 and P/J8725 securely.

Check for an open wire or short circuit between J8700 and J8725. The wire between J8700 and J8725 is normally conductive with no open wire or short circuit.

Υ Ν

Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor. The voltage changes

Y Ν

Replace the Eject Home Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. The Elect Motor rotates.

Ν Υ

Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

γ

Ν

Δ

Connect P/J8706 and P/J8741 securely.

Check for an open or short circuit between J8706 and J8741. The wires between J8706 and J8741 are OK.

Ν Y

Repair the open wire or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). Each voltage is approx. +24VDC. Υ Ν

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-263 (Int) Rear Tamper Home Sensor ON Fault

#### BSD-ON: BSD 12.4 Integrated Finisher Tamping and Offset

During the moving of the Rear Tamper from when the Rear Tamper Home Sensor was Off to the home position, the Rear Tamper Home Sensor was not detected turning On within a specified time after the Rear Tamper started moving.

## **Initial Actions**

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

## Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. **The Rear Tamper is free from defects and binding.** 

Y N

Repair the deformation and remove the foreign object(s) and the binding.

Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and gears seat properly.

Y N

Repair the Rear Tamper drive mechanism.

Enter dC330 [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. **The display changes.** 

Y N

Check the connections of P/J8700 and P/J8726. P/J8700 and P/J8726 are securely connected.

Y N

Connect P/J8700 and P/J8726 securely.

Check for an open wire or short circuit between J8700 and J8726. The wire between J8700 and J8726 are OK.

#### Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-12 (+) and GND (-). The voltage is approx. +5VDC.

#### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-11 (+) and GND (-). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. The voltage changes.

#### Y N

Replace the Rear Tamper Home Sensor (PL 22.9).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-026] and [012-029] alternately. The Rear Tamper Motor rotates.

Y N

Υ

Δ

Check the connections of P/J8710, P/J8737A and J8738B. P/J8710, P/J8737A and J8738B are securely connected.

## Ν

Connect P/J8710, P/J8737A and J8738B securely.

Check for an open or short circuit between J8710, P/J8737A and J8737B. The wires between J8710, P/J8737A and J8737B are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). Each voltage is approx. +24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Rear Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

#### Initial Issue

## 312-280 (Int) Eject Home Sensor OFF Fault

## BSD-ON:BSD 12.6 Integrated Finisher Set Eject (1 of 2)

In the Eject Motor's initializing operation and ejecting operation, the Eject Motor had rotated forward for a time corresponding to a specified number of pulses since the Eject Home Sensor was On, and then the motor stopped, but then the Eject Home Sensor was not detected turning Off.

## Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object. ٠
- Power Off/ON. ٠

## Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

Ν Repair the mechanism.

Enter dC330 [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. The display changes.

#### Y N

Υ

Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected. Υ

Ν

Connect P/J8700 and P/J8725 securely.

Check for an open or short circuit between J8700 and J8725. The wires between J8700 and J8725 are OK.

Υ Ν

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). The voltage is approx. +5VDC.

#### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. The voltage changes.

Y N

Replace the Eject Home Sensor (PL 22.10).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. The Elect Motor rotates.

#### Ν Υ

Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected. Υ Ν Connect P/J8706 and P/J8741 securely.



- Check for an open or short circuit between P/J8706 and P/J8741. The wires between J8706 and J8741 are OK.
- Υ Ν

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). Each voltage is approx. +24VDC.

Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-283 (Int) Set Clamp Home Sensor ON Fault

## BSD-ON:BSD 12.7 Integrated Finisher Set Eject (2 of 2)

In the initialize operations each at Power On, when Interlock closed and at the start of a job, and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning On within a specified time after the start of the Set Clamp Motor operation.

## **Initial Actions**

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

## Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

Y N

Repair the Set Clamp mechanism.

Enter dC330 [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The display changes.** 

Y N

Check the connections of P/J8707, J8742B, J8742A and P/J8723. P/J8707, J8742B, J8742A and P/J8723 are securely connected.

Y N

Connect P/J8707, J8742B, J8742A and P/J8723 securely.

Check for an open or short circuit between J8707 and J8742B, and between J8742A and J8723. The wires between J8707 and J8742B and between J8742A and J8723 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8707-9 (+) and GND (-). The voltage is approx. +5VDC.

#### Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8707-8 (+) and GND (-). Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The voltage changes.** 

Y N

Replace the Set Clamp Home Sensor (PL 22.4).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## Enter [012-017]. The Set Clamp Motor rotates.

Check the connections of P/J8706 and P/J8740. P/J8706 and P/J8740 are securely connected.

Y N

Connect P/J8706 and P/J8740 securely.

Check for an open or short circuit between  $\mbox{P/J8706}$  and  $\mbox{P/J8740}.$  The wires between J8706 and J8740 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-9 (+) and GND (-), and between J8706-11 (+) and GND (-). Each voltage is approx. +24VDC.

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Set Clamp Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Δ.

## 312-284 (Int) Set Clamp Home Sensor OFF Fault

## BSD-ON:BSD 12.7 Integrated Finisher Set Eject (2 of 2)

In the initialize operations each at Power On, when Interlock closed and at the start of a job, and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning Off within a specified time after the start of the Set Clamp Motor operation.

## **Initial Actions**

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.

## Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

Y N

Repair the Set CLamp mechanism.

Enter dC330 [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. **The display changes.** 

Y N

Check the connections of P/J8707, J8742B, J8742A and P/J8723. P/J8707, J8742B, J8742A and P/J8723 are securely connected.

Y N

Connect P/J8707, J8742B, J8742A and P/J8723 securely.

Check for an open or short circuit between J8707 and J8742B, and between J8742A and J8723. The wires between J8707 and J8742B and between J8742A and J8723 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8707-9 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8707-8 (+) and GND (-). Rotate the Set Clamp Shaft by hand to block and unblock the acceptance surface of the Set Clamp Home Sensor. **The voltage changes normally.** 

Y N

Replace the Set Clamp Home Sensor (PL 22.4).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## Enter [012-017]. The Set Clamp Motor rotates.

Check the connections of P/J8706 and P/J8740. P/J8706 and P/J8740 are securely connected.

Connect P/J8706 and P/J8740 securely.

Check for an open or short circuit between  $\mbox{P/J8706}$  and  $\mbox{P/J8740}.$  The wires between J8706 and J8740 are OK.

Y N

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8706-9 (+) and GND (-), and between J8706-11 (+) and GND (-). Each voltage is approx. +24VDC.

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Set Clamp Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-291 (Int) Stapler Fault

## BSD-ON:BSD 12.5 Integrated Finisher Staple Control

Within a specified time after the Staple Motor started rotating in reverse direction, the Staple Head Home Sensor was never detected turning On.

## **Initial Actions**

- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/ON.

## Procedure

Enter dC330 [012-042] and [012-043] alternately. The Staple Motor rotates.

Y N

Check the connections of  $\mbox{ P/J8705}$  and  $\mbox{ P/J8705}$  and  $\mbox{ P/J8735}$  are securely connected.

Y N

Connect P/J8705 and P/J8735 securely.

Check for an open or short circuit between J8705 and J8735. The wires between J8705 and J8735 are OK.

#### Y N

Repair the open wire or short circuit.

Enter [012-042] and [012-043] alternately. Measure the voltages between Finisher PWB J8705-3, 4, 5, 6 (+) and GND (-). Each voltage changes.

Y N

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7)

```
Replace the Staple Assembly (PL 22.4).
```

Enter [012-042] and [012-043] alternately. The display changes.

Y N

Check the connections of P/J8701 and P/J8731. P/J8701 and P/J8731 are securely connected.

Y N

Connect P/J8701 and P/J8731 securely.

Check for an open or short circuit between J8701 and J8731. The wires between J8701 and J8731 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8701-4 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

А\_\_\_В

Status Indicator RAPs 312-291 (Int)

- A B
  - Measure the voltage between Finisher PWB P/J8701-5 (+) and GND (-). Enter [012-042] and [012-043] alternately. The voltage changes. Y N

Replace the Staple Assembly (PL 22.4).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-301 (Int) Top Cover Interlock OPEN

BSD-ON:BSD 12.1 Integrated Finisher DC Power and Interlock Switching

The Top Cover Interlock Open was detected.

## **Initial Actions**

- Check that the Top Cover can be opened and closed.
- Check the Finisher Top Cover Interlock Sensor and the Finisher Top Cover Interlock +24V
   Switch are properly installed, not broken, and have no foreign objects
- Power Off/ON.

## Procedure

Check the following;

- Top Cover installation
- Finisher Top Cover Interlock Sensor for damage
- Finisher Top Cover Interlock +24V Switch actuator for any damage

## These parts are in normal condition.

- Y N
  - Repair or replace any of the parts that has a defect.

Enter dC330 [012-300]. Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. **The display changes.** 

## Y N

Check the connections of P/J8701 and P/J8730. P/J8701 and P/J8730 are securely connected.

Y N

Connect P/J8701 and P/J8730 securely.

Check for an open or short circuit between J8701 and J8730. The wires between J8701 and J8730 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8701-3 (+) and GND (-). The voltage is approx. +5VDC.

Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8701-2 (+) and GND (-). Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. **The voltage changes.** 

## Y N

Replace the Finisher Top Cover Interlock Sensor (PL 22.3).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Measure the voltage between Finisher PWB J8702-1 (+) and GND (-). The voltage is approx. +24VDC.

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-302 (Int) Front Cover Interlock OPEN

### BSD-ON:BSD 12.1 Integrated Finisher DC Power and Interlock Switching

The Front Cover Interlock Open was detected.

## **Initial Actions**

- Check that the Top Cover can be opened and closed.
- Check that the Finisher Front Interlock Switch is properly installed, not broken, and has no foreign object.
- Power Off/ON.

## Procedure

Check the following;

- Front Cover installation
- hinges for any damage
- Finisher Top Cover Interlock Sensor for any damage

## Thee above parts are OK.

Y N Repair or replace any of the parts that are defected.

Enter dC330 [012-302]. Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. **The display changes.** 

#### Y N

Connect the connections of P/J8702 and P/J8733. P/J8702 and P/J8733 are securely connected.

Y N

Connect P/J8702 and P/J8733 securely.

Check for an open or short circuit between J8702 and J8733. The wires between J8702 and J8733 are OK.

Y N

Repair the open or short circuit.

Measure the voltage between Finisher PWB J8702-4 (+) and GND (-). Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. The voltage changes.

## Y N

Replace the Finisher Front Interlock Switch (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Measure the voltage between Finisher PWB J8702-1 (+) and (-). The voltage is approx. +24VDC.

#### Y N

Go to Finisher (Int) +24VDC/24VDC RTN and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-903 (Int) Paper Remains at Compiler Exit Sensor

## BSD-ON:BSD 12.3 Integrated Finisher Transportation

- At Power On, the Compiler Exit Sensor detected paper.
- While the Main Motor was operating at initialization at Power On, the Compiler Exit Sensor detected paper.
- When the Cycle down operation at the end of a job was complete, the Compiler Exit Sensor was On.

## **Initial Actions**

- Check the power supply voltage at the customer site for a drop.
- Check the Compiler Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/ON.

## Procedure

Check for paper remaining on the Compiler Exit Sensor and how it is installed. The sensor is properly installed with no paper left there.

N Bomovo the

Remove the remaining paper and reinstall the sensor properly.

## Run Component Control [012-150].

Enter dC330 [012-150]. Actuate the Compiler Exit Sensor. The display changes.

## ack the connectio

Check the connections of P/J8709 and P/J8728. P/J8709 and P/J8728 are securely connected.

Y N

Ν

Υ

Connect P/J8709 and P/J8728.

Check for an open or short circuit between J8709 and J8728. The wires between J8709 and J8728 are OK. Y N

N Repair the open or short circuit.

Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). The voltage is approx.+5VDC.

## Y N

Go to Finisher (Int) +5VDC Wirenet and check the +5VDC circuit.

Measure the voltage between Finisher PWB J8702-2 (+) and GND (-). Actuate the Compiler Exit Sensor. **The voltage changes.** 

Y N

Replace the Compiler Exit Sensor (PL 22.5).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 312-917 (Int) Stacker Tray Staple Set Over Count RAP

## **BSD-ON: 12.2 PWBS Communication IOT - Integrated Finisher**

When stapled sets are ejected to the Stacker Tray:

- Stapled set count exceeded 30 sets.
- And Stacker Tray is not positioned at paper empty level.
- And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.

## Procedure

Remove all paper from the Stacker. If the problem continues, go to the 312-211 (Int) RAP.

## 312-928 (Int) Scratch Sheet Compile

Paper was detected that was either out of spec, in poor condition (wrinkled, curled) and was ejected to the compiler.

**NOTE:** This Code is an operation message. If this fail code is frequently declared, perform the procedure below.

## **Initial Actions**

- Check that the Top Cover can be opened and closed.
- Power Off/On.

## Procedure

Check the specifications of paper. The paper is in spec.

Ν

Υ

Υ

Replace the paper with new paper that is in spec.

Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent (dog eared) or jam.

Y N

Resolve any problem that causes the paper to be bent or caught.

Check for a Fault Code. Another Fault Code is displayed.

Ν

If the problem continues, replace the Finisher PWB (PL 22.7).

Go to the appropriate Fault Code.

## 312-930 (Int) Stacker Tray Full RAP

## BSD-ON: BSD 12.8 Integrated Finisher Stacker Tray Control

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size).

## **Initial Actions**

- Remove the paper from the Stacker Tray
- Power Off/On

If the fault remains, perform the Procedure

## Procedure

Go to the 312-211 (Int) RAP.

## 312-976 (Int) Staple Fail

Staple Head Home Sensor is not turned on within 450msec after Staple Head Close operation is started, and Staple Head Home Sensor is turned on after reverse operation is started.

## Procedure

Go to the 312-291 (Int) RAP.

## 312-977 (Int) Staple Ready Fail

Staple Head void stapling reached a specified number of times (13) during the Staple Head initialization.

## Procedure

Check that staples are present and correctly installed. If the problem continues, go to the 312-291 (Int) RAP.

## 312-979 (Int) Stapler Near Empty RAP

BSD-ON: BSD 12.1 Integrated Finisher DC Power and Interlock Switching

**BSD-ON: BSD 12.5 Integrated Finisher Staple Control** 

The Staple Cartridge is nearly empty.

## **Initial Actions**

If the staples are nearly empty, replace the Cartridge. If adequate staples are present, remove and reinstall the Cartridge several times. Check for dirt or debris blocking the Cartridge from correct seating. If the problem continues, perform the Procedure.

## Procedure

Execute dC330 [012-242 Low Staple Sensor]. Install and remove the Staple Cartridge. The display changes.

Y N Disconnect P/J8731. There is +5 VDC from P/J8701 pin 9 to GND. Y N Replace the Finisher PWB (PL 22.7).

Check the wires between P/J8701 and P/J8731 for an open circuit or a short circuit. If the wires are OK, replace the Staple Assembly (PL 22.4). If the problem persists, replace the Finisher PWB (PL 22.7).

If the fault remains, replace the Finisher PWB (PL 22.7).

## 312-982 (Int) Stacker Lower Safety Warning RAP

## BSD-ON: BSD 12.8 Integrated Finisher Stacker Tray Control

The Stacker Lower Safety Warning occurs when the following happens four time successively:

Stacker tray height adjustment was not completed successfully within a specified time period when running a job.

## Procedure

Remove all paper from the Stacker. If the problem continues, go to the 312-211 (Int) RAP.

# 313-902 Paper remains at Booklet Compiler No Paper Sensor

Paper remains at the Booklet Compile No Paper Sensor.

## Procedure

Go to 312-266 (Pro) to troubleshoot the Fault.

## 313-903 Paper remains at Booklet Folder Roll Exit Sensor

Paper remains at the Booklet Folder Roll Exit Sensor.

## Procedure

Go to 312-115 (Pro) and/or 312-180 (Pro) to troubleshoot the Fault.

## 313-210 (LX) Booklet Staple Move Home Sensor ON RAP

#### BSD-ON: BSD 12.25 Office Finisher LX Booklet Staple Positioning

Booklet Staple Move Home Sensor does not turn on within designated time period.

## **Initial Actions**

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute dC330 [013-143], Booklet Staple Move Home Sensor. Move the Booklet Stapler to block and unblock the sensor (PL 23.18). The display changes.

Y N

Check the wire between  $\,$  J8897 pin 2 and  $\,$  P/J8991 pin 2 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8991, pins 3 and 1 on the Booklet PWB (BSD 12.25 Office Finisher LX Booklet Staple Positioning). **The voltage is approx. +5VDC.** 

Y N

Replace the Booklet PWB (PL 23.21).

Measure the voltage between P/J8991 pin 2 on the Booklet PWB and GND (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Actuate the Booklet Staple Move Home Sensor. **The voltage changes.** 

Y N

Replace the Booklet Staple Move Home Sensor (PL 23.18).

```
Replace the Booklet PWB (PL 23.21).
```

Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.** 

Y N

Check the wires between P/J8992 pins 1~6 on the Booklet PWB and P/J8906 on the Booklet Stapler Move Motor (BSD 12.25 Office Finisher LX Booklet Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK.** 

Y N

Repair/replace as required.

Monitor the voltage at P/J8994, pin 3 (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. An AC clock pulse is detected.

Y N

Check the wire between  $\mbox{ P/J8994},\mbox{ pin 3 and }\mbox{ P/J8995 pin 4. If the wire is OK, replace the Finisher PWB (PL 23.16).}$ 

Replace the Booklet Stapler Move Motor (PL 23.18). If the problem persists, replace the Booklet PWB (PL 23.21).

Α

## 313-211 (LX) Booklet Staple Move Home Sensor OFF

## BSD-ON:BSD 12.25 Office Finisher LX Booklet Staple Positioning

Booklet Staple Move Home Sensor does not turn off within designated time period

## **Initial Actions**

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute dC330 [013-143], Booklet Staple Move Home Sensor. Move the Booklet Staplers to block and unblock the sensor (PL 23.18). The display changes.

Y N

Check the wire between J8897 pin 2 and P/J8991 pin 2 for an open or short circuit, or a loose or damaged connector. The wire is OK.

Y N

Repair/reconnect as required.

Measure the voltage between P/J8991, pins 3 and 1 on the Booklet PWB (BSD 12.25 Office Finisher LX Booklet Staple Positioning). **The voltage is approx. +5VDC.** 

Y N

Replace the Booklet PWB (PL 23.21).

Measure the voltage between P/J8991 pin 2 on the Booklet PWB and GND (BSD 12.25 Office Finisher LX Booklet Staple Positioning).Actuate the Booklet Staple Move Home Sensor. **The voltage changes.** 

Y N

Replace the Booklet Staple Move Home Sensor (PL 23.18).

```
Replace the Booklet PWB (PL 23.21).
```

Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.** 

Y N

Check the wires between P/J8992 pins 1~6 on the Booklet PWB and P/J8906 on the Booklet Stapler Move Motor (BSD 12.25 Office Finisher LX Booklet Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK.** 

Y N

Repair/replace as required.

Monitor the voltage at P/J8994, pin 3 (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. An AC clock pulse is detected.

Y N

Check the wire between  $\mbox{ P/J8994},\mbox{ pin 3 and }\mbox{ P/J8995 pin 4. If the wire is OK, replace the Finisher PWB (PL 23.16).}$ 

Replace the Booklet Stapler Move Motor (PL 23.18). If the problem persists, replace the Booklet PWB (PL 23.21).

Δ

# 313-212 (LX) Booklet Staple Move Position Sensor On Fault

BSD-ON:BSD 12.25 Office Finisher LX Booklet Staple Positioning

Booklet Staple Move Position Sensor does not turn on within designated time period

## **Initial Actions**

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute dC330 [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the sensor (PL 23.18). **The display changes**.

Y N

Check the wire between J8898 pin 2 and P/J8991 pin 5; and the wire between P/J8994, pin 5 and P/J8995 pin 5 for an open or short circuit, or a loose or damaged connector. **The wires are OK.** 

Y N

Repair/reconnect as required.

Measure the voltage between P/J8991, pins 6 and 4 on the Booklet PWB (BSD 12.25 Office Finisher LX Booklet Staple Positioning). **The voltage is approx. +5VDC.** 

#### Y N

Replace the Booklet PWB (PL 23.21).

Measure the voltage between P/J8991 pin 5 on the Booklet PWB and GND (BSD 12.25 Office Finisher LX Booklet Staple Positioning).Actuate the Booklet Staple Move Position Sensor. **The voltage changes.** 

Y N

Replace the Booklet Staple Move Position Sensor (PL 23.18).

Measure the voltage between J8985 pin 5 on the Finisher PWB and GND ('). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.** 

Y N

Replace the Booklet PWB (PL 23.21). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **The Stapler Move Motor moves.** 

#### Y N

Δ.

Check the wires between P/J8992 pins 1~6 on the Booklet PWB and P/J8906 on the Booklet Stapler Move Motor (BSD 12.25 Office Finisher LX Booklet Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK**.

Y N

Repair/replace as required.

Monitor the voltage at P/J8994, pin 3 (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. An AC clock pulse is detected.

Y N

A B

Check the wire between P/J8994, pin 3 and P/J8995 pin 4. If the wire is OK, replace the Finisher PWB (PL 23.16).

Replace the Booklet Stapler Move Motor (PL 23.18). If the problem persists, replace the Booklet PWB (PL 23.21).

# 313-213 (LX) Booklet Staple Move Position Sensor Off Fault

#### BSD-ON:BSD 12.25 Office Finisher LX Booklet Staple Positioning

Booklet Staple Move Position Sensor does not turn off within designated time period.

#### **Initial Actions**

- Ensure the Staple Head is free from obstructions
- Check for 013-306 or 013-307 Faults.

## Procedure

Execute dC330 [013-144], Booklet Staple Move Position Sensor. Move the Booklet Stapler to block and unblock the sensor (PL 23.18). **The display changes**.

Y N

Check the wire between J8898 pin 2 and P/J8991 pin 5; and the wire between P/J8994, pin 5 and P8985 pin 5 for an open or short circuit, or a loose or damaged connector. **The wires are OK.** 

Y N

Repair/reconnect as required.

Measure the voltage between P/J8991, pins 6 and 4 on the Booklet PWB (BSD 12.25 Office Finisher LX Booklet Staple Positioning). **The voltage is approx. +5VDC.** 

#### Y N

Replace the Booklet PWB (PL 23.21).

Measure the voltage between P/J8991 pin 5 on the Booklet PWB and GND (BSD 12.25 Office Finisher LX Booklet Staple Positioning).Actuate the Booklet Staple Move Position Sensor. **The voltage changes.** 

Y N

Replace the Booklet Staple Move Position Sensor (PL 23.18).

Measure the voltage between P8985 pin 5 on the Finisher PWB and GND (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Actuate the Booklet Staple Move Position Sensor. **The voltage changes.** 

Y N

Replace the Booklet PWB (PL 23.21). If the problem persists, replace the Finisher PWB (PL 23.16).

Replace the Finisher PWB (PL 23.16).

Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. The Stapler Move Motor moves.

Y N

Υ

Check the wires between P/J8992 pins 1~6 on the Booklet PWB and P/J8906 on the Booklet Stapler Move Motor (BSD 12.25 Office Finisher LX Booklet Staple Positioning) for an open or short circuit, or loose or damaged connectors. **The wires are OK.** 

```
N
Repair/replace as required.
```

Δ\_\_\_\_\_



Δ

Monitor the voltage at P/J8994, pin 3 (BSD 12.25 Office Finisher LX Booklet Staple Positioning). Alternately execute dC330 [013-028], Stapler Move Motor In and [013-029], Stapler Move Motor Out. **An AC clock pulse is detected**.

Y N

Check the wire between P/J8994, pin 3 and P8985 pin 4. If the wire is OK, replace the Finisher PWB (PL 23.16).

Replace the Booklet Stapler Move Motor (PL 23.18). If the problem persists, replace the Booklet PWB (PL 23.21).

## 313-220 (LX) Booklet Creaser Detect Fault

BSD-ON: BSD 12.17 Office Finisher LX Folding

Control logic cannot detect the Creaser Assembly.

## Procedure

**NOTE:** If the Booklet Maker has been removed or is not installed, unplug the connector to the Crease assembly.

Execute dC330 [013-160], Creaser Detected. The display is 'Low.'

Y N

There is less than 1 VDC at P/J8990 pin 4.

Y N

Check the wires between P/J8990 pins 4 and 5. Make sure that P8903 is securely fastened.

Replace the Finisher PWB (PL 23.16).

Go to BSD 12.17 Office Finisher LX Folding and check for an intermittent circuit.

## 313-306 (LX) Booklet Safety Switches Open

BSD-ON:BSD 12.13 Office Finisher LX Booklet Interlock Switching

Control logic senses that one or more Booklet Safety Switch is open.

Initial Actions Check for 013-307 Faults.

## Procedure

There is +24 VDC between P/J8993 pin 3 on the Booklet PWB and GND. Y N There is +24 VDC between P/J8993 pin 6 on the Booklet PWB and GND. Y N Go to the 313-307 (LX) RAP

Go to BSD 12.13 Office Finisher LX Booklet Interlock Switching and check the circuit through the Booklet Safety Switches (PL 23.21).

Replace the Booklet PWB (PL 23.21).

## 313-307 (LX) Booklet Cover Open

BSD-ON:BSD 12.13 Office Finisher LX Booklet Interlock Switching

Control logic senses that the Booklet Cover is open.

## **Initial Actions**

Ensure the Cover is closed.

## Procedure

There is +24 VDC between P/J8993 pin 5 on the Booklet PWB and GND.

Y N

GO to BSD 12.13 Office Finisher LX Booklet Interlock Switching and check the circuit from P/J8993 to and from J8899 on the Booklet Stapler Cover Switch (PL 23.21).

Replace the Booklet PWB (PL 23.21).

## **316-XXX Faults Entry RAP**

## Procedure

Find the Fault Code in Table 1. Go to the RAP listed for that Fault Code. Fault Code extensions are defined in Table 2.

#### Table 1 Chain 16 Fault Codes

Link	Ext	Fault Name	Fault Cause	RAP
000	09	Cannot create RPC connec- tion with ENS	RPC corrupted or O/S ser- vice failure or ENS died	316-1 RAP
000	14	Cannot create RPC connec- tion with ENS	RPC corrupted or O/S ser- vice failure or ENS died	316-1 RAP
000	19	Unable to Create RPC Con- nection with ENS	RPC corrupted or O/S ser- vice failure or ENS died	316-1 RAP
000	26	Cannot Create RPC Connec- tion with ENS	RPC corrupted or O/S ser- vice failure or ENS died	316-1 RAP
001	09	Unable to do startup synchro- nization	IPC failure or SC not responding	316-1 RAP
001	14	Unable to do startup synchro- nization	IPC failure or SC not responding	316-1 RAP
001	19	Unable to do start up synchro- nization	IPC failure or SC not responding	316-1 RAP
001	26	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
001	90	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
001	47	Unable to do Start Up Syn- chronization	IPC failure or SC not responding	316-1 RAP
002	09	Unable to register as RPC server	Corrupt RPC or corrupt sys- tem configuration or O/S ser- vice failure	316-1 RAP
002	14	Unable to register as RPC server	Corrupt RPC or corrupt sys- tem configuration or O/S ser- vice failure	316-1 RAP
002	19	Unable to Register as an RPC Server	Corrupt RPC or corrupt sys- tem configuration or O/S ser- vice failure	316-1 RAP
002	26	Could not become an RPC Server	Corrupt O/S RPC Table	316-1 RAP
002	46	Unable to Start up and Sync with SC	IPC failure or SC not responding	316-1 RAP
003	09	Too many IPC Handles	Too many existing IPC han- dlers in IPC handler table	316-1 RAP
003	14	Too many IPC Handles	Too many existing IPC han- dlers in IPC handler table	316-1 RAP
	Link 000 000 000 001 001 001 001 00	Link         Ext           000         09           000         14           000         19           000         26           001         09           001         14           001         14           001         14           001         14           001         14           001         14           001         14           001         26           001         90           001         47           002         09           002         14           002         19           002         26           002         26           002         19           002         46           003         09           003         14	LinkExtFault Name00009Cannot create RPC connection with ENS00014Cannot create RPC connection with ENS00019Unable to Create RPC Connection with ENS00026Cannot Create RPC Connection with ENS00026Cannot Create RPC Connection with ENS00109Unable to do startup synchronization00114Unable to do startup synchronization00119Unable to do start up synchronization00126Unable to Start up and Sync with SC00126Unable to Start up and Sync with SC00147Unable to do Start Up Synchronization00209Unable to register as RPC server00214Unable to register as RPC server00219Unable to Register as an RPC Server00226Could not become an RPC Server00246Unable to Start up and Sync with SC00309Too many IPC Handles	LinkExtFault NameFault Cause00009Cannot create RPC connection with ENSRPC corrupted or O/S service failure or ENS died00014Cannot create RPC connection with ENSRPC corrupted or O/S service failure or ENS died00019Unable to Create RPC Connection with ENSRPC corrupted or O/S service failure or ENS died00026Cannot Create RPC Connection with ENSRPC corrupted or O/S service failure or ENS died00009Unable to do startup synchronizationIPC failure or SC not responding00114Unable to do startup synchronizationIPC failure or SC not responding00119Unable to Start up and SyncIPC failure or SC not responding00126Unable to Start up and SyncIPC failure or SC not responding00190Unable to Start up and SyncIPC failure or SC not responding00190Unable to Start Up SyncIPC failure or SC not responding00190Unable to register as RPCCorrupt RPC or corrupt system configuration or O/S service failure00209Unable to register as RPCCorrupt RPC or corrupt system configuration or O/S service failure00219Unable to Register as an RPCCorrupt RPC or corrupt system configuration or O/S service failure00219Unable to Start up and SyncIPC failure or SC not responding00219Unable to Register as an RPCCorrupt RPC or corrupt system configuration or O/S service failure00219Unable to Start up and SyncIPC fail

#### Table 1 Chain 16 Fault Codes

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	003	19	Too many IPC Handlers	Too many existing IPC han- dles in IPC handler table	316-1 RAP
316	003	90	Utility Insert Handler Failure	Too Many IPC Handlers in IPC Handler Table	316-1 RAP
316	004	14	RPC call failure to SBC regis- tration service	Registration Service failed	316-1 RAP
316	004	19	RPC Connect Failure to SBC Registration Service	Registration Service Failed.	316-1 RAP
316	004	26	RPC Connect Failure to SBC Registration Service	RPC Communication Prob- lem; Registration Service Failed	316-1 RAP
316	004	46	RPC connect failure to SBC Registration Service (to regis- ter with)	RPC Communication Prob- lem (Flt Service)	316-1 RAP
316	005	14	RPC call failure to SBC regis- tration service	Registration service failed to respond in time	316-1 RAP
316	005	19	RPC Call Failure to SBC Reg- istration Service	Registration Service Failed to Respond in Time	316-1 RAP
316	005	26	RPC Call Failure to SBC Reg- istration Service	Registration Service failed to respond in time.	316-1 RAP
316	005	46	RPC Call Failure to SBC Reg- istration Service (to register with)	Registration Service Failed to Respond in Time (null returned)	316-1 RAP
316	005	90	RPC call to SBC Registration failed	Registration Service failed to respond. SW error.	316-1 RAP
316	005	92	RPC Call Failure to SBC Reg- istration Service (to register with)	Registration Service Failed to Respond in Time (null returned)	316-1 RAP
316	006	09	Cannot register for events	Event Notification Service unable to process request; ENS died	316-1 RAP
316	006	19	Cannot register for events	Event Notification Service unable to process request; ENS died	316-1 RAP
316	007	92	Invalid RPC Data Received	Unable to register; Can't open IPC queue; SW Error; O/S Failure; Driver Failure	316-1 RAP
316	009	09	Invalid IPC Data Received	SW Error; Corrupt Disk; Bad Memory	316-1 RAP
316	010	14	Unable to send IPC	Service being communicated to is dead; Queue is full; No Queue; System Resource Corrupted	316-1 RAP

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	010	99	IPC open, create, signal queue failed	Service being communicated to is dead; Queue is full; No Queue; System Resource Corrupted	316-2 RAP
316	013	14	Digital Copier ENS synchroni- zation error	System RPC info corrupt or DC ENS dead	316-1 RAP
316	014	14	Digital Copier ENS registration error	System RPC info corrupt or DC ENS dead	316-1 RAP
316	015	14	SESS data store environmen- tal variable not set	Corrupt environment vari- able or configuration script error	316-1 RAP
316	015	19	SESS data store environmen- tal variable not set	Corrupt environment vari- able or configuration script error	316-1 RAP
316	016	14	Data Store init. failed	SESS Faults 206, 207 or Data store not created or cor- rupt environment variable	316-1 RAP
316	016	19	Data Store init. failed	SESS Faults 206, 207 or Data store not created or cor- rupt environment variable	316-1 RAP
316	017	19	Send Event Failure Unable to send event to SBC ENS	Invalid event info or data, ENS failure, System RPC info corrupt	316-1 RAP
316	021	19	SBC PM Registration Connect Error	LynxOS failure of system call gethostname	316-1 RAP
316	021	26	Service could not get Host Name	Service could not get Host Name	316-1 RAP
316	021	46	Unable to Get Host Name	SW error.	316-1 RAP
316	023	09	RPC Call Failure to ENS	ENS Service Failed to Respond in Time	316-1 RAP
316	023	26	RPC Call Failure to ENS	ENS Service Failed to Respond in Time	316-1 RAP
316	026	09	Memory allocation failure	SW Error, system resource failure	316-1 RAP
316	026	14	MALLOC error	Memory Leak, SW Bug, Memory Corrupt, Virtual Memory Exhausted, process Size Exceeding System Lim- its	316-1 RAP
316	026	46	Memory Allocation Error	Memory Leak, SW Bug, Memory Corrupt, Virtual Memory Exhausted, process Size Exceeding System Lim- its	316-1 RAP

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	026	90	Malloc Error	Memory Leak; SW Error; Vir- tual Memory Exhausted; pro- cess Size Exceeding System Limits	316-1 RAP
316	026	92	Memory Allocation Fault	Memory Leak; SW Bug; Memory Corrupt; Virtual Memory Exhausted; process Size Exceeding System Lim- its	316-1 RAP
316	027	90	Unable to obtain well known Queue ID	Invalid Queue Requested; No Range Environment Vari- able; Invalid Range Environ- ment Variable	316-1 RAP
316	028	09	Unable to complete RPC call	SW Error; system resource failure; RPC corrupt	316-1 RAP
316	028	90	Invalid Range String	Range Environment Variable not set; Range Environment Variable set to Invalid Numeric String	316-1 RAP
316	030	19	Unable to Obtain Client RPC handle to EJS	RPC corrupted; O/S Service Failure; ENS died.	316-1 RAP
316	031	09	Invalid Event Notification Received	SW Error in the ENS Service or in the Service generating the Fault	316-1 RAP
316	032	19	NVM Connection Failure	Invalid System Config; SW Error; NVM Corrupted; NVM Non existent	316-1 RAP
316	039	00	Pthread Create Error	UNIX problem creating a thread; O/S Failure	316-1 RAP
316	040	92	Semaphore Fault	O/S error	316-1 RAP
316	048	09	Unable to set binding	SW Error IPC failure system resource exhaustion. Unable to set binding	316-1 RAP
316	048	14	Can not set SBC client binding	IPC failure. OS failure. Semaphore allocation failure.	316-1 RAP
316	048	90	Can not set SBC client binding	IPC failure. OS failure. Semaphore allocation failure.	316-1 RAP
316	048	99	Unable to set client binding	IPC failure. OS failure. Semaphore allocation fail- ure. Cannot set SBC client binding	316-1 RAP
316	150	09	Cannot send registration event	RPC corrupted or O/S ser- vice failure or ENS died. Can- not send registration event	316-1 RAP
316	150	14	Unable to obtain RPC trans- port	System RPC corrupt or invalid configuration	316-1 RAP

Initial Issue

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	150	19	Unable to sync peer (within SBC) infrastructure services	Infrastructure service(s) died/ gone or clogged or s/w error. Infrastructure service died/ gone or clogged or s/w error	316-1 RAP
316	150	26	Fault Service Failed to Write to Log	Disk Write Error SW Error.	316-1 RAP
316	150	90	Invalid IPC Request Destina- tion	SW Error	316-1 RAP
316	150	92	Consumer Interface Fault	Data Store failure	316-1 RAP
316	151	09	Invalid IPC command	Message corrupt	316-1 RAP
316	151	14	SNMP event registration failed	SC IPC Queue full Excessive 16-750-14 faults.	316-1 RAP
316	151	19	Invalid IPC command	Message corrupt	316-1 RAP
316	151	26	Fault Service Failed to get a Log Handle	SW Error.	316-1 RAP
316	151	90	Put Environment Variable Fail- ure	Malloc Failure; SW Error; Vir- tual Memory Exhausted; pro- cess Size Exceeding Configuration System Limit.	316-1 RAP
316	152	09	Internal IPC failure	Software error; System resource exhaustion	316-1 RAP
316	152	14	Empty internal event received by ENS	S/W error.	316-1 RAP
316	152	19	Unable to send request to SESS	SESS System Control broken or too many IPC messages.	316-1 RAP
316	152	26	Fault Service could not open Fault Log	SW Error; Bad Disk. Fault Service could not open Fault Log	316-1 RAP
316	153	09	Unable to obtain IPC queue	File system corrupt or full or disk problem	316-1 RAP
316	153	19	NVM Save Failure	SW Error; Mother Board Fail- ure	316-1 RAP
316	154	19	NVM Read Failure	SW Error; Mother Board Fail- ure	316-1 RAP
316	155	19	SBC Faulted to Boot from Alternate Disk Partition	Corrupted SW; H/W Faults. File System Corrupted. SBC	316-1 RAP
316	156	19	ServiceRun loop failed.	Poll select failed.	316-1 RAP
316	160	09	SBC Registration Service pro- cess death	Software error (technically not possible)	316-1 RAP
316	161	09	Cannot send registration event	Software error.	316-1 RAP
316	162	09	SBC Platform Manager Ser- vice process death	Software error. Check fault log for more specific reasons.	316-1 RAP

#### Table 1 Chain 16 Fault Codes

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	163	09	SBC DM Agent Service pro- cess death	Software error.Check fault log for more specific reasons.	316-1 RAP
316	674	00	XSA RPC Server Death	RPC Server Not Responding	316-2 RAP
316	674	09	XSA RPC Server Death	RPC Server Not Responding	316-2 RAP
316	675	00	XSA Database Server Death	Database Server Not Responding	316-2 RAP
316	701	00	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	701	99	Unable to communicate with XSA database	LOA Failure.SW error, XSA database crash.	316-2 RAP
316	702	00	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	702	95	Unable to communicate with XSA database	LOA Failure	316-2 RAP
316	740	19	Error - SBC Hard Disk IIO Failure	Immediate image overwrite failed on SBC hard disk.	316-4 RAP
316	751	00	Database Error known by Ser- vice Registry or registry not available.	S/W error.	316-2 RAP
316	752	07	Queue Service Library Initial- ization Failed	Data Store error; S/W error	316-1 RAP
316	752	14	Retry SESS Sys Control event registration	SC Not Responding; SC IPC Queue Full; SC IPC Queue does not exist	316-2 RAP
316	752	95	File transfer operation failure	File transfer failure	316-2 RAP
316	753	00	No IPC Response	Login gets no response from SRS	316-2 RAP
316	755	00	Service Registry cannot initial- ize database	Unable to remove advisory lock on network server.	316-2 RAP
316	760	09	Scan To File process death	Software error; Check fault log for more specific reasons	316-3 RAP
316	760	47	Incorrect Checksum partition 1	Found incorrect checksum partition 1 during Software Verify check; Bad disk; bad s/ w	316-2 RAP
316	761	09	LPD process death	Software error	316-3 RAP
316	761	68	Login gets no response from SRS	No IPC Response	316-2 RAP
316	762	09	Netware process death	Netware process failed. Soft- ware error	316-3 RAP
316	762	47	Missing File	Missing file found during Soft- ware Verify check; Disk access problem; Configura- tion problem	316-2 RAP

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	763	09	NetBios process death	Software error	316-3 RAP
316	763	14	Reached internal limit for events	Reached internal limit for events	316-2 RAP
316	763	47	Invalid Permission	Invalid Permission found dur- ing Software Verify check	316-2 RAP
316	764	09	AppleTalk process death	Software error	316-3 RAP
316	765	09	Banyan Vines process death	Software error	316-3 RAP
316	766	09	Adobe process failure	Software error	316-3 RAP
316	767	09	HP PCL process death	Software error	316-3 RAP
316	767	19	Request to cancel spooling job error	Job Map Library unable to cancel job	316-2 RAP
316	768	09	Parallel process death	Software error	316-3RAP
316	769	09	HTTP process death	Software error	316-3 RAP
316	770	09	Unexpected process death	Software error	316-3 RAP
316	771	09	Print Service EJS process death	Software error	316-2 RAP
316	772	09	SBC Print SPI process death	Software error	316-2 RAP
316	772	19	Failure to set SBC Platform Manager service state	Software error	316-2 RAP
316	772	46	TCP/IP status file error.	TCP/IP address already being used.	316-3 RAP
316	773	09	SBC Print Service Surrogate process death	Software error	316-2 RAP
316	774	09	SBC Protocol Module pro- cess death	Software error	316-2 RAP
316	776	09	SBC Fault Service process death	Software error	316-2 RAP
316	777	09	SBC Completed Job Log Ser- vice/SPI process death	Software error	316-2 RAP
316	778	09	SBC Configuration Utility pro- cess death	Software error	316-2 RAP
316	779	09	SBC Diagnostic Service pro- cess death	Software error	316-2 RAP
316	780	09	SBC Authentication SPI pro- cess death	Software error	316-2 RAP
316	781	09	SBC Counters Utility process death	Software error	316-2 RAP
316	782	09	SBC Configuration Synchroni- zation process failure	Software error; Check fault log for more specific reasons	316-2 RAP
316	785	09	SBC SNMP Agent process failure	Software error	316-3 RAP
316	786	09	Token Ring process death	Software error	316-3 RAP
316	787	09	Sub agent process death	Software error	316-3 RAP

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	788	09	Serial process death	Software error	316-3 RAP
316	789	09	Connectivity Configuration Server process death	Software error	316-3 RAP
316	789	46	Autonet status file error	Failed performing Autonet IP process	316-3 RAP
316	789	47	SESS Apple test unknown error	SESS Diagnostic failure.	316-3 RAP
316	790	09	Lan Fax process death	Software error	316-3 RAP
316	790	47	SESS Banyan test unknown error	SESS Diagnostic failure.	316-3 RAP
316	791	09	Accounting process death	Software error	316-2 RAP
316	792	09	Tiff process death	Software error	316-2 RAP
316	792	19	Lan Fax DLM is not defined.	Lan Fax DLM is not defined.	316-2 RAP
316	793	09	Port9100 process death	software error	316-2 RAP
316	793	19	Job Based Accounting DLM is not defined.	Job Based Accounting DLM is not defined.	316-2 RAP
316	795	09	Slpsa process death	software error	316-3 RAP
316	796	09	SSDP process death	Software error	316-3 RAP
316	797	09	USB process death	Software error	316-3 RAP
316	798	09	POP3 process death	Software error	316-3 RAP
316	799	09	SMTP process death	Software error	316-3 RAP
316	800	46	Ethernet Initialization failure	Unable to connect to device when setting up IP over Ethernet	316-3 RAP
316	801	46	Token Ring Initialization failure	Unable to connect to device when setting up IP over Token Ring	316-3 RAP
316	802	46	DHCP Initialization failure	Error occurred when attempt- ing to get the IP data from the DHCP server.	316-3 RAP
316	803	46	RARP Initialization failure	Unable to get the IP address from the RARP server.	316-3 RAP
316	806	00	SESS NetBIOS test memory allocation error	CPI Death Error	316-2 RAP
316	807	00	SESS NetBIOS test memory allocation error	JobLog death Error	316-2 RAP
316	808	00	SESS NetBIOS test memory allocation error	Job Tracker death Error	316-2 RAP
316	809	00	SESS NetBIOS test memory allocation error	Kerberos Death Error	316-2 RAP
316	810	00	SESS NetBIOS test memory allocation error	Scan to Distribution Death Error	316-2 RAP
316	811	00	SESS NetBIOS test memory allocation error	SMB Death Error	316-2 RAP

Initial Issue

Chain	Link	Ext	Fault Name	Fault Cause	RAP
316	812	00	SESS NetBIOS test memory allocation error	TCP/IP Death Error	316-2 RAP
316	813	00	SESS NetBIOS test memory allocation error	WS Scan Temp Death Error	316-2 RAP
316	814	00	SESS NetBIOS test memory allocation error	Scan Compressor Death Error	316-2 RAP
316	815	09	Service Registry Process Death	Service Registry process death	316-2 RAP

#### **Table 2 Fault Code Extensions**

Extension number	Definition
00 - 07	Queue Utility Faults
09	SBC Registration Service Faults.
14	Event Notification Service Faults.
19	Platform Manager Faults.
26	Fault Log Service Faults
38	Completed Job Log Service Faults
46	Config Utility Faults
47	Diagnostic Service Faults
68	Net Auth Service Faults
90	
92	Internal Print Service Faults
95	Transfer Service Faults
99	

## 316-1 RAP

## **Initial Actions**

Switch the power off, then on. If the problem is not resolved, continue with this procedure.

## Procedure

Υ

Refer to the error log and try to determine under what situations the problem is occurring. The problem is related to a specific job, client, or Page Description Language (PDL). Y N

Reload the software (GP 9). The problem remains.

N Switch the neuror off then on Deturn t

Switch the power off, then on. Return to Call Flow.

Replace the following, one at-a-time, until the problem is corrected:

- SBC Hard Disk & Hard Disk Cable.
- SBC DRAM SIMMS
- SBC PWB

#### The problem occurs on one particular job from one particular client.

#### Ν

Υ

The problem occurs on all jobs sent from one client.

#### Y N

The problem occurs with one job from any client.

Y N

Replace the following one at a time until the problem is corrected.

- SBC Hard Disk & Hard Disk Cable.
- SBC DRAM SIMMS.
- SBC PWB.

#### Another WC 7855F printer is available.

Y N

Escalate the service call.

#### The problem is repeatable on both printers.

#### Y N

Reload software on the problem machine. (GP 9). Ensure that the latest version is installed. If the problem continues, escalate the service call.

Inform Field Engineering that a Software Problem Action Report (SPAR) needs to be generated.

#### Ensure the following:

- Have the system administrator (SA) check the network configuration on the client (Compare to working client).
- Have the SA ensure that the client has the required resources.
- Have the system administrator reload the print driver on the client.
- If the problem continues, have the customer call the customer support center.

Reload the print driver on the affected workstation.

## 316-2 RAP

Non-Shutdown fault procedure

## **Initial Actions**

For non-shutdown specified Network Controller faults, there need be no action taken. If the fault seems related to a customer complaint, perform the Procedure.

## Procedure

Switch the power off, then on. If the problem continues, go to the 316-1 RAP.

## 316-3 RAP

This RAP addresses Network Controller faults related to network connectivity.

## Procedure

Verify that the server or network with which you are trying to connect is operating. Go to the OF 16-1 Network Printing Problems Entry RAP, Network Printing Problems Entry RAP. If the problem is not resolved, go to the 316-1 RAP.

## 316-4 RAP

This RAP troubleshoots Network Controller fault codes related to the Image Overwrite options.

## **Initial Actions**

Print a Configuration Report (GP 6) and determine if Immediate Image Overwrite and/or On-Demand Overwrite options are enabled.

## Procedure

If the configuration report shows Image Overwrite as installed/disabled:

- Enter the Administrator Mode (GP 2)
- Select the Tools Tab.
- Select Security Settings.
- Enable the required Feature.

If the problem continues, go to the 316-1 RAP.

## 319-300 RAP

Unable to read or write data from the Image Disk

## Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

## Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-301 RAP

Unable to write data to the Image Disk

## Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

## Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-302 RAP

Bad Data received from the Disk (i.e. disk returns data other than a read or write operation in response to a read or write request from)

## Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

## Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-303 RAP

Unable to Format the Image Disk

## Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

## Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-310 RAP

System Disk does not return capacity information during Power Up.

## Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

## Perform the following:

- Check the connections of the power harness and the red SATA data cable from the Disk Drive (PL 35.2) to the SBC PWB. Check for damage. Repair as required.
- If no problems are found, replace the Disk Drive (PL 35.2). Perform GP 9 Software Upgrade. If the problem continues, replace the SBC PWB (PL 35.2).

## 319-401 RAP

Out of Memory caused by a Stress Document

## Procedure

No action is required. If 19-401 remains for more than 5 minutes, switch power off then on. If the problem continues, perform GP 9.

## 319-402 RAP

Out of Memory caused by a Stress Job

## Procedure

No action is required. If the fault remains for more than 5 minutes, switch power off then on. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

## 319-403 RAP

Out of Memory with greater than one job in EPC

## Procedure

Rescan job. If the Problem continues, rescan job according to EPC capabilities.

## 319-409 RAP

Video determines that it cannot guarantee the integrity of the job being processed.

## Procedure

Reconcile completed jobs with uncompleted jobs. Switch the power off then on. Rerun uncompleted jobs.

## 319-410-0 RAP

Mark Output Timeout. Incomplete image data transfer within the prescribed period. Machine will attempt to recover (may take more then 30 sec.).

## Procedure

If the job does not recover, switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.
### 319-410-1 RAP

Mark Output Timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

### 319-410-2 RAP

Compress Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure. If the problem continues, replace the EPC memory (PL 35.2) in the SBC.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

### 319-410-3 RAP

Decompress Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

### 319-410-4 RAP

Merge Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

### 319-410-5 RAP

Rotate Image timeout. Incomplete image data transfer within the prescribed period. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

### 319-410-6 RAP

Network Input Failure. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-7 RAP

E-Fax Send/Receive Failure. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-8 RAP

Scan Input Failure. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If there is a black background, but the prints are good, replace the IIT PWB (PL 1.8) item 3, and check the values of NVM 715-050 through 715-099 against the factory sheet.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-9 RAP

Byte Count Error. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-10 RAP

Set Up Too Late. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-11 RAP

DMA Master Abort. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-12 RAP

Huffman Error. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-410-13 RAP

EOR Error. Incomplete image data transfer. Job has been deleted.

#### Procedure

Switch the power off/on and rerun the job. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

If Smears, Streaks, Lines, or Color Misregistrations occur when using DADF only, and/or DADF jobs appear to make the engine pause longer than normal before starting, reseat or replace the EPC Memory on the SBC PWB (PL 35.2).

If copying from the platen and job is deleted when the fault occurs, the NVM may be corrupt.

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# 319-750 RAP

The System detects that the EPC Memory Size configuration has changed during the Power On Sequence

#### Procedure

Rerun the job.

### 319-752 RAP

The System detects that the Image Rotation Configuration has changed during Power On Sequence

#### Procedure

Switch machine off then on.

# 319-754 RAP

The System detects that the Image Disk Configuration (Present vs. Not Present) has changed during the Power On Sequence

#### Procedure

Check the DC power connector on the HDD. Switch machine off then on.

# 319-760 RAP

Test Patterns are missing from EPC

#### Procedure

Switch power off then on. The problem continues.

Y N

Return to service call procedures.

Go to GP 9 and perform the Regular AltBoot procedure.

### 320-302 RAP

#### BSD-ON: 34.1 FAX

Fax Card Hardware or Software error.

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-303 RAP

#### BSD-ON: 34.1 FAX

Fax Card Hardware or Software error.

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-305 RAP

#### BSD-ON: 34.1 FAX

Fax Card Hardware or Software error.

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-320 RAP

#### BSD-ON: 34.1 FAX

5 instances of an unrecoverable fax fault and has not been cleared by a card reset.

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-322 RAP

#### BSD-ON: 34.1 FAX

NV device not fitted to basic fax card

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-323 RAP

#### BSD-ON: 34.1 FAX

Fax system memory is low. (<6MB)

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-324 RAP

#### BSD-ON: 34.1 FAX

Not enough memory to use Fax Service

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-327 RAP

#### BSD-ON: 34.1 FAX

Registers cannot be accessed on the Extended card

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-331 RAP

#### BSD-ON: 34.1 FAX

No comms via PSTN1 port

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-332 RAP

#### BSD-ON: 34.1 FAX

No comms via PSTN2 port

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-338 RAP Fax Communication Fault

#### BSD-ON: 34.1 FAX

Fax communication error at power up or re-boot; power on self test (POST) failure.

#### Procedure

Power the machine off and on. If the problem continues, go to OF 17-1 FAX Entry RAP

# 320-339 RAP

#### BSD-ON: 34.1 FAX

Internal FAX card fault

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-340 RAP

#### BSD-ON: 34.1 FAX

Fax Port 2 Modem Failure

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-341 RAP

BSD-ON: 34.1 FAX

Miscellaneous Basic Card problems

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-342 RAP

#### BSD-ON: 34.1 FAX

Error accessing file on a NV device

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N

Install a Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-345 RAP

#### BSD-ON: 34.1 FAX

Fax Port 1 Modem Failure

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install a Fax PWB.

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

### 320-701 RAP

#### BSD-ON: 34.1 FAX

Phone book download failed

#### Procedure

Print a Configuration Sheet. The Config Sheet indicates the Fax PWB is installed.

Y N Install Fax PWB.

Check the following:

- Ensure the FAX is enabled
- Check that the FAX is securely connected to SBC.
- Check that the FAX phone wire is securely connected
- Go to the OF 17-1 FAX Entry RAP and check that the FAX settings are correct
- If the above checks are OK, replace the FAX PWB (PL 35.2).

# 320-710 RAP

#### BSD-ON: 34.1 FAX

Fax Immediate Image Overwrite (IIO) Error. IIO Error has occurred on the fax card when overwriting the job

#### Procedure

TBD

# 320-711 RAP

#### BSD-ON: 34.1 FAX

Fax On Demand Image Overwrite (ODIO) Error. ODIO Error has occurred on the fax card when overwriting the compact flash memory.

#### Procedure

TBD

# 322-300-05 RAP

Image Complete not Received from Video

#### Procedure

Switch the power off then on.

# 322-300-10 RAP

Failed to transfer image do to decoding error. (EORERROR, HUFFMANERROR, BYTECOUN-TERROR)

#### Procedure

### 322-300-16 RAP

When machine determines that it needs to do a reset in order to avoid an impending real time clock overflow

#### Procedure

Switch the power off then on.

# 322-301 RAP

Scan resources not available

#### Procedure

# 322-309 RAP

Consecutive no accepts received from a module exceeds threshold value (currently 20).

Five consecutive 22-309-04 will cause 22-319-04.

#### Procedure

Switch the power off then on.

Allow five minutes for fault recovery.

### 322-310 RAP

Pages received from Extended Job Service out of Sequence

#### Procedure

Check that originals are not jammed in DADF. Verify DADF operation with media used by customer. Re-sort and reload ALL originals in the document feeder.

# 322-311 RAP

Sequencer did not respond with proposal within the required time

Procedure

Switch the power off then on.

322-314 RAP

Module Registration Error.

Procedure

# 322-315 RAP

One or more modules did not respond with completion message

#### Procedure

Switch the power off then on.

# 322-316 RAP

One or more modules did not respond with completion message

#### Procedure

### 322-317 RAP

Job requires finishing capability that does not exist

#### Procedure

Switch the power off then on.

322-318 RAP

Job requires an IOT capability that does not exist

#### Procedure

# 322-319 RAP

IOT Integrity problem while printing a job.

#### This fault can result in two ways:

- 1. IOT Cycles down and back up 10 times without printing a page within the same job causing a 322-319-04.
- 2. Five consecutive 322-309-04 will also cause a 322-319-04. Please refer to fault code 322-309 RAP for more information

#### Procedure

Switch the power off then on.

# 322-320 RAP

SM Failed to install scan to file

#### Procedure

### 322-321-01 RAP

SM Failed to remove Scan to file

#### Procedure

Switch the power off then on.

**322-321-04 RAP** Proposal Response Time Out Error

**Procedure** Switch the power off then on.

### 322-322 RAP

SM Failed to install Lan FAX

#### Procedure

Switch the power off then on.

322-323 RAP SM Failed to remove LAN FAX

# Procedure

322-324 RAP

SM Failed to install Scan to E-mail

Procedure

Switch the power off then on.

**322-325 RAP** SM Failed to remove Scan to E-mail.

**Procedure** Switch the power off then on.

### 322-326 RAP

SM Failed to install IFAX

#### Procedure

Switch the power off then on.

**322-327 RAP** SM Failed to install IFAX

**Procedure** Switch the power off then on.

### 322-328 RAP

Incomplete System Information. Accounting Service Data is corrupt

#### Procedure

Switch the power off then on.

### 322-330-00 RAP

PagePack PIN (Supplies Plan Activation Code) Entry locked due to repeated incorrect PIN entry attempts.

### Procedure

TBD

# 322-330-01 RAP

List Jobs Request Timed out between UI and CCS

#### Procedure

Switch the power off then on.

### 322-330-02 RAP

List Jobs Request Timed out between CCS and SBC Print Service

#### Procedure

# 322-330-03 RAP

List Jobs Request Timed out between CCS and Scan to File Service

Procedure

Switch the power off then on.

### 322-330-04 RAP

List Jobs Request Timed out between CCS and Scan To Fax Service

#### Procedure

# 322-330-05 RAP

List Jobs Request Timed out between Queue Utility and DC Job Services

Procedure

Switch the power off then on.

### 322-330-06 RAP

SBC Scan to Distribution Service not responding to List Jobs RPC call

#### Procedure

# 322-332 Invalid Plan Conversion

Plan Conversion entry locked due to repeated incorrect entry attempts.

#### Procedure

TBD

### 322-335 RAP

SM Failed to install Job Based Accounting

#### Procedure

### 322-336 RAP

SM Failed to remove Job Based Accounting

#### Procedure

Switch the power off then on.

**322-337 RAP** SM Failed to install disk overwrite

**Procedure** Switch the power off then on.
322-338 RAP

SM Failed to remove Disk Overwrite

Procedure

Switch the power off then on.

**322-339 RAP** SM Failed to install Job Overwrite

**Procedure** Switch the power off then on.

## 322-340 RAP

SM Failed to remove Job Overwrite

### Procedure

Switch the power off then on.

## 322-350-1 RAP

Software detects non-valid Xerox SIM

### Procedure

There is a serial number problem, a copyright problem, or a SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-350-2 RAP

Software detects non-valid Xerox SIM

### Procedure

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-351-1 RAP

SIM Write Failure

### Procedure

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-351-2 RAP

SIM Write Failure

### Procedure

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-351-3 RAP

SIM Write Failure

### Procedure

There is a serial number problem, a copyright problem, or SIM problem. Try reinstalling the feature using the SIM located in the Tray 2 compartment on the right side of the tray. If the problem continues, call service support for corrective actions.

## 322-352-00 RAP

Serial Number Update Required.

## Initial Actions

Confirm that the machine serial number displayed on the UI (select Machine Status, Machine Information Screen) or the Configuration Sheet (if the UI is unavailable), and the serial number on the label on machine frame match. If they do not match please notify the FE/NTS.

Make sure PWBs and PJ connectors among IOT Drive, MCU, SBC, UI, and IIT are seated properly

Check dC122 for Communications faults (Chain 303). These can prevent serial number synchronization and must be addressed before proceeding

Enter diagnostics and select Clear Counters, Exit and Reboot at Service exit and exit diagnostics.

Have new SBC SD Card, MDM PWB, and IIT PWB available before trouble shooting problem.

### CAUTION

Do not swap the SD Card or PWBs between Machines.

### CAUTION

Do not remove the batteries from any PWBs while making voltage checks in this RAP.

### CAUTION

If any of the billing data PWBs is to be replaced (SBC SD Card, MDM PWB, IIT PWB) replace them one at a time, as directed in this procedure. Replacing them all at the same time will cause unrecoverable NVM corruption.

If failure persists, wait 12 minutes before powering off / powering on the machine.

## Procedure

Check the serial numbers on the UI (select Machine Status, Machine Information Screen) against the label on the machine frame and the Configuration Report. The serial numbers match.

#### Υ Ν

Power off the machine and disconnect the power cord. Contact the field engineer (RSE)/ NTS immediately.

More than one of the following have been replaced at the same time: SBC SD Card, MDM PWB, IIT PWB.

Υ Ν

Install the original PWB back into the machine, and reboot the machine. The 322-352 Fault Code is still present.

Υ Ν

If any other fault codes exist, go to the specific RAP for that fault code. Otherwise, go to Call Flow.

Perform the following steps in the order indicated:

Reseat the wire harness between the IIT PWB and SBC PWB.

Reseat each board and connectors on the MCU-PF PWB, MDM PWB, SBC PWB, SBC NVM PWB.

### The original boards are still available.

#### Υ Ν

Use dC132 to restore serial number and billing data integrity.

NOTE: It may take up to 24 hours to receive a password from ACAST

Install the original PWBs back into the machine, and perform the following steps in the order indicated:

- ٠ Reseat the wire harness between the IIT PWB and SBC PWB.
- ٠ Reseat each board and connectors on the MCU-PF PWB, MDM PWB, SBC PWB.

### The fault code 322-352 is still present.

Υ N

If other fault codes are present, go to the specific fault code RAP. If no other fault codes exist, go to Call Flow.

#### The red light on the MDM PWB is flashing. v

### Ν

Perform each activity until the fault is cleared.

- Replace the SBC PWB (PL 35.2). Have the MC load the latest software, and power ٠ on the machine.
- Replace the MDM PWB (PL 18.2A-7830/35, PL 18.2B-7845/55). Have the MC load the latest software and power on the machine.
- Replace the IIT/IPS PWB (PL 1.8). Have the MC load the latest software, and power • on the machine.
- Enter Diagnostics and refresh the screen at dC120, and dC122.

### Other fault codes are present.

Υ Ν

Go to Call Flow.

Go to the particular fault code RAP. If, after completing any remaining fault code RAPs, the 322-352 fault code is still present, repeat the 322-352 Rap one time. If the fault code still remains, contact the CTS, FE(RSE) or NTS for assistance.

Replace the MDM PWB (PL 18,2A-7830/35, PL 18,2B-7845/55) and have the MC load the latest software. If the fault code remains, contact the CTS, FE(RSE) or NTS for assistance.

## 322-352-01 RAP

Serial Update Required

**NOTE:** Password required to write serial number to the IOT and SBC

### Procedure

Contact service support to perform a dC132.

## 322-360 RAP

Service Plan Mismatch. Three way sync of Service Plan could not be resolved.

### Procedure

Contact service support.

## 322-370 RAP

XSA communication lost

### Procedure

Switch machine power off then on. Check network connections to XSA server and have System Administrator check configuration for XSA refer to System Administrator Guide.

## 322-371 RAP

Fax Application Registration Error

### Procedure

Switch machine power off and then on.

If the Fax Card is installed, go to OF 17-1 FAX Entry RAP.

## 322-372 RAP

Fax Service can not un-register.

### Procedure

If the Fax Card was removed from the machine, switch machine power off and then on.

If the Fax Card is installed, go to OF 17-1 FAX Entry RAP.

## 322-407 RAP

SM Failed To Install Embedded Fax

### Procedure

Switch machine power off then on. If problem still exists reseat Fax PWB.

## 322-417 RAP

SM Failed To Removal Embedded Fax

## Procedure

Switch machine power off then on.

# 322-419 RAP

SM Failed To Enable Embedded Fax

## Procedure

- 1. Switch machine power off then on.
- 2. Check Configuration Report, under Installed Options ensure Embedded Fax is installed (machine recognizes Fax Card). If the Embedded Fax does not show as installed on Configuration Report, switch off machine power and reseat the Fax Card (PL 35.2).
- 3. Switch on machine power and check the Configuration Report to see if the machine recognizes the Fax Card is installed and enabled. If enabled, return to Service Call Procedures. If not, continue with this RAP.
- 4. Check that Network Server Fax is disabled. Server Fax and Embedded Fax cannot be enabled at the same time.
- 5. Enter Tools mode GP 2. Select User Interface Settings and Service Enablements.
- 6. Select Server Fax and ensure Server Fax is disabled. If not, select Disable and Save.
- 7. Select Embedded Fax, enable Embedded Fax.
- 8. If problem still exists replace Fax Card (PL 35.2).
- 9. If problem still exists contact Service Support for assistance.

## 322-421 RAP

SM Failed To Disable Embedded Fax.

### Procedure

- 1. Switch machine power off then on.
- 2. Check Configuration Report, under installed Options see if Embedded Fax is disabled.
- 3. If not, Enter Tools Mode GP 2. Select User Interface Settings and Service Enablements.
- 4. Select Embedded Fax and select the **Disabled** button and **Save**.
- 5. Print a Configuration Report. Check report, Embedded Fax should now be disabled.
- 6. If disabled, return to Service Call Procedures.
- 7. If still enabled remove Fax Card from machine if it is still present PL 35.2.
- 8. Check new Configuration Report to ensure Embedded Fax is disabled.
- 9. If still enabled contact Service Support for assistance.

# 322-701 RAP

Module completion message received after IOT returned to standby

## Procedure

Switch the power off then on.

## 322-720 RAP

Service Registry Bad data / Corrupted.

### Procedure

TBD

## 322-721 RAP

Triple A gets no response from SRS

## Procedure

TBD

## 322-750-04 RAP

Output Device Configuration Mismatch

### Procedure

Check output device connections.

322-750-17 RAP Accessory Card Configuration Mismatch

Procedure

Check output device connections.

## 322-751 RAP

Paper Tray Configuration Mismatch

### Procedure

Switch the power off then on.

## 322-754 RAP

When the System detects the UI Configuration has changed during the Power On Sequence

### Procedure

Switch the power off then on.

## 322-755 RAP

RDT Configuration Mismatch

## Procedure

Check Output device connections.

## 324-923 Y Toner Cartridge Empty

BSD-ON: 9.3 Drum Life Control (Y,M)

Y Toner Cartridge Empty

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform dC991 Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive PL 8.1 or toner supply path.

## 324-924 M Toner Cartridge Empty

BSD-ON: 9.3 Drum Life Control (Y,M)

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform dC991 Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive PL 8.1 or toner supply path.

## 324-925 C Toner Cartridge Empty

BSD-ON: 9.4 Drum Life Control (C,K)

### Procedure

Replace toner cartridge.

If the machine declares Toner Empty state even when remaining toner is not low, perform dC991 Tone Up/Down first to see if Toner Empty state is canceled or not.

If not cancelled, check Dispense Motor drive PL 8.1 or toner supply path.

## 341-310 IM Logic Fail

BSD-ON: 3.5 PWB Communication (5 of 9)

IM (IOT Manager) software control error detected.

### Procedure

- 1. Turn the power OFF and ON.
- 2. Install the correct version of the IOT firmware.
- 3. Perform dC301, and initialize the IOT NVM (includes writing back the adjustment NVM).
- 4. If the problem persists, replace the MCU-PF PWB.
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)

# 341-316 IH Driver Interface Fault

BSD-ON: 10.4 Fusing Heat Control (2 of 3)

Interface error between the MDM PWB and the IH Driver has occurred (at the IH Driver).

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

## **Cause/Action**

Turn the power OFF and check the connection between the IH Driver  $\mbox{ P/J530}$  and the MDM PWB  $\mbox{ P/J414}$  for open circuit, short circuit, and poor contact.

If no problems are found, replace the IH Driver (PL 18.3).

## 341-317 MDM IH Interface Fault

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

Interface error between the MDM PWB and the IH Driver has occurred (at the MCU-IF).

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

#### Procedure

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the connection between the IH Driver PWB P/J530 and the Motor Driver Main PWB P/J414 for open circuit, short circuit, and poor contact.
- 3. If no problem is found, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 341-340 MDM NVM EEPROM Data Fault

BSD-ON: 3.6 PWB Communication (6 of 9)

NVM data error (valid data is not stored in a valid address).

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

#### Procedure

- 1. Turn the power OFF and ON.
- 2. Install the correct version of the IOT firmware.
- 3. Initialize the IOT NVM (includes writing back the adjustment NVM).
- 4. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)

## 341-341 MDM NVM EEPROM Access Fault

### BSD-ON: 3.6 PWB Communication (6 of 9)

NVM access error (The read values are different from those that were written, or there is I2C communication error).

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

### Procedure

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check for poor contact between the EEPROM and the Motor Driver Main PWB.
- 3. If no problem is found, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)

## 341-351 MDS Detect Fault

#### **BSD-ON: 3.11 PWB Detection**

The MDS PWB is not installed.

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the connector ( P452) between the MDM PWB and the MDS PWB for poor connection.
- 3. If no problems are found, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

## 341-368 MCU-SW Firmware Mismatch

#### BSD-ON: 3.6 PWB Communication (6 of 9)

The MCU-PF software for 7845/55 model is installed in a 7830/35 model. Or, the MCU-PF software for 7830/35 model is installed in a 7845/55 model.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Install the correct version of the IOT firmware.
- 3. Initialize the IOT NVM (includes writing back the adjustment NVM).
- 4. If the problem persists, replace the MCU-PF PWB.
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7830/35) (PL 18.2B)

## 341-369 MDM Type Mismatch

BSD-ON: 3.6 PWB Communication (6 of 9)

The MDM PWD for the 7845/55 model is installed in the 7830/35 model. Or, the MDM PWD for the 7845/55 model is installed in the 7830/35 model.

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

### **Cause/Action**

- 1. Turn the power OFF and replace with the correct MDM PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7830/35) (PL 18.2B)

## 341-371 Speed Update Required Fault

Procedure

Go to No-Run RAP

## 341-388 MK Logic Fail

BSD-ON: 3.6 PWB Communication (6 of 9)

A fatal error was detected in Marking control.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Install the correct version of the IOT firmware.
- 3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 341-391 Finisher Module Logic Fail

BSD-ON: 3.8 PWB Communication (8 of 9)

A fatal error was detected in the Finisher Module.

### **Initial Actions**

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

### **Cause/Action**

1. Turn the power OFF and ON.

- 2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Sub PWB P590 and the Finisher PWB for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector (P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
  - The power supply at the Finisher.

**NOTE:** For more information on the IOT connection PWB and power supply at the Finisher, refer to the Finisher Supplementary Service Manual.

- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

## 341-393 Motor Driver Sub PWB F1 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

**BSD-ON: 1.9 DC Power Distribution - Options** 

BSD-ON: 1.14 PWB Fuse Status

**BSD-ON: 4.2 Drive Unit Cooling** 

BSD-ON: 8.2 Tray 1 and MSI Paper Transportation

BSD-ON: 9.27 Waste Toner Disposal (1 of 2)

BSD-ON: 10.2 Fuser Drive Control (2 of 2)

BSD-ON: 10.5 Fusing Heat Control (3 of 3)

Fuse 1 on the Motor Driver Sub PWB has blown.

### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC supply line to the Motor Driver Sub PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Y N

Is the voltage between the Main LVPS  $\ \mbox{P/J510-3}$  (+) and the GND (-) +24VDC? Y  $\ \ \mbox{N}$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- P/J529-A13 (LVPS Front Fan)
- P/J529-B13 (C Exhaust Fan) (7845/55)
- P/J538-1, 2, 3, 4 (Takeaway Motor) 7845/55)
- P/J529-B5, B6, B7, B8 (Agitator Motor)
- P/J524-14, 15, 16, 17 (P/R Latch Motor)
- P/J529-B9 (IH Intake Fan)
- P/J524-10 (Fusing Unit Fan)

Is the resistance 5 Ohm or higher for each?

- Y N
  - Check the following:
  - The connections that are in earth fault (at 5 Ohm or lower) for short circuits.

Α

The target components for internal short circuits.

Check the connector ( P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for short circuit.

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

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 341-394 Motor Driver Sub PWB F2 Fuse Fail

**BSD-ON: 1.12 Interlocked Power** 

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 10.7 Fused Paper Exit 1

BSD-ON: 10.9 Fused Paper Exit 2 (1 of 2)

BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

Fuse 2 on the Motor Driver Sub PWB has blown.

#### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Sub PWB. Is the voltage between the Motor Driver Sub PWB P/J539-3 (+) and the GND (-) +24VDC?

#### Y N

Is the voltage between the Motor Driver Main PWB P/J540-3 (+) and the GND (-) +24VDC?

#### Y N

Are the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the GND (-) +24VDC?

Y N

Are the voltages between the Main LVPS  $\ \mbox{P/J510-4/5}$  (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS  $\mbox{P/J510}$  and the Motor Driver Main PWB  $\mbox{P/J520}$  for open circuit, short circuit, and poor contact.

Replace the Motor Driver Main PWB.

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

Turn OFF the power and check the connection between the Motor Driver Main PWB  $\,$  P/J540 and the Motor Driver Sub PWB  $\,$  P/J539 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- P/J524-3, 4 (Exit 1 OCT Motor)
- P/J524-A7 (Exit Gate Solenoid)

- P/J522-A3, A4 (Exit 2 OCT Motor)
- P/J522-A9 (Face Up Gate Solenoid)

#### Is the resistance 5 Ohm or higher for each?

Y N

- Check the following:
- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

#### Replace the Motor Driver Sub PWB.

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

## 341-397 (7845/55) Motor Driver Main PWB F4 Fuse Fail

BSD-ON: 1.7 DC Power Generation (5 of 5)

#### **BSD-ON: 1.9 DC Power Distribution - Options**

#### BSD-ON: 1.14 PWB Fuse Status

Fuse 4 on the Motor Driver Main PWB has blown.

### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J536-7 (+) and the GND (-) +24VDC?

```
Y N
```

Is the voltage between the Sub LVPS  $\,$  P/J504-3 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Sub LVPS P/J504 and the Motor Driver Main PWB P/J536 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J593 from the Motor Driver Main PWB and measure the resistance between P/J593-1 and the GND. Is the resistance 5 Ohm or higher?

- Y N
  - Check the following:
  - The connection between the Motor Driver Main PWB P/J593-1 and the HCF for short circuit (earth fault).
  - The HCF for internal short circuit.

**NOTE:** For more information on the circuits at the HCF, refer to the HCF Supplementary Service Manual.

Disconnect connector P/J540 from the Motor Driver Main PWB and measure the resistance between P/J540-1 and the GND. Is the resistance 5 Ohm or higher?

```
Y N
```

Disconnect connector P592 from the Motor Driver Sub PWB and measure the resistance between P592-B2 and the GND. Is the resistance 5 Ohm or higher?

#### Y N

Check the connection between the Motor Driver Sub PWB  $\,$  P592-B2 and the Tray Module PWB  $\,$  P/J541-10 for short circuit (earth fault).

If no problem is found, replace the Tray Module PWB. (PL 10.9, PL 11.17)

Check the connection between the Motor Driver Main PWB P/J540-1 and the Motor Driver Sub PWB P/J539-1 for short circuit (earth fault).

If no problem is found replace the Motor Driver Sub PWB.

• MDS PWB (7830/35) (PL 18.2A)

• MDS PWB (7845/55) (PL 18.2B)

Replace the Motor Driver Main PWB.

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

## 341-398 Motor Driver Main PWB F5 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

BSD-ON: 1.14 PWB Fuse Status

**BSD-ON: 8.2 Tray 1 and MSI Paper Transportation** 

BSD-ON: 9.12 Toner Suction and Marking Module

**BSD-ON: 9.22 First BTR Contact/Retract Control** 

**BSD-ON: 9.29 Rear Bottom Fan Control** 

Fuse 5 on the Motor Driver Main PWB has blown.

### **Initial Actions**

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

### Procedure

Y N

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Is the voltage between the Main LVPS  $\,$  P/J510-3 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J417 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J417-B14 (Takeaway Clutch) (7830/35)
- P/J417-A1 (Suction Fan) (7845/55)
- P/J417-A10 (Marking Fan) (7845/55)
- P/J417-A10 (HV Fan) (7830/35)
- P/J417-A8 (1st BTR Contact/Retract Clutch)
- P/J417-B11 (Rear Bottom Fan)

#### Is the resistance 5 Ohm or higher for each?

- Y N
  - Check the following:
  - The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
  - The target components for internal short circuits.

Replace the Motor Driver Main PWB.

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

## 341-399 Motor Driver Main PWB F6 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 9.23 ADC Patch and Environment Sensing

BSD-ON: 9.25 Drum Cleaning

BSD-ON: 9.28 Waste Toner Disposal (2 of 2)

BSD-ON: 10.3 Fusing Heat Control (1 of 3)

BSD-ON: 10.5 Fusing Heat Control (3 of 3)

Fuse 6 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Y N

Is the voltage between the Main LVPS  $\,$  P/J510-3 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- P/J415-B6 (MOB ADC Sensor Assembly)
- P/J411-A5, A7, B5, B7 (Erase Lamp (Y, M, C, K))
- P/J416-6 (Process 2 Fan)
- P/J431-11 (Fusing Unit Assembly)
- P/J414-B1 (IH Exhaust Fan) (7845/55)

### Is the resistance 5 Ohm or higher for each?

- Y N
  - Check the following:
  - The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
  - The target components for internal short circuits.

**NOTE:** If the MOB ADC Sensor Assembly was replaced, change the value of NVM [760-240] (TMA Gain Flag) to '1' after the replacement.

Replace the Motor Driver Main PWB.

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

## 342-319 (7830/35) Drum Y, M, C Motor Fail

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

The Drum/Deve Drive Motor (Y, M, C) revolution failure was detected.

### **Initial Actions**

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

## Procedure

Remove the Drum Unit (Y, M, C) and the Developer (Y, M, C), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y, M, C)). **Does the Drum/Deve Drive Motor (Y, M, C) rotate?** 

### Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum/Deve Drive Motor (Y, M, C).
- The connection between the Motor Driver Main PWB P/J527 and the Drum/Deve Drive Motor (Y, M, C) P/J247 for open circuit, short circuit, and poor contact.

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

- Drum/Deve Drive Motor (Y, M, C) (PL 3.3A)
- Motor Driver Main PWB (PL 18.2A)

Turn OFF the power and remove the Drum Unit (Y, M, C) and the Developer (Y, M, C). Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y, M, C)). **Does the Drum/Deve Drive Motor (Y, M, C) rotate?** 

#### Y N

Check the Drum Unit (Y, M, C) and the Developer (Y, M, C) for loading

Turn OFF the power and check the connection between the Drum/Deve Drive Motor (Y, M, C) P/J247-8 and the Motor Driver Main PWB P/J527-A9 for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. (PL 18.2A)

## 342-319 (7845/55) Drum Y, M, C Motor Fail

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

The Drum Drive Motor (Y,M,C) revolution failure was detected.

## **Initial Actions**

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

## Procedure

Υ

Remove the Drum Unit (Y, M, C) and cheat the Front Cover Interlock Switch. Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y, M, C)). **Does** the Drum Drive Motor (Y, M, C) rotate?

## N

- Check the following:
- The power supplies (+5VDC, +24VDC) of the Drum Drive Motor (Y, M, C).
- The connection between the Motor Driver Main PWB P/J527 and the Drum Drive Motor (Y, M, C) P/J247 for open circuit, short circuit, and poor contact.

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

- Drum Drive Motor (Y, M, C) (PL 3.3B)
- Motor Driver Main PWB (PL 18.2B)

Turn OFF the power and remove the Drum Unit (Y, M, C).

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y, M, C)). Does the Drum Drive Motor (Y, M, C) rotate?

Check the Drum Unit (Y, M, C) for loading.

Turn OFF the power and check the connection between the Drum Drive Motor (Y, M, C) P/J247-8 and the Motor Driver Main PWB P/J527-A9 for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. (PL 18.2B)

## 342-320 (7830/35) Drum Y Motor Fail

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

The Drum/Deve Drive Motor (Y) revolution failure was detected.

### **Initial Actions**

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

### Procedure

Remove the Drum Unit (Y) and the Developer (Y), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y)). **Does** the Drum/Deve Drive Motor (Y) rotate?

#### Y N

Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum/Deve Drive Motor (Y).
- The connection between the Motor Driver Main PWB P/J527 and the Drum/Deve Drive Motor (Y) P/J247 for open circuit, short circuit, and poor contact.

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

- Drum/Deve Drive Motor (Y) (PL 3.3A)
- Motor Driver Main PWB (PL 18.2A)

Turn OFF the power and remove the Drum Unit (Y) and the Developer (Y).

Turn ON the power and turn ON DC330 [091-030] (Drum/Deve Drive Motor (Y)). **Does** the Drum/Deve Drive Motor (Y) rotate?

#### Y N

Check the Drum Unit (Y) and the Developer (Y) for loading

Turn OFF the power and check the connection between the Drum/Deve Drive Motor (Y) P/ J247-8 and the Motor Driver Main PWB P/J527-A9 for open circuit, short circuit, and poor contact.

If no problem is found, replace the Motor Driver Main PWB. (PL 18.2A)

## 342-320 (7845/55) Drum Y Motor Fail

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

The Drum Drive Motor (Y) revolution failure was detected.

### **Initial Actions**

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

### Procedure

Remove the Drum Unit (Y) and cheat the Front Cover Interlock Switch. Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y)). **Does the Drum** 

#### Drive Motor (Y) rotate? Y N

N Check the following:

- The power supplies (+5VDC, +24VDC) of the Drum Drive Motor (Y).
- The connection between the Motor Driver Main PWB P/J527 and the Drum Drive Motor (Y) P/J247 for open circuit, short circuit, and poor contact.

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

- Drum Drive Motor (Y) (PL 3.3B)
- Motor Driver Main PWB (PL 18.2B)

Turn OFF the power and remove the Drum Unit (Y).

Turn ON the power and turn ON DC330 [091-030] (Drum Drive Motor (Y)). Does the Drum Drive Motor (Y) rotate? Y N

Check the Drum Unit (Y) for loading.

Turn OFF the power and check the connection between the Drum Drive Motor (Y) P/J247-8 and the Motor Driver Main PWB P/J527-A9 for open circuit, short circuit, and poor contact. If no problem is found, replace the Motor Driver Main PWB. (PL 18.2B)

## 342-323 Drum K Motor Fail

### BSD-ON: 9.2 Drum/Developer Drive Control (K)

The Drum/Developer Drive Motor revolution failure was detected.

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

### Procedure

Turn the power OFF and remove the Front Cover. Remove the Drum (K) and the Developer (K) and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON dC330 [091-036] (Drum/Developer Drive Motor K). **Does the Drum/Developer Drive Motor (K) rotate?** 

Y N

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J526-1 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55)

Is the voltage between the MDM PWB P/J527-A8 (+) and the GND (-) +5VDC?

Y N

Go to +5VDC Power RAP.

Turn the power OFF and check the connections between the MDM PWB P/J526 and the Drum/Developer Drive Motor (K) P/J240, as well as between the MDM PWB P/J527 and the Drum/Developer Drive Motor (K) P/J241 for open circuits, short circuits, and poor contacts.

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

- Drum/Developer Drive Motor (K) (7830/35) (PL 3.3A)
- Drum/Developer Drive Motor (K) (7845/55) (PL 3.3B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Install the Drum (K), the Developer (K), and the Front Cover.

Turn the power ON and enter the Diag mode. Turn ON dC330 [091-036] (Drum/Developer Drive Motor K). Does the Drum/Developer Drive Motor (K) rotate?

Y N

Check the Drum (K) and the Developer (K) for loading

Press the Stop button and turn the power OFF. Check the connection between the Drum/ Developer Drive Motor (K)  $\,$  P/J241-8 and the MDM PWB  $\,$  P/J527-A1 for open circuit, short circuit, and poor contact.

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

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

## 342-324 IBT Motor Fail

BSD-ON: 9.20 IBT Belt Drive Control

The IBT Drive Motor revolution failure was detected.

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

### Procedure

Turn the power OFF. Remove the IBT Unit and cheat the L/H Cover Interlock Switch. Turn the power ON and enter the Diag mode. Turn ON dC330 [094-010] (IBT Drive Motor). **Does the IBT Drive Motor rotate?** 

#### Y N

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J526-5 (+) and the GND (-) +24VDC?

#### Y N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Is the voltage between the MDM PWB P/J527-B8 (+) and the GND (-) +5VDC?

Go to +5VDC Power RAP.

Turn the power OFF and check the connections between the MDM PWB P/J526 and the IBT Drive Motor P/J248, as well as between the MDM PWB P/J527 and the IBT Drive Motor P/J249 for open circuits, short circuits, and poor contacts.

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

- IBT Drive Motor (7830/35) (PL 3.3A)
- IBT Drive Motor (7845/55) (PL 3.3B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Install the IBT Unit and close the L/H Cover. Turn the power ON and enter the Diag mode. Turn ON dC330 [094-010] (IBT Drive Motor). **Does the IBT Drive Motor rotate?** 

Y N

Check the IBT Drive for loading. Also, check the IBT for loading due to blockage in the IBT Waste Toner Collection Auger

Press the Stop button and turn the power OFF. Check the connection between the IBT Drive Motor P/J249-8 and the MDM PWB P/J527-B1 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

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

## 342-325 Main Motor Fail

**BSD-ON: 4.1 Main Drive Control** 

#### **BSD-ON: 8.2 Tray 1 and MSI Paper Transportation**

**BSD-ON: 8.6 Registration** 

The Main Drive Motor revolution failure was detected.

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

### Procedure

Turn the power OFF. Remove the IBT Unit and cheat the L/H Cover Interlock Switch. Turn the power ON and enter the Diag mode. Turn ON dC330 [042-002] (Main Drive Motor). Does the Main Drive Motor rotate?

#### Υ Ν

Υ

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J535-1 (+) and the GND (-) +24VDC?

Ν Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Is the voltage between the MDM PWB P/J525-A16 (+) and the GND (-) +5VDC?

Υ Ν

Go to +5VDC Power RAP.

Turn the power OFF and check the connections between the MDM PWB and the Main Driver Motor PWB for open circuits, short circuits, and poor contacts.

- 7830/35
  - MDM PWB P/J535 and the Main Drive Motor P/J244 \_
  - MDM PWB P/J525 and the Main Drive Motor P/J245 \_
- 7845/55
  - MDM PWB P/J535 and the Main Drive Motor P/J244 \_
  - \_ MDM PWB - P/J525 and the Main Drive Motor - P/J245

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

- Main Drive Motor (PL 3.2) ٠
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Install the IBT Unit and close the L/H Cover. Turn the power ON and enter the Diag mode. Turn ON dC330 [042-002] (Main Drive Motor). Does the Main Drive Motor rotate?

Υ Ν

Check the 2nd BTR for loading and the Drive Gear for revolution failure or damage

Press the Stop button.

- 7830/35
  - Turn ON dC330 [042-002] (Main Drive Motor), then turn ON dC330 [077-001] (Takeaway Clutch).

- 7845/55
  - Turn ON dC330 [042-002] (Main Drive Motor), then turn ON dC330 [077-050] (Takeaway Motor).

#### Does the Main Drive Motor rotate? Υ

### N

Check the MSI Takeaway Roll and the Tray 1 Takeaway Roll for loading and the Drive Gear for revolution failure or damage

Press the Stop button. Turn ON dC330 [042-002] (Main Drive Motor), then turn ON dC330 [077-002] (Registration Clutch). Does the Main Drive Motor rotate?

#### Y N

Check the Registration Roll for loading and the Drive Gear for revolution failure or damade

Press the Stop button and turn the power OFF. Check the connection between the Main Drive Motor and the MDM PWB for open circuit, short circuit, and poor contact.

7830/35 •

MDM PWB P/J525-A9 and Main Drive Motor P/J245-8

7845/55 .

MDM PWB P/J525-A9 and Main Drive Motor P/J245-8

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

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

## 342-330 (7845/55) IH Exhaust Fan Fail

### BSD-ON: 10.5 Fusing Heat Control (3 of 3)

The IH Exhaust Fan error was detected.

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MDS PWB and open the Chassis Assembly. Rotate the IH Exhaust Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-017] (IH Exhaust Fan). Is the IH Exhaust Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J414-B1 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).

Turn the power OFF and check the connection between the IH Exhaust Fan P/J225 and the MDM PWB P/J414 for open circuit, short circuit, and poor contact.

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

- IH Exhaust Fan (7845/55) (PL 4.3B)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the IH Exhaust Fan P/J225-3 and the MDM PWB P/J414-B3 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB (PL 18.2B).

## 342-332 IH Intake Fan Fail

BSD-ON: 10.5 Fusing Heat Control (3 of 3)

The IH Intake Fan error was detected.

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

### Procedure

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

Rotate the IH Intake Fan manually to check for loading.

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

#### Y N

When the Diag is turned ON, is the voltage between the MDS PWB P/J529-B9 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDS PWB.

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

Turn the power OFF and check the connection between the IH Intake Fan P/J226 and the MDS PWB P/J529 for open circuit, short circuit, and poor contact.

- If no problems are found, replace the following parts in sequence:
- IH Intake Fan (PL 4.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the IH Intake Fan P/J226-2 and the MDS PWB P/J529-B11 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 342-334 (7830/35) IBT Fan Fail

BSD-ON:

### Procedure

TBD

## 342-335 (7845/55) Process 1 Fan Fail

BSD-ON: 9.28 Waste Toner Disposal (2 of 2)

The Process 1 Fan error was detected.

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-022] (Process 1 Fan). Is the Process 1 Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J537-4 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).

Turn the power OFF and check the connection between the Process 1 Fan P/J228 and the MDM PWB P/J537 for open circuit, short circuit, and poor contact.

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

- Process 1 Fan (PL 4.2B)
- MDM PWB (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Process 1 Fan P/J228-2 and the MDM PWB P/J537-5 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB (PL 18.2B).

## 342-336 Process 2 Fan Fail

### BSD-ON: 9.28 Waste Toner Disposal (2 of 2)

The Process 2 Fan error was detected.

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-013] (Process 2 Fan). Is the Process 2 Fan rotating?

#### Y N

When the Diag is turned ON, is the voltage between the MDM PWB  $\,$  P/J416-6 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB.

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

Turn the power OFF and check the connection between the Process 2 Fan P/J238 and the MDM PWB P/J416 for open circuit, short circuit, and poor contact.

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

- Process 2 Fan (7830/35) (PL 4.2A)
- Process 2 Fan (7845/55) (PL 4.2B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Process 2 Fan P/J238-2 and the MDMPWB P/J416-7 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

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

## 342-338 LVPS Front Fan Fail

BSD-ON: 1.11 LVPS Cooling

An abnormality was detected in the LVPS Front Fan.

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

### Procedure

Turn the power OFF and remove the Right Cover and Rear Upper Cover. Disconnect and reconnect P/J239. Rotate the Front LVPS Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-014] (Front LVPS Fan). Is the Front LVPS Fan rotating?

#### Y N

When the Diag is turned ON, is the voltage between the MDS PWB P/J529-A13 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDS PWB.

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

Turn the power OFF and check the connection between the Front LVPS Fan P/J239 and the MDS PWB P/J529 for open circuit, short circuit, and poor contact.

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

- Front LVPS Fan (PL 4.1)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Front LVPS Fan P/J239-2 and the MDS PWB P/J529-A14 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

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

## 342-340 (7845/55) Cartridge Fan Fail

BSD-ON: 9.19 Toner Cartridge Cooling (7845/55)

The Cartridge Fan error was detected.

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

## Procedure

Turn the power OFF and remove the Rear Upper Cover. Open the Front Cover and cheat the Front Cover Interlock Switch.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-021] (Cartridge Fan). Is the Cartridge Fan rotating?

#### Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J416-3 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).

Turn the power OFF and check the connection between the Cartridge Fan P/J619 and the MDM PWB P/J416 for open circuit, short circuit, and poor contact.

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

- Cartridge Fan (PL 4.2B)
- MDM PWB (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Cartridge Fan P/J619-2 and the MDM PWB P/J416-4 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB (PL 18.2B).

## 342-341 Marking/HV Fan Fail

**BSD-ON: 9.12 Toner Suction and Marking Module** 

The HV Fan (7830/35) or Marking Fan (7845/55) error was detected.

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

### Procedure

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

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-012] (HVPS/M Fan). Is the HVPS Fan or the Marking Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J417-A10(+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB.

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

Turn the power OFF and check the connection between the Marking/HV Fan P/J235 and the MDM PWB P/J417 for open circuit, short circuit, and poor contact.

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

- HV Fan (7830/35) (PL 4.3A)
- Marking Fan (7845/55) (PL 4.3B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF.

Check the connection between the Marking/HV Fan P/J235-3 and the MDM PWB P/J417-A12 for open circuit, short circuit, and poor contact.

If no problems are found, replace the MDM PWB.

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

## 342-342 (7845/55) Suction Fan Fail

#### **BSD-ON: 9.12 Toner Suction and Marking Module**

The Suction Fan error was detected.

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MDS PWB and open the Chassis Assembly. Rotate the Suction Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-020] (Suction Fan). Is the Suction Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J417-A1 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).

Turn the power OFF and check the connection between the Suction Fan P/J231 and the MDM PWB P/J417 for open circuit, short circuit, and poor contact.

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

- Suction Fan (PL 18.2B)
- MDM PWB (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Suction Fan P/J231-2 and the MDM PWB P/J417-A3 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB (PL 18.2B).

## 342-343 Rear Bottom Fan Fail

BSD-ON: 9.29 Rear Bottom Fan Control

The Bottom Fan error was detected.

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MDS PWB and open the Chassis Assembly. Rotate the Bottom Fan manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-015] (Bottom Fan). Is the Bottom Fan rotating?

#### Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J417-B11 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB.

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

Turn the power OFF and check the connection between the Bottom Fan P/J234 and the MDM PWB P/J417 for open circuit, short circuit, and poor contact.

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

- Bottom Fan (7830/35) (PL 4.3A)
- Bottom Fan (7845/55) (PL 4.3B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the connection between the Bottom Fan P/J234-2 and the MDM PWB P/J417-B12 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
# 342-344 (7845/55) C Exhaust Fan Fail

BSD-ON: 4.2 Drive Unit Cooling

The C Exhaust Fan error was detected.

## **Initial Actions**

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

## **Cause/Action**

Check the following:

- The C Exhaust Fan (dC330 [042-024]) for operation failure. (PL 4.3B)
- The C Exhaust Fan for foreign substances.

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

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 342-400 Deodorant Filter Life End

The Deodorant Filter must be replaced.

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

## **Cause/Action**

Replace the Deodorant Filter and clear the dC135 HFSI Counter [954-860].

## 342-604 NOHAD Temperature Sensor Fail

**BSD-ON: 9.23 ADC Patch and Environment Sensing** 

The NOHAD Thermistor error was detected.

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

## **Cause/Action**

Turn the power OFF and check the connection between the NOHAD Thermistor P/J130 and the MDM PWB P/J414 for open circuit, short circuit, and poor contact. Also check whether there is poor connection or foreign substances at the detection section of the NOHAD Thermistor.

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

- NOHAD Thermistor (7830/35) (PL 4.4A)
- NOHAD Thermistor (7845/55) (PL 4.4B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 342-605 (7830/35) Suction Drive Fan Fail

**BSD-ON: 9.12 Toner Suction and Marking Module** 

The Drive Fan error was detected.

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

## Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MDS PWB and open the Chassis Assembly. Rotate the Drive Fan manually to check for load-ing.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-020] (Drive Fan). Is the Drive Fan rotating?

Y N

When the Diag is turned ON, is the voltage between the MDM PWB P/J417-A1 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2A).

Turn the power OFF and check the connection between the Drive Fan P/J231 and the MDM PWB P/J417 for open circuit, short circuit, and poor contact.

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

- Drive Fan (PL 18.2A)
- MDM PWB (PL 18.2A)

Press the Stop button and turn the power OFF. Check the connection between the Drive Fan P/J231-2 and the MDM PWB P/J417-A3 for open circuit, short circuit, and poor contact. If no problems are found, replace the MDM PWB (PL 18.2A).

# 342-609 LH Fan Fail

### BSD-ON: 9.30 LH Fan Control (Option)

The LH Fan 1-3 error was detected.

- **NOTE:** •The LH Fan is an option Fan to prevent paper blocking. If the LH Fan is installed, set NVM (741-140) to "1".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power OFF. Open the L/H Cover and cheat the L/H Cover Interlock Switch. Disconnect and reconnect the LH Fan PWB P/J453, P/J454, LH Fan 2 P/J217, and LH Fan 3 P/J218. Rotate the LH Fan 1-3 manually to check for loading.

Turn the power ON and enter the Diag mode. Turn ON dC330 [042-026] (LH Fan). Are the LH Fan 1-3 rotating?

#### Y N

Press the Stop button. Is the voltage between the LH Fan PWB P/J450-5 (+) and the GND (-) +24VDC?

Y N

Remove the Rear Upper Cover. Is the voltage between the MDM PWB P/J523-B13 (+) and the GND (-) +24VDC?

Y N

Turn the power OFF and replace the MDM PWB (PL 18.2B).PL18.2b

Turn the power OFF and check the connection between the MDM PWB P/J523 and the LH Fan PWB P/J450 for open circuit, short circuit, and poor contact.

Turn ON dC330 [042-026] (LH Fan) and measure the following voltages:

- Between the LH Fan PWB P/J453-1 (+) and the GND (-) (LH Fan 1)
- Between the LH Fan PWB P/J453-1 (+) and the GND (-) (LH Fan 2)
- Between the LH Fan PWB P/J453-5 (+) and the GND (-) (LH Fan 3)

### Is the voltage +24VDC?

Y N

Turn the power OFF and check the connection between the MDM PWB P/J523 and the LH Fan PWB P/J450 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- LH Fan PWB
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Check the following connectors for open circuits, short circuits, and poor contacts.

- Between the LH Fan PWB P/J454 and the LH Fan 2 P/J217
- Between the LH Fan PWB P/J454 and the LH Fan 3 J218

If no problems are found, replace the LH Fan (1-3).

Press the Stop button. Turn the power OFF and check the following:

Status Indicator RAPs 342-609

- Check the connection between the LH Fan 2 P/J217-3 and the LH Fan PWB P/J454-3 for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan 3 P/J218-3 and the LH Fan PWB P/J454-7 for open circuit, short circuit, and poor contact.
- Check the connection between the LH Fan PWB P/J450-2 and the MDM PWB P/J523-B16 for open circuit, short circuit, and poor contact.

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

- LH Fan PWB
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Go to the 345-349 RAP.

## 345-310 Image Ready NG

BSD-ON: 3.5 PWB Communication (5 of 9)

The Controller image preparation failure was detected.

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the connectors (J335, J451, and J1) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
- 3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - SBC PWB (7830/35) (PL 18.2A)
  - SBC PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - BP PWB (7830/35) (PL 18.2A)
  - BP PWB (7845/55) (PL 18.2B)

## 345-311 Controller Communication Fault

BSD-ON: 3.5 PWB Communication (5 of 9)

Communication error between SBC PWB and MCU-PF PWB was detected.

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the connectors (J335, J451, and J1) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
- 3. If the problem persists, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - SBC PWB (7830/35) (PL 18.2A)
  - SBC PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - BP PWB (7830/35) (PL 18.2A)
  - BP PWB (7845/55) (PL 18.2B)

## 345-320 Motor Driver Main PWB F8 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 7.8 Tray 1 Paper Stacking

BSD-ON: 9.28 Waste Toner Disposal (2 of 2)

Fuse 8 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC? Y N

Is the voltage between the Main LVPS  $\ P/J510\mathchar`-3$  (+) and the GND (-) +24VDC? Y  $\ N$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- P/J528-B1, B2, B3, B4 (Tray 1 Feed/Lift Up Motor)
- P/J537-4 (Process 1 Fan) (7845/55)

### Is the resistance 5 Ohm or higher for each?

Y N

- Check the following:
- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

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

# 345-343 Motor Driver Main PWB F9 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

BSD-ON: 1.14 PWB Fuse Status

### **BSD-ON: 8.6 Registration**

Fuse 9 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Y N

Is the voltage between the Main LVPS  $\,$  P/J510-3 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS  $\ PJJ510$  and the Motor Driver Main PWB  $\ PJJ520$  for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J523 from the Motor Driver Main PWB and measure the resistance between P/J523-A7 and the GND. Is the resistance 5 Ohm or higher? Y N

- N Check the following:
- The connection between the Motor Driver Main PWB P/J523-A7 and the Regi Clutch P/J260-2 for short circuit (earth fault).
- The Regi Clutch for internal short circuit (PL 15.2)

Replace the Motor Driver Main PWB.

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

## 345-345 Motor Driver Sub PWB F3 Fuse Fail

**BSD-ON: 1.10 DC Power Distribution - HCF Option** 

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 9.17 Toner Dispense Control (Y,M)

BSD-ON: 9.18 Toner Dispense Control (C,K)

BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

Fuse 3 on the Motor Driver Sub PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Sub PWB. Is the voltage between the Motor Driver Sub PWB P/J539-3 (+) and the GND (-) +24VDC?

Are	e the voltages between the Motor Driver Main PWB P/J520-4/5 (+) and the
<b>GN</b> Y Rej •	ID (-) +24VDC?
	Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC?
	Y N
	Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .
	Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.
	place the Motor Driver Main PWB.
	MDM PWB (7830/35) (PL 18.2A)
	MDM PWB (7845/55) (PL 18.2B)
OF	F the power and check the connection between the Motor Driver Main PWB P/

Turn OFF the power. Disconnect the following connectors from the Motor Driver Sub PWB and measure the resistance between each connector terminal and the GND.

- P/J529-A1, A2, A3, A4 (Toner Dispense Motor (Y))
- P/J529-A5, A6, A7, A8 (Toner Dispense Motor (M))

- P/J529-A9, A10, A11, A12 (Toner Dispense Motor (C))
- P/J529-B1, B2, B3, B4 (Toner Dispense Motor (K))
- P/J529-B4, B5, B6, B7 (Exit 2 Drive Motor)

# Is the resistance 5 Ohm or higher for each? Y N

N Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Sub PWB.

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

## 345-346 (7830/35) Motor Driver Main PWB F3 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

BSD-ON: 1.8 IIT DC Power Distribution

**BSD-ON: 1.9 DC Power Distribution - Options** 

### BSD-ON: 1.14 PWB Fuse Status

Fuse 3 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Y N

Is the voltage between the Main LVPS P/J510-3 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7830/35).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J593 from the Motor Driver Main PWB and measure the resistance between P/J593-1 and the GND. Is the resistance 5 Ohm or higher?

Y N

Check the following:

- The connection between the Motor Driver Main PWB P/J593-1 and the HCF for short circuit (earth fault).
- The HCF for internal short circuit.

**NOTE:** For more information on the circuits at the HCF, refer to the HCF Supplementary Service Manual.

Disconnect connector P/J540 from the Motor Driver Main PWB and measure the resistance between P/J540-1 and the GND. Is the resistance 5 Ohm or higher?

```
Y N
```

Disconnect connector P592 from the Motor Driver Sub PWB and measure the resistance between P592-B2 and the GND. Is the resistance 5 Ohm or higher? Y N

N Check the connection between the Motor Driver Sub PWB P592-B2 and the Tray Module PWB P/J541-10 (3T) or P/J541-10 (TT) for short circuit (earth fault). If no problem is found, replace the Tray Module PWB. (PL 10.9, PL 11.17, [PL 12.5], [PL 20.7])

Check the connection between the Motor Driver Main PWB P/J540-1 and the Motor Driver Sub PWB P/J539-1 for short circuit (earth fault).

- If no problem is found, replace the Motor Driver Sub PWB.
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Replace the Motor Driver Main PWB.

Δ

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

# 345-347 Motor Driver Main PWB F10 Fuse Fail

BSD-ON: 1.12 Interlocked Power

#### BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 9.19 Toner Cartridge Cooling (7845/55)

Fuse 10 on the Motor Driver Main PWB has blown.

### Initial Actions

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk +24VDC supply line to the Motor Driver Main PWB. Are the voltages between the Motor Driver Main PWB P/ J520-4/5 (+) and the GND (-) +24VDC?

Υ Ν

Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC? Υ N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

#### This is a 7830/35 machine.

Ν

This is a 7845/55 machine.

Turn OFF the power. Disconnect connector P/J416 from the Motor Driver Main PWB and measure the resistance between P/J416-3 and the GND. Is the resistance 5 Ohm or higher?

### Y N

Check the following:

- The connection between the Motor Driver Main PWB P/J416-3 and the Cartridge Fan P/J619 for short circuit (earth fault).
- The Cartridge Fan for internal short circuit. ٠

Replace the Motor Driver Main PWB. (PL 18.2B)

Replace the Motor Driver Main PWB. (PL 18.2A)

# 345-348 Motor Driver Main PWB F11 Fuse Fail

**BSD-ON: 1.12 Interlocked Power** 

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 9.7 Charging and Exposure (7845/55) (1 of 2)

BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD-ON: 9.13 Development (Y)

BSD-ON: 9.21 First Transfer

BSD-ON: 10.8 Fused Paper Exit 2 (1 of 4)

Fuse 11 on the Motor Driver Main PWB has blown.

### Initial Actions

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. Are the voltages between the Motor Driver Main PWB P/ J520-4/5 (+) and the GND (-) +24VDC?

Y N

Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC? Υ Ν

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power, Disconnect the following connectors from the Motor Driver Main PWB and measure the resistance between each connector terminal and the GND.

- ٠ P/J412-A13 (HVPS (BCR)) (7845/55)
- P/J412-A13 (HVPS (Deve/BCR)) (7830/35)
- P/J412-A12 (HVPS (Deve)) (7845/55) .
- P/J412-A12 (HVPS (Deve/BCR)) (7830/35)
- P/J414-A15 (HVPS (1st/2nd BTR)) .
- P/J523-B7, B8, B9, B10 (Duplex Motor)

#### Is the resistance 5 Ohm or higher for each?

Ν

- Check the following: The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits. ٠

### Replace the Motor Driver Main PWB.

MDM PWB (7830/35) (PL 18.2A)

Υ

•

## 345-349 Motor Driver Main PWB F13 Fuse Fail

**BSD-ON: 1.12 Interlocked Power** 

BSD-ON: 1.14 PWB Fuse Status

#### BSD-ON: 10.8 Fused Paper Exit 2 (1 of 4)

Fuse 13 on the Motor Driver Main PWB has blown.

#### Initial Actions

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

#### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. Are the voltages between the Motor Driver Main PWB P/ J520-4/5 (+) and the GND (-) +24VDC?

```
Y N
```

Are the voltages between the Main LVPS P/J510-4/5 (+) and the GND (-) +24VDC? Y Ν

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J523 from the Motor Driver Main PWB and measure the resistance between P/J523-B11 and the GND. Is the resistance 5 Ohm or higher? Y

- Ν
- Check the following:
- The connection between the Motor Driver Main PWB P/J523-B11 and the DC Heater P/J170-1 for short circuit (earth fault).
- The DC Heater for internal short circuit. •

Replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A) ٠
- ٠ MDM PWB (7845/55) (PL 18.2B)

# 345-353 Motor Driver Main PWB F14 Fuse Fail

BSD-ON: 1.12 Interlocked Power

BSD-ON: 1.14 PWB Fuse Status

**BSD-ON: 4.1 Main Drive Control** 

BSD-ON: 10.1 Fuser Drive Control (1 of 2)

Fuse 14 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Y N

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. Are the voltages between the Motor Driver Main PWB P/ J520-4/5 (+) and the GND (-) +24VDC?

Are the voltages between the Main LVPS  $\,$  P/J510-4/5 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J535 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J535-1 (Main Drive Motor)
- P/J535-3 (Fusing Unit Drive Motor)

### Is the resistance 5 Ohm or higher for each?

Y N

- Check the following:
- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the Motor Driver Main PWB.

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

# 345-354 Motor Driver Main PWB F15 Fuse Fail

**BSD-ON: 1.12 Interlocked Power** 

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

BSD-ON: 9.2 Drum/Developer Drive Control (K)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

BSD-ON: 9.20 IBT Belt Drive Control

Fuse 15 on the Motor Driver Main PWB has blown.

## **Initial Actions**

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

## Procedure

Remove the Rear Upper Cover. Turn ON the power and check the Intlk\_+24VDC supply line to the Motor Driver Main PWB. Are the voltages between the Motor Driver Main PWB P/ J520-4/5 (+) and the GND (-) +24VDC?

#### Y N

Are the voltages between the Main LVPS  $\,$  P/J510-4/5 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J526 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J526-3 (Drum Drive Motor (Y, M, C)) (7845/55)
- P/J526-3 (Drum/Deve Drive Motor (Y, M, C)) (7830/35)
- P/J526-1 (Drum/Deve Drive Motor (K))
- P/J526-7 (Deve Drive Motor (Y, M, C)) (7845/55)
- P/J526-5 (IBT Drive Motor)

### Is the resistance 5 Ohm or higher for each?

- Y N Check the following:
  - The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
  - The target components for internal short circuits.

### Replace the Motor Driver Main PWB.

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

# 345-355 Motor Driver Main PWB F16 Fuse Fail

**BSD-ON: 1.12 Interlocked Power** 

#### BSD-ON: 1.14 PWB Fuse Status

Fuse 16 on the Motor Driver Main PWB has blown.

## **Cause/Action**

The Intlk\_+24VDC\_F16 power line is not being used (no load). If this failure has occurred, replace the Motor Driver Main PWB. (MDM PWB (7830/35) (PL 18.2A) or MDM PWB (7845/55) (PL 18.2B))

## 345-356 Motor Driver Main PWB F17 Fuse Fail

BSD-ON: 1.3 DC Power Generation (1 of 5)

**BSD-ON: 1.9 DC Power Distribution - Options** 

**BSD-ON: 1.12 Interlocked Power** 

**BSD-ON: 1.14 PWB Fuse Status** 

Fuse 17 on the Motor Driver Main PWB has blown.

### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +5VDC\_Stby supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J521-3 (+) and the GND (-) +5VDC? Y N

Y N

Go to +5VDC Power.

Turn OFF the power and check the connection between the Main LVPS  $\ PJ502$  and the Motor Driver Main PWB  $\ PJ521$  for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P592 from the Motor Driver Sub PWB and measure the resistance between P592-B8 and the GND. Is the resistance 5 Ohm or higher?

Y N

Check the following:

- The connection between the Motor Driver Sub PWB P592-B8 and the Fax (G4 or Mini) for short circuit (earth fault).
- The Fax (G4 or Mini) for internal short circuit.

Check the connector (P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for short circuit.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 345-357 Motor Driver Main PWB F22 Fuse Fail

BSD-ON: 1.4 DC Power Generation (2 of 5)

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 1.14 PWB Fuse Status

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

BSD-ON: 6.9 LPH Control (K)

Fuse 22 on the Motor Driver Main PWB has blown.

### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +5VDC supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-2 (+) and the GND (-) +5VDC?

#### Y N

Is the voltage between the Main LVPS P/J510-2 (+) and the GND (-) +5VDC?

N Go to +5VDC Power

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector P/J532 from the Motor Driver Main PWB and measure the resistances between the following terminals and the GND.

- P/J532-2, 4 (LPH (Y))
- P/J532-6, 8 (LPH (M))
- P/J532-10, 12 (LPH (C))
- P/J532-14, 16 (LPH (K))

Is the resistance 5 Ohm or higher for each?

### Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

### Replace the Motor Driver Main PWB.

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

## 345-358 Motor Driver Main PWB F23 Fuse Fail

BSD-ON: 1.6 DC Power Generation (4 of 5)

### BSD-ON: 1.14 PWB Fuse Status

Fuse 23 on the Motor Driver Main PWB has blown.

### **Initial Actions**

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

### Procedure

Remove the Rear Upper Cover. Turn ON the power and check the +24VDC\_SQ supply line to the Motor Driver Main PWB. Is the voltage between the Motor Driver Main PWB P/J520-8 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55) .

Turn OFF the power and check the connection between the Main LVPS P/J510 and the Motor Driver Main PWB P/J520 for open circuit, short circuit, and poor contact.

Turn OFF the power. Disconnect connector  $\ P/J540$  from the Motor Driver Main PWB and measure the resistance between  $\ P/J540\text{-}5$  and the GND. Is the resistance 5 Ohm or higher?

Y N

Disconnect connector P591 from the Motor Driver Sub PWB and measure the resistance between P591-1 and the GND. Is the resistance 5 Ohm or higher?

- Y N
  - Check the following:
  - The connection between the Motor Driver Sub PWB P591-1 and the Finisher for short circuit (earth fault).
  - The Finisher for internal short circuit.

**NOTE:** For more information on the circuits at the Finisher, refer to the Finisher Supplementary Service Manual.

Check the connection between the Motor Driver Main PWB P/J540-5 and the Motor Driver Sub PWB P/J539-5 for short circuit (earth fault).

If no problem is found replace the Motor Driver Sub PWB.

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

### Replace the Motor Driver Main PWB.

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

## 345-359 EEPROM Config Mismatch

### BSD-ON: 3.6 PWB Communication (6 of 9)

The EEPROM for 7845/55 model is installed in a 7830/35 model. Or, the EEPROM for 7830/35 model is installed in a 7845/55 model.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace with the correct EEPROM.
- 3. Initialize the IOT NVM (includes writing back the adjustment NVM).
- 4. If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 345-368 SBM Initialize Fail

BSD-ON: 3.6 PWB Communication (6 of 9)

Communication cannot be established via the serial bus between the MSOC and the HASIC.

### **Initial Actions**

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 345-369 SBM Master Communication Fail

#### BSD-ON: 3.6 PWB Communication (6 of 9)

A communication error has occurred at the MSOC side via the serial bus between the MSOC and the HASIC.

### **Initial Actions**

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 345-370 LPH Power On Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

BSD-ON: 6.9 LPH Control (K)

Power source error during LPH batch download complete verification or MDM error. (Fail has occurred in multiple LPHs.)

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

#### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

Y N

Go to +5VDC Power .

#### Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Ν

Υ

Turn the power OFF and disconnect the MDM PWB connector P/J532.

Measure the resistance between the MDM PWB  $\,$  P/J532-2/6/10/14 and the Frame. Is the resistance infinite for all?

Y N

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

#### Replace the MDM PWB.

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

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-350 RAP ٠
- M color: 361-351 RAP
- C color: 361-352 RAP ٠
- K color: 361-353 RAP ٠

## 345-371 LPH Download Data Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

BSD-ON: 6.9 LPH Control (K)

DELSOL register error during the LPH batch download complete verification or connector error. (Fail has occurred in multiple LPHs.)

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

Υ N

Go to +5VDC Power.

Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC? Υ

Ν

Turn the power OFF and disconnect the MDM PWB connector P/J532.

Measure the resistance between the MDM PWB P/J532-2/6/10/14 and the Frame. Is the resistance infinite for all?

Υ Ν

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

#### Replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A) ٠
- MDM PWB (7845/55) (PL 18.2B)

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561 ٠
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559 .
- Between MDM PWB P/J554 and LPH Rear PWB P/J558 ٠

- MDM PWB (7830/35) (PL 18.2A) ٠
- ٠ MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A) ٠
- MCU-PF PWB (7845/55) (PL 18.2B) ٠

If the problem persists, refer to dC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-354 RAP
- M color: 361-355 RAP
- C color: 361-356 RAP
- K color: 361-357 RAP

## 345-372 LPH Mismatch Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

BSD-ON: 6.9 LPH Control (K)

The model numbers of multiple LPH Units do not match.

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

### Procedure

Υ

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

N Go to +5VDC Power.

Is the voltage between the MDM PWB  $\,$  P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?  $\,$  Y  $\,$  N  $\,$ 

Turn the power OFF and disconnect the MDM PWB connector P/J532. Measure the resistance between the MDM PWB P/J532-2/6/10/14 and the Frame. Is the resistance infinite for all?

Y N

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

Replace the MDM PWB.

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

Check that the values in dC131 [749-152 to 160] (LPH Specific Code) do not contain corruption, etc. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)
- LPH Unit (Y, M, C, K) (PL 2.1)

## 345-373 LPH Read Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

### BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and LPH Units (data read error from multiple LPHs)

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

N Go to +5VDC Power.

Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N

Υ

Turn the power OFF and disconnect the MDM PWB connector  $\mbox{P/J532}.$  Measure the resistance between the MDM PWB  $\mbox{P/J532-2/6/10/14}$  and the Frame. Is the resistance infinite for all?

Y N

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

Replace the MDM PWB.

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

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558
- If no problems are found, replace the following in sequence:
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-362 RAP
- M color: 361-363 RAP
- C color: 361-364 RAP
- K color: 361-365 RAP

## 345-374 LPH Write Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

### BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and LPH Units (data write error to multiple LPHs).

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

N Go to +5VDC Power.

Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N

Υ

Turn the power OFF and disconnect the MDM PWB connector P/J532. Measure the resistance between the MDM PWB P/J532-2/6/10/14 and the Frame. Is the resistance infinite for all?

Y N

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

Replace the MDM PWB.

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

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558
- If no problems are found, replace the following in sequence:
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to DC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-366 RAP
- M color: 361-367 RAP
- C color: 361-368 RAP
- K color: 361-369 RAP

# 345-375 LPH Act Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

### BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and multiple LPH Units (error in the communication IC or cable).

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

### Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Check the timing at when this Fail occurs. **Does this Fail occur right after the power is turned ON?** 

Y N

If the failure occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum (Y, M, C, K) for improper installation

### Is the voltage between the MDM PWB P/J532-4/8/12/16 (+) and the GND (-) +5VDC?

Y N

Go to +5VDC Power .

### Is the voltage between the MDM PWB P/J532-2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N

Turn the power OFF and disconnect the MDM PWB connector  $\mbox{P/J532}.$  Measure the resistance between the MDM PWB  $\mbox{P/J532-2/6/10/14}$  and the Frame. Is the resistance infinite for all?

Y N

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

Replace the MDM PWB.

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

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558

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

• MDM PWB (7830/35) (PL 18.2A)

- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to dC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-370 RAP
- M color: 361-371 RAP
- C color: 361-372 RAP
- K color: 361-373 RAP

## 345-376 LPH PLL Lock Fault Multi

BSD-ON: 1.5 DC Power Generation (3 of 5)

BSD-ON: 6.6 LPH Control (Y)

BSD-ON: 6.7 LPH Control (M)

BSD-ON: 6.8 LPH Control (C)

### BSD-ON: 6.9 LPH Control (K)

LPH PLL lock mechanism failure (clock failures in multiple LPHs).

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

## Procedure

Turn the power OFF and remove the Rear Upper Cover. Turn the power ON. Is the voltage between the MDM PWB P/J532 -4/8/12/16 (+) and the GND (-) +5VDC?

N Go to +5VDC Power.

Is the voltage between the MDM PWB P/J532 -2/6/10/14 (+) and the GND (-) +1.8VDC?

Y N

Υ

Turn the power OFF and disconnect the MDM PWB connector P/J532. Measure the resistance between the MDM PWB P/J532 -2/6/10/14 and the Frame. Is the resistance infinite for all?

Y N

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

Replace the MDM PWB.

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

Turn the power OFF and check the following connectors for open circuit, short circuit, and poor connection.

- Between MDM PWB P/J557 and LPH Rear PWB P/J561
- Between MDM PWB P/J556 and LPH Rear PWB P/J560
- Between MDM PWB P/J555 and LPH Rear PWB P/J559
- Between MDM PWB P/J554 and LPH Rear PWB P/J558
- If no problems are found, replace the following in sequence:
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

If the problem persists, refer to dC131 [749-001] (LPH Fail Color) to go to the appropriate RAP. (1: Error has occurred at Y, 2: Error has occurred at M, 4: Error has occurred at C, 8: Error has occurred at K)

- Y color: 361-386 RAP
- M color: 361-387 RAP
- C color: 361-388 RAP
- K color: 361-389 RAP

## 345-377 SBM Slave Communication Fail

### BSD-ON: 3.6 PWB Communication (6 of 9)

A communication error has occurred at the HASIC side via the serial bus between the MSOC and the HASIC.

### **Initial Actions**

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- 3. If no problem is found, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)

## 345-378 MCU-PF Config Mismatch

BSD-ON: 3.6 PWB Communication (6 of 9)

The MCU-PF settings differ from the expected values.

### **Initial Actions**

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 345-379 Motor Driver Main/Sub PWB Type Mismatch

### BSD-ON: 3.11 PWB Detection

The Motor Driver Main PWB or Motor Driver Sub PWB for 7830/35 model is installed in a 7845/ 55 model. Or, the Motor Driver Main PWB or Motor Driver Sub PWB for 7830/35 model is installed in a 7845/55 model.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace with the correct Motor Driver Main PWB or Motor Driver Sub PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)

# 347-211 Exit 1 OCT Home Fault

### BSD-ON: 10.7 Fused Paper Exit 1

After the Exit 1 OCT Motor has run for the specified operation time, the Exit 1 OCT Home Position Sensor does not turn ON.

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

### Initial Actions

- Check the Exit 1 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 1 OCT Home Position Sensor, for damage and check the OCT Chute for improper installation.

### Procedure

Turn the power ON and enter the Diag mode.

Turn ON dC330 [077-109]. Move the OCT Chute manually to block/clear the light path to the Exit 1 OCT Home Position Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-1 RAP to check the Exit 1 OCT Home Position Sensor.

Press the Stop button. Turn ON dC330 [077-040] and dC330 [077-041] alternately. Does the OCT 1 Chute move forward and backward? Y N

Is the voltage between the MDS PWB  $\,$  P/J524-3/4 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn the power OFF and check the Exit 1 OCT Motor Gear for blockage and the OCT Chute for damage. Also, check the connection between the MDS PWB P/J524 and the Exit 1 OCT Motor J271 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Exit 1 OCT Motor (PL 17.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Replace the MD PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 347-212 Exit 2 OCT Home Fault

BSD-ON:BSD 10.9 Fused Paper Exit 2 (2 of 4)

After the Exit 2 OCT Motor has run for the specified operation time, the Exit 2 OCT Home Position Sensor does not turn ON.

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

### **Initial Actions**

- Check the Exit 2 OCT Home Position Sensor for improper installation, contamination, and etc.
- Check the Shielding Board, which blocks the detection section of the Exit 2 OCT Home Position Sensor, for damage and check the OCT 2 Chute for improper installation.

### Procedure

Turn the power ON and enter the Diag mode.

Turn ON dC330 [077-110]. Move the OCT 2 Chute manually to block/clear the light path to the Exit 2 OCT Home Position Sensor. **Does the display change between High/Low?** 

Y N

Use Transmissive Sensor RAP OF 99-2 to check the Exit 2 OCT Home Position Sensor.

Press the Stop button. Turn ON dC330 [077-045] and dC330 [077-046] alternately. Does the OCT 2 Chute move forward and backward?

Y N

Is the voltage between the MDM PWB P/J522-A3/A4 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55).

Turn the power OFF and check the Exit 2 OCT Motor Gear for blockage and the OCT 2 Chute for damage. Also, check the connection between the MDS PWB P/J522 and the Exit 2 OCT Motor P/J266 for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

- Exit 2 OCT Motor (PL 17.5)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF. Replace the MD PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

## 347-213 Finisher Type Mismatch

BSD-ON: 3.8 PWB Communication (8 of 9)

#### BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

System detect incorrect finisher type.

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

### Cause/Action

1. Power down the machine.

**NOTE:** The Integrated Finisher is only applicable to the 7830/35 machines. If an Integrated Finisher is installed on a 7845/55 machine, perform the following:

- a. Disconnect the Finisher
- b. Power up the machine
- c. Go to dC131 and set NVM location 742-869 to 0.
- d. Exit diagnostics
- 2. Turn the power OFF and connect a Finisher that is supported by this machine.
  - a. Power up the machine
  - b. Verify the fault has cleared

## 347-310 Finisher Communication Fault

BSD-ON: 3.8 PWB Communication (8 of 9)

#### BSD-ON: 12.9 Office Finisher LX Communication (IOT-Finisher)

Communication failure between the Finisher and the IOT was detected.

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

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Sub PWB P590 and the Finisher PWB for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector (P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
  - The power supply at the Finisher.

#### NOTE:

For more information on the PWB and power supply at the Finisher, refer to the Finisher Supplementary Service Manual.

- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

## 347-320 ALL Destination Tray Broken

BSD-ON: 3.7 PWB Communication (7 of 9)

All Trays connected to the IOT have become unusable.

## **Cause/Action**

Enter dC122 Fault History. Go to the RAP of the affected Output Tray.

# 361-350 LPH Power On Fault Y

### BSD-ON: 6.6 LPH Control (Y)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

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

### **Cause/Action**

Check the following:

- The connection between the Motor Driver Main PWB P/J532 and the LPH Rear PWB (Y) P/J553 for open circuit and poor contact.
- The connection between the LPH Header PWB (Y) P/J565 and the Driver PWB (Y) P/ J573 for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB P/J557-28/27 and the LPH Rear PWB (Y) P/J561-1/2)
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/ J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-351 LPH Power On Fault M

BSD-ON: 6.7 LPH Control (M)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

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

### **Cause/Action**

Check the following:

- The connection between the Motor Driver Main PWB P/J532 and the LPH Rear PWB (M) P/J552 for open circuit and poor contact.
- The connection between the LPH Header PWB (M) P/J564 and the Driver PWB (M) P/ J572 for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB P/J556-28/27 and the LPH Rear PWB (M) P/J560-1/2)
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/ J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-352 LPH Power On Fault C

### BSD-ON: 6.8 LPH Control (C)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

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

### **Cause/Action**

Check the following:

- The connection between the Motor Driver Main PWB P/J532 and the LPH Rear PWB (C) P/J551 for open circuit and poor contact.
- The connection between the LPH Header PWB (C) P/J563 and the Driver PWB (C) P/ J571 for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB P/J555-28/27 and the LPH Rear PWB (C) P/J559-1/2)
- The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/ J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-353 LPH Power On Fault K

BSD-ON: 6.9 LPH Control (K)

Power source system error during LPH batch download complete verification or poor connection of Flat Cable.

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

### **Cause/Action**

Check the following:

- The connection between the Motor Driver Main PWB P/J532 and the LPH Rear PWB (K) P/J550 for open circuit and poor contact.
- The connection between the LPH Header PWB (K) P/J562 and the Driver PWB (K) P/ J570 for open circuit and poor contact (connection within the LPH Unit)
- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact. (Especially, check for short circuits between the Motor Driver Main PWB P/J554-28/27 and the LPH Rear PWB (K) P/J558-1/2)
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/ J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-354 LPH Download Data Fault Y

#### BSD-ON: 6.6 LPH Control (Y)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

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

### **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/ J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The EEPROM data of the LPH Unit (Y) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

## 361-355 LPH Download Data Fault M

BSD-ON: 6.7 LPH Control (M)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

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

### **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/ J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The EEPROM data of the LPH Unit (M) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-356 LPH Download Data Fault C

### BSD-ON: 6.8 LPH Control (C)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

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

### **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/ J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The EEPROM data of the LPH Unit (C) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.
- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-357 LPH Download Data Fault K

BSD-ON: 6.9 LPH Control (K)

DELSOL register data error during the LPH batch download complete verification, download error, or connector error.

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

### **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/ J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The EEPROM data of the LPH Unit (K) for corruption. (Check using DC402 (LPH EEPROM Self Test))
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.
- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-358 LPH Mismatch Fault Y

### BSD-ON: 6.6 LPH Control (Y)

The model number of the LPH Unit (Y) does not match.

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

## **Cause/Action**

Check the following:

- Check that the values in dC131 [749-157] (LPH Specific Code 4Y) do not contain corruption, etc.
- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.

If no problems are found, replace the LPH Unit (Y) (PL 2.1).

## 361-359 LPH Mismatch Fault M

BSD-ON: 6.7 LPH Control (M)

The model number of the LPH Unit (M) does not match.

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

## **Cause/Action**

Check the following:

- Check that the values in dC131 [749-158] (LPH Specific Code 4M) do not contain corruption, etc.
- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.

If no problems are found, replace the LPH Unit (M) (PL 2.1).

# 361-360 LPH Mismatch Fault C

### BSD-ON: 6.8 LPH Control (C)

The model number of the LPH Unit (C) does not match.

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

## **Cause/Action**

Check the following:

- Check that the values in dC131 [749-159] (LPH Specific Code 4C) do not contain corruption, etc.
- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.

If no problems are found, replace the LPH Unit (C) (PL 2.1).

## 361-361 LPH Mismatch Fault K

BSD-ON: 6.9 LPH Control (K)

The model number of the LPH Unit (K) does not match.

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

### **Cause/Action**

Check the following:

- Check that the values in dC131 [749-160] (LPH Specific Code 4K) do not contain corruption, etc.
- Use Software Versions (dC108) to verify the most current software is installed.
  - If a software upgrade is necessary go to GP 9.

If no problems are found, replace the LPH Unit (K) (PL 2.1).

# 361-362 LPH Read Fault Y

### BSD-ON: 6.6 LPH Control (Y)

Communication error between MCU-PF and LPH Unit (Y) (data read error from LPH)

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

## **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/ J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-363 LPH Read Fault M

BSD-ON: 6.7 LPH Control (M)

Communication error between MCU-PF and LPH Unit (M) (data read error from LPH)

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

## Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/ J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-364 LPH Read Fault C

### BSD-ON: 6.8 LPH Control (C)

Communication error between MCU-PF and LPH Unit (C) (data read error from LPH)

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

## **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/ J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-365 LPH Read Fault K

BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and LPH Unit (K) (data read error from LPH)

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

### Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/ J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-366 LPH Write Fault Y

### BSD-ON: 6.6 LPH Control (Y)

Communication error between MCU-PF and LPH Unit (Y) (data write error to LPH).

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

## Procedure

Refer to NVM [749-046] (Write Retry Data Y). Is the value of NVM [749-046] = '0'?

- Y N
  - Check the following:
  - The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
  - The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
  - The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
  - The LPH Unit (Y) for improper installation
  - The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
  - The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB P/J532.

# 361-367 LPH Write Fault M

BSD-ON: 6.7 LPH Control (M)

Communication error between MCU-PF and LPH Unit (M) (data write error to LPH).

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

### Procedure

Refer to NVM [749-047] (Write Retry Data M). Is the value of NVM [749-047] = '0'? Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB P/J532.
# 361-368 LPH Write Fault C

## BSD-ON: 6.8 LPH Control (C)

Communication error between MCU-PF and LPH Unit (C) (data write error to LPH).

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

## Procedure

Refer to NVM [749-048] (Write Retry Data C). Is the value of NVM [749-048] = '0'?

- Y N
  - Check the following:
  - The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact.
  - The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
  - The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
  - The LPH Unit (C) for improper installation
  - The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
  - The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB P/J532.

# 361-369 LPH Write Fault K

BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and LPH Unit (K) (data write error to LPH).

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

## Procedure

Refer to NVM [749-049] (Write Retry Data K). Is the value of NVM [749-049] = '0'? Y N

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.

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

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Check the power lines (+5VDC, +1.8VDC) from the Motor Driver Main PWB P/J532.

# 361-370 LPH Act Fault Y

### BSD-ON: 6.6 LPH Control (Y)

Communication error between MCU-PF and LPH Unit (Y) (error in the communication IC or cable).

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

## Procedure

Check the timing at when this Fail occurs. Does this Fail occur right after the power is turned ON?

#### Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/ J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- If no problem is found, replace the following parts in sequence:
- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-371 LPH Act Fault M

BSD-ON: 6.7 LPH Control (M)

Communication error between MCU-PF and LPH Unit (M) (error in the communication IC or cable).

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

## Procedure

Check the timing at when this Fail occurs. Does this Fail occur right after the power is turned ON?

#### Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak.Check the Drum Unit (Y, M, C, K) for improper installation

#### Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/ J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- If no problem is found, replace the following parts in sequence:
- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-372 LPH Act Fault C

### BSD-ON: 6.8 LPH Control (C)

Communication error between MCU-PF and LPH Unit (C) (error in the communication IC or cable).

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

## Procedure

Check the timing at when this Fail occurs. Does this Fail occur right after the power is turned ON?

#### Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/ J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- If no problem is found, replace the following parts in sequence:
- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-373 LPH Act Fault K

BSD-ON: 6.9 LPH Control (K)

Communication error between MCU-PF and LPH Unit (K) (error in the communication IC or cable).

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

## Procedure

Check the timing at when this Fail occurs. Does this Fail occur right after the power is turned ON?

#### Y N

If the Fail occurs when the Drum is rotating, it is very likely due to the noise caused by high voltage leak. Check the Drum Unit (Y, M, C, K) for improper installation

#### Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/ J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation
- The Drum Unit (Y, M, C, K) for improper installation (affected by the noises caused by improper installation)
- The connector (J1) between the MCU-PF PWB and Motor Driver Main PWB for poor contact, damage, and foreign substances.
- If no problem is found, replace the following parts in sequence:
- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- Replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

# 361-374 LPH Chip Fault Y

#### BSD-ON: 6.6 LPH Control (Y)

Open circuit detected in LPH Unit (Y) (open circuit between DELSOL and SLED).

- NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power • Switch.

#### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 has occurred. Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?

```
Υ
Ν
```

```
Replace the LPH Unit (Y). (PL 2.1)
```

Go to the appropriate FIP

# 361-375 LPH Chip Fault M

BSD-ON: 6.7 LPH Control (M)

Open circuit detected in LPH Unit (M) (open circuit between DELSOL and SLED).

- NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 has occurred. Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred? Ν

```
Υ
```

Replace the LPH Unit (M). (PL 2.1)

Go to the appropriate FIP

# 361-376 LPH Chip Fault C

#### BSD-ON: 6.8 LPH Control (C)

Open circuit detected in LPH Unit (C) (open circuit between DELSOL and SLED).

- NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power • Switch.

#### Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 has occurred. Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred?

Υ Ν

Replace the LPH Unit (C). (PL 2.1)

Go to the appropriate FIP

# 361-377 LPH Chip Fault K

BSD-ON: 6.9 LPH Control (K)

Open circuit detected in LPH Unit (K) (open circuit between DELSOL and SLED).

- NOTE: •Because this Fail is detected for each color at every cycle-up, perform at least four jobs after turning the power OFF and ON.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether any Fail related to connection failure of the Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 has occurred. Has any Chain No. 061 Fail (other than LPH Chip Fail) occurred? Ν

Υ

Replace the LPH Unit (K). (PL 2.1)

Go to the appropriate FIP

# 361-378 LPH Ltrg Fault Y

### BSD-ON: 6.6 LPH Control (Y)

The Ltrg signal (image synchronization signal) failure was detected.

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

## **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J557 and the LPH Rear PWB (Y) P/J561 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (Y) P/J569 and the Driver PWB (Y) P/ J577 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J581) between the LPH Rear PWB (Y) and the LPH Header PWB (Y) for poor contact, damage, and foreign substances.
- The LPH Unit (Y) for improper installation

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

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 361-379 LPH Ltrg Fault M

BSD-ON: 6.7 LPH Control (M)

The Ltrg signal (image synchronization signal) failure was detected.

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

## Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J556 and the LPH Rear PWB (M) P/J560 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (M) P/J568 and the Driver PWB (M) P/ J576 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J580) between the LPH Rear PWB (M) and the LPH Header PWB (M) for poor contact, damage, and foreign substances.
- The LPH Unit (M) for improper installation

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

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 361-384 LPH Ltrg Fault C

### BSD-ON: 6.8 LPH Control (C)

The Ltrg signal (image synchronization signal) failure was detected.

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

## **Cause/Action**

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J555 and the LPH Rear PWB (C) P/J559 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (C) P/J567 and the Driver PWB (C) P/ J575 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J579) between the LPH Rear PWB (C) and the LPH Header PWB (C) for poor contact, damage, and foreign substances.
- The LPH Unit (C) for improper installation

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

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 361-385 LPH Ltrg Fault K

BSD-ON: 6.9 LPH Control (K)

The Ltrg signal (image synchronization signal) failure was detected.

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

## Cause/Action

Check the following:

- The Flat Cable between the Motor Driver Main PWB P/J554 and the LPH Rear PWB (K) P/J558 for open circuit, short circuit, and poor contact.
- The Flat Cable between the LPH Header PWB (K) P/J566 and the Driver PWB (K) P/ J574 for open circuit, short circuit, and poor contact (connection within the LPH Unit)
- The connector ( P/J578) between the LPH Rear PWB (K) and the LPH Header PWB (K) for poor contact, damage, and foreign substances.
- The LPH Unit (K) for improper installation

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

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 361-386 LPH PLL Lock Fault Y

#### BSD-ON: 6.6 LPH Control (Y)

LPH PLL lock mechanism failure (LPH clock failure).

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

## Procedure

Enter DC122 Fail History. Check whether 361-354 LPH Download Fail Y has occurred. Has Fail 361-354 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-354 RAP.

# 361-387 LPH PLL Lock Fault M

BSD-ON: 6.7 LPH Control (M)

LPH PLL lock mechanism failure (LPH clock failure).

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

#### Procedure

Enter DC122 Fail History. Check whether 361-355 LPH Download Fail M has occurred. Has Fail 361-355 occurred?

#### Y N

Replace the following parts in sequence:

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-355 RAP.

# 361-388 LPH PLL Lock Fault C

### BSD-ON: 6.8 LPH Control (C)

LPH PLL lock mechanism failure (LPH clock failure).

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

## Procedure

Enter DC122 Fail History. Check whether 361-356 LPH Download Fail C has occurred. Has Fail 361-356 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-356 RAP.

# 361-389 LPH PLL Lock Fault K

BSD-ON: 6.9 LPH Control (K)

LPH PLL lock mechanism failure (LPH clock failure).

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

### Procedure

Enter DC122 Fail History. Check whether 361-357 LPH Download Fail K has occurred. Has Fail 361-357 occurred?

#### YN

Replace the following parts in sequence:

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-357 RAP.

# 361-390 LPH FFC Connect Positive Fault Y

#### BSD-ON: 6.6 LPH Control (Y)

The image data (Y) cannot be received normally from the MCU.

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

## Procedure

Enter DC122 Fail History. Check whether 361-374 LPH Chip Fail Y has occurred. **Has Fail 361-374 occurred?** 

Y N

Replace the following parts in sequence:

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-374 RAP.

## 361-391 LPH FFC Connect Positive Fault M

BSD-ON: 6.7 LPH Control (M)

The image data (M) cannot be received normally from the MCU.

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

### Procedure

Enter DC122 Fail History. Check whether 361-375 LPH Chip Fail M has occurred. **Has** Fail 361-375 occurred?

#### Y N

Replace the following parts in sequence:

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-375 RAP.

# 361-392 LPH FFC Connect Positive Fault C

#### BSD-ON: 6.8 LPH Control (C)

The image data (C) cannot be received normally from the MCU.

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

## Procedure

Enter DC122 Fail History. Check whether 361-376 LPH Chip Fail C has occurred. **Has Fail 361-376 occurred?** 

Y N

Replace the following parts in sequence:

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-376 RAP.

## 361-393 LPH FFC Connect Positive Fault K

BSD-ON: 6.9 LPH Control (K)

The image data (K) cannot be received normally from the MCU.

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

#### Procedure

Enter DC122 Fail History. Check whether 361-377 LPH Chip Fail K has occurred. **Has** Fail 361-377 occurred?

#### Y N

Replace the following parts in sequence:

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-377 RAP.

# 361-394 LPH FFC Connect Negative Fault Y

#### BSD-ON: 6.6 LPH Control (Y)

The image data (Y) cannot be received normally from the MCU.

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

## Procedure

Enter DC122 Fail History. Check whether 361-374 LPH Chip Fail Y has occurred. Has **Fail 361-374 occurred?** 

Y N

Replace the following parts in sequence:

- LPH Unit (Y) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (Y) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-374 RAP.

## 361-395 LPH FFC Connect Negative Fault M

BSD-ON: 6.7 LPH Control (M)

The image data (M) cannot be received normally from the MCU.

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

## **Initial Actions**

Reseat the Drum Modules. Power off, then on if the fault does not clear.

## Procedure

Enter DC122 Fail History. Check whether 361-375 LPH Chip Fail M has occurred. **Has** Fail 361-375 occurred?

Y N

Replace the following parts in sequence:

- LPH Unit (M) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (M) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-375 RAP.

# 361-396 LPH FFC Connect Negative Fault C

### BSD-ON: 6.8 LPH Control (C)

The image data (C) cannot be received normally from the MCU.

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

## Procedure

Enter DC122 Fail History. Check whether 361-376 LPH Chip Fail C has occurred. Has **Fail 361-376 occurred?** 

Y N

Replace the following parts in sequence:

- LPH Unit (C) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (C) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-376 RAP.

## 361-397 LPH FFC Connect Negative Fault K

BSD-ON: 6.9 LPH Control (K)

The image data (K) cannot be received normally from the MCU.

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

#### Procedure

Enter DC122 Fail History. Check whether 361-377 LPH Chip Fail K has occurred. **Has** Fail 361-377 occurred?

#### Y N

Replace the following parts in sequence:

- LPH Unit (K) (PL 2.1)
- LPH Cable Assembly (PL 2.2)
- LPH Rear PWB (K) (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Proceed to the 361-377 RAP.

## 361-398 ASIC 1 Initialize Fault

## BSD-ON: 3.6 PWB Communication (MCU-PF - Motor Driver Main PWB)

The ASIC 1 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC (image processing chip for Y and M) that is installed on the Motor Driver Main PWB.

## Procedure

Enter DC122 Fail History and check whether any other LPH related Fail has occurred. **Has any Chain No. 061 Fail occurred?** 

Y N

Replace the following parts in sequence:

- LPH Cable Assembly (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Go to the appropriate FIP

## 361-399 ASIC 2 Initialize Fault

BSD-ON: 3.6 PWB Communication (MCU-PF - Motor Driver Main PWB)

The ASIC 2 initialization error was detected. This is an error where the CPU is unable to access the memory and the register of the ASIC (image processing chip for C and K) that is installed on the Motor Driver Main PWB.

## Procedure

Enter DC122 Fail History and check whether any other LPH related Fail has occurred. **Has any Chain No. 061 Fail occurred?** 

YN

- Replace the following parts in sequence:
- LPH Cable Assembly (PL 2.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MCU-PF PWB (7830/35) (PL 18.2A)
- MCU-PF PWB (7845/55) (PL 18.2B)

Go to the appropriate FIP

# 361-610 Bitz1 CONTIF Fault

#### BSD-ON: 3.6 PWB Communication (MCU-PF - Motor Driver Main PWB)

The Valid signal for Y color or M color was detected to be in error. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, did not turn ON at the given timing or turns ON at an unscheduled timing. (this Fail is a hidden failure and it is registered only in the History.)

## **Initial Actions**

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the connectors (J335, P451, and J1) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
- 3. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - BP PWB (7830/35) (PL 18.2A)
  - BP PWB (7845/55) (PL 18.2B)

# 361-611 Bitz2 CONTIF Fault

#### BSD-ON: 3.6 PWB Communication (MCU-PF - Motor Driver Main PWB)

The Valid signal for C color or K color was detected to be in error. The Valid signal, which is sent from the Controller to indicate the valid range of the fast scan, did not turn ON at the given timing or turns ON at an unscheduled timing. (this Fail is a hidden failure and it is registered only in the History.)

## **Initial Actions**

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the connectors (J335, P451, and J1) between the SBC PWB, BP PWB, Motor Driver Main PWB, and MCU-PF PWB for poor contacts.
- 3. If the problem persists, replace the following parts in sequence:
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - BP PWB (7830/35) (PL 18.2A)
  - BP PWB (7845/55) (PL 18.2B)

# 362-xxx Chain 62 Entrance Rap

The following table includes a list of chain 62 fault codes, fault description and links to associated RAPs. Use the table to locate the appropriate RAP for the fault code.

#### Table 1 362-xxx Fault Table

Fault Code	Description	RAP
362-396	CCD Cable Connection Fault	362-396
362-397	IIT-Cont Video Cable Connection Fault	362-397
362-398	IIT-Cont I/O Cable Connection Fault	362-398
362-399	DADF Cable Fail	362-901 (7830/35) 362-901 (7845/55)
362-450	Calibration Dark Range Not Clear	362-900
362-451	Calibration Dark Range Not Done	362-900
362-452	Calibration Pixel Offset Not Clear	362-900
362-453	Calibration Pixel Offset Not Done	362-900
362-454	Calibration Gain Range Not Clear	362-900
362-455	Calibration Gain Range Not Done	362-900
362-457	Calibration Pixel Gain Not Done	362-900
362-458	Calibration Dark Range Errors	362-900
362-459	Calibration Pixel Offset Hi Errors	362-900
362-460	Calibration Pixel Offset Lo Errors	362-900
362-461	Calibration Gain Range Errors	362-900
362-462	Calibration Pixel Gain Hi Errors	362-900
362-463	Calibration Pixel Gain Lo Errors	362-900
362-466	Dark Range Rail Error	362-900
362-467	Gain Range Rail Error	362-900
362-468	Color State Errors	362-900
362-476	Stepper Home Error	362-476
362-481	DADH Client Time Out	362-481 (7830/35) 362-481 (7845/55)
362-486	Supply 24 Volt Error	362-486
362-490	Data Steerer Error	362-490
362-491	Data Steerer Tx Error	362-490
362-779	FPGA not loaded	362-779
362-780	FPGA CRC Error	362-780
362-781	IIT Remote NVM Out of Range	
362-782	IIT Remote NVM Read Timeout	
362-783	SPDH Side 1 Hotline Error	
362-784	IIT Platen Hotline Error	

# 362-396 CCD Cable Connection Fault

**BSD-ON: BSD 3.10 Poor Cable Connection** 

A CCD Flat Cable connection error was detected.

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

#### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - Check the Flat Cable between the CCD Lens Assy P/J700 and the IIT PWB P/J710 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - The coaxial cable between the IIT PWB P/J7191 and the BP PWB P336 for an open circuit, short circuit, and poor contact
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances

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

- IIT PWB (Switch the EEPROM) (PL 1.8)
- SBC PWB (PL 35.2)
- BP PWB (7830/35) (PL 18.2A)
- BP PWB (7845/55) (PL 18.2B)

# 362-397 IIT-Cont Video Cable Connection Fault

#### BSD-ON: BSD 3.10 Poor Cable Connection

An SBC Video Cable connection error was detected.

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

#### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The coaxial cable between the IIT PWB P/J7191 and the BP PWB P336 for open circuit, short circuit, and poor contact
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances

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

- SBC PWB (PL 35.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7830/35) (PL 18.2A)
- BP PWB (7845/55) (PL 18.2B)

## 362-398 IIT-Cont I/O Cable Connection Fault

#### BSD-ON: BSD 3.10 Poor Cable Connection

An SBC I/O Cable connection error was detected.

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connection between the IIT PWB P/J7192 and the BP PWB P/J390 for open circuit, short circuit, and poor contact
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances

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

- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7830/35) (PL 18.2A)
- BP PWB (7845/55) (PL 18.2B)
- SBC PWB (PL 35.2)

# 362-468 Color State Errors

Pixel clock error from the full width array

## Procedure

Switch the power off, then on.

# 362-476 Stepper Home Error

BSD-ON: BSD 6.3 Carriage Control

IIT Reg. Sensor not cleared/made in time

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

## Procedure

Switch the power off, then on.

Enter dC122 and check the Fault History for additional faults. Fault codes 362-310 and 362-481 are BOTH also present.

#### Y N

Fault Code 362-481 is also present.

- Y N
  - Go to the following RAPs:
  - 362-904 Lamp Illumination Fault
  - 362-905 Platen AOC Fault

Go to the 362-901 (7830/35) IPS-DADF Communication Fault RAP to troubleshoot.

Go to the following RAPs:

- 362-902 (7830/35) IIT PWB Power Cable Connection Fault RAP
- 362-903 (7845/55) IIT PWB Power Cable Connection Fault RAP
- 362-398 IIT-Cont I/O Cable Connection Fault RAP

# 362-481 (7830/35) DADF Communication Timeout

#### BSD-ON: BSD 3.2 PWB Communication (2 of 9)

Communication cannot be established between the SBC PWB and the DADF PWB.

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

#### Procedure

Turn the power OFF and ON.

Enter dC122 and check the Fault History for additional faults. Fault Code 362-310 is also present.

#### Y N

Turn the power OFF and check the following:

- The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances
- The connection between the BP PWB P/J 390 and the IIT PWB P/J7192 for open circuit, short circuit, and poor contact
- The connection between the IIT PWB J750 and the DADF PWB P/J751 and P/ J751 (7830/35) or P/J751 and P/J752 (7845/55) for open circuit, short circuit, poor contact, damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB

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

- DADF PWB (PL 51.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7830/35) (PL 18.2A)
- SBC PWB (PL 35.2)

Go to the 362-901 (7830/35) IPS-DADF Communication Fault RAP to troubleshoot.

## 362-481 (7845/55) DADF Communication Timeout

BSD-ON: BSD 3.3 PWB Communication (3 of 9)

Communication cannot be established between the SBC PWB and the DADF PWB.

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

## Procedure

Turn the power OFF and ON.

Enter dC122 and check the Fault History for additional faults. Fault Code 362-310 is also present.

#### Y N

Turn the power OFF and check the following:

- The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances
- The connection between the BP PWB P/J 390 and the IIT PWB P/J7192 for open circuit, short circuit, and poor contact
- The connection between the IIT PWB J750 and the DADF PWB P/J751 and P/ J751 (7830/35) or P/J751 and P/J752 (7845/55) for open circuit, short circuit, poor contact, damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB

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

- DADF PWB (PL 51.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7845/55) (PL 18.2B)
- SBC PWB (PL 35.2)

Go to the 362-901 (7830/35) IPS-DADF Communication Fault RAP to troubleshoot.

# 362-486 Supply 24 Volt Error

24 volts not detected by the IIT

## Procedure

Go to 362-902 (7830/35) or 362-903 (7845/55).

# 362-490 Data Steerer Error

Failed to transfer video from

**Procedure** Switch the power off, then on.

# 362-779 FPGA not loaded

FPGA has corrupted image or hasn't been loaded

## Procedure

Reload the FPGA by reloading the IIT SW.

Refer to GP 9 to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

# 362-780 FPGA CRC Error

FPGA has corrupted image or hasn't been loaded

## Procedure

Reload the FPGA by reloading the IIT SW.

Refer to GP 9 to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

# 362-900 IIT Calibration RAP

BSD-ON: BSD 1.7 DC Power Generation (5 of 5)

BSD-ON: BSD 1.8 IIT DC Power Distribution

BSD-ON: BSD 6.4 Image Input (1 of 2) (SBC to CCD)

## Procedure

Switch the power off, then on.

## Procedure

Switch the power off, then on. The fault is still present.

#### Y N

Perform Final Actions.

Check ADJ 6.2 IIT LEad Edge Registration. The check is good.

Y N

Perform ADJ 6.2 IIT LEad Edge Registration.

Check the following voltages on the IIT Trans PWB.

- TP10 to GND: +3.3 VDC
- TP20 to GND: +3.3VDC
- TP30 to GND: +10VDC

## The voltages are good.

## Y N

# +24VDC is measured on P/J720 on the IIT Trans PWB from pin 2 to pin 1.

**N** Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Replace the IIT Trans PWB (PL 1.6)

. Check that all optics mirrors are correctly aligned (ADJ 6.6 Optical Axis Correction). The check is good.

## Y N

Perform ADJ 6.6 Optical Axis Correction.

Check the CCD assembly for loose electrical connections or misalignment of the assembly. The CCD assembly is good.

## Y N

Correct the electrical connection or misalignment.

Check the IIT Trans PWB for loose connections or damage. The IIT Trans PWB is good.

## Y N

Correct the electrical connections or replace the IIT Trans PWB (PL 1.6).

Check the wiring between the IIT Trans PWB P/J710 and the CCD PWB (P/J700). The wiring is good.

N

Υ

Repair the wiring.

## Clean the optics:

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

## The fault is still present.

Y N

Perform Final Actions.

Perform the following in order:

- Reload SW using the Forced Altboot process (GP 9).
- Replace the LED Lamp (PL 1.5)
- Replace the IIT Control Cable (PL 18.1)
- Replace the IIT Trans PWB (PL 1.6)
- Replace the CCD Lens Assembly (PL 1.3)
- Replace the Hard Drive (PL 35.2).
- Replace the SBC PWB (PL 35.2)

## 362-901 (7830/35) IPS-DADF Communication Fault

#### BSD-ON: 3.2 PWB Communication (SBC - 2 Pass DADF)

Communication cannot be established between the SBC PWB and the DADF PWB.

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances
  - The connection between the BP PWB P/J 390 and the IIT PWB P/J7192 for open circuit, short circuit, and poor contact
  - The connectors of the BP PWB P/J390 and the IIT PWB P/J7192 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
  - The connection between the IIT PWB and the DADF PWB for open circuit, short circuit, poor contact damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
    - 7830/35

IIT PWB J750 and the DADF PWB P/J751 and P/J752

- 7845/55

IIT PWB J750 and the DADF PWB P/J751 and P/J752

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

- DADF PWB (PL 51.2)
- SBC PWB (PL 35.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7830/35) (PL 18.2A)

# 362-901 (7845/55) IPS-DADF Communication Fault

BSD-ON: 3.3 PWB Communication (SBC - 1 Pass DADF)

Communication cannot be established between the SBC PWB and the DADF PWB.

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

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances
  - The connection between the BP PWB P/J 390 and the IIT PWB P/J7192 for open circuit, short circuit, and poor contact
  - The connectors of the BP PWB P/J390 and the IIT PWB P/J7192 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
  - The connection between the IIT PWB and the DADF PWB for open circuit, short circuit, poor contact damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
    - 7830/35

IIT PWB J750 and the DADF PWB P/J751 and P/J752

- 7845/55

IIT PWB J750 and the DADF PWB P/J751 and P/J752

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

- DADF PWB (PL 51.2)
- SBC PWB (PL 35.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7845/55) (PL 18.2B)

# 362-902 (7830/35) IIT PWB Power Cable Connection Fault

BSD-ON: BSD 1.6 DC Power Generation (4 of 5)

BSD-ON: BSD 1.7 DC Power Generation (5 of 5)

BSD-ON: BSD 1.8 IIT DC Power Distribution

The IIT PWB power source error was detected.

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

## Procedure

Turn the power OFF and remove the Right Cover.

Turn the power ON. Is the voltage between the Main LVPS P/J502-2 (+) and P/J502-4 (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35).

Turn the power OFF and check the connection between the Main LVPS PWB P/J502 and the IIT PWB P/J720 for open circuit, short circuit, and poor contact. If no problems are found, replace the IIT PWB (Switch the EEPROM) (PL 1.8).

# 362-903 (7845/55) IIT PWB Power Cable Connection Fault

BSD-ON: BSD 1.7 DC Power Generation (5 of 5)

#### BSD-ON: BSD 1.8 IIT DC Power Distribution

The IIT PWB power source error was detected.

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

## Procedure

Turn the power OFF and remove the Rear Upper Cover. Disconnect the connector P592 of the MD Sub PWB and open the Chassis Assembly.

Turn the power ON. Is the voltage between the Sub LVPS P/J505-1 (+) and P/J505-3 (-) +24VDC?

#### Y N

Go to +24VDC Power RAP (7845/55).

Turn the power OFF and check the connection between the Sub LVPS PWB P/J505 and the IIT PWB P/J720 for open circuit, short circuit, and poor contact. If no problems are found, replace the IIT PWB (Switch the EEPROM) (PL 1.8).

## 362-904 Lamp Illumination Fault

**BSD-ON: BSD 6.2 Document Illumination** 

#### BSD-ON: BSD 6.5 Image Input (2 of 2) (CCD to SBC)

Insufficient light from Lamp detected in CCD (during white gradation correction/AGC before Scan starts)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

When checking at the vicinity of the CCD and the IIT Trans PWB with the power remaining ON and the CCD Lens Cover removed, do not allow the Carriage to move all the way to the right. If the Carriage is moved all the way to the right, the LED Lamp PWB will contact the Earth Plate, which then shorts the LED Lamp PWB and damages it.

#### **Initial Actions**

Check whether there is something blocking the light and check the Lamp, Lens, Mirror, and White Color Correction Plate for deterioration or contamination.

### Procedure

- 1. Turn the power ON and perform the following voltage checks on the IIT PWB:
  - a. Check for ANA 10V between TP 30 and GND.
  - b. Check for ANA 3.3V between TP 20 and GND.
  - c. Check for +3.3VDC between TP 10 and DC COM.

If one or more voltages is incorrect, replace the IIT/PS PWB (PL 1.8); otherwise, continue with Step 2.

- 2. Check the following:
  - LED Lamp broken: dC330 [062-002] (PL 1.7) Switch the power off.
  - Check the Flat Cable between the LED Lamp PWB P/J1 and the IIT PWB P/J723 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - Check the Flat Cable between the CCD Lens Assy P/J700 and the IIT PWB P/J710 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - The coaxial cable between the IIT PWB P/J7191 and the BP PWB P336 for open circuit, short circuit, and poor contact
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances

## 362-905 Platen AOC Fault

BSD-ON: BSD 6.5 Image Input (2 of 2) (CCD to SBC)

A CCD output error was detected when performing AOC.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

When checking at the vicinity of the CCD and the IIT Trans PWB with the power remaining ON and the CCD Lens Cover removed, do not allow the Carriage to move all the way to the right. If the Carriage is moved all the way to the right, the LED Lamp PWB will contact the Earth Plate, which then shorts the LED Lamp PWB and damages it.

#### **Initial Actions**

Check whether there is something blocking the light and check the Lamp, Lens, Mirror, and White Color Correction Plate for deterioration or contamination.

#### Procedure

- 1. Switch the power off, then on.
- 2. If the problem persists, switch power off and check the following:
  - Check the Flat Cable between the CCD Lens Assy P/J700 and the IIT PWB P/J710 for open circuits, short circuits, and poor contacts (especially, check whether the Flat Cable was inserted in a skewed manner).
  - The coaxial cable between the IIT PWB P/J7191 and the BP PWB P336 for an open circuit, short circuit, and poor contact
  - The connector ( J309) between the SBC PWB and the BP PWB for damage and foreign substances

If no problems are found, replace the following parts in sequence:

- CCD Lens Assy (PL 1.5)
- SBC PWB (PL 35.2)
- IIT PWB (Switch the EEPROM) (PL 1.8)
- BP PWB (7830/35) (PL 18.2A)
- BP PWB (7845/55) (PL 18.2B)

# 366-xxx Chain 66 Entry Rap

The following table includes a list of chain 62 fault codes, fault description and links to associated RAPs. Use the table to locate the appropriate RAP for the fault code.

Table 4

# 366-490 Data Steerer Error - Taurus 2 (DADF-130 / 1 Pass)

BSD-ON: BSD 5.14 DADF Document Scan (DADF-130 /1 Pass)

Data steerer error to/from Taurus 2 - Second side error.

## Procedure

Switch the power off, then on.

Fault Code	Description	RAP
366-450	Calibration Dark Range Not Clear	366-900
366-451	Calibration Dark Range Not Done	366-900
366-452	Calibration Pixel Offset Not Clear	366-900
366-453	Calibration Pixel Offset Not Done	366-900
366-454	Calibration Gain Range Not Clear	366-900
366-455	Calibration Gain Range Not Done	366-900
366-457	Calibration Pixel Gain Not Done	366-900
366-458	Calibration Dark Range Errors	366-900
366-459	Calibration Pixel Offset Hi Errors	366-900
366-460	Calibration Pixel Offset Lo Errors	366-900
366-461	Calibration Gain Range Errors	366-900
366-462	Calibration Pixel Gain Hi Errors	366-900
366-463	Calibration Pixel Gain Lo Errors	366-900
366-466	Dark Range Rail Error	366-900
362-467	Gain Range Rail Error	366-900
362-468	Color State Errors	
366-490	Data Steerer Error	366-490
366-491	Data Steerer Tx Error	366-490
366-779	FPGA not loaded	366-779
366-780	FPGA CRC Error	366-780
366-783	SPDH Side 2 Hotline Error	

# 366-779 FPGA Not Loaded (Side 2) (DADF-130 / 1 Pass)

## BSD-ON: BSD 5.14 DADF Document Scan (DADF-130 /1 Pass)

FPGA has corrupted image or has not been loaded - Second side error.

## **Cause/Action**

Reload the FPGA by reloading the IIT SW.

Refer to GP 9 to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

# 366-780 FPGA CRC Error (Side 2) (DADF-130 / 1 Pass)

BSD-ON: BSD 5.14 DADF Document Scan (DADF-130 /1 Pass)

FPGA has corrupted image or has not been loaded - Second side error.

## **Cause/Action**

Reload the FPGA by reloading the IIT SW.

Refer to GP 9 to perform a Forced AltBoot. Reload the SBC SW using a forced altboot to force reload.

# 366-900 IIT Side 2 Calibration RAP (DADF-130 / 1 Pass)

#### BSD-ON: BSD 5.14 DADF Document Scan (DADF-130 /1 Pass)

Dark Range Status bit is not clear prior to calibration - Second side error.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Procedure

- 1. Switch the power off, then on; if the problem remains, check the following:
- 2. Turn OFF the power and check the following:
  - The flat cable (PL 55.8) between the CIS P/J1 and the DCDC PWB P/J746 for open circuits, short circuits, and poor contacts.
  - The coaxial cable (PL 55.2) between the DCDC PWB P/J745 and the CIS PWB P/J740 for open circuits, short circuits, and poor contacts.
  - The connector ( P/J17) between the SBC PWB and the CIS PWB for poor contact.
- 3. Turn the power ON.
- 4. If the problem still exists, perform the following in sequence:
  - Reload SW using a Forced Altboot (GP 9).
  - Replace the DCDC PWB (PL 55.2)
  - Replace the CIS PWB (PL 35.2)
  - Replace the Hard Drive (PL 35.2).
  - Replace the SBC PWB (PL 35.2).

# 371-105 (7830/35) Regi Sensor On Jam (Tray 1/2/3/4)

**BSD-ON: 4.1 Main Drive Control** 

**BSD-ON: 8.2 Tray 1 and MSI Paper Transportation** 

BSD-ON:BSD 8.3 Tray Module Paper Transportation (1 of 2)

BSD-ON:BSD 8.4 Tray Module Paper Transportation (2 of 2)

#### **BSD-ON: 8.6 Registration**

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On during paper feed from the various Trays.

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

## **Cause/Action**

Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Main Drive Motor (dC330 [042-006]) for operation failure (when the Feed is from Tray 1). (PL 3.2)
- The Takeaway Clutch (dC330 [077-001]) for operation failure (when the Feed is from Tray 1). (PL 15.1)

The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Main PWB P/J417 pin-B14 and P/J417 pin-B15

**NOTE:** It is possible to drive the T/A Roll 1 by combining this with the Main Drive Motor (dC330 [042-006]).

• The TM Takeaway Motor 1 (dC330 [077-031]) for operation failure (when the Feed is from Tray 2, 3, 4). (PL 10.9)

The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm (3TM/TTM/ 2TM) or approx. 100 Ohm (1TM)

- Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
- Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
- The Tray 1 Feed Roll, Retard Roll, Nudger Roll, and Takeaway Roll 1 for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 1).
- The T/A Roll 2-4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 2, 3, 4).
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the following parts in sequence:

#### Initial Issue

- MDM PWB (7830/35) (PL 18.2A)
- Tray Module PWB (7830/35) (PL 10.9)

# 371-105 (7845/55) Regi Sensor On Jam (Tray 1/2/3/4)

BSD-ON: 8.2 Tray 1 and MSI Paper Transportation

#### BSD-ON:BSD 8.3 Tray Module Paper Transportation (1 of 2)

#### BSD-ON: 8.6 Registration

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On during paper feed from the various Trays.

#### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

## Cause/Action

Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Takeaway Motor (dC330 [077-050]) for operation failure (when the Feed is from Tray 1). (PL 15.1)

The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)

- Between Takeaway Motor P/J253 pin-1 and P/J253 pin-3
- Between Takeaway Motor P/J253 pin-4 and P/J253 pin-6
- The TM Takeaway Motor 1 (dC330 [077-035]) for operation failure (when the Feed is from Tray 2, 3, 4). (PL 10.9)

The wire wound resistance of the TM Takeaway Motor 1: approx. 100 Ohm

- Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
- Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
- The TM Takeaway Motor 2 (DC330 [077-037]) for operation failure (when the Feed is from Tray 3, 4). (PL 11.16)
  - The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm
  - Between TM Takeaway Motor 2 P/J226 pin-2 and P/J226 pin-1/3
  - Between TM Takeaway Motor 2 P/J226 pin-5 and P/J226 pin-4/6
- The Tray 1 Feed Roll, Retard Roll, Nudger Roll, and T/A Roll 1 for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 1).
- The T/A Roll 2-4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration (when the Feed is from Tray 2, 3, 4).
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the following parts in sequence:

- Motor Driver Main PWB (PL 18.2B)
- Motor Driver Sub PWB (PL 18.2B)

# 371-210 Tray 1 Lift Up Fault

### BSD-ON: 7.8 Tray 1 Paper Stacking

Tray 1 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Remove Tray 1. Turn the power ON and enter the Diag mode. Turn ON dC330 [071-001] (Tray 1 Feed/Lift Up Motor). **Does the Tray 1 Feed/Lift Up Motor rotate?** 

Y N

```
Is the voltage between the MDM PWB P/J520-9 (+) and the GND (-) +24VDC? Y N
```

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 1 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances.

- Between the MDM PWB P/J528-B1 and the P/J528-B2
- Between the MDM PWB P/J528-B3 and the P/J528-B4

#### Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the MDM PWB P/J528 and the Tray 1 Feed/Lift Up Motor P/J268 for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 1 Feed/Lift Up Motor (PL 9.4).

Measure the resistance between the MDM PWB P/J528-B1/B2/B3/B4 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button. Turn ON dC330 [071-102] (Tray 1 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 1 Nudger Level Sensor. **Does the display change between High/Low?** 

Y N

Initial Issue

Check for damaged wiring or a contaminated sensor. If the wiring is OK, replace the Tray 1 Nudger Level Sensor (PL 9.4) before replacing the MDM PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 371-212 Tray 1 Paper Size Sensor Broken

BSD-ON: 7.1 Tray 1 Paper Size Sensing

Abnormal Analog voltage to Digital value from Tray 1 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 1 Paper Size Sensor for failure: dC140 [071-200], dC330 [071-104] (PL 9.1)
- The connection between the Tray 1 Paper Size Sensor P/J174 and the MDM PWB P/ J417 for open circuit, short circuit, and poor contact

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 372-101 Tray 2 Misfeed

BSD-ON: 1.9 DC Power Distribution - Options

BSD-ON: 7.9 Tray 2 Paper Stacking

BSD-ON: 8.3 Tray Module Paper Transportation (1 of 2)

#### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

The Tray 2 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 2 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB P592 and the Tray Module PWB P/J541 for open circuit, short circuit, and poor contact.

## Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [072-001] (Tray 2 Feed/Lift Up Motor). **Does the Tray 2 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB  $\,$  P/J541-10 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 2 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( P/J550 - 3T, P/J550 - TT).

- Between the Tray Module PWB P/J550-1 and P/J550-2
- Between the Tray Module PWB P/J550-3 and P/J550-4

Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the Tray Module PWB (P/J550 - 3T, P/J550 - TT) and the Tray 2 Feed/Lift Up Motor (P/J221 - 3T, P/J221 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 2 Feed/Lift Up Motor (PL 10.3, PL 11.7).

Measure the resistance between the Tray Module PWB P/J550-1/2/3/4 and the Frame. Is the resistance infinite for all?

#### Y N

Initial Issue

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON the TM Takeaway Motor.

- 7830/35 dC330 [077-031]
- 7845/55 dC330 [077-035]

Does the TM Takeaway Motor rotate?

#### Y N

Is the voltage between the TM Takeaway Motor (  $\mathsf{P}/\mathsf{J224}$  - 3T,  $\mathsf{P}/\mathsf{J224}$  - TT (7845/55),  $\mathsf{P}/\mathsf{J224}$  - TT (7830/35))  $\mathsf{P}/\mathsf{J224}$ -2/5 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( P/J224 - **3T**, P/J224 - **TT (7845/55)**, P/J224 - **TT (7830/35)**).

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor P/J224-2 and P/J224-1
- Between the TM Takeaway Motor P/J224-2 and P/J224-3
- Between the TM Takeaway Motor P/J224-5 and P/J224-4
- Between the TM Takeaway Motor P/J224-5 and P/J224-6

The following resistance is measured:

- 7830/35 0.85 Ohms at 25 degrees C / 77 degrees F
- 7845/55 100 Ohms at 25 degrees C / 77 degrees F

#### The correct resistance is measured.

- Y N
  - Replace the TM Takeaway Motor.
  - TM Takeaway Motor (PL 10.9)

Measure the resistance between the disconnected TM Takeaway Motor connectors ( P/ J224 - 3T, P/J224 - TT (7845/55), P/J224 - TT (7830/35)), P/J224 - TT (7830/35)) P/ J224-1/3/4/6 and the Frame. Is the resistance infinite for all?

#### Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB (P/J551 - 3T, P/J551 - TT) and the TM Takeaway Motor (P/J224 - 3T, P/J224 - TT (7845/55), P/J224 - TT (7830/35)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9)

Press the Stop button and open the L/H Cover. Turn ON dC330 [072-103] (Tray 2 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 2 Feed Out Sensor. **Does the display change between High/Low?** 

#### Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 2 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure

- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 372-102 Feed Out Sensor On Jam (Tray 2)

BSD-ON: 7.10 Tray 3 Paper Stacking

BSD-ON: 8.3 Tray Module Paper Transportation (1 of 2)

## BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

Feed Out Sensor 1 does not turn ON within the specified time during transport of the paper fed from Tray 2 to Take Away Path.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Check the following:

- The Feed Out Sensor 3 (dC330 [073-103] or dC330 [077-106]) for operation failure. (PL 10.12)
- 7830/35

The TM Takeaway Motor 1 (dC330 [077-031]) for operation failure. (PL 10.9) The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm

- (P/J224 3T, P/J224 TT (7830/35))
- Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
- Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
- 7845/55

The TM Takeaway Motor 2 (dC330 [077-037]) for operation failure. (PL 11.7) The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm

- (P/J226 3T, P/J226 TT (7845/55))
- Between TM Takeaway Motor 2 P/J226 pin-2 and P/J226 pin-1/3
- Between TM Takeaway Motor 2 P/J226 pin-5 and P/J226 pin-4/6
- The T/A Roll 3, 4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- The LH Cover for improper latching.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.7)

# 372-210 Tray 2 Lift Up Fault

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.9 Tray 2 Paper Stacking

Tray 2 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Remove Tray 2. Turn the power ON and enter the Diag mode. Turn ON dC330 [072-001] (Tray 2 Feed/Lift Up Motor). **Does the Tray 2 Feed/Lift Up Motor rotate?** 

- Y N
  - Is the voltage between the Tray Module PWB J541-10 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 2 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances ( P/J550 - 3T, P/J550 - TT).

- Between the Tray Module PWB P/J550-1 and P/J550-2
- Between the Tray Module PWB P/J550-3 and P/J550-4
- Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F
- Y N

Check the connection between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) and the Tray 2 Feed/Lift Up Motor ( P/J221 - 3T, P/J221 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 2 Feed/Lift Up Motor (PL 10.3, PL 11.7).

Measure the resistance between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) P/ J550-1/2/3/4 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON dC330 [072-102] (Tray 2 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 2 Nudger Level Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 2 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

## 372-212 Tray 2 Paper Size Sensor Broken

BSD-ON: 7.2 Tray 2 Paper Size Sensing

Abnormal Analog voltage to Digital value from Tray 2 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 2 Paper Size Sensor for failure: DC140[072-200],dC330 [072-104] (PL 10.1)
- Check the connection between the Tray 2 Paper Size Sensor (P/J101 3T, P/J101 TT) and the Tray Module PWB (P/J549 - 3T, P/J549 - TT) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)
# 372-900 Tray 2 Feed Out Sensor Static Jam

### BSD-ON: 8.5 Tray Module Paper Transportation (3 of 3)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 2 Feed Out Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Tray 2 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 2 Feed Out Sensor for failure: dC330 [072-103] (PL 10.12)
- The connection between the Tray 2 Feed Out Sensor P/J180-1 and the Tray Module
   PWB ( P/J549 3T, P/J549 TT) P/J549-A9 for short circuit

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 373-101 (7830/35) Tray 3 Misfeed

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.10 Tray 3 Paper Stacking

#### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB P592 and the Tray Module PWB P/J541 for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [073-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB P/J541-10 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following (P/J550 - 3T, P/J550 - TT).

- Between the Tray Module PWB P/J550-5 and P/J550-6
- Between the Tray Module PWB P/J550-7 and P/J550-8

#### Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)

#### Y N

Check the connection between the Tray Module PWB (P/J550 - 3T, P/J550 - TT) and the Tray 3 Feed/Lift Up Motor (P/J222 - 3T, P/J222 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor (PL 10.3, PL 11.9).

Measure the resistance between the Tray Module PWB (P/J550 - 3T, P/J550 - TT) P/J550-5/6/7/8 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON dC330 [077-031] (TM Takeaway Motor). Does the TM Takeaway Motor rotate?

Ν

Is the voltage between the TM Takeaway Motor ( P/J224 - 3T, P/J224 - TT (7845/55), P/J224 - TT (7830/35)) P/J224-2/5 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( P/J224 - **3T**, P/J224 - **TT (7845/55)**, P/J224 - **TT (7830/35))**.

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor P/J224-2 and P/J224-1
- Between the TM Takeaway Motor P/J224-2 and P/J224-3
- Between the TM Takeaway Motor P/J224-5 and P/J224-4
- Between the TM Takeaway Motor P/J224-5 and P/J224-6

### Is the resistance approx. 0.85 Ohm for each? (At 25 degree C / 77 degree F)

Y N Replace the TM Takeaway Motor (PL 10.9, PL 11.17).

Measure the resistance between the disconnected TM Takeaway Motor connectors ( P/ J224 - 3T, P/J224 - TT (7845/55), P/J224 - TT (7830/35)) P/J224-1/3/4/6 and the Frame. Is the resistance infinite for all?

#### Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB (P/J551 - 3T, P/J551 - TT) and the TM Takeaway Motor (P/J224 - 3T, P/J224 - TT (7845/55), P/J224 - TT (7830/35)) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button and open the L/H Cover. Turn ON dC330 [073-103] (Tray 3 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 3 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 373-101 (7845/55) Tray 3 Misfeed

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.10 Tray 3 Paper Stacking

#### BSD-ON: 8.3 Tray Module Paper Transportation (1 of 2)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB P592 and the Tray Module PWB P/J541 for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [073-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB P/J541-10 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( P/J550).

- Between the Tray Module PWB P/J550-5 and P/J550-6
- Between the Tray Module PWB P/J550-7 and P/J550-8

#### Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)

Y N

Check the connection between the Tray Module PWB (P/J550) and the Tray 3 Feed/Lift Up Motor (P/J222) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor (PL 11.9).

Measure the resistance between the Tray Module PWB (P/J550) P/J550-5/6/7/8 and the Frame. Is the resistance infinite for all?

N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 11.17)

Press the Stop button. Turn On dC330 [077-037] (TM Takeaway Motor 2). Does the TM Takeaway Motor 2 rotate?

```
'N
```

Is the voltage between the TM Takeaway Motor 2 ( P/J226) P/J226-2/5 (+) and the GND (-) +24VDC?

Y N

Δ

Go to +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor 2 connector ( P/J226). Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 P/J226-2 and P/J226-1
- Between the TM Takeaway Motor 2 P/J226-2 and P/J226-3
- Between the TM Takeaway Motor 2 P/J226-5 and P/J226-4
- Between the TM Takeaway Motor 2 P/J226-5 and P/J226-6

#### Is the resistance approx. 0.85 Ohm for each? (At 25 degree C / 77 degree F)

Y N

Replace the TM Takeaway Motor 2 (PL 11.17).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors (  $\mathsf{P}/\mathsf{J226})$   $\mathsf{P}/\mathsf{J226-1/3/4/6}$  and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB (P/J552) and the TM Takeaway Motor 2 (P/J226) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 11.17)

Press the Stop button and open the L/H Cover. Turn ON dC330 [073-103] (Tray 3 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 3 Feed Out Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 3 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)
- If no problems are found, replace the following parts in sequence:
- Tray Module PWB (PL 11.17)

# 373-102 Feed Out Sensor 3 On Jam (Tray 3)

BSD-ON: 7.10 Tray 3 Paper Stacking

#### **BSD-ON: 8.3 Tray Module Paper Transportation (1 of 2)**

#### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

The Tray 3 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 3 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

#### Check the following:

- The Feed Out Sensor 3 dC330 [073-103] or dC330 [077-106]) for operation failure. (PL 10.12)
- 7830/35

The TM Takeaway Motor 1 (dC330 [077-031]) for operation failure. (PL 10.9, PL 11.16) The wire wound resistance of the TM Takeaway Motor 1: approx. 0.85 Ohm( P/J224 - **3T**, P/J224 - **TT**)

- Between TM Takeaway Motor 1 P/J224 pin-2 and P/J224 pin-1/3
- Between TM Takeaway Motor 1 P/J224 pin-5 and P/J224 pin-4/6
- 7845/55

The TM Takeaway Motor 2 (DC330 [077-037]) for operation failure. (PL 10.9, PL 11.16) The wire wound resistance of the TM Takeaway Motor 2: approx. 100 Ohm( P/J226 - 3T, P/J226 - TT)

- Between TM Takeaway Motor 2 P/J226 pin-2 and P/J226 pin-1/3
- Between TM Takeaway Motor 2 P/J226 pin-5 and P/J226 pin-4/6
- The T/A Roll 3, 4 and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- The LH Cover for improper latching.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 373-210 Tray 3 Lift Up Fault

**BSD-ON: 1.9 DC Power Distribution - Options** 

### BSD-ON: 7.10 Tray 3 Paper Stacking

Tray 3 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 3. Turn the power ON and enter the Diag mode. Turn ON dC330 [073-001] (Tray 3 Feed/Lift Up Motor). **Does the Tray 3 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB  $\,$  J541-10 (+) and the GND (-) +24VDC? Y  $\,$  N  $\,$ 

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 3 Feed/Lift Up Motor wire wound resistance. Remove the Rear Upper Cover, then measure the following resistances ( P/J550 - 3T, P/ J550 - TT).

- Between the Tray Module PWB P/J550-5 and P/J550-6
- Between the Tray Module PWB P/J550-7 and P/J550-8

### Is the resistance approx. 4.0 Ohm for each? (At 25 degree C / 77 degree F)

Y N

Check the connection between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) and the Tray 3 Feed/Lift Up Motor ( P/J222 - 3T, P/J222 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 3 Feed/Lift Up Motor (PL 10.3, PL 11.9).

Measure the resistance between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) P/ J550-5/6/7/8 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON dC330 [073-102] (Tray 3 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 3 Nudger Level Sensor. **Does the display change between High/Low?** 

#### Y Ň

Use OF 99-2 Transmissive Sensor RAP to check the Tray 3 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 373-212 Tray 3 Paper Size Sensor Broken

BSD-ON: 7.3 Tray 3 Paper Size Sensing (3TM)

### BSD-ON: 7.4 Tray 3 Paper Size Sensing (TTM)

Abnormal Analog voltage to Digital value from Tray 3 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- Broken link and breakage at the bottom of the tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 3 Paper Size Sensor for failure: dC330 [073-104] (PL 10.1, PL 11.1)
- The connection between the Tray 3 Paper Size Sensor ( P/J102 3T, P/J102 TT) and the Tray Module PWB ( P/J549 3T, P/J549 TT) for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 373-900 Tray 3 Feed Out Sensor Static Jam

### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 3 Feed Out Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Tray 3 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 3 Feed Out Sensor for failure: dC330 [073-103] (PL 10.12)
- The connection between the Tray 3 Feed Out Sensor ( P/J112 3T, P/J112 TT) P/J112-2 and the Tray Module PWB ( P/J549 - 3T, P/J549 - TT) P/J549 - A5 for short circuit

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

# 374-101 (7830/35) Tray 4 Misfeed

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.11 Tray 4 Paper Stacking

#### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

The Tray 4 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 4 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB P592 and the Tray Module PWB P/J541 for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB P/J541-10 (+) and the GND (-) +24VDC?

Y N

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following (P/J550 - 3T, P/J550 - TT).

- Between the Tray Module PWB P/J550-9 and P/J550-10
- Between the Tray Module PWB P/J550-11 and P/J550-12

#### Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the Tray Module PWB (P/J550 - 3T, P/J550 - TT) and the Tray 4 Feed/Lift Up Motor (P/J223 - 3T, P/J223 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor (PL 10.3, PL 11.11).

Measure the resistance between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) P/ J550-9/10/11/12 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON dC330 [077-031] (TM Takeaway Motor). Does the TM Takeaway Motor rotate?

N

Y N

Is the voltage between the TM Takeaway Motor ( P/J224 - 3T, P/J224 - TT) P/J224-2/ 5 (+) and the GND (-) +24VDC?

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor connector ( P/J224 - **3T**, P/J224 - **TT**).

Measure the TM Takeaway Motor wire wound resistance.

- Between the TM Takeaway Motor P/J224-2 and P/J224-1
- Between the TM Takeaway Motor P/J224-2 and P/J224-3
- Between the TM Takeaway Motor P/J224-5 and P/J224-4
- Between the TM Takeaway Motor P/J224-5 and P/J224-6

# Is the resistance approx. 0.85 Ohm for each? (At 25 degrees C / 77 degrees F) Y N

N Replace the TM Takeaway Motor (PL 10.9, PL 11.17).

Measure the resistance between the disconnected TM Takeaway Motor connectors ( P/ J224 - **3T**, P/J224 - **TT**) P/J224-1/3/4/6 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB (P/J551 - 3T, P/J551 - TT) and the TM Takeaway Motor (P/J224 - 3T, P/J224 - TT) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button and open the L/H Cover. Turn ON dC330 [074-103] (Tray 4 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 4 Feed Out Sensor. **Does the display change between High/Low?** 

### Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 4 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)
- If no problems are found, replace the following parts in sequence:
- Tray Module PWB (PL 10.9, PL 11.17)

# 374-101 (7845/55) Tray 4 Misfeed

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.11 Tray 4 Paper Stacking

#### BSD-ON: 8.3 Tray Module Paper Transportation (1 of 2)

The Tray 4 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 4 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

Remove the Rear Upper Cover and the Rear Cover. Check the connection between the MDM PWB P592 and the Tray Module PWB P/J541 for open circuit, short circuit, and poor contact.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?** 

Y N

Is the voltage between the Tray Module PWB J541-10 (+) and the GND (-) +24VDC? Y N

Go to +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( P/J550).

- Between the Tray Module PWB J550-9 and J550-10
- Between the Tray Module PWB J550-11 and J550-12

### Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the Tray Module PWB (P/J550) and the Tray 4 Feed/Lift Up Motor (P/J223) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor (PL 11.11).

Measure the resistance between the Tray Module PWB ( P/J550) J550-9/10/11/12 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

Tray Module PWB (PL 11.17)

Press the Stop button. Turn On dC330 [077-037] (TM Takeaway Motor 2). Does the TM Takeaway Motor 2 rotate? Y N

#### N Is the voltage between the TM Takeaway Motor 2 ( P/J226) J226-2/5 (+) and the GND (-) +24VDC?

Y N

Δ

Go to +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, disconnect the TM Takeaway Motor 2 connector ( P/J226). Measure the TM Takeaway Motor 2 wire wound resistance.

- Between the TM Takeaway Motor 2 J226-2 and J226-1
- Between the TM Takeaway Motor 2 J226-2 and J226-3
- Between the TM Takeaway Motor 2 J226-5 and J226-4
- Between the TM Takeaway Motor 2 J226-5 and J226-6

#### Is the resistance approx. 0.85 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Replace the TM Takeaway Motor 2 (PL 11.17).

Measure the resistance between the disconnected TM Takeaway Motor 2 connectors J226-1/3/4/6 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Check the connection between the Tray Module PWB (  $\mathsf{P}/\mathsf{J552}$ ) and the TM Takeaway Motor 2 (  $\mathsf{P}/\mathsf{J226}$ ) for open circuit, short circuit, and poor contact. If no problems are found, replace the following parts in sequence:

Tray Module PWB (PL 11.17)

Press the Stop button and open the L/H Cover. Turn ON dC330 [074-103] (Tray 4 Feed Out Sensor). Move the Actuator manually to block/clear the light path to the Tray 4 Feed Out Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 4 Feed Out Sensor.

#### Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Feed Roll, Retard Roll, and Nudger Roll for contamination, wear, and revolution failure
- The TM Takeaway Roll and Pinch Roll for contamination, wear, and revolution failure
- The Feed Roll, Retard Roll, and Nudger Roll Drive Gears for wear and damage
- The TM Takeaway Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)
- If no problems are found, replace the following parts in sequence:
- Tray Module PWB (PL 11.17)

# 374-210 Tray 4 Lift Up Fault

**BSD-ON: 1.9 DC Power Distribution - Options** 

#### BSD-ON: 7.11 Tray 4 Paper Stacking

Tray 4 Lift Up NG has occurred 3 times in a row.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Remove Tray 4. Turn the power ON and enter the Diag mode. Turn ON dC330 [074-001] (Tray 4 Feed/Lift Up Motor). **Does the Tray 4 Feed/Lift Up Motor rotate?** 

- Y N
  - Is the voltage between the Tray Module PWB  $\,$  J541-10 (+) and the GND (-) +24VDC?  $\,$  Y  $\,$  N  $\,$

Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 4 Feed/Lift Up Motor wire wound resistance. Check the resistance of the following ( P/J550 - 3T, P/J550 - TT).

- Between the Tray Module PWB J550-9 and J550-10
- Between the Tray Module PWB J550-11 and J550-12

#### Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)

Y N

Check the connection between the Tray Module PWB (P/J550 - 3T, P/J550 - TT). and the Tray 4 Feed/Lift Up Motor (P/J223 - 3T, P/J223 - TT) for open circuit, short circuit, and poor contact. If there are no problems, replace the Tray 4 Feed/Lift Up Motor (PL 10.3, PL 11.11).

Measure the resistance between the Tray Module PWB ( P/J550 - 3T, P/J550 - TT) J550-9/10/11/12 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

• Tray Module PWB (PL 10.9, PL 11.17)

Press the Stop button. Turn ON dC330 [074-102] (Tray 4 Nudger Level Sensor). Use a sheet of paper, etc. to block/clear the light path to the Tray 4 Nudger Level Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Tray 4 Nudger Level Sensor.

Press the Stop button and turn the power OFF.

Check the Tray Lift Up Gear for damage or the Tray Lift Up mechanism for mechanical load. If no problems are found, replace the following parts in sequence:

Tray Module PWB (PL 10.9, PL 11.17)

# 374-212 Tray 4 Paper Size Sensor Broken

BSD-ON: 7.5 Tray 4 Paper Size Sensing (3TM)

Abnormal output AD value from Tray 4 Size Sensor was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- Broken link and damage at the bottom of the Tray
- The Actuator at the rear of the Tray for operation failure
- The Tray 4 Paper Size Sensor for operation failure. (PL 10.1, PL 11.15)
  - 3TM: dC140 [074-200], dC330 [074-104]
  - TTM: dC140 [074-200]
- The Tray for Paper misload
- The Tray for existence of objects other than Paper.

If no problem is found, replace the Tray Module PWB:

• Tray Module PWB (PL 10.9, PL 11.17)

# 374-900 Tray 4 Feed Out Sensor Static Jam

### BSD-ON: 8.4 Tray Module Paper Transportation (2 of 2)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Tray 4 Feed Out Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Tray 4 Feed Out Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Tray 4 Feed Out Sensor for failure: dC330 [074-103] (PL 10.12)
- The connection between the Tray 4 Feed Out Sensor ( P/J116 3T, P/J116 TT) J116-2 and the Tray Module PWB ( P/J549 3T, P/J549 TT) J549- A5 for short circuit.

If no problems are found, replace the following parts in sequence:

• Tray Module PWB (7845/55) (PL 11.17)

# 375-100 Tray 5 (MSI) Misfeed

**BSD-ON: 8.2 Tray 1 and MSI Paper Transportation** 

### **BSD-ON: 7.12 Paper Stacking**

The Tray 5 Feed Out Sensor does not turn ON within the specified time after the Feed from Tray 5 has started.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Turn the power ON and enter the Diag mode. Turn ON dC330 [075-001] (Tray 5 Feed/Nudger Motor). **Does the Tray 5 Feed/Nudger Motor rotate?** 

Y N Is the voltage between the MDM PWB P/J520-1 (+) and the GND (-) +24VDC? Y N Go to +24VDC Power RAP (7830/35) +24VDC Power RAP or +24VDC Power RAP (7845/55) +24VDC Power RAP.

Turn the power OFF, then measure the Tray 5 Feed/Nudger Motor wire wound resistance. Check the resistance of the following.

- Between the MDM PWB P/J525-B10 and the P/J525-B11
- Between the MDM PWB P/J525-B12 and the P/J525-B13
- Is the resistance approx. 4.0 Ohm for each? (At 25 degrees C / 77 degrees F)
- Y N

Check the connection between the MDM PWB P/J525 and Tray 5 Feed/Nudger Motor P/J269 for open circuit, short circuit, and poor contact. If no problems are found, replace the Tray 5 Feed/Nudger Motor (PL 13.2).

Measure the resistance between the MDM PWB P/J525-B10/B11/B12/B13 and the Frame. Is the resistance infinite for all?

Y N

Check the wires of the pins with non-infinite resistance for peeled-off coatings and short circuits due to pinching.

Replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Press the Stop button. Turn ON dC330 [077-104] (Tray 5 Feed Out Sensor). Activate the Actuator by using a sheet of paper, etc. to block/clear the light path to the Tray 5 Feed Out Sensor. **Does the display change between High/Low?** 

Y N

Initial Issue

Use OF 99-2 Transmissive Sensor RAP to check the Tray 5 Feed Out Sensor.

Press the Stop button and turn the power OFF. Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Front Chute Floating Snap for disengagement
- The Tray 5 Nudger Roll and Retard Spring for deformation and snags

- The Tray 5 Feed Roll and Nudger Roll for contamination, wear, and revolution failure
- The Tray 5 Feed Roll and Nudger Roll Drive Gears for wear and damage
- Use of paper out of spec (Refer to the spec in Chapter 6 General)

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 375-103 (7830/35) Tray 5 Feed Out Sensor Off Jam

**BSD-ON: 4.1 Motor Drive Control** 

#### **BSD-ON: 8.2 Tray 1 and MSI Paper Transportation**

#### BSD-ON: 8.6 Registration

The MSI Feed Out Sensor did not turn OFF within the specified time after the Regi Clutch On.

### Initial Actions

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### **Cause/Action**

Check the following:

- The MSI Feed Out Sensor (dC330 [077-104]) for operation failure. (PL 13.4)
- The Main Drive Motor (dC330 [042-006]) for operation failure. (PL 3.2)
- The Takeaway Clutch (dC330 [077-001]) for operation failure. (PL 15.1)

The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Main PWB P/J417 pin-B14 and P/J417 pin-B15

**NOTE:** It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor (dC330 [042-006]).

• The Regi Clutch (dC330 [077-002]) for operation failure. (PL 15.2)

The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Main PWB P/J523 pin-A7 and P/J523 pin-A8

**NOTE:** It is possible to drive the Regi Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The MSI T/S Roll, Regi Roll, and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 375-103 (7845/55) Tray 5 Feed Out Sensor Off Jam

**BSD-ON: 4.1 Motor Drive Control** 

#### **BSD-ON: 8.2 Tray 1 and MSI Paper Transportation**

#### **BSD-ON: 8.6 Registration**

The MSI Feed Out Sensor did not turn OFF within the specified time after the Regi Clutch On.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### **Cause/Action**

.

Check the following:

- The MSI Feed Out Sensor (dC330 [077-104]) for operation failure. (PL 13.4)
- The Takeaway Motor (dC330 [077-050]) for operation failure. (PL 15.1)
   The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)
  - Between Takeaway Motor P/J253 pin-1 and P/J253 pin-3
  - Between Takeaway Motor P/J253 pin-4 and P/J253 pin-6
- The Main Drive Motor (DC330 [042-006]) for operation failure. (PL 3.2)
- The Regi Clutch (dC330 [077-002]) for operation failure. (PL 15.2) The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB P/J523 pin-A7 and P/J523 pin-A8

**NOTE:** . It is possible to drive the Regi Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The MSI T/S Roll, Regi Roll, and Pinch Roll for contamination, wear, and transportation failure due to deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7845/55) (PL 18.2B)

# 375-135 (7830/35) Reg Sensor On Jam (Tray 5)

BSD-ON: 4.1 Motor Drive Control

#### **BSD-ON: 8.2 Tray 1 and MSI Paper Transportation**

#### **BSD-ON: 8.6 Registration**

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On after the Paper Feed from the MSI has started.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Main Drive Motor (dC330 [042-006]) for operation failure. (PL 3.2)
- The Takeaway Clutch (dC330 [077-001]) for operation failure. (PL 15.1)
  - The coil resistance of the Takeaway Clutch: approx. 155 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB P/J417 pin-B14 and P/J417 pin-B15

**NOTE:** It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The MSI T/A Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the following parts:

• Motor Driver Main PWB (PL 18.2A)

# 375-135 (7845/55) Reg Sensor On Jam (Tray 5)

**BSD-ON: 4.1 Motor Drive Control** 

### **BSD-ON: 8.2 Tray 1 and MSI Paper Transportation**

### BSD-ON: 8.6 Registration

The Regi Sensor did not turn ON within the specified time after the Regi Clutch On after the Paper Feed from the MSI has started.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

• The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)

**NOTE:** It is possible to drive the MSI T/A Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The Takeaway Motor (dC330 [077-050]) for operation failure. (PL 15.1)
   The wire wound resistance of the Takeaway Motor: approx. 1.2 Ohm (When the temperature is 25 degrees celsius)
  - Between Takeaway Motor P/J253 pin-1 and P/J253 pin-3
  - Between Takeaway Motor P/J253 pin-4 and P/J253 pin-6
- The MSI T/A Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the following parts:

- Motor Driver Main PWB (PL 18.2B)
- Motor Driver Sub PWB (PL 18.2B)

# 375-212 Tray 5 Nudger Up/Down Fault

### BSD-ON: 7.12 Paper Stacking

The MSI Nudger Position Sensor did not change within the specified time after the MSI Nudger Up or Down operation has started.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

### Check the following:

- The MSI Nudger Position Sensor (dC330 [075-102]) for operation failure. (PL 13.2)
- The MSI Feed/Nudger Motor (dC330 [075-004] (Up/Down)) for operation failure. (PL 13.2)

The wire wound resistance of the MSI Feed/Nudger Motor: approx. 4 Ohm (when the temperature is 25 degrees celsius)

- Between MSI Feed/Nudger Motor P/J269 pin-1 and P/J269 pin-2
- Between MSI Feed/Nudger Motor P/J269 pin-3 and P/J269 pin-4
- The MSI Nudger Roll Up/Down mechanism for mechanical loading, the springs for deformation and snags.

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-101 Regi Sensor Off Jam

BSD-ON: 4.1 Main Drive Control

#### **BSD-ON: 8.6 Registration**

### BSD-ON: 10.1 Fuser Drive Control (1 of 2)

The Regi Sensor did not turn OFF within the specified time after the Regi Clutch On.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Main Drive Motor (dC330 [042-006]) for operation failure. (PL 3.2)
- The Regi Clutch (dC330 [077-002]) for operation failure. (PL 15.2)

The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Main PWB P/J523 pin-A7 and P/J523 pin-A8

**NOTE:** It is possible to drive the Regi Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
- The Fusing Unit Drive Motor (dC330 [010-001]) for operation failure. (PL 3.1)
- The Regi Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- Each Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-103 Fuser Exit Sensor Off Jam

BSD-ON: 10.1 Fuser Drive Control (1 of 2)

BSD-ON: 10.6 Fusing

BSD-ON: 10.7 Fused Paper Exit 1)

BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

After the Fuser Exit Sensor turned ON, the Fuser Exit Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Fuser for wound up, stuck paper
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Exit Roll Drive Gear for wear and damage
- The Exit 1 Gate for operation failure
- The Exit 2 Gate for operation failure
- Use of paper out of spec (Refer to the spec in Product Codes Chapter 6 General)
- The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
- The Fuser Exit Sensor for failure: dC330 [077-106] (PL 7.1)
- The connection between the Fuser Assembly DJ600 and the MDM PWB P/J431 for open circuit, short circuit, and poor contact
- The Fuser Drive Motor for revolution failure: dC330 [010-006] (PL 3.1)
- The Exit 2 Drive Motor for revolution failure: dC330 [077-062] (PL 17.4)
   The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Exit 2 Gate Solenoid for failure: dC330 [077-003] (PL 17.5)

The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Sub PWB P/J522 pin-A7 and P/J522 pin-A8
- The Face Up Gate Solenoid for failure: dC330 [077-004] (PL 17.5)

The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Sub PWB P/J522 pin-A9 and P/J522 pin-A10

If no problems are found, replace the following parts in sequence:

• MDM PWB (7830/35) (PL 18.2A)

- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-104 Fuser Exit Sensor Off Jam (Too Short)

BSD-ON: 10.1 Fuser Drive Control (1 of 2)

BSD-ON: 10.6 Fusing

BSD-ON: 10.7 Fused Paper Exit 1)

BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

After the Fuser Exit Sensor turned ON, the Fuser Exit Sensor turned OFF before the specified time has passed.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Fuser for wound up, stuck paper
- Each Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- Each Exit Roll Drive Gear for wear and damage
- The Exit 1 Gate for operation failure
- The Exit 2 Gate for operation failure
- Use of paper out of spec (Refer to the spec in Product Codes Chapter 6 General)
- The Fuser Exit Sensor for contamination, improper installation, and Actuator operation failure
- The Fuser Exit Sensor for failure: dC330 [077-101] (PL 7.1)
- The connection between the Fuser Assembly DJ600 and the MDM PWB P/J431 for open circuit, short circuit, and poor contact
- The Fuser Drive Motor for revolution failure: dC330 [010-001] (PL 3.1)
- The Exit 2 Drive Motor for revolution failure: dC330 [077-062] (PL 17.4)
   The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Exit 2 Gate Solenoid for failure: dC330 [077-003] (PL 17.5)
   The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is
  - Between Motor Driver Sub PWB P/J522 pin-A7 and P/J522 pin-A8
- The Face Up Gate Solenoid for failure: dC330 [077-004] (PL 17.5)
  - The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Sub PWB P/J522 pin-A9 and P/J522 pin-A10.

If no problems are found, replace the following parts in sequence:

MDM PWB (7830/35) (PL 18.2A)

20 degrees celsius)

- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-105 Exit Sensor 2 Off Jam

BSD-ON: 10.6 Fusing

#### BSD-ON: 10.7 Fused Paper Exit 1)

#### BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

After the Exit 2 Sensor turned ON, the Exit 2 Sensor did not turn OFF within the specified time.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- A paper transportation failure due to a foreign substance/burr on the paper path
- The Exit 2 Roll and Pinch Roll for contamination, wear, and revolution failure
- The Face Up Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Exit 2 Roll Drive Gear for wear and damage
- The Exit 2 Gate for operation failure
- The Face Up Exit Roll Drive Gear for wear and damage
- Use of paper out of spec (Refer to the spec in Product Codes Chapter 6 General)
- The Exit 2 Sensor for contamination, improper installation, and Actuator operation failure
- The Exit 2 Sensor for failure: dC330 [077-100] (PL 17.4)
- The connection between the Exit 2 Sensor P/J164 and the MDS PWB P/J522 for open circuit, short circuit, and poor contact
- The Exit 2 Drive Motor for revolution failure: dC330 [077-062] (PL 17.4)
   The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Face Up Gate Solenoid for failure: dC330 [077-004] (PL 17.5)
   The coil resistance of the Face Up Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Sub PWB P/J522 pin-A9 and P/J522 pin-A10.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-106 Fuser Exit Sensor On Jam

### BSD-ON: 10.1 Fuser Drive Control (1 of 2)

#### BSD-ON: 10.6 Fusing

The Fuser Exit Sensor does not turn ON within the specified time after the Reg Clutch On.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (dC330 [077-101]) for operation failure. (PL 7.1)
- The Fusing Unit Drive Motor (dC330 [010-001]) for operation failure. (PL 3.1)
- The Fusing Unit for wound up, stuck paper.
- The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
- The Fusing Unit P/Roll for Latch failure.
- The Fusing Unit Exit Chute for improper installation and deformation.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-109 Exit Sensor 2 On Jam

BSD-ON: 10.1 Fuser Drive Control (1 of 2)

BSD-ON: 10.7 Fused Paper Exit 1)

#### BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

The Exit 2 Sensor did not turn ON within the specified time after the Fusing Unit Exit Sensor On.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### **Cause/Action**

Check the following:

- The Exit 2 Sensor (dC330 [077-100]) for operation failure. (PL 17.4)
- The Exit 2 Drive Motor (dC330 [077-062] (output direction)) for operation failure. (PL 17.4) The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Fusing Unit Drive Motor (dC330 [010-001]) for operation failure. (PL 3.1)
- The Exit 1 Gate for operation failure (including the Exit Gate Solenoid (DC330 [077-003]) operation failure). (PL 17.5)

The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Sub PWB P/J522 pin-A7 and P/J522 pin-A8
- The Invert Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Fusing Unit Exit Chute for improper installation and deformation.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-110 POB Sensor On Jam

BSD-ON: 4.1 Main Drive Control

#### **BSD-ON: 8.6 Registration**

#### BSD-ON: 9.24 Second Transfer

The POB Sensor did not turn ON within the specified time after the Regi Clutch On.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The POB Sensor (dC330 [077-102] or dC330 [094-202]) for operation failure. (PL 14.4)
- The 2nd BTR for contamination, wear, and transportation failure due to revolution failure.
- The IBT Belt for wound up, stuck paper.
- The Main Drive Motor (dC3300 [042-006]) for operation failure. (PL 3.2)
- The Regi Roll and Pinch Roll for transportation failure due to contamination, wear, and deterioration.
- The Regi Clutch (dC330 [077-002]) for operation failure. (PL 15.2)
   The coil resistance of the Regi Clutch: approx. 192 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB P/J523 pin-A7 and P/J523 pin-A8

**NOTE:** It is possible to drive the Regi Roll by combining this with the Main Drive Motor (dC330 [042-006]).

- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.
- The Regi Transport Assembly for improper installation. (PL 15.1)

If no problem is found, replace the MDM PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-130 Reg Sensor On Jam (Duplex Direct)

**BSD-ON: 8.6 Registration** 

### BSD-ON: 10.8 Fused Paper Exit 2 (1 of 4)

The Reg Sensor does not turn ON within the specified time after the Reg Clutch On after the Feed has started in Duplex Direct mode.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

### Check the following:

- The Regi Sensor (dC330 [077-103]) for operation failure. (PL 15.2)
- The Duplex Motor (dC330 [077-073]) for operation failure. (PL 14.6) The wire wound resistance of the Duplex Motor: approx. 5.7 Ohm (7830/35) or approx. 1.5 Ohm (7845/55)
  - Between Motor Driver Main PWB P/J523 pin-B7 and P/J523 pin-B9
  - Between Motor Driver Main PWB P/J523 pin-B8 and P/J523 pin-B10
- The Duplex Trans Roll 1-3 for transportation failure due to contamination, wear, and deterioration.
- The Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the MDM PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-131 Duplex Wait Sensor On Jam

BSD-ON: 10.7 Fused Paper Exit 1)

#### BSD-ON: 10.8 Fused Paper Exit 2 (1 of 4)

#### BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

The Duplex Wait Sensor does not turn ON within the specified time after the Exit 2 Drive Motor has started rotating in the Duplex intake direction.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Duplex Path Sensor (DC330 [077-108]) for operation failure. (PL 14.6)
- The Duplex Motor (DC330 [077-073]) for operation failure. (PL 14.6)
   The wire wound resistance of the Duplex Motor: approx. 5.7 Ohm (7830/35) or approx.
   1.5 Ohm (7845/55)
  - Between Motor Driver Main PWB P/J523 pin-B7 and P/J523 pin-B9
  - Between Motor Driver Main PWB P/J523 pin-B8 and P/J523 pin-B10
- The Exit 2 Drive Motor (DC330 [077-063] (intake direction)) for operation failure. (PL 17.4) The wire wound resistance of the Exit 2 Drive Motor: approx. 5.7 Ohm (7830/35) or approx. 0.9 Ohm (7845/55)
  - Between Motor Driver Sub PWB P/J522 pin-B4 and P/J522 pin-B6
  - Between Motor Driver Sub PWB P/J522 pin-B5 and P/J522 pin-B7
- The Exit 1 Gate for operation failure (including the Exit Gate Solenoid (DC330 [077-003]) operation failure). (PL 17.5)

The coil resistance of the Exit Gate Solenoid: approx. 60 Ohm (when coil temperature is 20 degrees celsius)

- Between Motor Driver Sub PWB P/J522 pin-A7 and P/J522 pin-A8
- The Exit Roll 2, Invert Roll, and Duplex Trans Roll 1, 2 for transportation failure due to contamination, wear, and deterioration.
- Each Drive Gear for wear and damage.
- Transportation failure due to foreign substances in the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-211 Tray Module Kind Mismatch

BSD-ON: 3.7 PWB Communication (7 of 9)

A different type of Tray Module is connected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF. Refer to 3.7 PWB Communication (7 of 9) check the following:
  - The DIP Switch settings on the Tray Module PWB
  - The connection between the MDS PWB P592 and the Tray Module PWB P/J541 ( P/J541 - 3T, P/J541 - TT) for open circuit, short circuit, and poor contact

- Tray Module PWB (7830/35) PL 10.9, (PL 11.17)
- Tray Module PWB (7845/55) (PL 11.17)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-212 Tray Module Reset Fault

BSD-ON: 1.5 DC Power Generation (3 of 5)

#### BSD-ON: 1.8 IIT DC Power Distribution

BSD-ON: 3.7 PWB Communication (7 of 9)

The Tray Module reset was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the voltage between the following terminals of the Tray Module PWB and the GND. ( P/J541 3T, P/J541 TT)
  - P/J541-10 (+24VDC)
  - P/J541-12 (+5VDC)
- 3. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( P/J541 3T, P/J541 TT) and the Motor Driver Sub PWB P592 for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
- 4. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) (PL 10.9, PL 11.17)
  - Tray Module PWB (7845/55) (PL 11.17)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

# 377-214 Tray Module Logic Fault

BSD-ON: 3.7 PWB Communication (7 of 9)

I/F mismatch between the IOT and the Tray Module was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( P/J541 3T, P/J541 TT) and the Motor Driver Sub PWB P592 for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector (P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
- 3. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) (PL 10.9, PL 11.17)
  - Tray Module PWB (7845/55) (PL 11.17)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

# 377-215 Tray Module Communication Fault

### BSD-ON: 3.7 PWB Communication (7 of 9)

Communication error between Tray Module PWB and MCU PWB was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( P/J541 3T, P/J541 TT) and the Motor Driver Sub PWB P592 for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector ( J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector ( P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
- 3. If no problems are found, replace the following parts in sequence:
  - Tray Module PWB (7830/35) (PL 10.9, PL 11.17)
  - Tray Module PWB (7845/55) (PL 11.17)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

# 377-300 Front Cover Interlock Open

**BSD-ON: 1.12 Interlocked Power** 

### BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

The Front Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Front Cover for damage or mismatch.
- The Front Cover Interlock Switch for failure: dC330 [077-303] (PL 18.5)
- The connection between the Front Cover Interlock Switch (P/J101 3T, P/J101 TT) and the MDM PWB P/J521 for open circuit, short circuit, and poor contact

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-301 L/H Cover Interlock Open

BSD-ON: 1.12 Interlocked Power

#### BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

The L/H Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The L/H Cover Unit for damage or mismatch
- The L/H Cover Interlock Switch for failure: dC330 [077-300] (PL 14.1)
- The connection between the L/H Cover Interlock Switch  $\,$  P/J100 and the MDM PWB  $\,$  P/J534 for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-305 Tray Module L/H Cover Open

BSD-ON: 1.13 Interlocked Cover Switches

The Tray Module L/H Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Check the following:
  - The Tray Module L/H Cover for damage or mismatch
  - The Tray Module L/H Cover Switch for failure: dC330 [077-306] (PL 10.12)
  - The connection between the Tray Module L/H Cover Switch (P/J104 3T, P/J104 -TT) and the Tray Module PWB (P/J549 - 3T, P/J549 - TT) for open circuit, short circuit, and poor contact

If no problems are found, replace the Tray Module PWB.

• Tray Module PWB (PL 10.9, PL 11.17)

# 377-307 Duplex Cover Open

#### **BSD-ON: 1.13 Interlocked Cover Switches**

The Duplex Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Duplex Cover for damage or mismatch.
- The Duplex Cover Switch for failure: dC330 [077-305] (PL 14.5)
- The connection between the Duplex Cover Switch P/J176 and the MDM PWB P/J523 for open circuit, short circuit, and poor contact

If no problems are found, replace the following parts in sequence:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-308 L/H High Cover Open

BSD-ON: 1.13 Interlocked Cover Switches

The L/H High Cover is open.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The L/H High Cover Assembly for damage or mismatch
- The L/H High Cover Switch for failure: dC330 [077-302] (PL 17.4)
- The connection between the L/H High Cover Switch P/J168 and the MDM PWB P/J522 for open circuit, short circuit, and poor contact

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-312 Feeder Comm Fail

BSD-ON: 3.9 PWB Communication (9 of 9)

Communication failure between the HCF and the IOT was detected.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the following:
  - The connection between the Motor Driver Main PWB P/J594 and the HCF PWB for open circuit, short circuit, and poor contact.
  - The Drawer Connector ( DP800) for broken/bent pins, burn damage, and foreign substances.
  - The power supply at the HCF.
- 3. If no problem is found, replace the following parts in sequence:
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

# 377-314 P/H Module Logic Fail

BSD-ON: 3.7 PWB Communication (7 of 9)

A fatal error was detected in the Tray Module.

### **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn OFF the power and check the following:
  - The connection between the Tray Module PWB ( P/J541 3T, P/J541 TT) and the Motor Driver Sub PWB P592 for open circuit, short circuit, and poor contact.
  - Turn OFF the power and check the connector (J1) between the MCU-PF PWB and Motor Driver Main PWB, as well as the connector (P452) between the Motor Driver Main PWB and Motor Driver Sub PWB for poor contacts, damage, and foreign substances.
- 3. If no problem is found, replace the following parts in sequence:
  - Tray Module PWB (PL 10.9, PL 11.17)
  - MCU-PF PWB (7830/35) (PL 18.2A)
  - MCU-PF PWB (7845/55) (PL 18.2B)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - MDS PWB (7830/35) (PL 18.2A)
  - MDS PWB (7845/55) (PL 18.2B)

# 377-320 All Feed Tray Broken

BSD-ON: 3.7 PWB Communication (7 of 9)

All the Feed Trays that are connected to the IOT were detected to have malfunctioned.

### **Cause/Action**

Enter DC122 Fail History. Go to the RAP of the affected Paper Tray.

# 377-900 Reg Sensor Static Jam

**BSD-ON: 8.6 Registration** 

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Reg Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Reg Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Reg Sensor for failure: dC330 [077-103] (PL 15.2)
- The connection between the Reg Sensor  $\mbox{\sc P}\sc J160$  and the MDM PWB  $\mbox{\sc P}\sc J523$  for short circuit
- Check the return Spring (PL 23.11) and replace if damaged or missing
- Check to see the timing between the eject motor Gear (PL 23.11) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-901 Exit Sensor 1 Static Jam

#### BSD-ON: 10.6 Fusing

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Fuser Exit Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Lower Exit Pinch Rollers (PL 17.2) may be missing.
- The Fuser Exit Sensor for remaining paper, contamination, actuator return failure, or improper installation
- The Fuser Exit Sensor for failure: dC330 [077-101] (PL 7.1)
- The connection between the Fuser Assembly DJ600 and the MDM PWB  $\,$  P/J431 for short circuit
- Check the return Spring (PL 23.11) and replace if damaged or missing.
- Check to see if the timing between the eject motor Gear (PL 23.11) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-902 Exit Sensor 2 Static Jam

BSD-ON: 10.10 Fused Paper Exit 2 (2 of 2)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Exit 2 Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Exit 2 Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Exit 2 Sensor for failure: dC330 [077-100] (PL 17.4)
- The connection between the Exit 2 Sensor  $\mbox{ P/J164}$  and the MDS PWB  $\mbox{ P/J522}$  for short circuit
- The L/H High Cover Assembly for damage or mismatch

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 377-903 POB Sensor Static Jam

#### BSD-ON: 9.24 Second Transfer

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the POB Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Lower Exit Pinch Rollers (PL 17.2) may be missing.
- The POB Sensor for remaining paper, contamination, or improper installation
- The POB Sensor for failure: dC330 [077-102] (PL 14.4)
- The connection between the POB Sensor P/J180 and the MDM PWB P/J523 for short circuit
- Check the return Spring (PL 23.11) item 38 and replace if damaged or missing
- Check to see the timing between the eject motor Gear (PL 23.11) item 1, and the clamp drive Gear item 2, is correct allowing the clamp to open

If no problems are found, replace the MDM PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 377-907 Duplex Path Sensor Static Jam

### BSD-ON: 10.8 Fused Paper Exit 2 (1 of 4)

When the power was turned ON, the M/C was stopped (Cycle Down/ Shut Down), or when the interlocks were closed (all interlocks including options), the Duplex Path Sensor detected paper.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Check the following:

- The Duplex Path Sensor for remaining paper, contamination, Actuator return failure, or improper installation
- The Duplex Path Sensor for failure: dC330 [077-108] (PL 14.5)
- The connection between the Duplex Path Sensor P/J175 and the MDM PWB P/J523 for short circuit

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 378-151 HCF Feed Out Sensor Fault RAP

### BSD-ON: 8.12 Standard HCF Option (Tray 6) Paper Transportation

The paper transported from HCF did not turn on the Tray 6 Feed Out Sensor within the specified time.

# Initial Actions

- ٠ Clear any jam and switch the power off then on.
- Check for out-of-spec paper.
- Paper Path for a foreign object/burr/piece of paper ٠

# Procedure

Execute dC330 [078-101], Tray 6 Feed out Sensor. Block and unblock the Feed Out Sensor. The display changes.

Y N

Go to 8.12 Standard HCF Option (Tray 6) Paper Transportation and check the following for an open wire, short or poor contact:

- Feed Out Sensor PF/JF67-2 to HCF PWB PF/JF01-2
- Feed Out Sensor PF/JF67-1 to HCF PWB PF/JF01-3
- Feed Out Sensor PF/JF67-3 to HCF PWB PF/JF01-1

If OK, replace the Feed Out Sensor (PL 28.8) before replacing the HCF PWB (PL 28.8).

Execute dC330 [078-096], Tray 6 Takeaway Motor. There is operation noise from the Takeaway Motor.

Y N

Check the circuit between PF/JF57 on the Tray 6 Takeaway Motor and PF/JF06 on the HCF PWB for an open or a short circuit, or a loose or damaged connector. The wires are OK.

Υ Ν

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms (at 25 degrees C / 77 degrees F) at the measurement points below.

- PF/JF57-3 to pins 1/2
- PF/JF57-4 to pins 5/6

### The resistances are OK

Υ Ν

Replace the Tray 6 Takeaway Motor (PL 28.8)

There is +24VDC from PF/JF06 pins 9 and 10, to GND.

#### Υ N

Go to HCF +24VDC Wirenet and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor (PL 28.8). If the problem persists, replace the HCF PWB (PL 28.8).

Open and close Tray 6. The Tray 6 Lift/Feed Motor operates

Ν

Check the circuit between PF/JF57 on the Tray 6 Lift/Feed Motor and PF/JF06 on the HCF PWB for an open or a short circuit, or a loose or damaged connector. The wires are OK.

Ν Υ

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms at the measurement points below.

- PF/JF57-3 to pins 1/2
- ٠ PF/JF57-4 to pins 5/6

#### The resistances are OK+ Υ

Ν

Replace the Tray 6 Takeaway Motor (PL 28.8).

### There is +24VDC from PF/JF06 pins 9 and 10, to GND.

Υ Ν

Go to HCF +24VDC Wirenet and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor (PL 28.8). If the problem persists, replace the HCF PWB (PL 28.8).

Check the HCF paper lift components and repair as required (PL 28.3).

# 378-210 Tray 3 (TTM) Lift Failure RAP

### BSD-ON: 1.5 DC Power Generation (3 of 5)

#### BSD-ON: 7.10 Tray 3 Paper Stacking

After the Tray 3 Lift/Feed Motor turned on, the Tray 3 Level Sensor did not turn on within the specified time.

### Initial Actions

- Reload paper in the tray correctly. .
- Remove foreign substances in the tray. ٠
- Power OFF/ON

### Procedure

Execute dC330 [073-004] Tray 3 Lift/Feed Motor On. The Tray 3 Lift/Feed Motor can be heard.

Υ Ν

There is +24 VDC from P/J541 pin 12 on the Tray Module PWB to GND

Υ Ν

> Refer to 1.5 DC Power Generation (3 of 5) and the +24VDC-4 Wirenet to troubleshoot the 24 VDC circuit.

Turn OFF the power. Remove the Tray 3 Lift/Feed Motor, then measure the following resistances.

- Between P/J222 pin-1 and P/J222 pin-2
- Between P/J222 pin-3 and P/J222 pin-4

All resistances are approx. 4 Ohms at 25 degrees C / 77 degrees F

Υ Ν

Replace the Tray 3 Lift/Feed Motor (PL 10.3, PL 11.9).

Check the wires between P/J222 on the Tray 3 Lift/Feed Motor and P/J550 on the Tray Module PWB for an open or shorted circuit, or a loose or damaged connector. The wires are OK.

Υ Ν

Repair as required.

Replace the Tray 3 Feed/Lift Motor (PL 10.3, PL 11.9). If the problem continues, replace the following in sequence:

- ٠ Tray Module PWB (PL 10.9, PL 11.17)
- MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)
- MDS PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)

Check the installation of the Tray 3 Nudger Level Sensor (PL 11.9) and the operation of the actuator. The Level Sensor is installed correctly and the actuator works.

Υ Ν

Reinstall the Tray 3 Level Sensor.

Execute dC330 [073-102], Tray 3 Nudger Level Sensor. Manually activate the Tray 3 Level Sensor (PL 10.3, PL 11.9). The display changes.

# Check the wires between P/J111 on the Tray 3 Nudger Level Sensor and P/J548 on the Trav Module PWB for an open or shorted circuit, or a loose or damaged connector. The

#### wires are OK. Ν Y

Ν

Repair as required.

Disconnect P/J548 on the Tray Module PWB. There is approx. +5VDC from P 548 pin 13 to GND on the Tray Module PWB.

Ν

Replace the Tray Module PWB (PL 10.9, PL 11.17).

Reconnect P/J548. Monitor the voltage between P/J548-15 (+) and GND (-) while you activate the actuator of the Tray 3 Level Sensor. The voltage changes.

Υ Ν

Υ

Replace the Tray 3 Level Sensor (PL 10.3, PL 11.9).

Replace the following in sequence:

- Tray Module PWB (PL 10.9, PL 11.17)
- MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)
- MDS PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)

Check the mechanical components of the lift mechanism for dirty or damaged gears, broken or out-of-place cables.

If a problem is found replace the Tray 3 Assembly PL 10.2, (PL 11.1). If the check is good, replace the following in sequence:

- Tray Module PWB (PL 10.9, PL 11.17) ٠
- MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)
- MDS PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)

# 378-216 Logic Failure RAP

BSD-ON: 3.7 PWB Communication (7 of 9)

Cannot read from and/or write to the NVM in HCF Module.

### **Initial Actions**

Power OFF/ON

### Procedure

Check wires and connectors between the HCF and the IOT.

Reload Software. If the problem continues, replace the HCF PWB (PL 28.8).

# 378-219 HCF PF2 Soft Download Fail Procedure

TBD

378-250 HCF Lift Fault RAP	Execute dC330 [078-201], Tray 6 Stack Height Sensor. Manually activate the Tray 6 Stack
	Height Sensor. The display changes.
BSD-ON: 1.5 DC Power Generation (3 of 5)	YN
BSD-ON: 1.10 DC Power Distribution - HCF Option	Check the wires between PF/JF62 on the Tray 6 Stack Height Sensor and PF/JF02 on the HCF PWB for an open or shorted circuit, or a loose or damaged connector. <b>The</b> wires are <b>OK</b>
BSD-ON: 7.14 Standard HCF Option (Tray 6) Paper Stacking	Y N
HCF Tray Lift failure. The Tray 6 Level Sensor does not turn ON within the specified time after the trays were inserted.	Repair as required. Disconnect PF/JF02. There is approx. +5VDC from PF/JF02 pin 3 to GND.
Initial Actions	Y N Deploce the LICE DWD (DL 20.0)
Clear any jam and switch the power off then on.	 Reconnect PE/IE02 Monitor the voltage between PE/IE02-2 (±) and GND (-) while you
Check the size of the paper in the tray.	activate the actuator of the Trav 6 Stack Height Sensor The voltage changes
<ul> <li>Remove any debris or foreign substances in the tray.</li> </ul>	Y N
	Replace the Tray 6 Stack Height Sensor (PL 28.5)
Procedure	
Execute dC330 [078-004] Tray 6 Lift/Feed Motor On The Tray 6 Lift/Feed Motor can be	Replace the following in sequence:
heard.	• HCF PWB (PL 28.8)
Y N	• MDM PWB (PI 18 2A -7830/35 PI 18 2B -7845/55)
There is +24 VDC from PF/JF06 pin 4 on the HCF PWB to GND	WDWT WD (TE 10.27 7000/00; TE 10.28 7040/00)
YN	Check the mechanical components (PL 28.4) of the lift mechanism for dirty or damaged gears.
Refer to 1.10 DC Power Distribution - HCF Option and the HCF +24VDC Wirenet to	broken or out-of-place cables.
troubleshoot the 24 VDC circuit.	If the check is good, replace the following in sequence:
	• HCF PWB (PL 28.8)
Turn OFF the power. Disconnect the Tray 6 Lift/Feed Motor, then measure the following	• MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)
resistances.	
Between PF/JF58 pin-2 and PF/JF58 pins 2, 3	
Between PF/JF58 pin 5 and PF/JF58 pins 4, 6	

```
All resistances are approx. 4 Ohms at 25 degrees C / 77 degrees F
```

```
Y N
```

```
Replace the Tray 6 Lift/Feed Motor (PL 28.4).
```

Check the wires between PF/JF58 on the Tray 6 Lift/Feed Motor and PF/JF06 on the HCF PWB for an open or shorted circuit, or a loose or damaged connector. The wires are OK.

Y Ν

Repair as required.

Replace the Tray 6 Feed/Lift Motor (PL 28.4). If the problem continues, replace the following in sequence:

- HCF PWB (PL 28.8) ٠
- MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55) ٠

Check the installation of the Tray 6 Stack Height Sensor (PL 28.5) and the operation of the actuator. The Level Sensor is installed correctly and the actuator works.

Υ Ν

Α

Reinstall the Tray 6 Stack Height Sensor.

# 378-300 HCF Top Cover Interlock Open RAP

BSD-ON: 1.5 DC Power Generation (3 of 5)

#### **BSD-ON: 1.10 DC Power Distribution - HCF Option**

The HCF Top Cover Interlock is open.

### Procedure

Υ

Execute dC330 [078-300 HCF Top Cover Interlock]. Open and close the Top Cover. **The display changes.** 

Y N

+24VDC is measured between PF/JF05-2 on the HCF PWB and GND. Y N

+24VDC is measured between PF/JF05-1 on the HCF PWB and GND.

N +24VDC is measured from J593 pin 1 on the MDM PWB to GND. Y N

Use 1.10 DC Power Distribution - HCF Option and the HCF +24VDC Wirenet to troubleshoot the 24 VDC circuit.

Replace the HCF PWB (PL 28.8).

Check the wires between PF/JF05-1 on the HCF PWB and FS001 on the HCF Top Cover Interlock Switch, and between FS002 on the HCF Top Cover Interlock Switch and PF/JF05-2 on the HCF PWB for an open wire or poor contact. If the wires are good, replace the HCF Top Cover Interlock Switch (PL 28.7).

Replace the HCF PWB (PL 28.8).

The problem could be misalignment between the HCF Top Cover and the HCF Top Cover Interlock Switch. Check if the Switch/Cover is improperly installed and if the actuator is broken or bent.

If the check is good, replace the following in sequence:

- HCF PWB (PL 28.8)
- MDM PWB (PL 18.2A -7830/35, PL 18.2B -7845/55)

# 378-301 HCF Docking interlock Open RAP

**BSD-ON: 1.10 DC Power Distribution - HCF Option** 

HCF Docking Interlock Open. The HCF and the IOT were undocked.

### **Initial Actions**

- Check that the HCF and the IOT are docked properly.
- Switch the power OFF then ON.

### Procedure

Execute dC330 [078-301], HCF Docking Interlock. Dock and Undock the HCF. The display changes.

Y N

Undock the HCF. Press the HCF Docking Interlock several times. The display changes. Y  $\ N$ 

The voltage between PF/JF08-2 on the HCF PWB and GND drops to less that 1 VDC when the Docking Interlock is pressed.

Y N

Check the wires between PF/JF08-1 on the HCF PWB and FS003 on the HCF Docking Interlock, and between FS004 on the HCF Docking Interlock and PF/JF08-2 on the HCF PWB for an open wire or poor contact. If the wires are good, replace the HCF Docking Interlock Switch (PL 28.8).

Replace the HCF PWB (PL 28.8).

The problem could be misalignment between the HCF Docking Base and the IOT. Refer to REP 19.3.

The problem may be intermittent. Check 1.10 DC Power Distribution - HCF Option for loose or damaged wiring.

# 378-901 HCF Feed Out Sensor Static Jam RAP

### BSD-ON: 8.12 Standard HCF Option (Tray 6) Paper Transportation

The Tray 6 Feed Out Sensor static jam.

### **Initial Actions**

- Clear any jam and switch the power off then on.
- Check for out-of-spec paper.
- Paper Path for a foreign object/burr/piece of paper

# Procedure

Execute dC330 [078-101], Tray 6 Feed out Sensor. Block and unblock the Feed Out Sensor. The display changes.

Y N

Go to BSD and check the following for an open wire, short or poor contact:

- Feed Out Sensor PF/JF67-2 to HCF PWB PF/JF01-2
- Feed Out Sensor PF/JF67-1 to HCF PWB PF/JF01-3
- Feed Out Sensor PF/JF67-3 to HCF PWB PF/JF01-1

If OK, replace the Feed Out Sensor (PL 28.7) before replacing the HCF PWB (PL 28.8).

#### Execute dC330 [078-096], Tray 6 Takeaway Motor. There is operation noise from the Takeaway Motor.

Y N

Check the circuit between PF/JF57 on the Tray 6 Takeaway Motor and PF/JF06 on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.** 

### Y N

Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms (25 degrees C / 77 degrees F) at the measurement points below.

- PF/JF57-3 to pins 1/2
- PF/JF57-4 to pins 5/6

### The resistances are OK

Y N

Replace the Tray 6 Takeaway Motor (PL 28.8).

### There is +24VDC from PF/JF06 pins 9 and 10, to GND.

Y N

Go to HCF +24VDC Wirenet and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor (PL 28.8). If the problem persists, replace the HCF PWB (PL 28.8).

Open and close Tray 6. The Tray 6 Lift/Feed Motor operates

#### Y N

Check the circuit between PF/JF57 on the Tray 6 Lift/Feed Motor and PF/JF06 on the HCF PWB for an open or a short circuit, or a loose or damaged connector. **The wires are OK.** 

Y

Δ

N Repair as required.

Check that the resistance through Tray 6 Takeaway Motor is approx. 0.8 ohms at the measurement points below.

- PF/JF57-3 to pins 1/2
- PF/JF57-4 to pins 5/6

#### The resistances are OK Y N

N Replace the Tray 6 Takeaway Motor (PL 28.8).

# There is +24VDC from PF/JF06 pins 9 and 10, to GND.

Go to HCF +24VDC Wirenet and troubleshoot the +24VDC circuit.

Replace the Tray 6 Takeaway Motor (PL 28.8). If the problem persists, replace the HCF PWB (PL 28.8).

Check the HCF paper lift components and repair as required (PL 28.3).

# 389-600 RC Sample Lateral Fail-A1

#### **BSD-ON: 6.10 Image Registration Control**

There is an error with the Cyan fast scan position that is used as a reference during A1 (fine adjustment pattern) and C patch detection. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	38-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

# Table 1 Chain 389

### Procedure

Check the installation status of the IBT Belt Unit. Is the IBT Belt Unit installed properly?

Y N

Install the IBT Belt Unit properly. After the installation, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the IBT Belt Unit (PL 6.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-601 RC Sample Block Fail-A1-In

### BSD-ON: 6.10 Image Registration Control

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 003 in DC612 Test Pattern Print and check the printout of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	38-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

Table 1 Chain 389

### **Cause/Action**

- 1. Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact. If no problems are found, replace the MOB ADC Assembly (PL 18.5).
- 2. Perform dC675 Regi Control Setup Cycle.

# 389-603 RC Sample Block Fail-A1-Out

#### **BSD-ON: 6.10 Image Registration Control**

During the A1 (fine adjustment pattern) and C patch detection, the patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- NOTE: •When this Fail occurs, select No. 003 in DC612 Test Pattern Print and check the printout of the fine adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

Table 1 Chain 389

### Cause/Action

- Check the detection section of the MOB Sensor for contamination, the connectors for disconnection, and the connections for open circuit, short circuit, and poor contact. If no problems are found, replace the MOB ADC Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.
- Perform dC675 Regi Control Setup Cycle. 2.

# 389-604 RC Sample Block Fail-B-#1-In

#### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- NOTE: •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power ٠ Switch.

### Initial Actions

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

#### Table 1 Chain 389

### Procedure

Check the density of Y color. Is the density of Y color normal?

Υ Ν

Adjust to correct the density of Y color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/ J415 for connector disconnection, open circuit, short circuit, and poor contact. Is the connection normal? Υ

#### Ν

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Y N

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (Y) for scratches and deformation. Is the Drum Unit (Y) normal?

Y N

Replace the Drum Unit (Y) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main  $\ensuremath{\mathsf{PWB}}.$ 

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-606 RC Sample Block Fail-B-#1-Out

### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #1 (Yellow) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

#### Table 1 Chain 389

### Procedure

Check the density of Y color. Is the density of Y color normal?

Y N

Adjust to correct the density of Y color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. Is the Magnet Roll normal?
Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (Y) for scratches and deformation. Is the Drum Unit (Y) normal?

Y N

Replace the Drum Unit (Y) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-607 RC Sample Block Fail-B-#2-In

### BSD-ON: 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1			
Priority	Chain Link	Fail Item	
1 (High)	389-666, 389-667	TMA LED Fail	
2	389-668, 389-669	TMA Threshold Fail	
3	389-623, 389-629	Vout Stability Fail	
4	389-616	RC Data Over Flow Fail	
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B	
6	389-601, 389-603	RC Sample Block Fail-A1	
7	389-600	RC Sample Lateral Fail-A1	
8	389-617	RC Data Over Range Fail	
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail	

## Procedure

Check the density of M color. Is the density of M color normal?

Y N

Adjust to correct the density of M color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (M) for scratches and deformation. Is the Drum Unit (M) normal?

Y N

Replace the Drum Unit (M) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main  $\ensuremath{\mathsf{PWB}}.$ 

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-609 RC Sample Block Fail-B-#2-Out

### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #2 (Magenta) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1		
Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Check the density of M color. Is the density of M color normal?

Y N

Adjust to correct the density of M color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (M) for scratches and deformation. Is the Drum Unit (M) normal?

#### Y N

Replace the Drum Unit (M) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-610 RC Sample Block Fail-B-#3-In

### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1		
Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Check the density of C color. Is the density of C color normal?

Y N

Adjust to correct the density of C color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (C) for scratches and deformation. Is the Drum Unit (C) normal?

Y N

Replace the Drum Unit (C) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main  $\ensuremath{\mathsf{PWB}}.$ 

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-612 RC Sample Block Fail-B-#3-Out

### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #3 (Cyan) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1		
Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Check the density of C color. Is the density of C color normal?

Y N

Adjust to correct the density of C color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (C) for scratches and deformation. Is the Drum Unit (C) normal?

### Y N

Replace the Drum Unit (C) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-613 RC Sample Block Fail-B-#4-In

### BSD-ON: 6.10 Image Registration Control

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor In side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1			
Priority	Chain Link	Fail Item	
1 (High)	389-666, 389-667	TMA LED Fail	
2	389-668, 389-669	TMA Threshold Fail	
3	389-623, 389-629	Vout Stability Fail	
4	389-616	RC Data Over Flow Fail	
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B	
6	389-601, 389-603	RC Sample Block Fail-A1	
7	389-600	RC Sample Lateral Fail-A1	
8	389-617	RC Data Over Range Fail	
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail	

## Procedure

Check the density of K color. Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor In position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (K) for scratches and deformation. Is the Drum Unit (K) normal?

Y N

Replace the Drum Unit (K) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main  $\ensuremath{\mathsf{PWB}}.$ 

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-615 RC Sample Block Fail-B-#4-Out

### **BSD-ON: 6.10 Image Registration Control**

During the B (rough adjustment pattern) patch detection, the #4 (Black) patch at the MOB Sensor Out side did not satisfy the defined number of valid sample blocks. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

- **NOTE:** •When this Fail occurs, select No. 004 in DC612 Test Pattern Print and check the printout of the rough adjustment pattern to estimate the color position (In/Out). Before printing this test pattern, set the value of DC131 [870-207] to "7".
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1			
Priority	Chain Link	Fail Item	
1 (High)	389-666, 389-667	TMA LED Fail	
2	389-668, 389-669	TMA Threshold Fail	
3	389-623, 389-629	Vout Stability Fail	
4	389-616	RC Data Over Flow Fail	
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B	
6	389-601, 389-603	RC Sample Block Fail-A1	
7	389-600	RC Sample Lateral Fail-A1	
8	389-617	RC Data Over Range Fail	
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail	

## Procedure

Check the density of K color. Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Magnet Roll at the TMA Sensor Out position for contamination, scratches, and distortion. Is the Magnet Roll normal?

Repair the Magnet Roll. After the repair, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

#### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the Drum Unit (K) for scratches and deformation. Is the Drum Unit (K) normal?

#### Y N

Replace the Drum Unit (K) (PL 8.1). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-616 RC Data Over Flow Fail

**BSD-ON: 6.10 Image Registration Control** 

The correction setting value of calculation result has exceeded the settable range. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1			
Priority	Chain Link	Fail Item	
1 (High)	389-666, 389-667	TMA LED Fail	
2	389-668, 389-669	TMA Threshold Fail	
3	389-623, 389-629	Vout Stability Fail	
4	389-616	RC Data Over Flow Fail	
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B	
6	389-601, 389-603	RC Sample Block Fail-A1	
7	389-600	RC Sample Lateral Fail-A1	
8	389-617	RC Data Over Range Fail	
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail	

## Procedure

Display the adjustment amount in DC675 Registration Control Setup Cycle. Check which item has reached the maximum adjustment amount shown in the following table.

Correction item	Adjustment Range		
	MIN	МАХ	
Fast Scan Margin	-90	+90	
Slow Scan Margin	-4720	+4720	
Skew	-800	+800	

Is the item that has reached the adjustment range (MIN or MAX), [Fast Scan Margin] or [Slow Scan Margin]?

#### Y N

Check the following:

• Check that the value of NVM [760-024] is '0'.

Α

Α

Υ

Check the position of the Drum Unit for each color.

If no problem is found, replace the following parts in sequence:

- The Drum Unit (PL 8.1) of the appropriate color
- The LPH Unit (PL 2.1) of the appropriate color
- The Rear Holder Assembly (PL 2.1) of the appropriate color

### Is the item that has reached the adjustment range (MIN or MAX) [Slow Scan Margin]?

N Raise/lower the LPH (Y, M, C, K) 2 to 3 times to check the LPH lift up/down mechanism. If no problem is found, replace the LPH Unit (PL 2.1) of the appropriate color. After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

# 389-617 RC Lead Regi Over Range Fail

BSD-ON: 6.10 Image Registration Control

The result from adding the offset value to the color registration correction value has exceeded the settable range. (This is a hidden failure. The Alignment Lead Regi or Skew might have exceeded the adjustable range and Data is only recorded in history.)

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item	
1 (High)	389-666, 389-667	TMA LED Fail	
2	389-668, 389-669	TMA Threshold Fail	
3	389-623, 389-629	Vout Stability Fail	
4	389-616	RC Data Over Flow Fail	
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B	
6	389-601, 389-603	RC Sample Block Fail-A1	
7	389-600	RC Sample Lateral Fail-A1	
8	389-617	RC Data Over Range Fail	
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail	

- 1. Check that the value of NVM [760-063] (Lead Regi Offset) is '0'. If the value is not '0', set it to '0'.
- Check that the value of NVM [760-082] (Side 1 Skew Offset) is between the values of NVM [760-084] and NVM [760-085]. If the value is not in between, set it so that it does fall in between.
- Check that the value of NVM [760-083] (Side 2 Skew Offset) is between the values of NVM [760-084] and NVM [760-085]. If the value is not in between, set it so that it does fall in between.

## 389-623 Vsout Stability Fail-In

#### **BSD-ON: 6.10 Image Registration Control**

During the TMA Sensor LED Light Amount Correction at the In side, the reflected light amount is unstable. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

#### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Та	hle	1
10	DIC	

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389-610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. Is the connection normal?

Y N

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor In contaminated?

Y N

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

NOTE: When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

## 389-625 RC Data Linearity Fail Y

#### BSD-ON: 6.10 Image Registration Control

The result from adding the skew/bow correction value to the Y color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

#### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (Y) is correct. Has any Fail involving the EEPROM of LPH (Y) occurred?

### Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. Is the skew correction amount within the range of +500 to -500?

### Y N

- Check the following:
- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (Y) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (Y) (PL 8.1)
- LPH Unit (Y) (PL 2.1)
- Rear Holder Assembly (Y) (PL 2.1)

Replace the LPH Unit (Y). (PL 2.1) If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

Α

# 389-626 RC Data Linearity Fail M

#### BSD-ON: 6.10 Image Registration Control

The result from adding the skew/bow correction value to the M color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (M) is correct. Has any Fail involving the EEPROM of LPH (M) occurred?

```
Y N
```

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. Is the skew correction amount within the range of +500 to -500?

Y N

Check the following:

- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (M) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (M) (PL 8.1)
- LPH Unit (M) (PL 2.1)
- Rear Holder Assembly (M) (PL 2.1)

Replace the LPH Unit (M). (PL 2.1) If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Δ

Go to the appropriate RAP

Δ

# 389-627 RC Data Linearity Fail C

#### BSD-ON: 6.10 Image Registration Control

The result from adding the skew/bow correction value to the C color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

#### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

#### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (C) is correct. Has any Fail involving the EEPROM of LPH (C) occurred?

### Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. Is the skew correction amount within the range of +500 to -500?

- Y N
  - Check the following:
  - Check that the value of NVM [760-024] is '0'.
  - Check the Drum Unit (C) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (C) (PL 8.1)
- LPH Unit (C) (PL 2.1)
- Rear Holder Assembly (C) (PL 2.1)

Replace the LPH Unit (C). (PL 2.1) If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

Α

# 389-628 RC Data Linearity Fail K

### BSD-ON: 6.10 Image Registration Control

The result from adding the skew/bow correction value to the K color linearity correction value has exceeded the settable range. (This is a hidden failure. The LPH Slow Scan linearity cannot be guaranteed and Data is only recorded in history.)

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control. However, 389-617 is also detected during power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

#### Procedure

Use DC402 (LPH EEPROM Self Test) to check whether the value that is stored in the EEPROM of LPH (K) is correct. Has any Fail involving the EEPROM of LPH (K) occurred?

### Y N

Perform DC675 Regi Control Setup Cycle and display the skew correction amount. Is the skew correction amount within the range of +500 to -500?

### Y N

- Check the following:
- Check that the value of NVM [760-024] is '0'.
- Check the Drum Unit (K) for improper installation and its installation position.

If no problem is found, replace the following parts in sequence:

- Drum Unit (K) (PL 8.1)
- LPH Unit (K) (PL 2.1)
- Rear Holder Assembly (K) (PL 2.1)

Replace the LPH Unit (K). (PL 2.1) If the problem persists, replace the Motor Driver Main PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

Δ

## 389-629 Vsout Stability Fail-Out

#### **BSD-ON: 6.10 Image Registration Control**

During the TMA Sensor LED Light Amount Correction at the Out side, the reflected light amount is unstable. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1		
Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

#### Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

#### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor Out contaminated?

Y N

Α

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

NOTE: When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

NOTE: When replacing, take care so as not bend the Shutter.

If the problem persists even after taking the above actions, replace the following parts in sequence:

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- If the problem persists, replace the Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

After the replacement, perform dC675 Regi Control Setup Cycle.

## 389-666 TMA LED Fail-In

#### **BSD-ON: 6.10 Image Registration Control**

The TMA Sensor LED Light Amount Correction at the In side did not complete successfully. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

#### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Table 1

## Procedure

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. Is the connection normal?

#### Y N

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

#### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor In contaminated?

Y N

Δ

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

A

NOTE: When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 389-667 TMA LED Fail-Out

#### **BSD-ON: 6.10 Image Registration Control**

The TMA Sensor LED Light Amount Correction at the Out side did not complete successfully. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

#### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

#### Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

#### Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor Out contaminated?

Y N

Α

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Α

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

# 389-668 TMA Thresh Hold Fail-In

#### **BSD-ON: 6.10 Image Registration Control**

For the YMA Sensor Threshold level setting at the In side, the difference between the output voltage value of the Sensor that measures the IBT Belt surface and the output voltage value of the Sensor that measures the patch is lower than the permissible level. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

## **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	389-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

## Procedure

Check the density of K color.

**NOTE:** Check whether any defect, such as white streaks, has occurred at the vicinity of the Sensor position.

### Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor In P/J150 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor In P/J150 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor In position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor In contaminated?

Y N

Clean the detection section of the TMA Sensor In. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

# 389-669 TMA Thresh Hold Fail-Out

#### **BSD-ON: 6.10 Image Registration Control**

For the YMA Sensor Threshold level setting at the Out side, the difference between the output voltage value of the Sensor that measures the IBT Belt surface and the output voltage value of the Sensor that measures the patch is lower than the permissible level. This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

### **Initial Actions**

When multiple failures with Chain No. 389 occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures. (Chain No. 389 Fail is detected during the execution of Regi Control or TMA Gain Correction. However, only 389-617 will also be detected at power ON.)

Table 1

Priority	Chain Link	Fail Item
1 (High)	389-666, 389-667	TMA LED Fail
2	389-668, 389-669	TMA Threshold Fail
3	389-623, 389-629	Vout Stability Fail
4	389-616	RC Data Over Flow Fail
5	389-604, 389-606, 389-607, 389-609, 389- 610, 389-612, 389-613, 389-615	RC Sample Block Fail-B
6	389-601, 389-603	RC Sample Block Fail-A1
7	389-600	RC Sample Lateral Fail-A1
8	389-617	RC Data Over Range Fail
9 (Low)	08-625, 389-626, 389-627, 389-628	RC Data Linearity Fail

### Procedure

Check the density of K color.

**NOTE:** Check whether any defect, such as white streaks, has occurred at the vicinity of the Sensor position.

#### Is the density of K color normal?

Y N

Adjust to correct the density of K color. After the adjustment, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the connection between the TMA Sensor Out P/J151 and the Motor Driver Main PWB P/J415 for connector disconnection, open circuit, short circuit, and poor contact. **Is the connection normal?** 

Y N

Connect the TMA Sensor Out P/J151 to the Motor Driver Main PWB P/J415 properly. After the connection, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

Check the IBT Belt at the TMA Sensor Out position for scratches and distortion. Is the IBT Belt normal?

Y N

Replace the IBT Belt (PL 6.3). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

#### Is the detection section of the TMA Sensor Out contaminated?

Y N

Clean the detection section of the TMA Sensor Out. After the cleaning, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When cleaning, take care so as not bend the Shutter.

Replace the MOB ADC Sensor Assembly (PL 18.5). After the replacement, change the value of NVM [760-240] (TMA Gain Flag) to '1'.

**NOTE:** When replacing, take care so as not bend the Shutter.

- IBT Belt Unit (PL 6.1) (After the replacement, change the value of NVM [760-240] to '1'.)
- Motor Driver Main PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 391-313 CRUM ASIC Communication Fault

BSD-ON: 9.3 Drum Life Control (Y,M)

#### BSD-ON: 9.4 Drum Life Control (C,K)

Communication error between CPU of the MDM PWB and CRUM ASIC was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and replace the MDM PWB.
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

## 391-400 Waste Toner Bottle Near Full

BSD-ON: 9.27 Waste Toner Disposal (1 of 2)

The Waste Toner Bottle Full Sensor detected Near Full state.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

The Waste Toner Bottle needs to be replaced soon. Replace the Waste Toner Bottle (PL 8.2) as required. If the problem persists, check the Waste Toner Bottle Full Sensor.

Turn the power ON and enter the Diag mode. Turn ON dC330 [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor. **Does the display change between High/Low?** 

Y N

Use OF 99-2 Transmissive Sensor RAP to check the Waste Toner Bottle Full Sensor.

Press the Stop button and turn the power OFF. Replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-401 Drum Cartridge K Near Life

### BSD-ON: 9.4 Drum Life Control (C,K)

It was detected that the replacement timing for Drum (K) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

The Drum (K) needs to be replaced soon. Replace the Drum (K) (PL 8.1) as required.

## 391-402 Drum Cartridge K Life Over

BSD-ON: 9.4 Drum Life Control (C,K)

Drum (K) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace the Drum (K) (PL 8.1).

# 391-411 Drum Cartridge Y Near Life

### BSD-ON: 9.3 Drum Life Control (Y,M)

It was detected that the replacement timing for Drum (Y) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

The Drum (Y) needs to be replaced soon. Replace the Drum (Y) (PL 8.1) as required.

## 391-421 Drum Cartridge M Near Life

BSD-ON: 9.3 Drum Life Control (Y,M)

It was detected that the replacement timing for Drum (M) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

The Drum (M) needs to be replaced soon. Replace the Drum (M) (PL 8.1) as required.

# 391-431 Drum Cartridge C Near Life

### BSD-ON: 9.4 Drum Life Control (C,K)

It was detected that the replacement timing for Drum (C) is closer than Pre Near.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

The Drum (C) needs to be replaced soon. Replace the Drum (C) (PL 8.1) as required.

## 391-480 Drum Cartridge Y Life Over

BSD-ON: 9.3 Drum Life Control (Y,M)

Drum (Y) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace Drum (Y) (PL 8.1).

# 391-481 Drum Cartridge M Life Over

BSD-ON: 9.3 Drum Life Control (Y,M)

Drum (M) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace Drum (M) (PL 8.1).

## 391-482 Drum Cartridge C Life Over

BSD-ON: 9.4 Drum Life Control (C,K)

Drum (C) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace Drum (C) (PL 8.1).

## 391-910 Waste Toner Bottle Not In Position

### BSD-ON: 9.27 Waste Toner Disposal (1 of 2)

The Waste Toner Bottle is not in the proper position.

NOTE: When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Check that the Bottle Guide Assembly at the machine side and the Waste Toner Bottle does not have any deformation or foreign substances, and that they are installed properly. Is the Waste Toner Bottle installed properly?

Υ Ν

Install the Waste Toner Bottle properly. If there is any deformation, replace the Waste Toner Bottle (PL 8.2) and Bottle Guide Assembly (PL 8.2).

Check the Waste Toner Bottle Position Sensor.

Turn the power ON and enter the Diag mode. Enter dC330 [091-200]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Position Sensor. Does the display change between High/Low?

Ν Υ

Use OF 99-2 Transmissive Sensor RAP to check the Waste Toner Bottle Position Sensor.

Press the Stop button and turn the power OFF. Replace the MDM PWB.

- ٠ MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B) ٠

## 391-911 Waste Toner Bottle Full

BSD-ON: 9.27 Waste Toner Disposal (1 of 2)

After the Waste Toner Bottle Near Full has occurred, the PV exceeds the threshold value.

NOTE: When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### Procedure

Replace the Waste Toner Bottle (PL 8.2). If the problem persists, check the Waste Toner Bottle Full Sensor. Enter dC330 [091-201]. Use a sheet of paper, etc. to block/clear the light path to the Waste Toner Bottle Full Sensor. Does the display change between High/Low? Ν

Υ

Use OF 99-2 Transmissive Sensor RAP to check the Waste Toner Bottle Full Sensor.

Press the Stop button and turn the power OFF. Replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A) ٠
- MDM PWB (7845/55) (PL 18.2B) ٠

# 391-913 Drum Cartridge K Life End

BSD-ON: 9.4 Drum Life Control (C,K)

Drum (K) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace the Drum (K) (PL 8.1).

# 391-914 Drum CRUM K Communication Fault

BSD-ON: 9.4 Drum Life Control (C,K)

Communication failure with Drum (K) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (K) P/J115 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Drum (K) CRUM PWB for contamination or disengagement
  - The Drum (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (K) (PL 8.1)
- Drum CRUM Coupler Assembly (K) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 391-915 Drum CRUM K Data Broken

### BSD-ON: 9.4 Drum Life Control (C,K)

The system detected that the data written to the Drum (K) CRUM and the data read from the Drum (K) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Remove and reinstall the Drum (K) and check for improper installation. If no problems are found, replace the Drum (K) (PL 8.1).

## 391-916 Drum CRUM K Data Mismatch

BSD-ON: 9.4 Drum Life Control (C,K)

Incorrect authentication area data was detected in Drum (K) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Remove and reinstall the Drum (K) and check for improper installation. If no problems are found, replace it with the correct Drum (K) (PL 8.1).

# 391-917 Drum CRUM Y Communication Fault

BSD-ON: 9.3 Drum Life Control (Y,M)

Communication failure with Drum (Y) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (Y) P/J112 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Drum (Y) CRUM PWB for contamination or disengagement
  - The Drum (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (Y) (PL 8.1)
- Drum CRUM Coupler Assembly (Y) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-918 Drum CRUM M Communication Fault

BSD-ON: 9.3 Drum Life Control (Y,M)

Communication failure with Drum (M) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (M) P/J113 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Drum (M) CRUM PWB for contamination or disengagement
  - The Drum (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (M) (PL 8.1)
- Drum CRUM Coupler Assembly (M) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-919 Drum CRUM C Communication Fault

BSD-ON: 9.4 Drum Life Control (C,K)

Communication failure with Drum (C) CRUM was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Turn the power OFF and check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (C) P/J114 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Drum (C) CRUM PWB for contamination or disengagement
  - The Drum (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (C) (PL 8.1)
- Drum CRUM Coupler Assembly (C) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 391-920 Drum CRUM Y Data Broken

BSD-ON: 9.3 Drum Life Control (Y,M)

The system detected that the data written to the Drum (Y) CRUM and the data read from the Drum (Y) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Remove and reinstall the Drum Unit (Y).
- 2. Check the Drum Unit (Y) for improper installation
- 3. If the problem persists, replace the Drum Unit (Y). (PL 8.1)

# 391-921 Drum CRUM K Not In Position

#### BSD-ON: 9.4 Drum Life Control (C,K)

The Drum (K) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Remove and reinstall the Drum (K).
- 2. Polish the connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (K) P/J115 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (K) CRUM PWB and the Drum CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Drum (K) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (K) (PL 8.1)
- Drum CRUM Coupler Assembly (K) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-922 Drum CRUM M Data Broken

BSD-ON: 9.3 Drum Life Control (Y,M)

The system detected that the data written to the Drum (M) CRUM and the data read from the Drum (M) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Remove and reinstall the Drum Unit (M).
- 2. Check the Drum Unit (M) for improper installation
- 3. If the problem persists, replace the Drum Unit (M). (PL 8.1)

## 391-923 Drum CRUM C Data Broken

### BSD-ON: 9.4 Drum Life Control (C,K)

The system detected that the data written to the Drum (C) CRUM and the data read from the Drum (C) CRUM do not match.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

- 1. Remove and reinstall the Drum Unit (C).
- 2. Check the Drum Unit (C) for improper installation
- 3. If the problem persists, replace the Drum Unit (C). (PL 8.1)

## 391-924 Drum CRUM Y Data Mismatch

BSD-ON: 9.3 Drum Life Control (Y,M)

Incorrect authentication area data was detected in Drum (Y) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Remove and reinstall the Drum Unit (Y).
- 2. Check the Drum Unit (Y) for improper installation
- 3. If the problem persists, replace the Drum Unit (Y). (PL 8.1)

## 391-925 Drum CRUM M Data Mismatch

BSD-ON: 9.3 Drum Life Control (Y,M)

Incorrect authentication area data was detected in Drum (M) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Remove and reinstall the Drum Unit (M).
- 2. Check the Drum Unit (M) for improper installation
- 3. If the problem persists, replace the Drum Unit (M). (PL 8.1)

## 391-926 Drum CRUM C Data Mismatch

BSD-ON: 9.4 Drum Life Control (C,K)

Incorrect authentication area data was detected in Drum (C) CRUM.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Remove and reinstall the Drum Unit (C).
- 2. Check the Drum Unit (C) for improper installation
- 3. If the problem persists, replace the Drum Unit (C). (PL 8.1)

# 391-927 Drum CRUM Y Not In Position

### BSD-ON: 9.3 Drum Life Control (Y,M)

The Drum (Y) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Remove and reinstall the Drum (Y).
- 2. Polish the connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (Y) P/J112 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (Y) CRUM PWB and the Drum CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Drum (Y) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (Y) (PL 8.1)
- Drum CRUM Coupler Assembly (Y) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-928 Drum CRUM M Not In Position

BSD-ON: 9.3 Drum Life Control (Y,M)

The Drum (M) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Remove and reinstall the Drum (M).
- Polish the connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (M) P/J113 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (M) CRUM PWB and the Drum CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Drum (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (M) (PL 8.1)
- Drum CRUM Coupler Assembly (M) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-929 Drum CRUM C Not In Position

BSD-ON: 9.4 Drum Life Control (C,K)

The Drum (C) CRUM is not in the proper position (loose CRUM).

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

- 1. Remove and reinstall the Drum (C).
- 2. Polish the connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDM PWB P/J528 and the Drum CRUM Coupler Assembly (C) P/J114 for open circuit, short circuit, and poor contact
  - The connection terminals between the Drum (C) CRUM PWB and the Drum CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Drum (C) for improper installation

If no problems are found, replace the following parts in sequence:

- Drum (C) (PL 8.1)
- Drum CRUM Coupler Assembly (C) (PL 8.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 391-932 Drum Cartridge Y Life End

BSD-ON: 9.3 Drum Life Control (Y,M)

Drum (Y) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### **Cause/Action**

Replace the Drum (Y) (PL 8.1).

# 391-933 Drum Cartridge M Life End

BSD-ON: 9.3 Drum Life Control (Y,M)

Drum (M) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace the Drum (M) (PL 8.1).

# 391-934 Drum Cartridge C Life End

BSD-ON: 9.4 Drum Life Control (C,K)

Drum (C) has reached the end of its life span.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace the Drum (C) (PL 8.1).

# 392-312 ATC Fault [Y]

#### BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

#### **BSD-ON: 9.13 Development (Y)**

The frequency at which the ATC Average Fail [Y] or the ATC Amplitude Fail [Y] has been occurring has exceeded the threshold value.

- **NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-346] (ATC Fail [Y]) or DC131 [752-350] (ATC Fail Continuous Count [Y]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB P/J124 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: dC330 [093-005] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A1 and P/J529 pin-A2
  - Between Motor Driver Sub PWB P/J529 pin-A3 and P/J529 pin-A4
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-026] (PL 3.3B)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (Y) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## 392-313 ATC Fault [M]

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

#### BSD-ON: 9.14 Development (M)

The frequency at which the ATC Average Fail [M] or the ATC Amplitude Fail [M] has been occurring has exceeded the threshold value.

- **NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-347] (ATC Fail [M]) or DC131 [752-351] (ATC Fail Continuous Count [M]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB P/J125 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: dC330 [093-010] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A5 and P/J529 pin-A6
  - Between Motor Driver Sub PWB P/J529 pin-A7 and P/J529 pin-A8
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-026] (PL 3.3B)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
# 392-314 ATC Fault [C]

#### BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

#### **BSD-ON: 9.15 Development (C)**

The frequency at which the ATC Average Fail [C] or the ATC Amplitude Fail [C] has been occurring has exceeded the threshold value.

- **NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-348] (ATC Fail [C]) or DC131 [752-352] (ATC Fail Continuous Count [C]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB P/J126 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: dC330 [093-015] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A9 and P/J529 pin-A10
  - Between Motor Driver Sub PWB P/J529 pin-A11 and P/J529 pin-A12
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-0226] (PL 3.3B)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (C) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-315 ATC Fault [K]

BSD-ON: 9.2 Drum/Developer Drive Control (K)

## BSD-ON: 9.16 Development (K)

The frequency at which the ATC Average Fail [K] or the ATC Amplitude Fail [K] has been occurring has exceeded the threshold value.

- **NOTE:** •Although this failure can be cleared by turning the power OFF and ON and it will be possible to output a few sheets of printouts, when this failure has occurred a certain number of times, it will no longer be clearable by turning the power OFF and ON. To clear it, clear the value of DC131 [752-349] (ATC Fail [K]) or DC131 [752-353] (ATC Fail Continuous Count [K]) to "0". If the machine is not repaired back to normal status, this failure will occur again during the operation.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB P/J127 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: dC330 [093-020] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-B1 and P/J529 pin-B2
  - Between Motor Driver Sub PWB P/J529 pin-B3 and P/J529 pin-B4
- The Drum/Dev Drive Motor (K) for revolution failure (7830/35): dC330 [091-036] (PL 3.3A)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

- ATC Sensor (K) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-649 ADC Shutter Open Fault

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC Sensor shutters is open (cannot be closed). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly)  $\,$  P/J153 and the MDM PWB  $\,$  P/J415 for open circuit, short circuit, and poor contact.

Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly (PL 18.5)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# **392-650 ADC Shutter Close Fault**

**BSD-ON: 9.23 ADC Patch and Environment Sensing** 

The ADC Sensor shutters is closed (cannot be opened). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly)  $\,$  P/J153 and the MDM PWB  $\,$  P/J415 for open circuit, short circuit, and poor contact.

Also check whether there is opening/closing failure due to foreign substances/burrs, etc. at the shutter section of the ADC Sensor.

- MOB ADC Assembly (PL 18.5)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-651 ADC Sensor Fault

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC Sensor read value of the density reference patch is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the connection between the ADC Sensor (MOB ADC Assembly) P/J153 and the MDM PWB P/J415 for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the ADC Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly (PL 18.5)
- IBT Assembly (PL 6.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-657 ATC Amplitude Fault [Y]

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

**BSD-ON: 9.13 Development (Y)** 

#### BSD-ON: 9.19 Toner Cartridge Cooling (7845/55)

The difference between the maximum and minimum values in the ATC Sensor (Y) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB P/J124 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y) for revolution failure: dC330 [093-005] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A1 and P/J529 pin-A2
  - Between Motor Driver Sub PWB P/J529 pin-A3 and P/J529 pin-A4
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-026] (PL 3.3B)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

- ATC Sensor (Y) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-658 ATC Amplitude Fault [M]

BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

BSD-ON: 9.14 Development (M)

BSD-ON: 9.17 Toner Dispense Control (Y, M)

The difference between the maximum and minimum values in the ATC Sensor (M) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# Procedure

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB P/J125 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M) for revolution failure: dC330 [093-016] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A5 and P/J529 pin-A6
  - Between Motor Driver Sub PWB P/J529 pin-A7 and P/J529 pin-A8
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-026] (PL 3.3B)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (M) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-659 ATC Amplitude Fault [C]

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

**BSD-ON: 9.15 Development (C)** 

#### BSD-ON: 9.18 Toner Dispense Control (C,K)

The difference between the maximum and minimum values in the ATC Sensor (C) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# Procedure

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB P/J126 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C) for revolution failure: dC330 [093-015] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A9 and P/J529 pin-A10
  - Between Motor Driver Sub PWB P/J529 pin-A11 and P/J529 pin-A12
- The Drum/Dev Drive Motor (Y, M, C) for revolution failure (7830/35): dC330 [091-030] (PL 3.3A)
- The Drum Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [091-030] (PL 3.3B)
- The Dev Drive Motor (Y, M, C) for revolution failure (7845/55): dC330 [093-026] (PL 3.3B)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

- ATC Sensor (C) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-660 ATC Amplitude Fault [K]

BSD-ON: 9.3 Drum Life Control (Y,M)

## **BSD-ON: 9.16 Development (K)**

#### BSD-ON: 9.18 Toner Dispense Control (C,K)

The difference between the maximum and minimum values in the ATC Sensor (K) measurement set is lower than the threshold value. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB P/J127 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the MDM PWB P/J528 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (K) for revolution failure: dC330 [093-020] (PL 5.1) Check the wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-B1 and P/J529 pin-B2
  - Between Motor Driver Sub PWB P/J529 pin-B3 and P/J529 pin-B4
- The Drum/Dev Drive Motor (K) for revolution failure (7830/35): dC330 [091-036] (PL 3.3A)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problems are found, replace the following parts in sequence:

- ATC Sensor (K) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-661 Temperature Sensor Fault

**BSD-ON: 9.23 ADC Patch and Environment Sensing** 

Abnormal value was detected by the ENVIRONMENT SENSOR (Temperature). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly)  $\,$  P/J154 and the MDM PWB  $\,$  P/J415 for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

- MOB ADC Assembly (PL 18.5)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-662 Humidity Sensor Fault

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

Abnormal value was detected by the ENVIRONMENT SENSOR (Humidity). (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Check the connection between the Environment Sensor (MOB ADC Assembly)  $\,$  P/J154 and the MDM PWB  $\,$  P/J415 for open circuit, short circuit, and poor contact.

Also check whether there is poor connection or foreign substances at the detection section of the Environment Sensor.

If no problems are found, replace the following parts in sequence:

- MOB ADC Assembly (PL 18.5)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 392-665 ATC Average Fail Y

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

**BSD-ON: 9.13 Development (Y)** 

#### BSD-ON: 9.17 Toner Dispense Control (Y, M)

The average output value of Y color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

## Cause/Action

Check the following:

- The connection between the ATC Sensor (Y) and the ATC PWB P/J124 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the Motor Driver Main PWB P/J528 for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (Y) (dC330 [093-005]) for operation failure. (PL 5.1) The wire wound resistance of the Toner Dispense Motor (Y): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A1 and P/J529 pin-A2
  - Between Motor Driver Sub PWB P/J529 pin-A3 and P/J529 pin-A4
- 7830/35
  - The Drum/Deve Drive Motor (Y, M, C) (dC330 [091-030]) for operation failure. (PL 3.3A)
- 7845/55
  - The Drum Drive Motor (Y, M, C) (dC330 [091-030]) for operation failure. (PL 3.3B)
  - The Deve Drive Motor (Y, M, C) (dC330 [093-026]) for operation failure. (PL 3.3B)
- The path from Toner Cartridge (Y) to Developer (Y) for toner blockage
- The Developer (Y) for internal toner blockage
- The Toner Cartridge (Y) for internal toner blockage

- ATC Sensor (Y) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 392-666 ATC Average Fail M

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

#### BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

BSD-ON: 9.14 Development (M)

## BSD-ON: 9.17 Toner Dispense Control (Y, M)

The average output value of M color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The connection between the ATC Sensor (M) and the ATC PWB P/J125 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the Motor Driver Main PWB P/J528 for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (M) (dC330 [093-010]) for operation failure. (PL 5.1) The wire wound resistance of the Toner Dispense Motor (M): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A5 and P/J529 pin-A6
  - Between Motor Driver Sub PWB P/J529 pin-A7 and P/J529 pin-A8
- 7830/35
  - The Drum/Deve Drive Motor (Y, M, C) (DC330 [091-030]) for operation failure. (PL 3.3A)
- 7845/55
  - The Drum Drive Motor (Y, M, C) (dC330 [091-030]) for operation failure. (PL 3.3B)
  - The Deve Drive Motor (Y, M, C) (dC330 [093-026]) for operation failure. (PL 3.3B)
- The path from Toner Cartridge (M) to Developer (M) for toner blockage
- The Developer (M) for internal toner blockage
- The Toner Cartridge (M) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (M) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 392-667 ATC Average Fail C

BSD-ON: 9.1 Drum/Developer Drive Control (Y,M,C)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

BSD-ON: 9.15 Development (C)

## BSD-ON: 9.18 Toner Dispense Control (C,K)

The average output value of C color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

# **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The connection between the ATC Sensor (C) and the ATC PWB P/J126 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the Motor Driver Main PWB P/J528 for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (C) (dC330 [093-015]) for operation failure. (PL 5.1) The wire wound resistance of the Toner Dispense Motor (C): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-A9 and P/J529 pin-A10
  - Between Motor Driver Sub PWB P/J529 pin-A11 and P/J529 pin-A12
- 7830/35
  - The Drum/Deve Drive Motor (Y, M, C) (dC330 [091-030]) for operation failure. (PL 3.3A)
- 7845/55
  - The Drum Drive Motor (Y, M, C) (dC330 [091-030]) for operation failure. (PL 3.3B)
  - The Deve Drive Motor (Y, M, C) (dC330 [093-026]) for operation failure. (PL 3.3B)
- The path from Toner Cartridge (C) to Developer (C) for toner blockage
- The Developer (C) for internal toner blockage
- The Toner Cartridge (C) for internal toner blockage

- ATC Sensor (C) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 392-668 ATC Average Fail K

BSD-ON: 9.2 Drum/Developer Drive Control (K)

#### BSD-ON: 9.16 Development (K)

#### BSD-ON: 9.18 Toner Dispense Control (C,K)

The average output value of K color is not within the specified range in the ATC (Automatic Toner Control) measurement. (this Fail is a hidden failure and it is registered only in the History)

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# **Cause/Action**

Check the following:

- The connection between the ATC Sensor (K) and the ATC PWB P/J127 for open circuit, short circuit, and poor contact
- The connection between the ATC PWB P/J633 and the Motor Driver Main PWB P/J528 for open circuit, short circuit, and poor contact.
- The Toner Dispense Motor (K) (dC330 [093-020]) for operation failure. (PL 5.1) The wire wound resistance of the Toner Dispense Motor (K): approx. 5.3 Ohm
  - Between Motor Driver Sub PWB P/J529 pin-B1 and P/J529 pin-B2
  - Between Motor Driver Sub PWB P/J529 pin-B3 and P/J529 pin-B4
- The Drum/Deve Drive Motor (K) (dC330 [091-036]) for operation failure. (PL 3.3A, PL 3.3B)
- The path from Toner Cartridge (K) to Developer (K) for toner blockage
- The Developer (K) for internal toner blockage
- The Toner Cartridge (K) for internal toner blockage

If no problem is found, replace the following parts in sequence:

- ATC Sensor (K) (PL 5.2)
- ATC PWB (PL 5.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)

# 392-670 ADC Patch Fault [Y]

# BSD-ON: 9.13 Development (Y)

BSD-ON: 9.21 First Transfer

## **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC patch of Y color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [Y] has occurred. Has Fail 392-651 or 392-312 occurred?

- Y N
  - Turn the power OFF and check the following:
  - The Drum (Y) for contamination
  - The LPH (Y) for contamination
  - The 1st BTR (Y) for contamination
  - The Transfer Belt for contamination
  - The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
  - 7830/35
    - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts
  - 7845/55
    - The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts
  - If no problems are found, replace the following parts in sequence:
  - Drum (Y) (PL 8.1)
  - LPH Assembly (Y) (PL 2.1)
  - HVPS (Dev/BCR) (7830/35) (PL 18.6A)
  - HVPS (Dev) (7845/55) (PL 5.3)
  - HVPS (1st/2nd/BTR) (PL 6.2)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

#### Go to the 392-651 or 392-312.

# 392-671 ADC Patch Fault [M]

BSD-ON: 9.14 Development (M)

#### BSD-ON: 9.21 First Transfer

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC patch of M color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [M] has occurred. **Has** Fail 392-651 or 392-313 occurred?

Y N

Turn the power OFF and check the following:

- The Drum (M) for contamination
- The LPH (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (M) (PL 8.1)
- LPH Assembly (M) (PL 2.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## Go to 392-651 or 392-313.

# 392-672 ADC Patch Fault [C]

BSD-ON: 9.15 Development (C)

BSD-ON: 9.21 First Transfer

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC patch of C color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [C] has occurred. **Has Fail 392-651 or 392-314 occurred?** 

Y N

- Turn the power OFF and check the following:
- The Drum (C) for contamination
- The LPH (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts
- If no problems are found, replace the following parts in sequence:
- Drum (C) (PL 8.1)
- LPH Assembly (C) (PL 2.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/DTC) (PL 6.2)
- MDMPWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

#### Go to 392-651 or 392-314.

# 392-673 ADC Patch Fault [K]

BSD-ON: 9.16 Development (K)

#### **BSD-ON: 9.21 First Transfer**

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The ADC patch of K color is abnormally light. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [K] has occurred. **Has** Fail 392-651 or 392-315 occurred?

Y N

Turn the power OFF and check the following:

- The Drum (K) for contamination
- The LPH (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (K) (PL 8.1)
- LPH Assembly (K) (PL 2.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

## Go to 392-651 or 392-315.

# 392-675 ADC Mini Setup Fault [Y]

BSD-ON: 9.7 Charging and Exposure (7845/55) (1 of 2)

BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

**BSD-ON: 9.13 Development (Y)** 

**BSD-ON: 9.21 First Transfer** 

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The difference in densities among the ADC patches of Y color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [Y] has occurred. Has Fail 392-651 or 392-312 occurred?

#### Y N

Turn the power OFF and check the following:

- The Drum (Y) for contamination
- The 1st BTR (Y) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (Y) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (Y) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (BCR) and the BCR (Y) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (Y) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (Y) (PL 8.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (BCR) (7845/55) (PL 18.6B)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

#### Go to 392-651 or 392-312.

# 392-676 ADC Mini Setup Fault [M]

BSD-ON: 9.7 Charging and Exposure (7845/55) (1 of 2)

#### BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD-ON: 9.14 Development (M)

**BSD-ON: 9.21 First Transfer** 

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The difference in densities among the ADC patches of M color is abnormal. (This is a hidden failure. (Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [M] has occurred. Has Fail 392-651 or 392-313 occurred?

Y N

- Turn the power OFF and check the following:
- The Drum (M) for contamination
- The 1st BTR (M) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (M) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (M) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (BCR) and the BCR (M) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (M) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (M) (PL 8.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (BCR) (7845/55) (PL 18.6B)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDMPWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

#### Go to 392-651 or 392-313.

# 392-677 ADC Mini Setup Fault [C]

BSD-ON: 9.7 Charging and Exposure (7845/55) (1 of 2)

BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD-ON: 9.15 Development (C)

**BSD-ON: 9.21 First Transfer** 

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The difference in densities among the ADC patches of C color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [C] has occurred. Has Fail 392-651 or 392-314 occurred?

#### Y N

- Turn the power OFF and check the following:
- The Drum (C) for contamination
- The 1st BTR (C) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (C) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (C) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (BCR) and the BCR (C) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (C) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (C) (PL 8.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (BCR) (7845/55) (PL 18.6B)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Go to 392-651 or 392-314.

# 392-678 ADC Mini Setup Fault [K]

## BSD-ON: 9.7 Charging and Exposure (7845/55) (1 of 2)

## BSD-ON: 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD-ON: 9.16 Development (K)

**BSD-ON: 9.21 First Transfer** 

#### **BSD-ON: 9.23 ADC Patch and Environment Sensing**

The difference in densities among the ADC patches of K color is abnormal. (This is a hidden failure. Data is only recorded in history.)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## Procedure

Enter DC122 Fail History. Check whether ADC Sensor Fail or ATC Fail [K] has occurred. **Has Fail 392-651 or 392-315 occurred?** 

Y N

- Turn the power OFF and check the following:
- The Drum (K) for contamination
- The 1st BTR (K) for contamination
- The Transfer Belt for contamination
- The connection and board springs between the HVPS (1st/2nd/DTC) and the 1st BTR (K) for open circuits, short circuits, and poor contacts
- 7830/35
  - The connection and board springs between the HVPS (Dev/BCR) and the BCR (K) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev/BCR) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts
- 7845/55
  - The connection and board springs between the HVPS (BCR) and the BCR (K) for open circuits, short circuits, and poor contacts
  - The connection and board springs between the HVPS (Dev) and the Magnet Roll (K) for open circuits, short circuits, and poor contacts

If no problems are found, replace the following parts in sequence:

- Drum (K) (PL 8.1)
- HVPS (Dev/BCR) (7830/35) (PL 18.6A)
- HVPS (BCR) (7845/55) (PL 18.6B)
- HVPS (Dev) (7845/55) (PL 5.3)
- HVPS (1st/2nd/BTR) (PL 6.2)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Go to 392-651 or 392-315.

# 393-314 Y Dispense Motor Fault

## BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Regardless of low usage of toner from Y Toner Cartridge, it was detected to be empty.

#### NOTE:

- If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace the Toner Cartridge (Y) (PL 5.1).

If the problem persists, check the following:

- The connectors of the MDM PWB P/J411 and the Toner CRUM Coupler (Y) P/J120 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB P/J411 and the Toner CRUM Coupler (Y)
   P/J120 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (Y): dC330 [093-002] (PL 5.1)
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - 7830/35 (PL 18.2A)
  - 7845/55 (PL 18.2B)

# 393-315 M Dispense Motor Fault

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Regardless of low usage of toner from M Toner Cartridge, it was detected to be empty.

#### NOTE:

- If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace the Toner Cartridge (M) (PL 5.1).

If the problem persists, check the following:

- The connectors of the MDM PWB P/J411 and the Toner CRUM Coupler (M) P/J121 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB P/J411 and the Toner CRUM Coupler (M)
   P/J121 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (M): dC330 [093-007] (PL 5.1)
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - 7830/35 (PL 18.2A)
  - 7845/55 (PL 18.2B)

# 393-316 C Dispense Motor Fault

## BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Regardless of low usage of toner from C Toner Cartridge, it was detected to be empty.

#### NOTE:

- If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace the Toner Cartridge (C) (PL 5.1).

If the problem persists, check the following:

- The connectors of the MDM PWB P/J411 and the Toner CRUM Coupler (C) P/J122 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
- The connection between the MDM PWB P/J411 and the Toner CRUM Coupler (C)
   P/J122 for open circuit, short circuit, and poor contact
- The Toner Dispense Motor (C): dC330 [093-012] (PL 5.1)
- The drive transmission path in the Dispense Assembly
- The MDM PWB for failure
  - 7830/35 (PL 18.2A)
  - 7845/55 (PL 18.2B)

# 393-317 K Dispense Motor Fault

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Regardless of low usage of toner from K Toner Cartridge, it was detected to be empty.

#### NOTE:

- If the failure occurs when printing high density images, check whether the Developer Unit Rotating Shutter is completely open. If the Rotating Shutter is not completely open, it might cause the supplied toner to be insufficient, resulting in this failure.
- When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Replace the Toner Cartridge (K) (PL 5.1).
  - If the problem persists, check the following:
  - The connectors of the MDM PWB P/J411 and the Toner CRUM Coupler (K) P/J123 for damage, foreign substances, bent connector pins, burns, and improper soldering on the PWB
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler (K)
     P/J123 for open circuit, short circuit, and poor contact
  - The Toner Dispense Motor (K): dC330 [093-017] (PL 5.1)
  - The drive transmission path in the Dispense Assembly
  - The MDM PWB for failure
    - 7830/35 (PL 18.2A)
    - 7845/55 (PL 18.2B)

# 093-324 Deve Y, M, C Motor Fail (7845/55)

BSD-ON: 9.11 Developer Drive Control (Y,M,C) (7845/55)

The Deve Drive Motor (Y, M, C) revolution failure was detected.

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

# Procedure

Remove the Drum Unit (Y, M, C) and the Developer (Y, M, C), and then cheat the Front Cover Interlock Switch.

Turn ON the power and turn ON DC330 [093-025] (Deve Drive Motor (Y, M, C)). **Does** the Deve Drive Motor (Y, M, C) rotate?

- Y N
  - Check the following:
  - The power supplies (+5VDC, +24VDC) of the Deve Drive Motor (Y, M, C).
  - The connection between the Motor Driver Main PWB P/J527 and the Deve Drive Motor (Y, M, C) P/J247 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence:

- Deve Drive Motor (Y, M, C) (PL 3.3B)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

Turn OFF the power and reinstall the Drum Unit (Y, M, C) and the Developer (Y, M, C). Turn ON the power and turn ON DC330 [093-025] (Deve Drive Motor (Y, M, C)). **Does the Deve Drive Motor (Y, M, C) rotate?** 

Y N

Check the Developer (Y, M, C) for loading/binding.

Turn OFF the power and check the connection between the Deve Drive Motor (Y, M, C) P/J247-8 and the Motor Driver Main PWB P/J527-A9 for open circuit, short circuit, and poor contact.

If no problem is found, replace MDM PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 393-400 Y Toner Cartridge Near Empty RAP

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

It was detected that the replacement timing for Toner Cartridge (Y) is closer than Pre Near.

# Procedure

The Toner Cartridge (Y) needs to be replaced soon. Replace the Toner Cartridge (Y) (PL 5.1) as required.

# 393-423 M Toner Cartridge Near Empty RAP

# BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

It was detected that the replacement timing for Toner Cartridge (M) is closer than Pre Near.

## Procedure

The Toner Cartridge (M) needs to be replaced soon. Replace the Toner Cartridge (M) (PL 5.1) as required.

# 393-424 C Toner Cartridge Near Empty RAP

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

It was detected that the replacement timing for Toner Cartridge (C) is closer than Pre Near.

# Procedure

The Toner Cartridge (C) needs to be replaced soon. Replace the Toner Cartridge (C) (PL 5.1) as required.

# 393-425 K Toner Cartridge Near Empty RAP

# BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

It was detected that the replacement timing for Toner Cartridge (K) is closer than Pre Near.

## Procedure

The Toner Cartridge (K) needs to be replaced soon. Replace the Toner Cartridge (K) (PL 5.1) as required.

# 393-912 K Toner Cartridge Empty

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

The K Toner Cartridge Empty state was detected.

## **Cause/Action**

Replace the Toner Cartridge (K) (PL 5.1). No special action necessary.

# 393-924 Toner K CRUM Communication Fault

## BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Communication failure with Toner CRUM (K) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- Check the connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (K) P/J123 for open circuit, short circuit, and poor contact. Also, remove and reinstall the Toner Cartridge (K) and check for improper installation.

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (K) (PL 5.1)
- Toner CRUM Coupler Assembly (K) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- Go to 393-926 Toner K CRUM Data Mismatch Fault

# 393-925 Toner K CRUM Data Broken Fault

#### BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

The system detected that the data written to the Toner CRUM (K) and the data read from the Toner CRUM (K) do not match.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Initial Actions**

Remove and reinstall the Toner Cartridge (K).

## Procedure

An Error Message appears on the UI - Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details. Remove and reinstall the Black Toner Cartridge and check for improper installation. The problem continues

Ν

Υ

End

Check the NVM locations in Table 1.

#### Table 1 CRUM Data NVM

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

#### The NVM values match the expected customer configuration.

Y N

Determine correct Contract Type from customer. Contact Technical Support Center or your NTS for the CRUM conversion procedure.

- Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (K) P/J123 for open circuit, short circuit, and poor contact

Initial Issue

- The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
- The Toner Cartridge (K) for improper installation

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 393-926 Toner K CRUM Data Mismatch Fault

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Incorrect authentication area data was detected in the Black Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Initial Actions**

Remove and reinstall the Toner Cartridge (K).

## Procedure

An Error Message appears on the UI - Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details. Remove and reinstall the Black Toner Cartridge and check for improper installation. The problem continues

```
N
```

Υ

End

Check the NVM locations in Table 1.

#### Table 1 CRUM Data NVM

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

#### The NVM values match the expected customer configuration.

Y N

- Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (K) P/J123 for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
- The Toner Cartridge (K) for improper installation

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 393-927 Toner Y CRUM Communication Fault

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Communication failure with Toner CRUM (Y) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

1. Turn the power OFF and ON.

**NOTE:** If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

- 2. Check the connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (Y) P/J120 for open circuit, short circuit, and poor contact.
- 3. Remove and reinstall the Toner Cartridge (Y) and check for improper installation.
- 4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (Y) (PL 5.1)
  - Toner CRUM Coupler Assembly (Y) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - Go to 393-937 Toner Y CRUM Data Mismatch Fault

# 393-928 Toner M CRUM Communication Fault

#### BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Communication failure with Toner CRUM (M) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

1. Turn the power OFF and ON.

**NOTE:** . If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

- 2. Check the connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (M) P/J121 for open circuit, short circuit, and poor contact.
- 3. Remove and reinstall the Toner Cartridge (M) and check for improper installation.
- 4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (M) (PL 5.1)
  - Toner CRUM Coupler Assembly (M) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - Go to 393-938 Toner M CRUM Data Mismatch Fault

# 393-929 Toner C CRUM Communication Fault

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Communication failure with Toner CRUM (C) was detected.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

1. Turn the power OFF and ON.

**NOTE:** If this resolves the problem, it is highly probable that the Motor Driver Main PWB had misdetected due to external noise abnormal or noise caused by electrical discharge in the machine. Check for any noise source around the machine and check for any abnormal electrical discharge, etc.

- 2. Check the connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (C) P/J122 for open circuit, short circuit, and poor contact.
- 3. Remove and reinstall the Toner Cartridge (C) and check for improper installation.
- 4. If no problems are found, replace the following parts in sequence:
  - Toner Cartridge (C) (PL 5.1)
  - Toner CRUM Coupler Assembly (C) (PL 5.1)
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)
  - Go to 393-939 Toner C CRUM Data Mismatch Fault

# 393-933 Toner Y CRUM Data Broken Fault

#### BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

The system detected that the data written to the Toner CRUM (Y) and the data read from the Toner CRUM (Y) do not match.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Remove and reinstall the Toner Cartridge (Y).
- 3. Check the Toner Cartridge (Y) for improper installation
- 4. If the problem persists, replace the Toner Cartridge (Y). (PL 5.1)

# 393-934 Toner M CRUM Data Broken Fault

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

The system detected that the data written to the Toner CRUM (M) and the data read from the Toner CRUM (M) do not match.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Remove and reinstall the Toner Cartridge (M).
- 3. Check the Toner Cartridge (M) for improper installation
- 4. If the problem persists, replace the Toner Cartridge (M). (PL 5.1)

# 393-935 Toner C CRUM Data Broken Fault

#### BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

The system detected that the data written to the Toner CRUM (C) and the data read from the Toner CRUM (C) do not match.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Cause/Action**

- 1. Turn the power OFF and ON.
- 2. Remove and reinstall the Toner Cartridge (C).
- 3. Check the Toner Cartridge (C) for improper installation
- 4. If the problem persists, replace the Toner Cartridge (C). (PL 5.1)

# 393-937 Toner Y CRUM Data Mismatch Fault

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Incorrect authentication area data was detected in the Yellow Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Initial Actions**

Remove and reinstall the Toner Cartridge (Y).

## Procedure

An Error Message appears on the UI - Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details. Remove and reinstall the Yellow Toner Cartridge and check for improper installation. The problem continues

Ν

Υ

End

Check the NVM locations in Table 1.

#### **Table 1 NVM Values**

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

The NVM values match the expected customer configuration.

Y N

- Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (Y) P/J120 for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
- The Toner Cartridge (Y) for improper installation

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 393-938 Toner M CRUM Data Mismatch Fault - TBD verify this for Spyglass

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

Incorrect authentication area data was detected in the Magenta Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The 7830/35/45/55 machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

# **Initial Actions**

Remove and reinstall the Toner Cartridge (M).

# Procedure

An Error Message appears on the UI - Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details. Remove and reinstall the Magenta Toner Cartridge and check for improper installation. The problem continues

```
N
End
```

Check the NVM locations in Table 1.

Table 1 NVM Values

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

## The NVM values match the expected customer configuration.

Y N

- Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (M) P/J121 for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
- The Toner Cartridge (M) for improper installation

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

# 393-939 Toner C CRUM Data Mismatch Fault

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

Incorrect authentication area data was detected in the Cyan Toner CRUM. This fault is displayed if the wrong type of Toner cartridge is installed.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Initial Actions**

Remove and reinstall the Toner Cartridge (C).

## Procedure

An Error Message appears on the UI - Reinsert an improperly seated consumable or replace any consumables with Error. Press Machine Status button and select Supplies tab for details. Remove and reinstall the Cyan Toner Cartridge and check for improper installation. The problem continues

```
N
End
```

Υ

-

Check the NVM locations in Table 1.

#### **Table 1 NVM Values**

NVM Location	Name	Values (read-only)
740-053	Geographic Setting	3 = North America/Europe 12 = DMO 15 = Worldwide
740-055	Contract Type	2 = Sold 3 = Metered 31 = Neutral

#### The NVM values match the expected customer configuration.

Y N

- Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 2. Check the following:
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (C) P/J122 for open circuit, short circuit, and poor contact

- The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
- The Toner Cartridge (C) for improper installation

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)

393-956 Deve install Mode Fail K

Procedure

TBD

# 393-959 Deve Install Times Over Fail K

Procedure

TBD

# 393-970 Toner Y CRUM Not In Position

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

## BSD-ON: 9.17 Toner Dispense Control (Y, M)

The Toner CRUM (Y) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

# **Cause/Action**

- 1. Remove and reinstall the Toner Cartridge (Y).
- 2. Polish the connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDS PWB P/J529 and the Toner Dispense Motor  $\,$  P/ J220 for damaged wiring or connectors
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (Y) P/J120 for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (Y) CRUM PWB and the Toner CRUM Coupler Assembly (Y) CRUM for damage and foreign substances
  - The Toner Cartridge (Y) for improper installation

- Toner Cartridge (Y) (PL 5.1)
- Toner CRUM Coupler Assembly (Y) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)
- Go to 393-937 Toner Y CRUM Data Mismatch Fault

# 393-971 Toner M CRUM Not In Position

BSD-ON: 9.5 Toner Cartridge Life Control (Y,M)

## BSD-ON: 9.17 Toner Dispense Control (Y, M)

The Toner CRUM (M) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

# **Cause/Action**

- 1. Remove and reinstall the Toner Cartridge (M).
- Polish the connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDS PWB P/J529 and the Toner Dispense Motor P/ J221 for damaged wiring or connectors
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (M) P/J121 for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (M) CRUM PWB and the Toner CRUM Coupler Assembly (M) CRUM for damage and foreign substances
  - The Toner Cartridge (M) for improper installation

If no problems are found, replace the following parts in sequence:

- Toner Cartridge (M) (PL 5.1)
- Toner CRUM Coupler Assembly (M) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)
- Go to 393-938 Toner M CRUM Data Mismatch Fault

# 393-972 Toner C CRUM Not In Position

BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

## BSD-ON: 9.18 Toner Dispense Control (C, K)

The Toner CRUM (C) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

# **Cause/Action**

- 1. Remove and reinstall the Toner Cartridge (C).
- 2. Polish the connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDS PWB  $\mbox{ P/J529}$  and the Toner Dispense Motor  $\mbox{ P/J222}$  for damaged wiring or connectors
  - The connection between the MDM PWB P/J411 and the Toner CRUM Coupler Assembly (C) P/J122 for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (C) CRUM PWB and the Toner CRUM Coupler Assembly (C) CRUM for damage and foreign substances
  - The Toner Cartridge (C) for improper installation

- Toner Cartridge (C) (PL 5.1)
- Toner CRUM Coupler Assembly (C) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)
- Go to 393-939 Toner C CRUM Data Mismatch Fault

# 393-973 Toner K CRUM Not In Position

## BSD-ON: 9.6 Toner Cartridge Life Control (C,K)

#### BSD-ON: 9.18 Toner Dispense Control (C, K)

The Toner CRUM (K) is not in the proper position.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The WC 7855F machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced in the machine, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

## **Cause/Action**

- 1. Remove and reinstall the Toner Cartridge (K).
- Polish the connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM with dry cloth. (When cleaning, do not use Drum cleaner, etc.)
- 3. Check the following:
  - The connection between the MDS PWB P/J529 and the Toner Dispense Motor P/ J223 for damaged wiring or connectors
  - The connection between the MDM PWB J411 and the Toner CRUM Coupler Assembly (K) P/J123 for open circuit, short circuit, and poor contact
  - The connection terminals between the Toner Cartridge (K) CRUM PWB and the Toner CRUM Coupler Assembly (K) CRUM for damage and foreign substances
  - The Toner Cartridge (K) for improper installation

- Toner Cartridge (K) (PL 5.1)
- Toner CRUM Coupler Assembly (K) (PL 5.1)
- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B)
- MDS PWB (7830/35) (PL 18.2A)
- MDS PWB (7845/55) (PL 18.2B)
- Go to 393-926 Toner K CRUM Data Mismatch Fault.

# 394-300 IBT Front Cover Open

#### **BSD-ON: 1.13 Interlocked Cover Switches**

The Front Cover Open was detected by the IBT Front Cover Switch.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Check the following:

- The Front Cover for damage or mismatch.
- The IBT Front Cover Switch for failure: dC330 [077-307] (PL 18.5)
- The connection between the IBT Front Cover Switch P/J272 and the MDM PWB P/J416 for open circuit, short circuit, and poor contact

If no problems are found, replace the MDM PWB.

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B).

# 394-320 1st BTR Contact/Retract Fail

#### BSD-ON: 9.22 First BTR Contact/Retract Control

After the 1st BTR Contact/Retract operation has started, it does not complete within the specified time.

## **Initial Actions**

Refer to the BSD and check the related connectors of the target electrical parts for partial connections.

## **Cause/Action**

#### Check the following:

- The 1st BTR Contact/Retract Sensor for improper installation
- The 1st BTR Contact/Retract Sensor (DC330 [094-200]) for operation failure. (PL 3.2)
- The 1st BTR Contact/Retract Clutch (DC330 [094-012/013]) for operation failure. (PL 3.2) The coil resistance of the 1st BTR Contact/Retract Clutch: approx. 240 Ohm (when coil temperature is 20 degrees celsius)
  - Between Motor Driver Main PWB P/J417 pin-A8 and P/J417 pin-A9

**NOTE:** During the 1st BTR Contact/Retract operation, also check for the rotation of the Fusing Unit Drive Motor. If it is not rotating, check the 1st BTR Contact/Retract Gear for blockage and damage.

• The IBT Belt Unit for mechanical loading or damage

If no problem is found, replace the Motor Driver Main PWB:

- MDM PWB (7830/35) (PL 18.2A)
- MDM PWB (7845/55) (PL 18.2B).

# 394-417 IBT Unit Near End Warning

## BSD-ON: 10.6 Fusing

The IBT Assembly needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Replace the IBT Assembly and clear dC135 [954-820] (IBT Belt Assembly).

# 394-418 IBT CLN Unit Near End Warning

## BSD-ON: 10.6 Fusing

The IBT Cleaner needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Replace the IBT Cleaner and clear dC135 [954-822] (Transfer Belt Cleaner).

# 394-419 2nd BTR Unit Near End Warning

## BSD-ON: 10.6 Fusing

The 2nd BTR needs to be replaced soon.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## **Cause/Action**

Replace the 2nd BTR and clear dC135 [954-821] (Second Bias Transfer Roll).

# 394-420 IBT Unit End Warning

## BSD-ON: 10.6 Fusing

The IBT Assembly must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Replace the IBT Assembly and clear dC135 [954-820] (IBT Belt Assembly).

# 394-421 IBT CLN Unit End Warning

## BSD-ON: 10.6 Fusing

The IBT Cleaner must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Replace the IBT Cleaner and clear dC135 [954-822] (Transfer Belt Cleaner).

# 394-422 2nd BTR Unit End Warning

## BSD-ON: 10.6 Fusing

The 2nd BTR must be replaced.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# **Cause/Action**

Replace the 2nd BTR and clear dC135 [954-821] (Second Bias Transfer Roll).

# 95-XXX Faults Entry RAP

# 95-XXX Fault Code Table

Find the Fault Code in Table 1. Go to the Procedure listed for that Fault Code.

#### Table 1 Chain 95 Fault Codes

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	000	00	Software Upgrade Failure: DC BootCode	Failed to upgrade the DC Boot Code	SBC Pro- cedure
95	001	00	Software Upgrade Failure: DC SoftwareUpgradeCode	Failed to upgrade the DC Software Upgrade Code	SBC Pro- cedure
95	002	00	Software Upgrade Failure: DC Application	Failed to upgrade the DC Application	SBC Pro- cedure
95	800	00	Software Upgrade Failure: DC OS	Failed to upgrade the DC Operating System	SBC Pro- cedure
95	009	00	Software Upgrade Failure: DC CIPS	Failed to upgrade the DC CIPS	SBC Pro- cedure
95	016	00	Software Upgrade Failure: SUI Application	Failed to upgrade the SUI Application Code	SBC Pro- cedure
95	019	00	Software Upgrade Failure: SUI H8	Failed to upgrade the SUI H8	SBC Pro- cedure
95	020	00	Failed to upgrade the SUI H8	Failed to upgrade the DADH Application	DADF Pro- cedure
95	021	00	Software Upgrade Failure: Ext Memory	External Memory Error	SBC Pro- cedure
95	022	00	Software Upgrade Failure: DADH Kernel	Failed to upgrade the DADH Kernel	DADF Pro- cedure
95	030	00	Software Upgrade Failure: FAX Application	Failed to upgrade the FAX Application	FAX Pro- cedure
95	031	00	Software Upgrade Failure: FAX FPGA	Failed to upgrade the Fax FPGA	FAX Pro- cedure
95	035	00	Software Upgrade Failure: FAX Bootcode	Failed to upgrade the Fax Bootcode	FAX Pro- cedure
95	038	00	Software Upgrade Failure: Embedded Fax LCF Applica- tion	Failed to upgrade the embed- ded fax LCF Application	FAX Pro- cedure
95	040	00	Software Upgrade Failure: IOT Bootstrap	Failed to upgrade the IOT bootstrap code	
95	041	00	Software Upgrade Failure: IOT Bootloader	Failed to upgrade the IOT Bootloader code	
95	042	00	Software Upgrade Failure: IOT Application	Failed to upgrade the IOT Application	
95	048	00	Software Upgrade Failure: IOT Duplex Module	Failed to upgrade the IOT Duplex Module	
95	049	00	Software Upgrade Failure: IOT Loosely Coupled Module	Failed to upgrade the IOT Loosely Coupled Module	

#### Table 1 Chain 95 Fault Codes

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	050	00	Software Upgrade Failure: LCSS 1K Application	Failed to upgrade the LCSS 1K Application	
95	060	00	Software Upgrade Failure: LCSS 2K Application	Failed to upgrade the LCSS 2K application	
95	065	00	Software Upgrade Failure: LCSS 2K Bootcode	Failed to upgrade the LCSS 2K Application	
95	070	00	Software Upgrade Failure: LCSS 3K Application	Failed to upgrade the LCSS 3K Application	
95	100	00	Software Upgrade Failure: HCSS BO HCSS Application	Failed to upgrade the HCSS BO HCSS Application	N/A
95	110	00	Software Upgrade Failure: HCSS BO Application	Failed to upgrade the HCSS BO Application	N/A
95	140	00	Software Upgrade Failure: DC NC Applications	Failed to upgrade the DC NC Applications	
95	141	00	Software Upgrade Failure: DC NC OS	Failed to upgrade the DC NC Operating System	
95	150	00	software Upgrade Failure: IIT Application	Failed to upgrade the IIT Application	IIT Proce- dure
95	151	00	Software Upgrade Failure: Embedded Fax FPGA	Failed to upgrade the Embedded Fax FPGA	FAX Pro- cedure
95	153	00	Software Upgrade Failure: IIT Kernel	Failed to upgrade the IIT Ker- nel	IIT Proce- dure
95	154	00	Software Upgrade Failure: IIT A4 Scanner Module	Failed to upgrade the IIT A4 Scanner Module	IIT Proce- dure
95	155	00	Software Upgrade Failure: IIT CCD Module	Failed to upgrade the IIT CCD Module	IIT Proce- dure
95	156	00	Software Upgrade Failure: IIT FWA TES Module	Failed to upgrade the IIT FWA TES Module	IIT Proce- dure
95	157	00	Software Upgrade Failure: DADH Quiet 100 Sheet Mod- ule	Failed to upgrade the DADH Quiet 100 Sheet Module	DADF Pro- cedure
95	158	00	Software Upgrade Failure: DADH 100 Sheet Module	Failed to upgrade the DADH 100 Sheet Module	DADF Pro- cedure
95	159	00	Software Upgrade Failure: DADH Quiet Module	Failed to upgrade the DADH Quiet Module	DADF Pro- cedure
95	170	00	Software Upgrade Failure: Scanner FWModule	Failed to upgrade the Scan- ner Firmware Module	IIT Proce- dure
95	180	00	Software Upgrade Failure: HCF FWModule	Failed to upgrade the HCF Firmware Module	HDF Pro- cedure
95	190	00	Software Upgrade Failure: PFM FWModule	Failed to upgrade the PFM Firmware Module	N/A
95	191	00	Software Upgrade Failure: PFP FWModule	Failed to upgrade the PFP Firmware Module	
Chain	Link	Ext	Fault Name	Fault Cause	Link
-------	------	-----	---	--	------------------------
95	192	00	Software Upgrade Failure: HVF Application	Failed to upgrade the HVF Application	
95	193	00	Software Upgrade Failure: HVF BM Application	Failed to upgrade the HVF BM Application	
95	194	00	Software Upgrade Failure: HVF Bootcode	Failed to upgrade the HVF Bootcode	
95	195	00	Software Upgrade Failure: HVF BM Bootcode	Failed to upgrade the HVF BM Bootcode	
95	196	00	Software Upgrade Failure: PFP Bootloader	Failed to upgrade the PFP Bootloader	
95	200	00	Software Upgrade Failure: C Finisher Application	Failed to upgrade the C Fin- isher Application	Finishing Procedure
95	201	00	Software Upgrade Failure: D Finisher Application	Failed to upgrade the D Fin- isher Application	N/A
95	202	00	Software Upgrade Failure: KM Finisher Application	Failed to upgrade the KM Finisher Application	N/A
95	203	00	Software Upgrade Failure: A Finisher Application	Failed to upgrade the A Fin- isher Application	Finishing Procedure
95	204	00	Software Upgrade Failure: SB Finisher Application	Failed to upgrade the SB Fin- isher Application	N/A
95	206	00	Software Upgrade Failure: PFM Tray 3 Application	Failed to upgrade the PFM Tray 3 Application	N/A
95	207	00	Software Upgrade Failure: PFM Tray 4 Application	Failed to upgrade the PFM Tray 4 Application	N/A
95	208	00	Software Upgrade Failure: PFM Tray 5 Application	Failed to upgrade the PFM Tray 5 Application	N/A
95	212	00	Software Upgrade Failure: DC IOT Proxy	Failed to upgrade the DC IOT Proxy	
95	213	00	Software Upgrade Failure: DC IIT Proxy	Failed to upgrade the DC IIT Proxy	IIT Proce- dure
95	214	00	Software Upgrade Failure: DC ACD	Failed to upgrade the DC ACD	
95	216	00	Software Upgrade Failure: DC Glue	Failed to upgrade the DC Glue Application	
95	217	00	Software Upgrade Failure: DC PWS Proxy	Failed to upgrade the DC PWS Proxy	
95	218	00	Software Upgrade Failure: Staple stacker 650 Bootcode	Failed to upgrade the Staple Stacker 650 Bootcode	
95	219	00	Software Upgrade Failure: Staple stacker 650 Application	Failed to upgrade the Staple Stacker 650 Application	
95	221	00	Software Upgrade Failure: LVF Bootcode	Failed to upgrade the LVF Bootcode	
95	222	00	Software Upgrade Failure: LVF Application	Failed to upgrade the LVF Application	

#### Table 1 Chain 95 Fault Codes

Chain	Link	Ext	Fault Name	Fault Cause	Link
95	223	00	Software Upgrade Failure: LVF BM Bootcode	Failed to upgrade the LVF BM Bootcode	
95	224	00	Software Upgrade Failure: LVF BM Application	Failed to upgrade the LVF BM Application	
95	251	00	Software Upgrade Failure: DC Nomad Proxy	Failed to upgrade the DC Nomad Proxy	
95	254	00	Software Upgrade Failure: DC Upgrade report Descriptor	Failed to upgrade the DC Upgrade Report Descriptor	
95	255	00	Software Upgrade Failure: DC SCD	Failed to upgrade the DC SCD	
95	300	00	Software Upgrade Failure: Incompatible Product	SWUP Incompatible Product	
95	301	00	Software Upgrade Failure: Incompatible Hardware	SWUP Incompatible Hard- ware	
95	302	00	Software Upgrade Failure: Incompatible Firmware	SWUP Incompatible Firm- ware	
95	303	00	Software Upgrade Failure: DLM Downgrade	SWUP DLM Downgrade Error	
95	304	00	Software Upgrade Failure: DLM Sidegrade	SWUP DLM Sidegrade Error	
95	305	00	Software Upgrade Failure: Platform Synchronisation Error	SWUP Platform Synchronisa- tion Error	

# SBC Procedure

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - SCB PWB (PL 35.2))

# **IOT Procedure**

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - MDM PWB (7830/35) (PL 18.2A)
  - MDM PWB (7845/55) (PL 18.2B)

# **FAX Procedure**

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - FAX Unit (PL 35.1)

# **IIT Procedure**

1. Check that system connections are correct.

- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - IIT PWB (PL 1.8)

# **DADF Procedure**

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - DADF PWB (PL 51.2)

# **HDF Procedure**

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - HCF PWB (PL 28.8)

# **Finishing Procedure**

- 1. Check that system connections are correct.
- 2. Refer to GP 9 Regular / Forced AltBoot, and perform a forced altboot software installation.
- 3. If the error persists, replace the faulty board
  - C / Professional Finisher (Finisher PWB PL 21.12)
  - A / Integrated Office Finisher (Finisher PWB PL 22.7)
  - LX Finisher (Finisher PWB PL 23.16)

# **AC Power RAP**

### BSD-ON:BSD 1.1 Main Power On

NOTE: When turning power Off, turn Off the Power Switch then the Main Power Switch.

### **Initial Actions**

If the GFI Breaker is tripped, reset the Breaker. If the Breaker trips again, check the AC circuit for a short circuit.

# Procedure

Plug in the Power Cord. AC line voltage is measured between the GFI Breaker J10 and J11.

#### Y N

Unplug the Power Cord from the outlet. AC line voltage is measured at the outlet. Y  $\,$  N  $\,$ 

Check the customer's breaker. If necessary, use a different outlet.

Check the Power Cord for open circuit and poor contact. If no problems are found, replace the GFI (PL 18.4).

Turn the main power On (turn On the Main Power Switch). AC line voltage is measured between the Main Power Switch J13 and J15.

#### Y N

Is the voltage between the Main Power Switch J13 and J15 equal to line voltage? Y N

Go to OF 99-3 and test the switch. The switch operates correctly.

Y N Replace the Main Power Switch (PL 18.5).

Replace the Breaker.

Unplug the Power Cord and disconnect J1 on the Main LVPS. Check for open circuits and poor contacts.

- Between Main Power Switch J13 and Main LVPS J1-3
- Between Main Power Switch J15 and Main LVPS J1-1

If no problem is found, replace the Main LVPS.

Check the AC circuit to each component by referring to Chapter 7 Wiring Data.

# STBY +5VDC Power RAP

BSD-ON:BSD 1.3 DC Power Generation (1 of 5)

NOTE: When turning power Off, turn Off the Power Switch then the Main Power Switch.

### Procedure

Turn the power On. Are the voltages between the Main LVPS J501-1/2/3 (+) and the GND (-) +5V? Y N

Is the voltage between the Main LVPS J1-1 and J1-3 equal to line voltage? Y = N

Go to the AC Power RAP.

Turn the power Off and disconnect the Main LVPS J501 and J502. Turn On the machine 15 seconds later. Are the voltages between the Main LVPS J501-1/2/3 (+) and the GND (-) +5V?

Y N

Replace the Main LVPS (PL 18.5).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

Is the voltage between the Main LVPS J502-1 (+) and the GND (-) +5V?

Ν

Υ

Replace the Main LVPS (PL 18.5).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

# +5VDC Power RAP

BSD-ON:BSD 1.1 Main Power On

#### BSD-ON:BSD 1.4 DC Power Generation (2 of 5)

**NOTE:** When turning power Off, turn Off the Power Switch then the Main Power Switch.

# Procedure

Υ

Turn the power On. Are the voltages between the Main LVPS J501-4/5 (+) and GND (-) +5VDC? Y N

Is the voltage between the Main LVPS J1-1 and J1-3 equal to line voltage?

N Go to AC Power RAP.

Turn the power Off and disconnect the Main LVPS J501 and J510. Turn On the machine 15 seconds later. Are the voltages between the Main LVPS J501-4/5 (+) and GND (-) +5VDC?

Y N

Replace the Main LVPS (PL 18.5).

Check the +5VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

### Are the voltages between the Main LVPS J510-1/2 (+) and GND (-) +5VDC?

Y N

Replace the Main LVPS (PL 18.5).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

# +24VDC Power RAP (7830/35)

BSD-ON:BSD 1.1 Main Power On

#### BSD-ON:BSD 1.6 DC Power Generation (4 of 5)

NOTE: When turning power Off, turn Off the Power Switch then the Main Power Switch.

#### Procedure

Υ

Turn the power On. Is the voltage between the Main LVPS J501-6 (+) and GND (-) +24VDC?

N Is the voltage between the Main LVPS J1-1 and J1-3 equal to line voltage? Y N

Go to AC Power RAP.

Turn the power Off and disconnect the Main LVPS J501, J502, and J510. Turn On the machine 15 seconds later. Is the voltage between the Main LVPS J501-6 (+) and GND (-) +24VDC?

```
Y N
```

Replace the Main LVPS (PL 18.5).

Check the +24VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

#### Is the voltage between the Main LVPS J502-2 (+) and the GND (-) +24VDC?

N

Υ

Replace the Main LVPS (PL 18.5).

#### Is the voltage between the Main LVPS J510-3 (+) and the GND (-) +24VDC?

Y N

Replace the Main LVPS (PL 18.5).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

# +24VDC Power RAP (7845/55)

BSD-ON:BSD 1.1 Main Power On

BSD-ON:BSD 1.6 DC Power Generation (4 of 5)

BSD-ON:BSD 1.7 DC Power Generation (5 of 5)

NOTE: When turning the power OFF, turn OFF the Power Switch, then the Main Power Switch.

# Procedure

Turn the power On. Is the voltage between the Main LVPS J510-3 (+) (BSD 1.6) and GND(-), as well as between the Sub LVPS J504-3 (+) (BSD 1.7) and GND (-) +24VDC?

Y N

- Is the voltage between the Main LVPS J1-1 and J1-3 (BSD 1.1) equal to line voltage? Y N
  - Go to AC Power RAP.

Is the voltage between the Main LVPS J6-2 and J6-4 (BSD 1.1) equal to line voltage?

N Replace the Main LVPS (PL 18.5).

Turn the power Off and disconnect the Main LVPS J501, J510, and the Sub LVPS J504. Turn On the machine 15 seconds later. Is the voltage between the Main LVPS J510-3 (+) (BSD 1.6) and the GND (-) +24VDC?

Y N

Replace the Main LVPS (PL 18.5).

Is the voltage between the Sub LVPS J504-3 (+) (BSD 1.7) and the GND (-) +24VDC? Y N

Turn the power OFF and unplug the Power Cord from the outlet. Disconnect  $\,\rm J6$  on the Main LVPS to check the following connections for open circuits and poor contacts.

- Between the Main LVPS J5-4 and the Sub LVPS J8-2
- Between the Main LVPS J5-8 and the Sub LVPS J8-1
- If no problems are found, replace the Sub LVPS (PL 18.3).

Check the +24VDC circuit for a short circuit in the Frame by referring to Chapter 7 Wiring Data.

# Is the voltage between the Main LVPS J501-6 (+) (BSD 1.6) and the GND (-) +24VDC?

Y N

Replace the Main LVPS (PL 18.5).

Check the wire to the applicable component for an open circuit or poor contact by referring to Chapter 7 Wiring Data.

# OF 2 UI Touch Screen Failure RAP

BSD-ON:BSD 2.4 LCD Control

Use this RAP to solve user interface touch screen problems when the machine has power but either the display is Black, blank, too dark, responds incorrectly or does not refresh.

# **Initial Actions**

- If the UI is Black, check for +24V to the UI I/F PWB.
- Check and re-seat all PJ's on the UI I/F PWB.
- If the UI is blank (White), check that the SBC SD Card is seated correctly.
- Reseat the SBC into the Backplane PWB.
- Refer to ADJ 4.1 to access touch screen tests.
- Press the Machine Status key. Select the Tools tab. Select Device Settings, then Display Brightness. Adjust the brightness level.
- If the UI fails to boot, observe POST progress on the SBC 7-segment display. refer to OF 3.3.

# Procedure

Check the +24VDC from P/J1311, pin 27 on the Backplane PWB to  $\,$  J1, pin 27 on the UI I/F PWB. +24VDC is measured.

Y N

Check the ribbon cable between the Backplane PWB and UI I/F PWB. Install a new cable if necessary. If the wiring is good, Go to +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55)

Check the +5VDC from P/J1311, pin 29 on the Backplane PWB to J1, pin 29 on the UI I/F PWB. **+5VDC is measured.** 

Y N

Check the ribbon cable between the SBC and the UI I/F PWB. Install a new cable if necessary. If the wiring is good, Go to +5VDC Power

Check the status of CR18 on the SBC. The LED is Off.

- Y N
  - Check the Main LVPS for +24V. If +24V is available, replace the SBC.

Reload the machine software, GP 9. The fault remains.

N Complete Final Actions.

Check that the ribbon cables between the user interface control PWB and the touch screen are in good condition and are securely connected. As necessary, install new components:

- Control Panel Assembly.
- SBC

# Machine Not Ready RAP

"Machine not ready" is defined as any condition where the machine is not capable of performing its basic tasks (Copy or Print). "Not ready" ranges from a machine that is totally inert, without any indication of power, to a machine that appears ready but does not respond to either Control Panel commands or network input.

Boot failures can be caused by hardware failures in the SBC, or communication failures between the SBC and the rest of the machine. The SBC has several debug LEDs mounted onboard to indicate board activity. See Figure 1. Also mounted to the SBC is a 7-segment display that changes state as the boot-up progresses. See OF 3.3 for details.

# **Initial Actions**

- Reseat the SBC to the Backplane.
- If the boot failure occurs after new components are installed, make sure the new components are compatible with the machine and all PJ's are seated. Check that no pins are damaged.
- Check that all the PJ's are seated correctly on the SBC.

# Procedure

The first step is to categorize the problem. Decide which of the following condition best describes the problem:

- Dead Machine
- Does not complete Boot-up
- Boots up; does not respond to Control Panel
- Boots up; does not print (or other Network problem)

### **Dead Machine**

If the machine shows no sign of power (fans or motors running, backlight on UI display, LEDs on Control Panel), check for AC line voltage at the Finisher Outlet.

- 1. If AC is not present, go to the AC Power RAP.
- 2. If AC is present check for:
  - STBY +5VDC Power
  - +5VDC Power
  - +24VDC Power RAP (7830/35) or +24VDC Power RAP (7845/55)

### Does not complete Boot-up

Failure to complete the boot routine can be caused by corrupt or mismatched software versions. GP 6 details how to check s/w versions; GP 9 explains how to reload software. Boot failures can also be caused by hardware failures in the SBC, or communication failures between the SBC and the rest of the machine. The SBC has a group of diagnostic LEDs that change state as the boot-up progresses.

- 1. Check the state of the SBC debug LED's, Figure 1. Refer to Table 1 to determine the fault state. If the debug LEDs indicate a problem on the SBC, follow procedures listed in the table.
- 2. Refer to OF 3.3 and monitor the SBC 7-segment display. Perform the relevant service actions.
- 3. If the software appears to load, but the IOT and Finisher are missing on the UI display, replace the MD PWB (PL 18.2A: 7830/35) or (PL 18.2B: 7845/55).

4. Switch Off power and disconnect the power cord. Disconnect all accessories (Finisher, H-Transport, Fax, HCF, Tray Module, Foreign Interface). Reconnect power and reboot the machine. If the problem is no longer present, then reconnect one accessory and reboot. Repeat this process to identify the faulty accessory.





### Table 1 SBC Debug LEDs

Table 1 SBC Debug LEDs					
Designator	Color	Purpose	Service Action		
CR4	Green	Supervisor heartbeat	<ul> <li>With the main power switch On and the soft power switch Off, this LED blinks a very slow heart beat and is the only LED On in this mode. Once soft switch is turned On, the LED continues to blink a slow heart beat. Failure is no heart beat flash. Perform these steps:</li> <li>Check the LVPS, or check for +5V at J300 (power connector) on the SBC.</li> <li>If +5V present at J300, replace the SBC.</li> </ul>		
CR5	Green	5V0_On signal present	<ul> <li>This LED is always On when the main and soft power switches are On. Failure is Off if both power switches are On. Perform these steps:</li> <li>1. Check status of CR4.</li> <li>2. If CR4 heart beat is visible, test the Soft Switch.</li> <li>3. If the Soft Switch passes, replace the SBC.</li> </ul>		
CR6	Green	5V0_OFF signal present	<ul> <li>On at power On of soft switch. Remains On during FPGA loading from SD card. Off during sleep mode. Off during boot could indicate corrupt or a failed SD card.</li> <li>1. Reload system software.</li> <li>2. Check LVPS for +5V at J300 on SBC (power connector should have 5 wires with +5V on them).</li> <li>3. Reseat or replace the SD Card.</li> <li>4. Replace the SBC.</li> </ul>		
CR7	Green	Image power available	<ul> <li>On at power On of soft switch. Remains On during FPGA loading from SD card. Off during sleep mode. Off during boot could indicate corrupt or a failed SD card.</li> <li>1. Reload system software.</li> <li>2. Reseat or replace the SD Card.</li> <li>3. Replace the SBC.</li> </ul>		
CR8	Green	Power available	<ul> <li>This LED is always On when the main and soft power switches are On. Failure is Off if both power switches are On. Perform these steps:</li> <li>1. Check status of CR4.</li> <li>2. If CR4 heart beat is visible, test the Soft Switch.</li> <li>3. If the Soft Switch passes, replace the SBC.</li> </ul>		

Designator	Color	Purpose	Service Action		
CR9	Green	CPU in sleep	Under software control. A very slow hear beat blink when CPU is in the deepest sleep mode. CPU sleep indicator only.		
CR10	Green	Lynx configuration	<ul> <li>Quick flash at power on of soft switch. LED</li> <li>On after 3 or 4 minutes indicates boot failure.</li> <li>Perform these steps:</li> <li>1. Reload system software.</li> <li>2. Reseat or replace SD Card.</li> <li>3. Replace the SBC.</li> </ul>		
CR11	Red	SIM error	Blinking = Activity. On solid for ~1 minute at power On of soft switch. Off unless SIM card inserted.		
CR12	Green	SIM active	Blinking = Activity. On solid for ~1 minute at power on of soft switch then goes out unless SIM card inserted.		
CR13	Multi	Ethernet link	Green = 1Gb, Yellow = 100Mb, Off = 10Mb or no link		
CR14	Green	Taurus heartbeat	LED On solid at power on of soft switch. Goes Off ~1 minute into boot process. LED On after 3 or 4 minutes indicates a boot failure. Per- form these steps: 1. Check that U83 is seated in socket. 2. Reload system software. 3. Replace the SBC.		
CR15	Green	Lyra configuration	<ul> <li>Quick flash at power on of soft switch. LED</li> <li>On after 3 or 4 minutes indicates boot failure.</li> <li>Perform these steps:</li> <li>1. Reload system software.</li> <li>2. Reseat or replace SD Card.</li> <li>3. Replace the SBC.</li> </ul>		
CR16	Multi	Ethernet activity	Green On = Any link speed		
CR17	Green	Elnath configuration	<ul> <li>LED On solid at power on of soft switch. Goes</li> <li>Off after ~1 minute into boot process (timed with Taurus heartbeat CR14 above). LED On after 3 or 4 minutes indicates a boot failure.</li> <li>Perform these steps:</li> <li>1. Check that U3011 is seated in socket.</li> <li>2. Reload system software.</li> <li>3. Replace the SBC.</li> </ul>		
CR18	Red	SBC power failure	LED is Off when +5V is available. LED On = Failure. Perform these steps: 1. Check LVPS for +5V at J300 on SBC. 2. Replace the SBC.		

#### Boots up; does not respond to Control Panel

Check the following:

- 1. Refer to OF 2.
- 2. Check the cable between the SBC and the UI PWB for damage or loose connections.
- 3. Check the connections of the wiring and PWBs within the Control Panel Assembly.
- 4. If the check is good, replace the following parts in sequence:
  - Control Panel Assembly (PL 18.3)
  - SBC PWB (PL 35.2)
  - MD PWB
    - PL 18.2A (7830/35)
    - PL 18.2B (7845/55)

Boots up; does not print (or other Network problem) Go to the OF 16-1 Network Printing Problems Entry RAP.

# **Unresettable Machine Status Messages**

In many cases when a problem causes a machine status message, no chain-link fault code is entered into either dC120 Fault Counters or dC122 Fault History. Typically these messages involve things like covers , interlock switch circuits and paper tray status.

This RAP can be used to find RAPs that can be used to troubleshoot and repair faults that cause unresettable machine status messages.

**NOTE:** When a machine status message occurs frequently or is unresettable and performing the action that would normally resolve the problem fails to resolve it, it is likely that the problem is caused by a repairable hardware fault such as a bent or broken cover, faulty wiring, a failed component, or by a SW fault.

The RAPs referenced in this procedure do not have their fault code appear in dC120 or dC122. Do not use the Unresettable Machine Status Messages RAP if an appropriate fault code appears in either of the diagnostic listings.

# Procedure

Refer to **Table 1**. The table is grouped by subsystem. Within a particular subsystem, the faults are listed in Fault Code number order.

Perform he following steps in order;

- 1. Look within the listing for the subsystem that appears to be faulty. Find the displayed UI Message and/or Machine Reaction.
- 2. Check the items listed in the Clearing Action Column.
- 3. If performing the Clearing Actions fails to resolve the problem, go to the RAP indicated to troubleshoot the problem.

**NOTE:** If no action is listed go directly to the indicated RAP to troubleshoot the problem.

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
UI	Rewrite Failure	Blink all LED indicators	302-302	Flash rewrite failure	
UI	Erase Failure	Blink all LED indicators	302-306	Flash erase failure	
UI	Download Invalid	Blink all UI LED indicators	302-308	Download invalid	
UI	Application Checksum Failure	Blink Job Stat & Features LED indicators	302-312	Application SW Checksum Failure	
UI	UI Data Time Out Error	A software error has occured. User inter- vention is reuired to Power Off/Power On the machine. Printing may be disabled	302-320	UI does not receive requested data from the CCM within the specified time out window	One of the printer features requires service, however the printer can still function in a degraded mode.
UI	Config Services not Stable	Printing is disabled and the powering up process has stalled.	302-390	During power up all configurable ser- vices have not achieved a stable state after 5 minutes from power up	User Intervention, The printer needs to be rebooted in order to eliminate the current fault.
IIT/Scan	DADF No Original Fail		305-940 (7830/35) 305-940 (7845/55)	Machine detects that original has been removed	Follow UI Display
IIT/Scan	DADF Not Enough Document - TBD		305-941 (7830/35) 305-941 (7845/55)	Machine detects that original has been removed	Follow UI Display
Fuser	Fuser Assenbly Near Life		310-420	"Need replacement" for Fuser Assy (consumables) detected.	No action required. However, recommend replacement to new Fuser Assy if Fuser Assy life is estimated to largely be over at the next call.
Fuser	Fuser Assembly Life Over		310-421	"Need replacement" for Fuser Assy (consumables) detected.	Replace Fuser Assy to new one.
Integrated Finisher	Finisher Front Door Open	Shut Down/Start Inhibited	312-302 (Int)	Machine detects that Flnisher Front Door is open	Check that the FInisher Front Door closes properly

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Integrated Finisher	Stacker Tray Staple Set Over Count	Finisher Job not allowed	312-917 (Int)	When stapled sets are ejected to the Stacker Tray: Stapled set count exceeded 30 sets, And Stacker Tray is not positioned at "paperempty" level, And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove Paper
Integrated Finisher	Scratch Sheet Compile	Finisher Job not allowed	312-928 (Int)	A sheet which was designated as a bad sheet (scratchsheet) by SheetIn- formation command from IOT was ejected to the complier.	Remove Paper
Integrated Finisher	Stacker Tray Full Stack	Finisher Job not allowed	312-930 (Int)	Stacker Height Sensor is detected full condition	Remove Paper
LX Finisher	Finisher Front Door Open	Shut Down/Start Inhibited	312-302 (LX)	Machine detects that FInisher Front Door is open	Check that the FInisher Front Door closes properly
LX Finisher	H-Xport Cover Open	Printing Inhibited	312-303 (LX)	Machine detects that Horizontal Transport Cover is open	Check that the Horizontal Transport Cover closes properly
LX Finisher	Punch Dust Nearly Full	No Action	312-700 (LX)	Machine detects that the Punch Waste Box is nearly full	Check that the Punch Waste Box is not nearly full
LX Finisher	Stacker Mix Stack Detection	Printing Inhibited	312-916 (LX)	A stack of mixed sizes is detected	Verify that the problem is not caused by a stack of mixed sizes
LX Finisher	Stacker Tray Staple Set Over Count	Finisher Job not allowed	312-917 (LX)	When stapled sets are ejected to the Stacker Tray: Stapled set count exceeded 30 sets, And Stacker Tray is not positioned at "paperempty" level, And Stacker Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove Paper
LX Finisher	Stacker Tray Full Stack	Finisher Job not allowed	312-930 (LX)	Stacker Height Sensor is detected full condition	Remove Paper
LX Finisher	Booklet Low Staple F	Printing Inhibited	312-984 (LX)	Booklet Stapler Low Staple F signal was found to be on when staple started working. or Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.	Check the Front Booklet Stapler
LX Finisher	Booklet Low Staple R	Printing Inhibited	312-989 (LX)	Booklet Stapler Low Staple R signal was found to be on when staple started working. or Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.	Check the Rear Booklet Stapler

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Eject Cover Open	Shut Down. Start inhibited.	312-300 (Pro)	Eject Cover Interlock Open	Check the following: - Eject Cover installation condition - Damage at Hinge area - Interlock Detect Lever damage (Bent) - Sensing Bracket damage (Bent)
Professional Finisher	Finisher Front Door Open	Shut Down. Start inhibited.	312-302 (Pro)	Finisher Front Door Interlock Open	Check the following: - Front Door installation condition - Damage at Door Hinge - Damage at interlock detect area - Check Magnet.
Professional Finisher	H-Transport Cover Open	Printing inhibited	312-303 (Pro)	Horizontal Transport Cover was detected to be opened.	Close interlock.
Professional Finisher	Booklet Drawer Opened	Shut Down. Start inhibited.	312-307 (Pro)	Booklet Drawer SNR OPEN is detected	Check the following: - Booklet Drawer Broken SNR mount- ing failure - Booklet Drawer Broken SNR Con- nector contact failure - Foreign material and deformation on Booklet Drawer Acctuator area - Foreign material and deformation on Booklet Drawer Structure area
Professional Finisher	Punch Dust Nearly Full	No Action Jobs to Finisher may continue even with fault active.	312-700 (Pro)	PUNCH Dust Nearly Full	- Remove punch waste - Check that the Punch Dust Box Set SNR is OFF
Professional Finisher	Stacker Mix Stack Detection	Printing inhibited	312-916 (Pro)	A stack of mixed sizes detected.	When Stacker No Paper Sensor is turned off, the fault will be cleared. Or reset NVM 763-970 to clear stacker full state.

Table 1	Machine	Status t	o RAP	Cross	Reference
---------	---------	----------	-------	-------	-----------

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Stacker Tray Full	Finisher job not allowed	312-930 (Pro)	Fault occurs with any of the following conditions: -At power on, the Stacke Height Sen- sor detected full. -When Stacker Tray is holding a stack of small size paper, Stacker Tray is detected to be full while it is lowering to adjust its height. And Stacke Height Sensor is turned on, or information on the 30th sheet of the next job is received from IOT. - When Stacker Tray is holding a stackof large size paper (requiring lim- iting the stackingc apacity to half), Stacker Tray is detected to be full while it is lowering toad just its height. And Stacker Height Sensor is tured on, or information on the 30th sheet of the next job is received from IOT. -Stacker Tray is already detected to be full (full = half capacity because of large paper size), and large size paper is ejected. And Stack Height Sensor is turned on or information on the 30th sheet of the next job is received from IOT.	Remove paper when Finisher is instandby state. Then Stacker Tray is detected to be empty.
Professional Finisher	Top Tray Full Detection	Printing inhibited	312-946 (Pro)	Top Tray Sensor was turned on for 10 sec or more.	When top Tray Sensor is turned off, the fault will be cleared.
Professional Finisher	Punch Dust Box Full		312-963 (Pro)	Amount of punch waste is greater than or equal to the full amount of punch waste. If running paper is heavyweight paper, the number of holes is counted based on the sheet count that is defined in the NVM.	Check the following: 1) Punch Dust Box is installed. 2) Punch Box Set SNR in the Punch Unit fails. 3) The detection part of Punch Box Set SNR on the back side of Punch Dust Box is deformed or damaged. 4) Harness or PWB failure.
Professional Finisher	Booket Tray Full Detection	Printing inhibited	312-983 (Pro)	Booklet Tray full state was detected.	When Booklet No Paper Sensor is turned off, the fault will be cleared.
Professional Finisher	Booklet Front Stapler Low	Printing inhibited	312-984 (Pro)	<ol> <li>Booklet Stapler Low Staple F signal was found to be on when staple started working.</li> <li>Booklet Stapler Low Staple F signal was found to be on at power on or when interlock was closed.</li> </ol>	When Booklet Low Staple F Switch is turned off, the fault will be cleared.

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Professional Finisher	Booklet Rear Stapler Low	Printing inhibited	312-989 (Pro)	<ol> <li>Booklet Low Staple R signal was found to be on when staple started working.</li> <li>Booklet Stapler Low Staple R signal was found to be on at power on or when interlock was closed.</li> </ol>	When Booklet Low Staple R Switch is turned off, the fault will be cleared.
LX Finisher	Booklet Safety Switch Open		313-306 (LX)	Booklet Safety SW (located under Booklet) detects OPEN (with obsta- cles).	Check the Booklet Safety Switch
LX Finisher	Booklet Cover Open		313-307 (LX)	Booklet Cover SW detects OPEN.	Check the Booklet Cover Switch
Paper Handling	Tray 1 size switch NG	Display status message	371-212	Tray 1 size switch not working	Adjust tray
Paper Handling	Tray 2 size switch NG	Display status message	372-212	Tray 2 size switch not working	Adjust tray
Paper Handling	Tray 3 size switch NG	Display status message	373-212	Tray 3 size switch not working	Adjust tray
Paper Handling	Tray 4 size switch NG	Display status message	374-212	Tray 4 size switch not working	Adjust tray
Paper Handling	Front Cover Interlock Open	None	377-300	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Left Hand Cover Interlock Open	None	377-301	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Tray Module Left Hand Cover Open	Printing Inhibited	377-305	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Duplex Door Open		377-307	Interlock Switch operation failure or Latch failure	Verify that closing the cover does not resolve the problem
Paper Handling	Upper Left Door Open		377-308	Interlock Switch operation failure or Latch failure	Verify that closing the door does not resolve the problem
Paper Handling	HCF1 Transport Interlock	None	378-300	HCF1 Transport Cover has been opened.	Check and fix the following: - Transport Cover Open Switch opera- tion failure - Top-Cover Latch failure
Paper Handling	IBT Front Cover	Printing inhibited	394-300	IBT (IOT)Left front door open	Close cover
Paper Handling	HCF1 Side Out Interlock	None	378-301	HCF1 has been disconnected from IOT.	Check and fix the following: HCF Side Out Switch operation failure
Drive	Deodorant Filter Life End	Printing operation inhibited	342-400	Deodorant Filter Life End	Replace odor filter if necessary.
Xerographics/ Cleaning	Waste Bottle Near Full		391-400	Waste Bottle Near Full has been detected by Toner Near Full Sensor	Check that the Toner Wate Bottle does not need replacing
Xerographics/ Cleaning	Drum Cartridge K Near Life		391-401	The number of K Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge K replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Xerographics/ Cleaning	Drum Cartridge K Life Over		391-402	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Near Life		391-411	The number of Y Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge Y replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge M Near Life		391-421	The number of M Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge M replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Near Life		391-431	The number of C Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge C replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Life Over		391-480	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge M Life Over		391-481	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Life Over		391-482	Drum Cartridge Life over. Life is being extended.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Waste Bottle Not in Position	Print operation inhibited	391-910	Waste Bottle Not in Position has been detected by the Waste Bottle Sensor	Check that the Toner Wate Bottle is in postition
Xerographics/ Cleaning	Waste Bottle Full	Print operation inhibited	391-911	"Waste Bottle Full" has been detected by elapse of the specified drive time (NVM) of YMCK Dispense Motor after Waste Bottle Near Full occurrence.	Check that the Toner Wate Bottle does not need replacing
Xerographics/ Cleaning	Drum Cartridge K Life End	Print operation inhibited	391-913	The number of K Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge K replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge Y Life End	Print operation inhibited	391-932	The number of Y Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge Y replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
Xerographics/ Cleaning	Drum Cartridge M Life End	Print operation inhibited	391-933	The number of M Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge M replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
Xerographics/ Cleaning	Drum Cartridge C Life End	Print operation inhibited	391-934	The number of C Drum Cycles (CRUM) is compared with the thresh- old value (CRUM) and "Drum Car- tridge C replacement timing" is detected.	Check the HFSI value and determine if it is within the value for Drum Replacement timing. If it is, replace the drum.
ProCon	Y Toner Cartridge is Empty		324-923 Y Toner Cartridge Empty	The CRU Manager has generated the message Yellow toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is can- celed or not.
ProCon	M Toner Cartridge is Empty		324-924 M Toner Cartridge Empty	The CRU Manager has generated the message Magenta toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is can- celed or not.
ProCon	C Toner Cartridge is Empty		324-925 C Toner Cartridge Empty	The CRU Manager has generated the message Cyan toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is can- celed or not.
ProCon	Yellow Toner Cartridge is near empty state (replace soon)		393-400	The CRU manager has generated the message "Yellow Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recov- ery is successfully completed at power off/on)
ProCon	Magenta Toner Cartridge is near empty state (replace soon)		393-423	The CRU manager has generated the message "Magenta Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recov- ery is successfully completed at power off/on)
ProCon	Cyan Toner Cartridge is near empty state (replace soon)		393-424	The CRU manager has generated the message "Cyan Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recov- ery is successfully completed at power off/on)

Subsystem	UI Message	Machine Reaction	RAP	Fault Cause	Clearing Action
ProCon	Black Toner Cartridge is near empty state (replace soon)		393-425	The CRU manager has generated the message "Black Toner Cartridge is near empty state (replace soon)"	Fault code is cleared when toner recovery operation is successfully completed after front interlock is opened/closed (or when toner recov- ery is successfully completed at power off/on)
ProCon	Black Toner Cartridge is empty		393-912	The CRU Manager has generated the message Black toner cartridge is empty.	Replace toner cartridge. If the Toner Empty message occurs even when remaining toner is not low, perform Toner Recovery operation first to see if Toner Empty state is can- celed or not.
Transfer	IBT Unit Near End Warning		394-417	This fault code is issued when the fol- lowing condition is met. (IBT unit present count (NVM)) > (IBT unit life (NVM)) - (Page count before end of life warning (NVM))	Fault Code is cleared ater replacing the IBT Unit.
Transfer	IBT CLN Unit Near End Warning		394-418	This fault code is issued when the fol- lowing condition is met. (IBT cleaner unit present count (NVM)) > (IBT cleaner unit life (NVM)) - (Page count before end of life warn- ing (NVM))	End of life of IBT cleaner unit is approaching. Replace IBT cleaner unit if necessary and clear HFSI Counter.
Transfer	2nd BTR Unit Near End Warning		394-419	This fault code is issued when the fol- lowing condition is met. (2nd BTR unit present count (NVM)) > (2nd BTR unit life (NVM)) - (Page count before end of life warning (NVM))	Fault Code is cleared ater replacing the 2nd BTR Unit.

# OF 3.3 Power On Self Test RAP

Power on Self Test (POST) runs each time the machine is powered On. POST tests the function of key subsystems on the SBC before starting the operating system. As POST executes, progress codes appear on the SBC 7-segment display.

This procedure uses POST to help diagnose SBC faults preventing the machine from powering up correctly. On power up, the 7-segment displays progress codes for short periods of time dependent on how long each test takes. Following POST testing, normal operation is indicated by a flashing decimal point. If any other code remains after testing, this may point to a problem component. Refer to the Table 1 for POST codes and corresponding service procedure.

### CAUTION

If you replace the SD Card, SBC, or System Hard Drive, perform an AltBoot (GP 9) at the first power-up.

### Procedure

**NOTE:** If boot failure occurs after new components are installed, make sure the new components are compatible with the machine and all connectors are secure.

- 1. Locate the SBC 7-segment display, Figure 1, then cycle system power.
- 2. Observe activity on the 7-segment display. If a failure occurs during POST, one of the codes listed in Table 1 remains to indicate the error. Follow the indicated service action.

Test	Code	Decimal	Description		Service Action	Comments
		Point				
Display Test	8	On	Initial 7-Segment display test. All seg-	1.	Check power to the SBC.	All segments lit indicate a successful test, power is avail-
			ments and decimal point illuminate to	2.	If power present, replace the SBC.	able to the SBC and the 7-segment display is operating
						external USB LED is On (FAIL) = Display is faulty. If one
						or more segments are not lit and external USB LED is
						Off (FAIL) = SBC or power distribution fault.
SBC power	Р	Off	SBC onboard power supply failure.	1.	Cycle power.	Displayed when an onboard power supply fault occurs.
				2.	If the problem persists, replace the SBC.	
SBC function	1	Off	SBC component failure.	1.	Cycle power.	Displayed when an onboard component fault occur.
				2.	If the problem persists, replace the SBC.	
System Memory	2	Flashing	System Memory (DIMM) Failed	1.	Reseat System Memory.	2 appears at start then, if successful, changes to 0. On
				2.	If problem persists, replace the System Mem-	failure "2" remains displayed with no decimal point flash- ing indicating that U-boot cannot execute out of SDRAM
				_	If another still a second second second	SDRAM not present or faulty.
FRO Manage	0	Electric to a		3.	If problem still persists, replace the SBC.	
EPC Memory	3	Flashing	EPC Memory (DIMM) Failed	1.	Reseat EPC Memory.	findicates EPC Memory Module (DIMM) is not present or
				2.	If problem still persists, replace EPC Memory.	unchanged. Boot continues.
				3.	If problem still persists, replace the SBC.	
						<b>NOTE:</b> Another indication of faulty EPC is a White screen on the UI panel.

### Table 1 SBC 7-segment Display Codes

Figure 1 7-Segment display location

### Table 1 SBC 7-segment Display Codes

Test	Code	Decimal Point	Description		Service Action	Comments
NVM	4	Flashing	NVM Memory (SD Card) Failed	1.	Reseat SD Card.	NVM read/write sample test. 4 appears on error, else
				2.	If problem persists, replace the SD Card.	display is left unchanged.
				3.	If problem still persists, replace the SBC.	
SD Card	5	Flashing	Flash Memory Failed	1.	Reseat SD Card. Cycle power to verify fix.	Kernel image corrupted - board does not boot. 5 is dis-
				2.	If problem still persists, replace the SD Card.	played just before the test start then set to 9 just before
				3.	If problem still persists, replace the SBC.	Boot code resides in the SD card.
External Hard Drive	6	Flashing	External Hard Drive Failed	1.	Reseat SATA data/power cable on both ends.	SATA cable and or Hard Drive fault. SATA initialization
				2.	If problem persists, replace the SATA cable.	run, 6 displayed on error.
				3.	If problem still persists, replace the Hard Drive.	
				4.	If problem still persists, replace the SBC.	
RTC Module	7	Flashing	Failed Real Time Clock	1.	Check RTC battery voltage (2.7 - 3.0V)	Check RTC before EPC is initialized, then read clock
				2.	Replace the RTC battery.	again. Display 7 on error.
				3.	If problem persists, replace the SBC.	
Initial entry to kernel	0	Flashing	Waiting for Power Normal	1.	Reload system software.	After successful memory test the display is set to 0 and
				2.	If problem persists, reseat SD Card.	remains 0 if autoboot is interrupted by user. If there is no
				3.	If problem still persists, replace the SD Card.	raised (after POST has completed (~25s). If Power Nor-
				4.	If problem still persists, replace the SBC.	mal is not raised or u-boot does not hand over to kernel
						then 0 will also remain displayed.
Boot complete	9	Flashing	Boot process hand over to kernal	1.	Reload system software.	9 indicates kernel load has started.
				2.	If problem still persists, replace the Hard Drive.	If 9 persists, the kernel s/w has failed to start.
				3.	If problem still persists, replace the SBC.	<b>NOTE:</b> If a previous error was detected, that error per-
						sists on the display following hand over to kernel.
Kernel starting	u	Flashing	Kernel starting user space	1.	Reload system software.	Kernel s/w has started. When u remains flashing, the
				2.	If problem still persists, replace the Hard Drive.	CCS Application has not started.
				3.	If problem still persists, replace the SBC.	

Table 1 SBC 7-segment Display Codes

Test	Code	Decimal Point	Description	Service Action	Comments
UI platform available	A	Flashing	UI platform available	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	On power up, the 7-segment display cycles through these codes until the relevant platform has fully synchro- nized with the system.
IIT communication	b	Flashing	IIT communication established	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	Any code left displayed after power up indicates this event has not been detected in software and is likely a s w issue. F is only displayed if a Fax card is installed and detected
NC Platform available	С	Flashing	NC Platform available	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	by the software. F is removed when the s/w gets a "plat- form available" response from the fax s/w
Dc platform available	d	Flashing	Dc platform available	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	
IOT communication	E	Flashing	IOT communication established	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	
FAX communication	F	Flashing	FAX communication established	<ol> <li>Reload system software.</li> <li>If problem still persists, replace the Hard Drive.</li> <li>If problem still persists, replace the SBC.</li> </ol>	
Attempting sleep entry	L	Flashing	OS suspending drivers, entering sleep	None, for diagnostic information only	On system sleep entry an L is briefly displayed while drivers are suspended. The display changes to an r when in deep sleep.
In Sleep state	r	Off	Resting in sleep	None, for diagnostic information only	Display an r when in deep sleep. Decimal point stops flashing in deep sleep.
In semi-conscious state	t	Flashing	Running in Low Power mode	None, for diagnostic information only	Display t in semi-conscious mode between Sleep and Wake.
Attempt sleep wake-up	Н	Flashing	OS resuming drivers	None, for diagnostic information only	When leaving deep sleep, display changes from 'H' to 't'. From semi-conscious (t) the machine either fully wakes and blanks the display, or goes back to deep sleep (r).
Machine at Ready	Blank	Flashing	No Faults Detected	Normal operation	If blank, in Ready mode, no faults detected.

# **Toner CRUM Mismatch RAP**

**NOTE:** The machine is shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration.

When the first Toner Cartridge (any color) is replaced, the geographic differentiation code and Toner Cartridge type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the machine toner configuration can only be changed with a CRUM conversion.

One or more Toner Cartridges are of the wrong type (i.e., a "Sold" cartridge installed in a "metered" configured machine.

# Procedure

- 1. Press the Machine Status button on the Control Panel.
- 2. Select Supplies.
- 3. The UI displays **Cartridge Error** for the mismatched cartridge.
- 4. Go to the Fault Code for the color that displays an error:
  - 393-937 Toner Y CRUM Data Mismatch Fail RAP
  - 393-938 Toner M CRUM Data Mismatch Fail RAP
  - 393-939 Toner C CRUM Data Mismatch Fail RAP
  - 393-926 Toner K CRUM Data Mismatch Fail RAP

# **USB Port Disabled**

USB Ports can be Enabled/Disabled in Centreware  $\ensuremath{\mathbb{R}}$  Internet Services (CWIS) by the System Administrator

### Procedure

Log onto the machine or CWIS as System Administrator and verify the status of the USB Ports.

# **No-Run RAP**

Machine model (Speed) information corrupted or not set

# Procedure

Machine Speed information must be loaded using the appropriate SIM Card.

1. Insert the SIM containing machine speed information.



### Figure 1 Inserting SIM Card

- 2. When the SIM is inserted, the status will be indicated by an LED display as shown in Figure 1. The LEDs are located on the SBC and are visible through small square holes in the frame above CR12 (Green) and below CR11 (Red) the SIM socket. The following list describes the LED display status:
  - Solid Green LED indicates correct insertion. On solid for approximately one minute at power On of soft switch, then goes out unless SIM card inserted.
  - Solid RED indicates incorrect insertion. On solid for approximately one minute at power On of soft switch. Off unless SIM card inserted.
  - Flashing Green LED indicates activity, and should flash for 5 seconds at half-second intervals.
  - Flashing Red LED (at half-second intervals until card is removed) indicates **Incom**plete error or **Failed SIM**.
- 3. Cycle system power after the SIM is installed.

# **Xerographic Messages RAP**

Machine fails to detect Toner dispensing (Replace Toner message) or Drum Cartridge (Drum Cartridge Error message); message can't be cleared, no status codes displayed.

Turn the power off, then on.

# Drum Cartridge Error message is displayed on the UI:

Turn the power off.

Inspect the Drum cartridges for damage and ensure that cartridges are firmly inserted into position.

Remove the Drum Cartridge(s) and inspect the Drum CRUM Coupler Assembly at the rear of the machine for proper mounting and possible damage:

- Drum CRUM Coupler (Y) P/J112
- Drum CRUM Coupler (M) P/J113
- Drum CRUM Coupler (C) P/J114
- Drum CRUM Coupler (K) P/J115

If no problem is found, check the wiring from the MD PWB J411 to the Drum CRUM Coupler Assemblies for an open or short circuit, or physical damage:

- BSD 9.5 Toner Cartridge Life Control (Y,M)
- BSD 9.6 Toner Cartridge Life Control (C,K)

If the wiring is OK, replace the following parts in sequence:

- MD PWB (PL 18.2B)
- MCU PWB (PL 18.2B)
- Drum CRUM Coupler (PL 8.1)

### Replace Toner message is displayed on the UI:

Turn the power off.

Ensure that the Toner Cartridges contain toner, are not damaged or obstructed, and are firmly seated in place.

Check the wiring from the MD SUB PWB P/J529 to the Toner Dispense Motor(s) for an open or short circuit, or physical damage:

- J220, J221 BSD 9.17 Toner Dispense Control (Y,M)
- J222, J223 BSD 9.18 Toner Dispense Control (C,K)

If the wiring is OK, replace the following parts in sequence:

- MD PWB (PL 18.2B)
- MCU PWB (PL 18.2B)
- Toner Dispense Motor (PL 5.1)

# **OF 16-1 Network Printing Problems Entry RAP**

This Procedure is provided to help identify and diagnose network printing problems.

# Initial Actions

- ٠ Ensure the machine is online.
- Ensure that no IOT faults exist that prevent the IOT from functioning. That is, copies can ٠ be made, or prints can be printed from the UI.

Determine the following:

- Are any jobs printing on the printer? ٠
- Is the problem related to one workstation?
- Is the problem related to one job?
- Have any changes been made to the network prior to a printing problem? ٠
- Was a backup log of network configuration data created? If so, was it last created by a ٠ CSE or the customer/SA?

If there are multiple protocols enabled on the printer, and the problems are ONLY occurring with one network protocol, go to the procedure appropriate for that protocol:

- NOVELL: OF 16-2, Novell Netware Checkout RAP ٠
- TCP/IP: OF 16-3, TCP/IP Checkout RAP
- APPLETALK: OF 16-4, Appletalk Checkout RAP ٠
- NETBIOS: OF 16-5, Netbios Checkout RAP

# Procedure

#### No printing occurs (jobs won't print, can't see printer, or can't connect to printer) Υ

Y	N	Y N
	It, instead of job printing normally, there is a literal printing of the PDL (many pages of code, or the job prints, but looks wrong (wrong fonts, missing fonts, other image quality works) and the OE and the DE and the D	protocol (not grayed out). There is at least one selectable protocol.
	problems), go to the OF 16-9, Job Prints incorrectly KAP.	When machine is ready, select dC312 again. Check for a selectable protocol (not
The	e problem occurs in all print jobs from all clients.	grayed out).
Y	Ν	Check for a selectable protocol. (Not grayed out) There is at least one selectable
	The problem occurs in a specific job from all clients.	
	Y N	Y N
	The problem occurs in all jobs from a specific client or group of clients, Y N	Go to GP 9 and perform the Regular AltBoot procedure.
	If the problem is with a specific job from a specific client, the problem is likely	Verify that the problem is corrected. If the problem continues, return to the start of
	with the client; either not connected to the network, wrong or old driver, bad	this procedure.
		Verify that the problem is corrected. If the problem continues, return to the start of this pro-
	If no printing can be done from a specific client or group, while other clients or group function normally, the likely cause is a problem in the customer's network	cedure.
		select Start. Observe the test results. The test passed.
	If the problem is specific to a single application or group of applications, ensure that cur-	Y N
	rent drivers are loaded	Cycle system power. When machine is ready, select dC312 again. Select the desired pro-
	If the problem occurs in only one job, go to the OF 16-8 Problem Printing, Job RAP	tocol and select Start. The test passed.
		Y N
		Perform the following:
Α		B C

Initial Issue

Α

Check that the printer is physically connected to the network cable and that the cable/connections are OK. Disconnect and reseat the cable at both ends. Check to see if the problem is corrected. The problem continues. Υ N

Return to Service Call Procedures.

Go to GP 7 (Network Printing Simulation) and send a print job. An acceptable print is produced.

Υ N

- verify machine settings
- . reload system software
- If the problem continues, reseat the SBC System Memory and System Disk Cable. .
- If the problem continues, replace the following (PL 35.2) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB \_
  - System Disk

Print out a Configuration Report (GP 6). Review the NetWare, TCP/IP, Apple Talk, and Microsoft Networking (NETBIOS) settings. At least one networking protocol is enabled. Υ N

The printer is not installed properly. Inform the customer/system administrator that the printer needs to be installed and setup for the appropriate networking protocol.

Go to dC312 and check for a selectable protocol (not grayed out). There is at least one selectable protocol.

- в С
- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, reseat the SBC System Memory and System Disk Cable.
- Go to GP 9 and perform the Regular AltBoot procedure.
- If the problem continues, replace the following (PL 35.2) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB
  - System Disk
- If the problem continues, have the customer/System administrator replace the network drop cable.
- Go to the appropriate RAP for the network protocol type that failed the Echo test.
- NOVELL: OF 16-2, Novell Netware Checkout RAP
- TCP/IP: OF 16-3, TCP/IP Checkout RAP
- APPLETALK: OF 16-4, Appletalk Checkout RAP
- NETBIOS: OF 16-5, Netbios Checkout RAP

Verify that the problem is corrected. If the problem continues, go to GP 9 and perform the Regular AltBoot procedure.

### CAUTION

The AltBoot procedure (GP 9) will delete all stored data on the System Disk Drive, including Email addresses, Xerox Standard Accounting data, and network configuration information. ALWAYS clone the machine (GP 13), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.

Reload software via AltBoot (GP 9). The problem continues.

Y N

Return to Service Call Procedures.

Select the most appropriate from the following:

- Jobs Won't Print, Can't See Printer, Can't Connect to Printer
  - NOVELL: OF 16-2, Novell Netware Checkout RAP
  - TCP/IP: OF 16-3, TCP/IP Checkout RAP
  - APPLETALK: OF 16-4, Appletalk Checkout RAP
  - NETBIOS: OF 16-5, Netbios Checkout RAP
- A particular Job Won't Print go to the OF 16-8 Problem Printing Job RAP, Problem Printing Job RAP
- Instead of job printing normally, there is a literal printing of the PDL (many pages of cryptic code) Go to the OF 16-9, Job Prints Incorrectly RAP
- Job prints, but looks wrong. Wrong fonts, missing fonts, other image quality problems -Go to the OF 16-9, Job Prints Incorrectly RAP

# **OF 16-2 Novell Netware Checkout RAP**

Use this RAP if the printer is enabled for Novell Netware protocol, but there are problems printing to it.

It is assumed that before entering here that the IOT is known to be OK.

Perform OF 16-1 Network Printing Problems Entry RAP, Network Entry RAP before using this RAP.

# **Initial Actions**

Question the system administrator and determine if any changes have been made to the machine Network Setup or the network.

# Procedure

Determine if the problem is occurring on multiple workstations. Only one workstation is unable to print.

### Y N

Have the customer/system administrator run pconsole.

Check Print Queue, Attached Print Servers. The print server is attached to the queue. Y  $\ N$ 

Check Print Queue, Status.

Ensure the flag that indicates that new print servers can attach to queue is set to yes. **The flag is set to Yes.** 

Y N

Have the customer/system administrator set the flag to Yes.

There may be a problem with the Network and Connectivity Setup on the printer. If a configuration report has not already been run, do so now (GP 6). Consult with the system administrator and ensure that the following Netware settings are correct on the printer:

- IPX Frame Type is correct (Ethernet Only)
- Primary Server name is correct (Bindery Only)
- NDS Tree and Context is correct (Netware 4.x, or later, NDS Only)
- Print Server name is correct
- A Print Server password is set and the same password is set for the print server object on the NDS tree

### All settings are OK.

### Y N

Go to Connectivity and Network Setup. Make Changes as appropriate. Switch the machine power off/on to reboot the SBC. Check for a reoccurrence of the problem. **The problem continues**.

Y N

Done. Return to Service Call Procedures.

Go to GP 9 and perform the Regular AltBoot procedure.

Go to GP 9 and perform the Regular AltBoot procedure.

Check the following:

- Α
- In **pconsole**, check Print Queue, Print Queue Information, Status. Ensure that the following two flags are set to Yes.
  - Print servers can service jobs in the queue
  - Users can add jobs to the queue

**NOTE:** Administrator or Print Queue Operator rights are required to make these changes.

• Notify customer/system administrator. There may be a network problem or a problem with the client workstation.

### The problem occurs only on one job.

Y N

Have the customer or system administrator check the workstation configuration. There may be a network problem or a problem with the client workstation.

Have the customer or system administrator reload the print driver on the affected workstation. Ensure that the problem is corrected. If the problem continues, escalate the call to the Customer Service Center (CSC).

Have the system administrator check the prolem workstation.

# OF 16-3 TCP/IP Checkout RAP

Use this RAP if the printer is enabled for TCP/IP protocol, but there are problems printing to it.

# **Initial Actions**

- Perform OF 16-1 Network Printing Problems Entry RAP, Network Entry RAP before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.
- Ensure that the printer is properly configured for the TCP/IP Network. Verify with the system administrator that the following printer settings are correct:
  - Printer IP address
  - Subnet mask
  - Broadcast Address
  - Default Gateway
- For Solaris 2.5 and above, the key operator or system administrator must have root privilege to install the printer.
- For SunOs, have the system administrator ensure that the /etc/printcap file is properly configured.

# Procedure

Determine if problem is occurring on multiple workstations. Only one workstation is unable to print (answer no if unsure)

# Y N

Print out a configuration report. (GP 6). Review the TCP/IP settings. TCP/IP is enabled. Y  $\ N$ 

The printer is not installed for TCP/IP. Inform the customer/system administrator that the printer needs to be installed and setup for TCP/IP.

Select dC312. Check if TCP/IP is selectable. TCP/IP is selectable (not grayed out).

Y N

Switch off/on the machine power to reboot the SBC. When machine is ready, select (dC312) again. Check if TCP/IP is selectable. **TCP/IP** is selectable (not grayed out).

Y N

Go to GP 9 and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select dC312, select TCP/IP and select Start. Observe the test results. The test passed.

### Y N

In Echo Test (dC312), select Internal TCP/IP and select Start.

Observe the test results. The test passed.

Y N

Perform the following:

There may be a problem with the network port. Ask the system administrator to test the port.

A B C

В Δ С

- If the problem continues, have the customer/System administrator replace ٠ the network drop cable.
- If the problem continues, reseat the SBC System Memory and System • Disk Cable.
- Go to GP 9 and perform the Regular AltBoot procedure. ٠
- If the problem continues, replace the following ((PL 35.2) in order until the ٠ problem is resolved:
  - \_ System Disk Cable
  - SBC System Memory
  - SBC PWB
  - System Disk

#### Perform the following:

- ٠ There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseat the SBC PWB Memory and System Disk ٠ Cable.
- If the problem continues, replace the following in order until the problem is ٠ resolved:
  - System Disk Cable \_
  - SBC PWB Memory
  - SBC PWB
  - System Disk \_

The printer needs to be reinstalled on the network. Have the system administrator reinstall the printer.

Ensure that all configurations and IP addresses are valid. •

### The problem occurs only on one job

Υ Ν

Have the customer/system administrator Ping from the affected workstation to the IP address of the printer.

Observe results. The workstation can ping the printer successfully.

Y Ν

Have the customer/system administrator ping to another known good IP address, other than the broadcast address, on the network. The workstation can successfully ping another IP address on the network.

Υ Ν

Inform the customer/system administrator there is a problem with the workstation.

Ensure the Subnet Mask, IP address, broadcast address and Default Gateway are set properly at the printer.

Have the system administrator check the workstation configuration. Ensure that the workstation is set-up properly to print to the printer according to the System Administrator Guide.

D

#### The same job prints ok from another workstation. Υ

Ν

Have the customer/system administrator reload the print driver on the affected workstation. If the problem continues, escalate the call to the Customer Service Center (CSC).

There is an application problem. Have the customer contact the Customer Service Center.

D

# OF 16-4 AppleTalk Checkout RAP

Use this RAP if the printer is enabled for AppleTalk protocol, but there are problems printing to it.

# **Initial Actions**

- Perform OF 16-1 Network Printing Problems Entry RAP, Network Entry RAP before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.

# Procedure

Print out a configuration report (GP 6). AppleTalk is enabled.

Y N

The printer is not installed for AppleTalk. Inform the customer/system administrator that the printer needs to be installed and setup for AppleTalk.

### Select dC312 and select Start.

Check if AppleTalk is selectable. AppleTalk is selectable (not greyed out).

Y N

Switch off/on the machine power to reboot the SBC. When machine is ready select dC312 and select **Start**. Check if AppleTalk is selectable. **AppleTalk is selectable (not greyed out).** 

Y N

Have the system administrator reinstall the printer on the network. When complete, select dC312. Check if AppleTalk is selectable. **AppleTalk is selectable (not greyed out).** 

Ϋ́Ν

Go to GP 9 and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select AppleTalk and select Start. Observe the test results. The test passed.

Y N

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseat the SBC System Memory and System Disk Cable.
- Go to GP 9 and perform the Regular AltBoot procedure.
- If the problem continues, replace the following ((PL 35.2) in order until the problem is resolved:
  - System Disk Cable
  - SBC System Memory
  - SBC PWB

System Disk

Δ

Check the network drop cable for obvious damage. If OK, there may be a network problem. Notify the system administrator.

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- Recheck the AppleTalk configuration settings.
- Check the following AppleTalk configuration settings:
  - The Printer name is correct
  - Zone name is correct
  - The proper printer drivers are installed on the clients and that the printer is visible and selected in the chooser.

# **OF 16-5 NETBIOS Checkout RAP**

Use this RAP if the printer is enabled for NETBIOS protocol, but there are problems printing to it.

# **Initial Actions**

- Perform OF 16-1 Network Printing Problems Entry RAP, before using this RAP.
- It is assumed that before entering here that the IOT is known to be OK.
- If running NETBIOS over an TCP/IP network, ensure the printer is properly configured for TCP/IP network. Verify with the system administrator that the following printer settings are correct:
  - Host Name
  - Printer Name
  - Workgroup (domain)

# Procedure

Print out a Configuration Report (GP 6). NetBIOS is enabled.

Y N

The printer is not installed for NetBios. Inform the customer/system administrator that the printer needs to be installed and setup for NetBIOS.

Select dC312. Check if NetBIOS is selectable. NetBIOS is selectable (not grayed out).

Y N

Switch off/on the machine power to reboot the SBC. When machine is ready, select dC312 again. Check if NetBIOS is selectable. NetBIOS is selectable (not grayed out).

Y N

Have the system administrator reinstall the printer on the network. When complete, select **Diagnostics** tab, **SBC/Network** tab, **Echo Test (dC312)**.

Check if NetBIOS is selectable. NetBIOS is selectable (not grayed out).

Y N

Go to GP 9 and perform the Regular AltBoot procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Verify that the problem is corrected. If the problem continues, return to the start of this procedure.

Select NetBIOS and select Start. Observe the test results. The test passed.

# Y N

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- If the problem continues, have the customer/System administrator replace the network drop cable.
- If the problem continues, reseat the SBC System Memory and System Disk Cable.
- Go to GP 9 and perform the Regular AltBoot procedure.
- If the problem continues, replace the following (PL 35.2) in order until the problem is resolved:

- System Disk Cable
- SBC System Memory
- SBC PWB
- System Disk

Check the network drop cable for obvious damage. If OK, there may be a network problem. Notify the system administrator.

Perform the following:

- There may be a problem with the network port. Ask the system administrator to test the port.
- Recheck the NetBIOS configuration settings.

Check fault History for 16.800.46, 16.802.46, or 16.803.46 fault codes. The fault(s) occurred.

Y N

Δ

Return to the top of this RAP and answer NO to statement that the interface is IP/Ethernet or IP/Token Ring.

Go to the OF 16-3, TCP/IP RAP.

Α

# **OF 16-8 Problem Printing Job RAP**

Use this RAP when a particular job won't print. Other jobs print OK.

# Procedure

tion.

recoduro	
Check the output to see if a PDL error sheet was printed. An error sheet was printed.	Dis
Y N On the machine UI, select Job Status, Other Queues, All Completed Jobs, Save. Check the queue for the job in question. The job is in the log.	pro Y
Select Other Queues, All Incomplete Jobs, Save. The job is stuck in the queue.	
Y N Check for a fault listed against the job in question. There is a fault(s) listed with the job.	
Go to GP 9 and perform the Regular AltBoot procedure.	
Go to the appropriate RAP for the fault(s) listed with the job.	
Switch the machine power off/on to reboot the SBC. The job printed OK.	
Inform the customer the job must be deleted. Delete the job. Instruct the cus- tomer to recreate and re-send the job. <b>The job printed OK.</b> Y N	
Go to GP 9 and perform the Regular AltBoot procedure. If the problem continues, there may be a problem with the job. See if other jobs print OK. If not, instruct the customer/System administrator to reload the print driver on the affected workstation.	
If the problem continues have the customer call the Customer Service Center.	
Done. Return to Service Call Procedures.	Hav Pri
Done. Return to Service Call Procedures.	Y
The job must have been printed. Check for the possibility that the job was removed from the printer by another user.	
Go to GP 9 and perform the Regular AltBoot procedure.	
If the problem continues, there may be a problem with the job. See if other jobs print OK. If not, instruct the customer/System administrator to reload the print driver on the affected worksta-	•

# **OF 16-9 Job Prints Incorrectly RAP**

The job prints, but incorrectly.

# Procedure

Discuss the problem with the customer and/or inspect the incorrect output. **There is a font problem.** 

### Υ N

- The problem is occurring on all jobs from all clients.
- Y N

The problem is occurring on jobs from one particular client.

Y

Ν

The problem is related to a particular job. Have the customer call the Customer Support Center.

There may be a problem with the client workstation. Check/perform the following:

- See if problem is related to a particular job. If so, go to the OF 16-8 Problem Printing Job RAP.
- Ensure that the client meets minimum specifications for the Centreware® software drivers.
- Ensure the latest printer drivers are loaded.
- Have the customer/System administrator reload the printer driver.

Have the customer/system administrator replace the print drivers. Ensure that the latest drivers available are loaded. The problem still continues.

N Return to Service Call Procedures.

Go to GP 9 and perform the Regular AltBoot procedure.

Have the customer view the job in Print Preview of the application. The problem appears in Print Preview.

Y N

There may be a font substitution that is not acceptable to the customer. In the Printer Setup for the print driver, if Always Send to Printer is selected, the actual fonts will be sent to the printer from the workstation. This will slow down the printer performance, but will usually solve the font problem.

There may be a problem with the client workstation. Check/perform the following:

- See if problem is related to a particular job. If so, go to the OF 16-8 Problem Printing Job RAP.
- Ensure the client meets minimum specifications for the Centreware® software drivers.
- Ensure the latest printer drivers are loaded.
- Have the customer/System administrator reload the printer driver.

If the problem continues have the customer call the Customer Service Center.

OF 17-1 FAX Entry RAP
There is a problem with Embedded FAX. The primary causes of Fax problems, <b>in order of likelihood</b> , are:

- Phone line problems
- Customer operation problems
- PBX setup problems
- Machine configuration problems
- Fax hardware problems

#### **Initial Actions**

- If the problem is FAX not printing the Date and Time stamp, enter dC131 and change the setting in NVM location 200-143 from a 0 to a 1.
- Verify the presence of the FAX PWB.
- Check the Configuration Sheet to confirm that the FAX PWB is detected.
- Perform GP 1 Fax PWB Internal Selftest.
- Check the phone line connection (GP 14).
- If the FAX icon is not present, check cable (PL 35.2) item 8 on the SBC.

### Procedure

**NOTE:** Embedded Fax is designed to work over analog lines only. PBX and DSL lines attempt to emulate a PSTN analog line, and must be configured appropriately. Incorrect PBX settings are a major cause of service calls.

The following line types are supported on a best efforts only basis:

- xDSL lines with appropriate filtering.
- PBX extensions using digital signalling, with an analog speech path.
- ISDN lines are not supported.
- In a VoIP environment, Embedded Fax devices need separate analog lines or a T.38 Protocol Adapter

#### The Fax cannot send or receive.

Y N

Δ

Initial Issue

The Fax can send but not receive.

Y N

If the Fax receives but does not send, check the FAX set-up menus:

- Enter Tools (GP 2). Select Service Settings.
- Select Fax Service Settings.
- Select Line \_\_ Setup
  - Check that the Fax is set for **Send and Receive**.

If the Fax transmits but cannot receive,

- Check the phone number. To receive a FAX the sender must know the phone number assigned to the phone line connected to the FAX.
- Check the FAX set-up menus.
  - Enter Tools (GP 2). Select Service Settings.
  - Select Fax Service Settings.
  - Select Line \_\_ Setup.

Print a Configuration Report (GP 6). The Fax is listed as installed.

N Switch Off the power.

Δ

Disconnect then reconnect the Fax PWB, Riser PWB, and SBC NVM PWB. Switch on the power. If the problem remains, perform the following: Replace the Fax PWB (PL 35.1). Reload SW (GP 9). Replace SBC NVM PWB (PL 35.2). Replace the SBC PWB (PL 35.2).

#### Check the FAX set-up menus.

- Enter Tools (GP 2). Select Service Settings.
- Select Fax Service Settings.
- Select Fax Setup.
  - Check that the Fax is enabled.
  - If the Enable and Disable buttons are not present, then the initial setup at install was not completed correctly. Press Setup and complete the setup.
- Line Configuration be sure pulse or tone selection is correct.
- FAX Transmission Defaults (check closely for FAX transmission problems)
  - Automatic Redial Setups
  - Automatic Resend
  - Audio Line Monitor
  - Transmission Header Text
  - Batch Send
- Receive Defaults (check closely for FAX receive problems)
  - Receive Printing Mode
  - Default Output Options
  - Secure Receive
  - Auto Answer Delay
- FAX Country Setting
- File Management

**NOTE:** Though typically the FAX feature is setup for analog transmission, if FoIP is being used, the following may be helpful if there is a problem.

If the machine fails to receive or transmit fax jobs and the transmit speed drops immediately to 9600 bps or 7200 bps, then do the following:

The transmitting or receiving baud rate can be reduced from 33.6K bps to either 14.k bps, 9600 bps, or 7200 bps by changing the proper NVM locations.

The NVM values are: 3 = 33.6K 11= 14.4K 13 = 9600 14 = 7200

The NVMs are: Sending NVM 200-087 "T30MaxSpeedL1Tx" (single line) Sending NVM 200-088 "T30MaxSpeedL2Tx" (for 2 line fax) Receive NVM 200-089 "T30MaxSpeedL1Rx" (single line) Receive NVM 200-090 "T30MaxSpeedL2Rx" (for 2 line fax)

Otherwise, replace the FAX PWB (PL 35.1).

# **OF 18-1 Secure Access RAP**

#### Overview

Xerox Secure Access uses an external device, such as a card reader or biometric device, to authorize access to the machine. This reader then passes the information to the controller, which handles the authentication process including, which GUI screens are displayed, accepting GUI responses, that defines their content and order. The controller can pass user identities and passwords directly to the machine after gathering the data from an external server. All communication is via a secure network link, Figure 1 Network Diagram.

Xerox Secure Access shall be controlled via the Centreware® Internet Services GUI. The active status is displayed in tools within Access Control. If communication cannot be established with the Xerox Secure Access Server the service may be temporarily disabled by touching the now enabled Off button within the Xerox Secure Access tools window. Once communication is reestablished the stored Xerox Secure Access setting shall be restored.





#### Initial Action

Before working on the Xerox Secure Access, check out the machine in the service mode to insure no faults are displayed and that the machine is functioning properly. If it is not, repair any problems before proceeding with diagnosing the Secure Access Accessory. Diagnostics can be entered to test copier functionality when Secure Access is installed.

Perform the following steps

- Check the connection between the Card Reader and the Secure Access Authentication Device.
- Check for the LEDs are on or blinking on the Secure Access Authentication Device. If the LEDs on the Secure Access Authentication Device are not operating, go to Secure Access Authentication Device Failure.

- Check for the LEDs are on or blinking on the Card Reader. If the LEDs on the Card Reader are not operating, go to Card Reader Failure.
- If customers have problems of install / setting up, or any other problems related to their Secure Access Administrator, they should refer to the Secure Access System Administrator's Guide or contact Xerox Technical Support.

Secure Access Authentication Device Failure

The primary failure modes are power problems or failed hardware components. The symptom of these failures can be detected by observing the LEDs on the Secure Access Authentication Device, Figure 2.



**Figure 2 Authentication Device** 

Check the power to the Secure Access Authentication Device.

- Check the power supply at the wall socket. If there is no power at the wall socket, have the customer restore power and continue when confirmed.
- Disconnect the power cord from the wall socket and the power supply. Check the power cord for continuity and damage. If necessary install a new power cord. Disconnect the power cord from the power supply and plug the power cord into the wall outlet. Using a multi meter, check for line voltage at the end of the power cord disconnected from the power supply. If there is power at the wall but not at the end of the power cord. Install a new power cord.
- Disconnect the small power cord from the Secure Access Authentication Device. Check there is +5V at the connector that plugs into the Secure Access Authentication Device. If there is no +5V, install a new power supply.

- There is a 'Keyed' switch on the end of the Secure Access Authentication Device. Obtain the key from the customer. Insert the key into the 'keyed' switch and cycle the switch 1 quarter turn clockwise and then back to its start position. Observe the LEDs and listen for an audible tone.
- If the LEDs on the Secure Access Authentication Device "Uplink" and "Downlink" Ethernet ports do not cycle on and off as the controller goes through its boot-up process, or if the audible tone is not heard. Install a new Secure Access Authentication Device.

**NOTE:** A new device will require the Secure Access Administrator to reconfigure the server with the new MAC address for the new part. Be sure to inform the Secure Access Administrator of the MAC address of the device being removed and the MAC address of the new device.

### Card Reader Failure

The primary failure modes are power problems or failed hardware components. The symptom of these failures can be detected by observing the LED on the Card Reader. Refer to Figure 2.

- The Green LED on the Card Reader is On
- The Green LED on the Card Reader Flashes Rapidly
- The Red LED on the Card Reader is On
- The Red LED on Card Reader Flashes Slowly
- The Red LED on Card Reader Flashes Rapidly
- The Card Reader LEDs are not On or Blinking

When the LED on the card Reader is	Description
Red	The authentication device is in idle mode; there is no active session.
Green	The authentication device is in ready mode; a session is active.
Slow Flashing Red	The authentication device has no connection to the server.
Slow Flashing Green	The authentication device is communicating to the server.
Fast flashing red	Invalid card / password; access denied.

The Green LED on the Card Reader is On

- This indicates an active Secure Access Session and the Card Read correctly corresponds to a valid Secure Access Account.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.
- Ensure that the card corresponds to a valid Secure Access Account.

The Green LED on the Card Reader Flashes Rapidly

- This indicates a valid card swipe and in the process of authentication on the server.
- If the UI on the machine is locked, check with the customer for a second PIN number for additional security. This PIN number will need to be entered via the soft keys on the UI.

• If the UI on the machine is locked and no secondary PIN is required. Check that the Xerox Secure Access is installed correctly, and ask customer to check the configuration at the server.

The Red LED on the Card Reader is On

- This indicates the Card Reader is in an idle state. If the red LED remains on, and the UI remains locked after a card is swiped, re-orient the card and re-swipe.
- Try a known good card in the reader. If the other card is working on the problem Card Reader. Ask customer to make sure the card corresponds to a valid Secure Access Account.
- Try the card in a known good reader. If the card is working on a known good Card Reader, it may be a problem with the Secure Access Authentication Device. Check to see is the LEDs on the Secure Access Authentication Device are on.

The Red LED on Card Reader Flashes Slowly

- This indicates the reader is connected to the controller but the controller is not connected to the server. Check the Ethernet green LED on the Authentication Device.
- If the Ethernet green LED on the Authentication Device is off, make sure the connectors of the LAN connections are working properly. If the connections are working, this indicates the network may not work properly. Ask customer to check with Network Administrator.
- If the Ethernet green LED on the Authentication Device is either on or flashing, contact the Secure Access Administrator

The Red LED on Card Reader Flashes Rapidly

- This indicates a valid card but does not correspond to a valid Secure Access Account at the server, test with a known valid user's card.
- If all cards react the same way, this indicates the Server Configuration may not be correct. Ask customer to check the Server Configuration.
- If all the card react this way, this indicates the cards are not valid. Ask customer to check the Server Configuration

The Card Reader LEDs are not On or Blinking

- Check to see is the Secure Access is correctly installed.
- If there is still no LED on the Card Reader, install a new the Card Reader.

**NOTE:** If there is another working card reader available, the readers can be switched to confirm failure. If the Card Reader is not functioning, the web page of the machine has a setting that will enable UI keypad access. If the users know their card access number, they can use the machine by manually entering their number. The process is as follows:

- 1. Go to the machine web page under properties and then security and check the box that says "Allow local user interface initiation".
- 2. Enable the keypad and test with valid credentials. This will validate the rest of the secure access function.
- 3. Leave it in this mode until the new card reader can be installed.

# **OF 19 Wireless Connectivity RAP**

Use this RAP when the customer reports wireless network failures when using the Xerox wireless print kit.

**NOTE:** The customer must use the Xerox wireless print kit. Other wireless network adapters are not supported.

# **Initial Actions**

Consult your manager before troubleshooting the customer's network, as the policy varies according to region.

# Procedure

### Perform the following:

- 1. Check that the USB wireless network adapter is plugged into a USB port on the machine.
- 2. If the USB wireless network adapter is connected using the USB extension cable, check that the extension cable is also plugged into a USB port on the machine.
- 3. Print a configuration report.
  - a. Check with the customer that printing of configuration reports is enabled. If necessary, ask the customer to enable printing of the configuration report.
- 4. Ensure that the USB ports are enabled.
  - a. Check the configuration report under the heading Connectivity Physical Connections.
  - b. If Software Tools is not listed next to USB Connection Mode, ask the customer to enable USB.
    - i. Refer to the System Administrator Guide > USB Port Security Setting Check.
    - ii. Refer to the System Administrator Guide > Configuring USB Settings and set USB Connection Mode.
- 5. Confirm the USB port is functional.
  - a. Check that the LED on the wireless network adapter flashes when the machine is in standby.
  - b. Connect the wireless network adapter to a different USB port if available.
  - c. Perform dC361 NVM Save and Restore. If the NVM can be saved to a USB flash drive, the USB port is functional.

NOTE: It is not necessary to perform the NVM restore procedure.

- 6. Ensure that the machine is configured for wireless printing.
  - a. Check the configuration report under the heading Connectivity Physical Connections.
  - b. If wireless is disabled, ask the customer to enable wireless printing. Or enter Customer Administration Tools:
    - i. Select Network Settings.
    - ii. Select Network Connectivity.
    - iii. Select Wireless.
    - iv. Select OK.
  - c. Check the network name listed next to SSID on the configuration report.

Initial Issue

- d. If the network name does not match the customer's wireless network, ask the customer to configure the wireless network setup before continuing.
- e. Check the network name under the heading Connectivity Protocols.
- f. If an IP address is not listed under TCP/IPv4 or TCP/IPv6, ask the customer to configure the wireless network setup before continuing.
- 7. Confirm that the customer's wireless network can be detected at the machine's location.
  - a. Ask the customer to confirm that the wireless network is switched on and can be received at the machine's location. Or use your PWS or a smartphone to detect the customer's wireless network.
  - b. To use a PWS with Windows 7 to confirm the customer's wireless network can be detected, perform relevant procedure below.

#### Windows 7

- Click on the Wireless Networking icon in the notification area of the taskbar. If necessary, click on the Show hidden icons button to show the wireless networking icon.
- ii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

### Windows XP

- i. Right click on the Network Connection icon in the notification area of the taskbar.
- ii. Click on View Available Wireless Networks.
- iii. Confirm that the customer's network name (SSID) is displayed in the list that pops up.

**NOTE:** Do not attempt to connect the PWS or smartphone to the customer's wireless network.

- 8. If the wireless network signal strength is weak, ensure that the wireless network adapter is connected via the USB extension lead. If possible change the mounting position of the adapter to improve the reception. To view the signal strength, enter System Administration Tools and preform the following:
  - a. Select Network Settings.
  - b. Select Network Connectivity.
  - c. Select Wireless.
  - d. The signal strength is displayed in the text frame.
  - e. Move the wireless network adapter and extension lead until the strongest signal strength is found.
- 9. If necessary, install a new wireless network adapter.

# **OF 99-1 Reflective Sensor RAP**

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Reflective sensors operate by light from the LED being reflected off the paper to the photo transistor, causing the output of the sensor to go to the low (L) state.

### **Initial Actions**

Ensure that the sensor is not actuated.

### Procedure

Enter the component control code indicated in the Procedure and/or Circuit Diagram of the RAP that sent you here. Actuate the sensor using a sheet of paper. **The display changes with each actuation.** 

#### Y N

Clean the sensor and then block and unblock it. The display changes with each actuation.

#### Y N

Access to some sensors in this machine is difficult. Follow the **Y** leg if you can access the sensor connector. Follow the **N** leg if access is not possible. **The sensor connector is accessible.** 

### Y N

Check the voltage at the output of the PWB or power supply (refer to the Circuit Diagram). In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC depending on the circuit (refer to the Circuit Diagram for the correct voltage). **The voltage corresponds with the voltage shown in the Circuit Diagram.** 

### Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB

### The display indicates a constant L.

### Y N

B C

Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.

#### Y N

Use the circuit diagram and/or the wirenets in Section 7 to trace the problem.

Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. **The display changes from H to L.** 

Α

N There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

Disconnect the sensor. The display indicates H.

# Y N

γ

B C

Δ

When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB.Figure 1 represents a typical sensor for this machine.

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.



Figure 1 Typical Reflective Sensor Circuit Diagram

# OF 99-2 Transmissive Sensor

Sensors consist of a light-emitting diode and a photo transistor. When energized, the light from the LED causes the photo transistor to conduct, drawing current through a pull-up resistor. The voltage drop across the resistor causes the input signal to the control logic to change from a high to a low.

Transmissive sensors have a flag or actuator that is pushed into the space between the LED and transistor, blocking the light beam and causing the output of the sensor to go to the high (H) state. This actuation may be caused by a sheet of paper striking a pivoting flag, or a rotating actuator on a shaft or roll.

Some sensors have built-in inverters and the outputs will go to the low (L) state when the sensors are blocked. In other situations, the processing of the signal in control logic may cause the logic level displayed on the UI or the PWS to be the opposite of the actual voltage output by the sensor. The specific RAP and/or Circuit Diagram will indicate if this is the case. Figure 1 is an example of a typical sensor circuit for this machine

# Procedure

Enter the component control code indicated in the specific RAP and/or Circuit Diagram. Block and unblock the sensor. **The display changes with each actuation.** 

Y N

Clean the sensor and then block and unblock it. The display changes with each actuation.

# Y N

Access to some sensors in this machine is difficult. Follow the **Y** leg if you can access the sensor connector. Follow the **N** leg if access is not possible. **The sensor connector is accessible.** 

# Y N

Check for +5VDC at the output of the PWB or power supply. Refer to the Circuit Diagram. In the example for this generic procedure, voltage is provided from J533 on the I/F (MDD) PWB. Check for pull-up voltage for the output signal. This voltage will be either +5 VDC or +3.3 VDC, depending on the circuit. Refer to the circuit diagram for the correct voltage.

### Y N

Check for short circuit(s) that may be loading down the line. Check the power input to the PWB(s). If this does not resolve the problem, replace the PWB.

Refer to the Circuit Diagram. Check the wires from the PWB to the sensor for opens, shorts, or loose contacts. If the wires are OK, replace the sensor. If this does not resolve the problem, replace the PWB

### The display indicates a constant L

### Y N

С

D

Check for +5VDC to the sensor (typically pins 1 and 3 on a 3 pin connector). +5 VDC is present.

### Y N

Use the circuit diagram and /or the wirenets in Section 7 to trace the problem.

A B

D Disconnect the sensor. Use a jumper wire to connect the output wire from the sensor (typically pin 2 on a 3 pin connector) to DC COM or GND. The display changes from H to L.

Ν Y

В С

Δ

There is either an open circuit or a failed PWB. Use the Circuit Diagram to trace the output wire to the PWB. If the wire is OK, replace the PWB.

Replace the sensor.

Disconnect the sensor. The display indicates H.

Υ Ν

When sensors are unplugged, the input at the PWB should always be high if there is no harness short or PWB failure. Check the output wire from the sensor (typically pin 2 on a 3 pin connector) to the PWB for a short circuit. If the wire is good, replace the PWB. Figure 1 represents a typical sensor for this machine

The sensor is shorted. Replace the sensor.

Look for unusual sources of contamination.

The sensor and the circuit appear to operate normally. Check the adjustment of the sensor. Clean the sensor. Check the sensor actuator/flag for proper operation. Check for intermittent connections, shorted, or open wires. If the problem continues, replace the sensor.

#### MCU PWB I/F PWB 2ND BTR RETRACT PL13.1 DOUBLE PL9.1 SENSOR PLUG PI 2.9 J612 J140 DC COM P612 J533 B18 YEL VIO DC COM J140 +5VDC B20 YEL GRY +3.3VDC +. DC330 [009-200] 2ND BTR RETRACTED +5VDC (L) +3.3VDC 70 B19 YEL YEL T709005B-CAR

Figure 1 Typical Transmissive Sensor Circuit Diagram

# OF 99-3 Switch

# Procedure

Enter dC330 [XXX-XXX]. Actuate the switch. The display changed.

Υ N

> There is +3.5 / 5VDC measured between Pin 2(+) of the Switch and GND(-). Υ Ν

Check the wire between the switch Pin 2 and the PWB Pin 3 for an open circuit and poor contact. If the check is OK, replace the PWB.

There is +3.5 / 5VDC measured between Pin 1(+) of the Switch and GND(-), Figure 1. Υ

Ν Replace the switch.

Check the wire between the PWB Pin 4 and the switch Pin 1 for an open circuit and poor contact. If the check is OK, replace the PWB.

# De-actuate the switch. The display changed.

#### Υ Ν

Disconnect the connector on the switch. The display changed.

- Υ Ν
  - Check for a short between the switch Pin 2 and the PWB Pin 3. If the check is OK, replace the PWB.

Replace the switch.

Replace the switch.



Figure 1 2003
# **OF 99-4 Generic Solenoid/Clutch RAP**

Solenoids and electric clutches are essentially electromagnets. Typically, a positive voltage is applied to one end of a coil, and a current driver is connected to the other end. Control Logic switches this driver to GND potential, actuating the magnet. Bidirectional solenoids have a bipolar driver connected to each end. One leg is switched to 24 VDC and the other to GND.

Figure 1 is a circuit diagram of a typical solenoid.

#### **Initial Actions**

Ensure that there is no damage or binding in the solenoid or in any mechanical linkage. If there is an Adjustment for the clutch or solenoid, make sure that the procedure was performed correctly

#### Procedure

#### The clutch/solenoid is always energized.

Y N

Enter the component control code (dC330) given in the RAP or the Circuit Diagram. Press the **Start** button **The Clutch or solenoid energizes.** 

Y N

Press the Stop button There is +24 VDC between the switched leg (J407 pin A6 in the example, Figure 1) of the control PWB and GND.

Y	N
	Disconnect the connector (J407 in the example, Figure 1). There is +24 VDC between the powered leg of the control PWB and GND.
	Y N
	Refer to the 24 VDC wirenets. check the input power to the contro PWB. <b>+24 VDC is present.</b>
	Y N
	Use the 24 VDC wirenets to troubleshoot the problem.
	Replace the control PWB.
	Check the wire in the powered leg of the circuit, (J407 pin A7 in the example, Figure 1) for a short circuit to GND. If the wire is OK, replace the clutch or solenoid.
 Dis	connect the connector (J407 in the example, Figure 1). Check continuit
thro	ough the two wires and the clutch or solenoid. There is less than 10
ohr	ns between the two legs of the circuit.
Y	N
	Disconnect the clutch or solenoid. Check continuity through the two wire
	and the clutch or solenoid. There is less than 100 ohms across the
	clutch or solenoid.
	Y N
	Devile set the schedule set of set of the

#### BCDE

Δ

One of the two wires between the control PWB and the clutch or solenoid is open. Repair or replace the wiring as required.

Replace the control PWB.

Press the Start button. There is less than 1 VDC between the switched leg of the control PWB and GND.

- Y N
  - Replace the PWB.

Replace the clutch or solenoid.

The clutch or solenoid appears to be functioning correctly. Refer to the Circuit Diagram for the RAP that sent you here. Check the wires for loose connections or damage that may cause intermittent operation. Perform any required adjustments.

There is a short circuit on the switched leg (J407 pin A6 in the example) from the solenoid or clutch. Check the wire for a short circuit to GND. If the wire is OK, replace the solenoid. If the problem persists, replace the controlling PWB.





B C D

F

Α

# OF 99-6 2 Wire Motor Open

#### Procedure

NOTE: Before performing this RAP, ensure that the motor is free to rotate.

#### Enter the dC330 [XXX-XXX].

Υ

Υ

There is +24VDC measured between Pin 3(+) of the PWB and GND(-).

#### Y N

There is +24VDC measured between the Motor Pin 2(+) of the Motor and GND(-). Y N

There is +24VDC measured between the Motor Pin 1(+) of the Motor and GND(-).

N There is +24VDC measured between the PWB Pin 4(+) of the PWB and GND(-).

```
N
Replace the PWB.
```

Check the wire between the PWB Pin 4 and the Motor Pin 1 for an open circuit or poor contact.

Replace the motor.

Check the wire between the PWB Pin 3 and the Motor Pin 2 for an open circuit or poor contact.

Replace the PWB.



Figure 1 Motor CD

# OF 99-7 2 Wire Motor On

#### Procedure

Turn off the power. Remove the PWB connector. There is 10 Ohm's or less measured between the connector Pin 3 and the frame.

Y N

Replace the PWB.

Check the wire between the connector Pin 3 and the motor Pin 2 for a short circuit. If the check is OK, replace the motor.



Figure 1 Motor CD

# OF 99-8 Set Gate Solenoid Open

#### Procedure

There is +24VDC measured between the Nip/Release Solenoid Pin 1 (+) and GND (-).

Y N

#### There is +24VDC measured between the PWB Pin 5 (+) and GND(-).

Y N

Check +24VDC inputs on the PWB. If the check is OK, replace the PWB.

Check the wire between the PWB Pin 5 and the Nip/Release Solenoid Pin 1 for an open circuit or poor contact.

Enter dC330 [XXX-XXX]. There is +24VDC measured between the PWB Pin 4 (+) and GND(-).

#### Y N

There is +24VDC measured between the Nip/Release Solenoid Pin 3 (+) and GND (-).

Ý N

Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 4 and the Nip/Release Solenoid Pin 3 for an open circuit and poor contact.

Follow the following when the release caused a problem.

Go to the dC330 [XXX-XXX]. There is +24VDC measured between the PWB Pin 6 (+) and GND(-).

#### Y N

There is +24VDC measured between the Nip/Release Solenoid Pin 2 (+) and GND (-)

Y N

Replace the Nip/Release Solenoid.

Check the wire between the PWB Pin 6 and the Nip/Release Solenoid Pin 2 for an open circuit or poor contact.

Replace the PWB.



Figure 1 Nip Solenoid CD

have 1 or 2 DC power inputs

- are controlled by 2 or more drivers
- have no DC COM connections for return power
- have no specific feedback circuits

#### Procedure

Connect black meter lead to ground. Measure voltage at each pin of J2 (example only, refer to the actual Circuit Diagram for the correct voltage and connector designation). +24 VDC is measured at each pin.

#### Ν

Disconnect J2. Measure voltage at P2-1 and P2-6. +24 VDC is measured.

#### Y N

Υ

Switch machine off then on. Measure voltage at P2-1 and P2-6. +24 VDC is measured.

#### Υ

Ν

If an interlock circuit is present, check the interlock circuit. Repair as required. If the interlock circuit is good, replace the PWB.

Check the motor wires for a short circuit. If the wires are good, replace the Motor.

Check the motor wires for obvious damage. If the wires are good, replace the Motor.

Replace the PWB.



Figure 1 Motor CD

# 3 Image Quality

#### Image Quality RAPs

IQ1 IOT Image Quality Entry RAP	3-3
IQ2 IIT Image Quality Entry RAP	3-7
IQ3 1mm Lines RAP	3-8
IQ4 Image Shift in Process Direction RAP	3-8
IQ5 White Lines RAP	3-9
IO6 SI ED Transfer Cycle Lines RAP	3-9
IO7 INLOUT Density Difference RAP	3-10
IQI IN-OUT Density Difference IXAL	2 10
IQO Image Shift in Inheard to Outheard Direction DAD	2 44
1Q9 IIIage Silit II IIIboard-to Outboard Direction RAP	0.44
IQ10 Edge-less Image RAP	3-11
IQ11Contamination Lines RAP	3-12
IQ12 Chip/Half Chip Blanks RAP	3-12
IQ13 SLED Transfer Failure RAP	3-13
IQ14 Tapes Not Peeled RAP	3-13
IQ15 Charging Roll Pitch White Lines (type 1)	3-14
IQ16 Charging Roll Pitch White Lines (type 2)	3-14
IQ17 Photoreceptor Pitch Color Lines	3-15
IQ18 Background on Gloss RAP	3-15
IQ19 Toner Empty Detection Color Lines RAP	3-16
IQ20 Toner Droplet Contamination RAP	3-16
IQ21 Smear on Heavyweight RAP	3-17
IQ22 Rough Black RAP	3-17
IQ23 Moist Paper Transfer Failure RAP	3-18
IQ24 Toner Contamination at Lead/Trail Edge RAP	3-18
IO25 Trail Edge Transfer Failure RAP	3-19
IO26 Color Lines RAP	3-20
IO27 Transfer Blank Areas (Partially Moist Paner) RAP	3-21
IO28 Nin Marke RAP	3_21
IO20 Majeture PAP	3-21
	2 22
IQ30 Low Inlage Density RAF	2 22
	3-23
1032 IOT Background RAP	3-24
IQ33 Color-to-Color Misregistration RAP	3-25
IQ34 Skew/Misregistration RAP	3-26
IQ35 Process Direction Bands, Streaks, and Smears RAP	3-27
IQ36 Unfused Copy/Toner Offset RAP	3-28
IQ37 Repeating Bands, Streaks, Spots, and Smears RAP	3-28
IQ38 Spots RAP	3-29
IQ39 Missing Colors RAP	3-30
IQ40 Background on Coated Paper	3-30
IQ41 Multi Color Transfer Failure	3-31
IQ42 Lines on Coated Paper (EXIT)	3-32
IQ43 Caterpillar Mark (Transfer)	3-32
IQ44 White Stripes Due to Trimmer Jam (DEV)	3-33
IQ45 Heat Haze/Mock Heat Haze	3-33
IQ46 Poor Reproducibility of Fine Lines (IOT Image Quality)	3-35

Q47 Outboard Deletion in All Colors
Q48 MWS (Side 2) (Micro White Spots)
Q49 Moist Paper Wrinkles (Fusing Unit)
Q50 White Streaks in Process Direction/Dropping Density (XERO/CLN)
Q51 Background (IPS)
Q52 Light Ink Support (IPS)
Q53 Highlight Density Reproduction (NVM Darken +3) (IPS)
Q54 Highlight Density Reproduction (NVM Lighten +3) (IPS)
Q55 Bleed on Tracing Paper (IPS)
Q56 CVT Streaks (IPS)
Q57 Copy: Gradation Jump in Text & Photo (IPS)
Q58 Scan: Smeared Text, JPEG Mosquito Noise (IPS)
Q59 Moire In Text Mode (Fine) BW Scan/Fax For 133 lpi Originals (IPS)
Q60 Copy: Bleed on 2 Sided Document (IPS)
Q61 Copy: Platen Background (IPS)
Q62 Image Quality Difference between Side 1 and Side 2 (Sharpness Adjustment
of Side 1 and Side 2)
Q63 Image Quality Difference between Side 1 and Side 2 (Color Balance Adjustmen
of Side 1 and Side 2)
Q64 Image Quality Difference between Side 1 and Side 2 (Background Suppressior
Adjustment of Side 1 and Side 2)
Q65 Image Quality Difference between Side 1 and Side 2 (Color Adjustment of Side
and Side 2)
Q66 Unevenness Correction Within Image Area (IOT Image Quality)

Test Pattern Usage (dC612)	3-53
Image Quality Specifications	3-53
Things to Note for Image Quality Restrictions	3-57

# IQ1 IOT Image Quality Entry RAP

The purpose of this RAP is to serve as the entrance vehicle into the Image Quality RAPs section. All Image Quality RAPs must be accessed through this RAP.

The RAP will have you evaluate the copies made during the Call Flow procedure for image quality defects. It will refer you to the Image Quality Analysis RAPs, the Image Quality Defect section in order to diagnose and repair any image quality problems.

#### **Initial Actions**

1. Check for the presence of the defect in Copy mode and in Print mode. If the problem occurs in Copy mode only, go to the IQ2 RAP.

**NOTE:** Color Calibration Adjustment (customer should refer to **Color Calibration in the SA Guide**) is a color calibration for the copier and printer. It compensates for differences between the actual and the expected (target) toner densities for each color. This procedure should be performed whenever there is a noticeable change in the appearance (quality) of the output, particularly changes in color tones or densities. Performing a Color Calibration Adjustment on a regular basis will help to maintain consistent color quality over time. Since this procedure can affect all jobs for all users, it is recommended that this procedure be performed only by the Machine Administrator.

Ask the customer SA to perform the Color Calibration Adjustment if any of the following problems are reported:

- Incorrect colors
- Poor gray balance
- Colors have shifted over time
- Color densities too high or low

Continue with the procedure if the problem remains.

#### Procedure

Go to Table 1. Examine the prints for any of the listed defects. Perform the corrective action that is listed.

Defect	Description	Corrective Action
1mm Lines	At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width approximately. 1mm.	Go to the RAP IQ3
Image Shift in Process Direction	The image is shifted in the process direction.	Go to the RAP IQ4
White Lines	White lines appear in the process direction for all densities.	Go to the RAP IQ5
SLED Transfer Cycle Lines	Cyclical matte lines or black lines appear in the process direction. The cycle changes depending on the process speed. (175mm/s: 9.5mm, 121mm/s: 6.1mm, 79mm/s: 4.2mm)	Go to the RAP IQ6
IN/OUT Density Difference	The densities between the IN and OUT sides are different.	Go to the RAP IQ7
Video Data/Crosstalk	An image with different color overlaps another.	Go to the RAP IQ8
Image Shift in Inboard-to Outboard Direction	The image lands on the blank area and gets dragged in the Inboard-to Outboard direction.	Go to the RAP IQ9
Edge-less Image	An image is printed on the edges.	Go to the RAP IQ10
Contamination Lines	There are blank areas. Their size is proportional to the size of contaminants.	Go to the RAP IQ11
Chip/Half Chip Blanks	Blank areas in sizes of 2.7mm or 5.4mm.	Go to the RAP IQ12
SLED Transfer Failure	Black lines and blank areas (lines) appear repeatedly in units of 2.7mm. They appear by half chip units.	Go to the RAP IQ13
Tapes Not Peeled	The highlight portions are too obvious. The whole paper seems to be filled with lines.	Go to the RAP IQ14
Charging Roll Pitch White Lines - 1	If the BCR is deformed at the BCR and Photoreceptor NIP sections, the trace may appear as thin white lines in the Inboard-to Outboard direction on the highlight portion at the Charging Roll Pitch.	Go to the RAP IQ15
Charging Roll Pitch White Lines - 2	If the substances contained in the CLN-Roll get stuck to the BCR at the BCR and CLN-Roll NIP sections, the resistance on the BCR gets reduced and may cause the appearance of white lines in the Inboard-to Outboard direction.	Go to the RAP IQ16
Photoreceptor Pitch Color Lines	Vibrations during the Drum CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the Inboard-to Outboard direction on the highlight portion at the Photoreceptor Pitch. Limit sample: SIR.84.00, < (incl.) G3 level	Go to the RAP IQ17

Defect	Description	Corrective Action
Background on Gloss	Background level on Gloss paper is worse than the background level of Plain paper.	Go to the RAP IQ18
Toner Empty Detection Color Lines	At Pre Near or Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.	Go to the RAP IQ19
Toner Droplet Contamination	A contamination consisting of random spatters of toner in sizes of a few millimeters.	Go to the RAP IQ20
Smear on Heavyweight	When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to change (decrease in speed). This change in speed changes the difference in relative speed between the Photoreceptor and the Transfer Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).	Go to the RAP IQ21
Rough Black	On paper that is not flat or has poor hue, the toner may not have been transferred properly due to the irregular paper surface, creating a rough transferred image.	Go to the RAP IQ22
Moist Paper Transfer Failure	The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielec- tric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the differ- ence in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.	Go to the RAP IQ23
Toner Contamination at Lead/Trail Edge	Lead Edge: Paper lead edge contacts the Belt when it is transported from REGI to Transfer. Trail Edge: The trail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt.	Go to the RAP IQ24
Trail Edge Transfer Failure	The paper trail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Transfer Belt.	Go to the RAP IQ25
Color Lines	Presence of paper dust in between the Transfer Belt and the CLN Blade causes poor cleaning.	Go to the RAP IQ26
Transfer Blank Areas (Partially Moist Paper)	Ripples in partially moist paper becomes wrinkles in the Transfer section, causing blank areas to appear.	Go to the RAP IQ27
Nip Marks	When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch.	Go to the RAP IQ28
Wetting	Distorted image may appear at one side or both sides of the paper trail edge when printing halftone fill.	Go to the RAP IQ29
Background (IOT)	Undesirable toner deposits on the copy or print. The toner deposits can be localized or may cover the entire copy or print. Depending on the density of the background, it is referred to as low, medium, high, or very high background. It may occur in all colors, single colors, or any combination of single colors.	Go to the RAP IQ32
Color Misregistration	Multi-colored images that should be superimposed are offset. This offset may be in the process direction or perpendicular to process direction.	Go to the RAP IQ33
Fuser Offset	Areas of poorly-fused toner are lifted from one area of a print and deposited on a different area, or onto a subsequent print.	Go to the RAP IQ36
High Frequency Bands	Repeating interval bands that are most noticeable in low density (20-30%) halftone areas of the copy. These bands run perpendicular to process direction.	Go to the RAP IQ37
Irregular Process Direction Streak	Streaks: Usually medium-width streaks of (or shifts in) color most noticeable in low density 20-30%) halftone areas of the copy. A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy.	Go to the RAP IQ35
Lead Edge Toner Smear (fused)	Smears of fused toner on the lead edge of prints	Go to the RAP IQ35
Lead Edge Toner Smear (unfused)	Smears of unfused toner on the lead edge of prints	Go to the RAP IQ36
Low Image Density	A condition that results when too little toner of a single color or combination of colors is developed on the copy or print. This results in lighter copies or prints for the single-color toner or the color that results from the combination of color ton- ers.	Go to the RAP IQ30
Misregistration/Skew	The position and/or alignment of the image relative to the top edge and side edge of the paper is not within specifica- tion.	Go to the RAP IQ34
Missing Colors	One or more of the primary colors are missing from the image.	Go to the RAP IQ39

Defect	Description	Corrective Action
Regular (Repeating) Bands, Streaks, Spots, or Smears	A defect that repeats at an interval from14 to 264 mm, is most noticeable in low density (20-40%) halftone areas of the copy, and runs perpendicular to process direction. Lines and bands are generally uniform in shape from one end to the other. Streaks are generally shorter than lines and are of nonuniform width along their length. They may have a more ragged or fuzzy appearance than lines.	Go to the RAP IQ37
Spots	Generally circular in shape, these defects can be caused by an absence of toner in a desired area, or a deposit of toner in an undesired area	Go to the RAP IQ38
Unfused prints	Image can be rubbed off with little or no pressure	Go to the RAP IQ36
Wrinkled Image	Areas of 11x17 in./A3 prints have distinctive worm track patterns, and/or wrinkles in the paper itself	Go to the RAP IQ31
Background on Coated Paper	Compared to Plain Paper, background is a lot more visible on Coated Paper.	Go to the RAP IQ40
Multi Color Transfer Failure	Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resis- tance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).	Go to the RAP IQ41
Lines on Coated Paper	Lines are generated on Side 1 in 2 Sided mode.	Go to the RAP IQ42
Caterpillar Mark	This is caused by low electric charge in toner.	Go to the RAP IQ43
White Stripes due to Trimmer Jam	When foreign substances such as dirt, dust, toner aggregate (including the case of heated one) exist in the Toner Car- tridge, on the Toner Supply Path, or in the Developer Housing Assy and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of developer layer.	Go to the RAP IQ44
Heat Haze/Mock Heat Haze	The heat haze occurs at the place where paper is peeled off from the Transfer Belt. The mock heat haze occurs when the transported paper rubs against the Holder DTS (Chute at the Transfer EXIT) as shown in the figure, which charges it electrically and causes the toner to scatter at the Lead and Tail edges of the Solid section. This might form streaks in some parts.	Go to the RAP IQ45
Poor Reproducibility of Fine Lines	The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600dpi/1200dpi thin lines.	Go to the RAP IQ46
Deletions (outboard, all colors)	There is a light (faded or deleted) area along the outboard side of all prints, due to buildup on the outboard side of all the first BTRs, which is best viewed on halftone test patterns (all colors).	Go to the RAP IQ47
MWS (Micro White Spots) - Side 2	When the resistance in the Secondary Transfer section is high, such as early mornings (low humidity environment), the transfer latitude between multicolor and monocolor is narrow and the voltage setting favors multicolor. That is, the voltage is a little high for monocolor, and this causes the Transfer nip discharge phenomenon that creates the white spots.	Go to the RAP IQ48
Moist Paper Wrinkles	When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fusing Nip in this condition, the Fusing Nip cannot feed the paper properly, resulting in wrinkles.	Go to the RAP IQ49
White Streaks in Process Direction / Dropping Density	IOT image quality defect	Go to the RAP IQ50
Background (IPS)	A phenomenon like background (e.g. background color or document bleed) may occur depending on the document. The default background suppression function is unable to fully remove the background.	Go to the RAP IQ51
Light Ink Support	This is used to copy an image to be lighter than the current BW Copy settings; e.g. when using light ink.	Go to the RAP IQ52
Highlight Density Reproduction (NVM Darken +3)	This is used to reproduce the highlights (light colors) in darker shades.	Go to the RAP IQ53
Highlight Density Reproduction (NVM Lighten +3)	This is used to reproduce the highlights (light colors) in lighter shades.	Go to the RAP IQ54
Bleed on Tracing Paper	When copying or scanning Tracing Paper documents, bleed or background occurs around the text.	Go to the RAP IQ55
CVT Streaks	Dirt such as paper dust is generated at the DADF scan position. The streaks in the process direction are created when that contamination is scanned.	Go to the RAP IQ56
Copy Mode: Gradation Jump in Text & Photo	In the B/W and Text & Photo Copy mode, gradation jump occurs on 100-line photo documents.	Go to the RAP IQ57

Defect	Description	Corrective Action
Scan mode: JPEG Mosquito Noise	Color texts are blurred and mosquito noise is generated around the text due to JPEG compression.	Go to the RAP IQ58
Moire In Text Mode (Fine), BW Scan/Fax For 133-Ipi Originals	When a document with tint on the whole paper, or a background image, is scanned using Fax Text mode in High Quality (Fine), the file size or the Fax transmission time may increase drastically.	Go to the RAP IQ59
Copy: Bleed on 2-Sided Document	Bleed occurs in the Copy BW and Text mode.	Go to the RAP IQ60
Copy: Platen Background	When 8.5x11/A4 stark white paper is scanned into 11x17/A3 when in Copy BW Text mode and AE is ON, the platen background density is reproduced outside of the copy range.	Go to the RAP IQ61
Image Quality Difference between Side1andSide2(Sharpness)	During single-pass scanning, text and halftone reproduction (sharpness) is different, comparing Side 1 and Side 2 in copy or scan mode (DADF-130 only)	Go to the RAP IQ62
Image Quality Difference between Side 1 and Side 2 (Color Balance)	Relative difference in color density, comparing Side 1 and Side 2	Go to the RAP IQ63
Image Quality Difference between Side 1 and Side 2 (Bkgnd. Supp.)	Relative difference in background suppression, comparing Side 1 and Side 2	Go to the RAP IQ64
Image Quality Difference between Side 1 and Side 2 (Color Adj.)	Relative difference in color, comparing Side 1 and Side 2	Go to the RAP IQ65
Uneven Inboard/Outboard Density within the Image Area (ADJ 9.6)	Uneven density inboard to outboard arising from various causes in the vicinity of the Photoreceptor.	Go to the RAP IQ66

# IQ2 IIT Image Quality Entry RAP

This RAP is for troubleshooting IIT (Scanner/ADF) problems only. Before proceeding, verify that the defect is present in Copy mode only. If the defect is present in Print mode, go to the IQ1 RAP.

#### **Initial Actions**

Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth.

#### Procedure

Compare the defective copies with the descriptions listed in Table 1. Perform the corrective action listed for that defect.

Defect	Corrective Action
Background	Clean the Platen Belt. Calibrate the IIT (dC945).
Blurred or Streaked Copy	Ensure that the Platen Glass is installed correctly. Check/adjust the carriage alignment (ADJ 6.1).
Deletions	Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth. If the problem persists, replace the CCD/Lens Assembly (PL 1.5).
Misregistration/Skew	Go to the IQ34 RAP.
Moire Patterns in the image areas of the print that have the appearance of a screen or grid overlaying the image. The pattern may be uniform or nonuniform in area or shape.	<ul> <li>Switch between photo modes and, if necessary, original types, to determine which mode minimizes the defect.</li> <li>Decrease the Sharpness level.</li> <li>Reduce or enlarge the copy slightly.</li> <li>Rotate the original on the platen by 90 degrees.</li> </ul>
Newton Rings Repetitive, irregular-shaped marks that occur when making copies of glossy photographs. These marks are most noticeable in large low-density or highlight areas.	Clean the Document Glass. Place a transparency between the document and the glass.

# IQ3 1mm Lines RAP

This RAP troubleshoots parts failure or contamination on the LPH surface.

At Cin50% and Cin30%, the lines in the process direction have reversed black and white colors. Width is approximately 1mm.



Figure 1 1mm Lines Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify 1mm lines, or print Cin50% and Cin30% halftones using print test pattern -12'(dC612), and check for a 1mm line as in Figure 1.
- 2. Check fault history for any LPH (chain 061) fault(s); resolve any faults.
- 3. Replace the paper in use with fresh, dry paper of the correct specification.
- 4. Use the LPH Cleaner to clean the LPH surface (PL 2.1).

#### Procedure

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

Perform IQ35 Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, replace the LPH Assembly for the affected color (REP 9.10).

# IQ4 Image Shift in Process Direction RAP

This RAP troubleshoots for corrupt LPH EEPROM data that results in an image shift in the process direction.

#### **Initial Actions**

Check the EEPROM data.

- 1. Access UI Diagnostics (UI Diagnostic (CSE) Mode).
- 2. Select the **Diagnostics** tab.
- 3. Select LPH EEPROM Self Test (dC304).

#### Procedure

#### The EEPROM data is OK.

- Y N
  - Replace the LPH Assembly for the affected color (REP 9.10).

Go to IQ39, Missing Colors RAP.

# **IQ5 White Lines RAP**

This RAP is used to eliminate white lines that appear in the process direction for all densities.



i0wo21002



#### **Initial Actions**

- 1. Check customer print to verify white lines appear in the process direction for all densities as in Figure 1.
- 2. Use the LED Print Head (LPH) Cleaner to clean the LPH surface (PL 2.1).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

3. Perform IQ35 Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, continue with this RAP.

#### Procedure

#### White lines still appear after cleaning the LPH surface.

N Go to Final Actions.

Clean and inspect the LPH Cleaner (PL 2.1). The LPH Cleaner is damaged or broken.

Y N

Υ

Replace the LPH Assembly (REP 9.10).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

Replace the LPH Cleaner (PL 2.1).

# IQ6 SLED Transfer Cycle Lines RAP

This RAP is used to eliminate cyclical matte lines or black lines that appear in the process direction.

The pitch changes depending on the process speed. Refer to Table 1.

Table '	1 Pitch
---------	---------

Process Speed	Pitch
175mm	9.5mm
121mm	6.1mm
79mm	4.2mm



Figure 1 Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify cyclical matte lines or black lines that appear in the process direction as in Figure 1.
- 2. Use the LED Print Head (LPH) Cleaner to clean the LPH surface (PL 2.1).

**NOTE:** This problem must be distinguished from Developer trimmer jam. Do not replace the LPH without giving this consideration.

- 3. Perform IQ35 Process Direction Bands, Streaks, and Smears RAP. If this does not resolve the problem, continue with this RAP.
- 4. Print test pattern -12 (dC612).

#### Procedure

If the problem occurs in the dC612-12 test pattern print, go to IQ39, Missing Colors RAP.

# **IQ7 IN-OUT Density Difference RAP**

The densities vary from the inboard to outboard edges.



Figure 1 IN-OUT Density Difference Defect Sample

#### **Primary Causes**

- The LPH Z direction positioning pin is not in contact with the Photoreceptor.
- Failure in the retract mechanism.
- The positioning plate cannot fit in.
- The LPH positioning pin is bent.
- The tip of the pin is contaminated.
- The LPH positioning pin is not in contact with the Drum bearing surface.
- The gap between the Photoreceptor and the Developer Housing is different at In and Out.

**NOTE:** The retract mechanism for the LPH also acts as the Retract Mechanism for the Developer; it may also cause Developer positioning failure.

#### **Initial Actions**

- 1. Check customer print to verify the densities vary from the inboard to outboard edges as in Figure 1.
- 2. Use the LPH Cleaner to clean the LPH surface (PL 2.1).
- 3. Check the EEPROM data (dC304).
- Check whether the section that contacts the Drum bearing surface of the Developer Housing Assembly is abnormal.
- 5. Check for dirt or debris between the LPH and the Xero CRU.
- 6. Check for foreign substances on the tip of the LPH positioning pin (In/Out). (REP 9.15)

#### Procedure

Perform the following based on the outcome of the above checks:

- 1. Perform LPH Exposure (Smile) Adjustment (ADJ 9.6).
- 2. Replace Developer Housing Assembly (REP 9.14).
- 3. Replace DRUM. (see CRUs and Consumables)
- 4. Replace 1st BTR. (REP 9.2)

# IQ8 Video Data/Crosstalk RAP

A different color image overlaps another.

Poor connection of Flat Cable between the MCU and the LPH



#### Figure 1 Video Data/Crosstalk Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify a different color image overlaps another as in Figure 1.
- 2. Use the LPH Cleaner to clean the LPH surface (PL 2.1).

#### Procedure

Go to IQ39, Missing Colors RAP.

# IQ9 Image Shift in Inboard-to Outboard Direction RAP

This RAP is used when an image defect appears as an image landing on the blank area and getting dragged in the Inboard-to Outboard direction as in Figure 1.



j0wa31006

# IQ10 Edge-less Image RAP An image is printed on the margins as in Figure 1.



j0wa31007

#### Figure 1 Edge-less Image Defect Sample

#### **Initial Actions**

Check the IIT Side Registration (ADJ 6.3); adjust as required.

#### Procedure

If the IIT Side Registration is in specification, go to IQ39, Missing Colors RAP.

Figure 1 Image Shift in Inboard-to Outboard Direction Defect Sample

#### **Initial Actions**

1. Print test pattern -13 (dC612).

#### Procedure

If the defect is present in dC612 (Test Pattern Print)-13, go to IQ39, Missing Colors RAP.

# **IQ11Contamination Lines RAP**

There are blank areas. Their size is proportional to the size of the contaminants as in Figure 1.

**NOTE:** Be careful, because this phenomenon is very similar to that of the process direction bands, streaks, and smears.



Figure 1 Contamination Lines Defect Sample

#### **Initial Actions**

Use the LPH Cleaner to clean the LPH surface (PL 2.1).

#### Procedure

Contamination Lines are still present after cleaning the LPH surface.

```
N
Go to Final Actions.
```

Check for process direction bands, streaks, and smears. Go to IQ35. The defect is still visible.

#### Y N

Υ

Go to Final Actions.

Go to IQ39, Missing Colors RAP.

# IQ12 Chip/Half Chip Blanks RAP

Blank areas with widths of 2.7mm (half-chip) or 5.4mm (chip).



#### Figure 1 Chip/Half Chip Blanks Defect Sample

#### **Initial Actions**

- 1. Check fault history for 061-374, 061-375, 061-376, 061-377 faults. If found, go to the appropriate RAP.
- 2. Check customer print or make prints using printer test patterns to compare and verify 2.7mm scale (dC612-13) or 5.4mm scale (dC612-12) of blank areas as in Figure 1.

#### Procedure

Go to IQ39, Missing Colors RAP.

# **IQ13 SLED Transfer Failure RAP**

Black lines and blank areas (lines) appear repeatedly in half-chip units of 2.7mm in width.

# **IQ14 Tapes Not Peeled RAP**

The highlight portions are too obvious. The whole paper seems to be filled with lines.



j0wa31010

#### Figure 1 SLED Transfer Failure Defect Sample

#### Procedure

Enter Service Rep. mode. Under the **Diagnostics** tab, select dC304(LPH EEPROM Selftest). The EEPROM data is OK.

#### Y N

Replace the LPH Assembly for the affected color (REP 9.10).

Go to IQ39, Missing Colors RAP.



Figure 1 Tapes Not Peeled Defect Sample

#### **Initial Actions**

- 1. Check customer print to compare problem to Figure 1.
- 2. Check if any protective tape remains on the LPH. Remove the LPH Assembly. (REP 9.10)

#### Procedure

Ensure no protective tape remains on the LPH. Peel off the protective tape.

NOTE: Do not forget to check for and peel off any tape when replacing the LPH (spare part).

# IQ15 Charging Roll Pitch White Lines (type 1)

This image quality defect occurs in the BCR and Photoreceptor NIP sections. The defect may appear as thin white lines in the Inboard-to Outboard direction on the highlight portion at the Charging Roll Pitch as in Figure 1.

This problem may occur with New Drum CRU that has been stored for a long time. It also occurs when the MC has rested in a high temperature environment for a long time. (Halftone image)



# IQ16 Charging Roll Pitch White Lines (type 2)

If contamination from the Cleaner roll gets stuck to the BCR, the resistance on the BCR gets reduced and may cause the appearance of white stripes in the FS direction. This may occur when the machine has been resting for a long time or in the early mornings as in Figure 1.



j0wa31014

#### Figure 1 Charging Roll Pitch White Lines (type 2) Defect Sample

#### Procedure

Figure 1 Charging Roll Pitch White Lines (type 1) Defect Sample

#### Procedure

Print test pattern -11 (dC612). Lines with 38mm pitch appear in the Inboard-to-Outboard direction.

#### Y N

Have the customer re-evaluate affected jobs and re-send.

- 1. Make approximately 10 to 30 printouts.
- 2. Verify that no lines appear.

**NOTE:** If the machine has been resting (Wait state) or the machine is being utilized in the early morning, this image quality defect will occur because the BCR and Photoreceptor NIP sections are not properly warmed up to operating temperature. Printing 10 to 30 prints will be sufficient to allow the BCR and Photoreceptor to warm up to operating temperature.

- 1. Check customer print or Print test pattern -9 (dC612) Make approximately. 10 to 30 printouts.
- 2. Verify that no lines appear. If the problem persists after you make approximately 10 to 30 printouts, this may be a case of IQ-15 White Stripes. Perform the solution in IQ-15. > This disappears over time
- 3. Check dC120 and/or dC122 for Chain 094-xxx Faults.
- 4. Perform 2nd Transfer Voltage Offset Adjustment (see dC909).
- 5. Replace:
  - HVPS (Dev/BCR) 7830/35 (REP 1.9).
  - HVPS (BCR) 7845/55 (REP 1.9)
- 6. Replace the 2nd BTR (CRUs and Consumables).
- 7. Replace the BTR/Detack HVPS (REP 1.1) (PL 6.2).

# **IQ17** Photoreceptor Pitch Color Lines

Vibrations during the Drum CRU transportation may cause scrapes and friction in the BCR and the Photoreceptor, resulting in leftover electrostatic memory on the Photoreceptor that generates thin white streaks in the Inboard-to Outboard direction on the highlight portion at the Photoreceptor Pitch. This problem may occur right after the replacement of Drum CRU (occurs at Halftone image quality).



j0wa31015

Figure 1 Photoreceptor Pitch Color Lines Defect Sample

#### **Initial Actions**

Check customer print or Print test pattern -9 (dC612), check that lines with 94mm pitch appear in the Inboard-to Outboard direction as in Figure 1.

#### Procedure

Make approximately 10 to 30 printouts:

- If the fault lies with the Y, M, or C Drum, print full-color images.
- If it is with the K Drum, print either full-color or B/W images.

# IQ18 Background on Gloss RAP

Use this RAP when the background level on Gloss paper is worse than the background level of Plain paper.

#### **Initial Actions**

Verify that the background level is worse than that on Plain Paper.

**NOTE:** Increasing the value of the NVM from the default will sacrifice the reproducibility of fine lines and highlight sections.

#### Procedure

- 1. Changing these NVM values should be performed only for the color exhibiting the problem.
  - 753-054: Reference CF [Y]
  - 753-055: Reference CF [M]
  - 753-056: Reference CF [C]
  - 753-057: Reference CF [K]
- 2. Change the NVM for the target color from **110** (default value) to **120** if high background was observed when printing onto coated paper.
- 3. After changing NVM, power Off/On the machine. Enter the Diagnostics mode and execute ProCon On Print (ADJ 9.7).
- 4. Check the image quality on the test print (coated paper).
- 5. If the image quality is good, then the procedure is completed.
- 6. If the image quality is still not good, then change the NVM value to **130**. Power Off/On the machine. Enter the Diagnostics mode and execute ProCon On Print (ADJ 9.3).
- 7. Check the image quality on the test print (coated paper).
- 8. If the image quality is good, then the procedure is completed.
- 9. If high background becomes worse after changing the NVM, return the NVM back to it's original (Default) value.

# **IQ19 Toner Empty Detection Color Lines RAP**

At Pre Near or Near Empty state, if a customer had removed the Cartridge and knocked on it to collect the toner towards the exit in attempt to use the very last bit of toner, it may cause color stripe deterioration.

# **IQ20 Toner Droplet Contamination RAP**

This RAP troubleshoots for contamination consisting of random spatters of toner in sizes of a few millimeters.





j0wa31017

j0wa31016

#### Figure 1 Toner Empty Detection Color Lines Defect Sample

#### **Initial Actions**

Check customer print to verify color stripe deterioration as in Figure 1.

#### Procedure

Use a new Cartridge.

#### Figure 1 Toner Droplet Contamination Defect Sample

#### **Initial Actions**

Check customer print to verify contamination consisting of random spatters of toner in sizes of a few millimeters as in Figure 1.

#### Procedure

Clean the upper cover and trimmer cover of the Developer Housing Assembly (REP 9.14).

# **IQ21 Smear on Heavyweight RAP**

When the lead edge of paper reaches the Secondary Transfer, it immediately increases the Secondary Transfer section load and causes the IBT Drive Roll speed to decrease. This change in speed changes the difference in relative speed between the Photoreceptor and the Transfer Belt surface in the K-color Primary Transfer section, hence creating a smear (distorted image).

# eed between the Photoreceptor and the ection, hence creating a smear (distorted



On paper that is not flat, has a rough surface, or has poor hue, the toner is not transferred onto

j0wa31019

Figure 1 Rough Black Defect Sample

#### **Initial Actions**

**IQ22 Rough Black RAP** 

paper well.

Check customer print to verify that the same problem does not occur for the same job printed on paper that is flatter, smoother, or has a better hue as in Figure 1.

#### Procedure

Go to dC909, Calibrate for Paper, to adjust 2nd Transfer Voltage for desired result.



#### Figure 1 Smear on Heavyweight Defect Sample

#### **Initial Actions**

Check customer print to verify smear or print test pattern -10 (dC612), and check for a 1mm-line (smear) as in Figure 1, 130 mm from the lead edge of the paper.

#### Procedure

**NOTE:** Changing the following NVM Read/Write (dC131) locations (SmearSwitch) from **1** to **0** causes the IOT to operate in the FC mode, regardless of the color mode setting (Color Priority, B/W Priority, ACS) in the Controller, when performing monochrome printing for Cardstock and Glossy Cardstock in 35-sheet models and Cardstock, Glossy Cardstock, and Transparencies in 25-sheet models.

Change the following values in dC131 NVM Read/Write, only for the color exhibiting the problem:

- Change 740-134: SmearSwitch\_NORMAL\_D from 0 to 1.
- Change 740-135: SmearSwitch\_NORMAL\_G from 0 to 1.
- Change 740-136: SmearSwitch\_THICK1\_S from 0 to 1.
- Change 740-137: SmearSwitch\_THICK2\_S from 0 to 1.
- Change 740-140: ProductivityChangeSW\_forSmear from **0** to **1**. (Heavyweight Smear Countermeasure) \* This is valid only for 25-sheet and 35-sheet models.

# **IQ23 Moist Paper Transfer Failure RAP**

The resistance is lowered because the paper is moist. The K color contains carbon that causes it to have larger dielectric loss, and hence it requires a different electrical field from the other colors. There is no latitude because the difference in required electrical field between multi color and K color is larger than the difference between paper resistance and toner resistance.

# 

j0wa31019

#### Figure 1 Defect Sample

#### **Initial Actions**

Print using freshly unpacked paper of the same type as the defective paper, then compare the roughness and blank areas for K color and single color as in Figure 1.

#### Procedure

Be sure to use freshly unpacked paper.

# IQ24 Toner Contamination at Lead/Trail Edge RAP

Toner contamination suddenly appears on the 2nd BTR or Belt (background) while in color mode.

Lead Edge: Paper lead edge contacts the Belt when it is transported from Registration to Transfer.

Trail Edge: The trail edge of Paper that loops between the Transfer-Fusing sections, at the release of the Secondary Transfer NIP, moves opposite to the feed direction and contacts the BTR surface, or bounds up and contacts the Belt



j0wa31020

#### Figure 1 Toner Contamination at Lead/Trail Edge Defect Sample

#### **Initial Actions**

Run 1-Sided print to check on which side (transfer side or side 2) the contamination exists as in Figure 1.

#### Procedure

**NOTE:** Since increasing the charge voltage for background area causes the repeatability of fine lines to deteriorate, take the balance into consideration.

- 1. Access UI Diagnostics. (UI Diagnostic (CSE) Mode).
- 2. Change the value of dC131 NVM Read/Write location [753-054 to 753-057] from **110** (default value) to **120** for the target color.
  - 753-054: Reference CF [Y]
  - 753-055: Reference CF [M]
  - 753-056: Reference CF [C]
  - 753-057: Reference CF [K]

- 3. After changing NVM, power off/on the machine.
- 4. Execute ProCon On Print (ADJ 9.3) on coated paper. If the image quality is good, go to Final Actions.
- 5. If the image quality is still not good, change the value of NVM locations 753-054 to 753-057 from **120** to **130** for the target color.

**NOTE:** By changing NVM, fine line reproduction and highlight reproduction may get worse. (worse when the value is changed to **130**)

- 753-054: Reference CF [Y]
- 753-055: Reference CF [M]
- 753-056: Reference CF [C]
- 753-057: Reference CF [K]
- 6. If high background becomes worse after changing NVM, put NVM back to original.

# IQ25 Trail Edge Transfer Failure RAP

This RAP troubleshoots for an image defect that looks like a rough image or blank area (in Lead Edge-to Trail Edge direction) that occurs for images within 10mm (including margins) from the paper trail edge.

The paper trail edge, after the Secondary Transfer NIP has been released, bounded up due to the fusing stroke effect and re-transfers to the Transfer Belt.



j0wa31022

#### Figure 1 Trail Edge Transfer Failure Defect Sample

#### **Initial Actions**

Check customer print to verify an image defect that looks like a rough image or blank area (in Lead Edge-to Trail Edge direction) that occurs for images within 10mm (including margins) from the paper trail edge as in Figure 1.

#### Procedure

There is no corrective action.

# **IQ26 Color Lines RAP**

If customer uses paper which causes a lot of paper debris and also run long run-length jobs, paper debris will adhere to the IBT cleaner, which may result in poor cleaning of residual toner on the Transfer Belt. Transfer Belt reverse rotation is needed to remove such residual toner from the Transfer Belt.



Figure 1 Color Lines Defect Sample

#### **Primary Causes**

Presence of paper dust in between the Transfer Belt and the Transfer Belt Cleaner Assembly blade causes poor cleaning.

#### **Initial Actions**

- 1. Check customer print to verify presence of paper dust in between the Intermediate Belt Transfer and the Transfer Belt Cleaner Assembly blade as in Figure 1.
- 2. Remove the Transfer Belt Cleaner Assembly to check if foreign substances exist at the tip of the cleaner blade. (REP 9.1)
  - If check is true, clean the tip of the Transfer Belt Cleaner Assembly blade.
- 3. If the side that is opposite to the Intermediate Belt Transfer has toner scrapes or if the color lines disappear after the tip of the blade is cleaned, follow the procedure below.

#### Procedure

**NOTE:** By default, NVM 746-020 is **0** Transfer Belt reverse rotation is only performed at end of job (e.g. if a job is for 1000 pages, Transfer Belt reverse rotation is performed after printing 1000 pages).

When NVM 746-020 is **1**, Transfer Belt reverse rotation is performed after a number of pages, determined by the value in location 746-125 (default is 7000 = 70 pages). NVM location 746-021 controls the length of time that the transfer belt is reversed. The machine always cycles down after printing 70 pages and performs Transfer Belt reverse rotation to remove residual toner on the Transfer Belt.

- 1. Change the dC131 NVM Read/Write location [746-020] to 1 to change the Transfer Belt reverse rotation:
  - 0; Reverse at Job End
  - 1: Reverse during Job
  - 2: Do not Reverse
- 2. Change the dC131 NVM Read/Write location [746-021] to change the Transfer Belt reverse rotation; increasing the value increases reverse rotation time.
- 3. If Transfer Belt reverse rotation needs to be performed more often, then the value in NVM 746-125 should be a smaller value.

# IQ27 Transfer Blank Areas (Partially Moist Paper) RAP

Ripples in partially moist paper become wrinkled in the Transfer section, causing blank areas to appear.



#### Figure 1 Transfer Blank Areas (Partially Moist Paper) Defect Sample

#### **Initial Actions**

Check customer print to verify defect in paper that has uneven moisture content as in Figure 1.

#### Procedure

Replace the paper in use with fresh, dry paper of the correct specification. Ensure that the loaded media matches the UI or print driver settings.

Advise customer to try LEF paper feed or use horizontal-grained paper. In damp conditions, optional tray heater may be required.

# **IQ28 Nip Marks RAP**

When using transparencies, slight lines may appear at the Fuser Heat Roll Pitch as in Figure 1.



j0wa31026

#### Figure 1 Nip Marks Defect Sample

#### Procedure

No action required. This occurs when a transparency is the first thing printed after starting up a machine that has been left idle for a few days without heating up.

# **IQ29 Moisture RAP**

Distorted image may appear at one side or both sides of the paper trail edge when printing halftone fill as in Figure 1.

# IQ30 Low Image Density RAP

This RAP troubleshoots the causes of output images showing image density lower than specification.



j0wa31027

#### Figure 1 Moisture Defect Sample

#### Procedure

- 1. No special actions required.
- 2. Try not to print in the early mornings.
- 3. Ask the customer to use fresh paper whenever possible.
- 4. In damp conditions, optional tray heater may be required.



#### Figure 1 Low Density Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify images showing image density lower than specification as in Figure 1.
- 2. Use the LPH Cleaner to clean the LPH (PL 2.1).
- 3. Replace the paper in use with fresh, dry paper of the correct specification.
- 4. Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-oflife. Replace if necessary.
- 5. Perform Max Setup (ADJ 9.16). If this does not resolve the problem, continue with this RAP.

#### Procedure

Print Test pattern -7 (dC612). The defect involves a single color.

Ν

A B

Υ

Print Test pattern -7 (dC612). Open the Front Door in the middle of the print job (approximately 7 seconds after selecting **Start**). Extend the IBT. **There is a good toner image on the Transfer Belt.** 

Y N

Clean the LPH and check for misalignment.

A B

Check the 2nd BTR for damage or incorrect installation. Check the Backup Roll bias. If the problem continues, replace 2nd BTR Assembly. If this does not resolve the problem, replace the Transfer Belt (PL 6.3).

Swap the affected Drum Cartridge with an adjacent unit. Print Test Pattern -7 (dC612). The defect moved to the new color.

Y N

Replace the Developer for the affected color (PL 5.2). If this does not resolve the problem, replace the ATC Sensor for the affected color (PL 5.2).

Replace the Drum Cartridge (see CRUs and Consumables in Section 6).

If the problem continues, replace the LPH Assembly for the affected color CMYK (REP 9.10).

# **IQ31 Wrinkled Image RAP**

Areas of 11x17 in./A3 prints have distinctive worm track patterns in the image, and/or wrinkles in the paper itself.

**NOTE:** The following factors will increase the likelihood of this problem:

- Lighter weight papers.
- Larger papers.
- Short-grain 11x17 in / A3 papers.
- Old (not freshly opened) paper.
  - 2 sided printing
  - Fuser with 1100 or more hours of operating life.



0104926A-CAR

#### Figure 1 Wrinkled Image Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify distinctive worm track patterns in the images in Figure 1.
- 2. Make the following modifications to the copy/print jobs if possible:
  - Ensure that the paper is dry and fresh.
  - Use heavier weight paper
  - Use long-grain paper.

#### Procedure

If the problem persists after performing the Initial Actions, replace the Fuser (PL 7.1).

# IQ32 IOT Background RAP

Defect may be due to incorrect Electrostatics, high TC, faulty ADC Sensor.



#### Figure 1 Background Defect Sample

#### **Initial Actions**

1. Check customer print to verify image defect as in Figure 1.

**NOTE:** Some background is unavoidable on certain media, such as cardstock and transparencies. Ensure that the customer selects the correct settings on the UI and print driver.

2. Perform Max Setup (ADJ 9.16). If this does not resolve the problem, continue with this RAP.

#### Procedure

#### WARNING

Use extreme care when working near electrically energized components and high voltage cables that are exposed during troubleshooting or repair. Contact with electrical components or high voltage cables represents a shock potential that could result in serious personal injury.

DANGER: Faire très attention en travaillant près des éléments sous tension et des câbles HT qui sont exposés pendant le dépannage. Tout contact avec les éléments électriques ou les câbles haute tension représente un risque de choc et de graves blessures.

AVVERTENZA: Fare estrema attenzione quando si lavora vicino a componenti sotto tensione e cavi elettrici esposti durante l'intervento. Il contatto con componenti sotto tensione o cavi elettrici comportano un serio pericolo di scossa elettrica e gravi ferite.

VORSICHT: Während dem Reparieren oder der Fehlerbehebung muss man beim Umgang mit elektonisch aufgeladenen Bauteilen und Hochspannunsgleitungen äußerste Vorsicht walten. Beim Umgang mit elektrischen Bauteilen und Hochspannungsleitungen erhöht sich das Unfallrisiko. Äußerste Vorsicht ist geboten.

AVISO: Use extrema precaución altrabajar cerca de componentes cargados eléctricamente y cables de alto voltaje que estén expuestos mientras soluciona problemas o realiza reparaciones. Todo contacto con componentes eléctricos o cables de alto voltaje representa un peligro que puede ocasionar daños personales graves.

The problem occurs only when scanning or copying with the DADF.

Ν

Υ

Y N

- The problem is Single Color Background.
  - Examine the face of the ADC Sensor. The ADC Sensor is clean.
  - Y N

Go to the 392-651 ADC Sensor Fail RAP to troubleshoot the ADC Sensor Solenoid.

Examine the Transfer Belt for excessive dirt, damage, or uncleaned toner. The Belt is clean.

#### Y N

Check the Transfer Belt Cleaner for damage or wear. Clean or replace as required.

Check the Developer bias circuit for -600VDC (nominal Default). **Developer Bias is present.** 

#### Y N

.

Go to the following BSDs and check the wiring from the MD Main PWB to the Deve HVPS:

- BSD 9.15 Development (C)
- BSD 9.16 Development (K)
- BSD 9.17 Toner Dispense Control (Y,M)
- BSD 9.18 Toner Dispense Control (C,K)
- BSD 9.19 Toner Cartridge Cooling (7845/55)
- BSD 9.20 IBT Belt Drive Control
- BSD 9.21 First Transfer

A B

С

#### A B C

#### BSD 9.22 First BTR Contact/Retract Control

If the wiring is OK, replace the Deve HVPS power supply (PL 5.3). If the problem still exists, replace the MD Main PWB (PL 18.2B).

If Developer Bias is OK, replace the Transfer Belt (PL 6.3). If this does not solve the problem, replace the 2nd BTR (PL 14.2).

Check the following:

- Check the end-of-life counter for the Toner Cartridge and Drum Cartridge for the affected color. Replace if at or near end-of-life (see CRUs and Consumables in Section 6).
- If the problem continues, examine the Developer Housing for the affected color. Check for toner bridging, uneven brush, or loose High Voltage terminals. Clean, repair, or replace as required (PL 5.2).

White reference settings for CVT mode may be incorrect. Enter Diagnostics dC131 and check that the following NVM locations are set as indicated:

715-097 = 104

715-098 = 105

715-099 = 106

If NVM settings are correct, upgrade to the latest software. If problem still exists, the NVM may be corrupt; initialize the NVM:

- 1. Enter Diagnostics dC301.
- 2. Select [Copier] (left), [Scanner] (center), [All] (right).
- 3. Select [Initialize] and exit Diagnostics.
- 4. Switch the power off, then on.

# **IQ33 Color-to-Color Misregistration RAP**

Failure of the IBT walking from rear to front or front to rear.

Defect may be due to mechanical problem in the IBT Assembly.



Figure 1 Color Misregistration Defect Sample

#### **Initial Actions**

- 1. Check customer print to verify color to color misregistration as in Figure 1.
- 2. Adjust the color registration (ADJ 9.6). If the problem remains, continue with this procedure.

#### Procedure

If the problem involves a single color, go to Registration Control Setup Cycle (ADJ 9.10).

# **IQ34 Skew/Misregistration RAP**

This RAP is used when Skew, System Registration, or Magnification are out of specification. For Color-to-Color-Misregistration, go to the RAP IQ33 RAP.

# Initial Actions

Load some new, dry 24 lb. 11X17/A3 Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) into each paper tray (use 8.5X11/A4 in Tray 1). Make 3 full color copies from each paper tray. Mark the appropriate paper tray on these copies.

# Procedure

#### The problem is still present when using the proper paper.

#### Υ

Explain to the customer that new, dry, 24 lb. Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) paper is the specified paper to use.

#### The problem occurs only in the printer mode.

#### Y N

The defect occurs when the document is manually registered on the platen glass. Υ Ν

Ensure that the Document Transport Belt is clean. Check the Document Handler Adjustments. If the problem continues, check the DADF drive rolls and pinch rolls for wear or glossing.

#### The problem is Skew.

#### Υ Ν

#### The problem is Misregistration.

Υ Ν

Adjust the IOT Lead Edge/Side Edge Registration (ADJ 9.1).

#### Enter dC612 (Test Pattern Print), select Pattern 3. Misregistration is present on the copy

Υ Ν

Adjust the IOT Lead Edge/Side Edge Registration (ADJ 9.1), then the IIT Lead Edge and Side Edge Registration (ADJ 6.2 and ADJ 6.3).

#### <?FM: DEBUG [T:\fm books\spyglass\3iq nwd.fm] ELEMEND 0>The defect occurred on copies from all five paper trays. Υ

Ν Check the IOT Lead Edge/Side Edge Registration (ADJ 9.1) for that tray. Check the feeder for the affected tray for wear, slipping, damage, or contamination.

- Tray 1 Feeder (PL 9.3) ٠
- Tray 2 Feeder (PL 10.3)
- Tray 3 Feeder ([PL 10.5]) ٠
- Tray 4 Feeder ([PL 10.7]) ٠

#### Registration varies from copy to copy. Υ

#### Ν Go to ADJ 9.1, Lead/Side Edge Adjustment.



#### В С

Δ

Check the components in the Registration Transport Assembly (PL 15.1) for wear, slipping, damage, or contamination. Clean/replace as required

#### The defect occurred on copies from all five paper trays.

#### Ν Υ

Check the components in the Registration Transport Assembly (PL 15.1) for wear. slipping, damage, or contamination. Clean/replace as required

Check the IOT Lead Edge/Side Edge Registration (ADJ 9.1) for that tray.

Check the feeder for the affected tray for wear, slipping, damage, or contamination.

- . Tray 1 Feeder (PL 9.3)
- Tray 2 Feeder (PL 10.3)
- Tray 3 Feeder ([PL 10.5])
- Tray 4 Feeder ([PL 10.7])
- Tray 5 Feed Assembly (PL 13.3)

#### The problem occurs on all jobs. Υ

#### Ν

Have the customer re-evaluate affected jobs and re-send.

Refer to the DFE Service Guide.

# **IQ35 Process Direction Bands, Streaks, and Smears RAP**

Contamination of LPH, damage to or contact with Transfer Belt or Drum Cartridge.

Clog in Developer Housing, malfunction of Belt Cleaner, contaminated LPH.



Figure 1 Streak Deletion Defect Sample



Figure 2 Streak Defect Sample

#### **Initial Actions**

 Check customer print to verify Process Direction Bands, Streaks, and Smears as in the following:

- Figure 1
- Figure 2
- Clean the Transfer Belt Cleaner. Check for wear or damage
- Clean the Fuser. Check the metal stripper baffle in the Fuser for contamination.
- Check the 2nd BTR and the Detack Sawtooth (DTS) for Toner contamination.
- Use the LPH Cleaner to clean the LPH.

#### Procedure

**NOTE:** The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every third sheet, or may only occur every 14 sheets.

#### The defect occurs in approximately the same position on multiple prints.

Y N

If the defect occurs intermittently, examine the Developer Housings for evidence of toner clumping. If clumping is found, replace the Developer (REP 9.15).

#### The defect is full-width (LE - TE) Figure 1.

Y N

Remove the Fuser Assembly. Examine the Heat Roll for damage or contamination. Clean or replace as required (PL 7.1).

Check the Transfer Belt Cleaner (PL 6.1). Ensure that the blade and the Mylar backing are free from damage. Check that the auger turns freely. Clean, repair, or replace as required.

Check the Developer Housing (PL 5.2). Repair or replace as required (REP 9.14).

If the problem is related to a single color, replace the Drum Cartridge (see CRUs and Consumables in Section 6).

Enter dC612 (Test Pattern Print). Select Test Pattern 9. Print a 40% coverage pattern for each single color. **The defect is present for all colors.** 

- Y N
  - Check Drum Cartridge for affected color. Check for damage or contamination to the BCR.
  - Replace the Developer (REP 9.15) for the affected color. Check the housing for damage or toner clumping.

Remove the Transfer Belt Cleaner (PL 6.1). Inspect the cleaning blade and Mylar seal for damage. Clean or replace as required.

If the Transfer Belt Cleaner is OK, check the Transfer Belt (PL 6.3) for damage or contamination. Ensure that there is no debris or loose wiring, etc. in contact with the belt. Clean or replace as required.

# IQ36 Unfused Copy/Toner Offset RAP

#### **Initial Actions**

- Replace the paper in use with fresh, dry paper of the correct specification.
- Check the post-Fuser transport areas for dirt.
- Ensure that the media being used matches the settings on the UI screen or print driver. Using the next heavier setting may resolve the problem.
- If the Key Operator/Administrator has configured certain trays for a specific type of media, ensure that the specified media is actually loaded in those trays.

### Procedure

Check the following:

- Check the Sensor Assembly (PL 6.2) for contamination or incorrect mounting. Clean, repair, or replace as required.
- Check the Fuser (PL 7.1) for damage, toner offsetting, paper wrap, or incorrect installation. Clean or replace as required.

After resolving the problem, make 10 blank copies (letter size, Black mode) to clean residual toner from the Fuser Heat Roll and Fuser Belt. If the problem persists, or if Lead Edge contamination is present, remove the Fuser Exit Chute (PL 7.1) and clean any toner or paper residue from the Exit Chute and the metal stripper baffle.

# IQ37 Repeating Bands, Streaks, Spots, and Smears RAP

Damage, density variation, or deletions caused by rotating component. Spacing equal to effective circumference of part.

Faulty Photoreceptor/Developer Housing gear or bearing problem.



Figure 1 Repeating Defects Sample Image



Figure 2 High Frequency Bands Defect Sample

#### **Initial Actions**

Check customer print to verify Repeating Bands, Streaks, Spots, and Smears as in the following:

- Figure 1
- Figure 2

#### Procedure

Measure the distance between the repeating defects. Locate the distance on the table below. Perform the indicated repair actions.

Table 1 Repeating Defects		
Repetition spacing	Component(s)	Repair Actions
<4 MM.	High Frequency Band- ing	
95 MM.	Photoreceptor	Single Color - Replace the Drum Cartridge (see CRUs and Consumables in Section 6).
38 MM.	BCR	
56 MM.	Developer Mag Roll	Check Developer roll bias for floating or shorting out. Replace Developer Housing (PL 5.2) if required.
84 MM.	Fuser Heat Roll	Ensure correct paper type is set for the actual paper in the paper tray. Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contami- nation. Clean or replace as required (PL 7.1).
94 MM.	Fuser Pressure Belt	All Colors - Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contamination. Clean or replace as required (PL 7.1).
25mm	BTR 1 Roll	
55 MM.	BTR 2 Backup Roll BTR 2 Roll	Check the 2nd BTR Assembly for damage or contami- nation. Clean, repair or replace as required. Replace the Transfer Belt (PL 6.3).
81 MM.	IBT Drive Roller	

# **IQ38 Spots RAP**

#### **Initial Actions**

Ensure that the paper in use is fresh, dry, and within specification for weight and quality.

Check print driver and copier control panel settings to ensure the media is being run in the proper mode.

#### Procedure

The defect occurs in Copy mode only.

The spots occur at a fixed interval on each print.

Y N

Y N

The spots occur in the same location on every letter size print.

Y Ń

**NOTE:** The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every third sheet, or may only occur every 14 sheets.

The defect occurs in approximately the same position on multiple prints.  $Y \quad N$ 

- The problem is Fuser offset and/or lead edge smears or spots.
- Y N

#### CAUTION

Do not use a vacuum cleaner or any solvents in the following step. Damage to the Transfer Belt Cleaner will result.

Remove the Transfer Belt Cleaner (REP 9.1). Carefully clean the cleaning blade and the Mylar shield with a soft brush or a lint free cloth. Brush away any accumulation of toner on the foam seal and the outside surfaces. Wipe the surface of the Transfer Belt with a lint free cloth.

If the problem continues, replace the Transfer Belt Cleaner (PL 6.1).

Go to the RAP IQ28 RAP.

Check the Transfer Belt (PL 6.3) for dirt or damage. Clean or replace as required.

Check the Drum Cartridge for dirt or damage. Clean or replace as required (see CRUs and Consumables in Section 6).

Go to the IQ37 RAP.

Ensure that the original is free from the defect. Clean the Platen Glass and Lens.

# **IQ39 Missing Colors RAP**

One or more of the primary (YMCK) colors is missing from the image.

#### **Initial Actions**

Use the LPH Cleaner to clean the LPH.

#### Procedure

Check wire harness between the LVPS and MD Main PWB for damage. Repair or replace as required:

- LPH Cable Assembly (7830/35) (REP 9.11)
- LPH Cable Assembly (7845/55) (REP 9.12)

Check for damaged wiring from MD Main PWB to the LPH for the affected color YMCK:

- BSD 6.6 LPH Control (Y)
- BSD 6.7 LPH Control (M)
- BSD 6.8 LPH Control (C)
- BSD 6.9 LPH Control (K)

If the wiring is OK, replace the LPH Assembly for the affected color YMCK (REP 9.10).

If the problem still exists, replace the MD Main PWB (REP 1.6).

# IQ40 Background on Coated Paper

Compared to Plain Paper, background is a lot more visible on Coated Paper.

Paper types with better surface flatness (better transfer ability) and better toner absorption ability have more stress.

#### **Initial Actions**

Verify that the background level is worse than that on Plain Paper.

#### Procedure

- Increase the background voltage by 10 to 20V to reduce background on the Drum. However, this will sacrifice the reproducibility of fine lines and highlight sections. Adjust the background voltage. The default voltage is 600V. The Adjustment NVM Read/ Write (dC131) locations are:
  - NVM 753-006 (Y) Dev Bias DC Output Value for Y (0~700:0~700V)
  - NVM 753-007 (M) Dev Bias DC Output Value for M (0~700:0~700V)
  - NVM 753-008 (C) Dev Bias DC Output Value for C (0~700:0~700V)
  - NVM 753-009 (K) Dev Bias DC Output Value for K (0~700:0~700V)
- Change the NVM locations listed below to increase the cleaning field voltage by approx. 10 to 20V to reduce the background on the Drum. Note that this will sacrifice the reproducibility of fine lines and highlight areas.

Color (YMC):

Add +10 to +20 to each of the following values:

- NVM location 753-237 CF Upper Limit Ref. Value default = 110
- NVM location 753-239 CF Lower Limit Ref. Value default = 100
- NVM location 753-241 CF Upper Limit: Lower Limit default = 110
- NVM location 753-243 CF Upper Limit: Upper Limit default = 110
- NVM location 753-245 CF Lower Limit: Lower Limit default = 100
- NVM location 753-247 CF Lower Limit: Upper Limit default = 100 Black and White (K) or Color (K):

Add +10 to +20 to each of the following values:

- NVM location 753-238 CF Upper Limit Ref. Value default = 110
- NVM location 753-240 CF Lower Limit Ref. Value default = 100
- NVM location 753-242 CF Upper Limit: Lower Limit default = 110
- NVM location 753-244 CF Upper Limit: Upper Limit default = 110
- NVM location 753-246 CF Lower Limit: Lower Limit default = 100
- NVM location 753-248 CF Lower Limit: Upper Limit default = 100

# **IQ41 Multi Color Transfer Failure**

Paper that has had its Side 1 fused has a reduced percentage of moisture content, which increases its electric resistance. Since the resistance in the Secondary Transfer section also increases by lower humidity or over time, the required electrical field may not be attained, especially in the early mornings (low humidity environment).

Due to the characteristics of the EA-ECO Toner, high Rsys (in the early morning low temperature and low humidity environment) requires a transfer voltage for the areas where multiple transfers and MWS cannot be used at the same time. Because the machine is adjusted for Multiple Transfer Priority by default, MWS may be visible from Side 1. **NOTE:** Although the user offset is helpful, it deteriorates multiple transfers because they cannot be used at the same time. Also, because this problem recovers when the Rsys gets lowered as the machine internal temperature rises, the user offset adjustment cannot be recommended. Recovery can be faster by using condensation (plus, Tray Heater).



j0wa31021

#### Figure 1 Multi Color Transfer Failure Defect Sample

#### **Initial Actions**

- 1. Verify that the hue on Side 2 becomes lighter when printing a high density image in a low temperature and low humidity environment as in Figure 1.
- 2. Change the Secondary Transfer voltage setting up or down, then compare the hue to the paper with defective image.

#### Procedure

Initial Issue

- 1. Increase the Secondary Transfer voltage by decreasing the single color density or by changing the permissible range for MWS.
- 2. Apply the Secondary Transfer voltage user offset specifications. **Reference**: UI Operation Instructions for User Offset.
  - a. Enter UI Diagnostic (CSE) Mode.

#### Maintenance/Inspection > Max Setup > User Offset feature

- b. Select the Adjustments tab.
- c. Select NVM Read/Write dC131.
- d. While the nominal value is **6**, perform variable output (between 1 and 16, low to high voltage) for secondary voltage, and register the optimal value.
- e. Nominal 200V/1 step and NVM Read/Write (dC131) location 747-019/020: Change the step width.
# IQ42 Lines on Coated Paper (EXIT)

Lines are generated on Side 1 in 2 Sided mode.

When HW Gloss paper is output to Exit 1 using the 2 Sided mode in high temperature/high humidity environment, its Side 1 gets rubbed against the Exit Gate, resulting in lines as in Figure 1.

# Dup Mode Faceup

#### Figure 1 Lines on Coated Paper Defect Sample

#### **Initial Actions**

- 1. Check whether both sides are output to Exit 1.
- 2. During Side 2 output, check whether the Side 1 output direction is at the Trail Edge. If the above two conditions are met, this defect is likely to occur.

## Procedure

Change the output tray to the Exit 2 Tray or the Side Tray.

• When paper is output to Exit 1 in 2 Sided mode, the convex part of the paper that bowed due to the corrugation of the Exit section makes contact with the Exit Gate, which generates brushed lines from the middle to the Trail Edge on the upper side (Side 1) of the exiting paper.

This happens when the paper area that bowed due to corrugation makes contact with the Exit Gate.

# IQ43 Caterpillar Mark (Transfer)

This is caused by low electric charge in toner.

A bit of changed electricity remains at Side 1 Trail Edge of lightweight paper in the C-Zone.



#### Figure 1 Caterpillar Mark Defect Sample

# **Initial Actions**

1. Compare with the image sample. (Figure 1)

# Procedure

- 1. Lower the TC and increase the primary transfer current value (same as the heat haze/ mock heat haze countermeasure) (IQ46).
- 2. Because this may get worse during condensation, go through a few dozens of full image 2 sided sheets to handle it.

# IQ44 White Stripes Due to Trimmer Jam (DEV)

When foreign substances such as dirt, dust, toner aggregate (including melted) exist in the Toner Cartridge, on the Toner Supply Path, or in the Developer Housing Assy and they reach the section between the Developer Roll and the Trimmer, it could obstruct the formation of the developer layer.

# **Initial Actions**

- 1. Clean the LPH.
- 2. If the white stripes did not disappear, perform the following:

## Procedure

- 1. Scoop and remove the foreign substances by inserting a sheet of paper into the gap between the Developer Roll and the Trimmer.
- 2. In most cases, the above procedure will not be able to remove the foreign substances. The reliable method is to replace the Developer Housing Assy.

# IQ45 Heat Haze/Mock Heat Haze

# Procedure

The heat haze/mock heat haze is generated in various places and in different ways.



#### Figure 1 Heat Haze/Mock-Heat Haze

Heat Haze:

The heat haze occurs at the place where paper is peeled off from the IBT Belt as shown in Figure 1 and Figure 2. The toner scatters in small clouds around the Solid Patch.



Figure 2 Heat Haze

Mock Heat Haze:

The mock heat haze occurs when the transported paper rubs against the Holder DTS (Chute at the Transfer EXIT) as shown in the Figure 1 and Figure 3, which charges it electrically and causes the toner to scatter at the Lead and Trail edges of the Solid section. This might form streaks in some parts.



#### Figure 3 Mock-Heat Haze

# **Initial Action**

- 1. Perform dC909 Calibrate for Paper, generate the test pattern and check whether the defect occurs for single K color or multiple colors, and whether the defect changes as a result of the procedure (secondary transfer voltage).
- 2. Perform dC991,Toner Density Setup; if the TC reads higher than the target according to the Check, lower the TC to meet the target.

## Procedure

1. When heat haze or mock heat haze occurs, print 25 sheets of the dC909 test pattern on A3/11x17.

**NOTE:** Step 2 is mainly effective for heat haze.

- 2. Adjust the secondary transfer voltage based on the results of step 1.
- 3. Adjust the primary transfer current value for toner scattering (mock heat haze) around K/ color texts:

**NOTE:** The value in NVM 746-015 indicates the machine internal environment (temperature and humidity) and it is stored as an integer value between 1 and 10. The higher the temperature and humidity are, the smaller the value becomes and vice versa.

- a. Enter dC131, NVM 746-015 and make a note of the value.
- b. Change the primary transfer current value approximately to a value corresponding to the conditions in which the problem occurs (Table 2).
  - Refer to the following table for the NVM address to be changed (Table 1). (Model (ppm) & Output Color (FC/BW) & the value in NVM 746-015 noted above).

• Because the machine internal temperature and humidity changes slightly during the day, also change the values before and after the value that was noted in NVM 746-015 above (if the value is **5**, change the NVMs for **4** and **6** too).

**Example**: If this problem occurs for 25ppm Full Color print and 746-015 is **9**, change the value of 745-405, 406, and 407 from 103 to 150.

#### **Table 1 NVM Locations**

		746-01	746-015 (Environment No. for Temperature and Humidity 1-10)								
Model	Color	1	2	3	4	5	6	7	8	9	10
25ppm	FC	745- 398	745- 399	745- 400	745- 401	745- 402	745- 403	745- 404	745- 405	745- 406	745- 407
	BW	745- 408	745- 409	745- 410	745- 411	745- 412	745- 413	745- 414	745- 415	745- 416	745- 417
35ppm	FC	745- 448	745- 449	745- 450	745- 451	745- 452	745- 453	745- 454	745- 455	745- 456	745- 457
	BW	745- 458	745- 459	745- 460	745- 461	745- 462	745- 463	745- 464	745- 465	745- 466	745- 467
45ppm	FC	745- 498	745- 499	745- 500	745- 501	745- 502	745- 503	745- 504	745- 505	745- 506	745- 507
	BW	745- 508	745- 509	745- 510	745- 511	745- 512	745- 513	745- 514	745- 515	745- 516	745- 517
55ppm	FC	745- 548	745- 549	745- 550	745- 551	745- 552	745- 553	745- 554	745- 555	745- 556	745- 557
	BW	745- 568	745- 569	745- 570	745- 571	745- 572	745- 573	745- 574	745- 575	745- 576	745- 577

## Table 2 Adjusted Primary Transfer Voltage

Model	25ppm FC/BW	35ppm FC/BW	45ppm FC/BW	55ppm FC	55ppm BW
Initial Value	103	148	169	193	216
After Change	150	200	220	250	255

**NOTE:** NVM 746-005 stores the current value that was output last. In the case of 25/25ppm, 103 (10.3 MicroAmp) is stored before the adjustment and 150 (15.0 MicroAmp) is stored after the adjustment.

c. After performing steps a and b, make a test print and refer to NVM 746-005 (1st BTR Transfer Bias Last Output Value K) to check that the primary transfer output has changed to the new value.

**NOTE:** This procedure may result in worse ghosting (residual image due to electrostatic charge on the photoreceptor).

Print and check a test pattern. If the level of ghosting is bad, manually decrease the ATC target value in the following step.

This is effective for heat haze/mock heat haze.

 Decrease the TC by 1%. △ ATC Target Manual Correction Amount Decrease K color by 1%. 752-845: 0 to 35 Decrease Y color by 1%. 752-842: 0 to 35

Decrease M color by 1%. 752-843: 0 to 35

Decrease C color by 1%. 752-844: 0 to 35

When the value is changed, the target value for MAX Setup/Adjust Toner Density also shifts by 0 to 35.

**NOTE:** Occurrence of both heat haze and mock heat haze are easily influenced by the paper orientation. As final step, copy an image which has solid portions located at various positions to check for them. Especially for the secondary voltage offset chart (dC909), only one patch in the area is useful because the secondary transfer voltage changes between Lead and Trail edges.

# IQ46 Poor Reproducibility of Fine Lines (IOT Image Quality)

The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600dpi/ 1200dpi thin lines (Figure 1).



Figure 1 Poor Reproducibility of Fine Lines

## Procedure

Because of the dispersion due to the difference in the machines, thin lines, especially slanted ones, tend to break up.

When this happens, use the Thin Line Correction Mode to correct it.

**NOTE:** When in use, the Thin Line Correction Mode might cause defects to appear in the images.

The Thin Line Correction only emphasizes line images and it cannot be used to increase the text density, and may cause:

- 1. Interference in the form of banding in ladder images
- 2. LPH streaks appearing in high temperature environment

Because of these reasons, keep the adjustment amount as low as possible.

Perform the Thin Line Correction by adjusting the following NVM values:

- NVM Read/Write (dC131) location 749-006: 1200 Only Fine Line Correction -0: OFF (also performs correction for 600dpi)
  - 15: ON (only performs correction for 1200dpi)

If the Thin Line Correction is also to be performed for 600dpi, use  ${\bf 0}.$  The default value is 15.

- NVM Read/Write (dC131) location 749-007: Thin Line Correction Switch -0: Thin Line Correction OFF
  - 1: Thin Line Correction ON

The default value is 0.

3. Thin Line Correction Amount Adjustment (Table 1):

# Table 1 Thin Line Adjustment

NVM Address	Contents	Initial Value	Adjustment Range
749-243	Thin Line Correction Amount Y Color	200	140~255
749-244	Thin Line Correction Amount M Color	200	140~255
749-245	Thin Line Correction Amount C Color	200	140~255
749-246	Thin Line Correction Amount K Color	200	140~255

The smaller the value, the more emphasis the thin line gets (amount of exposure is increased).

Amount of exposure is increased by: 30% for 140, 20% for 160, and 10\% for 180. (Default value - Adjustment value)/2 = amount of increased exposure in%.

The recommended value is 160.

4. NVM Read/Write (dC131) location 752-006 Thin Line Correction\_ADC\_Switch - 0: OFF, 1: ON.

Although this is normally set as 0 (OFF) during use, if the highlight reproduction is overdone, set this to 1 (ON).

Default value is 0.

# **IQ47 Outboard Deletion in All Colors**

These are light areas, faded or deleted, caused by toner buildup on the outboard side of the 1st BTRs.



# Figure 1 Outboard Deletion (All Colors)

# **Initial Actions**

1. Compare with the image sample (Figure 1).

# Procedure

- 1. Remove the IBT Assembly (REP 9.2) and Transfer Belt Assembly (PL 6.4, item 5).
- 2. Clean the 1st BTR rolls (PL 6.4, item 1) in order to correct the problem.
- 3. Run test prints in order to verify that the problem is corrected.

# IQ48 MWS (Side 2) (Micro White Spots)

When the resistance in the Secondary Transfer section is high, e.g. in the early mornings (low humidity environment), the transfer latitude between multicolor and monocolor is narrow and the setting voltage favors multicolor. In other words, the voltage is a little high for monocolor, and this causes the Transfer nip discharge phenomenon that creates the white spots on Side 2 in a low-humidity environment.

# **IQ49 Moist Paper Wrinkles (Fusing Unit)**

When moisture gets into vertical grained paper, paper waves occurs at the tip of short edge side. If the paper enters the Fusing Nip in this condition, the Fusing Nip cannot feed the paper properly, resulting in wrinkles.



Figure 1 j0wa31023

# **Initial Actions**

Verify that the micro white spots (MWS) appear on Side 2 when printing in a low humidity environment.

# Procedure

Reduce the 2nd-transfer voltage for the paper type in use by decreasing the single-color density or by changing the permissible range for MWS (Micro White Spots) (dC909).

**NOTE:** As much as user offset can serve as a solution, both multi-color transfer and MWS cannot be simultaneously satisfied. Whichever is given priority will lead to deterioration of the other. Adjust based on the customer's expectation and requirement.



j0ki31017

#### Figure 1 Moist Paper Wrinkles

# **Initial Actions**

Check the paper in the Tray for moistness and waviness at the lead edge in the Paper Feed direction.

# Procedure

- Use fresh paper.
- Change the Paper Feed direction (LEF).
- Use horizontal grained paper.

# IQ50 White Streaks in Process Direction/Dropping Density (XERO/CLN)



j0ki31016

Figure 1 j0ki31016

# **Initial Actions**

TBS

# Procedure

1. TBS

# IQ51 Background (IPS)

A phenomenon like background (e.g. background color or document bleed) may occur depending on the document.

The default background suppression function is unable to fully remove the background.



Figure 1 Background (IPS)

# **Initial Actions**

Set Background Suppression to **Enabled** and check whether background still occurs on the customer's document.

# Procedure

 Refer to Table 1 for a rough standard (approximation) of the effects that can be achieved with the various settings for Background Suppression Level, which varies by type of document.

#### Table 1 Background Suppression Level Settings (Approx.)

Suppression Level	Rough Standard for Suppression Levels (documents with white background, or level of effect on documents)			
Output Color	Color	BW		
Normal	White paper such as Plain paper	Bleed is reduced slightly.		
Higher (+1): Default	Recycled	White paper such as Plain paper, Recycled paper, Newspaper		
Higher (+2)	Old recycled paper, Dark recycled paper	The suppression amount is more than Higher (+1).		
Higher (+3)	Newspaper (with some bleed)	The suppression amount is more than Higher (+2).		

#### Table 1 Background Suppression Level Settings (Approx.)

Suppression Level	Rough Standard for Suppression Levels (documents with white background, or level of effect on documents)			
Output Color	Color BW			
Higher (+4)	Newspaper	Reduces background to the level at which pencil text (light text) can be read.		

2. The adjustment methods are different for Services and Output Colors in System Administrator mode and CE mode (NVM), dC131. Refer to Table 2.

Table 2 Background	Suppression	Level Adjust	ment Method	by Mode
Table E Baokground	ouppiocoion		anone mounoa	<i>b</i> , moao

Service	Output Color	Adjustment Method
Сору	Full Color Mode	System Administrator Mode
	BW	CE Mode (NVM)
Fax	BW	CE Mode (NVM)
Scan	Full Color Mode	System Administrator Mode
	BW	CE Mode (NVM)

- a. To make the adjustment in System Administrator Mode:
  - Copy (Full Color) Adjustment

[Tools] > System Settings tab > [Copy Service Settings] > [Copy Control] > [Background Suppression Level]

• Scan (Full Color) Adjustment

[Tools] > System Settings tab > [Scan Service Settings] > [Other Settings] > [Background Suppression Level]

- b. To make the Adjustment in CE Mode (NVM):
  - When adjusting the Text & Photo mode for Copy BW, Fax, and Scan BW, change the following NVM values in dC131; refer to Table 3.

# Table 3 NVM Settings (CE Mode) - Text & Photo

Chain-Link	NVM Names	PSW Display	Settings Range	Initial Value	Description
715-631	Background	TP_BW_Cop	0~4095		Background Suppression
	Suppression	y_Fax Offset			Level
	Offset Level	Level of AE			0: Strength Level 0 (nor-
	for BW Copy,				mal),
	Fax, Binary			273	1: Strength Level 1 (+1),
	Scan -				2: Strength Level 2 (+2),
	Text & Photo			546	3: Strength Level 3 (+3),
	Mode (Print,				4: Strength Level 4 (+4),
	Photograph,			819	5~15 and above: Strength
	Copy)				Level 0 (normal)
				1092	

• When adjusting the Text mode for Copy BW, Fax, and Scan BW, change the following NVM values in dC131; refer to Table 4.

**NOTE:** Text mode requires different NVM values for (Normal, Pencil) and (Tracing Paper).

**NOTE:** The description of the settings is the same as that for the Text & Photo mode.

Chain- Link	NVM Names	PSW Display	Setting s Range	Initial Value	Description
715- 633	Background Suppression Offset Level for BW Copy, Fax, Binary Scan Text Mode (Nor- mal, Pencil Text)	TP_BW_Copy_ Fax Offset Level of AE	0~4095	273 546 819 1092	Background Suppression Level: 0: Strength Level 0 (nor- mal), 1: Strength Level 1 (+1), 2: Strength Level 2 (+2), 3: Strength Level 3 (+3), 4: Strength Level 4 (+4), 5~15 and above: Strength Level 0 (normal)
715- 637	Background Suppression Offset Level for BW Copy, Fax, Binary Scan Text Mode (Tracing Paper)	TP_BW_Copy_ Fax Offset Level of AE	0~4096	273	Background Suppression Level: 0: Strength Level 0 (nor- mal), 1: Strength Level 1 (+1), 2: Strength Level 2 (+2), 3: Strength Level 3 (+3), 4: Strength Level 4 (+4), 5~15 and above: Strength Level 0 (normal)

#### Table 4 NVM Settings (CE Mode) - Text

**NOTE:** Due to the mechanism of Background Suppression (Figure 2), backgrounds might not be suppressed up to the user's expectations on the following documents:

(1) Photo documents having their high density sections placed in the background detection areas.

(2) Document containing dark frames or fringes.

(3) Document containing texts on dark background.

(4) Negative document

For the document types (1) and (2), the suppression level may be improved by changing the background suppression method from High Speed to High Quality.

For the case of (3), density adjustment (ADJ 9.14may be helpful.



j0ki31008

Figure 2 Suppression Mechanism

# IQ52 Light Ink Support (IPS)

This is used to copy an image to be lighter than the current BW Copy settings; e.g. when using light ink. Density adjustment cannot lighten images to the light ink level.

# **Initial Actions**

Consult with the customer to determine which (or all) level of Photo mode (Lighten +1 to +3) is to be set with light ink support adjustment.

# Procedure

1. Change the NVM values listed in the following table to adjust the Lighten +1, Lighten +2, and Lighten +3 of Photo mode.

5				
	Chain-Link and Recommended Setting Value			
Photo Mode Lighten +3	[Chain-Link: 715-692]: 37 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set. Note 2) When 20 or lower is set, the result may be blank paper.			
Photo Mode Lighten +2	[Chain-Link: 715-693]: 40 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set. Note 2) When 15 or lower is set, the result may be blank paper.			
Photo Mode Lighten +1	[Chain-Link: 715-694]: 43 (recommended value) - N/A Settable range: [0-64] (Default = 0) Note 1) When 0 is set, the state is the same as when 64 is set.Note 2) When 10 or lower is set, the result may be blank paper.			

Table 1	Table	of Light	Ink	Support
---------	-------	----------	-----	---------

Density Adjustment: Darkening the Highlight

NOTE: This countermeasure is only valid for Copy BW images.

# IQ53 Highlight Density Reproduction (NVM Darken +3) (IPS)

This is used to reproduce the highlight (light colors) in darker shade.To prevent background, the highlight reproducibility is adjusted.

# Procedure

1. Set the density adjustment to **Darken +1** ~ **Darken +3**.

\* When the highlight is not reproduced after performing the density adjustment in (1), it can be adjusted by the following method:

2. Set the background suppression to **Disabled**.

\* Although may cause background to appear, it improves the highlight reproducibility.

3. In the case of Copy Service, adjust the density by using **DC919: Color Balance Adjust**ment.

In the case of Scan Service, increase the Scan Resolution.

\* The highlight reproducibility is improved more with 600dpi than 200dpi.

4. The following describes the adjustment method that is only valid for Output Color **BW** and Original Type **Text**.

Density Adjustment: Darkening the Highlight

## Table 1 Density Adjustment: Darkening the Highlight

NVM Chain- Link	Service	Mode	How to Use
715-720 N/A	Сору	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 120.
715-721 N/A	Сору	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 120. The density of Darken +3 and Normal may be reversed depending on the set- ting value.
715-722	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 125.
715-723	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> <b>Density Darken +3</b>	The highlight is reproduced darker when a value larger than the default value (128) is set. The recommended value is 125. The density of Darken +3 and Normal may be reversed depending on the set- ting value.

\* The NVM value adjustment is done by visually checking the copy or scan output while performing the adjustment.

# IQ54 Highlight Density Reproduction (NVM Lighten +3) (IPS)

This is used to reproduce the density in lighter shade.

# Procedure

1. Set the density adjustment to Lighten +1 ~ Lighten +3.

\* When desired image quality cannot be obtained after performing the density adjustment in (1), the following adjustment method is also available:

Countermeasure (2): In the case of Copy Service, adjust the density by using **Color Balance Adjustment**.

The following describes the adjustment method that is only valid for Output Color **BW** and Original Type **Text**.

Density Adjustment: Lightening

Table 1	Density	Adjustment:	Lightening
---------	---------	-------------	------------

NVM Chain- Link	Service	Mode	How to Use
715-720 N/A	Сору	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 136.
715-721 N/A	Сору	Output Color <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 136. The density of <b>Darken +3</b> and <b>Normal</b> may be reversed depending on the set- ting value.
715-722 N/A	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Normal</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 132.
715-723 N/A	Fax Scan	Color Scanning <b>BW</b> Original Type <b>Text</b> Density <b>Darken +3</b>	The highlight is reproduced lighter when a value larger than the default value (128) is set. The recommended value is 132. The density of <b>Darken +3</b> and <b>Normal</b> may be reversed depending on the set- ting value.

\* The NVM value adjustment is done by visually checking the copy or scan output while performing the adjustment.

# IQ55 Bleed on Tracing Paper (IPS)

When copying or scanning Tracing Paper document, bleed or background occur around the texts. Because of the characteristics of Tracing Paper, shades are generated around the texts when scanning using CCD



Figure 1 Bleed on Tracing Paper

# Procedure

1. Use the Lightweight mode.

a. Copy Service Settings

Perform the following procedure to display the Lightweight mode on the UI.

[Tools] > System Settings tab > [Copy Service Settings] > [Copy Control] > [Original Type - See-Through Paper] > [Enabled]

The Lightweight mode becomes selectable when **Output Color = BW** and **Original Type = Text** are specified.

b. Scan Service Settings

Change the following NVM values to enable the Lightweight mode.

NVM715-669 0: Normal  $\rightarrow$  1: Tracing Paper mode

Select Color Scanning = BW and Original Type = Photo for the Lightweight mode. (The Lightweight mode button does not exist on the UI. It is attached as a background mode to the Photo mode.)

# **IQ56 CVT Streaks (IPS)**

Dirt such as paper dust is generated at the DADF scan position. The streaks in the SS direction are created when that contamination is scanned

# IQ57 Copy: Gradation Jump in Text & Photo (IPS)

In the BW and Text & Photo Copy mode, gradation jump occurs on 100-line photo documents.

As Text & Photo mode gives priority to 175 lpi halftone dots and text quality, Sharpen Edge is performed for lower lpi.



Figure 1 j0ki31012

# **Initial Action**

1. Check whether dirt such as paper dust exists at the DADF scan position.

# Procedure

1. Clean the DADF scan position.



# Figure 1 j0ki31013

# Procedure

Take the following countermeasures for 100-line documents:

#### Table 1 100-line Document: Countermeasures

Countermeasures	Secondary Defect
Set the Original Type to Photo.	The text becomes blurred.
Select [Tools] > [Common Service Settings] > [Image Quality Adjust-	Image quality of photographs deteriorate in [More Text] and [Text] settings. Text becomes blurred in [More
<pre>ment] &gt; [Image Quality] and adjust [Photo &amp; Text Recognition]</pre>	Photo] and [Photo] settings.

# IQ58 Scan: Smeared Text, JPEG Mosquito Noise (IPS)

Color texts are blurred and mosquito noise is generated around the texts due to JPEG compression.

**NOTE:** As the JPEG compression technique is for images, not texts, noise is easy to crop up when it is used to compress texts.

# IQ59 Moire In Text Mode (Fine) BW Scan/Fax For 133 Ipi Originals (IPS)

When a document with tint on the whole paper or a background image is scanned using Fax Text mode in High Quality (Fine), the file size or the Fax transmission time may increase drastically.

As the Text mode is designed to highlight texts, it generates halftone dot moire.



j0ki31014

Figure 1 j0ki31014

# Procedure

1. Set the compression mode from **Normal** to **Low Compression**. (Secondary defect: The file size becomes bigger.)



Fax fine 133 line half tone Screen Image j0ki31015

#### Figure 1 j0ki31015

#### Procedure

- 1. Scan the customer's document (photo image) in Binary Scan mode and check whether moire is generated and the file size became bigger.
- 2. Take the following countermeasures for 133-line documents:

#### Table 1 133-line document: Countermeasures

Countermeasures	Secondary Defect
Set the Original Type to <b>Photo.</b>	As the amount of data increases in Text & Photo mode, the machine takes a longer time for transmission.
Set the density adjustment to Lighten and the sharpness to Soften.	The text quality is degraded.

# IQ60 Copy: Bleed on 2 Sided Document (IPS)

Bleed occurs in the Copy BW and Text mode.

**NOTE:** Because the gradation feature is designed to improve the reproducibility of Low Contrast, when bleed density of the document is high, the background suppression function might not be able to remove it completely.

# Procedure

Take the following countermeasures for Bleed on document:

#### Table 1 Bleed on Document Countermeasures

Countermeasures	Secondary Defect
Switch the AE suppression level settings. (Switch the NVM)	Reproducibility of highlights is degraded.
Set the density adjustment to Lighten +1.	The density on the whole area becomes lighter and the reproducibility of highlights is degraded.

# IQ61 Copy: Platen Background (IPS)

When A4 stark white paper such as J Paper/Premier 80 is scanned into A3 when in Copy BW Text mode and AE is ON, the platen back density is reproduced outside of the copy range.

**NOTE:** Because some paper has a low background detection level, the density of the Platen background might not be fully removed, depending on the S/N level status of the IIT.

# Procedure

Take the following Platen background countermeasures:

#### Table 1 Platen Background Countermeasures

Countermeasures	Secondary Defect
Switch the AE suppression level settings. (Switch the NVM)	Reproducibility of highlights is degraded.
Set the density adjustment to Lighten +1.	The density on the whole area becomes lighter and the reproducibility of highlights is degraded.
Set the sharpness adjustment to <b>Soften +1</b> .	The text becomes blurred.

# IQ62 Image Quality Difference between Side 1 and Side 2 (Sharpness Adjustment of Side 1 and Side 2)

During 2 Sided Simultaneous Scan, the text and halftone dot reproduction qualities of copy or scan images are different between Side 1 and Side 2.

# Procedure

Adjust the sharpness of Side 2 scan in NVM 716-421. - N/A

The NVM has 5 levels, each of which indicates the Side 2 sharpness offset against Side 1.

Table 1								
Content	Setting Range	Initial Value	Meaning					
Sharpness adjustment for CIS (difference against Side 1)	0-4	2	Indicates the difference in sharpness adjustment against Side 1. 0: 2 levels softer than Side 1 1: 1 level softer than Side 1 2: Same as Side 1 3: 1 level sharper than Side 1 4: 2 levels sharper than Side 1					

# IQ63 Image Quality Difference between Side 1 and Side 2 (Color Balance Adjustment of Side 1 and Side 2)

To narrow the difference in density between Side 1 and Side 2 during scan.

# Procedure

Perform color balance adjustment on Side 1 and Side 2, separately. The center of color balance adjustment\* in Customer Mode will be changed by this adjustment.

\* The color balance adjustment is performed for Side 1 and Side 2 at the same time in Customer Mode. Only this adjustment can adjust Side 1 and Side 2 separately.

This adjustment is only applicable to the copy function.Perform this adjustment only when requested by the customer.

	-	
	Color Balance Adjustment for Side 1 Scan	Color Balance Adjustment for Side 2 Scan
Overview	Changes the center of color balance adjustment for Side 1 scan in Customer Mode.	Changes the center of color balance adjustment for Side 2 scan in Customer Mode.
Adjustment method	DC919	NVM 716-408 to 419 - N/A
Adjustment value	<b>0</b> is the default value. The image will become lighter from -1 to -4 (in 4 stages), and darker from 1 to 4 (in 4 stages).	<b>4</b> is the default value. The image will become lighter from 0 to 3 (in 4 stages), and darker from 5 to 8 (in 4 stages).

#### Table 1 Overview of Color Balance Adjustment for Side 1 and Side 2 Scans

#### Table 2 Color Balance Adjustment for Side 2 Scan: Chain-Link List

Chain-Link	Mode
716-408 N/A	Side 2 Scan Adjustment Level K Color Low Density
716-409	Side 2 Scan Adjustment Level K Color
N/A	Medium Density
716-410	Side 2 Scan Adjustment Level K Color High
N/A	Density
716-411	Side 2 Scan Adjustment Level Y Color Low
N/A	Density
716-412	Side 2 Scan Adjustment Level Y Color
N/A	Medium Density
716-413	Side 2 Scan Adjustment Level Y Color High
N/A	Density
716-414 N/A	Side 2 Scan Adjustment Level M Color Low Density
716-415	Side 2 Scan Adjustment Level M Color
N/A	Medium Density

#### Table 2 Color Balance Adjustment for Side 2 Scan: Chain-Link List

Chain-Link	Mode
716-416	Side 2 Scan Adjustment Level M Color
N/A	High Density
716-417 N/A	Side 2 Scan Adjustment Level C Color Low Density
716-418	Side 2 Scan Adjustment Level C Color
N/A	Medium Density
716-419	Side 2 Scan Adjustment Level C Color High
N/A	Density

# [Sample adjustment]

Adjusting the Yellow low density area on Side 2 because it is lighter than Side 1.

- 1. Enter DC919 and check the value of **Side 1 Color Balance Adjustment Y Low Density**. In this example, it is assumed that the value of Side 1 is the default value of **0**.
- 2. To darken the Y low density on Side 2, increase the default value of **4** of Chain-Link 716-411 within the range of 5 to 8.

**NOTE:** Perform the NVM value adjustment by visually checking the copy output as you perform the adjustment.

# IQ64 Image Quality Difference between Side 1 and Side 2 (Background Suppression Adjustment of Side 1 and Side 2)

How to Adjust the Suppression Level (Continuation)

# Procedure

When adjusting the Text & Photo mode for BW Copy, Fax, and BW Scan, change the following NVM values:

	Table 1									
Chain- Link	NVM Name	PSW Display	Setting Range	Initial Value	Meaning					
715-631 N/A	Background Suppression Offset Level for BW Copy, Fax, BW Scan: Text & Photo Mode (Print, Photo- graph, Copy)	TP_BW_Copy_F ax Offset Level of AE	0 to 4095	273	0: Strength Level 0 (Normal), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5 to 15 and above: Level 0 (Normal) * Refer to Table 3. bit0-bit3: Platen, bit4-bit7: CVT & DADF, bit8-bit11: CIS.					

Table 2

	Meaning of Adjustment Value											
Scanning Method	CIS			CVT & DADF			Platen					
Bit allocation	11	10	9	8	7	6	5	4	3	2	1	0
Expressed in binary	0	0	0	1	0	0	0	1	0	0	0	1

\* When the binary value in Table 2 above is converted to decimal value, it becomes the initial value in Table 1 (that is, 273).

Table 3 Relationship between Background Suppression Level and Strength Level

Background Suppression Level	Strength Level
Normal	0, 5 to 15
Higher (+1)	1
Higher (+2)	2
Higher (+3)	3
Higher (+4)	4

#### **Description of NVM Settings**

The NVM setting range is 12 bits, which are broken up into 4 bits for each scan method. The NVM setting value is determined in binary first, and then converted to a decimal number.

Example: The initial value 273 (decimal) indicates that the background suppression levels are 1 for all scan methods. When the background suppression levels are 2 for all scan methods: = 546 (decimal) = 001000100010 (binary). When the background suppression levels are 3 for all scan methods: = 819 (decimal) = 001100110011 (binary). When the background suppression levels are 4 for all scan methods: = 1092 (decimal) = 010001000100 (binary). When the background suppression level for the Platen or CVT & DADF scan method is 1 and the background suppression level for the CIS scan method is 3 (to suppress Side 2 background on Side 1) = 785 (decimal) = 001100010001 (binary). When the background suppression level for the CIS scan method is 3 (to suppress Side 2 background on Side 1) = 785 (decimal) = 001100010001 (binary). When the background suppression level for the CIS scan method is 3 (to suppress Side 1 background on Side 2) = 307 (decimal) = 000100110011 (binary)

# IQ65 Image Quality Difference between Side 1 and Side 2 (Color Adjustment of Side 1 and Side 2)

To narrow the difference in color between Side 1 and Side 2 during scan.

# **Initial Action**

Executing **2 Sided Color Scanning Calibration** in System Administrator Mode automatically narrows the difference in color between Side 1 and Side 2. This adjustment is applicable to the copy and scan functions. Perform this adjustment only when requested by the customer.

# Procedure

Refer to Performing the 2 Sided Color Scanning Calibration in the Administrator Guide.

# IQ66 Unevenness Correction Within Image Area (IOT Image Quality)

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

# **Correction Area**



## Figure 1 j0wa41850



As shown in the figure, the LPH zone is divided into 7 areas by setting the 6 points - from A (left-most edge) to G (right-most edge).

Adjustment is performed at each area to lower the LPH exposure amount until the density is even.

\*There are cases where point A or G will lie beyond the image zone. Furthermore, the 154mm mark is the center of the image.

**NOTE:** As an overly large adjustment might cause jumps in gradation, make the adjustments as small as possible.

The adjustment amount (%) is not = amount of change in density.

The actual exposure level includes a process that converts the brightness of ADC Sensor Position to 100%.

# [Purpose]

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

# [Procedure]

1. LPH Exposure Amount Fine Adjustment ON/OFF Switch Selector

To enable the LPH Exposure Amount Fine Adjustment function, set the following NVM as ON.

	T	able 2		
NVM Names	NVM Address	Contents	Initial Value	Adjustment Range
Smile Correction Switch	749-005	0: OFF 1: ON	0	0 or 1

## 2. Selection of Correction Method:

The LPH Exposure Amount Fine Adjustment can be done by:

- a. Correcting the density skew in the IN-OUT direction
- b. Selecting a pre-prepared pattern to perform the correction
- c. Using custom correction to manually correct the adjustment amount for each area

A combination of the various correction methods can be used. However, the correction cannot go beyond the 0 to -20 (%) range.

a. IN/OUT Density Correction

Corrects the IN-OUT density skew in the axis direction of the photoreceptor.

When there is density skew from the left to the right of the image, the adjustment amount to correct that has to be set for each color.

Setting Range is -20 to 20 (%)

	lab	le 3		
NVM Names	NVM Address		Initial Value	Adjustment Range
In Out Tendency (IN/OUT	749-191	Y	0	-20~20
correction)	749-192	М	0	-20~20
	749-193	С	0	-20~20
	749-194	К	0	-20~20

- . . .





\*Although there is also an adjustment range at the positive side, it only involves reducing the brightness at the IN side or the OUT side and therefore will not have any correction that goes above 100%.

b. Pattern Selection Correction:

If you have elected to perform correction based on Pattern Selection, select the Pattern 1~6 and Level 1~6 that is most suitable for the density correction from the following figure.

The selected Pattern and Level are reflected as LPH Brightness Correction by changing the following NVMs.

As there are separate NVMs for each color, they can each be corrected independently.



Figure 3 j0wa41852



Figure 5 j0wa41854

Table 4

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Pattern (Pattern	749-195	Y	1	1~6
Selection)	749-196	М	1	1~6
	749-197	С	1	1~6
	749-198	К	1	1~6

Table 5

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Level	749-199	Y	1	1~6
	749-200	М	1	1~6
	749-201	С	1	1~6
	749-202	К	1	1~6

NOTE: Take note that 0 and 5 for Pattern means Disabled and 1 for Level means No correction.

c. Custom Correction

If you have elected to perform density correction by custom correction, you must input the required adjustment amount for the correction of every area into the NVM for each YMCK color.

Be careful as only negative correction can be performed for density correction.

	Table 0										
NVM				Init	ial \	/alu	е				Adjustme
Names	NVM Address	Contents		Α	В	С	D	Е	F	G	nt Range
Custom	749-203~209	R/E (%) within	Y	0	0	0	0	0	0	0	-20~20
Correction	749-210~216	Pulse Width Variable Range	М	0	0	0	0	0	0	0	-20~20
value	749-217~223		С	0	0	0	0	0	0	0	-20~20
	749-224~230		K	0	0	0	0	0	0	0	-20~20

Table 6

# \*The NVM Addresses correspond in ascending order to ABCDEFG.

\*Although there is also an adjustment range at the positive side, the brightness will saturate at 100%. The positive correction of up to the 100% range will only be applied when the exposure amount has been corrected towards the negative side at IN-OUT Density Correction or Pattern Selection Correction.

- The above 3 types of correction can be used in combination. However, the total amount of exposure adjustment for these Smile Corrections are restricted to be within 0 to -20%.
- [Sum of Correction 0~20%] = [IN-OUT Adjustment Amount%] + [Pattern Selection Adjustment Amount%] + [Custom Adjustment Amount%] If the total from the 3 corrections add up to less than -20%, it will be uniformly limited to -20%
- If it is larger than 0%, then it will be uniformly limited to 0%.
- The above are the restrictions that apply to the exposure amount correction and correction by Smile Correction function. However, within the actual machine, after the exposure amount correction by Smile Correction, it will enter another process to calibrate the exposure at the ADC Sensor Position to be 100%. As a correction is applied to the exposure amount after a Smile Correction, the exposure amount in the vicinity of 114 to 144mm from the left of the image becomes 100%, while it is relatively higher or lower for the rest of the positions.
- Reference sample



# Figure 6 j0wa41855

As shown in figure B, the control is such that the final exposure at the ADC Sensor Position becomes 100%. By this, the exposure amount that was corrected by Smile Correction (figure A) is corrected again until it is at the actual output level (figure B). (The figures are the exposure models when Pattern 1, Level 4 correction have been performed)

# Test Pattern Usage (dC612)

The following table lists the types of test patterns and their usage:

#### Table 1 IOT Built-in Test Patterns (dC612)

No.	Pattern Name	Overview
1	90 Degree Grid	Alignment measurement
2	Diagonal Grid	For checking the reproducibility of diagonal lines
3	A1 Patch Pattern	For visual checking of Regi Control A1 Patch
4	B Patch Pattern	For visual checking of Regi Control B Patch
5	C Patch Pattern	For visual checking of Regi Control C Patch
6	C-TRACS Check PG	For calibration, gradation pattern for Print cali- bration
7	Procon PG	Gradation, Defect detection
8	16 Tone PG	Defect detection IOT
9	Full Halftone	Defect detection
10	Single K Full Halftone	Defect detection at single K mode
11	Drum Pitch Halftone	Defect detection/for shipment inspection
12	LPH streak adj chart (IOT mounted)	For LPH line detection
13	LPH streak adj chart (LPH mounted)	For LPH line detection and for identifying causes of Video data failure
14	X talk Test chart (Failure Analysis)	For detection of LPH power-related defects IOT
15	Grid (Fold Position Adjustment)	
16	Ladder	
17	Controller Test Pattern	N/A

# **Image Quality Specifications**

The following steps are used to set up the machine for the purpose of making test pattern copies to judge output image color density, balance, and registration.

- 1. Set the following Customer Mode Settings to the positions listed:
  - a. Output Color Full Color
  - b. Original Type Photo & Text / Halftone
  - c. Lighter/Darker Auto Contrast
  - d. Variable Color Balance Normal
  - e. Color Saturation Normal
  - f. Sharpness Normal
- 2. Place the Color Test Pattern on the platen. Load 11" X 17 or A3 paper into Tray 1. Make a copy of the test pattern.
- 3. Compare the copy to the test pattern. Refer to Figure 2 and Table 1 for this evaluation.

AREA (Fig. 2)	Check for the Following Results
A	Text Reproduction. Each of the seven sentences in this area are fully repro- duced with no missing letters or portions of letters. The sentences are repro- duced in Black, Cyan, Magenta, Yellow, Red, Green and Blue.
В	Color Registration. The patterns in location B should be properly registered to provide Black, Red, Green and Blue lines.
С	Front to Rear Density. The density of both the low density and high density bands should be uniform from front to rear. This can be tested by folding the copy in the center and comparing the front side of the copy to the rear side of the copy at location C. Both the high density and low density locations should exhibit even front to rear density.
D	Color Gradation. This area should exhibit a decreasing density of each of the colors from 100% density to 5% density. In a properly adjusted machine, the 10% patches should be visible and the 5% patches should be barely visible or not visible on the test pattern copy (except for the bottom row).
E	Routine Color. Location E represents three general tests for the machine to reproduce colors common to customer originals. Location A is a general skin tone test. Location B represents the color of grass or other common foliage. Location C represents the color of the sky.
F	Photo Gradation. Location F is not used for any copy quality evaluation on this product.
G	IIT Calibration Patches. These patches are scanned for IIT Calibration during the dC945 IIT Calibration portion of Max Setup.
Н	100 Lines/Inch Image. A Moire defect will show on this image. Moire on a 100 Line/Inch image is within specification.
I	175 Lines/Inch Image. This image is used to test for Moire. Depending on the degree of the defect, moire seen on this image should be considered out of specification.

#### **Table 1 Color Specifications Check Locations**

Registration and border deletions are checked using the Step Scales on the Geometric Test Pattern, an example of which is shown in Figure 1. All of the scales are 20mm in height, and are made up of four 5mm steps. Step 1 will be described as at the top of the Step Scale, and Step 4 will be described as at the bottom.



#### Figure 1 Step Scales

Each Step Scale is positioned for a particular paper size and orientation. Table 2 indicates the appropriate Step Scales to use for the various paper sizes, orientations and measurement locations.

Table 2	Goomotric	Chockout -	Ston	Sealo	Data
Table Z	Geometric	Checkout -	Step	Scale	Data.

Paper Size	Orientation	To check:	Step Scales to use (refer to Figure 1)
11x17	SEF	Lead Edge Side Edge Trail Edge	LE1 through LE3 SE1 through SE4 (top); SE5 and SE8 (bottom) TE3
A3	SEF	Lead Edge Side Edge Trail Edge	LE 1 through LE3 SE1 through SE4 (top); SE6 and SE7 (bottom) TE4
8.5x11	SEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE9 (bottom) TE5
A4	LSEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE10 (bottom) TE6
8.5x11	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE1 and 2 (bottom) SE6 and SE7 (top) TE 2
A4	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE5 (top); SE1 and SE2 (bottom) TE1

1. Set the following Customer Mode Settings to the positions listed:

Output Color - Full Color

- Original Type Photo & Text / Halftone
- Lighter/Darker Auto Contrast
- Color Saturation Normal
- Variable Color Balance Normal
- Sharpness Normal
- 2. Place Test Pattern 82E8220 on the platen and 24# Xerox Color Xpressions 11 X 17 (USCO), or 90 GSM Colortech A3 (XL) paper in Tray 1. Make a copy of the test pattern.
- 3. Follow the directions in Table 3 to determine if the machine registration is within specification.

Table	3 Test Pattern Image Data Locations for Geometric Specifications
GEOMETRIC AREA	CHECK PERFORMED
Magnification	Locate the 300mm line running from near LE1 to the trail edge of the 1.8 lp ladder. Locate the 200mm line running from near LE1 to near LE3. Make a copy. The measurements should be:. • Left to Right.: 300mm ±1.8mm • Front to Rear: 200mm ±1.2mm
Resolution	<ul> <li>Observing the targets on the test pattern copy at locations R1 through R8, the line pairs specified below are clearly visible for the magnification value indicated:</li> <li>70%: 3.0 lp/mm</li> <li>100% through 400%: 4.3 lp/mm</li> </ul>
Lead Edge Registration	<ul> <li>Measure from the lead edge of the paper to the top of Step 3 on the LE2 Step Scale. The measurement should be:</li> <li>Trays 1 through 4: 10mm ±1.5mm (±1.9mm for 2nd side of duplex job)</li> <li>Tray 5: 10mm ±2.2mm</li> </ul>
Side Edge Registration	Measure from the side edge of the paper to the top of Step 3 on the SE2 and SE3 Step Scales. The distance should be within the following tolerance: Trays 1 through 4: 10mm ±2.0mm (±2.4mm for 2nd side of duplex job) Tray 5: 10mm ±2.4mm
Lead Edge Skew	<ul> <li>For skew from front to rear, the distance from the lead edge of the paper to the targets at LE1 and LE3 are measured. The measurements must match each other to within the tolerance below.</li> <li>Trays 1 through 4: within ±1.5mm (±2.0mm for 2nd side of duplex job)</li> <li>Tray 5: within ±2.0mm</li> </ul>
Side Edge Skew	<ul> <li>For skew from left to right, the distance from the side edge of the paper to the targets at SE1 and SE4 are measured. They must match each other to within the tolerance below:</li> <li>Trays 1 through 4: within ±3.0mm (±4.0mm for 2nd side of duplex job)</li> <li>Tray 5: within ±4.0mm</li> </ul>
Line Density	This parameter is measured on the two 0.7G Text Blocks on the test pattern copy. The machine should reproduce all of the characters shown in the block on the output copy.
Solid Repro- duction	This specifies the desired standard for reproduction of solid gray images at 1.0 K. The 1.0 K blocks on the output copy should reproduce with minimal mottle or graininess.

Initial Issue

#### Table 3 Test Pattern Image Data Locations for Geometric Specifications

GEOMETRIC AREA	CHECK PERFORMED
Low Contrast	This specifies the desired standard for reproduction of low density images.
Reproduction	The machine should reproduce all of the text in the 0.2 G Text Blocks on the
	output copy.





# Things to Note for Image Quality Restrictions

#### Table 1 IQ Restrictions

No.	Image Quality Restrictions	Details
1	Roll Marks	Depending on the paper, there may be rubber roll traces or toner wax component stuck in the paper feed direction when perform- ing 2 Sided print or changing the output destination after continu- ous printing. This is more likely to occur with gloss paper and transparencies.
2	Transparency Blocking	When printing Transparencies continuously and then leaving them on the Exit Tray for a long time, they may adhere to each other and result in uneven gloss or image peel-off. Specifically, it is more likely to occur when printing 20 or more sheets continu- ously.
3	Condensation Copy	Sometimes patches of water droplets may be found on paper that is printed right after machine start up.
4	Side 2 Blank Areas (caused by water droplets)	These blank areas may appear on Side 2 of A3 paper of 157gsm or more. It is especially visible on gloss paper.
5	Scratched Transparency	When printing on Transparencies, minor scratches may appear in the fast scan direction.
6	Corrugation Lines	Depending on the paper, there may be Pinch Roll traces or minor scratches in the paper feed direction. This is more likely to occur with special paper such as Gloss.
7	Gloss Uneven Side 2	When performing 2 Sided print on Gloss, uneven image may appear on Side 2.
8	Background on Gloss	Background level on Gloss is higher than that on Plain.
9	Smear on Heavyweight	When using Heavyweight, smear may appear at the position 130mm away from the paper lead edge.
10	Rough Black	Depending on the paper type, rough images may occur to some extent.
11	Moist Paper Transfer Failure	This will occur when the paper moisture content increases.
12	Toner Contamination at Lead/ Trail Edge	Slight contamination due to toner has occurred at Lead/Trail Edge.
13	Uneven Streaks in Paper Feed Direction	Uneven streaks may appear in the paper feed direction when per- forming high volume printing in a low humidity environment.
14	Side 2 Transfer Failure	The hue on Side 2 may become lighter when printing a high den- sity image in a low temperature and low humidity environment.
15	Trail Edge Transfer Failure	Rough image or blank areas may occur for images within 10mm (including margins) from the paper trail edge.
16	MWS (Side2) (Micro White Spots)	Micro white spots may appear on Side 2 in a low humidity environment.
17	Moire	When copying, the Moire may appear due to interference with the halftone document. The appearance of Moire depends on the number of lines and angle of the document, as well as the magnification ratio.

Table 1 IQ Restrictions

No.	Image Quality Restrictions	Details
18	Density Fluctuation Right After Power ON/Change in Environ- ment	In machines set to B/W Priority, the very first color print after power ON may, to some extent, have incorrect color density.
19	Fingerprints	When loading paper, handle it with care and try not to touch the print side. Contamination to the print side will affect the print result. If you wish to obtain the best print results, wear finger cots or gloves so as not to leave any marks on the print side.
20	Color Lines	Color Lines may appear on paper that has lots of paper dust.
21	Vapor	White vapor may leak nearby the top of the LH Cover when print- ing in a low temperature and low humidity environment using Heavyweight Paper.

# **4 Repairs and Adjustments**

#### **Chain 1 Electrical Components**

REP 1.1 HVPS (1st/2nd/DTC)	4-5
REP 1.2 HVPS (Dev) 7845/55	4-5
REP 1.3 BP PWB	4-6
REP 1.4 (SCC) Motor Driver Sub PWB	4-9
REP 1.5 (SCC) (ISC) MCU-PF PWB	4-10
REP 1.6 (SCC) (ISC) Motor Driver Main PWB	4-10
REP 1.7 (SCC) IH Driver PWB (7830/7835)	4-12
REP 1.8 (SCC) IH Driver PWB (7845/7855)	4-14
REP 1.9 HVPS (Dev/BCR) 7830/35 HVPS (BCR)7845/55	4-16
REP 1.10 SBC Unit	4-17
REP 1.11 SBC SD Card	4-18
REP 1.12 Single Board Controller (SBC) PWB	4-19
REP 1.13 System Disk Drive	4-21
REP 1.14 Opening/Closing the PWB Chassis Unit	4-23
REP 1.15 SBC SIM Card	4-24

#### Chain 4 Drive

REP 4.1 Main Drive Assembly (7830/35)	4-27
REP 4.2 Main Drive Assembly (7845/55)	4-28
REP 4.3 Drum/Developer Drive Assembly (7830/35)	4-30
REP 4.4 Drum/Developer Drive Assembly (7845/55)	4-32

# **Chain 5 DADF**

REP 5.1 DADF (2 Pass)	4-35
REP 5.2 DADF Platen Cushion (2 Pass)	4-36
REP 5.3 DADF Front Cover (2 Pass)	4-37
REP 5.4 DADF Rear Cover (2 Pass)	4-37
REP 5.5 DADF Feeder Assembly (2 Pass)	4-39
REP 5.6 DADF PWB (2 Pass)	4-40
REP 5.7 Left Counter Balance (2 Pass)	4-42
REP 5.8 Right Counter Balance (2 Pass)	4-43
REP 5.9 DADF Document Tray (2 Pass)	4-44
REP 5.10 Top Cover (2 Pass)	4-46
REP 5.11 Harness Guide and Wire Harness (2 Pass)	4-46
REP 5.12 DADF Registration Motor (2 Pass)	4-48
REP 5.13 DADF Feed Motor (2 Pass)	4-49
REP 5.14 Reg Chute (2 Pass)	4-50
REP 5.15 Retard Chute (2 Pass)	4-51
REP 5.16 Takeaway Roll (2 Pass)	4-51
REP 5.17 Sensor Bracket (2 Pass)	4-54
REP 5.18 Nudger Roll, Feed Roll (2 Pass)	4-54
REP 5.19 Retard Roll (2 Pass)	4-56
Chain 5 DADF	
REP 55 1 DADE (1 Pass)	4-57

REP 55.4 DADF Rear Cover (1 Pass)	4-60
REP 55.5 DADF Feeder Assembly (1 Pass)	4-62
REP 55.6 DADF PWB (1 Pass)	4-65
REP 55.7 DD PWB (1 Pass)	4-66
REP 55.8 Left Counter Balance (1 Pass)	4-69
REP 55.9 Right Counter Balance (1 Pass)	4-71
REP 55.10 DADF Document Tray (1 Pass)	4-72
REP 55.11 Top Cover (1 Pass)	4-73
REP 55.12 Harness Guide and Wire Harness (1 Pass)	4-74
REP 55.13 DADF Regi Motor (1 Pass)	4-77
REP 55.14 DADF Feed Motor (1 Pass)	4-78
REP 55.15 DADF Pre Regi Motor (1 Pass)	4-79
REP 55.16 Regi Chute (1 Pass)	4-80
REP 55.17 Retard Chute (1 Pass)	4-80
REP 55.18 Out Chute (1 Pass)	4-81
REP 55.19 CIS (1 Pass)	4-83
REP 55.20 Sensor Bracket (1 Pass)	4-85
REP 55.21 Nudger Roll, Feed Roll (1 Pass)	4-86
REP 55.22 Retard Roll (1 Pass)	4-88
Chain 6 IIT	
Cildill 0 III DED 6.4 Distan Cushian	4 00
REP 0.1 Platen Clustion	4-69
REP 6.2 Platen Glass	4-89
REP 6.3 CONTROL Panel	4-90
REP 0.4 USB Cable	4-93
REP 6.5 Console Assembly	4-93
REP 6.6 CCD Lens Assembly	4-97
REP 6.7 Front/Rear Carriage Cable	4-99
REP 6.8 Carriage Motor	4-102
REP 6.9 LED Lamp PWB.	4-103
REP 6.10 LED Lamp Wire Harness	4-105
REP 6.11 Light Guide	4-108
REP 6.12 III PWB	4-109
REP 6.13 USB Connector	4-111
REP 6.14 III Rear Cover	4-112
Chain 7 Paper Feed	
REP 7.1 Tray 1 Feeder Assembly	4-115
REP 7.2 Tray 1 Feed/Retard/Nudger Roll	4-116
REP 7.3 Tray 2 Feeder Assembly (3TM)	4-116
PED 7 4 Tray 3 Feeder Assembly (3TM)	
	4-118

REP 7.7 Tray 3 Feed/Retard/Nudger Roll (3TM) ...... 4-121 REP 7.8 Tray 4 Feed/Retard/Nudger Roll (3TM) ...... 4-121

REP 55.1 DADF (1 Pass)	4-57
REP 55.2 DADF Platen Cushion (1 Pass)	4-58
REP 55.3 DADF Front Cover (1 Pass)	4-59

ECAT Issue

REP 7.12 Tray Cable (TTM)	4-123
REP 7.13 Tray 4 Feeder (TTM)	4-124
REP 7.14 Tray 2 Feeder (TTM)	4-127
REP 7.15 Tray 3 Feeder (TTM)	4-128
REP 7.16 Tray 2 Feed/Retard/Nudger Roll (TTM)	4-130
REP 7.18 Tray 3 Feed/Retard/Nudger Roll (TTM)	4-130
REP 7.19 Tray 4 Feed/Retard/Nudger Roll (TTM)	4-131
REP 7.20 Tray Module PWB (TTM)	4-131
REP 7.21 Tray 5	4-132
REP 7.22 Tray 5 Feed/Retard/Nudger Roll	4-133
REP 7.23 Tray 5 Paper Size Sensor	4-134
REP 7.24 Registration Transport Assembly	4-135

# **Chain 9 Xerographics**

REP 9.1 Transfer Belt Cleaner Assembly	4-137
REP 9.2 IBT Assembly	4-138
REP 9.3 Transfer Belt	4-141
REP 9.4 TR0 Seal	4-143
REP 9.5 Drum	4-144
REP 9.6 Erase Lamp Unit (K)	4-145
REP 9.7 Erase Lamp Unit (Y, M, C)	4-148
REP 9.8 Agitator Motor Assembly	4-152
REP 9.9 2nd BTR Assembly	4-153
REP 9.10 LED Print Head Assembly (Y, M, C, K)	4-154
REP 9.11 LPH Cable Assembly (7830/35)	4-154
REP 9.12 LPH Cable Assembly (7845/55)	4-157
REP 9.13 Toner Dispense Motor Assembly	4-160
REP 9.14 Developer Housing Assembly (Y, M, C, K)	4-162
REP 9.15 Developer	4-167
REP 9.16 MOB ADC Assembly	4-170

# Chain 10 Fuser/Post-Fuser Transport

REP 10.2 Duplex Assembly	4-174
REP 10.1 Fuser	4-173

## Chain 11 Exit/OCT

REP 11.1 Exit/OCT 1 Assembly	4-177
REP 11.2 Exit 2 Assembly	4-178

# Chain 14 Covers

REP 14.1 L/H Cover Unit	4-179
REP 14.2 Top Cover	4-180
REP 14.3 Rear Lower Cover	4-182
REP 14.4 Opening/Closing the PWB Chassis Unit	4-183

# Chain 19 High Capacity Feeder

4-REP 19.1 HCF Tray 6	-185
REP 19.2 HCF Feeder 4	-185
REP 19.3 HCF Un-docking 4-	-186
REP 19.4 HCF Tray Cables 4-	-187
REP 19.5 HCF Feed, Nudger, Retard Rolls 4-	-193
REP 19.6 HCF Feed Shaft 4-	-194
REP 19.7 HCF Retard Lever Spring 4-	-195

REP 19.8 HCF Nudger Bracket/Nudger Lever/Torsion Spring	4-196
REP 19.9 HCF Casters	4-196
REP 19.10 HCF Takeaway Roll	4-197
REP 19.11 HCF PWB	4-197
REP 19.12 HCF Feed Motor	4-198

# **Chain 21 Professional Finisher**

REP 21.1 (Pro) Finisher Front Door	4-199
REP 21.2 (Pro) Finisher Rear Upper Cover	4-199
REP 21.3 (Pro) Finisher Rear Lower Cover	4-200
REP 21.4 (Pro) Finisher Top Cover	4-200
REP 21.5 (Pro) Finisher Front Top Cover	4-201
REP 21.6 (Pro) Finisher Top Tray	4-202
REP 21.7 (Pro) Finisher Eject Cover	4-202
REP 21.8 (Pro) Finisher Tray Spring Guide	4-203
REP 21.9 (Pro) Finisher Inner Cover	4-204
REP 21.10 (Pro) Finisher Left Top Cover	4-205
REP 21.11 (Pro) Finisher	4-205
REP 21.12 (Pro) Finisher H-Transport Assembly	4-207
REP 21.13 (Pro) Finisher Punch Frame Assembly	4-208
REP 21.14 (Pro) Finisher Stapler Assembly	4-211
REP 21.15 (Pro) Finisher Stapler Rail	4-212
REP 21.16 (Pro) Finisher Booklet Maker	4-212
REP 21.17 (Pro) Finisher Booklet Stapler	4-213
REP 21.18 (Pro) Finisher Compiler Tray	4-213
REP 21.19 (Pro) Finisher Stacker Tray Position	4-215
REP 21.20 (Pro) Finisher Paddle Shaft	4-215
REP 21.21 (Pro) Finisher Stacker Drive Belt	4-216
REP 21.22 (Pro) Finisher Buffer Path Sensor	4-217
REP 21.23 (Pro) Finisher Gate Sensor	4-217
REP 21.24 (Pro) Finisher Top Tray Full Sensor	4-218
REP 21.25 (Pro) Finisher Buffer Roll	4-218
REP 21.26 (Pro) Finisher Bottom Buffer Chute Assembly	4-220
REP 21.27 (Pro) Finisher H-Transport Drive Belt	4-221
REP 21.28 (Pro) Finisher Eject Chute Assembly	4-222
REP 21.29 (Pro) Finisher PWB	4-223

# **Chain 22 Integrated Finisher**

REP 22.1 Integrated Office Finisher	4-225
REP 22.2 (Int) Paddle Belt	4-226
REP 22.3 (Int) Sub Paddle Solenoid	4-228
REP 22.5 (Int) Staple Assembly	4-230
REP 22.6 (Int) Set Clamp Home Sensor	4-231
REP 22.7 (Int) Exit Roll Assembly	4-232
REP 22.8 (Int) Pinch Roll	4-234
REP 22.9 (Int) Finisher Entrance Sensor	4-234
REP 22.10 (Int) Compiler Exit Sensor	4-236
REP 22.11 (Int) Main Paddle Shaft Assembly	4-237
REP 22.12 (Int) Lower Chute Assembly	4-239
REP 22.13 (Int) Entrance Roll Assembly	4-241
REP 22.14 (Int) Upper Chute Assembly	4-243
REP 22.15 (Int) Finisher PWB	4-245

REP 22.16 (Int) Stacker Tray Assembly	4-245
REP 22.17 (Int) Stacker Shaft Assembly	4-247
REP 22.18 (Int) Stacker Motor	4-249
REP 22.19 (Int) Stacker Sensor	4-251
REP 22.20 (Int) Compiler Assembly	4-251
REP 22.21 (Int) Set Clamp Shaft	4-253
REP 22.22 (Int) Eject Belt	4-255
REP 22.23 (Int) Eject/Set Clamp Motor Assembly	4-256
REP 22.24 (Int) Rear Tamper Home Sensor	4-258
REP 22.25 (Int) Eject Shaft Assembly	4-259
REP 22.26 (Int) Front /Rear Tamper Motor Assembly	4-261
REP 22.27 (Int) Front Tamper Home Sensor	4-262
REP 22.28 (Int) Eject Clamp Home Sensor	4-264
REP 22.29 (Int) Stack Height Sensor	4-265

# Chain 23 Office Finisher LX

REP 23.1 (LX) H-Transport Assembly	4-267
REP 23.2 (LX) Hole Punch Assembly	4-267
REP 23.3 (LX) H-Transport Belt	4-268
REP 23.4 (LX) H-Transport Motor	4-268
REP 23.5 (LX) Finisher Undocking	4-269
REP 23.6 (LX) Front Cover Assembly	4-270
REP 23.7 (LX) Rear Upper Cover	4-270
REP 23.8 (LX) Rear Lower Cover	4-271
REP 23.9 (LX) Eject Cover	4-271
REP 23.10 (LX) Foot Cover	4-273
REP 23.11 (LX) Stacker Lower Cover	4-274
REP 23.12 (LX) Stacker Upper Cover	4-274
REP 23.13 (LX) Stack Height Sensors 1 and 2	4-275
REP 23.14 (LX) Sub Paddle Solenoid Assembly	4-275
REP 23.15 (LX) Stapler Motor	4-276
REP 23.16 (LX) Finisher Stapler Assembly	4-277
REP 23.17 (LX) Compiler Tray Assembly	4-278
REP 23.18 (LX) Crease Assembly	4-288
REP 23.19 (LX) Stacker Elevator Motor	4-289
REP 23.20 (LX) Stacker Tray	4-293
REP 23.21 (LX) Eject Belt	4-293
REP 23.22 (LX) Eject Motor Assembly	4-294
REP 23.23 (LX) Finisher PWB	4-294
REP 23.24 (LX) Finisher LVPS	4-295
REP 23.25 (LX) Eject Motor	4-296
REP 23.26 (LX) Front/Rear Tamper Motor	4-296
REP 23.27 (LX) Front/Rear Tamper Home Sensors	4-297
REP 23.28 (LX) Compiler No Paper Sensor	4-297
REP 23.29 (LX) Front/Rear Carriage Assembly	4-298
REP 23.30 (LX) Booklet PWB	4-299
REP 23.31 (LX) Booklet Maker Assembly	4-300
REP 23.32 (LX) Booklet Front Cover	4-302
REP 23.33 (LX) Booklet Rear Cover	4-303
REP 23.34 (LX) Booklet Top Cover	4-304
REP 23.35 (LX) Booklet PWB Cover	4-305
REP 23.36 (LX) Booklet Left Cover	4-305

45	REP 23.37 (LX) Booklet Front/Rear Stapler	4-306
47	REP 23.38 (LX) Booklet Stapler Move Motor	4-308
49		
51	Chain 4	
51	ADJ 4.1 UI Diagnostic Tests	4-309
53	Chain 5 DADF	
55	ADJ 5.1 DADE Lead-Skew Adjustment	4-311
56	ADJ 5 2 DADE Side Registration	4-313
58	ADJ 5.3 DADE Lead Edge Registration (2 Pass)	4-315
59	ADJ 5.4 DADF Lead Edge Registration (1 Pass)	4-317
61		
62	Chain 6 IIT	
64	ADJ 6.1 Full/Half Rate Carriage Position Adjustment	4-319
65	ADJ 6.2 IIT Lead Edge Registration	4-321
	ADJ 6.3 IIT Side Registration	4-322
67	ADJ 6.5 IIT Calibration	4-323
67	ADJ 6.6 Optical Axis Correction	4-324
68	Chain 7 Banar Food	
68 88	AD 17 1 Tray 5 (MSI) Guida Adjustment	1 225
69		4-325
70	Chain 9 Electrical/Xerographic	
70	ADJ 9.1 Lead Edge/Side Edge Registration	4-327
71	ADJ 9.2 Edge Erase Value Adjustment	4-329
 71	ADJ 9.3 ProCon On/Off Print Check	4-330
73	ADJ 9.5 Thin Line Correction Mode Adjustment	4-331
74	ADJ 9.6 LPH Exposure Amount Fine Adjustment	4-332
74	ADJ 9.7 ATC Sensor Setup	4-335
75	ADJ 9.8 Default Developer ATC Setup	4-336
75	ADJ 9.9 Registration Measurement Cycle	4-336
76	ADJ 9.10 Registration Control Setup Cycle	4-337
77	ADJ 9.11 Registration Control Sensor Check Cycle	4-337
78	ADJ 9.12 Copy Color Balance Manual Adjustment	4-338
88	ADJ 9.13 TRC Manual Adjustment	4-339
89	ADJ 9.14 Toner Density Setup (Tone Up/Down)	4-340
93	ADJ 9.16 MAX Setup	4-340
93	Chain 12 Einichara	
94	AD   12 A Drofossional Finisher Leveling	4 0 4 4
94	ADJ 12.1 Professional Finisher Decklet Fold Skow	4-341
95	ADJ 12.2 FIDESSIDIA FINISTER DOUKELFUL SKEW	4-342
96	ADJ 12.3 FIGUESSIGNAL FINISHER DOUKIEL FOR FOSILION	4-040
96	ADJ 12.4 FIVIESSIONAL FINISHEL DOUKIEL STAPLE POSITION (Staple ON FOID)	4-344
97	ADJ 12.5 FIVIESSIONAL FINISHEL DOUKIEL STAPIE ANGINIENL	4-343
07		4-040

ADJ 12.7 Professional Finisher Booklet Fold Position (Fine Adjustment)	4-349
ADJ 12.8 Professional Finisher Booklet Staple Position (Staple on Fold Fine Adjustment	t) 4-
350	
ADJ 12.9 Finisher LX Hole Punch Position	4-351
ADJ 12.10 Finisher LX Booklet Crease/Staple Position	4-352

# REP 1.1 HVPS (1st/2nd/DTC)

# Parts List on PL 6.2

# Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

# CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the PWB Chassis Unit. (REP 1.14)
- 4. Remove the HVPS (1st/2nd/DTC). (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the screws (M3x8: x3).
  - c. Remove the screws (M3x6: x2).
  - d. Remove the HVPS (1st/2nd/DTC).



Figure 1 Remove the HVPS

# Replacement

1. To install, carry out the removal steps in reverse order.

# REP 1.2 HVPS (Dev) 7845/55

# Parts List on PL 5.3

# Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the PWB Chassis Unit. (REP 1.14)
- 4. Disconnect the connector of the HVPS (Dev). (Figure 1)
  - a. Release the wire harness from the Harness Guide.
  - b. Disconnect the connector.
  - c. Remove the Tapping Screw.



Figure 1 Disconnect the connector

- 5. Remove the HVPS (Dev). (Figure 2)
  - a. Release the hooks (x2).
  - b. Remove the HVPS (Dev) in the direction of the arrow.



Figure 2 Remove the LVPS

# Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 1.3 BP PWB**

Parts List on PL 18.2A/PL 18.2B

Removal

# WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

# CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

# CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

**NOTE:** Do not replace the BP PWB, MCU-PF PWB and CD Card at the same time because they contain information such as Billing.

- 1. Remove the Control Unit Connector Cover. (PLX.X)
- 2. Disconnect all cables connected to the Control Unit.
- 3. Pull out the Control Unit. (Figure 1)
  - a. Remove the screw (x2).
  - b. Remove the screw.
  - c. Open the handle and pull out the Control Unit.



Figure 1 Pull out the Control Unit

- 4. Remove the Rear Upper Cover. (PL 19.3)
- 5. Remove the SBC Cover. (Figure 2)
  - a. Remove the screw (x2).
  - b. Remove the SBC Cover in the direction of the arrow.



j0kt41806

Figure 2 Remove the SBC Cover

- 6. Open the PWB Chassis Unit.
- 7. Disconnect the connector of the BP PWB. (Figure 3)
  - a. Disconnect the connectors (x2).



Figure 4 Disconnect the connector of the BP PWB

- 9. Remove the Bracket. (Figure 5)
  - a. Remove the screws (x7).
  - b. Remove the Bracket.



j0kt41807 Figure 3 Disconnect the connector of the BP PWB

- 8. Disconnect the connector of the BP PWB. (Figure 4)
  - a. Disconnect the connectors (x3).
  - b. Release the hook and disconnect the connectors (x3).

**NOTE:** Take care to not pull too forcefully as it may damage the hook.



j0kt41809

Figure 5 Remove the Bracket

- 10. Remove the Bracket. (Figure 6)
  - a. Remove the screw (x3) that secure the BP PWB.
  - b. Remove the screw (x3) that secure the bracket.
  - c. Remove the Bracket.



Figure 6 Remove the Bracket

- 11. Remove the BP PWB. (Figure 7)
  - a. Remove the screws (x3).
  - b. Disconnect the connector at the back of the BP PWB and remove the BP PWB.



Figure 7 Remove the BP PWB

# Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When replacing the BP PWB, remove the EEP ROM from the old BP PWB and install it onto the new one. (Figure 8)



j0kt41812 Figure 8 Remove the EEP ROM from the old BP PWB

# REP 1.4 (SCC) Motor Driver Sub PWB

Parts List on PL 18.2A/PL 18.2B

Removal

# WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

# CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

- 1. Remove the IIT Rear Cap Cover. (PL 1.1)
- 2. Remove the Control Unit Connector Cover. (PL X.X)
- 3. Remove the Filter Cover. (PL X.X)
- 4. Remove the Rear Upper Cover. (PL X.X)
- 5. Remove the MCU Cover. (PL X.X)
- 6. Remove the Rear Lower Cover. (PL X.X)
- 7. Disconnect the Motor Driver Sub PWB connectors (x4). (Figure 1)
  - a. Disconnect the connector (x4).



j0kt41814

Figure 2 Remove the Motor Driver Sub PWB

# Replacement

1. To install, carry out the removal steps in reverse order.



j0kt41813

Figure 1 Disconnect the Motor Driver Sub PWB connectors

- 8. Remove the Motor Driver Sub PWB. (Figure 2)
  - a. Remove the screw (x4).
  - b. Disconnect the connector and remove the Motor Driver Sub PWB.
## REP 1.5 (SCC) (ISC) MCU-PF PWB

### Parts List on PL 18.2A/PL 18.2B

Removal

#### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

#### Do not get yourself hurt by a soldered part on the back of the PWB.

**NOTE:** Do not replace the MCU-PF PWB, BP PWB and SD Card at the same time because they contain information such as Billing.

- 1. Remove the IIT Rear Cap Cover. (PL X.X)
- 2. Remove the Control Unit Connector Cover. (PL X.X)
- 3. Remove the Filter Cover and Rear Upper Cover. (PL X.X)
- 4. Remove the Rear Lower Cover. (PL X.X)
- 5. Remove the MCU-PF PWB. (Figure 1)
  - a. Disconnect the connector at the back of the MCU-PF PWB and remove the MCU-PF PWB.

## REP 1.6 (SCC) (ISC) Motor Driver Main PWB

Parts List on PL 18.2A/PL 18.2B

Removal

### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

#### CAUTION

Static electricity may damage electrical parts. Always wear a wrist band during servicing. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

#### CAUTION

Do not get yourself hurt by a soldered part on the back of the PWB.

- 1. Remove the IIT Rear Cap Cover. (PL X.X)
- 2. Remove the Control Unit Connector Cover. (PL X.X)
- 3. Remove the Filter Cover. (PL X.X)
- 4. Remove the Rear Upper Cover. (PL X.X)
- 5. Remove the MCU Cover. (PL X.X)
- 6. Remove the Rear Lower Cover. (PL X.X)
- 7. Remove the MCU-PF PWB. (REP 1.5)
- 8. Disconnect the Motor Driver Main PWB connectors (x19). (Figure 1)
  - a. Disconnect the connector (x19).



j0kt41816

Figure 1 Remove the MCU-PF PWB

#### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 1 Disconnect the Motor Driver Main PWB connectors

- 9. Disconnect the Flexible Print Cables (x2). (Figure 2)
  - a. Disconnect the Flexible Print Cable (x2).



j0kt41819 Figure 2 Disconnect the Flexible Print Cables

- 10. Disconnect the Flexible Print Cables (x2). (Figure 3)
  - a. Disconnect the Flexible Print Cable (x2).



Figure 3 Disconnect the Flexible Print Cables

- 11. Remove the screws (x13) that secure the Motor Driver Main PWB. (Figure 4)
  - a. Remove the Spacer Screw (x4).
  - b. Remove the screw (x4).



Figure 4 Remove the screws

- 12. Remove the Motor Driver Main PWB. (Figure 5)
  - a. Disconnect the connector (x2) and remove the Motor Driver Main PWB.



Figure 5 Remove the Motor Driver Main PWB

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- When replacing the Motor Drive Main PWB, remove the EEPROM from the old Motor 2. Drive Main PWB and install it onto the new one. (Figure 6)



Figure 6 Remove the EEP ROM

j0kt41835

## REP 1.7 (SCC) IH Driver PWB (7830/7835)

Parts List on PL 18.3

Removal

### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

- 1. Open the PWB Chassis Unit. (REP 1.14)
- 2. Remove the IIT Rear Cover. (REP X.X)
- Disconnect the connector of the IH Driver PWB. (Figure 1) 3.
  - a. Remove the cable band.
  - b. Disconnect the connector (x2).



Figure 1 Disconnect the connector of the IH Driver PWB

- Remove the cover of the IH Driver PWB. (Figure 2) 4.
  - a. Remove the screw (x2).
  - b. Remove the cover of the IH Driver PWB.



Figure 2 Remove the cover of the IH Driver PWB

- 5. Disconnect the connector (x2) of the IH Driver PWB. (Figure 3)
  - a. Disconnect the connector (x2).



Figure 4 Remove the IH Driver PWB

### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 3 Disconnect the connector (x2) of the IH Driver PWB

- 6. Remove the IH Driver PWB. (Figure 4)
  - a. Remove the screw (x4).
  - b. Remove the IH Driver PWB.

# REP 1.8 (SCC) IH Driver PWB (7845/7855)

Parts List on PL 18.3

Removal

### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

- 1. Open the PWB Chassis Unit. (REP 1.14)
- 2. Disconnect the connector of the Sub LVPS. (Figure 1)
  - a. Disconnect the connector.



Figure 1 Disconnect the connector of the Sub LVPS

- 3. Remove the screws (x4) that secure the Sub LVPS. (Figure 2)
  - a. Remove the screw (x4).



Figure 2 Remove the screws

- 4. Remove the Sub LVPS. (Figure 3)
  - a. Raise the lower side of the Sub LVPS to remove the hook at the upper side of the Sub LVPS from the frame.



j0kt41829 Figure 3 Remove the Sub LVPS

- 5. Disconnect the connector of the IH Driver PWB. (Figure 4)
  - a. Remove the cable band.
  - b. Disconnect the connector (x2).



Figure 4 Disconnect the connectors

- 6. Remove the screws (x4) that secure the IH Driver PWB. (Figure 5)
  - a. Remove the screw (x4).



Figure 6 Move the IH Driver PWB

Disconnect the connector (x2) and remove the IH Driver PWB. (Figure 7)
a. Disconnect the connector (x2).



7. Move the IH Driver PWB. (Figure 6)

a. Release the clamp to move the IH Driver PWB.



Figure 7 Disconnect the connectors

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 1.9 HVPS (Dev/BCR) 7830/35 HVPS (BCR)7845/55

### Parts List on PL 18.6A (7830/35)

### Parts List on PL 18.6B (7845/55)

### Removal

NOTE: 7845/55 HVPS (Dev) (REP 1.2)

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Waste Toner Container (PL 8.2)
  - Right Cover (PL 19.3)
- 4. Remove the Tie Bar. (Figure 1)
  - a. Remove the screws (x4).
  - b. Remove the Tie Bar.



j0ki41807

Figure 1 Remove the Tie Bar

- 5. Disconnect the connectors (x2). (Figure 2)
  - a. Remove the cable band.
  - b. Disconnect the connectors (x2).



Figure 2 Disconnect the connectors

- 6. Remove the Bottle Guide Assembly. (Figure 3)
  - a. Remove the screws (x4).
  - b. Remove the Bottle Guide Assembly.



j0ki41809 Figure 3 Removing the Bottle Guide Assembly

7. [7830/35]:

Remove the HVPS (Dev/BCR). (Figure 4)

- a. Disconnect the connector.
- b. Remove the screws (x2).
- c. Hold onto the tabs (x2) of the Bracket and pull out the HVPS (Dev/BCR) in the direction of the arrow.



j0ki41830

Figure 4 Remove the HVPS (Dev/BCR)

#### 8. [7845/55]:

Remove the HVPS (BCR). (Figure 5)

- a. Disconnect the connector.
- b. Remove the screws (x2).
- c. Pull out and remove the HVPS (BCR).



Figure 5 Remove the HVPS (BCR)

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 1.10 SBC Unit

### Parts List on PL 35.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Ethernet Cable and the SBC Unit Connector Cover. (PL 19.3)
- 4. Disconnect all cables connected to the Control Unit.
- 5. Pull out the SBC Unit. (Figure 1)
  - a. Loosen the Thumbscrews (x2).
  - b. Loosen the handle Thumbscrew.
  - c. Open the handle and pull out the SBC Unit.



Figure 1 Pull out the SBC Unit

## REP 1.11 SBC SD Card

### Parts List on PL 35.2

### Preparation

- 1. If possible, go to dC361 and save NVM.
- 2. If possible, go to GP 13 and Clone Network Configurations.
- 3. If possible, print a configuration page.
- 4. If possible, record the Billing Meter contents. Replacing the SBC SD Card will clear the Billing meters. You will need to report this (GP 20).

### Removal

#### CAUTION

Serial number data is stored at three locations:

- MDM NVM PWB
- SBC SD Card
- IIT/IPS PWB.

If these boards are replaced one-at-a-time, the machine will automatically synchronize the data on the new PWB to match the other two. You must install the new PWB, switch on the power, wait for the numbers to synchronize, then switch off the power before replacing any other PWB.:

If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:

- 16-801.19
- 22-352

then you must perform dC132 to restore serial numbers/billing data.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Control Unit. (REP 1.10)
- 4. Remove the SD Card (Figure 1) by pushing in the card and releasing it to release the latch, then pulling it out after it ejects.



### Figure 1 Removing the SD Card

### Replacement

**NOTE:** When replacing the SD Card the machine will boot up in manufacturing mode. To change to a different mode please see below.

- 1. Install the SD Card (Figure 1) by pushing it in until it seats.
- 2. After reassembling the machine, switch on the power and run the install Wizard
  - a. Enter the UI Diagnostic (CSE) Mode.
  - b. Select the Adjustments tab, then select dC131 NVM Read/Write.
  - c. Change 616-014 to a value of 2 and reboot the machine.
- 3. Perform GP 9
- 4. Restore NVM (dC361).
- 5. Report Billing Meter resets (GP 20).

**NOTE:** Enablement of optional features may be lost when the SD Card is replaced. Go to GP 13 and restore Cloned Network Configurations.

## **REP 1.12 Single Board Controller (SBC) PWB**

### Parts List on PL 35.2

### Preparation

#### CAUTION

The AltBoot procedure (GP 9) that is required when replacing this component will delete all stored data on the System Disk Drive, including E-mail addresses, Xerox Standard Accounting data, and network configuration information. **ALWAYS** clone the machine (GP 13), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.

- 1. If possible, go to dC361 and save NVM to a USB drive.
- 2. If possible, print a configuration page.
- 3. If possible, go to GP 13 and clone the network configuration.

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress. If there are any jobs in progress, if possible wait until they complete, or inform the customer that the jobs will be lost.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the SBC Unit. (REP 1.10)
- 4. Remove the FAX PWB if present.
- 5. Remove the Fax PWB chassis (Figure 1).



Figure 1 Remove the Fax PWB and PWB chassis

6. Disconnect the Fax chassis ribbon cable (Figure 2).



Figure 2 Remove the Ribbon Cable

- 7. Remove the System Disk Drive (REP 1.13)
- 8. Remove the PXYIS PWB (7845/55) (Figure 3).



**NOTE:** RAM modules are not interchangeable; take note of the correct location for each.

9. Remove the System Memory and EPC Memory from the SBC PWB (Figure 4).



#### Figure 4 Removing the memory PWBs

- 10. Remove the SD Card from the SBC PWB (REP 1.11).
- 11. Remove the SIM Card from the SBC PWB (REP 1.15).

#### Replacement

- 1. Install the SIM Card onto the new SBC PWB (REP 1.15).
- 2. Install the SD Card onto the new SBC PWB (REP 1.11).
- 3. Install the System Memory and EPC Memory onto the new SBC PWB (Figure 4).
- 4. Install the PXYIS PWB (7845/55) (Figure 3).
- 5. Install the System Disk Drive (REP 1.13)
- 6. Install the Fax PWB chassis (Figure 2 and Figure 1).
- 7. After reassembling the machine, perform **Regular AltBoot** (GP 9).
- 8. Print a configuration page. Verify that all options are enabled.
- 9. Reload saved clone (GP 13).

Figure 3 Remove the PYXIS PWB (7845/55)

## **REP 1.13 System Disk Drive**

### Parts List on PL 35.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

The AltBoot procedure (GP 9) that is required when replacing this component will delete all stored data on the System Disk Drive, including E-mail addresses, Xerox Standard Accounting data, and network configuration information. **ALWAYS** clone the machine (GP 13), if possible, before performing AltBoot. If the machine failure is such that cloning is not possible, ensure that the customer is aware of the data loss.

- 1. If possible, go to GP 13 and clone the network configuration.
- 2. Press the Job Status button to check that there are no jobs in progress.
- 3. Switch off the power and disconnect the power cord.
- 4. Remove the SBC Unit. (REP 1.10)
- 5. Disconnect the connectors (3) at the Disk Drive and at the PWB.



Figure 1 Disconnecting the Disk Drive Connectors (3)

6. Remove the screws (4) (Figure 2).

**1** Remove the Screws (4)





Figure 2 Removing Replacing the Disk Drive

### Replacement

1. After positioning the Disk Drive inside the HDD chassis, install the 4 screws (Figure 3).

Figure 3 Removing Replacing the Disk Drive from the HDD chassis

- 2. Connect the connector to the Disk Drive.
- 3. After reassembling the machine, perform **Regular AltBoot** (GP 9).
- 4. Print a configuration page. Verify that all options are enabled.

## **REP 1.14 Opening/Closing the PWB Chassis Unit**

Parts List on PL 18.1

Removal

### WARNING

When turning OFF the power switch, make sure that the Data lamp turns OFF. Press the <Job Status> button to check that there are no jobs in progress/waiting in the queue. Turn OFF the power switch and make sure that the screen display turns OFF.

Turn OFF the main power switch and unplug the power plug.

- 1. Remove the Rear Upper Cover. (PL 19.3)
- 2. Disconnect all cables connected to the SBC Unit.
- 3. Remove the Rear Lower Cover. (PL 19.3))
- 4. Release the wire harness from the clamp. (Figure 1)
  - a. Release the wire harness from the clamps (x2).



j0kt41801

Figure 1 j0kt41801

- 5. Remove the cable from the Cable Guide (x3). (Figure 2)
  - a. Release the cable harness from the clamp.(x2).
  - b. Remove the cable from the Cable Guide (x3).



Figure 2 j0kt41802

Remove the screws that secure the PWB Chassis Unit. (Figure 3)
a. Remove the screws (x2).



j0kt41803

Figure 3 j0kt41803

Remove the screws that secure the PWB Chassis Unit. (Figure 4)
a. Remove the screws (x3).



### Figure 4 j0kt41804

- 8. Open the PWB Chassis Unit. (Figure 5)
  - a. Remove the screws (x3) and open the PWB Chassis Unit.



j0kt41805

#### Figure 5 j0kt41805

#### Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 1.15 SBC SIM Card**

### Parts List on PL 35.2

#### Preparation

If possible, print a configuration page.

#### Removal

#### CAUTION

If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:

- 303-397 SIM Card S/N mismatch
- 303-398 SIM Card data cannot be processed
- 303-406 SIM Card Speed does not match machine class
- 322-350-1 SW Detects a non-valid Xerox SIM
- 322-350-2 SW Detects a non-valid Xerox SIM
- 322-351-1 SIM Write failure
- 322-351-2 SIM Write failure
- 322-351-3 SIM Write failure
- No-Run RAP Machine speed information corrupted or not set

then you may need to obtain a replacement SIM Card (GP 26)..

Remove the SIM Card (Figure 1) by pulling it out of the socket. There is no latch mechanism.





#### Figure 1 Remove the SIM Card

#### Replacement

- 1. To replace the SIM Card, resinsert it into the slot (Figure 1). Ensure that the end of the SIM Card with the small tab is inserted into the machine first and that the arrow on the SIM Card and the arrow on the SBC PWB frame are aligned.
- 2. Reboot the machine.
- 3. If an error is encountered, it may be necessary to replace the SIM Card. GP 26 provides a process for obtaining a replacement SIM Card.
- 4. Print a configuration page (GP 6) if one did not print when the machine restarted.
- Verify that all customer options are correct. If they are not, it may be necessary to replace the SIM Card with one that will enable the correct options for that particular customer (GP 26).

# REP 4.1 Main Drive Assembly (7830/35)

### Parts List on PL 3.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Lower Cover. (REP 14.3)
- 4. Open the PWB Chassis Unit. (REP 14.4)
- 5. Remove the Takeaway Clutch. (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screws (x2).
  - d. Remove the Bracket and Takeaway Clutch.



Figure 1 Remove the Takeaway Clutch

- 6. Remove the Main Drive Assembly. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



Figure 2 Remove the Main Drive Assy

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the Takeaway Clutch, align the bosses (x4) of the bearing to the installation holes. (Figure 3)



Figure 3 Install the Takeaway Clutch

3. When installing the Bracket, insert the Bracket into the tab of the Takeaway Clutch. (Figure 4)



Figure 4 Install the Bracket

## REP 4.2 Main Drive Assembly (7845/55)

Parts List on PL 3.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Lower Cover. (REP 14.3)
- 4. Open the PWB Chassis Unit. (REP 14.4)
- 5. Remove the Takeaway Motor. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the screws (x3).
  - d. Release the clamp.
  - e. Move the wire harness in the direction of the arrow.
  - f. Remove the screw.
  - g. Remove the Takeaway Motor.



Figure 1 Remove the Takeaway Motor

- 6. Remove the gear and shaft. (Figure 2)
  - a. Remove the gear and shaft.



Figure 2 Remove the gear and shaft

- 7. Remove the Main Drive Assembly. (Figure 3)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



Figure 4 Install the gear and shaft

3. When installing the Takeaway Motor, align the shaft to the hole of the bearing. (Figure 5)



Figure 3 Remove the Main Drive Assy

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the gear and shaft, align the bosses (x4) of the bearing to the installation holes. (Figure 4)



Figure 5 Install the Takeaway Motor

# REP 4.3 Drum/Developer Drive Assembly (7830/35)

### Parts List on PL 3.3A

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Drum (Y, M, C, K). (REP 9.5)
- 4. Remove the Rear Lower Cover. (REP 14.3)
- 5. Open the PWB Chassis Unit. (REP 14.4)
- 6. Remove the HVPS (06A2). (REP 1.1)
- 7. Move the Harness Holder. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Release the hook and move the Harness Holder.



joki40 Figure 1 Move the Harness Holder

- 8. Move the Harness Holder. (Figure 2)
  - a. Release the wire harness from the Harness Holder.
  - b. Disconnect the connectors (x2).
  - c. Disconnect the connectors (x2).
  - d. Release the hook and move the Harness Holder.



Figure 2 Move the Harness Holder

- 9. Remove the Rear Bottom Fan. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Rear Bottom Fan.



Figure 3 Remove the Rear Bottom Fan

- 10. Slide the Bracket. (Figure 4)
  - a. Remove the screws (x3).
  - b. Slide the Bracket.

**NOTE:** When placing the Drum/Dev Drive Assembly on the floor, place it with its Motor section facing downwards. (Figure 6)



Figure 4 Slide the Bracket

- 11. Remove the Drum/Dev Drive Assembly. (Figure 5)
  - a. Remove the screws (x6).
  - b. Remove the Drum/Dev Drive Assembly.



j0ki40313 Figure 6 Place the Motor section facing downwards

### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 5 Remove the Drum/Dev Drive Assy

# REP 4.4 Drum/Developer Drive Assembly (7845/55)

### Parts List on PL 3.3B

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Drum (Y, M, C, K). (REP 9.5)
- 4. Remove the Rear Lower Cover. (REP 14.3)
- 5. Open the PWB Chassis. (REP 14.4)
- 6. Remove the LVPS (Dev). (REP 1.2)
- 7. Remove the HVPS (06A2). (REP 1.1)
- 8. Move the Harness Holder. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Release the hook and move the Harness Holder.



Figure 1 Move the Harness Holder

- 9. Move the Harness Holder. (Figure 2)
  - a. Release the wire harness from the Harness Holder.
  - b. Disconnect the connectors (x2).
  - c. Disconnect the connectors (x4).
  - d. Release the hook and move the Harness Holder.



Figure 2 Move the Harness Holder

- 10. Remove the Rear Bottom Fan. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Rear Bottom Fan.



Figure 3 Remove the Rear Bottom Fan

- 11. Slide the Bracket. (Figure 4)
  - a. Remove the screws (x3).
  - b. Slide the Bracket.

**NOTE:** When placing the Drum/Dev Drive Assembly on the floor, place it with its Motor section facing downwards. (Figure 6)



Figure 4 Slide the Bracket

- 12. Remove the Drum/Dev Drive Assembly. (Figure 5)
  - a. Remove the screws (x6).
  - b. Remove the Drum/Dev Drive Assembly.



Figure 5 Remove the Drum/Dev Drive Assy



Figure 6 Place the Motor section facing downwards

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 5.1 DADF (2 Pass)

### Parts List on PL 51.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Loosen the screws (x2) and disconnect the connector. (Figure 1)
  - a. Disconnect the connector.



Figure 1 Disconnect the connector

- 4. Remove the DADF. (Figure 2)
  - a. Tilt the Counter Balance in the direction of the arrow and remove it from the installation holes.



Figure 2 Remove the DADF

### Replacement

1. To install, carry out the removal steps in reverse order.

5.2 DADF Original Detection Correction.)

- 2. Install the DADF. (Figure 3)
  - a. Insert the tabs of the Counter Balance into the grooves of the installation holes.



3. Perform the DADF Original Detection Correction when replacing the DADF. (Refer to ADJ

# **REP 5.2 DADF Platen Cushion (2 Pass)**

### Parts List on PL 51.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** The DADF Platen Cushion is pasted on with double sided adhesive tapes.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Remove the DADF Platen Cushion.



j0ki45107 Figure 1 Remove the DADF Platen Cushion

### Replacement

- 1. Paste on the DADF Platen Cushion. (Figure 2)
  - a. Place the DADF Platen Cushion on the Platen Glass.
  - b. Set the gap between the Reg Guide and Platen Guide.
  - c. Slowly lower the DADF and press it onto the DADF Platen Cushion.



Figure 2 Paste on the DADF Platen Cushion

# **REP 5.3 DADF Front Cover (2 Pass)**

### Parts List on PL 51.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Open the DADF.
- 5. Remove the DADF Front Cover. (Figure 1)
  - a. Remove the Tapping Screws (x4).
  - b. Remove the DADF Front Cover.



Figure 1 Remove the DADF Front Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 5.4 DADF Rear Cover (2 Pass)**

### Parts List on PL 51.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Turn the DADF Document Tray upside down. (Figure 1)
  - a. Open the Top Cover.
  - b. Turn the DADF Document Tray upside down.



j0ki45101 Figure 1 Turn the DADF Document Tray upside down

4. Remove the screws that secure the DADF Rear Cover. (Figure 2)a. Remove the screws (x2).



j0ki45102

Figure 2 Remove the screws

- 5. Open the DADF.
- 6. Release the hooks on the DADF Rear Cover. (Figure 3)
  - a. Release the hooks (x2).



Figure 4 Remove the DADF Rear Cover

### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 3 Release the hooks

- 7. Close the DADF gently.
- 8. Remove the DADF Rear Cover. (Figure 4)

a. Remove the DADF Rear Cover in the direction of the arrow.(A) Hook

# **REP 5.5 DADF Feeder Assembly (2 Pass)**

### Parts List on PL 51.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connectors (x4).
  - b. Remove the Tapping Screw and the Ground Wire.



j0ki45113 Figure 1 Disconnect the connectors

- 8. Remove the DADF Feeder Assembly. (Figure 2)
  - a. Remove the Tapping Screw.
  - b. Remove the DADF Feeder Assembly in the direction of the arrow.



Figure 2 Remove the DADF Feeder Assy

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Align the positioning pin of the Base Frame and the hole of the FADF Feeder Assembly. (Figure 3)



j0ki45115 Figure 3 Align the positioning pin

3. When installing the DADF Feeder Assembly to the Base Frame, check the following A and B. Figure 4)

(A)At the front: The Frame of the DADF Feeder Assembly is attached to the positioning pin of the Base Frame as shown in the figure.

(B)The Bracket of the DADF Feeder Assembly is attached to the support of the Base Frame as shown in the figure.



Figure 4 Check the following (A) and (B)

4. After a replacement, enter the Diagnostics Mode and use dC135 to reset the HFSI counter.

# REP 5.6 DADF PWB (2 Pass)

Parts List on PL 51.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 5.4)
- 4. Remove the Bracket. (PL 51.2)
- 5. Remove the DADF-IIT Cable from the guide of the Base Frame. (Figure 1)



Figure 1 Remove the DADF-IIT Cable

- 6. Disconnect the DADF PWB connectors. (Figure 2)
  - a. Disconnect the connectors (x7).



j0ki45118

Figure 2 Disconnect the connectors

- 7. Remove the DADF PWB. (Figure 3)
  - a. Remove the Tapping Screws (x2) and the Ground Wires (x2).
  - b. Remove the Tapping Screws (x2).
  - c. Remove the DADF PWB.



Figure 4 Switching the EEP ROM

3. Check the software version. Update the version if an old software is installed in the new PWB.



Figure 3 Remove the DADF PWB

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Switch the ROM on the new PWB with the EEP ROM from the old PWB. (Figure 4) This is because it stores the alignment value of the DADF.

## **REP 5.7 Left Counter Balance (2 Pass)**

### Parts List on PL 51.3

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

Left/Right Counter Balance is identified by its spring pressure.

- Left Counter Balance: strong spring pressure
- Right Counter Balance: weak spring pressure
- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the screws that secure the Tie Plate. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Remove the Ground Plate.
  - c. Remove the Tapping Screws (x2).



Figure 1 Remove the screws and Ground Plate

- 9. Remove the Left Counter Balance. (Figure 2)
  - a. Remove the Tapping Screws (Large: x2).
  - b. Remove the Left Counter Balance.



Figure 2 Remove the Left Counter Balance

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the Left Counter Balance, align the hole of the Left Counter Balance to the positioning boss of the Frame. (Figure 3)



Figure 3 Installing the Left Counter Balance

3. Align the Ground Plate to the positioning boss. (Figure 4)



Figure 4 Align the Ground Plate

## **REP 5.8 Right Counter Balance (2 Pass)**

Parts List on PL 51.3

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### CAUTION

Left/Right Counter Balance is identified by its spring pressure.

- Left Counter Balance: strong spring pressure
- Right Counter Balance: weak spring pressure
- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 5.4)
- 4. Remove the DADF. (REP 5.1)
- 5. Take note of the graduation of the scale. (Figure 1)



Figure 1 Note the graduation of the scale

- 6. Remove the Right Counter Balance. (Figure 2)
  - a. Remove the Tapping Screws (Large: x3).
  - b. Remove the right Counter Balance.



j0ki45148 Figure 2 Remove the Right Counter Balance

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. If it was replaced, perform checking for DADF Lead-Skew Adjustment. (ADJ 5.1)

## **REP 5.9 DADF Document Tray (2 Pass)**

### Parts List on PL 51.4

### Removal

- 1. Remove the DADF Front Cover. (REP 5.3)
- 2. Remove the DADF Rear Cover. (REP 5.4)
- 3. Disconnect the connector of the DADF Document Set LED. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Remove the LED Bracket.
  - c. Remove the wire harness from the hook.
  - d. Disconnect the connector.



j0ki45109

Figure 1 Disconnect the connector

- 4. Disconnect the connector. (Figure 2)
  - a. Remove the clamp.
  - b. Disconnect the connector of the P/J756.
  - c. Remove the P/J756 wire harness from the Harness Guide.



Figure 2 Disconnect the connectors

- 5. At the front side of the DADF Document Tray, remove the boss of the DADF Document Tray from the installation hole of the Frame. (Figure 3)
  - a. Position the DADF Document Tray vertically.
  - b. Press the boss of the DADF Document Tray in the direction of the arrow and remove it from the installation hole.
  - c. Remove the wire harness of the DADF Document Set LED from the groove of the Frame.



Figure 4 Remove the wire harness from the hole

### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 3 Remove the boss of the DADF Document Tray

- 6. Pull out and remove the wire harness at the rear side of the DADF Document Tray from the hole of the Frame. (Figure 4)
  - a. Pull out and remove the wire harness through the hole on the Frame.
# REP 5.10 Top Cover (2 Pass)

## Parts List on PL 51.4

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Open the Top Cover.
- 10. Remove the Top Cover. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Remove the Stud Bracket.
  - c. Remove the Top Cover.



Figure 1 Remove the Top Cover

#### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 5.11 Harness Guide and Wire Harness (2 Pass)

## Parts List on PL 51.5

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Remove the Top Cover. (REP 5.19)
- 10. Remove the wire harness from the Harness Guide. (Figure 1)
  - a. Disconnect the connectors (x2).
  - b. Remove the wire harness from the Harness Guide.



Figure 1 Remove the wire harness from the Harness Guide

- 11. Remove the wire harness from the Harness Guide. (Figure 2)
  - a. Remove the J753 wire harness from the Harness Guide.



j0ki45128

Figure 2 Remove the wire harness from the Harness Guide

- 12. Remove the wire harness of the solenoid from the Harness Guide. (Figure 3)
  - a. Disconnect the connector (Blue).
  - b. Disconnect the connector (White).
  - c. Remove the wire harness from the Harness Guide.



Figure 4 Disconnect the connectors

- 14. Remove the Harness Guide and the wire harness. (Figure 5)
  - a. Remove the screw.
  - b. Remove the screw and the Ground Wire.
  - c. Remove the Harness Guide and the wire harness.



Figure 3 Remove the wire harness from the Harness Guide

- 13. Disconnect the connector. (Figure 4)
  - a. Disconnect the connectors (x4).



Figure 5 Remove the wire harness from the Harness Guide

- 1. To install, carry out the removal steps in reverse order.
- Hang the J753 wire harness to the hook (A). (Figure 6) (A)Hook



Figure 6 Hang the wire harness on the hook

# **REP 5.12 DADF Registration Motor (2 Pass)**

Parts List on PL 51.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Remove the Top Cover. (REP 5.19)
- 10. Remove the Harness Guide and the wire harness. (REP 5.11)
- 11. Remove the DADF Reg Motor. (Figure 1)
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Reg Motor.



Figure 1 Remove the DADF Reg Motor

- 1. To install, carry out the removal steps in reverse order.
- Install the Belt (A) to the Pulley of the DADF Reg Motor. (Figure 2) (A)Belt



j0ki45135

Figure 2 Install the Belt

# **REP 5.13 DADF Feed Motor (2 Pass)**

Parts List on PL 51.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Remove the Top Cover. (REP 5.19)
- 10. Remove the Harness Guide and the wire harness. (REP 5.11)
- 11. Turn the DADF Feeder Assembly upside down.
- 12. Remove the DADF Feed Motor. (Figure 1)
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Feed Motor.



j0ki45136 Figure 1 Remove the DADF Feed Motor

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Belt to the Pulley of the DADF Feed Motor. (Figure 2)



Figure 2 Install the Belt

# REP 5.14 Reg Chute (2 Pass)

Parts List on PL 51.8

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Turn the DADF Feeder Assembly upside down.
- 9. Remove the Reg Chute. (Figure 1)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Reg Chute.



j0ki45125 Figure 1 Remove the Reg Chute

### Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 5.15 Retard Chute (2 Pass)**

### Parts List on PL 51.8

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF Document Tray. (REP 5.19)
- 6. Open the Retard Chute.
- 7. Remove the Retard Chute. (Figure 1)
  - a. Remove the Retard Chute in the direction of the arrow.



Figure 1 Remove the Retard Chute

#### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 5.16 Takeaway Roll (2 Pass)

#### Parts List on PL 51.9

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Remove the Top Cover. (REP 5.19)
- 10. Remove the Harness Guide and the wire harness. (REP 5.11)
- 11. Loosen the Belt tension of the DADF Reg Motor. (Figure 1)
  - a. Loosen the screws (x2).



Figure 1 Loosen the Belt tension

- 12. Remove the DADF Reg Motor and the Bracket. (Figure 2)
  - a. Remove the spring.
  - b. Remove the screws (x2).
  - c. Remove the DADF Reg Motor and the Bracket.
  - d. Remove the Belt.



Figure 2 Remove the DADF Reg Motor and Bracket

- 13. Remove the Invert Chute. (Figure 3)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Invert Chute.



Figure 4 Remove the gear

- 15. Remove the bearing at the rear. (Figure 5)
  - a. Remove the E-Clip.
  - b. Remove the bearing.



j0ki45140

Figure 3 Remove the Invert Chute

- 14. Remove the gear at the rear. (Figure 4)
  - a. Remove the E-Clip.
  - b. Remove the gear.



Figure 5 Remove the bearing

- 16. Remove the Ground Plate at the front. (Figure 6)
  - a. Remove the Tapping Screws (x3).
  - b. Remove the Ground Plate.



Figure 6 Remove the Ground Plate

- 17. Remove the bearing at the front. (Figure 7)
  - a. Remove the E-Clip.
  - b. Remove the bearing.



Figure 7 Remove the bearing

- 18. Remove the Takeaway Roll. (Figure 8)
  - a. Remove the Takeaway Roll.



j0ki45145 Figure 8 Remove the Takeaway Roll

- 1. To install, carry out the removal steps in reverse order.
- Install the Belt (A) to the Pulley of the DADF Reg Motor. (Figure 9)
  (A) Belt



j0ki45135 Figure 9 Install the Belt

# **REP 5.17 Sensor Bracket (2 Pass)**

### Parts List on PL 51.9

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 5.3)
- 4. Remove the DADF Rear Cover. (REP 5.4)
- 5. Remove the DADF. (REP 5.1)
- 6. Remove the DADF Document Tray. (REP 5.19)
- 7. Remove the DADF Feeder Assembly. (REP 5.5)
- 8. Remove the Reg Chute. (REP 5.14)
- 9. Remove the Top Cover. (REP 5.19)
- 10. Remove the Harness Guide and the wire harness. (REP 5.11)
- 11. Remove the Takeaway Roll. (REP 5.16)
- 12. Remove the Sensor Bracket. (Figure 1)
  - a. Remove the Tapping Screws (x4).
  - b. Disconnect the connector.
  - c. Remove the Sensor Bracket.
  - d. Pull out and remove the wire harnesses (x2) through the hole on the Frame.

# REP 5.18 Nudger Roll, Feed Roll (2 Pass)

#### Parts List on PL 51.12

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Open the Feed Upper Chute. (Figure 1)
  - a. Release the hook and open the Feed Upper Chute.



j0ki45151 Figure 1 Open the Feed Upper Chute

- 5. Shift the housing. (Figure 2)
  - a. Release the hook and shift the housing in the direction of the arrow.



j0ki45146

Figure 1 Remove the Sensor Bracket

#### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 2 Shift the housing

- 6. Remove the housing. (Figure 3)
  - a. Remove the housing in the direction of the arrow.



Figure 3 Remove the housing

- 7. Remove the Nudger Roll and the Feed Roll. (Figure 4)
  - a. Remove the Nudger Roll.
  - b. Remove the Feed Roll.



Figure 4 Remove the Nudger Roll and Feed Roll

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Nudger/Feed Roll while aligning them as shown (Figure 5)



Figure 5 Align and Install the Nudger/Feed Roll

3. After a replacement, enter the Diagnostics Mode and use dC135 to reset the HFSI counter.

# REP 5.19 Retard Roll (2 Pass)

### Parts List on PL 51.14

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Open the Retard Roll Cover. (Figure 1)
  - a. Release the hook and open the Retard Roll Cover in the direction of the arrow.



j0ki45149 Figure 1 Open the Retard Roll cover

- 5. Remove the Retard Roll. (Figure 2)
  - a. Remove the Retard Roll.



Figure 2 Remove the Retard Roll

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diagnostics Mode and use dC135 to reset the HFSI counter.

# REP 55.1 DADF (1 Pass)

Parts List on PL 55.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the IIT Rear Cap Cover. (PL1.1)
- 4. Remove the Control Unit Connector Cover. (PL19.3)
- 5. Remove the Filter Cover. (PL19.3)
- 6. Remove the Rear Upper Cover. (PL19.3)
- 7. Disconnect the connector. (Figure 1)
  - a. Loosen the screw (x2) and disconnect the connector.



j0kt45502 Figure 2 Remove the cable from the guide

- 9. Disconnect the connector. (Figure 3)
  - a. Loosen the screw (x2) and disconnect the connector.
  - b. Release the clamp to remove the cable.



Figure 1 Disconnect the connector

- 8. Remove the cable from the guide. (Figure 2)
  - a. Release the clamp to remove the cable (x2).
  - b. Remove the cable from the guide (x3).



- 10. Open the DADF.
- Remove the Knob Screw (x2) that secure the DADF. (Figure 4)
  a. Remove the Knob Screw (x2).



Figure 4 Remove the Knob Screw (x2)

- 12. Remove the DADF. (Figure 5)
  - a. Remove the bracket (x2) of the Counter Balance from the stud (x2) in the direction of the arrow.



#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- Perform the DADF Original Detection Correction when replacing the DADF. (Refer to ADJ 5.3)

# **REP 55.2 DADF Platen Cushion (1 Pass)**

Parts List on PL 55.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: The DADF Platen Cushion is pasted on with double sided adhesive tapes.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Remove the DADF Platen Cushion.



j0kt45585 Figure 1 Peel off the DADF Platen Cushion

- 1. Paste on the DADF Platen Cushion. (Figure 2)
  - a. Place the DADF Platen Cushion on the Platen Glass.
  - b. Set the gap between the Regi Guide and Platen Guide.
  - c. Slowly lower the DADF and press it onto the DADF Platen Cushion.



Figure 2 Paste on the DADF Platen Cushion

# **REP 55.3 DADF Front Cover (1 Pass)**

Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the DADF.
- 4. Remove the screw (x3) that secure the DADF Front Cover. (Figure 1)
  - a. Remove the Tapping Screw (x3).



Figure 1 Remove the screws

- 5. Remove the DADF Front Cover. (Figure 2)
  - a. Remove the Tapping Screw.
  - b. Release the hook indicated by the arrow to remove the DADF Front Cover.



j0kt45507 Figure 2 Remove the DADF Front Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 55.4 DADF Rear Cover (1 Pass)**

Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Turn the DADF Document Tray upside down. (Figure 1)
  - a. Open the Top Cover.
  - b. Turn the DADF Document Tray upside down.



j0kt45508 Figure 1 Turn the DADF Document Tray upside down

- 4. Remove the screws that secure the DADF Rear Cover. (Figure 2)
  - a. Remove the screws (x2).



j0kt45509

Figure 2 Remove the screws

- 5. Open the DADF.
- 6. Release the hooks of the DADF Rear Cover. (Figure 3)
  - a. Release the hooks (x2).



j0kt45511 Figure 4 Remove the DADF Rear Cover

#### Replacement

1. To install, carry out the removal steps in reverse order.



Figure 3 Release the hooks

- 7. Close the DADF gently.
- 8. Remove the DADF Rear Cover. (Figure 4)
  - a. Remove the DADF Rear Cover in the direction of the arrow.

# **REP 55.5 DADF Feeder Assembly (1 Pass)**

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the DADF. (REP 55.1)
- 5. Remove the Harness Guide and the wire harness. (REP 55.12)
- 6. Disconnect the DADF PWB connector (x4). (Figure 1)
  - a. Disconnect the connector (x4).



Figure 2 Remove the wire harness

- 8. Remove the wire harness from the bracket of the DADF PWB. (Figure 3)
  - a. Remove the screw that secures the Ground Wire.
  - b. Release the clamp to remove the cable.



Figure 1 Disconnect the connectors

- 7. Remove the wire harness from the bracket of the DADF PWB. (Figure 2)
  - a. Release the clamp to remove the wire harness.
  - b. Remove the cable band.





Remove the screws that secure the DADF PWB and the bracket. (Figure 4)
 a. Remove the Tapping Screw (x2).



Figure 4 Remove the screws

- 10. Remove the DADF PWB and the bracket. (Figure 5)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the DADF PWB and the bracket.



j0kt45569 Figure 6 Removed DADF PWB and the bracket

- 12. Disconnect the DC / DC PWB connector (x2). (Figure 7)
  - a. Disconnect the connector.
  - b. Release the block of the Connector Housing and disconnect the connector.



j0kt45568 Figure 5 Remove the DADF PWB and the bracket

11. The figure shows the removed DADF PWB and the bracket. (Figure 6)



j0kt45516 Figure 7 Disconnect the DC / DC PWB connectors

- 13. Remove the DADF Document Tray. (REP 55.10)
- 14. Remove the Top Cover. (REP 55.11)
- 15. Remove the screw at the front. (Figure 8)
  - a. Remove the Tapping Screw.



Figure 8 Remove the screw

- 16. Remove the DADF Feeder Assembly. (Figure 9)
  - Peel off the DADF Feeder Assembly from the Adhesion Tape and remove the DADF Feeder Assembly from the Positioning Pin.



j0kt45519 Figure 10 Put down the DADF Feeder Assembly

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.



Figure 9 Remove the DADF Feeder Assembly

17. Put down the removed DADF Feeder Assembly with its Left side facing up. (Figure 10)

# **REP 55.6 DADF PWB (1 Pass)**

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connectors (x8).



j0kt45512

#### Figure 1 Disconnect the connectors

- 5. Remove the DADF PWB. (Figure 2)
  - a. Remove the screw and the Ground Wire.
  - b. Remove the screw (x3).
  - c. Remove the DADF PWB.



Figure 2 Remove the DADF PWB

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Switch the ROM on the new PWB with the EEP ROM from the old PWB. (Figure 3) This is because it stores the alignment value of the DADF.



j0kt45514

Figure 3 Switch the ROM

3. Check the software version. Update the version if an old software is installed in the new PWB.

# REP 55.7 DD PWB (1 Pass)

### Parts List on PL 55.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Disconnect the DADF PWB connectors. (Figure 1)
  - a. Disconnect the connector (x8).



j0kt45512



- 5. Remove the wire harness from the bracket of the DADF PWB. (Figure 2)
  - a. Release the clamp to remove the wire harness.
  - b. Remove the cable band.



Figure 2 Remove the wire harness

- 6. Remove the cable from the bracket of the DADF PWB. (Figure 3)
  - a. Remove the screw that secures the Ground Wire.
  - b. Release the clamp to remove the cable.



j0kt45566

Figure 3 Remove the cable

Remove the screws that secure the DADF PWB and the bracket. (Figure 4)
 a. Remove the Tapping Screw (x2).



Figure 4 Remove the screws

- 8. Remove the DADF PWB and the bracket. (Figure 5)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the DADF PWB and the bracket.



j0kt45568 Figure 5 Remove the DADF PWB and the bracket

9. The figure shows the removed DADF PWB and the bracket. (Figure 6)



j0kt45569 Figure 6 Removed DADF PWB and the bracket

- 10. Disconnect the DC / DC PWB connector (x3). (Figure 7)
  - a. Remove the screws that secure the clamp.
  - b. Loosen the screw (x2) and disconnect the connector.
  - c. Disconnect the connector.
  - d. Release the block of the Connector Housing and disconnect the connector.



j0kt45570

Figure 7 Disconnect the connectors

- 11. Remove the DC / DC PWB and the bracket. (Figure 8)
  - a. Remove the Tapping Screw (x3).
  - b. Remove the DC / DC PWB and the bracket.



j0kt45571 Figure 8 Remove the DC / DC PWB and the bracket

- 12. Remove the DC / DC PWB. (Figure 9)
  - a. Remove the screw (x4).
  - b. Remove the DC / DC PWB.



j0kt45573 Figure 10 Remove the EEP ROM





- 1. To install, carry out the removal steps in reverse order.
- 2. When replacing the DC / DC PWB, remove the EEP ROM from the old DC / DC PWB and install it onto the new one. (Figure 10)

# **REP 55.8 Left Counter Balance (1 Pass)**

Parts List on PL 55.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### WARNING

Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

#### CAUTION

Left/Right Counter Balance is identified by its spring pressure.

- Left Counter Balance: strong spring pressure
- Right Counter Balance: weak spring pressure
- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the DADF. (REP 55.1)
- 5. Remove the Harness Guide and the wire harness. (REP 55.12)
- 6. Remove the DADF Feeder Assembly. (REP 55.5)
- 7. Remove the screw (x2) that secure the Tie Plate. (Figure 1)
  - a. Remove the Tapping Screw.



j0kt45520

#### Figure 1 Remove the screws

- 8. Remove the screw (x8) that secure the Tie Plate. (Figure 2)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the screw (M3: x2).
  - c. Remove the screw (M4: x2).



j0kt45521

#### Figure 2 Remove the screws

- 9. Remove the Tie Plate and the CVT Chute. (Figure 3)
  - a. Remove the Tie Plate and the CVT Chute.





- 10. Remove the Left Counter Balance. (Figure 4)
  - a. Remove the screw (x2).
  - b. Remove the Left Counter Balance.



j0kt45523 Figure 4 Remove the Left Counter Balance



j0kt45525

Figure 6 Attach the spring

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Attach the hook of the CVT Chute at the bottom of the Tie Plate to the Base Frame. (Figure 5)



Figure 5 Attach the hook

3. Attach the spring of the CVT Chute to the boss of the Tie Plate. (Figure 6)

# **REP 55.9 Right Counter Balance (1 Pass)**

### Parts List on PL 55.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### CAUTION

Left/Right Counter Balance is identified by its spring pressure.

- Left Counter Balance: strong spring pressure
- Right Counter Balance: weak spring pressure
- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the DADF. (REP 55.1)
- 5. Take note of the graduation of the scale. (Figure 1)



Figure 1 Note the graduation of the scale

- 6. Remove the Right Counter Balance. (Figure 2)
  - a. Remove the Tapping Screws (Large: x4).
  - b. Remove the right Counter Balance.



j0kt45527 Figure 2 Remove the Right Counter Balance

- 1. To install, carry out the removal steps in reverse order.
- 2. If it was replaced, perform checking for DADF Lead-Skew Adjustment. (ADJ 5.1)

# REP 55.10 DADF Document Tray (1 Pass)

### Parts List on 55.4

#### Removal

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 55.3)
- 4. Remove the DADF Rear Cover. (REP 55.4)
- 5. Disconnect the connector of the DADF Document Set LED. (Figure 1)
  - a. Remove the Tapping Screw.b. Remove the LED Bracket.
  - c. Remove the wire harness from the hook.
  - c. Remove the wire harness from the d. Disconnect the connector.



j0kt45528

#### Figure 1 Disconnect the connector

- 6. Disconnect the connector. (Figure 2)
  - a. Remove the clamp.
  - b. Disconnect the connector of the P/J756.
  - c. Remove the P/J756 wire harness from the Harness Guide.



j0kt45529

#### Figure 2 Disconnect the connector

- 7. At the front side of the DADF Document Tray, remove the boss of the DADF Document Tray from the installation hole of the Frame. (Figure 3)
  - a. Position the DADF Document Tray vertically.
  - b. Press the boss of the DADF Document Tray in the direction of the arrow and remove it from the installation hole.
  - c. Remove the wire harness of the DADF Document Set LED from the groove of the Frame.



j0kt45530

#### Figure 3 Remove the boss

- 8. Pull out and remove the wire harness at the rear side of the DADF Document Tray from the hole of the Frame. (Figure 4)
  - a. Pull out and remove the wire harness through the hole on the Frame.



j0kt45531

Figure 4 Remove the wire harness

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 55.11 Top Cover (1 Pass)

Parts List on PL 51.4

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 55.3)
- 4. Remove the DADF Rear Cover. (REP 55.4)
- 5. Remove the link of the Top Cover from the stud. (Figure 1)
  - a. Remove the link from the cutout position of the link.



j0kt45540

Figure 1 Remove the link

- 6. Remove the Stud Bracket at the rear. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Stud Bracket.



j0kt45541

Figure 2 Remove the Stud Bracket

- 7. Remove the Top Cover. (Figure 3)
  - a. Remove the Tapping Screw.
  - b. Remove the Stud Bracket.
  - c. Remove the Top Cover.



Figure 3 Remove the Top Cover

#### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 55.12 Harness Guide and Wire Harness (1 Pass)

Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Disconnect the DADF PWB connector (x4). (Figure 1)
  - a. Disconnect the connector (x4).



j0kt45532 Figure 1 Disconnect the connectors

- 5. Remove the P756 wire harness from the Harness Guide. (Figure 2)
  - a. Remove the clamp.
  - b. Remove the P756 wire harness from the Harness Guide.



Figure 2 Remove the P756 wire harness

- 6. Disconnect the Motor connector (x3). (Figure 3)
  - a. Release the wire harness of the Motor from the Harness Guide.
  - b. Disconnect the connector (x3).



Figure 3 Disconnect the Motor connectors

- 7. Disconnect the Harness Guide connector (x5). (Figure 4)
  - a. Disconnect the Sensor connectors.
  - b. Disconnect the Relay Connector (x4).



Figure 4 Disconnect the connectors

8. Remove the disconnected wire harness from the Harness Guide. (Figure 5)



 $_{j0kt45536}$  Figure 5 Remove the disconnected wire harness

9. Remove the disconnected wire harness from the Harness Guide. (Figure 6)



j0kt45537 Figure 6 Remove the disconnected wire harness

10. Remove the disconnected wire harness (x2) from the Harness Guide. (Figure 7)



j0kt45539

Figure 8 Remove the Harness Guide and the wire harness

#### Replacement

1. To install, carry out the removal steps in reverse order.



j0kt45538 Figure 7 Remove the disconnected wire harness

- 11. Remove the Harness Guide and the wire harness. (Figure 8)
  - a. Remove the screw (x2).
  - b. Remove the Harness Guide and the wire harness.

# REP 55.13 DADF Regi Motor (1 Pass)

### Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the Harness Guide and the wire harness. (REP 55.12)
- 5. Remove the spring of the Belt Tension Bracket. (Figure 1)
  - a. Loosen the screw.
  - b. Remove the spring.



j0kt45543

Figure 1 Remove the spring

- 6. Remove the DADF Regi Motor. (Figure 2)
  - a. Remove the screw (x3).
  - b. Remove the DADF Regi Motor.



j0kt45544 Figure 2 Remove the DADF Regi Motor

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Belt to the Pulley of the DADF Regi Motor. (Figure 3)



j0kt45545 Figure 3 Install the Belt

# REP 55.14 DADF Feed Motor (1 Pass)

### Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the Harness Guide and the wire harness. (REP 55.12)
- 5. Remove the Belt Tension Bracket. (Figure 1)
  - a. Remove the screw.
  - b. Remove the screw.
  - c. Remove the Belt Tension Bracket.



j0kt45546 Figure 1 Remove the Belt Tension Bracket

- 6. Remove the DADF Feed Motor. (Figure 2)
  - a. Remove the screws (x3).
  - b. Remove the DADF Feed Motor.



Figure 2 Remove the DADF Feed Motor

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Belt to the Pulley of the DADF Feed Motor. (Figure 3)



j0kt45548 Figure 3 Install the Belt

# REP 55.15 DADF Pre Regi Motor (1 Pass)

### Parts List on PL 55.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- $\ \ 2. \quad \ Switch \ off \ the \ power \ and \ disconnect \ the \ power \ cord.$
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the Harness Guide and the wire harness. (REP 55.12)
- 5. Loosen the screw of the Belt Tension Bracket. (Figure 1)
  - a. Loosen the screw.



Figure 1 Loosen the screw of the Belt Tension Bracket

- 6. Remove the DADF Pre Regi Motor. (Figure 2)
  - a. Remove the screw (x2).
  - b. Remove the DADF Pre Regi Motor.



j0kt45550

Figure 2 Remove the DADF Pre Regi Motor

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Belt to the Pulley of the DADF Pre Regi Motor. (Figure 3)



Figure 3 Install the Belt

# REP 55.16 Regi Chute (1 Pass)

### Parts List on PL 55.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

#### WARNING

# Pay attention to your posture when removing the DADF because the DADF is heavy (10.8kg).

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the DADF. (REP 55.1)
- 5. Remove the Harness Guide and the wire harness. (REP 55.12)
- 6. Remove the DADF Feeder Assembly. (REP 55.5)
- 7. Turn the DADF Feeder Assembly left-side up.
- 8. Remove the Regi Chute. (Figure 1)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the Regi Chute.



j0kt45553 Figure 1 Remove the Regi Chute

#### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 55.17 Retard Chute (1 Pass)

### Parts List on PL 55.7

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Remove the Retard Chute. (Figure 1)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the Retard Chute.



Figure 1 Remove the Retard Chute

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 55.18 Out Chute (1 Pass)

### Parts List on PL 55.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Front Cover. (REP 55.3)

**NOTE:** The DADF Platen Cushion is pasted on with double sided adhesive tapes.

- 4. Peel off the DADF Platen Cushion. (Figure 1)
  - a. Peel off the DADF Platen Cushion.



j0kt45580 Figure 1 Peel off the DADF Platen Cushion

- 5. Disconnect the connector. (Figure 2)
  - a. Remove the wire harness from the hook.
  - b. Disconnect the connector.



j0kt45581

Figure 2 Disconnect the connector

- 6. Remove the hinge at the front. (Figure 3)
  - a. Raise the DADF Feeder Assembly in the direction of the arrow and remove the screw.
  - b. Remove the hinge.



j0kt45582 Figure 3 Remove the hinge at the front

- 7. Open the Out Chute downwards. (Figure 4)
  - a. Move the lever gently in the direction of the arrow.


j0kt45583 Figure 4 Open the Out Chute downwards

8. Remove the Out Chute from the hinge at the rear. (Figure 5)



j0kt45553 Figure 6 Remove the Regi Chute

### Replacement

1. To install, carry out the removal steps in reverse order.



j0kt45584

Figure 5 Remove the Out Chute

- 9. Remove the Harness Guide and the wire harness. (REP 55.12)
- 10. Remove the DADF Feeder Assembly. (REP 55.5)
- 11. Put down the DADF Feeder Assembly with its Left side facing up.
- 12. Remove the Regi Chute. (Figure 1)
  - a. Remove the Tapping Screw (x2).
  - b. Remove the Regi Chute.

# REP 55.19 CIS (1 Pass)

# Parts List on PL 55.8.1

## Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- $\ \ 2. \quad \ Switch \ off \ the \ power \ and \ disconnect \ the \ power \ cord.$
- 3. Remove the DADF Front Cover. (REP 55.3)
- 4. Remove the Retard Chute. (REP 55.17)
- 5. Move the Sensor Bracket. (Figure 1)
  - a. Remove the Tapping Screw (x2).
  - b. Move the Sensor Bracket.



j0kt45574

Figure 1 Move the Sensor Bracket

- 6. Disconnect the CIS connector (x2). (Figure 2)
  - a. Disconnect the connector.
  - b. Release the block of the Connector Housing and disconnect the connector.



j0kt45575 Figure 2 Disconnect the CIS connectors

7. Take note of the graduation of the scale of the installation position of the CIS. (Figure 3)



j0kt45576 Figure 3 Note of the graduation of the scale

- 8. Remove the screw (x2) that secure the CIS. (Figure 4)
  - a. Remove the screw (x2).



j0kt45577

Figure 4 Remove the screws

j0kt45579 Figure 6 Lower the rear side of the CIS to attach to the stud

- 9. Remove the CIS. (Figure 5)
  - a. Raise the rear side of the CIS in the direction of the arrow and remove the CIS.



j0kt45578

Figure 5 Remove the CIS

- 1. To install, carry out the removal steps in reverse order.
- 2. Lower the rear side of the CIS to attach to the stud. (Figure 6)

# REP 55.20 Sensor Bracket (1 Pass)

# Parts List on PL 55.9

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF Rear Cover. (REP 55.4)
- 4. Remove the Retard Chute. (REP 55.17)
- 5. Disconnect the Harness Guide connector (x2). (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Remove the wire harness (x2) from the harness guide.
  - c. Disconnect the connector (x2).



j0kt45554

#### Figure 1 Disconnect the Harness Guide connectors

- 6. Remove the Sensor Bracket. (Figure 2)
  - a. Remove the Tapping Screw (x4).
  - b. Remove the Sensor Bracket.
  - c. Pull out and remove the wire harness (x2) through the hole on the Frame.



Figure 2 Remove the Sensor Bracket

7. The figure shows the locations of the removed Sensor Bracket and the actuator (x2). (Figure 3)





Figure 3 Locations of the removed Sensor Bracket and the actuators

- 1. To install, carry out the removal steps in reverse order.
- 2. Check that the actuator (x2) appear from the chute when installing the Sensor Bracket. (Figure 4)



j0kt45557

Figure 4 Check the actuators

# REP 55.21 Nudger Roll, Feed Roll (1 Pass)

Parts List on PL 55.12

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Open the Feed Upper Chute. (Figure 1)
  - a. Release the hook and open the Feed Upper Chute.



j0kt45558 Figure 1 Open the Feed Upper Chute

- 5. Shift the housing. (Figure 2)
  - a. Release the hook and shift the housing in the direction of the arrow.



j0kt45559

Figure 2 Shift the housing

- 6. Remove the housing. (Figure 3)
  - a. Remove the housing in the direction of the arrow.



j0kt45560 Figure 3 Remove the housing

- 7. Remove the Nudger Roll and the Feed Roll. (Figure 4)
  - a. Remove the Nudger Roll.
  - b. Remove the Feed Roll.



j0kt45561

Figure 4 Remove the Nudger Roll and the Feed Roll

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Nudger/Feed Roll while aligning them as shown in the figure. (Figure 5)



Figure 5 Install the Nudger/Feed Roll

3. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 55.22 Retard Roll (1 Pass)

## Parts List on PL 55.14

## Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Top Cover.
- 4. Open the Retard Roll Cover. (Figure 1)
  - a. Release the hook and open the Retard Roll Cover in the direction of the arrow.



j0kt45563 Figure 1 Open the Retard Roll Cover

- 5. Remove the Retard Roll. (Figure 2)
  - a. Remove the Retard Roll.



j0kt45564 Figure 2 Remove the Retard Roll

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# **REP 6.1 Platen Cushion**

## Parts List on PL1.1

### Replacement

**NOTE:** Remove all remaining tapes on the Platen Cover after the Platen Cushion has been peeled off.

- 1. Place the Platen Cushion on the Platen Glass, at the proper position. (Figure 1)
  - a. Peel off the seals (x2).
  - b. Leave a gap of 0.50.3mm between the Regi. Guide and the Platen Guide of the Platen Glass.
  - c. Close the Platen Cover gently and press it onto the Platen Cushion.



j0ki40101 Figure 1 Place the Platen Cushion on the Platen Glass

# **REP 6.2 Platen Glass**

# Parts List on PL 1.2

## Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Platen Cover or DADF.
- 4. Remove the Platen Glass. (Figure 1)
  - a. Remove the screws (x2).
  - b. Remove the Right Side Plate.
  - c. Remove the Platen Glass.



Figure 1 Remove the Platen Glass

## Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** Push the Platen Glass in the direction of arrow A and the Right Side Plate in the direction of arrow B.

(Figure 2)



j0ki40103

Figure 2 Push the Platen Glass (A) and (B)

# **REP 6.3 Control Panel**

### Parts List on PL 1.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Cover.
- 4. Open the L/H Cover Unit.
- 5. Remove the Fusing Unit. (REP 10.1)
- 6. Disconnect the Connector at rear-side of the Front Left Cover. (Figure 1)
  - a. Release the Clamp (2) and remove the Wire Harness.
  - b. Disconnect the Connector.



j0kt40103

Figure 1 Disconnect the connector

- 7. Remove the Front Left Cover. (Figure 2)
  - a. Remove the screw.
  - b. Push the Front Left Cover to the arrow direction.



j0kt40104 Figure 2 Remover the Left Front Cover

- 8. Remove the screws that secure the Control Panel. (Figure 3)
  - a. Remove the Stylus Pen.
  - b. Remove the screws (x2).



Figure 3 Remove the screws

- 9. Remove the screws that secure the Control Panel. (Figure 4)
  - a. Remove the screws (x2).



Figure 4 Remove the screws

- 10. Remove the Control Panel. (Figure 5)
  - a. Hold the Control Panel and slide it slowly to the front.
  - b. Release the UI Cable from the hooks (x2).
  - c. Release the hook at the bottom of the Connector Housing and disconnect the connector.
  - d. Release the USB Cable from the clamp.
  - e. Disconnect the connector of the USB Cable at the inner side.



Figure 5 Remove the Control Panel

- 1. To install, carry out the removal steps in reverse order.
- 2. Align the cable tie of the USB Cable to the right side of the clamp. (Figure 6)



j0ki40164

Figure 6 Align the cable

3. Push in the excess length of the USB Cable into the opening. (Figure 7)



j0ki40166 Figure 8 Position the coated end of the UI Cable at the hook



Figure 7 Push in the excess length of USB Cable

4. When attaching the UI Cable to the hook, make it so that the coated end of the UI Cable is positioned at the hook. (Figure 8)

# **REP 6.4 USB Cable**

## Parts List on PL 1.2

### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. When replacing the USB Cable, store the excess length in between the clamps (x2) as shown in the figure. (Figure 1)



Figure 1 Store the excess USB Cable in between the clamps

# **REP 6.5 Console Assembly**

### Parts List on PL 1.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

Reference: Cleaning the Touch Panel

- When cleaning the Touch Panel, use soft cloth with mild detergent or alcohol and wipe gently.
- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Platen Cover or DADF.
- 4. Open the Front Cover.
- 5. Disconnect the Connector at rear-side of the Front Left Cover. (Figure 1)
  - a. Release the Clamp (2) and remove the Wire Harness.
  - b. Disconnect the Connector.



j0kt40103

Figure 1 Disconnect the connector

- 6. Remove the Front Left Cover. (Figure 2)
  - a. Remove the screw.
  - b. Push the Front Left Cover to the arrow direction.



j0kt40104

Figure 2 Remover the Left Front Cover

- 7. Remove the Stylus Pen. (Figure 3)
  - a. Remove the Stylus Pen.



- 8. Remove the One Touch Panel. (Figure 4)
  - a. Release the hooks (x2).
  - b. Remove the One Touch Panel.
  - c. Move the Block of the Connector Housing in the direction of the arrow.
  - d. Remove the Flexible Flat Cable.



Figure 4 Remove the One Touch Panel

9. Release the hooks of the Overlay Cover. (Figure 5)a. Release the hooks (x3).



Figure 5 Release the hooks

- 10. Remove the Overlay Cover. (Figure 6)
  - a. Remove the Overlay Cover in the direction of the arrow.



j0ki91123 Figure 6 Remove the Overlay Cover

- 11. Remove the Overlay Cover. (Figure 7)
  - a. Release the hooks (x3) and remove the Overlay Cover in the direction of the arrow.



Figure 8 Remove the screws

- 13. Remove the screws that secure the Console Assembly. (Figure 9)
  - a. Remove the Tapping Screws (x2).
  - b. Remove the screw.





- 12. Remove the screws that secure the Console Assembly. (Figure 8)
  - a. Remove the Tapping Screw.
  - b. Remove the screws (x2).



14. Move the Console Assembly in the direction of the arrow. (Figure 10)a. Move the Console Assembly in the direction of the arrow.



ناری Figure 10 Moving the Console Assembly in the direction of the arrow

- 15. Remove the UI Cable from the hook. (Figure 11)
  - a. Remove the UI Cable from the hook.



j0ki40156 Figure 11 Remove the UI Cable from the hook

- 16. Turn the Console Assembly upside down and place it gently on the Platen Glass.
- 17. Disconnect the connector of the Console Assembly. (Figure 12)
  - a. Release the hook and disconnect the connector.
  - b. Disconnect the connector of the USB Cable.



j0ki40157 Figure 12 Disconnect the connectors

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- When attaching the UI Cable to the hook, make it so that the coated end of the UI Cable is positioned at the hook as shown in the figure. (Figure 13)
  (A) Coated end of UI Cable



j0ki40158 Figure 13 Position the coated end of the UI Cable (A)

3. Store the excess length of the USB Cable as shown in (A) in the figure. (Figure 14)



j0ki40159 Figure 14 Store the excess length of USB Cable

# **REP 6.6 CCD Lens Assembly**

Parts List on PL 1.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Light axis correction using UI Diagnostics is required after replacing the parts. After replacement, always check the light axis and perform the light axis correction adjustment where necessary. (The correction steps are described in this procedure.)

**NOTE:** Because the removal procedure for 7830/35 and 7845/55 are the same (they differ only by the shape of their CCD Lens Assembly), only the shape for 7845/55 will be described here.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Platen Glass (REP 6.2)
  - Lens Cover (PL 1.4)
- 4. Move the APS Sensor. (Figure 1)
  - a. Remove the screw (round).
  - b. Release the harness from the clamp.
  - c. Move the APS Sensor.



j0kt40120 Figure 1 Move the APS Sensor

- 5. Disconnect the CCD Flexible Print Cable. (Figure 2)
  - a. Release the hook and disconnect the connector.



j0kt40121 Figure 2 Disconnect the CCD Flexible Print Cable

6. Replace the CCD Lens Assembly. (Figure 3)

**NOTE:** When removing the CCD Lens Assembly, never remove the screws (x2) of the jig pin.

- a. Remove the screws (x4).
- b. Replace the CCD Lens Assembly.
- c. Secure the CCD Lens Assembly by using the screws (x4).



Figure 3 Replace the CCD Lens Assembly

- 7. Connect the CCD Flexible Print Cable.
- 8. Install the APS Sensor and Lens Cover.
- 9. Install the Platen Glass. (No need to install the guide for holding the glass.)
- 10. Make a copy onto A3 size paper using the Test Chart, and check both Lead and Tail sides.

11. Reinstall the removed parts if no problems are found.

If any problems are found in images (especially alignment), go to Step 10.

**NOTE:** In the following steps, it is best to work in a condition in which outside light is minimized. If the servicing site is located directly below the fluorescent light, perform the servicing with the Platen (or DADF) somewhat closed to shut out the outside light.

- 12. Enter UI Diagnostics.
- 13. Enter **IIT Calibration** (White Reference Adjustment > CCD Calibration > Optical Axis Correction).
- 14. Select [Optical Axis Correction].
- 15. Follow the instructions shown on the screen. Open the Platen and press the [Start] button. The Lamp Carriage moves and the lamp irradiates.
- 16. Check the following items on the UI screen.

#### **Table 1 Optical Axis Correction**

Optical Axis Correction	
Optical Axis Correction Judgment (Result)	NG
Front Nut Correction Angle -: Left rotation	-90
Rear Nut Correction Angle +: Right rotation	-555

Optical Axis Correction Judgment (Result): Displays OK/NG. If OK appears, the operation is complete. If NG appears, correction is needed. Front/Rear Nut Correction Angle: Shows a combination of with a numeral.

- Front Nut refers to the nuts at the front of the CCD Lens Assembly.
- Rear Nut refers to the nuts at the rear of the CCD Lens Assembly.
- +: Refers to right rotation.
- -: Refers to left rotation.
- Numeral: Refers to the angle. (Unit: degrees)
  Using the content of the above table as an example:
  The Front Nut must be rotated 90 degrees. to the left.
  The Rear Nut must be rotated 555 degrees. to the left.
- If the value is an abnormal number such as 990, clean the Platen Glass and the mirror, etc. and start again. This may be due to the light path being blocked.
- 17. Carry out the steps above using the information on the UI screen.
- 18. Rotate the nut. (Figure 4)

**NOTE:** As it is difficult to control the rotation amount, it is recommended to draw a line on a strip of paper and tape it to the tip of the Box Driver to make a mark as shown in the figure below.(Figure 4)



Figure 4 Rotate the nut

- 19. After the adjustment, enter IIT Calibration (White Reference Adjustment, CCD Calibration, Optical Axis Correction) and perform the Optical Axis Correction again. (Refer to ADJ 6.6)
- 20. Repeat Steps 10 to 17 until the judgment displays OK.

**NOTE:** If the result is OK, the operation can be completed even if the number of rotations is still displayed.

21. Reinstall all removed parts.

# **REP 6.7 Front/Rear Carriage Cable**

Parts List on PL 1.6

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

## WARNING

Use extreme care when working with the following components. Some of the components may have very sharp edges and could cause serious personal injury.

DANGER: Manipuler les éléments suivants avec précaution: ils peut comporter des rebords tranchants qui peuvent causer de graves blessures.

AVVERTENZA: Maneggiare i seguenti elementi con la massima precauzione: essi possono avere dei bordi molto affilati che possono causare serie ferite.

VORSICHT: Bei der Verwendung nachfolgender Komponenten ist äußerste Vorsicht geboten. Einige dieser Komponenten können u.U. scharfe Kanten vorweisen und somit zu schweren Schnittverletzungen führen.

AVISO: Manipule los componentes siguientes con mucha precaución. Éstos pueden tener bordes filosos y ocasionar daños personales graves.

**NOTE:** The front and rear coatings of the Carriage Cable are different.

Front: Silver

Rear: Black

**NOTE:** Only the replacement procedures for the Rear Carriage Cable is described here. The replacement procedures for the Front Carriage Cable is the same as for the Rear Carriage Cable.

**NOTE:** The Carriage Cables must be replaced one by one. Never remove both front and rear cables at the same time.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the DADF or the Platen Cover.
- 4. Remove the following parts:
  - Platen Glass (REP 6.2)
  - Control Panel (REP 6.3)
  - IIT Left Cover (PL 1.1)
- 5. Unfasten the Full Rate Carriage from the Carriage Cable. (Figure 1)
  - a. Move the Full Rate Carriage to the notch on the Frame.
  - b. Remove the screw.



joki40118 Figure 1 Unfasten the Full Rate Carriage

- 6. Remove the Carriage Cable. (Figure 2)
  - a. Remove the spring from the Frame.
  - b. Detach the cable from the spring.



Figure 2 Remove the Carriage Cable

- 7. Remove the Carriage Cable. (Figure 3)
  - a. Pull out the ball from the notch of the Frame and remove the Carriage Cable.



Figure 3 Remove the Carriage Cable

### Replacement

1. Insert the ball of the Carriage Cable into the groove of the Pulley. (Figure 4)



Figure 4 Insert the ball of the Carriage Cable into the groove

- 2. Wind the Carriage Cable at the spring end around the Pulley for 2 rounds. (Figure 5)
  - a. Wind the cable 2 rounds.
  - b. Fix the cable at the spring end on the Frame with tape.



Figure 5 Wind the Carriage Cable around the Pulley for 2 rounds

- 3. Wind the Carriage Cable at the ball end around the Pulley for 1.5 rounds. (Figure 6)
  - a. Wind the cable 1.5 rounds.
  - b. Fix the cable wound on the Pulley with tape to prevent it from getting loose.





4. The figure below shows the number of rounds made by Carriage Cable at the front and rear. (Figure 7)



Figure 7 Rounds made by the Carriage Cable

- 5. Install the ball end of the Carriage Cable. (Figure 8)
  - a. Hang the cable on the larger Pulley of the Half Rate Carriage.
  - b. Hang the ball on the notch of the Frame.



#### Figure 8 Install the ball end of the Carriage Cable

- 6. Install the spring end of the Carriage Cable. (Figure 9)
  - a. Peel off the tape that secures the cable.
  - b. Hang the cable on the Pulley.
  - c. Hang it on the Pulley at the rear of Half Rate Carriage.
  - d. Hang the spring on the Cable and attach it to the Frame.



Figure 9 Install the spring end of the Carriage Cable

- 7. Affix the cable to the Full Rate Carriage. (Figure 10)
  - a. Peel off the tape.
  - b. Move the Full Rate Carriage to the notch on the Frame.
  - c. Affix the cable to the Full Rate Carriage.



Figure 10 Affix the cable

- 8. Adjust the position of Full Rate/Half Rate Carriages. (ADJ 6.1)
- 9. Restore the machine to its original state.

# **REP 6.8 Carriage Motor**

# Parts List on PL 1.6

# Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Platen Cover or DADF Assembly (REP 5.1)
  - Filter Cover (PL 19.3)
  - Rear Upper Cover (PL 19.3)
  - IIT Right Cover (PL 1.1)
  - IIT Rear Cover (PL 1.1)
  - IIT Top Cover (PL 1.1)
- 4. Remove the Carriage Motor. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the spring.
  - d. Remove the screws (x3).
  - e. Remove the Carriage Motor.



Figure 1 Remove the Carriage Motor

- 1. To install, carry out the removal steps in reverse order.
- 2. Install the Belt to the Pulley of the Carriage Motor. (Figure 2)



Figure 2 Install the Belt

- 3. Install the Carriage Motor:
  - a. Attach the idler spring.
  - b. Move the carriage to fit the Belt.
  - c. Secure the Carriage Motor to the Main Unit with the mounting screws.
- 4. After installing the Carriage Motor, move the Full Rate Carriage back and forth and check that it is moving smoothly.

# **REP 6.9 LED Lamp PWB**

### Parts List on PL 1.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: Do not touch the chip on the LED Lamp PWB.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Platen Cover or DADF.
- 4. Remove the Platen Glass. (REP 6.2)
- 5. Move the Full Rate Carriage to the notch on the Frame.
- 6. Disconnect the connector. (Figure 1)
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Remove the Flexible Flat Cable.



Figure 1 Disconnect the connector

- 7. Remove the LED Lamp. (Figure 2)
  - a. Remove the screws (x2).
  - b. Remove the LED Lamp.



Figure 2 Remove the LED Lamp

- 8. Remove the LED Lamp PWB. (Figure 3)
  - a. Remove the screws (x4).
  - b. Remove the LED Lamp PWB.
  - (A) Take note so as not to touch the LED chip.





3. When installing the LED Lamp, insert the rear side of the LED Lamp PWB into the square hole of the Full Rate Carriage. (Figure 5)





4. When installing the LED Lamp, affix the Full Rate Carriage by using the hook of the LED Lamp. (Figure 6)



j0ki40126 Figure 3 Remove the LED Lamp PWB

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the LED Lamp PWB, loosely affix screw A and tighten the screws in order of 1 to 4. (Figure 4)



Figure 6 Use the hook of the LED Lamp

5. After a replacement, enter the Diagnostics Mode and use dC135 reset the HFSI counter.

# **REP 6.10 LED Lamp Wire Harness**

Parts List on PL 1.7

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Platen Cover or DADF.
- 4. Remove the following parts:
  - CCD Lens Assembly (REP 6.6)
  - LED Lamp (REP 6.9)
- 5. Remove the PWB Cover. (Figure 1)
  - a. Remove the screw (Blue, x1).
  - b. Remove the screws (Round: x2).
  - c. Remove the PWB Cover in the direction of the arrow.



Figure 1 Remove the PWB Cover

- 6. Disconnect the LED Lamp Wire Harness. (Figure 2)
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Disconnect the LED Lamp Wire Harness.
  - c. Peel off the LED Lamp Wire Harness from the adhesive tape section.



Figure 2 Disconnect the LED Lamp Wire Harness

- 7. Remove the LED Lamp Wire Harness from the Harness Holder. (Figure 3)
  - a. Remove the LED Lamp Wire Harness from the Harness Holder.



Figure 3 Remove the LED Lamp Wire Harness

- 8. Remove the Full Rate Carriage. (Figure 4)
  - a. Remove the screws (x2).
  - b. Move the Full Rate Carriage in the direction of the arrow and remove it.



j0ki40133 Figure 4 Remove the Full Rate Carriage

- 9. Turn the Full Rate Carriage upside down.
- 10. Remove the guide. (Figure 5)
  - a. Remove the screw.
  - b. Remove the guide.



Figure 5 Remove the Guide

Remove the LED Lamp Wire Harness from the Full Rate Carriage. (Figure 6)
 a. Remove the LED Lamp Wire Harness.



Figure 6 Remove the LED Lamp Wire Harness

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. The LED Lamp Wire Harness is to be installed to the Harness Guide of the Half Rate Carriage. (Figure 7)

(A) Harness Guide



Figure 7 Install the LED Lamp Wire Harness

3. When securing the LED Lamp Wire Harness to the Base Frame using adhesive tape, align it to the mark as shown in the figure to paste it. (Figure 8)



Figure 8 Secure the LED Lamp Wire Harness

4. When installing the PWB Cover, attach the hooks (x4). (Figure 9)



j0ki40138 Figure 9 Install the PWB Cover

5. Adjust the position of Full Rate/Half Rate Carriages. (ADJ 6.1)

# **REP 6.11 Light Guide**

# Parts List on PL 1.7

## Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: Do not touch the Light Guide using bare hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the DADF. (REP 5.1)
- 4. Remove the Platen Glass. (REP 6.2)
- 5. Move the Full Rate Carriage to the notch on the Frame.
- 6. Remove the Light Guide. (Figure 1)
  - a. Remove the screw.
  - b. Remove the clip.
  - c. Remove the screw.
  - d. Remove the clip.
  - e. Remove the Light Guide.
  - (A) Take note so as to not damage the Lamp Wire Harness.



Figure 2 Install the Light Guide



Figure 1 Remove the Light Guide

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the Light Guide, insert the boss of the Light guide into the positioning hole of the Full Rate Carriage. (Figure 2)

# **REP 6.12 IIT PWB**

#### Parts List on PL 1.8

#### Removal

#### CAUTION

Serial number data is stored at three locations:

- MCU NVM PWB
- SBC NVM PWB
- IIT/IPS PWB.

If these boards are replaced one-at-a-time, the machine will automatically synchronize the data on the new PWB to match the other two. You must install the new PWB, switch on the power, wait for the numbers to synchronize, then switch off the power before replacing any other PWB.:

If the removal/replacement procedure is not followed correctly, or if data corruption causes one of the following faults:

- 16-801.19
- 22-352

then you must perform dC132 to restore serial numbers/billing data.

#### CAUTION

Static electricity can damage electrical parts. Always use an Electrostatic Discharge Kit during servicing. If an ESD kit is not available, touch metallic parts on the machine frame prior to servicing to discharge the static electricity.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Filter Cover and Rear Upper Cover. (PL 19.3)
- 4. Remove the IIT Rear Cover. (REP 6.14)
- 5. Disconnect the connectors at the rear side that are connected to the IIT PWB. (Figure 1)
  - a. Release the hook and disconnect the connector.
  - b. Disconnect the connector.
  - c. Remove the Lock Screws (x2).
  - d. Remove the screw.



Figure 1 Disconnect the connectors

- 6. Open the Platen or the DADF.
- 7. Remove the Platen Glass. (REP 6.2)
- 8. Remove the Lens Cover. (PL 1.5)
- 9. Remove the PWB Cover. (Figure 2)
  - a. Remove the screw (Blue, x1).
  - b. Remove the screws (Round: x2).
  - c. Remove the PWB Cover in the direction of the arrow.



Figure 2 Remove the PWB Cover

- 10. Disconnect the connectors that are connected to the IIT PWB. (Figure 3)
  - a. Move the Block of the Connector Housing in the direction of the arrow.
  - b. Remove the Flexible Print Cable.
  - c. Open the Plate of the Connector Housing in the direction of the arrow.
  - d. Remove the Flexible Print Cable.

- e. Release the hook and disconnect the connector.
- f. Disconnect the connector.



Figure 3 Disconnect the connectors

#### 11. Remove the IIT PWB. (Figure 4)

- a. Remove the screws (x4).
- b. Remove the IIT PWB.



j0ki40143

Figure 4 Remove the IIT PWB

## Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. When the PWB is replaced, remove the EEP ROM from the old PWB and install it onto the new one. (Figure 5)



Figure 5 Remove and Replace the EEP ROM from the old PWB

3. When installing the PWB Cover, attach the hooks (x4). (Figure 6)



j0ki40138 Figure 6 Install the PWB Cover

# **REP 6.13 USB Connector**

## Parts List on PL 1.4

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Release the hooks of the Overlay Cover. (Figure 1)
  - a. Release the hooks (x3).



Figure 1 Release the hooks

- 4. Remove the Overlay Cover. (Figure 2)
  - a. Remove the Overlay Cover in the direction of the arrow.



j0ki91123 Figure 2 Remove the Overlay Cover

- 5. Remove the screws that secure the USB Connector. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Tapping Screws (x2).



Figure 3 Remove the screws

- 6. Remove the USB Connector. (Figure 4)
  - a. Shift the USB Connector.
  - b. Disconnect the connector of the USB Cable.



Figure 4 Remove the USB Connector

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 6.14 IIT Rear Cover

## Parts List on PL 1.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the IIT Rear Cap Cover. (PL 1.1)
- 4. Remove the Control Unit Connector Cover. (PL 19.3)
- 5. Remove the Filter Cover. (PL 19.3)
- 6. Remove the Rear Upper Cover. (PL 19.3)
- 7. Disconnect the connector. (Figure 1)
  - a. Loosen the screw (x2) and disconnect the connector.



Figure 1 j0kt45501

- 8. Remove the cable from the guide. (Figure 2)
  - a. Release the clamp (x2)to remove the cable.
  - b. Remove the cable from the guide (x3).



j0kt45502

Figure 2 j0kt45502

- 9. Disconnect the connector. (Figure 3)
  - a. Loosen the screw (x2) and disconnect the connector.
  - b. Release the clamp to remove the cable.



- 10. Remove the IIT Rear Cover. (Figure 4)
  - a. Remove the screw (x2).
  - b. Remove the IIT Rear Cover.



j0kt40102

Figure 4 j0kt40102

# Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 7.1 Tray 1 Feeder Assembly**

# Parts List on PL 9.3

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Registration Transport Assembly. (REP 7.24)
- 4. Pull out Tray 1 and remove the paper.
- 5. Remove Tray 1.
- 6. Remove the Chute Assembly from the Tray 1 Feeder Unit. (Figure 1)
  - a. Remove the Stopper Screw.
  - b. Remove the Chute Assembly in the direction of the arrow.



Figure 2 Disconnect the connector

- 8. Remove the Tray 1 Feeder Unit. (Figure 3)
  - a. Remove the screws (x2).
  - b. Remove the Tray 1 Feeder Unit.



Figure 1 Remove the Chute Assembly

- 7. Disconnect the connector. (Figure 2)
  - a. Release the Wire Harness from the clamps (x2).
  - b. Disconnect the connector.
  - c. Release the wire harness from the clamp.
  - d. Disconnect the connector.



Figure 3 Remove Tray 1 Feeder

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag. Mode and use dC135 to reset the HFSI counter.

# REP 7.2 Tray 1 Feed/Retard/Nudger Roll

# Parts List on PL 9.5

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Pull out Tray 1 and remove the paper.
- 4. Remove Tray 1.
- 5. Remove the Tray 1 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 1 Feed/Retard/Nudger Roll.



Figure 1 Remove the Tray 1 Feed/Retard/Nudger Rolls

## Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.3 Tray 2 Feeder Assembly (3TM)

## Parts List on PL 10.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2.
- 4. Open the L/H Cover Unit.
- 5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



Figure 1 Remove the Feed Out Chute

- 6. Remove the Bracket Assembly. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket Assembly.



j0ki41002 Figure 2 Remove the Bracket Assembly

- 7. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



Figure 4 Remove the Tray 2 Feeder Assembly

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.



Figure 3 Disconnect the connectors

- 8. Remove the Tray 2 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 2 Feeder Assembly.
# REP 7.4 Tray 3 Feeder Assembly (3TM)

## Parts List on PL 10.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 3.
- 4. Open the L/H Cover Unit.
- 5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



Figure 1 Remove the Feed Out Chute

- 6. Disconnect the connector. (Figure 2)
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



Figure 2 Disconnect the connectors

- 7. Remove the Tray 3 Feeder Assembly. (Figure 3)
  - a. Remove the screws (x2).
  - b. Remove Tray 3 Feeder Assembly.



Figure 3 Remove the Tray 3 Feeder Assembly

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

## REP 7.5Tray 4 Feeder Assembly (3TM)

## Parts List on PL 10.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 4.
- 4. Open the L/H Cover Unit.
- 5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



Figure 1 Remove the Feed Out Chute

- 6. Remove the Bracket Assembly. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket Assembly.



Figure 2 Remove the Bracket Assembly

- 7. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamps (x3).
  - b. Disconnect the connectors (x2).



Figure 3 Disconnect the connectors

- 8. Remove the Tray 4 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 4 Feeder Assembly.



j0ki41011 Figure 4 Remove the Tray 4 Feeder Assembly

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.6 Tray 2 Feed/Retard/Nudger Roll (3TM)

Parts List on PL 10.4

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2/3.
- 4. Remove the Tray 2 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 2 Feed/Retard/Nudger Roll.



Figure 1 Remove the Tray 2 Feed/Retard/Nudger Rolls

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.7 Tray 3 Feed/Retard/Nudger Roll (3TM)

## Parts List on PL 10.4

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 3/4.
- 4. Remove the Tray 3 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 3 Feed/Retard/Nudger Roll.



Figure 1 Remove the Tray 3 Feed/Retard/Nudger Rolls

## Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.8 Tray 4 Feed/Retard/Nudger Roll (3TM)

## Parts List on PL 10.4

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 3/4.
- 4. Remove the Tray 4 Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the chute towards you.
  - b. Remove the Tray 4 Feed/Retard/Nudger Roll.



Figure 1 Remove the Tray 4 Feed/Retard/Nudger Rolls

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# **REP 7.9 Tray Module PWB (3TM)**

## Parts List on PL 10.9

#### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. After replacement, set the switch of the Tray Module PWB as follows. (Figure 1)



Figure 1 Tray Module PWB switch settings

#### Table 1 DIP Switch Settings

Tray Type	SW1	SW2	SW3	SW4
3TM	ON	ON	ON	ON

# REP 7.10 Tray 3 Assembly (TTM)

Parts List on PL 11.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Pull out Tray 3.
- 4. Remove the paper from Tray 3.
- 5. Remove the Tray 3 Assembly. (Figure 1)
  - a. Remove the screw.
  - b. Remove the stopper.
  - c. Remove the Tray 3 Assembly.



j0ki40101

Figure 1 Remove the Tray 3 Assembly

#### Replacement

1. To install, carry out the removed steps in reverse order.

# REP 7.11 Tray 4 Assembly (TTM)

## Parts List on PL 11.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Pull out Tray 4.
- 4. Remove the paper from Tray 4.
- 5. Remove the Tray 4 Assembly. (Figure 1)
  - a. Remove the screws (x2).
  - b. Store the Tray 4 Transport Assembly.
  - c. Remove the screw.
  - d. Remove the stopper.
  - e. Remove the Tray 4 Assembly.



Figure 1 Remove the Tray 4 Assembly

## Replacement

1. To install, carry out the removed steps in reverse order.

# REP 7.12 Tray Cable (TTM)

## Parts List on PL 11.4

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Tray 4 Assembly. (REP 7.11)
- 4. Remove the Tray 4 Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Remove the Tray 4 Cover.



Figure 1 Remove the Tray 4 Cover

5. Remove the Tray Cable. (Figure 2)

**NOTE:** Only the removal procedure for the Tray Cable at the front is described here. The Tray Cable at the rear is removed in the same way.

- a. Remove the E-Clip and Cable Guide.
- b. Remove the E-Clip and Cable Guide.



j0ki41104 Figure 2 Remove the Tray Cable

6. Remove the Tray Cable. (Figure 3)

**NOTE:** Only the removal procedure for the Tray Cable at the front is described here. The Tray Cable at the rear is removed in the same way.

- a. Remove the E-Clip and the Pulley.
- b. Remove the Tray Cable.
- c. Remove the Tray Cable.



j0ki41105

Figure 3 Remove the Tray Cable

#### Replacement

1. To install, carry out the removed steps in reverse order.

# REP 7.13 Tray 4 Feeder (TTM)

Parts List on PL 11.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 1 and Tray 2.
- 4. Disconnect the connector of the Tray 4 Feeder Assembly. (Figure 1)
  - a. Disconnect the connectors (x2).



j0ki41106 Figure 1 Disconnect the connectors

- 5. Pull out the Tray 3/4.
- 6. Remove the Stud Bracket. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Stud Bracket.



j0ki41107

Figure 2 Remove the Stud Bracket

- 7. Remove the screws that secure the Tray 4 Feeder Assembly. (Figure 3)
  - a. Remove the screws (x2).



j0ki41109 Figure 4 Remove the Tray 4 Feeder Assembly

- 9. Disconnect the connector. (Figure 5)
  - a. Remove the wire harnesses (x2) from the hooks (x2).
  - b. Disconnect the connectors (x2).



j0ki41108 Figure 3 Remove the screws

- 8. Remove the Tray 4 Feeder Assembly. (Figure 4)
  - a. Lift the Lower Chute in the direction of the arrow.
  - b. Move the Tray 4 Feeder Assembly in the direction of the arrow and remove it.



j0ki41110 Figure 5 Disconnect the connectors

- 10. Remove the Upper Chute. (Figure 6)
  - a. Remove the screws (x2).
  - b. Remove the Upper Chute.



j0ki41111

Figure 6 Remove the Upper Chute

- 11. Remove the Lower Chute. (Figure 7)
  - a. Remove the screws (x2).
  - b. Remove the Lower Chute.



Figure 8 Remove the various Tray 4 Feeder Assembly parts

#### Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.



Figure 7 Remove the Lower Chute

- 12. Remove the various parts from the Tray 4 Feeder Assembly. (Figure 8)
  - a. Remove the screws (x2).
  - b. Remove the Bracket.
  - c. Remove the screw.
  - d. Remove the Bracket.
  - e. Remove the screw.
  - f. Remove the Bracket.

# REP 7.14 Tray 2 Feeder (TTM)

## Parts List on PL 11.6

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Pull out Tray 2.
- 4. Open the Left Cover.
- 5. Remove the Feed Out Chute. (Figure 1)
  - a. Remove the Feed Out Chute.



j0ki41114 Figure 1 Remove the Feed Out Chute

- 6. Remove the Bracket. (Figure 2)
  - a. Remove the screw.
  - b. Remove the Bracket.



Figure 2 Remove the Bracket

- 7. Disconnect the connector. (Figure 3)
  - a. Release the wire harnesses (x2) from the clamps (x2).
  - b. Disconnect the connectors (x2).



j0ki41116 Figure 3 Disconnect the connectors

- 8. Remove the Tray 2 Feeder. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove the Tray 2 Feeder.



Figure 4 Remove the Tray 2 Feeder

#### Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.15 Tray 3 Feeder (TTM)

Parts List on PL 11.6

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2.
- 4. Pull out Tray 3 and Tray 4.
- 5. Open the Left Cover.
- 6. Remove the Lower Chute and the Feed Out Chute. (Figure 1)
  - a. Remove the Lower Chute.
  - b. Remove the Feed Out Chute.



j0ki41118 Figure 1 Remove the Lower and Feed Out Chutes

- 7. Disconnect the connector. (Figure 2)
  - a. Release the wire harnesses (x2) from the clamps (x2).
  - b. Disconnect the connectors (x2).



j0ki41119 Figure 2 Disconnect the connectors

- 8. Remove the screws that secure the Tray 3 Feeder Assembly. (Figure 3)
  - a. Remove the screw.



Figure 4 Remove the Tray 3 Feeder Assembly

- 10. Remove the Tray 3 Feeder. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the Bracket.



j0ki41120

- Figure 3 Remove the screws
- 9. Remove the Tray 3 Feeder Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove Tray 3 Feeder Assembly.



Figure 5 Remove the Tray 3 Feeder

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.16 Tray 2 Feed/Retard/Nudger Roll (TTM)

## Parts List on PL 11.8

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2.
- 4. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.



Figure 1 Remove the Feed/Retard/Nudger Rolls

#### Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.18 Tray 3 Feed/Retard/Nudger Roll (TTM)

## Parts List on PL 11.10

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2.
- 4. Pull out Tray 3 and Tray 4.
- 5. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.



Figure 1 Remove the Feed/Retard/Nudger Rolls

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.19 Tray 4 Feed/Retard/Nudger Roll (TTM)

## Parts List on PL 11.12

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Replace Feed, Retard, and Nudger Roll at the same time because they have the same duration of life.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove Tray 2.
- 4. Pull out Tray 4.
- 5. Remove the Feed/Retard/Nudger Roll. (Figure 1)
  - a. Slide the Front Chute towards you.
  - b. Remove the Retard Roll.
  - c. Remove the Nudger Roll.
  - d. Remove the Feed Roll.



j0ki41125 Figure 1 Remove the Feed/Retard/Nudger Rolls

#### Replacement

- 1. To install, carry out the removed steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 7.20 Tray Module PWB (TTM)

Parts List on PL 11.17

#### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. After replacement, set the switch of the Tray Module PWB as follows. (Figure 1)



Figure 1 Tray Module PWB switch settings

#### Table 1 DIP Switch Settings

Tray Type	SW1	SW2	SW3	SW4
ТТМ	ON	ON	OFF	ON

# REP 7.21 Tray 5

## Parts List on PL 13.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- $\ \ 2. \quad \ Switch \ off \ the \ power \ and \ disconnect \ the \ power \ cord.$
- 3. Remove the Left Rear Lower Cover. (PL 19.2)
- 4. Open the L/H Cover Unit.
- 5. Disconnect the connector. (Figure 1)
  - a. Release the wire harness from the clamps (x4).
  - b. Remove the cable band.
  - c. Disconnect the connector.



Figure 1 Disconnect the connectors

- 6. Close the L/H Cover Unit.
- 7. Remove Tray 5. (Figure 2)
  - a. Remove the screws (x2).
  - b. Remove Tray 5.





Figure 2 Remove Tray 5

#### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** Be careful not to pinch the wire harness of the Tray 5 when installing the Left Rear Lower Cover.

## REP 7.22 Tray 5 Feed/Retard/Nudger Roll

## Parts List on PL 13.3, PL 13.4

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Top Cover. (Figure 1)
  - a. Release the hooks (x2) and remove the Top Cover.



Figure 1 Remove the Top Cover

- 4. Remove the Nudger Roll. (Figure 2)
  - a. Remove the Nudger Roll.



Figure 2 Remove the Nudger roll

- 5. Remove the Front Chute. (Figure 3)
  - a. Remove the Front Chute.



j0ki41305

Figure 3 Remove the Front Chute

- 6. Remove the Feed/Retard Roll. (Figure 4)
  - a. Remove the Feed Roll.
  - b. Remove the Retard Roll.



Figure 4 Remove the Feed/Retard Rolls

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

## **REP 7.23 Tray 5 Paper Size Sensor**

## Parts List on PL 13.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Gently extend the Extension Tray and pull it out. (Figure 1)
  - a. Remove the Extension Tray.



Figure 1 Remove the Extension Tray

- 4. Remove the Plate. (Figure 2)
  - a. Remove the Tapping Screws (x3).
  - b. Remove the Plate.



Figure 2 Remove the Plate

- 5. Remove the Tray 5 Paper Size Sensor. (Figure 3)
  - a. Remove the Pinion Gear.
  - b. Remove the Tapping Screws (x3).
  - c. Remove the Tray 5 Paper Size Sensor.
  - d. Release the wire harness from the Tray 5 Paper Size Sensor.
  - e. Disconnect the connector.



Figure 3 Remove the Tray 5 Paper Size Sensor

#### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** When installing the Tray 5 Paper Size Sensor, make sure that the pin is inserted properly into the long hole of the Link. (Figure 4)



Figure 4 Insert the Pin

**NOTE:** When installing the Pinion Gear, align the marks on the Front/Rear Rack to the marks on Tray 5. (Figure 5)



j0wa41309 Figure 5 Installing the Pinion Gear

## **REP 7.24 Registration Transport Assembly**

## Parts List on PL 15.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the L/H Cover Unit. (REP 14.1)
- 4. Remove the Tray 5. (REP 7.21)
- 5. Remove the Registration Transport Assembly. (Figure 1)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Registration Transport Assembly.



Figure 1 Remove the Registration Transport Assembly

#### Replacement

1. To install, carry out the removal steps in reverse order.

#### CAUTION

Make sure you secure the screw (Figure 1) at the rear side of the Registration Transport Assembly. If it is not secured, it may cause the DUP MOT DRIVE of the MD PWB to be damaged.

## **REP 9.1 Transfer Belt Cleaner Assembly**

## Parts List on PL 6.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Cover.
- 4. Rotate the shutter of the Transfer Belt Cleaner Assembly clockwise. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Rotate the shutter in clockwise direction.



Figure 1 Rotate the shutter clockwise

- 5. Remove the Transfer Belt Cleaner Assembly. (Figure 2)
  - a. Rotate the Knob in the direction of the arrow until it is free.
  - b. Remove the Transfer Belt Cleaner Assembly.



Figure 2 Remove the Transfer Belt Cleaner Assembly

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# **REP 9.2 IBT Assembly**

## Parts List on PL 6.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

- **NOTE:** Do not touch the Drum surface with your hands.
- **NOTE:** Do not touch the Transfer Belt surface with your hands.

**NOTE:** When placing the IBT Assembly on the floor, spread paper or sheets, etc. on the floor beforehand to ensure that dirt or dust do not get stuck to the Transfer Belt.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Drum (Y, M, C, K). (REP 9.5)
- 4. Remove the Transfer Belt Cleaner Assembly. (REP 9.1)
- 5. Remove the Tension Lever of the Transfer Belt. (Figure 1)
  - a. Remove the screw.
  - b. Remove the Tension Lever.



Figure 1 Remove the Tension Lever

- 6. Remove the Fuser. (REP 10.1)
- 7. Open the L/H Cover Unit.
- 8. Remove the Rear Support from the L/H Cover Unit. (Figure 2)
  - a. Remove the KL-Clip.
  - b. Remove the Rear Support.



Figure 2 Remove the Rear Support

9. To open the L/H Cover Unit to the service position, rotate the Front Support 90 degree counterclockwise and pull it out one level. (Figure 3)





- 10. Remove the Front Lock Bracket. (Figure 4)
  - a. Remove the screw.
  - b. Remove the Front Lock Bracket.



Figure 4 Remove the Front Lock Bracket

- 11. Remove the Rear Lock Bracket. (Figure 5)
  - a. Remove the screw.
  - b. Remove the Rear Lock Bracket.



Figure 6 Pull the Stopper Lever

13. Pull out the IBT Assembly by holding onto the indicated sections (A) of the Front/Rear Frame until the Handle at the front/rear become accessible. (Figure 7)

**NOTE:** When pulling out the IBT Assembly, take care because it may drop from the front/ rear rails if pulled too far out.



Figure 5 Remove the Rear Lock Bracket

- 12. Pull the Stopper Lever. (Figure 6)
  - a. Pull the Stopper Lever.



j0ki40610 Figure 7 Pull out the IBT Assembly

- 14. Hold onto the Handle at the front/rear and remove the IBT Assembly. (Figure 8)
  - a. Hold onto the handles (x2) and pull it out.



j0ki40611 Figure 8 Hold onto handle and remove the IBT Assembly

- 15. While holding the IBT Assembly steady with your hand, remove the handle at the rear. (Figure 9)
  - a. Remove the KL-Clips (x2).
  - b. Remove the handle.



j0ki40612 Figure 9 Remove the handle

- 16. Push the handle all the way in at the position shown in (Figure 10).
  - a. Install the handle.



Figure 10 Push the handle all the way in

17. With the handle at the bottom, place the IBT Assembly into an upright position.

#### Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

**NOTE:** When installing the handle at the rear, install the KL-Clip in the orientation shown in (Figure 11)



Figure 11 Install the KL-Clip

**NOTE:** Insert the IBT Assembly completely into the Main Unit. After that, the positioning is done by the following procedure.

- a. Secure the Front Lock Bracket.
- b. Insert the Stopper Lever while pressing the indicated sections (A in Figure 7) of the Rear Frame against the Main Unit.
- c. Secure the Rear Lock Bracket.

- 2. When replacing the IBT Assembly, switch the Tension Plate of the new IBT Assembly.
  - Remove the Tension Plate. (Figure 12)
    - a. Remove the screw.
    - b. Remove the Tension Plate.



#### Figure 12 Switch the Tension Plate

- Install the Tension Plate. (Figure 13)
  - a. Install the Tension Plate.
  - b. Tighten the screw.



Figure 13 Install the Tension Plate

3. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# **REP 9.3 Transfer Belt**

## Parts List on PL 6.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Do not touch the Transfer Belt surface with your hands.

NOTE: Do not touch the Transfer Drive Roll surface with your hands.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Drum (Y, M, C, K). (REP 9.5)
- 4. Remove the Transfer Belt Cleaner Assembly. (REP 9.1)
- 5. Remove the IBT Assembly. (REP 9.2)
- 6. Remove the Tension Plate. (Figure 1)
  - a. Remove the screw.
  - b. Remove the Tension Plate.



Figure 1 Remove the Tension Plate

- 7. Switch the Tension Plate that was removed in Step 4. (Figure 2)
  - a. Install the Tension Plate.
  - b. Tighten the screw.



Figure 2 Switch the Tension Plate

- 8. Remove the Inlet Chute. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Inlet Chute.



Figure 3 Remove the Inlet Chute

- 9. Remove the BUR Front Frame. (Figure 4)
  - a. Remove the screw.
  - b. Remove the BUR Front Frame.



Figure 4 Remove the BUR Front Frame

- 10. Remove the Backup Roll. (Figure 5)
  - a. Remove the Backup Roll.



11. Remove the Transfer Belt. (Figure 6)



Figure 6 remove the Transfer Belt (IBT)

#### Replacement

- 1. To install, carry out the removal steps in reverse order taking note of the following: **NOTE:** When installing the Transfer Belt, install it with the TR0 Seal at the rear.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# REP 9.4 TR0 Seal

## Parts List on PL 6.3

#### Replacement

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Do not touch the Transfer Belt surface with your hands.

NOTE: Do not touch the IBT Drive Roll surface with your hands.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Drum (Y, M, C, K) (REP 9.5).
- 4. Remove the Transfer Belt Cleaner Assembly. (REP 9.1)
- 5. Remove the IBT Assembly. (REP 9.2)
- 6. Remove the Transfer Belt. (REP 9.3)
- 7. Open the DADF or Platen Cover and place a piece of cloth, etc. on the Platen Glass to create a working space.
- 8. Using drum cleaner, clean the surface beside the old TR0 Seal (left or right, either one is ok; this will be the position to paste the new TR0 Seal). (Figure 1)



j0wa40616 Figure 1 Clean the surface beside the old TR0 Seal

9. Paste the new TR0 Seal at approx. 1mm to 2mm beside the old TR0 Seal and less than 0.5mm away from the edge of the Transfer Belt. (Figure 2)

**NOTE:** When peeling off the new TR0 Seal from its backing paper, make sure to do so by first bending the backing paper away to expose the edge. If you attempt to peel off the TR0 Seal directly, it may result in its edges getting bunched up and rendering it unusable.

**NOTE:** If the new TR0 Seal is skewed, or has dirt/air trapped in it, redo the pasting.



j0wa40617 Figure 2 Paste the new TR0 Seal

10. From the top, gently press on the whole surface of the pasted TR0 Seal.

NOTE: Do not wipe it with a dry cloth, etc.

- 11. Peel off the old TR0 Seal and use drum cleaner to clean off any adhesive that may have remained on the Transfer Belt.
- 12. Clean the IBT Home Position Sensor by using a piece of dry cloth.

#### Removal

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: When installing the Transfer Belt, install it with the TR0 Seal at the rear.

# REP 9.5 Drum

### Parts List on PL 8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Cover.
- 4. Rotate the Tension Lever of the Transfer Belt counterclockwise.
- 5. Open the Drum Cover.
- 6. Remove the drum. (Figure 1)
  - a. Pull the handle of the Drum in the direction of the arrow and remove the Drum.



Figure 1 Remove the drum

#### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 9.6 Erase Lamp Unit (K)

## Parts List on PL 8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - IBT Assembly (REP 9.2)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in Figure 1.
  - c. Remove the Drum Cover.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



Figure 2 Remove the Front and Inner Cover together

7. [7845/55]:

Remove the Process 1 Fan and Duct. (Figure 3)

- a. Disconnect the connector.
- b. Remove the screw.
- c. Remove the Process 1 Fan and Duct.
- d. Remove the cable band.



Figure 3 Remove the Process 1 Fan and Duct

- 8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).



j0ki40809

Figure 4 Disconnect the connectors

- 9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.



Figure 5 Remove the ATC PWB Assembly

- 10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.



Figure 6 Close the shutters

- 11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).
  - b. Remove the Waste Toner Pipe Assembly.



j0ki40812 Figure 7 Remove the Waste Toner Pipe Assembly

**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)



Figure 8 Make sure the shutter is closed during Removal/Install

- 12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



Figure 9 Remove the Plate

- 13. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
- 14. Remove the MOB ADC Assembly. (REP 9.16)
- 15. Remove the screw that secures the Erase Lamp Unit (K) at the rear. (Figure 10)
  - a. Remove the screw.



Figure 10 Remove the screw

- 16. Remove the Erase Lamp Unit (K). (Figure 11)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Erase Lamp Unit (K).



Figure 11 Remove the Erase Lamp Unit (K)

### Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 12)



Figure 12 Siphon the cleaner from the outlet at the Waste Box side

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

# REP 9.7 Erase Lamp Unit (Y, M, C)

## Parts List on PL 8.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Because the removal procedure for the Erase Lamp Units (Y, M, C) is the same, the following describes only the procedure for the Erase Lamp Unit (C).

**NOTE:** Place paper under the removed Dispenser Pipe (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - IBT Assembly (REP 9.2)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in Figure 1.
  - c. Remove the Drum Cover.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)

- a. Remove the screws (x6).
- b. Remove the Front Cover together with the Inner Cover.



Figure 2 Remove the Front and Inner Covers together

7. [7845/55]:

Remove the Process 1 Fan and Duct. (Figure 3)

- a. Disconnect the connector.
- b. Remove the screw.
- c. Remove the Process 1 Fan and Duct.
- d. Remove the cable band.



Figure 3 Remove the cable band

- 8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).



j0ki40809 Figure 4 Disconnect the connectors

- 9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.



Figure 5 Remove the ATC PWB Assembly

- 10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.

**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)



Figure 8 Make sure the shutter is closed during Removal/Install

- 12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



Figure 9 Remove the Plate

- 13. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
- 14. Remove the Dispenser Pipe (K). (Figure 10)
  - a. Pull the joint section between the Dispenser Pipe (K) and the Guide Assembly (K) towards you.
  - b. Release the hooks (x2) and remove the Dispenser Pipe (K).



Figure 6 Close the shutters (Y,M,C,K)

- 11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).
  - b. Remove the Waste Toner Pipe Assembly.



j0ki40812 Figure 7 Remove the Waste Toner Pipe Assembly



Figure 10 Remove the Dispenser Pipe (k)

- 15. Remove the screw that secures the Erase Lamp Unit (C) at the rear. (Figure 11)
  - a. Remove the screw.



Figure 11 Remove the screw

- 16. Remove the Erase Lamp Unit (C). (Figure 12)
  - a. Disconnect the connector.
  - b. Remove the screws (x2).
  - c. Remove the Erase Lamp Unit (C).



Figure 12 Remove the Erase Lamp Unit (C)

#### Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 13)



Figure 13 Siphon the cleaner from the outlet at the Waste Box side

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

## **REP 9.8 Agitator Motor Assembly**

## Parts List on PL 8.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Disconnect all cables connected to the Control section on the right of the machine.
- 4. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Waste Box (PL 8.2)
  - Rear Lower Cover (REP 14.3)
  - Right Cover (PL 19.3)
  - HVPS (1st/2nd/DTC) (REP 1.1)
  - Remove the Drum/Dev. Drive Unit:
    - 7830/35 (REP 4.3)
    - 7845/55 (REP 4.4)
- 5. Slide the GFI Chassis Assembly. (Figure 1)
  - a. Release the wire harness from the clamp.
  - b. Remove the screws (x4).
  - c. Slide the GFI Chassis Assembly.



Figure 1 Slide the GFI Chassis Assembly

- 6. Remove the Harness Holder. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Release the wire harness from the hook.

November 9, 2012 4-152

- c. Remove the cable band.
- d. Remove the screws (x2).
- e. Remove the Harness Holder.



Figure 2 Remove the Harness Holder

- 7. Remove the gear and the bearing. (Figure 3)
  - a. Remove the KL-Clip.
  - b. Remove the gear.
  - c. Remove the bearing.



Figure 3 Remove the Gear and bearing

- 8. Remove the Agitator Motor Assembly. (Figure 4)
  - a. Remove the screws (x2).
  - b. Remove the Agitator Motor Assembly.



Figure 4 Remove the Agitator Motor Assembly

#### Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 9.9 2nd BTR Assembly**

#### Parts List on PL 14.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the 2nd BTR Roll surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the L/H Cover Unit.
- 4. Remove the 2nd BTR Assembly. (Figure 1)
  - a. Remove the Tapping Screw.
  - b. Press the Lever in the direction of the arrow.
  - c. Remove the 2nd BTR Assembly.



Figure 1 Remove the 2nd BTR Assembly

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.
# REP 9.10 LED Print Head Assembly (Y, M, C, K)

### Parts List on PL 2.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Because the removal procedure for the LPH Units (Y, M, C, and K) are the same, the following describes only the procedure for the LPH Unit (K).

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Place paper under the Developer Housing Assembly (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
- 4. Remove the Developer Housing Assembly (K). (REP 9.14)
- 5. Remove the LPH Unit (K). (Figure 1)
  - a. Remove the screw.
  - b. Remove the LPH Unit (K).



Figure 1 Remove the LPH Unit (K)

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 9.11 LPH Cable Assembly (7830/35)

### Parts List on PL 2.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Disconnect all cables connected to the Control section on the right of the machine.
- 4. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Rear Lower Cover (REP 14.3)
  - Left Rear Upper Cover (PL 19.2)
- 5. Disconnect the LPH Cables (x4) from the MCU PWB. (Figure 1)
  - a. Disconnect the LPH Cables (x2).
  - b. Disconnect the LPH Cables (x2).
  - c. Release the LPH Cable from the cable holder.
  - d. Release the LPH Cable from the cable holder.



Figure 1 Disconnect the LPH Cables

- 6. Remove the HVPS (06A2). (REP 1.1)
- 7. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
- 8. Release the wire harness from the Harness Holder. (Figure 2)
  - a. Disconnect the connectors (x4).
  - b. Release the wire harness from the Harness Holder.



j0ki40202

Figure 2 Release the wire harness

- 9. Remove the Takeaway Clutch. (Figure 3)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screws (x2).
  - d. Remove the Bracket and Takeaway Clutch.



Figure 3 Remove the Takeaway Clutch

- 10. Remove the Cable Supports (x2). (Figure 4)
  - a. Release the wire harness from the clamps (x2).
  - b. Remove the Cable Support.
  - c. Remove the Cable Support.



Figure 4 Remove the Cable Supports

- 11. Remove the Main Drive Assembly. (Figure 5)
  - a. Disconnect the connector.
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



Figure 5 Remove the Main Drive Assembly

- 12. Release the LPH Cable. (Figure 6)
  - a. Disconnect the connector.
  - b. Release the LPH Cable from the clamps (x3).
  - c. Release the LPH Cable from the cable holder.



Figure 6 Release the LPH Cable

- 13. Remove the screws that secure the LPH Cable Assembly. (Figure 7)
  - a. Disconnect the LPH Cables (x4).
  - b. Remove the screws (x2).
  - c. Remove the LPH Cable Assembly.



Figure 8 Remove the LPH Cable Assembly

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the Takeaway Clutch, align the bosses (x4) of the bearing to the installation holes. (Figure 9)



Figure 7 Remove the screws

- 14. Remove the LPH Cable Assembly. (Figure 8)
  - a. Release the hooks (x2) and remove the LPH Cable Assembly in the direction of the arrow.



Figure 9 Install the Takeaway Clutch

3. When installing the Bracket, insert the Bracket into the tab of the Takeaway Clutch. (Figure 10)



Figure 10 Install the Bracket

## REP 9.12 LPH Cable Assembly (7845/55)

Parts List on PL 2.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Disconnect all cables connected to the Control section on the right of the machine.
- 4. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Rear Lower Cover (REP 14.3)
  - Left Rear Upper Cover (PL 19.2)
- 5. Disconnect the LPH Cables (x4) from the MCU PWB. (Figure 1)
  - a. Disconnect the LPH Cables (x2).
  - b. Disconnect the LPH Cables (x2).
  - c. Release the LPH Cable from the cable holder.
  - d. Release the LPH Cable from the cable holder.



Figure 1 Disconnect the LPH Cables

- 6. Remove the HVPS (06A2). (REP 1.1)
- 7. Remove the Drum/Dev. Drive Unit:
  - 7830/35 (REP 4.3)
  - 7845/55 (REP 4.4)
- 8. Release the wire harness from the Harness Holder. (Figure 2)
  - a. Disconnect the connectors (x4).
  - b. Release the wire harness from the Harness Holder.



j0ki40202

Figure 2 Release the wire harness

- 9. Remove the Takeaway Motor. (Figure 3)
  - a. Disconnect the connector.
  - b. Remove the cable band.
  - c. Remove the screws (x3).
  - d. Release the clamp.
  - e. Move the wire harness in the direction of the arrow.
  - f. Remove the screw.
  - g. Remove the Takeaway Motor.



Figure 3 Remove the Takeaway Motor

- 10. Remove the gear and shaft. (Figure 4)
  - a. Remove the gear and shaft.



Figure 4 Remove the gear and shaft

- 11. Remove the Cable Supports (x2). (Figure 5)
  - a. Remove the Cable Support.
  - b. Remove the Cable Support.
  - c. Release the wire harness from the clamp.
  - d. Remove the cable band.



Figure 5 Remove the Cable Supports

- 12. Remove the Main Drive Assembly. (Figure 6)
  - a. Disconnect the connectors (x2).
  - b. Remove the screws (x4).
  - c. Remove the Main Drive Assembly.



Figure 6 Remove the Main Drive Assembly

- 13. Release the LPH Cable. (Figure 7)
  - a. Disconnect the connector.
  - b. Release the LPH Cable from the clamps (x3).
  - c. Release the LPH Cable from the cable holder.



Figure 8 Remove the screws

- 15. Remove the LPH Cable Assembly. (Figure 9)
  - a. Release the hooks (x2) and remove the LPH Cable Assembly in the direction of the arrow.



Figure 7 Release the LPH Cable

- 14. Remove the screws that secure the LPH Cable Assembly. (Figure 8)
  - a. Disconnect the LPH Cables (x4).
  - b. Remove the screws (x2).



Figure 9 Remove the LPH Cable Assembly

### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When installing the gear and shaft, align the bosses (x4) of the bearing to the installation holes. (Figure 10)



Figure 10 Install the gear and shaft

3. When installing the Takeaway Motor, align the shaft to the hole of the bearing. (Figure 11)



Figure 11 Install the Takeaway Motor

## **REP 9.13 Toner Dispense Motor Assembly**

Parts List on PL 5.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover.
  - c. Remove the Drum Cover.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



Figure 2 Remove the Front and Inner Covers together

- 7. Remove the Top Rear Cover. (PL 19.2)
- 8. Remove the Top Cover. (REP 14.2)
- 9. Remove the Rear Lower Cover. (REP 14.3)
- 10. Open the PWB Chassis Unit. (REP 14.4)
- 11. Remove the HVPS (1st/2nd/DTC). (REP 1.1)
- 12. Disconnect the connectors (x4). (Figure 3)
  - a. Release the clamps (x4) of the wire harness.
  - b. Disconnect the connectors (x4).



Figure 3 Disconnect the connectors

- 13. Remove the Conductor Housing Assembly. (Figure 4)
  - a. Remove the screws (x3).
  - b. Remove the Conductor Housing Assembly.



Figure 4 Remove the Conductor Housing Assembly

- 14. Disconnect the connectors (x4). (Figure 5)
  - a. Remove the cable bands (x4).
  - b. Release the wire harness from the clamp.
  - c. Disconnect the connectors (x4).



Figure 5 Disconnect the connectors

- 15. Remove the Toner Dispense Motor Assembly. (Figure 6)
  - a. Remove the screws (x5).
  - b. Remove the Toner Dispense Motor Assembly.



Figure 6 Remove the Toner Dispense Motor Assembly

#### Replacement

1. To install, carry out the removal steps in reverse order.

**NOTE:** If any of the Toner Dispense Motors (Y, M, C, K) was removed, align the connector sections to the arrows when installing. (Figure 7)



Figure 7 Align the connector sections to the arrows

# REP 9.14 Developer Housing Assembly (Y, M, C, K)

Parts List on PL 5.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Because the removal procedure for the Developer Housing Assemblies (Y, M, C, and K) is the same, the following describes only the procedure for the Developer Housing Assembly (K).

**NOTE:** When removing the Dev. Housing, pay attention to the following:

- Foreign substances in the Dev. Housing.
- Foreign substances on the surface of the Dev. Housing, especially on the Developer Material Roll and Lower Seal.
- Toner sticking to the gear of the Developer Housing Assembly.
- Toner sticking to the MOB ADC Assembly.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

**NOTE:** Place paper under the Dispenser Assembly (Y, M, C, K) and on the floor so that the toner, etc. do not dirty the floor and the machine during servicing.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover.
  - c. Remove the Drum Cover.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



Figure 3 Remove the Process 1 Fan and Duct

- 8. Disconnect the connectors of the ATC PWB Assembly. (Figure 4)
  - a. Release the wire harness from the hooks (x4).
  - b. Disconnect the connectors (x5).



Figure 2 Remove the Front and Inner Covers together

7. [7845/55]:

Remove the Process 1 Fan and Duct. (Figure 3)

- a. Disconnect the connector.
- b. Remove the screw.
- c. Remove the Process 1 Fan and Duct.
- d. Remove the cable band.



j0ki40809 Figure 4 Disconnect the connectors

- 9. Remove the ATC PWB Assembly. (Figure 5)
  - a. Remove the screws (x2).
  - b. Remove the ATC PWB Assembly.

b. Remove the Waste Toner Pipe Assembly.



Figure 5 Remove the ATC PWB Assembly

- 10. Close the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K). (Figure 6)
  - a. Close the shutter.
  - b. Turn the Lever counterclockwise and close the shutter.



j0ki40812 Figure 7 Remove the Waste Toner Pipe Assembly

**NOTE:** Make sure that the shutter at the Waste Box side of the Waste Toner Pipe Assembly is closed. Also make sure that the shutter is closed when installing. (Figure 8)



Figure 8 Make sure the shutter is closed during Removal/Install

- 12. Remove the Plate. (Figure 9)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



Figure 6 Close the shutters (Y,M,C,K)

- 11. Remove the Waste Toner Pipe Assembly. (Figure 7)
  - a. Remove the screws (x3).



Figure 9 Remove the Plate

- 13. Slide the Dispenser Pipe (K). (Figure 10)
  - a. Pull the joint section between the Dispenser Pipe (K) and the Developer Housing Assembly (K) in the direction of the arrow.
  - b. Open the Dispenser Pipe (K) upwards.



Figure 10 Slide the Dispenser Pipe (K)

- 14. Remove the Dev. Plate Assembly. (Figure 11)
  - a. Remove the screws (x2).
  - b. Remove the Dev. Plate Assembly.



Figure 11 Remove the Dev. Plate Assembly

- 15. Remove the Developer Housing Assembly (K). (Figure 12)
  - a. Remove the Developer Housing Assembly (K).



Figure 12 Remove the Developer Housing Assembly (K)

### Replacement

**NOTE:** When cleaning the inner part of the Waste Toner Pipe Assembly, siphon the cleaner from the outlet at the Waste Box side. Rotating the gear indicated in the figure clockwise will result in the toner being ejected. (Figure 13)

**NOTE:** If the Developer Housing Assembly is installed with toner stuck to the gears, it will cause banding of the gear, hastened wear and tear, and etc. (Figure 15)



Figure 13 Siphon the cleaner from the outlet at the Waste Box side

**NOTE:** If there is toner stuck to the MOB ADC Assembly, it has to be cleaned.

**NOTE:** Before installing the Developer Housing Assembly, check the locations on the Frame that are indicated in the following figure and clean it thoroughly if any toner, etc. are found to have gotten stuck there. (Figure 14)



Figure 14 Check/clean before Installing the Developer Housing Assembly



Figure 15 Check/clean Developer Housing Assembly gears

**NOTE:** After installing the Waste Toner Pipe Assembly, do not forget to open the shutters of the Dispenser Pipe (Y, M, C, K) and the Developer Housing Assembly (Y, M, C, K) that were closed in Step 8.

2. If it was replaced, supply the Developer Housing Assembly with new Developer. (REP 9.15)

**NOTE:** When replacing the Developer Housing Assembly, put the removed Developer Housing Assembly into the provided plastic bag without removing the Developer from it, and collect it back.

- 3. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.
- 4. Obtain the value of the ATC Sensor that is installed to the replaced Developer Housing Assembly and perform dC950 ATC Sensor Setup.
- 5. Perform dC949 ATC Default Developer Setup on the replaced Developer Housing Assembly.
- Obtain the NVM values of the Developer Housing Assembly Replacement Target Color that is found on the inspection sheet that comes with the machine (ATC Setup Coefficient, ATC Setup Offset, ATC\_Barcode\_No, and deltaATC target Setup correction) and overwrite the values of the inspection sheet.

# **REP 9.15 Developer**

## Parts List on PL 5.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

NOTE: When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

NOTE: Do not touch the Drum surface with your hands.

**NOTE:** When replacing the Developer, spread paper on the floor in advance to keep the site clean.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
  - Developer Housing Assembly (REP 9.14)
- 4. Remove the Upper Cover. (Figure 1)



j0wa40517

Figure 2 Remove the Triumph Plate

- 6. Put the Developer Housing Assembly into the plastic bag that comes bundled with the Developer and turn it upside down, then rotate the gear clockwise as shown in the figure to eject the Developer. (Figure 3)
  - a. Turn the Developer Housing Assembly upside down.
  - b. Rotate the gear in clockwise direction.



Figure 3 Put the Developer Housing Assembly in a plastic bag

7. Install the Triumph Plate. (Figure 4)



Upper Cover

j0wa40515

### Figure 1 Remove the Upper Cover

5. Remove the Triumph Plate. (Figure 2)



Figure 4 Install the Triumph Plate

8. Hold the Developer Housing Assembly steady with your hand and supply the new Developer to the Mag Roll side. (Figure 5)



Figure 6 Rotate the gear clockwise

**NOTE:** After the Developer on the Mag Roll is evened out, take note of the following points.

• Make sure that the Developer does not go beyond the line that is approx. 3mm below the Upper Cover installation slot hole. (Figure 7)



Figure 7 Make sure the Developer does not go beyond the line

• Make sure that no Developer or toner has gotten stuck to the locations shown in the figure. If there is any, clean it up by using dry cloth, etc. (Figure 8)





- 9. Rotate the gear indicated in the figure clockwise to even out the Developer on the Mag Roll. (Figure 6)
  - a. Rotate the gear in clockwise direction.



j0wa40521

#### Figure 8 Make sure that no Developer or toner is stuck

 Make sure that no Developer or toner has gotten stuck to the seal section indicated in the figure, on the Upper Cover that was removed in Step 2. If there is any, clean it up by using a vacuum cleaner or by gently using a dry cloth, etc. (Figure 9)



Figure 10 Make sure that no Developer or toner is stuck to the DRS Block locations

• Make sure that no Developer or toner has gotten stuck to the gear locations indicated in the figure by turning the gear clockwise. If there is any, clean it up by using a vacuum cleaner or a brush, etc. (Figure 11)



j0wa40522

#### Figure 9 Make sure that no Developer or toner is stuck to the seal

- 11. Reinstall the Upper Cover that was removed in Step 2.
- 12. Turn the Developer Housing Assembly upside down and check for the following.
  - Make sure that no Developer or toner has gotten stuck to the DRS Block locations indicated in the figure. If there is any, clean it up by using dry cloth, etc. (Figure 10)



j0wa40524

Figure 11 Make sure that no Developer or toner is stuck to the gears

#### Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

# **REP 9.16 MOB ADC Assembly**

## Parts List on PL 18.5

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in Figure 1.
  - c. Remove the Drum Cover.



Figure 2 Open the L/H Cover

- 7. Remove the Plate. (Figure 3)
  - a. Remove the screws (x6).
  - b. Remove the Plate.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



Figure 3 Remove the Plate

8. Remove the Plate. (7830/35: Figure 4) (7845/55: Figure 5)a. Release the hooks (x2) and remove the Plate.



Figure 4 Release the Hooks and Remove the Plate



Figure 5 Release the Hooks and Remove the Plate

- 9. Remove the Process 2 Fan and Duct. (7830/35: Figure 6) (7845/55: Figure 7)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connector.
  - c. Remove the screw.
  - d. Remove the Process 2 Fan and Duct.



Figure 6 Remove the Process 2 Fan and Duct



Figure 7 Remove the Process 2 Fan and Duct

- 10. [7830/35]:
  - Remove the Plate. (Figure 8)
  - a. Remove the Plate in the direction of the arrow.



Figure 8 Remove the Plate

- 11. Disconnect the connector. (Figure 9)
  - a. Disconnect the connector.



Figure 9 Disconnect the connectors

- 12. Remove the MOB ADC Assembly. (Figure 10)
  - a. Remove the screw.
  - b. Remove the MOB ADC Assembly.



j0ki41825 Figure 10 Remove the MOB ADC Assembly

### Replacement

# REP 10.1 Fuser

Parts List on PL 7.1

Removal

#### WARNING

Do not handle the fuser components until they have cooled. Some fuser components operate at hot temperatures and can produce serious personal injury if touched.

DANGER: Ne pas manipuler les éléments du four avant de les laisser refroidir. Certains éléments du four fonctionnent à des températures très élevées et peuvent causer de graves blessures s'ils sont touchés.

AVVERTENZA: Non maneggiare i componenti del fusore finché non sono raffreddati. Alcuni di questi componenti funzionano ad alte temperature e possono provocare gravi ferite se vengono toccati.

VORSICHT: Die Fixieranlage sollte erst gehandhabt werden, wenn diese genügend abgekühlt ist. Einige Teile der Fixieranlage erzeugen übermäßige Hitze und führen bei der Berührung zu schweren Verbrennungen.

AVISO: No manipule los componentes del fusor antes de que se enfríen. Algunos de los componentes del fusor funcionan a altas temperaturas y pueden ocasionar daños personales graves si se los toca.

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the L/H Cover Unit.
- 4. Remove the Fuser. (Figure 1)
  - a. Loosen the Knob Screws (x2).
  - b. Remove the Fuser.



Figure 1 Remove the Fuser

## Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. After a replacement, enter the Diag Mode and use dC135 to reset the HFSI counter.

## **REP 10.2 Duplex Assembly**

## Parts List on PL 14.2

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Do not touch the 2nd BTR Roll surface with your hands.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the L/H Cover Unit.
- 4. Remove the chute. (Figure 1)
  - a. Remove the screws (x4).
  - b. Remove the Tapping Screws (x2).
  - c. Remove the chute.



j0ki41406

Figure 1 Remove the Chute

- 5. Remove the L/H Cover. (Figure 2)
  - a. Remove the Tapping Screws (x6).
  - b. Remove the L/H Cover.



Figure 2 Remove the L/H Cover

- 6. Disconnect the connector. (Figure 3)
  - a. Release the wire harness from the clamp.
  - b. Disconnect the connectors (x3).



Figure 3 Disconnect the connectors

- 7. Remove the Duplex Assembly. (Figure 4)
  - a. Remove the screws (x3).
  - b. Remove the Duplex Assembly.



Figure 4 Remove the Duplex Assy

## Replacement

# **REP 11.1 Exit/OCT 1 Assembly**

### Parts List on PL 17.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Exit 2 Assembly. (REP 11.2)
- 4. Remove the Motor Cover. (Figure 1)
  - a. Release the wire harness from the hook.
  - b. Disconnect the connector.
  - c. Remove the Tapping Screw.
  - d. Remove the Motor Cover.



Figure 1 Remove the Motor Cover

- 5. Disconnect the connector. (Figure 2)
  - a. Disconnect the connectors (x2).
  - b. Slide and remove the Belt.
  - c. Remove the screws (x2).



Figure 2 Disconnect the connectors

- 6. Remove the Exit/OCT 1 Assembly. (Figure 3)
  - a. Slide the Bearing.
  - b. Remove the Exit/OCT 1 Assembly.



Figure 3 Remove the Exit/OCT 1 Assy

### Replacement

# **REP 11.2 Exit 2 Assembly**

### Parts List on PL 17.1

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the L/H Cover Unit.
- 4. Remove the Front Left Cover. (PL 19.2)
- 5. Remove the Left Rear Upper Cover. (PL 19.2)
- 6. Remove the Paper Weight. (Figure 1)
  - a. Release the hook and remove the Paper Weight.



Figure 1 Remove the Paper Weight

- 7. Remove the Exit 2 Assembly. (Figure 2)
  - a. Disconnect the connector.
  - b. Remove the screws (x4).
  - c. Remove the Exit 2 Assembly.



Figure 2 Remove the Exit 2 Assy

### Replacement

# REP 14.1 L/H Cover Unit

## Parts List on PL 14.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Left Rear Lower Cover. (PL 19.2)
- 4. Open the L/H Cover Unit.
- 5. Disconnect the connector. (Figure 1)
  - a. Release the wire harness from the clamps (x2).
  - b. Disconnect the connector.
  - c. Disconnect the connector.



j0ki41401

Figure 1 Disconnect the connectors

Rotate the Front Support 90 degree counterclockwise and remove it from hole of the Frame. (Figure 2)
(A) Front Support



Figure 2 Rotate and Remove the Front Support

- 7. Remove the Rear Support from the L/H Cover Unit. (Figure 3)
  - a. Remove the KL-Clip.
  - b. Remove the Rear Support.



Figure 3 Remove the Rear Support

- 8. Remove the L/H Cover Unit. (Figure 4)
  - a. Remove the L/H Cover Unit from the studs (x2) of the hinge.



Figure 4 Remove the L/H Cover

### Replacement

1. To install, carry out the removal steps in reverse order.

# REP 14.2 Top Cover

## Parts List on PL 19.2

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** When removing the Drum, cover it with a black sheet, etc. to prevent light fatigue.

**NOTE:** Do not touch the Drum surface with your hands.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Drum (Y, M, C, K) (REP 9.5)
  - Toner Cartridge (Y, M, C, K) (PL 5.1)
  - Waste Box (PL 8.2)
  - Transfer Belt Cleaner Assembly (REP 9.1)
  - Tension Lever (PL 6.1)
- 4. Remove the Drum Cover. (Figure 1)
  - a. Remove the screws (x2).
  - b. Open the Drum Cover up to the position in the figure.
  - c. Remove the Drum Cover.



Figure 1 Remove the Drum Cover

- 5. Open the L/H Cover Unit.
- 6. Remove the Front Cover together with the Inner Cover. (Figure 2)
  - a. Remove the screws (x6).
  - b. Remove the Front Cover together with the Inner Cover.



Figure 2 Remove the L/H Cover

- 7. Remove the Front Left Cover and the Exit Front Cover. (Figure 3)
  - a. Remove the screw.
  - b. Remove the Front Left Cover in the direction of the arrow.
  - c. Remove the Exit Front Cover.



Figure 4 Remove the Paper Weight

- 9. Remove the Top Cover. (Figure 5)
  - a. Remove the screw.
  - b. Remove the Top Cover.



Figure 3 Remove the Front Left and Front Exit Covers

- 8. Remove the Paper Weight. (Figure 4)
  - a. Release the hook and remove the Paper Weight.



Figure 5 Remove the Top Cover

### Replacement

## **REP 14.3 Rear Lower Cover**

### Parts List on PL 19.3

#### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following parts:
  - Filter Cover (PL 19.3)
  - Control Unit Connector Cover (PL 19.3)
  - Rear Upper Cover (PL 19.3)
  - MCU Cover (PL 19.3)
- 4. Disconnect the connector. (Figure 1)
  - a. Disconnect the connector.



j0ki41901 Figure 1 Disconnect the connectors

- 5. Remove the Rear Lower Cover. (Figure 2)
  - a. Remove the screws (x3).
  - b. Remove the Rear Lower Cover.



Figure 2 Remove the Rear Lower Cover

#### Replacement

# **REP 14.4 Opening/Closing the PWB Chassis Unit**

## Parts List on PL 18.1

### Removal

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- $\ \ 2. \quad \ Switch \ off \ the \ power \ and \ disconnect \ the \ power \ cord.$
- 3. Remove the Control Unit Connector Cover. (PL 19.3)
- 4. Disconnect all cables connected to the Control Unit.
- 5. Remove the Rear Lower Cover. (REP 14.3)
- 6. Release the wire harness from the clamp. (Figure 1)
  - a. Release the wire harness from the clamps (x2).



Figure 1 Release the Wire Harness

- 7. Remove the screws that secure the PWB Chassis Unit. (Figure 2)
  - a. Remove the screws (x2).



Figure 2 Remove the screws

Remove the screws that secure the PWB Chassis Unit. (Figure 3)
a. Remove the screws (x3).



Figure 3 Remove the screws that secure the PWB Chassis

- 9. Open the PWB Chassis Unit. (Figure 4)
  - a. Remove the screws (x3) and open the PWB Chassis Unit.



## Replacement

# REP 19.1 HCF Tray 6

### Parts List on PL 28.1

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the HCF Tray by pulling the tray toward you.
- 4. Remove all paper from the tray.
- 5. Using a small screwdriver, or other small, blunt instrument, release the stopper on each rail of the tray by inserting the screwdriver into the hole of the stopper and pulling the tray toward you.
- 6. Remove the tray by pulling it toward you.

#### Replacement

- 1. Slide the rails (2) into the HCF housing.
- 2. Line up the rails of the tray with the adjoining rails of the HCF and push the tray into place.
- 3. Place previously removed paper, or fresh paper, into the tray.

# **REP 19.2 HCF Feeder**

### Parts List on PL 28.1

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the HCF Tray (REP 19.1).
- 4. Open the Feeder Top Cover.
- 5. Remove the (2) screws used to secure the HCF Feeder on its rail (Figure 1).



Figure 1 Feeder Securing Screws

6. Slide the HCF Feeder toward you.

#### Replacement

- 1. Position the HCF Feeder's bottom rail-following feet (2) onto the internal HCF rail.
- 2. Slide the HCF Feeder back into the HCF until it seats.

### CAUTION

#### Do not over tighten the HCF Feeder screws.

3. Reinstall the two securing screws and tighten until snug.

# **REP 19.3 HCF Un-docking**

### Parts List on PL 28.8

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Unplug the HCF Power Cable connected to the left rear of the copier/printer.
- 4. Grasping the HCF by its upper corners, pull the HCF away from the copier/printer to expose the HCF Docking Base (Figure 1).



Figure 1 Exposing the docking base

- 5. Release the Docking Latch Spring Lever on the right side of the Docking Base.
- 6. Pull the HCF away from the copier/printer to un-dock it from the copier/printer.

#### Replacement

- 1. Push the HCF toward the two Docking Points on the left side of the printer.
- 2. Align the holes in the HCF Docking Base with the Docking Points on the printer/copier.

**NOTE:** Rotate the Caster of the copier/printer so that it does not interfere with docking.

- 3. Push the HCF into place.
- 4. Reattach the HCF Power Cable.

# **REP 19.4 HCF Tray Cables**

### Parts List on PL 28.3

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.

#### **Removing the HCF Rear Tray Cables**

- 1. Remove the HCF Tray (REP 19.1)
- 2. Remove the Gear Bracket Assembly (Figure 1).



Figure 1 Gear Bracket Assembly

3. At the rear of the HCF Tray, begin to free up movement of the Tray Cable Pulley (Figure 2).



Figure 2 Lift Shaft Rear Tray Cable Pulley

**NOTE:** You will not be able to release the cable ends from underneath the Tray Cable Pulley until you perform the next step, which puts slack in the cable enabling the Lift Shaft to be disengaged from its bracket, and the Tray Cable Pulley moved farther to the left releasing the cable ends.

4. Prepare to remove the Rear Tray Cable (Figure 3).



Figure 3 Preparing to remove the Rear Tray Cable

5. When both sections of the cable are slack, disengage the Lift Shaft from the frame and slide the Tray Cable Pulley to the front of the Lift Shaft to release the Rear Lift Cable ends that are trapped in the pocket underneath the Tray Cable Pulley (Figure 4).



Figure 4 Releasing the Cable ends from the Lift Shaft

6. Remove the Rear Tray Cable (Figure 5, Figure 6).


Figure 5 Removing the Rear Tray Cables



Figure 6 Rear Tray Cable details

#### Removing the HCF Front Tray Cables

- 1. Remove the (5) screws securing the HCF Tray's Front Cover.
- 2. At the front of the HCF Tray, begin to free up movement of the front Tray Cable Pulley (Figure 7).
  - a. Remove the E-Ring on the Lift Shaft.
  - b. Slide the bearing to the rear on the Lift Shaft.
  - c. Front Tray Cable Pulley



Figure 7 Lift Shaft Front Tray Cable Pulley

**NOTE:** You will not be able to release the cable ends from underneath the Tray Cable Pulley until you perform the next step, which puts slack in the cable enabling the Lift Shaft to be disengaged from its bracket, and the Tray Cable Pulley moved farther to the right releasing the cable ends.

3. Remove the E-Rings, Wire Guides, and Pulleys from the front of the HCF Tray (Figure 8).



Figure 8 Preparing to remove the Front Tray Cables

4. When both sections of the cable are slack, disengage the Lift Shaft from the frame and slide the Tray Cable Pulley to the front of the Lift Shaft to release the Rear Lift Cable ends that are trapped in the pocket underneath the Tray Cable Pulley (Figure 9).



Figure 9 Releasing the Cable ends from the Lift Shaft

5. Remove the Front Tray Cables (Figure 10, Figure 11).



Figure 10 Removing the Front Tray Cables



#### Figure 11 Front Tray Cable details

#### Replacement

- 1. Install the front Tray Cable by carrying out the removal steps in reverse order.
- 2. Install the rear Tray Cable by carrying out the removal steps in reverse order.
- 3. Reinstall the HCF Tray's Front Cover.
  - a. Make sure to raise the gear on the Indicator Shaft so that it meshes with the adjoining Lift Shaft gear.
  - b. Replace the (5) Installation Screws.
- 4. Reinstall the HCF Tray by lining up the rails of the tray with the adjoining rails of the HCF and pushing the tray into place.

# **REP 19.5 HCF Feed, Nudger, Retard Rolls**

## Parts List on PL 28.5, PL 28.6

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

**NOTE:** Remove and replace the Retard/Feed/Nudger Rolls at the same time.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Feeder Top Cover.
- 4. Release the green Lever to open the Upper Feeder Assembly to reveal the (3) rolls.

**NOTE:** For reference purposes, the single roll in the Upper Feeder Assembly is the Nudger roll. The double roll in the Upper Feeder Assembly is the Feed Roll. The larger double roll in the Lower Feeder component is the Retard Roll.

5. Remove each roll by squeezing the roll's shaft at both ends and lifting the roll up and out of the HCF (Figure 1).



Figure 1 Removing rolls

#### Replacement

- 1. Install each new roll by squeezing its shaft at both ends and sliding the roll into place.
- 2. check that the rolls turn freely.

- 3. Flip down the Upper Feeder Assembly.
- 4. Close the Feeder Top Cover of the HCF.

# **REP 19.6 HCF Feed Shaft**

## Parts List on PL 28.5

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the HCF Feeder (REP 19.2)
- 4. Place the Feeder on a flat surface.
- 5. Open the Upper Feeder Assembly by releasing the green lever.
- 6. Remove the Nudger Roll by squeezing the roll's shaft at both ends (with the thumb and forefinger of one hand) and lifting the roll up and out of the HCF.
- 7. Remove the E-Ring and bearing on the Feed Shaft (at the Nudger Roll end of the shaft).
- 8. Move the bearing at the opposite end of the shaft to the right, and slide the Feed Shaft to the right to remove.

## Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 19.7 HCF Retard Lever Spring**

# Parts List on PL 28.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- $\ \ 2. \quad \ Switch \ off \ the \ power \ and \ disconnect \ the \ power \ cord.$
- 3. Remove the HCF Feeder (REP 19.2)
- 4. Place the Feeder on a flat surface and release the green Lever to open the Upper Feeder Assembly.
- 5. Remove the Lower Chute (2 screws).
- 6. Remove the plastic Cover by removing (4) screws.
- 7. Remove the Retard Roll.
- 8. Remove the E-Rings on the Lever and Spring.
- 9. Remove the Lever.

Initial Issue

10. Remove the Spring (Figure 1).



Figure 1 Removing the Retard Lever Spring

# NOTE: Make sure the plastic pads on the Lower Chute fit in the track before pushing it in.1. To install, carry out the removal steps in reverse order.

Replacement

# REP 19.8 HCF Nudger Bracket/Nudger Lever/Torsion Spring

# Parts List on PL 28.4

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the HCF Feed Shaft (REP 19.6)
- 4. Disassemble the Feed Shaft by removing (4) E-Rings and unscrewing the Nudger Support that retains the Torsion Spring.

#### Replacement

- 1. Install replacement parts.
- 2. Carry out the removal steps in reverse order.

# **REP 19.9 HCF Casters**

# Parts List on PL 28.8

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Un-dock the HCF (REP 19.3).
- 4. Remove all paper from the HCF Tray.
- 5. Roll the HCF away from the copier/printer.
- 6. Turn the HCF over onto its left side to expose the casters on the underside of the HCF.
- 7. Remove (3) installation screws per caster.

#### Replacement

- 1. Install a new caster or casters, by tightening the (3) installation screws per caster.
- 2. Turn the HCF back up to an upright position.
- 3. Roll the HCF back toward the copier/printer.
- 4. Place previously removed paper, or fresh paper, into the HCF Tray.
- 5. Dock the HCF.

# **REP 19.10 HCF Takeaway Roll**

# Parts List on PL 28.7

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the HCF Feed Motor (REP 19.12)
- 4. Remove the Lower Chute (Figure 1).
  - Remove the (2) securing screws.



Figure 1 Removing the Lower Chute

5. Slide the Takeaway Roll to the right until the left side is released, then lower the roll to remove.

## Replacement

- 1. To install, carry out the removal steps in reverse order.
- 2. When replacing, enter into Diagnostic mode and then clear the DC135HFSI counter.

# **REP 19.11 HCF PWB**

# Parts List on PL 28.8

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Un-dock the HCF (REP 19.3).
- 4. Remove the plastic Rear Cover.
  - Remove the (4) securing screws.
- 5. Disconnect all of the connectors connected to the HCF PWB.
- 6. Remove the (4) screws securing the HCF PWB.
- 7. Remove the HCF PWB.

## Replacement

1. To install, carry out the removal steps in reverse order.

# **REP 19.12 HCF Feed Motor**

# Parts List on PL 28.4

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Un-dock the HCF (REP 19.3).
- 4. Remove the plastic Rear Cover.
  - Remove the (4) securing screws.

NOTE: Be careful when removing the motor as it is meshed to a hidden gear.

- 5. Supporting the motor with one hand, remove the HCF Feed Motor (Figure 1).
  - Disconnect the electrical Connector (1).
  - Remove the (2) securing screws.



Figure 1 Removing the HCF Feed Motor

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 21.1 (Pro) Finisher Front Door

# Parts List on PL 21.3

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Remove the Front Door (Figure 1).



Figure 1 Removing the Front Door

# REP 21.2 (Pro) Finisher Rear Upper Cover

# Parts List on PL 21.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (Figure 1).



Figure 1 Removing the Rear Upper Cover

# REP 21.3 (Pro) Finisher Rear Lower Cover

# Parts List on PL 21.2

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Lower Cover (Figure 1).



Figure 1 Removing the Rear Lower Cover

# REP 21.4 (Pro) Finisher Top Cover

# Parts List on PL 21.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Remove the Rear Upper Cover (REP 21.2).
- 5. Remove the Top Tray (REP 21.6).
- 6. Remove screws (Figure 1).



Figure 1 Removing screws

7. Remove the Top Cover (Figure 2).

0112010A-COP



Figure 2 Removing the Top Cover

# REP 21.5 (Pro) Finisher Front Top Cover

Parts List on PL 21.3

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Front Door (REP 21.1).
- 4. Remove the Top Cover (REP 21.4).
- 5. Remove Front Top Cover (Figure 1).



0112010A-COP

Figure 1 Removing the Front Top Cover

# REP 21.6 (Pro) Finisher Top Tray

# Parts List on PL 21.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Loosen screws (Figure 1).



Figure 1 Loosening Screws (2)

4. Lift and remove the Top Tray.

# REP 21.7 (Pro) Finisher Eject Cover

# Parts List on PL 21.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Front Door (REP 21.1).
- 4. Remove the Rear Upper Cover (REP 21.2).
- 5. Remove screw (Figure 1).



Figure 1 Removing screw

6. Remove the Eject Cover (Figure 2).



Figure 2 Removing the Eject Cover

# REP 21.8 (Pro) Finisher Tray Spring Guide

Parts List on PL 21.2

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Front Door (REP 21.1).
- 4. Remove the Rear Upper Cover (REP 21.2).
- 5. Remove the Top Cover (REP 21.4).
- 6. Remove the Front Top Cover (REP 21.5).
- 7. Remove the Top Tray (REP 21.6).
- 8. Remove screws on the rear of the Finisher (Figure 1).



0112012a-cop

Figure 1 Removing screws on the rear of the Finisher

9. Remove screws on the front of the Finisher (Figure 2).



0112010A-COP

Figure 2 Removing screws on the front of the Finisher

10. Remove screws (2) securing the Top Tray Full Sensor Bracket to the Tray Spring Guide.

# REP 21.9 (Pro) Finisher Inner Cover

Parts List on PL 21.8

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Stacker Tray (PL 21.2).
- 4. Remove the Inner Cover (Figure 1).





Figure 1 Removing the Inner Cover (Professional Finisher shown)

# REP 21.10 (Pro) Finisher Left Top Cover

# Parts List on PL 21.3

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher from the IOT (REP 21.11).
- 4. Remove the Left Top Cover (Figure 1).

# REP 21.11 (Pro) Finisher

# Parts List on PL 21.1

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the H-Transport Connector Cover (PL 21.2).
- 4. Remove the MCU Cover.
- 5. Disconnect the three connectors (Figure 1).



0112010A-COP

Figure 1 Removing the Left Top Cover



Figure 1 Disconnecting connectors

- 6. Open the Front Door.
- 7. Separate the Finisher from the IOT (Figure 2).



Figure 2 Separating the Finisher from the IOT

# Replacement

1. If the IOT and Finisher has been moved to a new location, check (ADJ 12.2) Finisher Leveling.

# REP 21.12 (Pro) Finisher H-Transport Assembly

# Parts List on PL 21.1; PL 21.24

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Disconnect the H-Transport Wire Harness from the Finisher (Figure 1).
  - a. Remove the Connector Cover (PL 21.2).
  - b. Disconnect the Wire Harness ( J8444) from the Finisher ( P8444).
  - c. Replace the Connector Cover.
- 4. Remove the Finisher (REP 21.11).
- 5. Remove (2) screws (Figure 2).
- 6. Remove the H-Transport Assembly (Figure 3).



Figure 1 H-Transport Assembly to Finisher Wire Harness Connectors



Figure 2 Removing Finisher H-Transport Assembly screws (2)



Figure 3 Removing the Finisher H-Transport Assembly

# REP 21.13 (Pro) Finisher Punch Frame Assembly

# Parts List on PL 21.5

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Remove screws (Figure 1).



Figure 1 Removing screws

5. Remove the Rear Upper Cover (REP 21.2).

**NOTE:** In order not to damage the Registration Motor Drive Belt during the next step, use caution when removing the Punch Frame Assembly from the Finisher.

6. Disconnect the connectors (Figure 2).



1

VIEW FROM BACK OF PRINTER

Figure 2 Disconnecting the connectors

7. Remove the two rear Punch Frame Assembly mounting screws (Figure 3).



Figure 3 Removing the two Mounting Screws

8. Remove the Punch Frame Assembly from the printer (Figure 4).



Figure 4 Removing the Punch Frame Assembly

### Replacement

1. Reinstallation is the reverse of the Removal procedure.

# **REP 21.14 (Pro) Finisher Stapler Assembly**

# Parts List on PL 21.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Remove Stapler Cover (Figure 1).



0112007A-COP

Figure 1 Removing the Stapler Cover

5. Remove the Stapler Assembly (Figure 2).



Figure 2 Removing the Stapler Assembly

# REP 21.15 (Pro) Finisher Stapler Rail

# Parts List on PL 21.6

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Stapler Assembly (REP 21.14).
- 4. Remove the Inner Cover (REP 21.9).
- 5. Remove the Stapler Carriage (Figure 1).



Figure 1 Removing the Stapler Carriage

6. Remove screws (6) holding the Stapler Rail.

# REP 21.16 (Pro) Finisher Booklet Maker

# Parts List on PL 21.1

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Pull out the Booklet Maker Unit until it stops.
- 5. Remove the Booklet Maker Stopper (black bracket on left side panel near the rear, 1 screw).
- 6. Remove the Booklet Maker Unit (Figure 1).

**NOTE:** Use caution to avoid personal injury and/or damage to the Booklet Maker when removing the Booklet Maker Unit from the Finisher.



Figure 1 Removing the Booklet Maker Unit

# Replacement

1. Perform the installation in the reverse order of the removal procedure, starting with attaching the Left Rail then the Right Rail.

# **REP 21.17 (Pro) Finisher Booklet Stapler**

# Parts List on PL 21.16

# Removal

2

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- Switch off the power and disconnect the power cord. 2.
- If the Booklet Maker Unit has been removed from the Finisher (REP 21.16), go to Figure 3. 1.
- 4. Open the Front Door.
- Pull out the Booklet Drawer Unit. 5.
- 6. Remove the Booklet Stapler (Figure 1).

# 3 Push in the stopper on the **Right Rail** Pull out the **Booklet Stapler** 4 Remove the **Booklet Stapler** Remove screws (2) on the Left Rail j0ne4k38

Figure 1 Removing the Booklet Stapler

# **REP 21.18 (Pro) Finisher Compiler Tray**

# Parts List on PL 21.8

## Removal

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (REP 21.2).
- Remove the Front Door (REP 21.1). 4.
- 5. Remove screw securing the Compiler Tray (Figure 1).



## Figure 1 Removing screw securing the Compiler Tray

- Remove the Stapler Assembly (REP 21.14). 6.
- 7. Remove the Inner Cover (REP 21.9).
- Disconnect the Compiler Harness (Figure 2). 8.



Figure 2 Disconnecting the Compiler Harness

- 9. Remove the Compiler Tray.
  - a. Push in the Front Tab (Figure 3).



Figure 3 Pushing in the Front Tab

b. Push in the Rear Tab (Figure 4).



Figure 4 Pushing in the Rear Tab

# **REP 21.19 (Pro) Finisher Stacker Tray Position**

# Parts List on PL 21.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (REP 21.2).

**NOTE:** In the next step, while disengaging the Elevator Pulley, hold the Stacker Tray with one hand.

4. Disengage the Elevator Pulley (Figure 1).



Figure 1 Disengaging the Elevator Pulley

5. Manually move the Stacker Tray Bracket up or down.

# REP 21.20 (Pro) Finisher Paddle Shaft

## Parts List on PL 21.9

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Manually move the Stapler Assembly towards the rear of the machine.
- 5. Remove the Rear Upper Cover (REP 21.2).
- 6. Remove the Paddle Shaft (Figure 1).

1.	3.	2.
Remove E-clip and Bushing (from the rear of the Fin- isher)	Disengage the tab on the Synchronous Belt Pulley and remove the Pulley	Remove E-clip and Bushing
isiter)		



**4.** Press Bracket down and remove the Paddle Shaft

Figure 1 Removing the Paddle Shaft

## Replacement

1. Reinstall components in the reverse order of the removal procedure.

# **REP 21.21 (Pro) Finisher Stacker Drive Belt**

# Parts List on PL 21.4

## Removal

2 Release

the Belt

rear Stacker

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- Switch off the power and disconnect the power cord. 2.
- 3. Remove the Front Door (REP 21.1).
- Remove the Rear Upper Cover (REP 21.2). 4.
- 5. Remove the Rear Lower Cover (REP 21.3).
- Perform REP 21.19 Stacker Tray (position the Stacker Tray in the lowest position). 6.
- 7. Remove the rear Stacker Drive Belt (Figure 1).



Figure 1 Removing the rear Stacker Belt

8. Remove the front Stacker Drive Belt (Figure 2).



Figure 2 Removing the front Stacker Belt

## Replacement

2

1. Reinstall components in the reverse order of the removal procedure. Refer to Figure 2 and Figure 1 for Stacker Drive Belt positioning in the Belt Clamps.

# REP 21.22 (Pro) Finisher Buffer Path Sensor

# Parts List on PL 21.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher from the IOT (REP 21.11).
- 4. Remove the Punch Assembly (REP 21.13).
- 5. Remove the Left Top Cover (REP 21.10).
- 6. Remove the Buffer Path Sensor (Figure 1).



Figure 1 Removing the Buffer Path Sensor

# REP 21.23 (Pro) Finisher Gate Sensor

Parts List on PL 21.11

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher from the IOT (REP 21.11).
- 4. Remove the Punch Assembly (REP 21.13).
- 5. Remove the Left Top Cover (REP 21.10).
- 6. Remove the Gate Sensor (Figure 1).



Figure 1 Removing the Gate Sensor

# REP 21.24 (Pro) Finisher Top Tray Full Sensor

# Parts List on PL 21.11

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Front Door (REP 21.1).
- 4. Remove the Rear Upper Cover (REP 21.2).
- 5. Remove the Top Cover (REP 21.4).
- 6. Remove the Front Top Cover (REP 21.5).
- 7. Remove the Top Tray (REP 21.6).
- 8. Remove the Tray Spring Guide (REP 21.8).
- 9. Disconnect P/J8322 and remove screw (1) securing the Top Tray Full Sensor to the Sensor Bracket.

# REP 21.25 (Pro) Finisher Buffer Roll

# Parts List on PL 21.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (REP 21.2).
- 4. Route the wires out of the Harness Bracket (Figure 1).



#### Figure 1 Routing the Wires out of the Harness Bracket

5. Remove the Harness Bracket (Figure 2).



**2** Remove the Harness Bracket from the machine.

Detach the Harness Bracket by releasing the two plastic clips at the back of the bracket.

#### Figure 2 Removing the Harness Bracket

6. Remove the Transport Gate Solenoid Bracket (Figure 3).



#### 0112004A-COP

#### Figure 3 Removing the Transport Gate Solenoid Bracket

7. Remove Pulley and Gear (Figure 4).



0112005-COP

#### Figure 4 Removing Pulley and Gear

- 8. Open the Front Door.
- 9. Manually move the Stapler Assembly towards the back of the Finisher.



Figure 5 Removing the Buffer Roll

## Replacement

1. Ensure that the Transport Gate is in the correct position when re-assembling.

# REP 21.26 (Pro) Finisher Bottom Buffer Chute Assembly

Parts List on PL 21.10

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the Front Door.
- 4. Remove the Booklet Maker Unit (REP 21.16).
- 5. Remove the Baffle (Figure 1).



Figure 1 Removing Baffle

6. Remove the Bottom Buffer Chute Assembly (Figure 2).



Lower the Bottom Buffer Chute Assembly and remove it

0112007A-COP

Figure 2 Removing the Bottom Buffer Chute Assembly

# REP 21.27 (Pro) Finisher H-Transport Drive Belt

Parts List on PL 21.26

#### Removal

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher (REP 21.11).
- Remove the H-Transport Assembly (REP 21.12) and place it upside down on a secure flat 4. surface.
- 5. Release the tension from the belt (Figure 1):
  - a. Use the Tension Bracket Assembly to release initial tension from the belt (PL 21.24)
  - Slide the belt of the two pulleys b.

a. Tension Bracket Assembly b. Slide the belt off of the two pulleys



Figure 1 Releasing tension from the Drive belt

**NOTE:** Note the position of the Drive belt in relationship to the gears and pulleys for correct reinstallation.

#### 6. Remove the Drive Belt (PL 21.26): (Figure 2)

- a. Remove the clip from the Roll Shaft Assembly (PL 21.26).
- b. Lift up on the belt side of the Roll Shaft Assembly then remove the smaller belt from the pulley.
- c. Remove the Drive belt.

<image><complex-block>

# REP 21.28 (Pro) Finisher Eject Chute Assembly

# Parts List on PL 21.7

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Front Door (REP 21.1).
- 4. Remove the Rear Upper Cover (REP 21.2).
- 5. Remove the Top Tray (REP 21.6).
- 6. Remove the Eject Cover (REP 21.7).
- 7. Remove E-clip and Bushing from the Eject Pinch Shaft (Figure 1).



0112010A-COP

Figure 1 Removing E-clip and Bushing

8. Remove Pinch Springs and screws from the Eject Pinch Shaft (Figure 2).



# REP 21.29 (Pro) Finisher PWB

Parts List on

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Check and record Finisher software version (GP 6).
- 4. Remove the Finisher Rear Upper Cover (REP 21.2).
- 5. Remove the Finisher Rear Lower Cover (REP 21.3).
- 6. Remove the Finisher PWB Cover (4 screws).
- 7. Remove the Finisher PWB (Figure 1).

Remove the Eject Chute Assembly (Figure 3).

9.



0112012a-cop

Figure 3 Removing the Eject Chute Assembly



- 763-011 Hole Punch Configuration
  - 3 = 2/.3 hole
  - 4 = 2/4 hole
  - 763-012 Finisher configuration
    - 0 = w/o Booklet Maker
    - 1 = w/ Booklet Maker

## Figure 1 Finisher PWB

# Replacement

- 1. Check Finisher software version (GP 6) and compare with software version recorded in Step 1 of the removal procedure.
- 2. If the current software version is lower than the previous version, load the Finisher software (GP 9). Use single platform, not All-in 1file.
- 3. Check the following NVM locations and reset if required to match the Finisher configuration:
  - 763-001 Finisher Type
    - 3 = w/o Booklet Maker
    - 4 = w/ Booklet Maker

# **REP 22.1 Integrated Office Finisher**

# Parts List on PL 22.1

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Switch off the power and disconnect the power cord
- 4. Disconnect the Integrated Office Finisher Wire Harness (Figure 1):

(1)Remove Cover.

(2)Remove Clamp.

(3)Disconnect Connectors (2).



Figure 1 Disconnecting harness

5. Loosen the Thumb Screws (2) (Figure 2):



Figure 2 Loosen the Thumb Screws

6. Remove the Integrated Office Finisher.

# Replacement

1. Reverse the removal procedure for replacement.
## **REP 22.2 (Int) Paddle Belt**

## Parts List on PL 22.3

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the front Pulley (Figure 1):
  - (1)Remove E-Clip.
  - (2)Remove Flange.
  - (3)Remove Belt from Pulley.
  - (4)Remove Pulley.



Figure 1 Removing the Pulley

 Remove the Front Bearing (Figure 2): (1)Remove Bearing.



Figure 2 Removing the Front Bearing

 Remove the Rear Gear (Figure 3) (1)Remove E-Clip. (2)Remove Gear.



Figure 3 Removing the Gear

8. Remove the Rear Bearing (Figure 4):



Figure 4 Removing the Bearing

 Remove the Paddle Link Assembly (Figure 5): (1)Remove Paddle Link Assembly.



j0fa42205

Figure 5 Removing the Paddle Link Assembly

 Remove the Bearing (Figure 6): (1)Remove E-Clip.
 (2)Remove Bearing.



Figure 6 Removing Bearing

11. Remove the Shaft Assembly (Figure 7):(1)Remove Paddle Belt from Pulley.(2)Remove Shaft Assembly in the direction of the arrow.



Figure 7 Removing Shaft Assembly

- 12. Remove the Paddle Belt (Figure 8):
  - (1)Remove E-Clips (2).(2)Move Bearings (2) in the direction of the arrow.
  - (3)Remove Sub Paddle Shaft Assembly.
  - (4)Remove Paddle Belt.



Figure 8 Removing the Paddle Belt

## Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install the Paddle Link Assembly as shown in Figure 9.



Figure 9 Installing the Paddle Link Assembly

# REP 22.3 (Int) Sub Paddle Solenoid

## Parts List on PL 22.3

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Turn over the Integrated Office Finisher.
- 6. Remove the Bottom Cover (PL 22.2)
- Disconnect the Connector (Figure 1): (1)Release Clamps (3) and remove the wire. (2)Disconnect Connector.



Figure 1 Disconnecting the Connector

- 8. Turn over the Integrated Office Finisher.
- 9. Remove the Sub Paddle Solenoid Assembly (Figure 2): (1)Disconnect Connector.
  (2)Release Wire from Hook.
  (3)Remove Screws (2).
  (4)Remove Sub Paddle Solenoid Assembly.



Figure 2 Removing the Sub Paddle Solenoid Assembly

10. Remove the Support (Figure 3): (1)Remove Screw.

(2)Remove Support.



j0fa42212

Figure 3 Removing the Support

- 11. Remove the Sub Paddle Solenoid (Figure 4):
  - (1)Remove Screws (2).
  - (2)Remove the Sub Paddle Solenoid.



j0fa42213

Figure 4 Removing the Sub Paddle Solenoid

### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install the Sub Paddle Assembly as shown in Figure 5.



j0fa42214 Figure 5 Installing the Sub Paddle Assembly

## **REP 22.5 (Int) Staple Assembly**

## Parts List on PL 22.4

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Staple Assembly (Figure 1):
  - (1)Remove Clamps (2).
  - (2)Disconnect Connectors (2).
  - (3)Remove Screws (2).
  - (4)Remove Staple Assembly.



Figure 1 Removing the Staple Assembly

 Remove the Bracket from the Staple Assembly (Figure 2): (1)Remove Screws (2).

(2)Remove Bracket.



Figure 2 Removing the Bracket

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.6 (Int) Set Clamp Home Sensor

## Parts List on PL 22.4

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Rear Cover (PL 22.1)
- 5. Disconnect the Connector (Figure 1):
  - (1)Release Clamp and remove the wire.
  - (2) Disconnect Connector.



Figure 1 Disconnecting Connector

- Remove the Set Clamp Home Sensor Assembly (Figure 2): (1)Remove Screw.
  - (2)Remove Set Clamp Home Sensor Assembly.



Figure 2 Removing the Set Clamp Home Sensor Assembly

 Remove the Set Clamp Home Sensor (Figure 3): (1)Remove Set Clamp Home Sensor from Bracket. (2)Disconnect Connector.



Figure 3 Removing the Set Clamp Home Sensor

Replacement

1. Reverse the removal procedure for replacement.

## REP 22.7 (Int) Exit Roll Assembly

## Parts List on PL 22.4

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Remove the Left Cover (PL 22.2)
- 7. Remove the Upper Frame Section (Figure 1):
  - (1)Remove Screw and Bracket.
  - (2)Remove Screws (2).
  - (3)Remove Screw and Bracket.
  - (4)Remove Screws (2).
  - (5)Remove the Upper Frame Section



Figure 1 Removing the Upper Frame Section

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

 Remove the Upper Chute Assembly (Figure 2): (1)Remove Screws (2). (2)Remove Screw. (3)Carefully Remove the Upper Chute Assembly.



Figure 2 Removing the Upper Chute Assembly

- 9. Remove the Exit Roll Assembly (Figure 3):
  - (1)Remove E-ring and Bearing.
  - (2)Remove E-ring and Bearing.
  - (3)Remove the Exit Roll Assembly.



Figure 3 Removing the Exit Roll Assembly

### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides on the Upper Chute (PL 22.6) are not folded back on top of the Exit Roll Assembly.

# REP 22.8 (Int) Pinch Roll

## Parts List on PL 22.5

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the Pinch Roll (Figure 1):
  - (1)Raise Springs (4) in the direction of the arrow.(2)Remove Pinch Rolls (4).



Figure 1 Removing the Pinch Rolls

## Replacement

1. Reverse the removal procedure for replacement.

# **REP 22.9 (Int) Finisher Entrance Sensor**

## Parts List on PL 22.5

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Turn over the Integrated Office Finisher.
- 5. Remove the Bottom Cover (PL 22.2)
- Remove the Connector Bracket (Figure 1): (1)Release Clamps (3) and remove the wire. (2)Disconnect Connectors (5). (3)Remove Screws (2). (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

7. Remove the Bottom Plate (Figure 2): (1)Release Clamps (5) and remove the wire. (2)Disconnect Connectors (8). (3)Remove Wire from Hook. (4)Remove Screws (4). (5)Remove Bottom Plate.



- 8. Remove the Finisher Entrance Sensor Assembly (Figure 3):
  - (1)Disconnect Connector.
  - (2)Remove Self-tapping Screw.
  - (3)Remove Finisher Entrance Sensor Assembly.



j0fa42226

#### Figure 4 Removing the Finisher Entrance Sensor

### Replacement

1. Reverse the removal procedure for replacement.



Figure 3 Removing the Finisher Entrance Sensor Assembly

Remove the Finisher Entrance Sensor (Figure 4):
 (1)Remove Finisher Entrance Sensor from Bracket.

## **REP 22.10 (Int) Compiler Exit Sensor**

## Parts List on PL 22.5

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Turn over the Integrated Office Finisher.
- 5. Remove the Bottom Cover (PL 22.2)
- 6. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

- Remove the Bottom Plate (Figure 2):
   (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Release Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.



 Remove the Compiler Exit Sensor Assembly (Figure 3): (1)Remove Screw.
 (2)Remove Compiler Exit Sensor Assembly.



Figure 3 Removing the Compiler Exit Sensor Assembly

 Remove the Compiler Exit Sensor (Figure 4): (1)Release Clamps (2) and remove the wire. (2)Disconnect Connector. (3)Remove Compiler Exit Sensor.



Figure 4 Removing the Compiler Exit Sensor

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.11 (Int) Main Paddle Shaft Assembly

Parts List on PL 22.5

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the Gear (Figure 1): (1)Remove E-Clip.

(2)Remove Gear.

(3)Remove KL-Clip.

(4)Remove Gear.



j0fa42229

Figure 1 Removing the Gear

 Remove the Gear Pulley (Figure 2): (1)Remove E-Clip.
 (2)Remove Gear.
 (3)Remove Flange.



Figure 2 Removing the Gear Pulley

 Remove the Bearing (Figure 3): (1)Remove Bearing.



Figure 3 Removing the Bearing

- Remove the Support Bearing from the Entrance Lower Chute Assembly (Figure 4): (1)Remove Self-tapping Screw.
  - (2)Remove Support Bearing.



Figure 4 Removing the Support Bearing

 Remove the Main Paddle Shaft Assembly (Figure 5): (1)Remove Main Paddle Shaft Assembly.



Figure 5 Removing the Main Paddle Shaft Assembly

 Remove the Support Bearing from the Main Paddle Shaft Assembly (Figure 6): (1)Remove E-Clip.



### Replacement

1. Reverse the removal procedure for replacement.

## **REP 22.12 (Int) Lower Chute Assembly**

Parts List on PL 22.5

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Turn over the Integrated Office Finisher (Transport).
- Remove the Stapler Assembly (Figure 1): (1)Release Clamps (2) and remove the wire. (2)Disconnect Connectors (2). (3)Remove Screws (2). (4)Remove Stapler Assembly.



Figure 1 Removing the Stapler Assembly

- 7. Turn over the Integrated Office Finisher.
- Remove the Transport Motor (Figure 2): (1)Remove Screws (2).
   (2)Remove Belt from Pulley.
   (3)Remove Transport Motor.



Figure 2 Removing the Transport Motor

- 9. Remove the Gear (Figure 3):
  - (1)Remove E-Clip.
  - (2)Remove Gear.
  - (3)Remove KL-Clip.
  - (4)Remove Gear.



Figure 3 Removing the Gear

Remove the Gear Pulley (Figure 4):
 (1)Remove E-Clip.

(2)Remove Gear.(3)Remove Pulley from Belt.(4)Remove Flange.



Figure 4 Removing the Gear Pulley

11. Remove the Bearing (Figure 5):(1)Remove the Bearing.



Figure 5 Removing the Bearing

12. Remove the Entrance Lower Chute Assembly (Figure 6): (1)Remove Screws (2).

(2)Loosen Screws (2).(3)Remove Entrance Lower Chute Assembly.



Figure 6 Removing the Entrance Lower Chute Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.13 (Int) Entrance Roll Assembly

### Parts List on PL 22.6

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Remove the Left Cover (PL 22.2)
- 7. Remove the Upper Frame Section (Figure 1):
  (1)Remove Screw and Bracket.
  (2)Remove Screws (2).
  (3)Remove Screws and Bracket.
  (4)Remove Screws (2).
  (5)Remove the Upper Frame Section



Figure 1 Removing the Upper Frame Section

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

8. Remove the Upper Chute Assembly (Figure 2):

- (1)Remove Screws (2).
- (2)Remove Screw.
- (3)Carefully Remove the Upper Chute Assembly.



Figure 2 Removing the Upper Chute Assembly

9. Remove the Entrance Roll Assembly (Figure 3): (1)Disconnect Spring. (2)Remove E-Rings (2). *NOTE: Capture the Bearing* (3)Remove Arm. (4)Slide Shaft out of the Bearing in the Arm.



Figure 3 Removing the Gear

#### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides on the Upper Chute (PL 22.6) are not folded back on top of the Exit Roll Assembly.

## REP 22.14 (Int) Upper Chute Assembly

Parts List on PL 22.6

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Remove the Left Cover (PL 22.2)
- 7. Remove the Upper Frame Section (Figure 1): (1)Remove Screw and Bracket.
  (2)Remove Screws (2).
  (3)Remove Screws and Bracket.
  (4)Remove Screws (2).
  (5)Remove the Upper Frame Section



Figure 1 Removing the Upper Frame Section

**NOTE:** The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.

8. Remove the Upper Chute Assembly (Figure 2):

- (1)Remove Screws (2).
- (2)Remove Screw.
- (3)Carefully Remove the Upper Chute Assembly.



Figure 2 Removing the Upper Chute Assembly

### Replacement

1. Reverse the removal procedure for replacement.

**NOTE:** Ensure that the Paper Guides (PL 22.6) are not folded back on top of the Exit Roll Assembly.

## **REP 22.15 (Int) Finisher PWB**

## Parts List on PL 22.7

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Turn over the Finisher.
- 5. Remove the Bottom Cover (PL 22.2)
- 6. Remove the Finisher PWB (Figure 1):
  - (1)Disconnect Connectors (12).
  - (2)Remove Screws (4).
  - (3)Remove Finisher PWB.



Figure 1 Removing the Finisher PWB

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.16 (Int) Stacker Tray Assembly

Parts List on PL 22.8

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- 8. Remove the Tray Cover (PL 22.2)
- 9. Disconnect Connector (Figure 1):
  - (1)Release Clamp.
  - (2)Remove Clamp.
  - (3)Release and remove Wire from Hook.
  - (4)Release Clamp.
  - (5)Disconnect Connector.
  - (6)Release and remove Wire from Hook.



Figure 1 Disconnecting the Connector

10. Release the Clamps and the Hook to remove the wire (Figure 2): (1)Release Clamps (5).(2)Remove Wire from Hook.



Figure 2 Disconnecting the Wire

- 11. Remove the Stacker Sensor Assembly (Figure 3):
  - (1)Remove Screw.
  - (2)Remove Stacker Sensor Assembly.
  - (3)Release Clamps (4).
  - (4)Disconnect Connectors (2).



Figure 3 Removing the Stacker Sensor Assembly

12. Remove the Stacker Tray Assembly (Figure 4):(1)Remove Screws (5).(2)Remove Stacker Tray Assembly.



Figure 4 Removing the Stacker Tray Assembly

### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install the Stacker Tray Assembly and Integrated Office Finisher as shown in Figure 5.



j0fa42251 Figure 5 Installing the Stacker Tray Assembly

## REP 22.17 (Int) Stacker Shaft Assembly

## Parts List on PL 22.8

### Removal

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Rear Cover (PL 22.1)
- 5. Turn over the Integrated Office Finisher.
- 6. Remove the Tray Cover (PL 22.2)
- 7. Remove the rear Bracket (Figure 1):

(1)Remove Screw.

(2)Remove Bracket.



Figure 1 Removing the Rear Bracket

8. Remove the front Bracket (Figure 2):

(1)Remove Screw.

(2)Remove Bracket.



Figure 2 Removing the Front Bracket

9. Remove the Top Tray (Figure 3):

(1)Raise Integrated Office Finisher slightly in the direction of the arrow.(2)Remove Top Tray.



Figure 3 Removing the Top Tray

 Disconnect Connector (Figure 4): (1)Release Clamps (5) and remove the wire. (2)Release Wire from Hook. (3)Disconnect Connector.



Figure 4 Disconnecting the Connector

- 11. Remove the Stacker Sensor Assembly (Figure 5):
  - (1)Remove Screw.
  - (2)Remove Stacker Sensor Assembly.
  - (3)Remove Wire from Clamps (5)



Figure 5 Removing the Stacker Sensor Assembly

12. Remove the Stacker Assembly (Figure 6):



Figure 6 Removing the Stacker Assembly

 Remove the Actuator (Figure 7): (1)Unhook.
 (2)Remove Actuator.



Figure 7 Removing the Actuator

14. Move the Bearing (Figure 8):(1)Remove E-Clip.(2)Move Bearing in the direction of the arrow.



Figure 8 Moving the Bearing

15. Remove the Stacker Shaft Assembly (Figure 9):(1)Remove Stacker Shaft Assembly in the direction of the arrow.



j0fa42260

Figure 9 Removing the Stacker Shaft Assembly

### Replacement

1. Reverse the removal procedure for replacement.

# REP 22.18 (Int) Stacker Motor

Parts List on PL 22.8

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Rear Cover ({PL 22.1)
- 5. Turn over the Integrated Office Finisher.
- 6. Remove the Tray Cover (PL 22.2)
- 7. Disconnect the Connector (Figure 1):
  (1)Release Clamps (3) and remove the wire.
  (2)Release Wire from Hook.
  (3)Disconnect Connector.



j0fa42261

Figure 1 Disconnecting the Connector

 Remove the Bracket (Figure 2): (1)Remove Screw.
 (2)Remove Bracket.

#### (3)Remove Stacker Motor.



Figure 2 Removing the Bracket

9. Remove the Stacker Motor Assembly (Figure 3):

(1)Remove Screws (2).

(2)Remove Stacker Motor Assembly.



Figure 3 Removing the Stacker Motor Assembly

10. Remove the Stacker Motor (Figure 4):

(1)Remove Screws (3).

(2)Remove Belt from Pulley.



Figure 4 Removing the Stacker Motor)

### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install the Stacker Motor as shown in Figure 5.



Figure 5 Installing the Stacker Motor

## REP 22.19 (Int) Stacker Sensor

## Parts List on PL 22.8

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Rear Cover (PL 22.1)
- 5. Turn over the Integrated Office Finisher.
- 6. Remove the Tray Cover (PL 22.2)
- 7. Remove the Stacker Sensor Assembly (Figure 1):

(1)Release the wire from the Clamp.

(2)Remove Screw.

- (3)Remove Stacker Sensor Assembly.
- (4) Disconnect the Sensor Connector and remove Sensor from Bracket (5)



Figure 1 Removing the Stacker Stack Sensor Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## **REP 22.20 (Int) Compiler Assembly**

### Parts List on PL 22.9

### Removal

9.

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- 8. Remove the Tray Cover (PL 22.2)
  - Remove the Connector Bracket (Figure 1): (1)Release Clamps (3) and remove the wire. (2)Disconnect Connectors (5). (3)Remove Screws (2). (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

10. Remove the Bottom Plate (Figure 2):
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).



11. Release the Clamp from the wire (Figure 3):(1)Release Clamp and remove the wire.



Figure 3 Releasing the Clamp

- Remove the Stacker Tray (Figure 4): (1)Release wires from Clamps (5) (2)Disconnect the Connector (3)Remove Screws (7)
  - (4)Remove the Stacker Tray



Figure 4 Removing the Stacker Tray

 Remove the front Self-tapping Screw (Figure 5): (1)Remove Self-tapping Screw.



Figure 5 Removing the Self-tapping Screw

14. Remove the rear Screw (Figure 6): (1)Remove Screw.



Figure 6 Removing the Screw

 Remove the Compiler Assembly (Figure 7): (1)Remove Compiler Assembly.



j0fa42271

Figure 7 Removing the Compiler Assembly

#### Replacement

1. Reverse the removal procedure for replacement.

# REP 22.21 (Int) Set Clamp Shaft

### Parts List on PL 22.9

### Removal

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (PL 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- Remove the Bracket Assembly (Figure 1): (1)Release Clamps (2) and remove the wire. (2)Remove Screws (2). (3)Remove Bracket Assembly.





Figure 1 Removing the Bracket Assembly

 Remove the KL-Clips from the Eject Shaft (Figure 2): (1)Remove KL-Clips (2).



Figure 2 Removing the KL-Clips

- Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3): (1)Move Bearings (2) in the direction of the arrow.
  - (2)Remove Eject Shaft in the direction of the arrow.
  - (3)Remove Belt from Pulley.



Figure 3 Removing the Eject Shaft

 Remove the Actuator and the Bearing (Figure 4): (1)Remove E-Clip. (2)Remove Actuator.(3)Remove E-Clip.(4)Remove Bearing.



Figure 4 Removing the Actuator and Bearing

 Remove the Bearing (Figure 5): (1)Remove E-Clip.
 (2)Remove Bearing.



Figure 5 Removing the Bearing

10. Remove the Set Clamp Shaft (Figure 6):(1)Move Set Clamp Shaft in the direction of the arrow.

(2)Remove Belts (3) from Pulleys (3).(3)Remove Set Clamp Shaft in the direction of the arrow.



Figure 6 Removing the Set Clamp Shaft

#### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install and align the Eject Belt with marks on the Pulleys (Figure 7):



Figure 7 Installing the Eject Belt

# REP 22.22 (Int) Eject Belt

## Parts List on PL 22.9

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (PL 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the Front/Rear Tamper Motor Assembly (REP 22.26)
- Move the Eject Home Sensor Assembly (Figure 1): (1)Remove Screw.
   (2)Move Figure Concernation

(2) Move Eject Home Sensor Assembly.



#### Figure 1 Moving the Eject Home Sensor Assembly (j0fa42279)

7. Remove the Eject Belt (Figure 2):
(1)Move the blades of Set Clamp Shaft in the direction of the arrow.
(2)Remove Eject Belt in the direction of the arrow.



Figure 2 Removing the Eject Belt

#### Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install and align the Eject Belt with marks on the Pulleys (Figure 3):



Figure 3 Installing the Eject Belt

## REP 22.23 (Int) Eject/Set Clamp Motor Assembly

Parts List on PL 22.9

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- Remove the Connector Bracket (Figure 1): (1)Release Clamps (3) and remove the wire. (2)Disconnect Connectors (5). (3)Remove Screws (2). (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

Remove the Bottom Plate (Figure 2):

 (1)Release Clamps (5) and remove the wire.
 (2)Disconnect Connectors (8).
 (3)Remove Wire from Hook.
 (4)Remove Screws (4).
 (5)Remove Bottom Plate.



Figure 2 Removing the Bottom Plate

- 10. Remove the Stacker Tray (Figure 3):
  - (1)Release wires from Clamps (5)(2)Disconnect the Connector(3)Remove Screws (7)(4)Remove the Stacker Tray



Figure 3 Removing the Stacker Tray

- 11. Remove the screws securing the Eject/Set Clamp Motor Assembly (Figure 4):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Screws (2).
  - (3)Remove Self-tapping Screws (2).



Figure 4 Removing Screws

12. Remove the Eject/Set Clamp Motor Assembly (Figure 5): (1)Remove Belts (2) from Pulley.(2)Remove Eject/Set Clamp Motor Assembly.



Figure 5 Removing the Eject/Set Clamp Motor Assembly

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.24 (Int) Rear Tamper Home Sensor

(5)Remove Bottom Plate.

## Parts List on PL 22.9

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- 8. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate (Figure 2):

(1)Release Clamps (5) and remove the wire.(2)Disconnect Connectors (8).

(3)Remove Wire form Hook.(4)Remove Screw (4).



Figure 2 Moving the Bottom Plate

10. Remove the Rear Tamper Home Sensor Assembly (Figure 3):(1)Release Clamps (2) and remove the wire.(2)Remove Self-tapping Screw.

(3)Move Rear Tamper Home Sensor Assembly in order to disconnect the connector.



Figure 3 Removing the Rear Tamper Home Sensor Assembly

11. Remove the Rear Tamper Home Sensor (Figure 4):(1)Remove Rear Tamper Home Sensor from the bracket.



Figure 4 Removing the Rear Tamper Home Sensor

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.25 (Int) Eject Shaft Assembly

Parts List on PL 22.9

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (PL 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- Remove the Bracket Assembly (Figure 1): (1)Release Clamps (2) and remove the wire. (2)Remove Screws (2). (3)Remove Bracket Assembly.



j0fa42272

Figure 1 Removing the Bracket Assembly

 Remove the KL-Clips from the Eject Shaft (Figure 2): (1)Remove KL-Clips (2).

2. Install and align the Eject Belt with marks on the Pulleys (Figure 4):



Figure 2 Removing the KL-Clips

- 7. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3):
  - (1)Move Bearings (2) in the direction of the arrow.
  - (2) Remove Eject Shaft in the direction of the arrow.

(3)Remove Belt from Pulley.



j0fa42278

Figure 4 Installing the Eject Belt



Figure 3 Removing the Eject Shaft

### Replacement

1. Reverse the removal procedure for replacement.

## REP 22.26 (Int) Front /Rear Tamper Motor Assembly

## Parts List on PL 22.10

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (PL 22.1).
- 4. Remove the Compiler Assembly (REP 22.20)
- 5. Remove the Bracket Assembly (Figure 1):
  - (1)Release Clamps (2) and remove the wire.
  - (2)Remove Screws (2).

(3)Remove Bracket Assembly.



Figure 1 Removing the Bracket Assembly

 Remove the KL-Clips from the Eject Shaft (Figure 2): (1)Remove KL-Clips (2).



j0fa42273

Figure 2 Removing the KL-Clips

7. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly (Figure 3): (1)Move Bearings (2) in the direction of the arrow.
(2)Remove Eject Shaft in the direction of the arrow.
(3)Remove Belt from Pulley.



Figure 3 Removing the Eject Shaft

 Remove the Front/Rear Tamper Motor Assembly (Figure 4): (1)Remove Self-tapping Screws (2).
(2)Remove Screw.(3)Remove Front/Rear Tamper Motor Assembly.



Figure 4 Removing the Front/Rear Tamper Motor Assembly

## Replacement

- 1. Reverse the removal procedure for replacement.
- 2. Install and align the Eject Belt with marks on the Pulleys (Figure 5):



Figure 5 Installing the Eject Belt

# REP 22.27 (Int) Front Tamper Home Sensor

Parts List on PL 22.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- Remove the Connector Bracket (Figure 1): (1)Release Clamps (3) and remove the wire. (2)Disconnect Connectors (5). (3)Remove Screws (2). (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate (Figure 2): (1)Release Clamps (5) and remove the wire. (2)Disconnect Connectors (8). (3)Remove Wire from Hook. (4)Remove Screws (4). (5)Remove Bottom Plate.



 Remove the Front Tamper Home Sensor Assembly (Figure 3): (1)Remove Screw.

(2)Remove Front Tamper Home Sensor Assembly.



Figure 4 Removing the Front Tamper Home Sensor

## Replacement

1. Reverse the removal procedure for replacement.



j0fa42286

Figure 3 Removing the Front Tamper Home Sensor Assembly

11. Remove the Front Tamper Home Sensor Assembly (Figure 4):

(1)Disconnect Connector.

(2)Remove Front Tamper Home Sensor Assembly.

# REP 22.28 (Int) Eject Clamp Home Sensor

## Parts List on PL 22.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Turn over the Integrated Office Finisher.
- 5. Remove the Bottom Cover (PL 22.2)
- 6. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.



## Figure 1 Removing the Connector Bracket

- 7. Remove the Bottom Plate (Figure 2):
  - (1)Release Clamps (5) and remove the wire.
  - (2)Disconnect Connectors (8).
  - (3)Remove Wire from Hook.
  - (4)Remove Screws (4).
  - (5)Remove Bottom Plate.



Figure 2 Removing the Bottom Plate

 Remove the Eject Home Sensor (Figure 3): (1)Release Clamp and remove the wire. (2)Disconnect Connector. (3)Remove Eject Home Sensor from the bracket.



Figure 3 Removing the Eject Home Sensor

## Replacement

1. Reverse the removal procedure for replacement.

# **REP 22.29 (Int) Stack Height Sensor**

## Parts List on PL 22.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Integrated Office Finisher from the machine (REP 22.1).
- 4. Remove the Inner Front Cover (PL 22.1)
- 5. Remove the Rear Cover (PL 22.1)
- 6. Turn over the Integrated Office Finisher.
- 7. Remove the Bottom Cover (PL 22.2)
- 8. Remove the Connector Bracket (Figure 1):
  - (1)Release Clamps (3) and remove the wire.
  - (2)Disconnect Connectors (5).
  - (3)Remove Screws (2).
  - (4)Remove Connector Bracket.



Figure 1 Removing the Connector Bracket

9. Remove the Bottom Plate (Figure 2):

(1)Release Clamps (5) and remove the wire.

- (2)Disconnect Connectors (8).
- (3)Remove Wire from Hook.
- (4)Remove Screws (4).
- (5)Remove Bottom Plate.



Figure 2 Removing the Bottom Plate

10. Remove the Stacker Tray (Figure 3):
(1)Release wires from Clamps (5)
(2)Disconnect the Connector
(3)Remove Screws (7)
(4)Remove the Stacker Tray



Figure 3 Removing the Stacker Tray

 Remove the Bracket Assembly (Figure 4): (1)Release Clamps (2) and remove the wire. (2)Remove Screws (2). (3)Remove Bracket Assembly.



j0fa42272

## Figure 4 Removing the Bracket Assembly

- 12. Remove the Stack Height Sensor (Figure 5):
  - (1)Remove Clamp.
  - (2)Release Clamps (4) and remove the wire.
  - (3)Disconnect Connector.
  - (4)Remove Stack Height Sensor from the bracket.



j0fa42289 Figure 5 Removing the Stack Height Sensor

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.1 (LX) H-Transport Assembly

## Parts List on PL 23.1

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher Assembly (REP 23.5).
- 4. Move the H-Transport Assembly (Figure 1).



Figure 1 Removing the Docking Bracket

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.2 (LX) Hole Punch Assembly

## Parts List on PL 23.2

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open the H-Transport Top Cover and hold it open.
- 4. Open the H-Transport Front Cover.
- 5. Remove the Hole Punch Assembly (Figure 1).



#### Figure 1 Removing the Hole Punch Assembly

## Replacement

- 1. Insert the Hole Punch Assembly rear locating pin into the H-Transport frame.
- 2. Install the Hole Punch Assembly in reverse order of removal.

# REP 23.3 (LX) H-Transport Belt

## Parts List on PL 23.4

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the H-Transport Assembly (REP 23.1).
- 4. Remove the screws (2) on the H-Transport Rear Cover and remove the Cover.
- 5. Loosen the screws (2) on the Tension Bracket (Figure 1).
- 6. Remove the Belt.



## Figure 1 Removing the H-Transport Belt

## Replacement

Install the H-Transport Belt in reverse order of removal.

# REP 23.4 (LX) H-Transport Motor

## Parts List on PL 23.4

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the H-Transport Assembly (REP 23.1).
- 4. Remove the H-Transport Rear Cover.
- 5. Place the H-Transport top down on a work surface.
- 6. Remove the H-Transport motor (Figure 1).



Figure 1 Removing the H-Transport Drive Motor

## Replacement

Replace in reverse order of removal.

# REP 23.5 (LX) Finisher Undocking

## Parts List on PL 23.1

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the Printer power cord.
- 3. Disconnect the Finisher Power Cord, the H-Transport Connector and the Finisher Connector from the IOT.

#### CAUTION

The Finisher is unstable when not docked with the Printer. Use care when handling an undocked Finisher so that it does not fall over.

4. Rotate the Feet (2) to free the Finisher. (Figure 1)



Figure 1 Finisher Feet

- 5. Open the Front Door of the Finisher.
- 6. Release the Screw that secures the Docking Plate and detach the Finisher.

(1) Remove the Screw.

(2) Pull the Docking Plate Lever towards you and detach the Finisher.(Figure 2)



Figure 2 Finisher Lever

## Replacement

- 1. Align the Printer Docking Bracket with the cut outs in the Finisher Docking Bracket.
- 2. Mate the Printer and the Finisher until it latches.
- 3. Check that the Finisher is firmly latched to the Printer.
- 4. Perform the remainder of the replacement procedure in reverse order of removal.

# REP 23.6 (LX) Front Cover Assembly

## Parts List on PL 23.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).

## CAUTION

## Do not drop the Booklet Maker Thumb screw into the Finisher.

- 4. Remove the Booklet Maker and set aside (REP 23.31).
- 5. Open the Finisher upper Front Door.
- 6. Remove the screws (5).
- 7. Remove the Front Cover Assembly.



Figure 1 Front Cover

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.7 (LX) Rear Upper Cover

## Parts List on PL 23.6

## Removal

4.

- 1. Switch off the power and disconnect the power cord.
- 2. Undock the Finisher (REP 23.5).
- 3. Remove the Booklet Maker (REP 23.31).
  - Remove the Rear Upper Cover. (1) Remove the screws (4).
    - (2) Remove the Rear Upper Cover.



Figure 1 Rear Upper Cover

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.8 (LX) Rear Lower Cover

## Parts List on PL 23.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).
- 4. Remove the Rear Lower Cover.
  - a. Remove the screws (3).
  - b. Remove the Cover.



Figure 1 Rear Lower Cover

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.9 (LX) Eject Cover

Parts List on PL 23.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Eject Cover (Figure 1).
  - a. Unlatch the Eject Cover, and move it to the left.
  - b. Remove the Retaining Screw (1).
  - c. Push the Latch through the hole in the Cover.
  - d. Remove the Cover by moving it to the left.



Figure 1 Removing the Eject Cover

## Replacement

Align the Eject Cover with the Pins (2) on both sides, and slide it to the right (Figure 2).
 NOTE: The left side of the Cover is now captured by the Pins and cannot be lifted up.



Figure 2 Aligning the Eject Cover

2. Position the Eject Cover so that the Latch is inserted in the hole (Figure 3).

#### NOTE: The Latch must be outside the hole.



Figure 3 Inserting the Latch through the hole in the Cover

3. Place the Latch Spring in the position shown (Figure 4).

Latch Spring



Figure 4 Positioning the Latch Spring

4. Make sure the Latch Hook and Latch Pin are positioned as shown (Figure 5).



Figure 5 Positioning the Latch Hook and Latch Pin

5. Install the Retaining Screw (1) (Figure 6).

**Retaining Screw** 



Figure 6 Installing the Retaining Screw

# REP 23.10 (LX) Foot Cover

Parts List on PL 23.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Screw (1) (Figure 1).
- 4. Remove the Foot Cover.



Figure 1 Removing the Foot Cover

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.11 (LX) Stacker Lower Cover

## Parts List on PL 23.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Foot Cover (REP 23.10).
- 4. Remove the Screws (2) (Figure 1).
- 5. Remove the Stacker Lower Cover.



Figure 1 Removing the Stacker Lower Cover

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.12 (LX) Stacker Upper Cover

## Parts List on PL 23.7

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Stacker Tray (REP 23.20).
- 4. Remove the Stacker Lower Cover (REP 23.11).
- 5. Remove the Screws (6) (Figure 1).
- 6. Remove the Stacker Upper Cover.



Figure 1 Removing the Stacker Upper Cover

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.13 (LX) Stack Height Sensors 1 and 2

## Parts List on PL 23.11

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (REP 23.7).
- 4. Remove the Stack Height Sensor 1 or 2 (Figure 1).
  - a. Disconnect the connector.
  - b. Remove the Sensor.



Stack Height Sensor 1

Stack Height Sensor 2

Figure 1 Removing the Stack Height Sensor 1 or 2

# REP 23.14 (LX) Sub Paddle Solenoid Assembly

## Parts List on PL 23.10

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Eject Cover (REP 23.9).
- 4. Remove the Sub Paddle Solenoid Assembly (Figure 1).
  - a. Disconnect the connector.
  - b. Remove the wires from the wire clamps
  - c. Remove the screw (1) from the Sub Paddle Solenoid Assembly.
  - d. Remove the Sub Paddle Solenoid Assembly.



Figure 1 Removing the Sub Paddle Solenoid Assembly

# REP 23.15 (LX) Stapler Motor

## Parts List on PL 23.8

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher Stapler Assembly (REP 23.16).
- 4. Remove the Screws (2) (Figure 1).



Figure 1 Removing the Screws

- 5. Remove the Wire Guide (Figure 2).
  - a. Pull out the Cable Clamps (3), and remove the wires from the Wire Guide.
  - b. Remove the Screws (2).
  - c. Remove the Wire Guide.



## Figure 2 Removing the Wire Guide

- 6. Remove the Stapler Motor (Figure 3).
  - a. Remove the wires from the Cable Clamp.
  - b. Disconnect the Connector.
  - c. Remove the Screws (2).
  - d. Remove the Stapler Motor.



Stapler Motor

Figure 3 Removing the Stapler Motor

## Replacement

1. Reverse the removal procedure for replacement.

# **REP 23.16 (LX) Finisher Stapler Assembly**

Parts List on PL 23.8

## Removal

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- 2. Switch off the power and disconnect the power cord.
- Remove the Creaser Knife Assembly (REP 23.18). 3.
- Remove the Front Cover Assembly (REP 23.6). 4.
- 5. Remove the Stapler Cover (Figure 1).
  - Remove the Screw. a.
  - b. Remove the Stapler Cover.



Figure 1 Removing the Stapler Cover

- 6. Remove the Finisher Stapler Assembly (Figure 2).
  - a. Disconnect the Connectors (2).
  - Remove the Screws (3). b.
  - Remove the Finisher Stapler Assembly. C.



Finisher Stapler Assembly

Connectors (2) Screws (3)

Figure 2 Removing the Finisher Stapler Assembly

## Replacement

Reverse the removal procedure for replacement.

# REP 23.17 (LX) Compiler Tray Assembly

Parts List on PL 23.12

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).
- 4. Remove the Front Cover (REP 23.6).
- 5. Remove the Rear Upper Cover (REP 23.7).
- 6. Remove the Foot Cover (REP 23.10).
- 7. Remove the Stacker Lower Cover (REP 23.11).
- 8. Remove the Stacker Tray (REP 23.20).
- 9. Remove the Stacker Upper Cover (REP 23.12).
- 10. Remove the Eject Cover (REP 23.9).
- 11. Preparing to remove the Eject Roller Shaft (Figure 1).



Figure 1 Removing the E-ring and brass bearing

- 12. Remove the Eject Roll Shaft (Figure 2).
  - a. Remove the E-ring and brass bearing from the front of the shaft.
  - b. Remove the E-ring,

- c. Slide the Eject Roller shaft toward the front.
- d. Remove the Gear, and brass bushing.
- e. Remove the Eject Roll from the Finisher.



Figure 2 Removing the Eject Roll Shaft

13. Remove the Compiler Tray screw (Figure 3).



Figure 3 Removing the Compiler Tray screw

**NOTE:** Notice the position and orientation of the Set Clamp Holders.

14. Disconnect the springs from the Set Clamp Holders (3) (Figure 4).



Disconnect spring from the Holders (3)

## Figure 4 Disconnecting the Set Clamp Holder Springs

15. Remove the front E-ring and the bushing from the Set Clamp Shaft Assembly (Figure 5).



Figure 5 Removing the front E-ring from the Set Clamp Shaft

**NOTE:** Notice the position and orientation of the Set Clamp Shaft gear and the cam gear that it engages. When installing the Set Clamp Shaft these gears must engage in the same manner (Figure 6).

16. Remove the rear E-ring from the Set Clamp Shaft (Figure 7).





Disconnect the Spring Slide the Gear away from the Gear from the frame Remove the E-ring

Figure 6 Set Clamp Shaft gear orientation

Figure 7 Preparing to remove the Set Clamp Shaft

17. Slide the Gear, Spring and the Bushing away from the frame (Figure 8).



Slide the Gear, Spring and Bushing toward the end of the Shaft

Unlock and remove the Flag

Figure 8 Preparing to remove the Set Clamp Shaft

18. Slide the Set Clamp Shaft to the front to clear the rear frame then slide the Shaft to the rear and remove it from the Finisher (Figure 9).



Slide the Shaft toward the rear and remove

Figure 9 Removing the Set Clamp Shaft

19. Remove the Compiler Tray Assembly (Figure 10).



Remove the Compiler Tray Assembly

#### Figure 10 Remove the Compiler Tray Assembly

20. Usually this level of Compiler Tray Assembly removal is for the purpose of removing the Front or Rear Tamper Motors, or the Front or Rear Tamper Home Sensors or the Compiler Tray No Paper Sensor.

However if the Compiler Tray Assembly must be completely removed from the Finisher, it will be necessary to disconnect all of the wire harness connectors to the Tamper Motors, Tamper Home Sensors and No Paper Sensor and disconnect the wires from all wire harness guides.

## Replacement

- 1. Route the wire harness through the wire guides and connect the proper connectors to the No Paper Sensor, the Tamper Home Sensors and the Tamper Motors.
- 2. Place the Compiler Tray Assembly into position.
- 3. Install the Set Clamp Shaft front end into the front frame (Figure 11).
- 4. Slide the Shaft toward the front until the rear end of the Shaft can be inserted into the rear frame (Figure 11).



## Figure 11 Installing the Set Clamp Shaft into position

Slide the 3 Set Clamp Holders with Springs into the correct location on the Shaft (Figure 12).





Holders and Springs in correct location on the Shaft

## Figure 12 Preparing to install the Holder Springs

6. Install the Bushing, Spring and Gear onto the rear end of the Set Clamp Shaft (Figure 13).

Figure 13 Installing the Bushing, Spring and Gear

7. Rotate the Set Clamp Shaft until the Stack Height Sensor Flag is in the correct position then position the 2 gears into the configuration (Figure 14).



Position the 2 Gears

Rotate shaft until Stack Height Flag is in position

Figure 14 Aligning the Gears and Stack Height Sensor Flag

- 8. Attach the Spring to the gear and slide the Gear into position.
- 9. Ensure that the 2 Gears and Stack Height Sensor Flag is in the position shown (Figure 15) and install the E-ring.



position on Pinion Gear

ring

position

## Figure 15 Orientation of 2 Gears and Stack Height Sensor Flag

10. Install the Bushing onto the front end of the Set Clamp Shaft and install the E-ring (Figure 16).



Figure 16 Installing the Bushing and E-ring

11. Ensure that the Set Clamp Holder Springs are connected (Figure 17).



Spring attaches in 2 spots

## Figure 17 Attaching the Set Clamp Holder Springs

- 12. Install the Eject Roll Shaft.
  - a. Place the Eject Roll Shaft into position in the front and rear frame (Figure 18).





Install the E-ring

Eject Roll Shaft in position

## Figure 18 Preparing to install the Eject Roll Shaft

b. Install the brass bearing, the Gear and the E-ring onto the rear of the Eject Roll Shaft (Figure 19).

## Figure 19 Installing the Eject Roll Shaft rear parts

c. Install the brass bearing and E-ring onto the front of the Eject Roll Shaft (Figure 20).



Figure 20 Installing the brass bearing and E-ring

- 13. Install the Compiler Tray screw (1).
- 14. Install the Eject Cover (REP 23.9).
- Install the Stacker Upper Cover (REP 23.12). 15.
- 16. Install the Stacker Tray (REP 23.20).
- 17. Install the Stacker Lower Cover (REP 23.11).
- 18. Install the Foot Cover (REP 23.10).
- 19. Install the Rear Upper Cover (REP 23.7).
- 20. Install the Front Cover (REP 23.6).
- 21. Dock the Finisher to the IOT (REP 23.5).

# **REP 23.18 (LX) Crease Assembly**

Parts List on PL 23.14

## Removal

NOTE: When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- Press the Job Status button to check that there are no jobs in progress. 1.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Crease Assembly (Figure 1).
  - Open the Finisher Front Door. a.
  - b. Remove the Guard.

**NOTE:** Pull out the Cable Tie to obtain additional slack in the wires.

- Disconnect the Cable. c.
- d. Remove the Thumbscrew.
- Pull the Crease Assembly straight out. e.



Cable

Crease Assembly

Figure 1 Removing the Crease Assembly

## Replacement

NOTE: Make sure the Locating Pins (2) are properly engaged (Figure 2).

1. Reverse the removal procedure for replacement.



Figure 2 Crease Assembly

# REP 23.19 (LX) Stacker Elevator Motor

Parts List on PL 23.7

## Removal

## CAUTION

Make sure to lower the Carriage Tray to the lowest position before removing the Stacker Elevator Motor Assembly.

- 1. If the machine has a Booklet Assembly, remove the Booklet Assembly. (REP 23.31)
- 2. Undock the Finisher. (REP 23.5)
- 3. Remove the following parts:
  - Rear Upper Cover (PL 23.7)
- 4. Move the Carriage Tray to the lowest position. (Figure 1)
  - a. Move the gear in the direction of the arrow.
  - b. Lower the Carriage Tray until it can go no lower.



- 5. Remove the Harness Guide. (Figure 2)
  - a. Disconnect the connectors (x2) of the Interlock Switch.
  - b. Remove the clamp.
  - c. Disconnect the connectors (x2).
  - d. Remove the screw.
  - e. Remove the harness guide.



**Figure 2 Disconnect Connectors** 

- 6. Remove the bracket. (Figure 3)
  - a. Disconnect the connectors (x2).
  - b. Remove the clamp.
  - c. Remove the screws (x2).
  - d. Remove the bracket.



Figure 3 Remove the Bracket

- 7. Remove the Stacker Encoder Sensor together with its bracket. (Figure 4)
  - a. Remove the screw.
  - b. Remove the Sensor and bracket.
  - c. Release the harness.



- 8. Disconnect the Set Clamp Clutch and release the harness from the Harness Guide. (Figure 5)
  - a. Release the clamp.
  - b. Disconnect the connector.
  - c. Release the harness from the Harness Guide.



- 9. Remove the Harness Guide. (Figure 6)
  - a. Disconnect the connector.
  - b. Remove the clamp.
  - c. Remove the Actuator.
  - d. Release the harness from the Harness Guide.
  - e. Remove the screws (x2).
  - f. Remove the harness guide.



Figure 6 Harness Guide

- 10. Remove the Stacker Height Sensor 2 together with its bracket. (Figure 7)
  - a. Remove the screw.
  - b. Remove the Stacker Height Sensor 2 and bracket.



Figure 7 Stack Sensor

- 11. Remove the Actuators (x2). (Figure 8)
  - a. Remove the Actuators (x2).



Figure 8 Actuators

12. Remove the screws (x4) and remove the bracket. (Figure 9)

**NOTE:** When removing the bracket, be careful as the gear at the back of the bracket can easily drop and got lost.

- a. Remove the screws (x4).
- b. Remove the bracket.



Figure 9 Bracket

- 13. Remove the Transport Motor Assembly. (Figure 10)
  - a. Remove the spring.
  - b. Disconnect the connector.
  - c. Remove the screws (x3).
  - d. Remove the Transport Motor Assembly.

b. Remove the pulley.



- 14. Remove the Stacker Elevator Motor Assembly. (Figure 11)
  - a. Disconnect the connector.
  - b. Remove the screws (x3).
  - c. Remove the Stacker Elevator Motor Assembly.



Figure 11 Elevator Motor

- 15. Remove the belt and the pulley from the Stacker Elevator Motor Assembly. (Figure 12)
  - a. Remove the belt.



## Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following when performing the installation.

**NOTE:** When installing the bracket, affix the tab of the Set Clamp Clutch to the position shown in the figure. (Figure 13)



Figure 13 Tab

# REP 23.20 (LX) Stacker Tray

## Parts List on PL 23.7

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the following:
  - a. Booklet Maker Assembly (if installed) (REP 23.31).
  - b. Front Cover Assembly (REP 23.6).
  - c. Rear Upper Cover (REP 23.7).
- 4. Remove the Stacker Tray (Figure 1).
  - a. Remove the Screws (4).
  - b. Remove the Stacker Tray.

# Stacker Tray

Figure 1 Removing the Stacker Tray

## Replacement

Reverse the removal procedure for replacement.

# REP 23.21 (LX) Eject Belt

## Parts List on PL 23.13

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).
- 4. Remove the Booklet Maker (REP 23.31).
- 5. Remove the Rear upper Cover (REP 23.7).
- 6. Remove the Eject Motor Assembly (REP 23.22).
- 7. Remove the Eject Motor (REP 23.25).
- 8. Remove the Eject Belt.

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.22 (LX) Eject Motor Assembly

## Parts List on PL 23.11

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).
- 4. Remove the Booklet Maker (REP 23.31).
- 5. Remove the Rear Upper Cover (REP 23.7).
- 6. Preparing to remove the Eject Motor Assembly.
  - a. Disconnect the Eject Motor connector
  - b. Remove the wire harness from the Harness Guide
  - c. Disconnect the wire harness clamps (2)
  - d. Remove the screws (2) from the Harness Guide and move the Harness Guide aside.
  - e. Disconnect the Spring
  - f. Remove the Eject Motor Assembly screws (4)
- 7. Remove the Eject Motor Assembly.

## Replacement

1. To install, carry out the removal steps in reverse order.

# REP 23.23 (LX) Finisher PWB

## Parts List on PL 23.16

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Upper Cover (REP 23.7).
- 4. Remove the Finisher PWB (Figure 1).
  - a. Disconnect the Connectors (9).
  - b. Remove the Screws (5).
  - c. Remove the Finisher PWB.



Figure 1 Removing the Finisher PWB

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.24 (LX) Finisher LVPS

## Parts List on PL 23.16

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Rear Lower Cover (REP 23.8).
- 4. Remove the Finisher LVPS (Figure 1).
  - a. Disconnect the Connectors (2).
  - b. Remove the Screws (4).
  - c. Remove the Finisher LVPS.



Figure 1 Removing the Finisher LVPS

# Replacement

Reverse the removal procedure for replacement.

## REP 23.25 (LX) Eject Motor

## Parts List on PL 23.11

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Undock the Finisher (REP 23.5).
- 4. Remove the Booklet Maker (REP 23.31).
- 5. Remove the Rear Upper Cover (REP 23.7).
- 6. Remove the Eject Motor Assembly (REP 23.22).
- 7. Remove the Eject Motor.
  - a. Remove the screws (2)
  - b. Remove the Eject motor

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 23.26 (LX) Front/Rear Tamper Motor

## Parts List on PL 23.12

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Compiler Tray (REP 23.17).
- 4. Turn the Compiler Tray over on a work surface.
- 5. Remove the Tamper Motor (Figure 1).
  - a. Release the wires from the wire guide.
  - b. Remove the screw (1) and remove the wire guide.
  - c. Disconnect the Tamper Motor connector.

NOTE: The Rear Tamper Motor connector has already been disconnected.

- d. Remove the screws (2).
- e. Remove the Tamper Motor.



Figure 1 Removing the Tamper Motor

## Replacement

Replace in reverse order of removal.

# REP 23.27 (LX) Front/Rear Tamper Home Sensors

## Parts List on PL 23.12

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Compiler Tray Assembly (REP 23.17).
- 4. Turn the Compiler Tray over on a work surface (Figure 1).
- 5. Disconnect the connector.
- 6. Remove the Front or Rear Tamper Home Sensor (PL 23.12).



Figure 1 Removing the Front or Rear Tamper Home Sensor

# REP 23.28 (LX) Compiler No Paper Sensor

Parts List on PL 23.12

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Compiler Tray Assembly (REP 23.17).
- 4. Turn the Compiler tray over on a work surface.
- 5. Remove the screw (1) that secures the bracket (PL 23.12) (Figure 1).



Figure 1 Removing the Bracket

- 6. Disconnect the connector (Figure 2).
- 7. Remove the screw (1) that secures the sensor.
- 8. Remove the Compiler No Paper Sensor.


Figure 2 Removing the Compiler No Paper Sensor

# REP 23.29 (LX) Front/Rear Carriage Assembly

## Parts List on PL 23.7

#### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

1. Press the Job Status button to check that there are no jobs in progress.

**NOTE:** Ensure that the Stacker Tray is in the top position.

- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Finisher Front Cover (REP 23.6).
- 4. Remove the Rear Upper and Rear Lower Covers (REP 23.7, REP 23.8).
- 5. Remove the Stacker Tray (REP 23.20).
- 6. Removing the Carriage Assembly (Figure 1).
  - a. Disconnect and remove the Spring.
- **NOTE:** The Carriage Bearings (2 each Assembly) are not fastened to the shafts. Use care to catch the Bearings when the Carriage Assembly is removed.
  - b. With a 6 inch common screwdriver, move the belt Clamp latch aside and remove the Stacker Belt and Carriage Assembly.



Figure 1 Removing the Carriage Assembly

**NOTE:** Ensure that the Front and Rear Carriage Assemblies are installed at the same height.

1. Install the Front or Rear Carriage Assemblies in the reverse order of removal.

# REP 23.30 (LX) Booklet PWB

Parts List on PL 23.21

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet PWB Cover (REP 23.35).
- 4. Remove the Booklet PWB (Figure 1).
  - a. Disconnect the Connectors (5).
  - b. Remove the Screws (4).
  - c. Remove the Booklet PWB.



Figure 1 Removing the Booklet PWB

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.31 (LX) Booklet Maker Assembly

Parts List on PL 23.6

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Unlatch the Eject Cover, and move it all the way to the left (Figure 1).
- 4. Remove the Thumbscrews (2) (Figure 1).





Eject Cover

Figure 1 Eject Cover and Thumbscrew

- 5. Disconnect the Booklet Maker Assembly from the Finisher.
  - a. Remove the Connector Cover (Figure 2).





# Figure 3 Disconnecting the Booklet Maker Assembly

6. Lift the Booklet Maker Assembly off the Locating Pins (4), and remove (Figure 4).

Connector Cover

Figure 2 Connector Cover

- b. Disconnect the Connector (Figure 3).
- c. Pull out the Cable Ties (4).



Figure 4 Removing the Booklet Maker Assembly

1. Reverse the removal procedure for replacement.

# REP 23.32 (LX) Booklet Front Cover

Parts List on PL 23.17

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Maker Assembly from the Finisher (REP 23.31).
- 4. Remove the Booklet Front Cover.
  - a. Remove the Screw (1) (Figure 1).



Figure 1 Removing the Booklet Front Cover

- b. Remove the Screws (2) (Figure 2)
- c. Remove the Booklet Front Cover.



Figure 2 Removing the Booklet Front Cover

1. Reverse the removal procedure for replacement.

# REP 23.33 (LX) Booklet Rear Cover

Parts List on PL 23.17

### Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Maker Assembly from the Finisher (REP 23.31).
- 4. Remove the Booklet PWB Cover (REP 23.35).
- 5. Remove the Booklet Rear Cover.
  - a. Remove the Self-tapping Screws (2) (Figure 1).
  - b. Remove the Booklet Side Cover.



Figure 1 Removing the Booklet Side Cover

- c. Remove the Screw (1) (Figure 2).
- d. Remove the Booklet Rear Cover.



Figure 2 Removing the Booklet Rear Cover

1. Reverse the removal procedure for replacement.

# REP 23.34 (LX) Booklet Top Cover

Parts List on PL 23.17

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Front Cover (REP 23.32).
- 4. Remove the Booklet Rear Cover (REP 23.33).
- 5. Remove the Booklet Top Cover (Figure 1).
  - a. Remove the Screws (4).
  - b. Remove the Booklet Top Cover.



Figure 1 Removing the Booklet Top Cover

Replacement Reverse the removal procedure for replacement.

# REP 23.35 (LX) Booklet PWB Cover

# Parts List on PL 23.17

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the Job Status button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet PWB Cover (Figure 1).
  - a. Remove the Self-tapping Screws (2).
  - b. Remove the Screws (2).
  - c. Remove the Booklet PWB Cover.

# Tapping Screws Tapping

Figure 1 Removing the Booklet PWB Cover

## Replacement

Reverse the removal procedure for replacement.

# REP 23.36 (LX) Booklet Left Cover

Parts List on PL 23.17

# Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Maker from the Finisher (REP 23.31).
- 4. Remove the Booklet Maker Left Cover.
- 5. Align the slots at the front and rear of the Booklet Maker Left Cover with the flats on the Mounting Pins.
- 6. Move the Booklet Maker Left Cover by allowing the flats on the Mounting Pins to slide through the slots in the Cover.

## Replacement

1. Reverse the removal procedure for replacement.

# REP 23.37 (LX) Booklet Front/Rear Stapler

# Parts List on PL 23.19, PL 23.20

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Maker Assembly from the Finisher (REP 23.31).
- 4. Remove the Stapler Guide (Figure 1).
  - a. Remove the Screw (1).
  - b. Remove the Stapler Guide.



Figure 1 Removing the Stapler Guide

- 5. Remove the Stapler Lower Cover (Figure 2).
  - a. Remove the Screw (1).
  - b. Remove the Stapler Lower Cover.



Figure 2 Removing the Stapler Lower Cover

- 6. Remove the Chute (Figure 3).
  - a. Remove the Screw (1).
  - b. Remove the Chute.
- 7. Remove the Stapler Rear Cover (Figure 3).
  - a. Remove the Screws (2).
  - b. Remove the Stapler Rear Cover.



Figure 3 Removing the Chute and Stapler Rear Cover

- 8. Remove the Stapler (Figure 4).
  - a. Release the wires from the Clip.
  - b. Disconnect the Connector.
  - c. Remove the Screws (3).
  - d. Remove the Stapler.



Figure 4 Removing the Stapler

1. Reverse the removal procedure for replacement.

# REP 23.38 (LX) Booklet Stapler Move Motor

# Parts List on PL 23.18

## Removal

**NOTE:** When turning the power OFF, turn the Power Switch OFF first, and then the Main Power Switch.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Remove the Booklet Maker Assembly from the Finisher (REP 23.31).
- 4. Remove the Cover for the Booklet Stapler Move Motor (Figure 1).
  - a. Remove the Screw (1).
  - b. Remove the Cover.



Figure 1 Removing the Cover

- 5. Remove the Booklet Stapler Move Motor (Figure 2).
  - a. Open the Clip and release the wires.
  - b. Disconnect the Connector.
  - c. Remove the Screws (3).
  - d. Remove the Booklet Stapler Move Motor.



Figure 2 Removing the Booklet Stapler Move Motor

# Replacement

1. Reverse the removal procedure for replacement.

# **ADJ 4.1 UI Diagnostic Tests**

## Purpose

This series of tests are built into the UI software to test the functionality of the UI display, UI pixels and color fidelity, Touch Screen response and Control Panel buttons and LEDs.

## Procedure

To display the UI Diagnostic Tests menu, simultaneously press the \*, #, and C buttons. The menu displays a list of 6 choices. You can select the tests from either the Touch Screen or by using the number key pad on the Control Panel. Each test will have one or more subtests. These tests are selectable from the number keys on the control panel. You can exit any of the top level tests by pressing the 0 button on the Control panel.

- 1. **LCD Pixel Test** This test displays five choices.
  - 1 Red Pixel Test
  - 2 Green Pixel Test
  - 3 Blue Pixel Test
  - 4 All White Pixel Test
  - 5 All Black Pixel Test
  - 0 Exit routine

When 1 is pressed, the screen turns red. When 2 is pressed, the screen turns green etc.

- 2. **Touch Panel Calibration** Use the Touch Pen for this routine. Start the test and touch the cross hatch locations as they are displayed. This will set the correct points of origin for the display.
- 3. **Touch Panel Test** A small square will display wherever you touch the screen. This will demonstrate the function of the touch screen. If your touch does not produce a color or grey square, the touch screen is defective.
- 4. **Button Test** This routine test the functions of the Buttons on the control panel and displays the results on the UI as a color change on the button display.
- 5. **Display Vertical Test** This test displays eight different vertical gradient patterns. These patterns are selected with the numeric key pad on the control panel:
  - 1 Red Grey Scale
  - 2 Green Grey Scale
  - 3 Blue Grey Scale
  - 4 Display 3 Vertical
  - 5 Display 33 Vertical
  - 6 Display 50 Vertical
  - 7 Display 100 Vertical
  - 8 Display 200 Vertical
  - 0 Exit routine
- 6. LED Test This routine tests the functionality of the LEDs on the Control panel. Select the test to perform and press the buttons on the control panel that have LEDs associated with them; the display on the UI will indicate which button was detected, and the LED will light. Also, pressing the Blink button will cause the LEDS to blink in a pattern after the LEDs have been switched on.

Select 0 to exit the procedure.

# ADJ 5.1 DADF Lead-Skew Adjustment

# Parts List on PL51.1

# Purpose

To correct the feeding of the original by adjusting the position of the DADF. (DADF Lead-Skew, Perpendicularity)

# Check

- 1. Place the Test Chart 82E8220 on the Platen Glass.
- 2. Place 11x17" paper in Tray 1.
- 3. Make a copy using the following settings in Copy mode.
  - a. On the UI Ready to Copy Screen, select the Copy tab.
  - b. Under Output Color select Black and White.
  - c. Under the Paper Supply select 11x17" paper size.
  - d. Under 2 Sided Copying select 1 Sided.
  - e. Reduce / Enlarge should be set to 100%.
  - f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
  - g. Make a copy.

NOTE: The copy made from the Platen Glass will be used as the original in the DADF.

- 4. Place the copy made from the Platen Glass into the DADF and make 3 copies.
- 5. Check that the difference in the distance between the side and the Edges at the 100mm mark and the 300mm mark in the 3 copies is within 00.5mm. (Figure 1)



#### Figure 1 Checking the Skew

6. If the value is not within the specified range, perform the Adjustment:

# Adjustment

- 1. Remove the DADF Rear Cover. (REP 5.4)
- 2. Adjust the position of the DADF by moving the DADF in direction A or B. (Figure 2 for 2 Pass or Figure 3 for 1 Pass)
  - a. Loosen the screws (x3 for 2 Pass) (x4 for 1 Pass).
  - b. Move the DADF in direction A or B.
  - c. Tighten the screws (x3 for 2 Pass) (x4 for 1 Pass).



j0ki45105 Figure 2 Skew Adjust (2 Pass)



Figure 3 Skew Adjust (1 Pass)

• The DADF moved in direction A. (Figure 4)



j0ku42044

Figure 4 Direction A correction

• The DADF moved in direction B. (Figure 5)



j0ku42043

#### Figure 5 Direction B correction

- 3. Reinstall the DADF Rear Cover.
- 4. After adjustment, perform DADF Side Registration (ADJ 5.2) and DADF Lead Edge Registration. (ADJ 5.3).

# ADJ 5.2 DADF Side Registration

Parts List on PL 51.1

## Purpose

To adjust the original to the proper position (drum shaft direction) on the Platen.

NOTE: The following adjustments must be made before carrying out checking and adjustment.

- IOT Side Registration (ADJ 9.1)
- IIT Lead Edge Registration (ADJ 6.2)
- IIT Side Edge Registration (ADJ 6.3)
- DADF Lead-Skew Adjustment (ADJ 5.1)

**NOTE:** DADF Side Registration is adjusted using the NVM for every paper width.

## Check

## Create a test pattern

 To create a Cross Line Test Pattern, use a plain white sheet of 8.5x11"/A4 paper and fold the sheet precisely in half lengthwise and width wise. Then with a straight edge draw a straight line in the lengthwise crease and a straight line in the width wise crease. Label the top for orientation purposes. (Figure 1)

	ТОР
A	В

#### Figure 1 Creating a Test Pattern Original

#### DADF Side Edge Registration Check - Side 1

- 1. Load Tray 1 with 8.5x11"/A4 paper.
- 2. Place the new Cross Line Test Pattern on the DADF with the word TOP **Face Up** and towards the rear of the DADF.
- 3. Select the following:
  - Tray 1
  - 1-1 Sided.
  - 100%
  - 1 copy
- 4. Make one copy to the center tray.
- 5. Remove the copy from the center tray and Flip the copy left to right.
- 6. Fold the copy in half parallel to the short edge (Fold A to B line in Figure 1).
- 7. Check that the fold line is within 2.0mm from the reference line. If the value is not within the specified range, perform the Adjustment. If the Check is OK, perform the DADF Side Edge Registration Check Side 2.

#### DADF Side Edge Registration Check - Side 2

- 1. Place the Cross Line Test Pattern on the DADF with the word TOP **Face Down** and towards the rear of the DADF.
- 2. Select the following:
  - Tray 1
  - 2-2 Sided.
  - 100%
  - 1 copy
- 3. Make one copy to the center tray.
- 4. Remove the copy from the center tray, but **DO NOT FLIP** the copy this time.
- 5. Fold the copy in half parallel to the short edge (A to B in Figure 1).
- 6. Check that the fold line is within 2.0mm from the reference line.

**NOTE:** Side 2 Registration should track Side 1 closely. In the event that it does not, perform the adjustment, and attempt to equalize the registration for both sides.

## Adjustment

#### Side 1 Adjustment

- 1. Enter UI Diagnostic (CSE) Mode. Select the Adjustments tab.
- 2. Select dC131 NVM Read/Write.
- 3. Change the value in location 711-272 to perform the correction (all sizes).
- 4. Increase the value to move the image toward "TOP." Each step represents 0.1% change (0.0847mm per step).
- 5. Repeat Check and Adjustment until the measurement is within the specified range.

Table 1 Side 1 of 1 Sided or 2 Sided mode	
---	--

	NVM	Document Width	Document Size
1	711-272	For all sizes	For all sizes
2	715-056	139.7~148.0mm	A5 SEF, 5.5x8.5" SEF
3	715-058	182.0~194.0mm	B5 SEF, 16K SEF
4	715-060	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-062	210.0mm	A4 SEF, A5 LEF
6	715-064	214.9~215.9mm	Letter SEF, Legal SEF, 5.5x8.5" LEF, 8.46x12.4" SEF, 8.5x13" SEF
7	715-066	254.0~257.0mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-068	266.7~267.0mm	16K LEF, 8K LEF, 8x10.5" LEF
9	715-070	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
10	715-072	297.0mm	A4 LEF, A3 SEF

6. Enter the value to perform correction for each size in "NVM: 715-056 to 072".

#### Side 2 Adjustment

- 1. Enter UI Diagnostic (CSE) Mode. Select the Adjustments tab.
- 2. Select dC131 NVM Read/Write.
- 3. Change the value in location 711-274 to perform the correction (all sizes).

- 4. Increase the value to move the image toward "TOP." Each step represents 0.1% change (0.0847mm per step).
- 5. Repeat Check and Adjustment until the measurement is within the specified range.

#### Table 2 Side 2 of 2 Sided mode

	NVM	Document Width	Document Size
1	711-274	For all sizes	For all sizes
2	715-057	139.7~148.0mm	A5 SEF, 5.5x8.5" SEF
3	715-059	182.0~194.0mm	B5 SEF, 16K SEF
4	715-061	203.2mm	8x10" SEF, 8x10.5" SEF
5	715-063	210.0mm	A4 SEF, A5 LEF
6	715-065	214.9~215.9mm	Letter SEF, Legal SEF, 5.5x8.5" LEF, 8.46x12.4" SEF, 8.5x13" SEF
7	715-067	254.0~257.0mm	B4 SEF, B5 LEF, 8x10" LEF
8	715-069	266.7~267.0mm	16K LEF, 8K LEF, 8x10.5" LEF
9	715-071	279.4mm	Letter LEF, 11x15" SEF, 11x17" SEF
10	715-073	297.0mm	A4 LEF, A3 SEF

6. Enter the value to perform correction for each size in "NVM: 715-057 to 073".

# ADJ 5.3 DADF Lead Edge Registration (2 Pass)

## Parts List on PL1.4

## Purpose

To adjust the original to the proper position (original feed direction) on the Platen.

**NOTE:** The following adjustments must be made before carrying out checking and adjustment.

- IOT Lead Edge/Side Edge Registration (ADJ 9.1)
- IIT Lead Edge Registration (ADJ 6.2)
- IIT Side Edge Registration (ADJ 6.3)
- DADF Lead-Skew Adjustment (ADJ 5.1)

## Check

- 1. Place the 82E8220 Test Pattern on the Document glass with the trade mark and part number as the lead edge.
- 2. Set up the machine to make two sided copies of the test pattern as follows:
  - a. On the UI Ready to Copy Screen, select the Copy tab.
  - b. Under Output Color select Black and White.
  - c. Under the Paper Supply select 11x17" paper size.
  - d. Under 2 Sided Copying select 1 to 2 Sided.
  - e. Reduce / Enlarge should be set to 100%.
  - f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
- 3. Select a Quantity of 5.
- 4. Press the **Start** button to make a copy of side 1.
- 5. After side 1 is made, place a small piece of paper with the words side 2 written on it, onto the Document Glass and under the 82E8220 Test Pattern. (Figure 1)

**NOTE:** Side 2 can now be identified by the word "side 2" copied from the small piece of paper placed on the Document Glass under the test pattern from previous step.

6. Press the **Start** button to make a copy of side 2.

**NOTE:** The 2 sided copies will be used to run duplex sets for measurement through the DADF.

- 7. Place the 2 sided copies into the DADF and make one set of 2 sided copies.
- 8. On side 1 and side 2, measure on the scale from the 10 mm line to the edge of the paper. The measurement should as follows. (Table 1)

If the value is not within the specified range, perform the Adjustment:

#### **Table 1 Specification**

ltem	Simplex	Duplex
Lead Edge	$10 \pm 0.5$ mm $10 \pm 0.5$ mm	



#### Figure 1 Identifying side 2

9. If the value is not within the specified range, perform the Adjustment:

## Adjustment

- 1. Enter the Diagnostic mode (Accessing UI Diagnostics.).
- 2. Select NVM Read/Write.
- 3. Adjust the Lead Edge using the NVM locations specified in Table 2 until the measured value falls within specifications.
  - each bit equals approximately 0.06 mm
  - increasing the value moves the image toward the Lead Edge

### Table 2 NVM List

Chain Link	Name	Min.	Initial	Max
711-140	DADF Lead Reg. Adjustment (Side 1) Replace All	80	129	230
711-141	DADF Lead Reg. Adjustment (Side 2) Replace All	80	129	230

- 4. Repeat Check and Adjustment until the Lead Edge measurement is within the specified range.
- 5. Repeat the procedure for Side 1 until the value is within the specified range (10+/-1.5mm) for each Magnification Ratio.

Adjust the following NVM values (Scan Speed) for any differences in the Magnification Ratios.

a. WorkCenter 7830/7835

Table 3

NVM	Scan Speed	Magnification Ratio
DC131[711-007]	220.0	25.0~100.0%
DC131[711-010]	146.7	100.1~150.0%
DC131[711-012]	110.0	150.1~200.0%
DC131[711-014]	73.3	200.1~300.0%
DC131[711-015]	55.0	300.1~400%

b. WorkCenter 7845/7855

Table 4			
NVM	Scan Speed	Ratio	
DC131[711-004]	330.0	25.0~100.0%	
DC131[711-007]	220.0	100.1~150.0%	
DC131[711-009]	165.0	150.1~200.0%	
DC131[711-012]	110.0	200.1~300.0%	
DC131[711-013]	82.5	300.1~400%	

6. Repeat the procedure for Side 2 until the value is within the specified range (10+/-1.5mm) for each Magnification Ratio.

Adjust the following NVM values (Scan Speed) for any differences in the Magnification Ratios.

a. WorkCenter 7830/7835

#### Table 5

NVM	Scan Speed	Magnification Ratio
DC131[711-027]	220.0	25.0~100.0%
DC131[711-030]	146.7	100.1~150.0%
DC131[711-032]	110.0	150.1~200.0%
DC131[711-034]	73.3	200.1~300.0%
DC131[711-035]	55.0	300.1~400%

b. WorkCenter 7845/7855

#### Table 6

NVM	Scan Speed	Ratio
DC131[711-024]	330.0	25.0~100.0%
DC131[711-027]	220.0	100.1~150.0%
DC131[711-029]	165.0	150.1~200.0%
DC131[711-032]	110.0	200.1~300.0%
DC131[711-033]	82.5	300.1~400%

# ADJ 5.4 DADF Lead Edge Registration (1 Pass)

## Purpose

Align image scanned from document with top edge of paper.

**NOTE:** The following adjustments must have been completed.

- IOT Lead Edge/Side Edge Registration Adjustment (ADJ 9.1)
- IIT Lead Edge Registration Adjustment ADJ 6.2
- IIT Side Edge Registration Adjustment ADJ 6.3
- DADF Lead Skew Adjustment ADJ 5.1

## Check

- 1. Make two copies from the Platen Glass to be used as DADF originals.
  - a. Register Geometric Test Pattern 82E8220 (11 x 17 / A3) on the Platen with the lead edge metrics LE1 through LE3 against the left registration guide.
  - b. Select the following:
    - On the UI Ready to Copy Screen, select the Copy tab.
    - 1→1 Sided
    - Under Output Color select Black and White.
    - A4 or 8 1/2 x 11 Long Edge Feed Paper Supply
    - 100% Reduce/Enlarge
    - 2 Copies
    - On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Off.
  - c. Press **Start** and write DADF Original 1 on the first copy and DADF Original 2 on the second copy.
- 2. Verify Lead Edge Registration of the DADF Originals.
  - a. On copy 2 (Original 2), measure the distance between the top edge of the copy and the reference line on metric LE2, and write A and the measurement on copy 2.
  - b. Check that A is 10.0  $\pm$ 0.5 mm. If A is 10.0  $\pm$ 0.5 mm, go to step 3.

If A is not 10.0  $\pm 0.5$  mm, check the following and then return to the beginning of this procedure.

- IOT Lead Edge/Side Edge Registration Adjustment (ADJ 9.1)
- IIT Lead Edge Registration Adjustment ADJ 6.2
- IIT Side Edge Registration Adjustment ADJ 6.3



#### Figure 1 Verifying Top Edge Registration of DADF Originals

- 3. Check DADF Top Edge Registration for Side 1.
  - a. Load both DADF Originals in the DADF, 1 on top, with lead edge metrics LE1 through LE3 facing toward the left.
  - b. Select the following:
    - 1→1 Sided
    - A4 or 8.5 x 11 Long Edge Feed Paper Supply
    - 100% Reduce/Enlarge
    - 2 Copies
  - c. Press Start and discard the first set.
  - d. On Side 1 (labeled DADF Original 1) of the second set of copies, measure the distance between the top edge of the copy and the reference line on metric LE2, and write B and the measurement on copy 1.
  - e. Compare B to A. B must be within  $0 \pm 2.2$  mm of A.

If the difference between B and A is greater than 2.2 mm, go to step 1 of the Adjustment.

Otherwise, go to the next step below.

- 4. Check the DADF Lead Edge Registration for Side 2.
  - a. Make a 2 sided test pattern.
    - i. Load DADF Originals 1 and 2 face up, 1 on top, with lead edge metrics LE1 through LE3 facing toward the left.
    - ii. Select 1 to 2 sided and press Start to make the 2 sided test pattern.
  - b. Make test copies.
    - i. Load the 2 sided test pattern with Side 1 up, and lead edge metrics LE1 through LE3 facing toward the left.
    - ii. Select the following:
      - 2 to 1 sided

- A4 or 8.5 x 11 Long Edge Feed Paper Supply
- 100% Reduce/Enlarge
- 2 Copies
- iii. Press Start and discard the first set.
- c. Check that the lead edge metrics are same distance from the edge of paper for both copies.

If the difference is greater than 2.2 mm, go to step 2 of the adjustment.

Otherwise, the DADF Lead Edge Registration is good.

## Adjustment

- 1. Adjust Side 1 DADF Lead Edge Registration.
  - a. Enter NVM Read/Write (dC131) [711-140 Side1 Lead Registration Offset NVM].

**NOTE:** For adjustment purposes, 25 numbers in NVM equals approximately 1 mm of adjustment.

- b. If B is more than A, increase the NVM value. If B is less than A, decrease the NVM value.
- c. Check results of adjustment and adjust if required.
- 2. Adjust Side 2 DADF Lead Edge Registration.
  - a. Enter following NVM Read/Write (dC131) [711-141 Side2 Lead Registration Offset NVM]

**NOTE:** For adjustment purposes, 25 numbers in NVM equals approximately 1 mm of adjustment.

- b. If Side 2 edge metric is farther away from edge than Side 1, increase the NVM value.
  If Side 2 edge metric is closer to edge than Side 1, decrease the NVM value.
- c. Check results of adjustment and adjust as required.

**NOTE:** 2 to 2-sided or 2 to 1-sided must be selected to view a change in [711-141]. [711-141] produces no change in 1 to 2-sided copying.

Table 1 I	VM List
-----------	---------

Chain	Link	Name	Min	Initial	Max	Increment	Remarks
711	140	DADF Lead Registration Adjust- ment (Side 1) Replace All	0	122	244	0.0414mm	Side 1
711	141	DADF Lead Registration Adjust- ment (Side 2) Replace All	0	122	244	0.0414mm	CVT-Side 2

**NOTE:** As the corresponding NVM 711-001 to 711-011 will be rewritten when NVM 711-140 is rewritten, be careful when NVM 711-001 to 711-011 are changed individually.

**NOTE:** As the corresponding NVM 711-015 to 711-025 will be rewritten when NVM 711-141 is rewritten, be careful when NVM 711-015 to 711-025 are changed individually.

# ADJ 6.1 Full/Half Rate Carriage Position Adjustment

# Parts List on PL 1.6

## Purpose

Adjust the position of the Full/Half Rate Carriage.

## Adjustment

**NOTE:** When turning the power OFF, turn OFF the Power Switch first and then the Main Power Switch.

**NOTE:** Adjust the position of Full/Half Rate Carriage at the front and rear separately. Only the procedures for the rear side is described here. The procedures for the front side is the same as for the rear side.

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Open DADF or the Platen Cover.
- 4. Remove the Platen Glass. (REP 6.2)
- 5. Remove the Lens Cover Assembly. (PL 1.5 )
- 6. Remove the jig pin from the Lens Assembly. (Figure 1)

**NOTE:** When removing the jig pin, never remove the screws (x4) that secure the Lens Base.

- a. Remove the screws (x2).
- b. Remove the jig pins (x2).



j0ki40145 Figure 1 Remove the Jig pins

7. Check that the Pulley at the front side is firmly secured. If the Pulley is loose, tighten the set screws (x2). (Figure 2)



Figure 2 Tighten the front pulley

8. Loosen the set screws (x2) that secure the Pulley at the rear side. (Figure 3)



Figure 3 Loosen the rear Pulley

- 9. Position the Half Rate Carriage. (Figure 4)
  - a. Move the Half Rate Carriage to the jig pin insertion position.
  - b. Set the jig pins (x2).

**NOTE:** Make sure the jig pins are aligned as shown in the figure.

c. Tighten the screws (x2).



Figure 4 Position the Half Rate Carriage

 Tighten one of the set screws (x2) (either side) that kept the Pulley at the rear side loose. (Figure 5)



Figure 5 Tighten one of the set screws

- 11. Secure the cable to the Full Rate Carriage at the rear side. (Figure 6)
  - a. Remove the screw.
  - b. Set the Tool Pin that was placed at the rear side of the Half Rate Carriage to the front side of the Full Rate Carriage.

- c. Tighten the screw.
- d. Remove the screw.
- e. Set the Tool Pin that was placed at the front side of the Half Rate Carriage to the rear side of the Full Rate Carriage.
- f. Tighten the screw.
- g. Tighten the affixed screws.



Figure 6 Secure the cable to the Full Rate Carriage

12. Tighten the set screw that kept the Pulley at the rear side loose. (Figure 7)



Figure 7 Tighten the set screw

- 13. Manually move the Full Rate Carriage to ensure that it moves smoothly.
- 14. Restore the Tool Pins to their original states.
- 15. Restore the Lens Cover Assembly to its original state.

# ADJ 6.2 IIT Lead Edge Registration

# Parts List on PL 1.1

# Purpose

To adjust the IIT scan timing in the Slow Scan direction and to correct the copy position.

# Check

## CAUTION

Perform this adjustment only if absolutely required; the IIT Lead Edge Registration affects the precision of the document size detection.

**NOTE:** Before performing this procedure, make sure that the IOT Lead Edge Registration is correct. Refer to ADJ 9.1, IOT Side/Lead Edge Registration.

- 1. Place the Geometric Test Pattern (82E8220) on the Platen Glass correctly and make copies with the following settings:
  - Copy Mode: Black
  - Paper Size: 11 x 17 in or A3
  - Magnification: 100%
  - No. of Copies: 2
- 2. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the LE2 scale is 10.0mm +/- 1.6mm (Figure 1).

# Adjustment

- 1. Enter the Diagnostic mode (UI Diagnostic (CSE) Mode).
- 2. Select dC131 location [715-050].
- 3. Change the value.
  - 1 increment: 0.034mm
  - Increment of the value: The image moves to the Tail Edge.
  - Decrement of the value: The image moves to the Lead Edge.
- 4. Repeat Check and Adjustment until the Lead Edge measurement is within the specified range.



Figure 1 Checking IIT Lead Registration

3. If the value is not within the specified range, Perform the Adjustment:

# ADJ 6.3 IIT Side Registration

# Parts List on PL 1.1

# Purpose

To adjust the IIT scan timing in the Fast Scan direction and to correct the copy position.

# Check

## CAUTION

Perform this adjustment only if absolutely required; the IIT Side Edge Registration affects the precision of the document size detection.

**NOTE:** Before performing this procedure, make sure that the IOT Side Edge Registration is correct. (Refer to ADJ 9.1, IOT Side/Lead Edge Registration.)

- 1. Load 11 x 17 in. or A3 paper into Tray 2.
- 2. Place the Geometric Test Pattern (82E8220) on the Platen Glass correctly and make copies with the following settings:
  - Copy Mode: Black
  - Paper Tray: Tray 2
  - Magnification: 100%
  - No. of Copies: 2
- 3. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the SE2 and SE3 scales is 10.0mm +/- 1.6mm (Figure 1).



#### Figure 1 Checking IIT Side Edge Registration

4. If the value is not within the specified range, perform the Adjustment:

## Adjustment

- 1. Enter the Diagnostic mode (UI Diagnostic (CSE) Mode).
- 2. Enter dC131 location [715-053].

Change the value.

- 1 increment = 0.075mm
- increasing the value = The image moves IN.
- decreasing the value = The image moves OUT.
- 3. Repeat Check and Adjustment until the Side Edge measurement is within the specified range.

# **ADJ 6.5 IIT Calibration**

## Purpose

The purpose of this procedure is to calibrate the optics in the IIT for optimal performance.

There are two adjustments included in the IIT Calibration Adjustment.

- White Reference Adjustment Calculates and sets the White Reference Correction Coefficient.
- CCD Calibration Corrects the IIT sensitivity dispersion.

## Adjustment

**NOTE:** NOTE: After performing ADJ 6.5 ITT Calibration, images copied or scanned may appear lighter. Images may not show much detail below 10%, particularly in Yellow.

**NOTE:** If the CCD Lens Assembly (*PL* 1.3) was replaced, perform ADJ 6.6 Optical Axis Correction before performing IIT Calibration.

#### CAUTION

#### Do not select the **Optical Axis Calibration** button unless the Lens Kit was replaced.

- 1. Clean the Optics:
  - a. Switch off the power and allow the Exposure Lamp to cool off.
  - b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
  - c. Clean the Exposure Lamp with a clean cloth and Film Remover.
  - d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
- 2. Enter the UI Diagnostic (CSE) Mode.
- 3. Select the Adjustment tab.
- 4. Select dC131 NVM Read/Write.
- Confirm the following NVM Read/Write (dC131) location 715-518 IIT Paper Code is set to 5 for XC (Digital Color Xpressions) or 6 for XE (Color Tech+). If NVM location 715-518 is incorrect, change to the correct value.

**NOTE:** If the value displayed is something other than 5, 6, or 1, then the scanner NVM is corrupt. Perform dC301 NVM Initialization.

- 6. Exit dC131.
- 7. Select dC945 IIT Calibration from the UI.
- 8. Select the White Reference Platen button.
- 9. Place 1 sheet of 11x17/A3 Color Expressions (or equivalent 98 brilliance paper) on the platen.
- 10. Press Start.
- 11. IIT Calibration in Process will appear on the UI screen.
- 12. When the **IIT Calibration Completed** message appears, select the White Reference DADH button.

**NOTE:** The **IIT Calibration Completed** message only appears for about 5 seconds, then the message changes to **The device is offline**.

- 13. Remove the sheet of paper from the platen and placve it in the DADF.
- 14. Press Start.

Initial Issue

- 15. IIT Calibration in Process will appear on the UI screen.
- 16. When the **IIT Calibration Completed** message appears, select the **CCD/LED Calibration** (7530/35) or the **CCD/LED Calibration - Side 1** (7845/55) button.

**NOTE:** The **IIT Calibration Completed** message only appears for about 5 seconds, then the message changes to **The device is offline**.

- 17. Remove the white paper. Place the Color Test Pattern 82E13120 on the platen with the Lead Edge (LE) on the left.
- 18. Press Start.
- 19. The message IIT Calibration in Process will appear on the UI screen.
- 20. When the calibration is complete, the obtained data is displayed in the Results box.
  - a. Ensure that the **Results** box shows a green check mark in the left most section of the box indicating that the results are OK.
  - b. If the **Results** box does not show OK (if a red X is shown in the left most area of the box), return to step 1 and repeat this procedure.
  - c. If, after repeating the procedure, the **Results** box still does show OK, go to the 362-900 RAP and troubleshoot the problem.
- 21. Perform the CIS Calibration Side 2 (7845/55 only).
  - a. Select the CIS/LED Calibration Side 2 button.
  - b. Place the Test Pattern 82E13120 in the DADF with the color pattern down and Lead Edge on the left (in) side, then press **Start**.
- 22. The message IIT Calibration in Process will appear on the UI screen.
- 23. When the calibration is complete, the obtained data is displayed in the Results box.
  - a. Ensure that the **Results** box shows a green check mark in the left most section of the box indicating that the results are OK.
  - b. If the **Results** box does not show OK (if a red X is shown in the left most area of the box), remove the CIS (REP 55.19), clean the optics and reinstall the CIS in the machine.
  - c. Return to step 21 and repeat this procedure. If, after repeating the procedure, the **Results** box still does not show OK go to RAP 366-900 and troubleshoot the problem.

# **ADJ 6.6 Optical Axis Correction**

# Parts List on PL 1.1

# Purpose

The purpose of this adjustment is to align the CCD with the lens.

### CAUTION

This procedure should only be performed if the Lens Kit is replaced, or if the documentation specifically directs.

## Check

1. Install the Platen Glass.

## CAUTION

Stray light will adversely affect the check. If there is significant ambient light around the machine (especially fluorescent light), open the platen cover as little as required to start the scan, and/or shroud the machine with a drop cloth in order to keep as much stray light as possible away from the Lens and CCD.

- 2. Ensure the document cover or DADF is partially raised and that there is nothing on the platen glass.
- 3. Enter UI Diagnostics (UI Diagnostic (CSE) Mode). Select the Adjustments tab, dC945 IIT Calibration, select the Optical Axis Correction button and press Start.
- 4. Check the results in the **Optical Axis Set Results** box. If the result is OK (if a **green check mark** is displayed in the left most area of the **Results** box), the check is good. Go to ADJ 6.5 and adjust the IIT Calibration.
- 5. If a red X is displayed in the **Results** box, perform the **Adjustment**.

# Adjustment

- 1. Remove the Platen Glass and the Optics cover.
- 2. Place an index mark on the barrel of a 5.5mm nut driver. Figure 1 shows the tool and the adjusting nuts.



Figure 1 Tool and Front Optics Adjusting Nut

- 3. Check the results in the **Front Nut Correction Angle** and the **Rear Nut Correction Angle** box. The values displayed indicate the amount and direction of the correction required:
  - + means rotate clockwise
  - means rotate counterclockwise
  - The amount of correction is displayed in degrees. Each division around the nut represents 15 degrees (divide the displayed value by 15 to get the number of divisions). If a value higher than 990 is displayed, this may indicate that insufficient light is entering the CCD. Make sure that the Lens and Platen Glass are clean.
- 4. Make the indicated correction for both the front and rear screws,
- 5. Reinstall the Platen Glass and the Optics cover, then select on Start on the screen.
- 6. Repeat the **Check** and **Adjust** until the the **green check mark** is displayed in the **Results** box.
- 7. Reinstall the Optics Cover and reinstall the Platen Glass.
- 8. Go to ADJ 6.5 and adjust the IIT Calibration.

# ADJ 7.1 Tray 5 (MSI) Guide Adjustment

## Purpose

This procedure calibrates the paper size detection circuits for Tray 5. It should be performed when the MSI size sensor is replaced or a size detection error occurs

## Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dc740 MSI Side Guide Adjustment.
- 4. Push the paper guides to their minimum width.
- 5. Select the **Minimum** button, then select **Read Width**. When the machine software has read the width of the Paper Guides, select **Write Width**. This measurement will then be written into NVM.
- 6. Push the paper guides to their maximum width.
- 7. Select the **Maximum** button, then select **Read Width**. When the machine software has read the width of the Paper Guides, select **Write Width**. This measurement will then be written into NVM.
- 8. Place a sheet of paper in Tray 5 and select **User Defined**, then select **Read Width**. Check to ensure accurate reading of the paper width.

# ADJ 9.1 Lead Edge/Side Edge Registration

## Purpose

The purpose is to adjust the position of the printed image on the page. This is done by changing the value of the Lead Edge Registration and Side Edge Registration in dC129. This controls where the ROS writes the image.

For the independent IIT Reg Adjustment, refer to dC945 IIT Calibration - Optical Axis Correction. For the IIT/DADF Skew Adjustment, refer to the IIT/DADF Adjustment Procedures, respectively.

# Specification

The specifications for Lead Edge and Side Edge are shown in the table below.

Table 1 Specification					
	Simplex	Duplex	Tray 5 / Bypass		

item	Simplex	Duplex	Tray 57 Bypass
Lead Edge	10±1.5mm	10±1.9mm	10±2.2mm
Side Edge	8.5±2.0mm	8.5±2.4mm	8.5±3.0mm

# Introduction

14 .....

This series consists of the following procedures:

- Lead Edge Registration, Bond/Plain Paper, Trays 1-4 and 6, Sides 1 and 2. One Lead Edge setting applies to all.
- Lead Edge Registration, Bond/Plain Paper, Tray 5 / Bypass, Sides 1 and 2.
- Side Edge Registration, All Trays (1 6), Sides 1 and 2, each set separately.

**NOTE:** Whenever you adjust registration, you must perform the entire series, in the sequence given. Read the entire procedure before performing the adjustment.

# Lead Edge Registration (Bond/Plain Paper)

## Purpose

To correctly register the lead edge of the image in relation to the lead edge of the paper. There is a single Side 1 lead edge setting for Trays 1 - 4 and 6; there is a similar Side 2 lead edge setting for these trays. There are separate lead edge settings for Side 1 and Side 2 of the Tray 5/ Bypass.

# Check

Initial Issue

Checking Baseline Lead Edge Registration (Side 1)

- Load Trays 1 and 2, and the Tray 5 / Bypass, with 11 x 17 / A3 Bond/Plain paper. Load Trays 3, 4, and 6 with 8 1/2 x 11 / A4 Bond/Plain paper. If you changed Paper Type or Weight from what was originally installed, make sure that you Change Description... on the Tray Settings screen. Remember to Confirm the changes.
- 2. The routine automatically selects the appropriate NVM location to set, based on the Paper Type setting for the trays. Ensure that the correct **Size** and **Weight** are displayed in the **Media Type** window.
- 3. Enter the UI Diagnostic (CSE) Mode.

- 4. Select the Adjustments tab.
- 5. Select dC129.
- 6. Make the following selections:
  - a. Select Side 1, if not already selected.
  - b. Set Paper Supply to Tray 1, if not already set.
  - c. Select 5 for Print Count.
- 7. Select Print on the UI Diagnostics screen.
- 8. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1," and "Side 1," and the location of the Lead Edge of each sheet.
- 9. Take the third print and measure from the lead edge to point A (as shown on Figure 1). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
- 10. If the measured value is not 10±1.5mm, perform the Adjustment. If the Check is OK, proceed to **Checking Side 2 Lead Edge Registration**.



Figure 1 Test Pattern Measurement Points

## SIDE EDGE

#### Checking Side 2 Lead Edge Registration

**NOTE:** The grid pattern for side 1 does not align with the side 2 grid pattern; do not attempt to set registration by aligning the grids.

- 1. Make the following selections:
  - a. Select Tray 1.
  - b. Select Side 2.
  - c. Select 5 for **Print Count**, if not already selected.
- 2. On the UI Diagnostics select Print. (Click Start on the PWS screen).
- 3. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1" and "Side 2," and the location of the Lead Edge of each sheet.
- 4. Take the third print and measure from the lead edge to point A (as shown on Figure 1). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
- 5. If the measured value is not 10±1.9mm, perform the Adjustment. If the Check is OK, proceed to **Checking Tray 5 / Bypass Lead Edge Registration**.

#### Checking Tray 5 / Bypass Lead Edge Registration

- 1. Select Tray 5 (MSI) from the **Feeder Tray** drop down menu.
- 2. Make the following selections:
  - a. Select Side 1.
  - b. Select 5 for Print Count, if not already selected.
- 3. Select Print.
- 4. Take the third print and measure from the lead edge to point A (as shown on Figure 1). Point A is at the intersection of the 7th line from the side edge and the first line from the lead edge.
- 5. If the measured value is not 10±2.2mm, perform the Adjustment. When the measured value falls within the specification, select the Side 2 radio button and repeat steps 1 through 4 to check registration for Side 2.
- 6. If the Check for Tray 5 / Bypass Side 2 is not 10±2.2mm, perform the Adjustment. If the Check is OK, proceed to **Side Edge Registration**.

#### Adjustment

- Use the Right and Left Arrow buttons to increase or decrease the amount of lead edge spacing. The right arrow increases the lead edge spacing (moves the grid pattern to the left). The left arrow decreases the lead edge spacing (moves the grid pattern to the right). Each increment of the displayed value is .32mm.
- 2. After adjustment, repeat the Check procedure to see if the measured value of the Lead Edge (A) now falls within the specification of Table 1.
- 3. Repeat Adjustment steps 1 through 3 until the measured value falls within the specification.

## Side Edge Registration

## Purpose

To correctly register the side edge of the image in relation to the outboard edge of the paper.

## Check

- 1. Check that paper is loaded in all trays, and that the paper guides are adjusted correctly.
- 2. Make the following selections:

- a. Select Side 1.
- b. Select Tray 1.
- c. Select 5 for **Print Count**, if not already selected.
- 3. On the UI Diagnostics screen select Print. (Click Start on the PWS screen.)
- 4. Label each printed sheet with the number of the print (1 through 5), the words "Tray 1," and "Side 1," and the location of the Lead Edge and Side Edge of each sheet.

**NOTE:** With the lead edge to the right, the side edge to be checked will be at the top.

- 5. Take the third print and measure the following:
  - For paper larger than letter size, measure from the intersection between the 1st line from the side edge and the 10th line from the lead edge of the paper (point B2 on Figure 1).
  - For letter size (8.5 x 11 / A4), measure from the intersection between the 1st line from the side edge and the 5th line from the lead edge of the paper (point B1 on Figure 1).
- 6. If the measured value is not 8.5±2.0mm, perform the Adjustment.
- 7. If the measurement is within specification, select Trays 2 through 4 and repeat steps 1 through 5 for each successive tray. Perform the Adjustment, if the measurement is not within specification.
- 8. If the measurement is within specification, select the Side 2 radio button, select Trays 1 through 4 and repeat steps 1 through 5 for each successive tray for Side 2.
- 9. If the measured value for Trays 2 through 4, and Tray 6 (Side 2) is not 8.5±2.4mm, perform the Adjustment, where applicable.
- 10. If the measurement is within specification, select Tray 5 and repeat steps 1 through 5 for Side 1 of the Tray 5 / Bypass.
- 11. If the measured value for Side 1 of the Tray 5 / Bypass is not 8.5 $\pm$ 3.0mm, perform the Adjustment.
- 12. If the measurement is within specification, select the **Side 2** radio button and repeat steps 1 through 5 for Side 2 of the Tray 5 / Bypass.
- 13. If the measured value for Side 2 of the Tray 5 / Bypass is not 8.5±3.0mm, perform the Adjustment.

## Adjustment

- Use the Up and Down Arrow buttons to increase or decrease the amount of side edge spacing. The Up arrow increases the side edge spacing (moves the image away from the outboard edge of the paper). The Down arrow decreases the side edge spacing (moves the image towards the outboard edge of the paper). Each increment of the displayed value is .35mm.
- 2. After adjustment, repeat the Check procedure to see if the measured value of the Side Edge (A) now falls within the specifications of Table 1.
- 3. Repeat Adjustment steps 1 through 3 until the measured value falls within the specification.

# ADJ 9.2 Edge Erase Value Adjustment

## Purpose

To correct both (Rear/Front) sides and Lead Edge erase values of the image.

## NOTE: .

## Prerequisite

The IOT Lead Edge/Side Edge Registration (ADJ 9.1) must be checked, and adjusted if required.

# Check

1. Specify a Tray loaded with paper. Make a black copy without using any originals and leaving the Platen Cover open.

To make a copy with the platen open:

- a. Remove the magnet from the DADF housing (Figure 1).
- b. Place the magnet over the area on the console where the magnet would touch when the DADF is closed (Figure 1.
- c. Hold down the DADF Interlock (Figure 1) while pressing Start.



Figure 1 Making a copy with the Platen open

2. Check that the margins are 4mm at the side and 2mm at both Lead and Trail Edges.

## Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode, then select dC131 NVM Read / Write.
- 2. Adjust the following NVM locations such that the measured value is 4mm at the top, and 2mm at both sides and Trail Edge (Table 1).

Table 1	NVM List
---------	----------

Chain Link	Name	Min.	Initial	Max	Step
749-418	SIDE NORMAL ERASE ADJUST- MENT	20	20	255	0.1mm increments
749-417	TOP NORMAL ERASE ADJUSTMENT	40	40	255	0.1mm increments
749-419	END NORMAL ERASE SIDE Reg ADJUSTMENT	20	20	255	0.1mm increments

- 3. After adjustment, make another black copy without using any originals and leaving the Platen Cover open.
- 4. Adjust until the margins are 4mm at both sides and 2mm at both Lead and Trail Edges.

# ADJ 9.3 ProCon On/Off Print Check

## Purpose

This procedure performs a Minisetup, outputs a printed test pattern for visual analysis, and prints a Job End patch. Selected process control NVM values are displayed, and a check for hidden process-control-related faults is performed.

There are 2 modes in this procedure:

- Procon On mode the routine is run with ATC/ADC correction per the ProCon lookup table (LUT) and customer mode settings.
- Procon Off mode: the routine is run with ATC/ADC/LUT bypassed, using the default settings for potential.

## Check

- 1. Ensure that there is 11 x 17 in/A3 paper in Tray 1.
- 2. Ensure that TRC (ADJ 9.13) values are set at midpoint.
- 3. Enter the UI Diagnostic (CSE) Mode.
- 4. Select the Adjustments tab, then select dC937 Pro Con On/Off Print.

**NOTE:** Disregard any NG readings that are displayed when you first enter the routine - the data are only valid after **Print** has been selected.

- 5. Select the **Process Control On** button, then select **Print**. Minisetup will be executed in 4 color mode. 1 sheet of the built-in test pattern **Pcon PG 200C** will be printed and the job end patch created.
- 6. Check the ProCon status screen for any failures. If **Fail** is displayed, perform the Adjustment.
- 7. Examine the printed test pattern. Compare the output to the Color Test Pattern (Figure 1). Check the density and color shift of the medium/high density areas, and the reproduced density and color shift of the highlights. If a problem is detected, perform the Adjustment.





## Adjustment

- 1. If NG is displayed, carry out the following failure correction as appropriate, then repeat the Check.
  - For ADC Shutter Open failures go to the 392-649 RAP.
  - For ADC Shutter Closed failures go to the 392-650 RAP.
  - For ADC Sensor failures go to the 392-651 RAP.
  - For ADC Patch failures go to the 392-670 (Y) RAP, 392-671 (M) RAP, 392-672 (C) RAP, or the 392-673 (K) RAP.
  - For ATC Average failures go to the 392-665 (Y) RAP, 392-666 (M) RAP, 392-667 (C) RAP, or 392-668 (K) RAP.
  - For ATC Amplitude failures go to the 392-657 (Y) RAP, 392-658 (M) RAP, 392-659 (C) RAP, or the 392-660 (K) RAP.
  - For Temperature failures go to the 392-661 RAP.
  - For Humidity failures go to the 392-662 RAP.
  - For ADC Minisetup failures go to the 392-662 (Y) RAP, 392-676 (M) RAP, 392-677 (C) RAP, or the 392-678 (K) RAP.
- 2. Record the values in the **ProCon On/Off Values** window.
- Select the ProCon Off button, then select Print. Minisetup will be executed in 4C mode. 1 sheet of the built-in test pattern Pcon PG 200C will be printed and the job end patch created.

ProCon Off switches off the Grid Voltage Control, and ADC Gradation Control:

Initial Issue

- Grid Voltage Control Off: For medium/high density problems, this allows you to differentiate between developing/transfer problems in IOT elements status and Grid Voltage Control problems due to Procon ADC.
- ADC Gradation Control: When reproduced highlights are poor, this allows you to differentiate between problems with the IOT itself and problems with the ADC Gradation Adjustment.
- 4. Compare the output of the ProCon On and ProCon Off prints. Evaluate according to one of the following Problem Statements:
  - a. Both ProCon On and ProCon Off prints are unacceptable
    - For poor Highlight reproduction, perform ADJ 9.14 (Tone-up/Tone-down).
    - If the problem involves a single color, it may be the Developer and/or power supplies, Photoreceptor/BCR/Scorotron, and/or power supplies, or ROS. Repair or replace as required.
    - If the problem involves all colors, check the 2nd BTR, its power supply, and the Transfer Belt.
  - b. ProCon Off print is OK, but ProCon On print is unacceptable
    - Replace the MOB/ ADC Sensor Assembly (PL 18.5).

# ADJ 9.5 Thin Line Correction Mode Adjustment

## Purpose

The Thin Line Correction Mode is the mode for correcting the poor reproducibility of 600 dpi/1200 dpi thin lines.

Because of the dispersion due to the difference in the machines, thin lines, especially slanted ones, tend to break up.

When this happens, use the Thin Line Correction Mode to correct it.

NOTE: The Thin Line Correction Mode might cause defects to appear in images when in use.

- 1. Interference in the form of banding in ladder images
- 2. LPH streaks appearing in high temperature environment

Because of these reasons, keep the adjustment amount as low as possible.

#### Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode, select dC131 NVM Read / Write, and perform the Thin Line Correction by adjusting the following NVMs.
- NVM 749-006, 1200 Only Fine Line Correction 0: OFF (also perform correction for 600dpi), 15: ON (only perform correction for 1200dpi)
  If the Thin Line Correction is also to be performed for 600dpi, use 0. The default value is 15.
- 3. NVM 749-007, Thin Line Correction Switch 0: Thin Line Correction OFF, 1: Thin Line Correction ON.

The default value is 0.

4. Thin Line Correction Amount Adjustment (Table 1):

#### **Table 1 Thin Line Correction**

NVM Address	Contents	Initial Value	Adjustment Range
749-243	Thin Line Correction Amount Y Color	200	140~255
749-244	Thin Line Correction Amount M Color	200	140~255
749-245	Thin Line Correction Amount C Color	200	140~255
749-246	Thin Line Correction Amount K Color	200	140~255

The smaller the value, the more emphasis the thin line gets (amount of exposure is increased).

Amount of exposure is increased by: 30% for 140, 20% for 160, and 10\% for 180. (Default value - Adjustment value)/2 = amount of increased exposure in %.

The recommended value is 160.

5. 752-006 Thin Line Correction ADC\_Switch - 0: OFF, 1: ON.

Although this is normally set as 0 (OFF) during use, if the highlight reproduction is overdone, set this to 1 (ON).

Default value is 0.

# ADJ 9.6 LPH Exposure Amount Fine Adjustment

# Purpose

The LPH Exposure Amount Fine Adjustment is the process of adjusting the LPH exposure amount to correct the uneven density in the Axis Direction that arose due to various causes in the vicinity of the Drum for each YMCK color individually.

The LPH Exposure Amount Adjustment can be performed as negative correction within the range of 0 to -20 (%).

# **Correction Area**



#### Figure 1 Correction Areas



	Α	В	С	D	E	F	G
Distance from the left of image (MM.)	0	52	103	154	206	257	308.9

As shown in Figure 1, the LPH zone is divided into 7 areas by setting the 6 points - from A (left most edge) to G (right most edge).

Adjustment is performed at each area to lower the LPH exposure amount until the density is even.

**NOTE:** There are cases where point A or G will lie beyond the image zone. Furthermore, the 154mm mark is the center of the image.

**NOTE:** As an overly large adjustment might cause jumps in gradation, make the adjustments as small as possible.

The adjustment amount (%) is not = amount of change in density.

The actual exposure level includes a process that converts the brightness of ADC Sensor Position to 100%.

## Adjustment

1. LPH Exposure Amount Fine Adjustment ON/OFF Switch Selector

To enable the LPH Exposure Amount Fine Adjustment function, set the following NVM as ON (Table 2).

Table	2	NVM
10010	_	

NVM Names	NVM Address	Contents	Initial Value	Adjustment Range
Smile Correction Switch	749-005	0: OFF 1: ON	0	0 or 1

2. Selection of Correction Method:

The LPH Exposure Amount Fine Adjustment can be done by:

- a. Correcting the density skew in the IN-OUT direction
- b. Selecting a pre-prepared pattern to perform the correction
- c. Using custom correction to manually correct the adjustment amount for each area

A combination of the various correction methods can be used. However, the correction cannot go beyond the 0 to -20 (%) range.

a. IN/OUT Density Correction (Table 3):

Corrects the IN-OUT density skew in the axis direction of the photoreceptor.

When there is density skew from the left to the right of the image, the adjustment amount to correct that has to be set for each color. Setting Range is -20 to 20 (%).

Table 3 In/Out Density NVM

NVM Names	NVM Address		Initial Value	Adjustment Range
In Out Tendency (IN/OUT correction)	749-191	Y	0	-20~20
	749-192	М	0	-20~20
	749-193	С	0	-20~20
	749-194	K	0	-20~20





Figure 4 Patterns 3 and 4 selection



Figure 5 Patterns 5 and 6 selection

#### Table 4 Correction Pattern NVM

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Pattern (Pattern Selection)	749-195	Y	1	1~6
	749-196	М	1	1~6
	749-197	С	1	1~6
	749-198	К	1	1~6

\*Although there is also an adjustment range at the positive side, it only involves reducing the brightness at the IN side or the OUT side and therefore will not have any correction that goes above 100%.

b. Pattern Selection Correction:

If you have elected to perform correction based on Pattern Selection, select the Pattern 1~6 and Level 1~6 that is most suitable for the density correction from the following figures (Figure 3, Figure 4, Figure 5).

The selected Pattern (Table 4) and Level (Table 5) are reflected as LPH Brightness Correction by changing the following NVM values.

As there are separate NVMs for each color, they can each be corrected independently.



Figure 3 Patterns 1 and 2 selection
Table 5 Correction Level NVM

NVM Names	NVM Address		Initial Value	Adjustment Range
Correction Level	749-235	Y	0	255
	749-236	М	0	255
	749-237	С	0	255
	749-238	К	0	255

**NOTE:** Take note that "0,5" for Pattern means "Disabled" and "1" for Level means "No correction".

c. Custom Correction:

If you have elected to perform density correction by custom correction, you must input the required adjustment amount for the correction of every area into the NVM for each YMCK color (Table 6).

Be careful as only negative correction can be performed for density correction.

NVM	NVM			Initial Value					Adjustment		
Names	Address	Contents		Α	в	С	D	Е	F	G	Range
Custom	749-203~209	R/E (%)	Y	0	0	0	0	0	0	0	-20~20
Correction	749-210~216	within Pulse Width Vari- able Range	М	0	0	0	0	0	0	0	-20~20
value	749-217~223		С	0	0	0	0	0	0	0	-20~20
	749-224~230		Κ	0	0	0	0	0	0	0	-20~20

Table 6 Custom Correction NVM

#### \*The NVM Addresses correspond in ascending order to ABCDEFG.

\*Although there is also an adjustment range at the positive side, the brightness will saturate at 100%. The positive correction of up to the 100% range will only be applied when the exposure amount has been corrected towards the negative side at IN-OUT Density Correction or Pattern Selection Correction.

The above 3 types of correction can be used in combination. However, the total amount of exposure adjustment for these Smile Corrections are restricted to be within 0 to -20%.

[Sum of Correction  $0\sim 20\%$ ] = [IN-OUT Adjustment Amount%] + [Pattern Selection Adjustment Amount %] + [Custom Adjustment Amount %]If the total from the 3 corrections add up to less than -20\%, it will be uniformly limited to -20\%.

If it is larger than 0%, then it will be uniformly limited to 0%.

The above are the restrictions that apply to the exposure amount correction and correction by Smile Correction function. However, within the actual machine, after the exposure amount correction by Smile Correction, it will enter another process to calibrate the exposure at the ADC Sensor Position to be 100%. As a correction is applied to the exposure amount after a Smile Correction, the exposure amount in the vicinity of 114 to 144mm from the left of the image becomes 100%, while it is relatively higher or lower for the rest of the positions.

Reference sample



Figure 6 Exposure Energy Measurement

As shown in Figure 6-B, the control is such that the final exposure at the ADC Sensor Position becomes 100%.By this, the exposure amount that was corrected by Smile Correction (Figure 6-A) is corrected again until it is at the actual output level (Figure 6-B).(The figures are the exposure models when Pattern 1, Level 4 correction has been performed.)

# ADJ 9.7 ATC Sensor Setup

Purpose

#### CAUTION

This procedure should only be performed when the ATC Sensor or Developer Housing is being replaced, **OR** when there is reason to believe that the calibration values in NVM are incorrect.

To set the calibration values **ATC Correction Coefficient**, **ATC Correction Offset** in NVM to calibrate the new ATC Sensor.

#### Check

- 1. If an ATC Sensor or Developer Housing was replaced, perform the first procedure listed in Adjustment
- 2. If there is reason to believe that the calibration values in NVM are incorrect, perform the following:
  - a. Enter the Diagnostic Mode (UI Diagnostic (CSE) Mode).
  - b. From the Adjustments Tab screen, select the dC950 ATC Sensor button.
  - c. Select Measurements.
  - d. Check the values in the window. The default values for each color are:
    - ATC Coefficient 1024
    - ATC Correction Offset 0
  - e. If the screen displays all default values, perform the second procedure listed in Adjustment.
  - f. If the measurement result is NG, check that the ATC Sensor is connected and undamaged.

#### Adjustment

#### Procedure for new ATC Sensors

Perform these steps if you have just replaced an ATC Sensor or a Developer Housing:

- 1. Locate the ATC Sensor calibration code on the ATC Sensor. This is the 3-digit number in the 3rd line of text on the label (it will always start with a zero).
- 2. Enter the Diagnostic Mode.
- 3. From the Adjustments Tab screen, select the dC950 ATC Sensor button.
- 4. Enter the last 2 digits of this code into the appropriate column of the display, using the up/ down arrows.
- 5. Press the Calibrate button.

#### Procedure to restore ATC Calibration values

Perform steps 1 or 2 as appropriate if you need to restore ATC Sensor NVM calibration values:

- 1. If a known good Machine Settings file exists, use it to restore Machine Settings.
- 2. If a known good file is not available, if one or more ATC Sensors have been replaced, or if you are not sure of the replacement status, perform the following:
  - a. Remove the Developer Housings (REP 9.11).
  - b. Locate the ATC Sensor calibration code on the ATC Sensor. This is the 3-digit number in the 3rd line of text on the label (it will always start with a zero).
  - c. Enter the Diagnostic Mode.
  - d. From the Adjustments Tab screen, select the dC950 ATC Sensor button.

- e. Enter the last 2 digits of this code into the appropriate column of the display, using the up/down arrows.
- f. Press the Calibrate button on the Control Panel.

# ADJ 9.8 Default Developer ATC Setup

## Purpose

Immediately after the replacement of a Developer Housing with known toner density, this sets the ATC Target Value by having the ATC Sensor measure the toner density of the developer. This can also work as the check function of the ATC Sensor.

## Adjustment

- 1. Enter the Diagnostic Mode (UI Diagnostic (CSE) Mode).
- 2. From the Adjustments Tab screen, select the dC950 ATC Sensor button.
- 3. Select Measurements.
- 4. Check the values in the window. The default values for each color are:
  - ATC Coefficient 1024
  - ATC Correction Offset 0
- 5. If the measurement result is NG, check that the ATC Sensor is connected and undamaged.

# ADJ 9.9 Registration Measurement Cycle

## Purpose

To measure the color registration and display the status by indicating OK/NG.

This cycle performs the color Registration measurement that includes the detection of AC component to determine the condition of AC control (Drum Drive, Belt Drive, etc.), which is one of the color Registration components.

NOTE: Correction is not performed.

- Performs Registration measurement to determine the condition of the AC control.
- Checks that the Belt control etc. are operating normally.
- Measures/displays the amount of color shift relative to Black in the Fast Scan/Slow Scan direction.
- Displays the result of comparison with the target value as OK/NG.

## Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dC671 Measurement Cycle.
- 4. Select Shift Amount.
- 5. Press Start. OK or NG will be displayed in the Judgement column.

If NG is displayed:

- 1. Go to GP 6. Press the **Machine Status** button on the Control Panel. The **Machine Status** screen opens.
- 2. Select the Billing Meter/Print Report tab.
- 3. Select Print Report/List.
- 4. Press the CE button. The CE screen opens
- 5. Press the Failure Report button.
- 6. Press the **Start** button. The report is printed.
- 7. Examine the Failure report to see if there are any Chain **089** fault codes. These are only on the Failure report and are printed on page 3.
- 8. Troubleshoot these codes.

# ADJ 9.10 Registration Control Setup Cycle

## Purpose

To set the most appropriate Registration Control correction value for skew etc. at setup, or after replacing any of the following parts:

- LPH replacement/detachment
- 2nd BTR replacement/detachment
- Transfer Belt replacement/detachment IBT CLN Unit replacement/detachment
- IBT Module replacement/detachment (recommended) Developer replacement/detachment

The Setup Cycle is made up of the following 2 functions.

Function 1: Performed right after assembling or during field installation or when replacing a key part. Also, this is a Registration Control Full Cycle that can be performed in the Diagnostic. mode right after the NVM is initialized. Executing this function corrects the Color Registration into the predefined range. The corrected shift amount for each color is saved in the NVM and it is displayed at normal completion.

Function: On entering a setup cycle, the IOT does not start. The Registration Control shift correction amount is displayed automatically on the UI screen and is used as a tool for determining the cause when a failure occurs.

#### Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dC675 Registration Control Setup.
- 4. Select Setup.
- 5. Select Start. The shift amount for each color is corrected automatically.
- 6. Perform ADJ 9.9.

# ADJ 9.11 Registration Control Sensor Check Cycle

#### Purpose

This is a self-diagnostic cycle for checking that the misregistration detection system (MOB Sensor) is operating normally. The color shift amount is detected using Cyan patch. Any misregistration detected in the MOB sensor is displayed on the screen.

This detection result is compared again with the target value to determine the pass/fail (OK/ NG) status. Correction is not performed.

#### Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dC673 Registration Control Sensor Check.
- 4. Select Start.
- 5. When the test completes, the results will be displayed. If the measured value for any parameter is larger than the target value by 10, NG is displayed in the Judgement column.
  - If NG, check that Cyan is being printed; if so, replace the MOB Sensor Assembly.
  - If Cyan is not being printed, there is a problem in Development or 1st Transfer.

# ADJ 9.12 Copy Color Balance Manual Adjustment

## Purpose

To adjust Copy Mode Color Balance to meet the customer's preference, by increasing or decreasing the center value for each color (YMC), in low density, medium density, and high density ranges.

#### CAUTION

Perform this adjustment only to correct a strong customer complaint. Altering the setpoints will affect Copy, but will have no effect on Print mode. Also, there is quite a bit of overlap between the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary.

Ensure that the customer is aware and agreeable to the fact that performing this adjustment will **permamently** alter the copy output of the machine, and will not have any effect on printer output.

The only way to change the output characteristics or return them to the default will be on a subsequent sevice call.

**NOTE:** The adjustments made in this procedure will have no effect on output made using the *B/W* mode.

#### Adjustment

**NOTE:** For this procedure, use two originals to implement and verify the process.

- Obtain a customer original that clearly shows the area, color, and density that the customer wishes changed.
- Use the density gradient section located in the lower half of the Color Test Pattern 82E13120.

Before beginning the procedure, if possible mark the customer original to differentiate it from copies.

- 1. While still in customer mode change the machine settings to Basic Copier Mode per Table 1 in Section 1.
- 2. Make 2 copies each of the Color Test Pattern and the customer original (4 copies total) and mark them "Before"
- 3. Enter the UI Diagnostic (CSE) Mode.
- 4. Select the Adjustments tab.
- 5. Select dc919 Color Balance Adjustment.
- 6. Evaluate the areas of the customer original and the two copies that the customer wishes to change and determine which color or colors to change, and in which density levels, low, medium or high to make the changes. Use the information in the following note to aid in your determinations.

#### NOTE:

- The changes that can be made with this adjustment are fairly small and may be hard to see, especially in the mid to high density areas of the output.
- Deciding what colors to change is usually a somewhat subjective judgement as to color and density unless the customer has readings from a colorimeter and a densitometer and has specific color and density data available. Use the principles learned in basic color theory as to which combinations of C M Y produce particular R G B colors to make the determination as to which C M Y color or colors to change.

- Color changes will be more pronounced and easier to see in R, G or B areas of the output than in the areas that are closer to pure C, M or Y
- As you make the changes, be aware of density and color changes that may be occuring in other areas of the customer's original.
- If a particular color is not present in the customer's original, changes to that color will
  not appear in the copy output for that original. Use the copies made from the Color
  Test Pattern to evaluate changes that may be occuring to colors and densities not
  present in the customer's original.
- Changing K will not change any hue, but will affect all colors in terms of density.
- 7. Select Read Values to get the current values.

NOTE: Selecting Reset Values will return ALL values to 0.

- 8. For each color, enter in the new values for Low, Medium, and High. The default is 0, and the range is from -3 to +3.
- 9. Select Write Values to save the values entered.
- 10. Perform a Call Closeout, then switch the machine power off then on.
- 11. Make 2 copies of each original. Ask the customer if the desired result is achieved. If the desired result has been achieved, record the values for C M Y in the Service Log.
- 12. If desired image quality has not been achieved, compare and evaluate the density changes that will be seen by comparing the C M Y areas of the copies with the Color Test Pattern, and color and density changes that will be seen by comparing copies with the R G B areas of the Color Test Pattern to aid in determining what further changes to make.
- 13. Repeat steps 2 through 12 until the customer is satisfied with the image quality.

# ADJ 9.13 TRC Manual Adjustment

#### Purpose

To adjust image quality (TRC) to meet the user's preference, by increasing or decreasing the center value of gradation correction for each (YMCK) color, in low density, medium density, and high density ranges.

#### CAUTION

Perform this adjustment only to correct a strong customer complaint. Altering the setpoints will affect both Print and Copy modes. Also, there is quite a bit of overlap between the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary.

Ensure that the customer is aware and agreeable to the fact that performing this adjustment will **permamently** alter tha copy and printer output of the machine.

The only way to change the output characteristics or return them to the default will be on a subsequent sevice call.

**NOTE:** The adjustments made to K in this procedure will have an effect on output made using the B/W mode.

**NOTE:** There is interaction between this adustment and the settings made in dC919 for copy output. If this adjustment is made, it may be necessary to perform dC919 to achieve desired customer image quality results for copying.

#### Adjustment

- 1. While still in customer mode change the machine settings to Basic Copier Mode per Table 1 in Section 1.
- 2. Print 2 copies of the customer file that they are using as thier image quality standard and mark them "Before"
- 3. Enter the UI Diagnostic (CSE) Mode.
- 4. Select the Adjustments tab.
- 5. Select dC919 Color Balance Adjustment and perform the following:
  - a. Read the low, medium and high density values for C M Y and K. If all values are zero, proceed to step 6.
  - b. Record any values that are **not** zero.
  - c. Select Reset Values.
- 6. Select dc924 TRC Manual Adjustment.
- 7. Under the Adjustment Options tab, select Enabled.
- 8. Select **Read Values** to get the current values of low, medium and high density for each color.

#### NOTE: Selecting Reset Values will return ALL values to 0.

9. Evaluate the areas of the customer original and the two copies that the customer wishes to change and determine which color or colors to change, and in which density levels, low, medium or high to make the changes. Use the information in the following note to aid in your determinations.

#### NOTE:

- Deciding what colors to change is usually a somewhat subjective judgement as to color and density unless the customer has readings from a colorimeter and a densitometer and has specific color and density data available. Use the principles learned in basic color theory as to which combinations of C M Y produce particular R G B colors to make the determination as to which C M Y color or colors to change.
- Color changes will be more pronounced and easier to see in R. G or B areas of the output than in the areas that are closer to pure C, M or Y
- As you make the changes, be aware of density and color changes that may be occuring in other areas of the customer's original.
- If a particular color is not present in the customer's original, changes to that color will
  not appear in the copy output for that original. Use the copies made from the Color
  Test Pattern to evaluate changes that may be occuring to colors and densities not
  present in the customer's original.
- Changing K will not change any hue, but will affect all colors in terms of density.
- 10. For each color, enter in the new values for Low, Medium, and High. The default is 0, and the range is from -128 to +127.
- 11. Select Write Values to save the values entered.
- 12. Perform a Call Closeout, then switch the machine power off then on.
- 13. Make 2 prints. Ask the customer if the desired result is achieved.
- 14. Repeat steps 2 through 14 until the customer is satisfied with the image quality.
- 15. If any non-zero values were recorded in step 5, perform the following:.
  - a. Enter the UI Diagnostic (CSE) Mode
  - b. Select the **Adjustments** tab.
  - c. Select dC919 Color Balance Adjustment
  - d. Re-enter the values recorded in step 5 for each color. Be sure to select **Write Values** before moving on to the next color.
- 16. Perform a Call Closeout, then switch the machine power off then on.
- 17. Ask the customer to make a copy using an original that they normally use to check image quality. If the customer is satisfied with image quality, return to the Call Flow RAP.
- 18. If the customer is not satisfied with image quality, perform the dC919 procdure.

# ADJ 9.14 Toner Density Setup (Tone Up/Down)

## Purpose

This procedure manually increases or decreases toner concentration (TC). It is used when a xerographic problem or out-of-toner condition has prevented process control from maintaining the TC target value.

This procedure does not change any parameters; it performs a one-time change to TC. It is important that the problem that caused the low or high TC condition is resolved before performing this adjustment.

## Check

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dC937 Pro Con On/Off Print.
- 4. Select **Print**.
- 5. Compare the values for **ATC Average** with the values for **ATC Target**. If the values differ by more than 25 bits for Y, M, or C; or by more than 50 bits for K, perform the **Adjustment**.

## Adjustment

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dC991 Tone Up/Tone Down.
- 4. For each color that is above or below target, enter a value between -99 and 99 into the row and select This value is the number of tone up or tone down cycles to be performed. Negative values increase the **ATC Average**; positive values decrease **ATC Average**.
- 5. Start on the UI.
- 6. Repeat as required until **ATC Average** matches **ATC Target**. If the measured (average) value cannot be set to the target, there is a problem in either the toner delivery system (Dispenser, low toner sensor, etc.), or in the TC detection circuitry.

# ADJ 9.16 MAX Setup

## Purpose

This procedure checks, and, if necessary, adjusts, several Image Quality factors so that optimum copy and print quality can be consistently obtained, by stabilizing the development potential and copy density.

## Check

- 1. Reset the TRC Adjust values (ADJ 9.13) to midpoint (0).
- 2. Perform the ProCon On/Off Print check (ADJ 9.3). If the check is good, go to 5.
- 3. If the prints display any Inboard-to-Outboard density variation, perform the Adjustment.
- 4. If Print quality is OK but Copy quality is bad, perform the **IIT Procedures** portion of the Adjustment.
- 5. Perform the following as required by the customer: TRC Adjust (ADJ 9.13). The adjustment is complete. DO NOT perform the Adjustment unless problems are encountered in this Check.

## Adjustment

Max Setup consists of several separate procedures that should be performed in the following sequence:

#### **IOT Procedures**

- 1. Verify the ATC Sensor Setup (ADJ 9.7), then proceed to 2. Ensure that the calibration codes have not been reset to the default values.
- 2. Perform the ProCon On/Off Print check (ADJ 9.3), then proceed to 3.
- 3. If the prints display any Inboard-to-Outboard density variation go to dC612. Print out test pattern #12 In/out adjustment\_primary color (4C). Evaluate the prints for inboard-to-outboard density variation. If problems are observed, perform ADJ 9.11, then proceed to 4.
- 4. If Print quality is OK but Copy quality is bad, go to the **IIT Procedures**; otherwise proceed to 5.
- 5. Perform the following as required by the customer: TRC Adjust (ADJ 9.13).

#### IIT Procedures

Perform these steps ONLY if sent here from the **IOT Baseline Checks**. IIT Calibration **SHOULD NOT** be performed as a routine part of the Adjustment.

- 1. If any IIT or IPS repairs were performed, perform the IIT Calibration (dC945), then proceed to 2.
- 2. Make a copy of the ProCon On pattern that was printed in 2 of the Baseline Checks. Compare the copy to the original print. Return to 5 of the IOT Procedures.

# ADJ 12.1 Professional Finisher Leveling

## Purpose

The Finisher level should be checked if the machine has been moved to a new location or if the machine is having Booklet Quality issues or entrance jams.

## Adjustment

- 1. Press the **Job Status** button to check that there are no jobs in progress.
- 2. Switch off the power and disconnect the power cord.
- 3. Verify that the Finisher is properly latched and secured to the IOT.
- 4. Verify that the Finisher is Level and parallel with the IOT (Figure 1).



Figure 1 Verifying Finisher Level

5. Adjust the Finisher Level so that it is parallel with the IOT (Figure 2).



Figure 2 Leveling the Finisher

6. When Finisher is parallel to the IOT, verify that the H-Transport does not interfere with the Finisher Entrance Gate.

# ADJ 12.2 Professional Finisher Booklet Fold Skew

## Purpose

To adjust the Booklet Maker so that the fold is square.

## Check

1. Set machine up according to instructions in Table 1 and run a set of each Booklet job. Label each booklet.

#### Table 1 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

2. Measure the skew (A) on all sheets of paper and verify against the Skew Specification table in Figure 1.



#### Figure 1 Skew Specification

3. If the fold is within specification on all sheets, go to ADJ 12.5 Booklet Fold Position. If any of the sheets are out of specification, go to the adjustment.

## Adjustment

1. Determine the type of Fold Skew:

a. Set machine up according to instructions in Table 2.

#### Table 2 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Booklet Size
1	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

b. Observe the booklet as it comes out on to the Booklet Tray (Figure 2) and determine the type of skew.



Figure 2 Type of skew

2. Adjust the Booklet skew (Figure 3).



- 3. Set machine up according to instructions in Table 1 and re-run sample job.
- 4. Repeat steps 1 3 until the Fold Skew setup meets specification or customer request.
- 5. After adjustment is done, go to ADJ 12.3 Booklet Fold Position.

# ADJ 12.3 Professional Finisher Booklet Fold Position

#### Purpose

The purpose of this adjustment is to set up the Booklet Maker so that the fold is in the center of the booklet. Several setups are required so that fold position can be set for paper size, set size, unstapled and stapled sets.

#### Check

**NOTE:** This procedure cannot be performed from Paper Trays 3 or 4 as the folding activity requires Short Edge Feed (SEF).

- 1. Ensure that the trays used are correctly programmed.
- 2. Ensure that the Fold Skew is within specification (ADJ 12.2).
- 3. Enter UI Diagnostic (CSE) Mode.

**NOTE:** There are 10 different fold position parameters available in UI diagnostics. All of them will need to be adjusted.

- 4. If the NVM Setting Value List for the Finisher is available, select dC131 from the **Adjustments** Tab, and enter the recorded values for the NVM locations listed in Table 1. Then, proceed to the next step.
- 5. Under the Adjustments Tab, select dC128.
- 6. On the dC128 screen, select the **Type** and **Position Adjustment** parameter for Job #1 in Table 1. Select a paper tray containing SEF paper larger than B4 (11 x 17"/A3 preferred)
- 7. Touch the Test Print button to print a sample.
- 8. Measure and record "X1" and verify Fold Position on that job against the Fold Specification table in Figure 1.





Specification

NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.



Figure 1 Fold Specification

Note: Example showing A-side longer than B-side

- 9. If the particular fold is not within specification, perform the Adjustment.
- 10. Repeat steps 6 9 for all other jobs in Table 1. Make sure that you select an appropriate paper tray for the booklet size being adjusted.
- 11. When the fold is within specification on all jobs, go to the Booklet Staple Position (Staple on Fold) (ADJ 12.4).

#### Table 1 Fold Position jobs

			Pro. Fin
Job	Туре	Position Adjustment	NVM
1	Bi-fold	Booklet Bi-fold position - B4 or larger	763-106
2	Booklet	Plain Booklet - 2 sheet fold position	763-133
3	Booklet	Plain Booklet - 3 or more sheet fold position.	763-134
4	Booklet	Stapled Booklet 2 sheet fold position B4 or larger	763-108
5	Booklet	Stapled Booklet 3 sheet fold position B4 or larger	763-152
6	Booklet	Stapled Booklet 4 sheet fold position B4 or larger	763-153
7	Booklet	Stapled Booklet 5/7 sheet fold position B4 or larger	763-154
8	Booklet	Stapled Booklet 8/14 sheet fold position B4 or larger	763-155
9	Booklet	Stapled Booklet 15 sheet fold position B4 or larger	763-145
10	Booklet	Booklet Tamper Shift Position	763-115

#### Adjustment

- 1. For each Test Print that was out of spec:
  - a. To make the 'B' side (Figure 1) longer, increase the value. To make the 'B' side shorter, decrease the value. Each count is equal to about 0.2 mm (5 counts will move the fold position 1mm).
  - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
- 2. Check output against specifications in Figure 1. Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

# ADJ 12.4 Professional Finisher Booklet Staple Position (Staple on Fold)

## Purpose

The purpose of this Adjustment is to set up the machine so that the Staples are within specification on the folded booklet.

#### Check

- 1. Ensure that the trays used are correctly programmed.
- 2. Ensure that the Fold Skew is within specification (ADJ 12.2).
- 3. Ensure that the Fold Position is within specification (ADJ 12.3).
- 4. Enter UI Diagnostic (CSE) Mode.

**NOTE:** There are 6 different Staple-on Fold parameters available in UI diagnostics. All of them will need to be adjusted.

- 5. If the NVM sheet for the Finisher is available (Tray 1 compartment), select dC131 from the **Adjustments** Tab, and enter the recorded values for the NVM locations listed in Table 1.
- 6. Under the Adjustments Tab, select dC128.
- 7. On the dc128 screen, select the **Type** and **Position Adjustment** parameter for Job #1 in Table 1. Select a paper tray containing paper larger than B4 (11 x 17"/A3 preferred)
- 8. Touch the **Test Print** button to print a sample.
- 9. Measure and record X1 and compare the staple position against the specification in (Figure 1). Ensure that all staples are within +/- 1.0 mm of the fold (X1 dimension).
- 10. If X1 is out of specification, perform the Adjustment procedure.
- 11. Repeat steps 7 10 for all other jobs in Table 1. Make sure that you select an appropriate paper tray for the booklet size being adjusted.
- 12. When the staple position is within specification on all jobs, go to (ADJ 12.5) Booklet Staple Alignment.



NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.



Figure 1 Staple Position

#### Table 1 Staple Position Jobs

Job	Туре	Position Adjustment	Pro Fin. NVM
1	Booklet	Stapled Booklet 2 sheet staple and fold position B4 or larger	763-110
2	Booklet	Stapled Booklet 2 sheet staple and fold position smaller than B4	763-111
3	Booklet	Stapled Booklet 3 sheet staple and fold position	763-147
4	Booklet	Stapled Booklet 4 sheet staple and fold position	763-148
5	Booklet	Stapled Booklet 5/7 sheet staple and fold position	763-149
6	Booklet	Stapled Booklet 8/14 sheet staple and fold position	763-150

#### Adjustment

- 1. For each Test Print that was out of spec:
  - To move the staples to the right (toward the B side) (Figure 1), increase the value; to move the staples to the left, decrease the value. Each count is equal to about 1 mm (10 counts to move the staple position 1mm).
  - b. Use the up and down arrows or the keypad to enter the correction and select **Write NVM**, then make another **Test Print**.
- 2. Check output against specifications in Figure 1. Repeat the **Check** and **Adjustment** until the Fold Position meets specification or customer request.

# ADJ 12.5 Professional Finisher Booklet Staple Alignment

#### Purpose

To center the Staple Position on the fold in the SE direction.

#### Check

- 1. Ensure that the trays used are correctly programmed.
- 2. Ensure that the Fold Skew is within specification (ADJ 12.2).
- 3. Ensure that the Fold Position is within specification (ADJ 12.3).
- 4. Ensure that the Staple Position is within specification (ADJ 12.4).
- 5. Enter UI Diagnostic (CSE) Mode > Adjustments > dC 128 Fold Position Adjustment.
- 6. From the drop-down menu, select **Booklet Staple**.
- 7. Select the paper tray to be tested.
- 8. On a scrap piece of paper, record the Stored NVM Value.
- 9. Select Test Print.
- 10. When the test print is completed, remove it from the Output Tray. Open the booklet up and perform the following:
  - Record the number of the test print (test print 1, test print 2, etc.).
  - Label the outboard edge of the print (for X1 measurement).
- 11. Measure X1 and verify against specification in Figure 1.



12. If X1 is within specification, the Adjustment is complete. If X1 is out of specification, perform the Adjustment procedure.

#### Adjustment

NOTE: X1 will be adjusted in dC 128 using the Adjust tab on the UI.

- To increase X1, the current NVM value should be decreased.
- To decrease X1, the current NVM value should be increased.
- 1 NVM count will move the staple position 0.26mm. (10 counts will move the staple position about 2.6mm).
- 1. Estimate the correction needed on the paper size(s) that did not meet specification.
- 2. Using the Adjust tab on the UI, adjust the NVM value up or down as required.

**NOTE:** The **Write NVM** tab must be selected in order for the NVM change to be visible on the test print.

- 3. Select the Write NVM tab.
- 4. Select the **Test Print** tab to run the job.
- 5. Measure X1 and compare against the specifications in (Table 1).
- 6. Repeat the Adjustment until the Staple Alignment meets specification or customer request.

#### Table 1 Booklet Jobs

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet
2	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold Only	6 sheets of 8.5 x 11 / A4 LEF	3 sheet

# ADJ 12.6 Professional Finisher Booklet Wrinkle

## Purpose

To prevent the Booklet Cover from getting wrinkled.

## Check

- Press the Job Status button to check that there are no jobs in progress.
- Switch off the power and disconnect the power cord.
- Verify that the customer is not running jobs that are out of specification.
- Check Fold Rollers for wear or contamination.

#### Adjustment

- 1. Remove the Booklet Maker (REP 21.16).
- 2. Remove KL-clip (Figure 1).



Figure 1 Removing the KL-clip

3. Remove the Booklet Maker Front Cover (Figure 2).



Figure 2 Removing the Booklet Maker Front Cover

4. Adjust the front Spring tension (Figure 3).



Figure 3 Adjust the front Spring tension

5. Adjust the rear Spring tension (Figure 4).



Figure 4 Adjusting the rear Spring tension

# ADJ 12.7 Professional Finisher Booklet Fold Position (Fine Adjustment)

## Purpose

The purpose with this adjustment is to set up the Booklet Maker so that the fold is in the center of the booklet. Several setups are needed depending on paper size, set size, unstapled or stapled sets.

## Check

- 1. Ensure that the trays used are correctly programmed.
- 2. Ensure that the Fold Skew is within specification (ADJ 12.2).
- 3. Ensure that the Fold Position is within specification (ADJ 12.3).
- 4. Ensure that the Staple Position is within specification (ADJ 12.4).
- 5. Set machine up according to instructions in Table 1 and run 1 set of each job. Label each booklet.

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size		
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets		
2	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets		
3	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	10 sheets of 8.5 x 11 / A4 LEF	5 - 7 sheets (setup is for 5 - 7 sheets)		
4	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	16 sheets of 8.5 x 11 / A4 LEF	8 - 14 sheets (setup is for 8 - 14 sheets)		
5	11 x 17 / A3 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets		
6	11 x 17 / A3 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets		
7	11 x 17 / A3 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	10 sheets of 8.5 x 11 / A4 LEF	5 - 7 sheets (setup is for 5 - 7 sheets)		
8	11 x 17 / A3 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	16 sheets of 8.5 x 11 / A4 LEF	8 - 14 sheets (setup is for 8 - 14 sheets)		
9	11 x 17 / A3 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	30 sheets of 8.5 x 11 / A4 LEF	15 sheets		

#### ble 1 Fine Adjustment

#### Table 1 Fine Adjustment

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size
10	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi-	30 sheets of 8.5 x	15 sheets
		nals / Booklet Fold and Sta-	11 / A4 LEF	
		ple		

6. Measure X1 and verify Fold Position on each job against the Fold Specification table in Figure 1.





Fold Position Specification

Note: Example showing A-side longer than B-side

NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.



Figure 1 Fold Specification

7. If the fold is within specification on each job, go to the Booklet Staple Position (Staple on Fold Fine Adjustment) (ADJ 12.8). If any of the booklets are out of specification, go to the Adjustment procedure.

#### Adjustment

- 1. Enter dC131.
- 2. Perform adjustment using the NVM locations in Table 2.

**NOTE:** If the "A"-side is longer than the "B"-side, the current NVM value should be increased. If the "B"-side is longer than the "A"-side, the current NVM value should be decreased.

#### Table 2 Fine Adjustment NVM locations

Job #	NVM	Default	Range	Remark
1	763-141	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
2	763-142	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
3	763-143	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
4	763-144	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
5	763-152	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
6	763-153	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
7	763-154	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
8	763-155	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
9	763-145	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
10	763-146	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.

3. Set up and re-run the job/s that were subject to adjustment (Table 1).

4. Check output against specifications in Figure 1.

- 5. Repeat steps 2 4 until the Fold Position meets specification or customer request.
- 6. After adjustment is done, go to ADJ 12.8 Booklet Staple Position (Staple on Fold Fine Adjustment.

# ADJ 12.8 Professional Finisher Booklet Staple Position (Staple on Fold Fine Adjustment)

## Purpose

To set up the machine so that the Staples are within specification on the folded booklet.

#### Check

- 1. Ensure that the trays used are correctly programmed.
- 2. Ensure that the Fold Skew is within specification (ADJ 12.2).
- 3. Ensure that the Fold Position is within specification (ADJ 12.3).
- 4. Ensure that the Staple Position (Staple on Fold) is within specification (ADJ 12.4).
- 5. Ensure that the Fold Position (Fine Adjust) is within specification (ADJ 12.7).
- 6. Set machine up according to instructions in Table 1 and run 1 set of each Booklet job. Label each booklet.

Job	Select Paper Supply	Select Booklet Creation Mode	Originals in DADF	Output Booklet Size
1	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	6 sheets of 8.5 x 11 / A4 LEF	3 sheets
2	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	8 sheets of 8.5 x 11 / A4 LEF	4 sheets
3	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided origi- nals / Booklet Fold and Sta- ple	10 sheets of 8.5 x 11 / A4 LEF	5 sheets (setup is for 5 - 7 sheets)
4	8.5 x 11 / A4 SEF	Booklet Layout, 2 sided originals / Booklet Fold and Staple	16 sheets of 8.5 x 11 / A4 LEF	8 sheets (setup is for 8 - 14 sheets)

#### Table 1 Booklet Jobs

7. Measure A and B on both Booklet jobs and verify X1 against specification in Figure 1.

8. If X1 is within specification, the complete Booklet Maker setup is done. If X1 is out of specification, go to the Adjustment procedure.



NOTE: TO DETERMINE WHICH SIDE IS "A" AND WHICH SIDE IS "B", OPEN THE BOOKLET AS IT COMES OUT ON THE BOOKLET TRAY. THE "A"-SIDE IS TO THE LEFT AND THE "B"-SIDE IS TO THE RIGHT.



Figure 1 Staple Position

#### Adjustment

Initial Issue

- 1. Enter dC131.
- 2. Perform adjustment using the NVM locations in Table 2.

**NOTE:** If the "A"-side is longer than the "B"-side, increase the current NVM value. If the "B"-side is longer than the "A"-side, decrease the current NVM value.

Table 2 NVM locations

Job #	NVM	Default	Range	Remark
1	763-147	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
2	763-148	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
3	763-149	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.
4	763-150	100	0 ~ 200	1 count = 0.1 mm. Target amount to be adjusted is half the amount of the total Fold Misalignment.

3. Set up and run the job/s that were subject to adjustment (Table 1).

- 4. Check output against specifications in Figure 1.
- 5. Repeat steps 2 4 until the Staple Position meets specification or customer request.

# ADJ 12.9 Finisher LX Hole Punch Position

#### Purpose

This procedure sets the distance from the trail edge of the punched sheet to the center of the punched holes.

**NOTE:** This adjustment is normally performed by the customer, via Tools mode.

#### Check

- 1. Enter Service Copy (Tools) Mode. Select Troubleshooting, then Hole Position Adjustment.
- 2. Choose whether you want separate adjustments for different sizes.
- 3. Press **Print** on the UI.
- 4. Measure the distance between the trail edge of the sheet and the center of the bottom hole. If the distance is not 10 +/- 3 mm, perform the Adjustment

#### Adjustment

- 1. Use the buttons on the UI to move the holes left or right. When the computed correction is made, select **Adjust**.
- 2. Repeat the Check and Adjustment until the measurement is correct
- 3. When the adjustment is complete, log out of Service Copy mode.

# ADJ 12.10 Finisher LX Booklet Crease/Staple Position

## Purpose

This procedure centers the crease and staple positions in the booklet.

**NOTE:** This adjustment is normally performed by the customer, via Tools mode.

#### Adjustment

- 1. Enter Service Copy (Tools) Mode. Select Troubleshooting, then Crease and Staple Adjustment.
- 2. Select the paper size to be set, and load paper of that size into tray 5 (MSI).
- 3. Follow the instructions on the UI to Check/Adjust the Crease position and the Staple position.
- 4. When the adjustment is complete, log out of Service Copy mode.

# **5 Parts List**

#### Overview

Introduction	5-5
Subsystem Information	5-6
Symbology	5-7

#### Parts Lists

#### 1. IIT/CP

PL 1.1 Platen/IIT Cover	5-9
PL 1.2 Control Panel/Platen Glass	5-10
PL 1.3 CCD Lens Assembly	5-11
PL 1.4 Carriage Cable/Motor	5-12
PL 1.5 Full/Half Rate Carriage	5-13
PL 1.6 IIT/IPS PWB	5-14
PL 1.7 Control Panel (2 of 2)	5-15
PL 1.8 Control Panel (1 of 2)	5-16
PL 1.9 Convenience Stapler	5-17

## 2. LED

PL 2.1 LED Print Head (1 of 2)	5-18
PL 2.2 LED Print Head (2 of 2)	5-19

## 2. Paper Transport

## 3. Drives

PL 3.1 Drives (1 of 4)	5-21
PL 3.2 Drives (2 of 4)	5-22
PL 3.3A Drives (7830/7835)(3 of 4)	5-23
PL 3.3B Drives (7845/7855)(4 of 4)	5-24

#### 4. NOHAD

PL 4.1 NOHAD Common	5-25
PL 4.2A NOHAD (7830/7835)(1 of 3)	5-26
PL 4.2B NOHAD (7845/7855)(1 of 3)	5-27
PL 4.3A NOHAD (7830/7835)(2 of 3)	5-28
PL 4.3B NOHAD (7845/7855)(2 of 3)	5-29
PL 4.4A NOHAD (7830/7835)(3 of 3)	5-30
PL 4.4B NOHAD (7845/7855)(3 of 3)	5-31

## 5. Development

PL 5.1 Development (1 of 2)	5-32
PL 5.2 Development (2 of 2)	5-33
PL 5.3 HVPS Developer (7845/7855)	5-34

## 6. Transfer

PL 6.1 Transfer (1 of 2)	5-35
PL 6.2 Transfer (2 of 2)	5-36
PL 6.3 IBT Assembly (1 of 2)	5-37
PL 6.4 IBT Belt Unit (2 of 2)	5-38

<b>7. Fuser</b> PL 7.1 Fuser	5-39
8 Yerographic	
Pl 81 Xerographic (1 of 2)	5-40
PL 8.2 Xerographic (2 of 2)	5-41
0. Paper Transport	
Pl 9.1 Tray $1/2$ (1 of 2)	5-42
PL 9.2 Tray 1/2 (2 of 2)	5-43
PL 9.3 Tray 1 Feeder	5-44
PL 9.4 Tray 1 Feeder Assembly (1 of 2)	5-45
PL 9.5 Tray 1 Feeder Assembly (2 of 2)	5-46
10 3TM	
Pl 10.1 Three Tray Module (3TM - 7830/35)	5-47
PL 10.2 Tray 2, 3, 4 Assembly (3TM - 7830/35)	5-48
PL 10.3 Tray 2, 3 & 4 Feeder Assembly (1 of 2) (3TM - 7830/35)	5-49
PL 10.4 Tray 2, 3 & 4 Feeder Assembly (3TM) (2 of 2)	5-50
PL 10.9 Electrical (3TM)	5-51
PL 10.12 Roller (3TM)	5-52
PL 10.13 Left Hand Cover Assembly (3TM)	5-53
PL 10.14 Covers (3TM)	5-54
11. Tandem Trav	
PL 11.1 Tandem Tray Assembly (TTM)	5-55
PL 11.2 Tray 2 (TTM)	5-56
PL 11.3 Tray 3 (TTM)	5-57
PL 11.4 Tray 4 (TTM)	5-58
PL 11.5 Tray 4 Paper Feed (TTM)	5-59
PL 11.6 Tray 2/3 Paper Feed (TTM)	5-60
PL 11.7 Tray 2 Feeder (TTM) (1 of 2)	5-61
PL 11.8 Tray 2 Feeder (TTM) (2 of 2)	5-62
PL 11.9 Tray 3 Feeder (TTM) (1 of 2)	5-63
PL 11.10 Tray & Feeder (TTM) (2 01 2)	5-65
PI 11 12 Tray 4 Feeder (TTM) (2 of 2)	5-66
PL 11.13 Left Cover Assembly (TTM)	5-67
PL 11.14 Tray Front Supports (TTM)	5-68
PL 11.15 Tray 2/3/4 Paper and Lift Sensors (TTM)	5-69
PL 11.16 Drive (TTM)	5-70
PL 11.17 Electrical (TTM)	5-71
PL 11.18 Covers (TTM)	5-72
13. Paper Transport	
PL 13.1 Bypass Tray Assembly (1 of 5)	5-73
PL 13.2 Bypass Tray Assembly (2 of 5)	5-74
PL 13.3 Bypass Tray Assembly (3 of 5)	5-75
PL 13.4 Bypass Tray Assembly (4 of 5)	5-76

PL 13.5 Bypass	s Tray Assembly (5 of 5)	5-77
----------------	--------------------------	------

#### 14. Duplex

PL 14.1 Left Hand Cover (1 of 2)       5-         PL 14.2 Left Hand Cover (2 of 2)       5-         PL 14.3 Left Hand Cover Assembly (1 of 2)       5-         PL 14.4 Left Hand Cover Assembly (2 of 2)       5-         PL 14.5 Chute Assembly       5-         PL 14.6 Duplex Assembly (1 of 2)       5-         PL 14.7 Duplex Assembly (2 of 2)       5-	-78 -79 -80 -81 -82 -83 -83
---	---

## 15. Registration

PL 15.1 Registration (1 of 2)	5-85
PL 15.2 Registration (2 of 2)	5-86

## 17. Exit

PL 17.1 Exit 1/OCT, Exit 2	5-87
PL 17.3 Exit 2 (1 of 3)	5-88 5-89
PL 17.4 Exit 2 (2 of 3)	5-90
PL 17.5 EXIT 2 (3 of 3) PL 17.6 Side Tray Unit (1 of 2)	5-91 5-92
PL 17.7 Side Tray Unit (2 of 2)	5-93

## 18. Electrical

PL 18.1 PWB Chassis Unit (1 of 2)	5-94
PL 18.2A PWB Chassis Unit (Low Speed)	5-95
PL 18.2B PWB Chassis Unit (High Speed)	5-96
PL 18.3 IOT Rear	5-97
PL 18.4 GFI Chassis	5-98
PL 18.5 Front/Right	5-99
PL 18.6A Bottom (Low Speed)	5-100
PL 18.6B Bottom (High Speed)	5-101
PL 18.7 Wire Harness	5-102

## 19. IOT Covers

PL 19.1 Covers (1 of 3)	5-103
PL 19.2 Covers (2 of 3)	5-104
PL 19.3 Covers (3 of 3)	5-105

## 21. Professional Finisher

PL 21.1 Professional Finisher	5-106
PL 21.2 Finisher Cover (1 of 2)	5-107
PL 21.3 Finisher Cover (2 of 2)	5-108
PL 21.4 Finisher Stack	5-109
PL 21.5 Finisher Punch	5-110
PL 21.6 Finisher Stapler	5-111
PL 21.7 Finisher Eject (1 of 3)	5-112
PL 21.8 Finisher Eject (2 of 3)	5-113
PL 21.9 Finisher Eject (3 of 3)	5-114
PL 21.10 Finisher Transport (1 of 2)	5-115
PL 21.11 Finisher Transport (2 of 2)	5-116
PL 21.12 Finisher Electrical	5-117

PL 21.13 Finisher Harness	5-118
PL 21.15 Booklet Accessory	5-119
PL 21.16 Booklet Component (1 of 7)	5-120
PL 21.17 Booklet Component (2 of 7) (End Guide)	5-121
PL 21.18 Booklet Component (3 of 7)	5-122
PL 21.19 Booklet Component (4 of 7)	5-123
PL 21.20 Booklet Component (5 of 7)	5-124
PL 21.21 Booklet Component (6 of 7) (Chute)	5-125
PL 21.22 Booklet Component (7 of 7)	5-126
PL 21.23 Booklet Tray Component	5-127
PL 21.24 H-Transport (1 of 5)	5-128
PL 21.25 H-Transport (2 of 5)	5-129
PL 21.26 H-Transport (3 of 5)	5-130
PL 21.27 H-Transport (4 of 5)	5-131
PL 21.28 H-Transport (5 of 5)	5-132

## 22. Integrated Office Finisher

PL 22.1 Finisher Assembly (Part 1 of 2) (Integrated Office Finisher)	5-133
PL 22.2 Finisher Assembly (Part 2 of 2) (Integrated Office Finisher)	5-134
PL 22.3 Stacker Base Assembly (Part 1 of 5) (Integrated Office Finisher)	5-135
PL 22.4 Stacker Base Assembly (Part 2 of 5) (Integrated Office Finisher)	5-136
PL 22.5 Stacker Base Assembly (Part 3 of 5) (Integrated Office Finisher)	5-137
PL 22.6 Stacker Base Assembly (Part 4 of 5) (Integrated Office Finisher)	5-138
PL 22.7 Stacker Base Assembly (Part 5 of 5) (Integrated Office Finisher)	5-139
PL 22.8 Stacker Tray Assembly (Integrated Office Finisher)	5-140
PL 22.9 Compile Assembly (Part 1 of 2) (Integrated Office Finisher)	5-141
PL 22.10 Compile Assembly (Part 2 of 2) (Integrated Office Finisher)	5-142

## 23. Office Finisher LX

PL 23.1 H-Transport Assembly (1 of 5) (Office Finisher LX)	5-143
PL 23.2 H - Transport Assembly (2 of 5) (Office Finisher LX)	5-144
PL 23.3 H - Transport Assembly (3 of 5) (Office Finisher LX)	5-145
PL 23.4 H - Transport Assembly (4 of 5) (Office Finisher LX)	5-146
PL 23.5 H - Transport Assembly (5 of 5) (Office Finisher LX)	5-147
PL 23.6 Finisher Covers (Office Finisher LX)	5-148
PL 23.7 Finisher Stacker (Office Finisher LX)	5-149
PL 23.8 Finisher Stapler (Office Finisher LX)	5-150
PL 23.9 Finisher Eject (1 of 5) (Office Finisher LX)	5-151
PL 23.10 Finisher Eject (2 of 5) (Office Finisher LX)	5-152
PL 23.11 Finisher Eject (3 of 5) (Office Finisher LX)	5-153
PL 23.12 Finisher Eject (4 of 5) (Office Finisher LX)	5-154
PL 23.13 Finisher Eject (5 of 5) (Office Finisher LX)	5-155
PL 23.14 Finisher Exit/Folder Assembly (Office Finisher LX)	5-156
PL 23.15 Folder Assembly (Office Finisher LX)	5-157
PL 23.16 Finisher Electrical (Office Finisher LX)	5-158
PL 23.17 Booklet Cover (Office Finisher LX)	5-159
PL 23.18 Booklet Stapler Assembly (Office Finisher LX)	5-160
PL 23.19 Booklet Front Stapler Assembly (Office Finisher LX)	5-161
PL 23.20 Booklet Rear Stapler Assembly (Office Finisher LX)	5-162
PL 23.21 Booklet Electrical (Office Finisher LX)	5-163

## 28. HCF

PL 28.1 HCF Unit	5-164
PL 28.2 HCF Tray 6 (1 of 2)	5-165
PL 28.3 HCF Tray 6 (2 of 2)	5-166
PL 28.4 HCF Feeder (1 of 3)	5-167
PL 28.5 HCF Feeder (2 of 3)	5-168
PL 28.6 HCF Feeder (3 of 3)	5-169
PL 28.7 HCF Top Cover Unit	5-170
PL 28.8 HCF Electrical and Rail	5-171

#### 35. SBC

PL 35.1 Single Board Controller (1 of 2)	5-172
PL 35.2 Single Board Controller (2 of 2)	5-173

#### 52. DADF

PL 51.1 DADF Accessory	5-174
------------------------	-------

#### 51. DADF

PL 51.2 Covers, PWB	5-175
PL 51.3 Base Frame	5-176
PL 51.4 Document Tray	5-177
PL 51.5 DADF Drives (1 of 2)	5-178
PL 51.6 DADF Drives (2 of 2)	5-179
PL 51.7 Front Belt	5-180
PL 51.8 Registration, Retard, Invert, Output Chutes	5-181
PL 51.9 Roll, Sensor Bracket	5-182
PL 51.10 Document Tray	5-183
PL 51.11 Top Cover	5-184
PL 51.12 Upper Feeder	5-185
PL 51.13 Registration Chute	5-186
PL 51.14 Retard Chute	5-187
PL 51.15 Invert Chute	5-188
PL 51.16 Output Chute	5-189
PL 51.17 Sensor Bracket	5-190

## 55. DADF (High Speed)

PL 55.1 DADF Accessory	5-191
PL 55.2 DADF Cover, PWB	5-192
PL 55.3 DADF Base Frame	5-193
PL 55.4 DADF Document Tray, Top Cover	5-194
PL 55.5 DADF Motor, Wire Harness	5-195
PL 55.6 DADF Front Belt	5-196
PL 55.7 DADF Regi/Retard/Out Chute	5-197

#### 

## 55. DADF (High Speed)

PL 55.9 DADF Roll, Sensor Bracket	5-199
PL 55.10 DADF Document Tray	5-200
PL 55.11 DADF Top Cover	5-201
PL 55.12 DADF Upper Feeder	5-202
PL 55.13 DADF Regi Chute	5-203
PL 55.14 DADF Retard Chute	5-204

Common Hardware	
PL 55.16 DADF Sensor Bracket	5-206
PL 55.15 DADF Out Chute	5-205

••••••••	
Common Hardware	5-207

## 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:

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	GigaByte	
КВ	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 Abbreviations

Abbreviation	Meaning
R/E	Reduction/Enlargement
REF:	Refer to
SCSI	Small Computer Systems Interface
W/	With
W/O	Without

#### Table 2 OP Cos

	Operating Companies
Abbreviation	Meaning
NASG - US	North American Solutions Group - US
NASG -	North American Solutions Group - Can-
Canada	ada
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.

# 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).



Γ	0		Z004	ł	Α
8	50	)	ΡL	м	I

Figure 1 With Tag Symbol



0	2005	5	Α
850	٩L	м	1

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 Platen/IIT Cover

ltem	Part	Description	PLI
1	_	Platen Cushion (Not Spared)	2
2	_	Platen Cover	
3	_	Platen Cover (P/O PL 1.1 Item 2)	5
4	_	Pocket Cover (P/O PL 1.1 Item 2)	
		(FX Only)	17
5	_	IIT Right Cover (Not Spared)	
6	848E78390	IIT Left Cover	
7	_	IIT Top Cover	
-	848E80100	IIT Top Cover (DADF-130)	
8	_	Hinge Cover	
9	-	Label (Caution) (Not Spared)	
10	-	Label (Not Spared)	
11	-	Counter Balance (P/O PL 1.1 Item	
		2) ()	
12	-	Vaccum Out Filter (Not Spared)	
13	-	Cradle Assembly (Not Spared)	
14	-	Curl Cord	
15	-	Handset	
16	-	Wire Harness	
17	848K62720	IIT Rear Cover	
18	-	Actuator Plate (P/O PL 1.1 Item 2)	
19	-	Blind Cover (Blue)	
20	-	Blind Cover (Not Spared) (White)	
21	-	IIT Right Cover (P/O PL 1.1 Item 5)	
22	-	IIT Right Cover (P/O PL 1.1 Item 5)	
23	-	IIT Rear Cover (P/O PL 1.1 Item	
		17)	
24	-	USB Cover (P/O PL 1.1 Item 17)	
25	-	Screw (Black)	
26	848E81970	IIT Rear Cap Cover	



13

# PL 1.2 Control Panel/Platen Glass

ltem	Part	Description
1	_	Glass Support (Not Spared)
2	090K93250	Platen Glass (REP 6.2)
3	815E40270	Plate
4	090K93011	CVT Platen Glass
5	868E04450	Rear Glass Support
6	868E04530	Front Glass Support
7	-	Seal (Left) (Not Spared)
8	-	Seal (Right) (Not Spared)
9	_	Seal (Center) (Not Spared)



# PL 1.3 CCD Lens Assembly

ltem	Part	Description
1	_	Lens Cover (Not Spared)
2	-	Screw (Not Spared)
3	-	Screw (Blue) (Not Spared)
4	130K73140	APS Sensor Assembly
5	130K64150	APS Sensor
6	-	Bracket (P/O PL 1.3 Item 4)
7	604K73710	CCD Lens Assembly
-	604K56050	CCD Lens Assembly (7545, 755
8	117K47560	CCD Flexible Print Cable
9	910W00901	Platen Interlock Switch
10	120K92541	Actuator Assembly
11	930W00123	Platen Angle Sensor
12	-	Wire Harness (Not Spared)



# PL 1.4 Carriage Cable/Motor

ltem	Part	Description
1	127K49532	Carriage Motor (REP 6.6)
2	809E76950	Spring
3	020E37030	Pulley
4	023E26430	Belt
5	063E97330	Таре
6	-	Tape (Not Spared)
7	012K94410	Front Carriage Cable (REP 6.7)
8	012K94420	Rear Carriage Cable (REP 6.7)
9	413W91850	Bearing
10	020E45300	Capstan Pulley
11	006K86470	Capstan Shaft
12	809E76840	Spring
13	930W00123	IIT Registration Sensor
14	019E70050	Holder
15	-	Sensor Bracket (P/O PL 1.4 Item
		17)
16	-	Tube (Not Spared)
17	130K76201	IIT Registration Sensor And Bracket



# PL 1.5 Full/Half Rate Carriage

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
2       019E70080       Clip       1       {2 - 12       AP       16       15         3       -       No. 1 Mirror (P/O PL 1.5 Item 1)       13       {10, 11       16       15         4       -       Harness Guide (P/O PL 1.5 Item 1)       13       {10, 11       16       15         5       -       Harness Guide (P/O PL 1.5 Item 1)       13       {10, 11       16       15	
3       -       No. 1 Mirror (P/O PL 1.5 Item 1)       1	
4 - Harness Guide (P/O PL 1.5 Item 1) 5 - Harness Guide (P/O PL 1.5 Item 1) 6 Full Pate Carriage (P/O PL 1.5 Item 1) 6 Full Pate Carriage (P/O PL 1.5 Item 1)	
5 – Harness Guide (P/O PL 1.5 Item 1)	
6 Eull Pate Carriage (P/O PL 1 5 Itom	
0 - rui rate Cattlage (F/OFL 1.3) tell 1.4 15 16 (2. (3.))	
7 – Light Guide (P/O PL 1.5 Item 1)	
(REP 6.11)	
8 – Front Clip (P/O PL 1.5 Item 1)	
9 – Rear Clip (P/O PL 1.5 Item 1)	
10 – Bracket (P/O PL 1.5 Item 13)	
11 960K61690 LED Lamp PWB (REP 6.9)	18
12 11/E30981 LED Lamp Wire Harness (REP	Ĩ
	/ 1
13 122/94300 LED Lamp	$\checkmark$
14 04 (K93910 Fiai Rate Calinage (AD3 0.1)	) /
16 – Harress Guide (P/O PI 15 Item)	$Y_{AB}$ /
	AF
17 020F37030 Pulley 11 16	
18 – Pulley (P/O Pl 15 Item 14) 2 8 10 /	
19 – Carriage Frame (P/O PL 1.5 Item )	
	J J
20 – Harness Guide (P/O PL 1.5 Item	
(4)	
	7
	1
	16
3	$\frown$

<sup>1ght</sup> Rear

051006A-NWD

2

4

5´ J

17

∕вм

## PL 1.6 IIT/IPS PWB

ltem	Part	Description
1	_	PWB Cover (Not Spared)
2	237W00178	Lock Screw
3	960K61760	IIT PWB Assembly (REP 6.12)
4	-	Harness Bracket (Not Spared)
5	-	Screw (Not Spared)
6	-	Conductor (Not Spared)
7	-	USB Hub PWB and Bracket (Not
		Spared)
8	-	Hub PWB (P/O PL 1.6 Item 7)
9	-	Bracket (P/O PL 1.6 Item 7)
10	-	USB Cable (Option)



# PL 1.7 Control Panel (2 of 2)

ltem	Part	Description
1	848K69120	W85 Control Panel (XC)
-	848K69130	W85 Control Panel (XE)
2	962K73341	W85 UI Cable
3	-	Braket (Not Spared)
4	604K84720	Name Label (Not Spared)
5	-	Caution Label
6	962K83261	USB Cable ()
8	848E39872	Clip Cover (Not Spared)

PL 1.7





# PL 1.8 Control Panel (1 of 2)

ltem	Part	Description
1	_	Outer Cover (Not Spared)
2	848K69130	W85 Console Assembly (XE)
-	848K69120	W85 Console Assembly (XC)
3	-	Stylus Pen
4	-	Overlay Cover Assembly (XC)
5	-	Overlay Cover Assembly (XE)
6	-	LED Lens (P/O PL 1.8 Item 4)
7	848E41080	USB Cover (P/O PL 1.8 Item 4)
8	-	Overlay Cover (FX)
9	848E55551	USB Plug



# PL 1.9 Convenience Stapler

ltem	Part	Description
1	604K35710	Convenience Stapler (110V)
-	604K35700	Convenience Stapler (220V)

## PL 1.9



0501009A-NWD
### PL 2.1 LED Print Head (1 of 2)

ltem	Part	Description
1	019K12490	Rear Holder Assembly
2	130K78680	LED Print Head Assembly (REP
		9.10)
3	-	Guide (P/O PL 2.1 Item 2)
4	042K93520	LED Print Head Cleaner
5	-	LED Print Head
6	011K04160	Drum Cover



#### PL 2.2 LED Print Head (2 of 2)

ltem	Part	Description
1	952K02830	LED Print Head Cable Assembly (REP 9.11, REP 9.12)
2	868E07741	Cable Holder
3	868E14670	Cable Holder
4	868E07730	Cable Holder
5	960K36952	LED Print Head Rear PWB





#### PL 2.16 Envelope Tray Assembly

Item 1

2

\_ \_ \_ \_ \_

Part	Description	
-	Envelope Tray Assembly	1 { 2 - 7
-	Front Cover	
-	Lever	
_	Spring	
_	End Guide	
-	Envelope Tray Frame (P/O PL 2.16	6
	Item 1)	
		A A A A A A A A A A A A A A A A A A A
		analan
		4
		o Contraction of the second se
		2

0502016A-OAK

#### PL 3.1 Drives (1 of 4)

ltem	Part	Description
1	068K64901	Fuser Input Bracket Assembly (2275, 3373, 3375)
2	-	Helical Gear (26T) (P/O PL 3.1 Item 1) (2275, 3373, 3375)
3	_	Fuser Shaft (P/O PL 3.1 Item 1)
4	-	Fuser Input Bracket (P/O PL 3.1 Item 1)
5	-	Helical Gear (25T) (P/O PL 3.1 Item 1) (2275, 3373, 3375)
6	809E74960	Spring
7	012E15930	Fuser Unit Link
8	809E74950	Spring
9	007K18550	Fuser Drive Motor Assembly (7830/35)
-	007K18580	Fuser Drive Motor Assembly (7845/55)
10	-	Fuser Drive Motor (P/O PL 3.1 Item 9) (4475, 5575)
11	-	Gear Bracket Assembly (P/O PL 3.1 Item 9)
12	807E27930	Helical Gear (40T/23T)
13	005E26140	Flange
14	423W10355	Belt
15	_	Bearing (P/O PL 3.1 Item 1)
16	-	Bearing (P/O PL 3.1 Item 1)

10



## PL 3.2 Drives (2 of 4)

ltem	Part	Description	
1	007K18540	Main Drive Assembly (2275, 3373, 3375) (REP 4.1)	PL 3.2
2	_	Bracket (P/O PL 3.2 Item 1)	
3	127K64390	Main Drive Motor Assembly (2275, 3373, 3375)	4 {5-22
4	007K98090	Retract Drive Assembly	
5	-	Retract Bracket Assembly (P/O PL 3.2 Item 4)	
6	-	Retract Lower Bracket (P/O PL 3.2 Item 4)	13 BC BQ
7	-	Retract Shaft (P/O PL 3.2 Item 4)	
8	-	Clutch Shaft (P/O PL 3.2 Item 4)	
9	-	Helical Gear (45T/23T) (P/O PL 3.2 Item 4)	
10	_	Helical Gear (36T) (P/O PL 3.2 Item 4)	
11	-	Helical Gear (21T) (P/O PL 3.2 Item 4)	
12	121K40850	1st BTR Contact Retract Clutch	
13	005E24620	Coupling	
14	-	Retainer (P/O PL 3.2 Item 4)	
15	-	Cam Wheel (P/O PL 3.2 Item 4)	
16	_	Spring (P/O PL 3.2 Item 4)	
17	930W00111	1st BTR Contact Retract Sensor	
18	413W14660	Sleeve Bearing	
19	-	Sleeve Bearing (P/O PL 3.2 Item 4)	
20	_	Connector (P/O PL 3.2 Item 4)	
21	-	Harness Holder (P/O PL 3.2 Item 4)	
22	-	Main Drive Assembly (4475, 5575)	
23 24	-	Main Motor (P/O PL 3.2 Item 23)	
25	-	(7545, 7556) Bracket (P/O PL 3.2 Item 23) (7545, 7556)	
26	127K64440	Main Drive Motor (4475, 5575)	
27	-	Helical Gear ( $P/O$ PL 3.2 Item 23)	
		(7545, 7556)	
		(1010) 1000)	

j0kt50302

### PL 3.3A Drives (7830/7835)(3 of 4)

ltem	Part	Description
1	007K18521	Drum/Developer Drive Assembly (REP 4.1)
2	-	Drive Assembly (P/O PL 3.3A Item 1)
3	127K64370	Drum/Developer Drive Motor (K)
4	127K64380	IBT Drive Motor Assembly
5	127K65970	Drum/Developer Driver Motor (Y, M, C)
6	055E56040	Gear Guide



### PL 3.3B Drives (7845/7855)(4 of 4)

ltem	Part	Description
1	007K18560	Drum/Developer Drive Assembly (REP 4.2)
2	-	Drive Assembly (P/O PL 3.3B Item 1)
3	127K64400	Developer Drive Motor (Y, M, C) / Drum /Developer Drive Motor (K) (P/O PL 3.3B Item 1)
4	127K64410	IBT Drive Motor (P/O PL 3.3B Item 1)
5	127K64420	Drum Drive Motor (Y, M, C) (P/O PL 3.3B Item 1)
6	055E56040	Gear Guide





05B3003A-NWD

### PL 4.1 NOHAD Common

Part	Description
054K48170	Fuser Fan And Duct
_	Duct (P/O PL 4.1 Item 1)
_	Duct (P/O PL 4.1 Item 1)
_	Fuser Fan (P/O PL 4.1 Item 1)
913W13170	Connector
_	LVPS Duct (Not Spared)
127K58360	Front LVPS Fan
054K48250	Filter Duct Assembly
-	Filter Duct (P/O PL 4.1 Item 9)
_	Seal (P/O PL 4.1 Item 9)
054K41490	IH Intake Fan And Duct High
-	Duct Low (P/O PL 4.1 Item 12)
127K60670	IH Intake Fan (7845/55)
127K66160	IH Intake Fan (7830/35)
-	Odor Filter
	Part 054K48170 - - 913W13170 - 127K58360 054K48250 - - 054K41490 - 127K60670 127K66160 -



## PL 4.2A NOHAD (7830/7835)(1 of 3)

ltem	Part	Description
1	054K36310	Center Duct
2	054K48510	IBT Fan And Duct Assembly
3	_	IBT Duct (P/O PL 4.2A Item 2)
4	-	Front Seal (Not Spared)
5	913W13170	Connector
6	_	Front Seal (P/O PL 4.2A Item 2)
7	_	IBT Fan Wire Harness (P/O PL
		4.2A Item 2)
8	_	Seal (P/O PL 4.2A Item 2)
9	054E40470	P2 Duct (P/O PL 4.2A Item 15)
10	927W00214	Process 2 Fan (P/O PL 4.2A Item
		15)
11	_	Connector (P/O PL 4.2A Item 15)
12	_	Plate (Not Spared)
13	_	Plate (Not Spared)
14	_	P1 Duct (Not Spared)
15	054K40410	Process 2 Fan Kit



### PL 4.2B NOHAD (7845/7855)(1 of 3)

ltem	Part	Description
1	-	Center Duct (Not Spared)
2	054K48210	Fan And Duct Assembly
3	-	Duct (P/O PL 4.2B Item 2)
4	-	Cartridge Fan (P/O PL 4.2B Item 2)
5	-	Plate (P/O PL 4.2B Item 2)
6	-	Screw (P/O PL 4.2B Item 2)
7	-	Connector (P/O PL 4.2B Item 2)
8	054K41440	P2 Duct (P/O PL 4.2B Item 19)
9	-	Process 2 Fan and Duct (P/O PL
		4.2B Item 19)
10	-	Screw (P/O PL 4.2B Item 19)
11	913W13170	Connector (P/O PL 4.2B Item 19)
12	-	Plate (Not Spared)
13	054K48230	Process 1 Fan And Duct Assembly
14	-	P1 Duct (P/O PL 4.2B Item 13)
15	-	Process Fan 1 (P/O PL 4.2B Item
		13)
16	-	Screw (P/O PL 4.2B Item 13)
17	-	Connector (P/O PL 4.2B Item 13)
19	-	Process 2 Fan Assembly



## PL 4.3A NOHAD (7830/7835)(2 of 3)

ltem	Part	Description
1	054K47010	Bottom Fan And Duct Assembly
2	127K64480	Bottom Fan (P/O PL 4.3A Item 1)
3	-	Bottom Duct (P/O PL 4.3A Item 1)
4	913W13170	Connector
5	-	Screw (P/O PL 4.3A Item 1)
6	-	HVPS Fan And Duct Assembly
7	-	Upper Duct (P/O PL 4.3A Item 6)
8	-	Lower Duct (P/O PL 4.3A Item 6)
9	127K66140	IH Exhaust Fan
10	-	Connector (P/O PL 4.3A Item 6)
11	-	IH Exhaust Fan (Not Spared)
12	-	IH Exhaust Fan





## PL 4.3B NOHAD (7845/7855)(2 of 3)

ltem	Part	Description
1	897E34340	Label (R12)
2	-	Bottom Duct (Not Spared)
3	127K64480	Bottom Fan
4	913W13170	Connector
5	-	Screw
6	-	M Fan And Duct Assembly (Not
		Spared)
7	-	Lower Duct (P/O PL 4.3B Item 6)
8	-	Upper Duct (P/O PL 4.3B Item 6)
9	127K66181	M Fan
10	-	Connector (P/O PL 4.3B Item 6)
11	-	IH Exhaust Duct (Not Spared)
12	-	IH Exhaust Fan
13	-	Connector (Not Spared)
14	_	Duct (Not Spared)
15	-	Section Duct (Not Spared)
16	053K93180	Suction Filter
17	-	Rear Fan Duct (Not Spared)
18	127K61230	C Exit Fan And Duct
19	127K60690	Exit Fan
20	-	Duct (P/O PL 4.3B Item 18)
21	_	Screw
22	-	Connector



## PL 4.4A NOHAD (7830/7835)(3 of 3)

ltem	Part	Description	PL 4
1	_	Front Bottom Duct (Not Spared)	2
2	-	HVPS Cover	5
3	815K02610	Base Plate Assembly	0
4	-	Base Plate (P/O PL 4.4A Item 3)	8
5	-	Bracket (P/O PL 4.4A Item 3)	
6	-	NOHAD Thermistor (P/O PL 4.4A	
		Item 3)	
7	-	Connector (P/O PL 4.4A Item 3)	
8	130K71990	NOHAD Thermistor and Bracket	
		Assembly	
9	-	Front Duct (Not Spared)	
10	-	Front Duct Plate (Not Spared)	



## PL 4.4B NOHAD (7845/7855)(3 of 3)

ltem	Part	Description	F
1	_	Front Bottom Duct (Not Spared)	
2	815K03601	Base Plate Assembly	
3	-	Base Plate (P/O PL 4.4B Item 2)	
4	-	Bracket (P/O PL 4.4B Item 2)	
5	-	NOHAD Thermistor (P/O PL 4.4B	
		Item 2, PL 4.4B Item 7)	
6	-	Connector (P/O PL 4.4B Item 2, PL	
		4.4B Item 7)	
7	130K71990	NOHAD Thermistor And Bracket	
		Assembly	
8	-	Seal (P/O PL 4.4B Item 7)	
9	-	Seal (Not Spared)	
10	-	Front Duct Assembly (Not Spared)	
11	-	Front Duct (P/O PL 4.4B Item 10)	
12	-	Lower Plate (P/O PL 4.4B Item 10)	
13	-	Seal (P/O PL 4.4B Item 10)	
14	-	Seal (P/O PL 4.4B Item 10)	
15	-	Seal (P/O PL 4.4B Item 10)	
16	-	Seal (P/O PL 4.4B Item 10)	
17	-	Seal (P/O PL 4.4B Item 10)	



### PL 5.1 Development (1 of 2)

ltem	Part	Description
1	006R01509	K-Toner (WW)
-	006R01513	K-Toner (NA/É)
-	006R01517	K-Toner (DMO)
2	006R01516	C-Toner (NA/E)
-	006R01520	C-Toner (DMO)
-	006R01512	C-Toner (WW)
3	006R01519	M-Toner (DMO)
-	006R01511	M-Toner (WW)
-	006R01515	M-Toner (NA/E)
4	006R01514	Y-Toner (NA/E)
-	006R01518	Y-Toner (DMO)
-	006R01510	Y-Toner (WW)
5	127K66670	Toner Dispense Motor Assembly (REP 9.13)
6	-	Dispense Assembly (P/O PL 5.1
7	127K65930	Toner Dispense Motor (K. C. M. Y)
8	113K83244	Toner CRUM Coupler Assembly
9	094K92391	Dispense Pipe Assembly (C. M. Y)
10	-	Guide Assembly (C, M, Y) (P/O PL 5.1 Item 9)
11	-	Auger Gear (Y. M, C) (P/O PL 5.1 Item 9)
12	_	Spring (P/O PL 5.1 Item 9)
13	052K96801	Dispenser Pipe (Y) (P/O PL 5.1 Item 9)
14	052K96811	Dispenser Pipe (M) (P/O PL 5.1 Item 9)
15	052K96821	Dispenser Pipe (C) (P/O PL 5.1 Item 9)
16	094K92402	Dispenser Pipe Assembly (K) (Low)
-	094K92770	Dispenser Pipe Assembly (K) (High) (4470, 5570)
17	-	Guide Assembly (P/O PL 5.1 Item 16)
18	052K96831	Dispenser Pipe (K) (P/O PL 5.1 Item 16)
19	-	Auger Gear (K) (P/O PL 5.1 Item 16)
20	094K92760	Dispenser Pipe Assembly (Y, M, C, K) (High)
-	094K92380	Dispenser Pipe Assembly (Y, M, C, K) (Low)





#### PL 5.2 Development (2 of 2)

ltem	Part	Description
1	015K77960	Developer Plate
2	848K65672	Developer Housing Assembly (K,
		C, M, Y) (REP 9.14)
3	_	Housing Assembly (P/O PL 5.2
		Item 2)
4	130K71851	ATC Sensor (K, C, M, Y)
5	-	Seal (P/O PL 5.2 Item 2)
6	675K85030	Developer (K)
7	675K85040	Developer (C)
8	675K85050	Developer (M)
9	675K85060	Developer (Y) (REP 9.15)
10	010K91700	Plunger Assembly
11	960K49660	ATC PWB
12	849E96933	Bracket



### PL 5.3 HVPS Developer (7845/7855)

ltem	Part	Description
1	848K37870	HVPS Housing
2	019K11110	Conductor Holder
3	815K09800	Developer HVPS (7545, 7556) (REP 1.2)
4	130E13880	Ground Conductor (7545, 7556)



0505003A-NWD

## PL 6.1 Transfer (1 of 2)

ltem	Part	Description	PI 6
1	068K53690	Front Lock Bracket	I LO.
2	068K53680	Rear Lock Bracket	
3	003E78891	Tension Lever	4 -
4	042K94470	Transfer Belt Cleaner Assembly	
		(REP 9.1)	
5	_	Knob (P/O PL 6.1 Item 4)	
6	_	Bearing (P/O PL 6.1 Item 4)	
7	_	Transfer Belt Cleaner (P/O PL 6.1	
		Item 4)	
8	_	Spring (P/O PL 6.1 Item 4)	
9	_	Shutter (P/O PL 6.1 Item 4)	
10	604K57383	IBT Assembly (REP 9.2)	





## PL 6.2 Transfer (2 of 2)

ltem	Part	Description
1	815E38150	Plate Nut
2	032K06050	IBT Cleaner Guide
3	013E36670	Metal Bearing
4	032E27610	IBT Front Guide
5	130E94310	Conductor
6	120E29340	Actuator
7	032K05310	Guide Assembly (Low)
-	032K06320	Guide Assembly (High Speed)
8	848K13960	Conductor Housing Assembly
9	105E20500	HVPS/Detack HVPS (REP 1.1)
10	-	PWB Support (Not Spared)
11	-	Bracket (Not Spared)



## PL 6.3 IBT Assembly (1 of 2)

ltem	Part	Description
1	003E75420	Handle
2	054K34290	Inlet Chute
3	801E03440	BUR Front Frame
4	059K54991	Back-up Roll
5	064K93621	Transfer Belt Assembly (REP 9.2)
6	-	Transfer Belt (P/O PL 6.3 Item 5)
7	-	TR0 Patch (P/O PL 6.3 Item 5)
		(REP 9.4)
8	604K57380	IBT Belt Assembly



## PL 6.4 IBT Belt Unit (2 of 2)

ltem	Part	Description
1	059E03290	1st BTR Roll
2	130E93970	1st BTR Conductor
3	806E21460	Tension Spring Shaft
4	809E74790	1st BTR Spring
5	809E74800	IR Spring
6	809E74810	BTR Spring
7	809E74870	Tension Spring
8	809E75300	Ground Spring
9	809E76310	Ground Center Spring
10	809E76320	Ground Right Spring
11	809E76810	BTR Spring
12	604K57383	IBT Belt Assembly
13	-	IBT Belt Assembly (P/O PL 6.1 Item 10)



0506004A-NWD

## PL 7.1 Fuser

ltem	Part	Description
1	604K62230	Fuser Assembly (220V) (7845, 7855)
-	604K62200	Fuser Assembly (120V) ((7830, 7835)
-	604K62210	Fuser Assembly (120V) ((7845, 7855)
-	604K62220	Fuser Assembly (220V) (7830, 7835) (REP 10.1)
2	007K16060	Retract Motor And Bracket Assembly
3	-	Motor Bracket (P/O PL 7.1 Item 2)
4	-	P/R Latch Motor (P/O PL 7.1 Item 2)
5	007K16071	Retract Gear



## PL 8.1 Xerographic (1 of 2)

ltem	Part	Description
1	019K10731	CRUM Holder
2	848E21520	CRUM Cover
3	113K83481	CRUM Coupler Drum
4	013R00662	Drum Cartridge (REP 9.5)
5	032K04701	Erase Lamp Unit (REP 9.7)
6	868E06271	Bracket
7	868E06281	Plate
8	-	Harness Holder (Not Spared)
9	-	Harness Holder (Not Spared)
10	848E15090	Cover
11	011E20901	Handle Lock Lever
12	868E08980	Bracket
13	809E79410	Spring
14	809E79420	Spring



0508001A-NWD

## PL 8.2 Xerographic (2 of 2)

ltem	Part	Description
1	-	Bottle Guide Assembly (P/O PL 8.2 Item 16)
2	-	Sensor Bracket (P/O PL 8.2 Item 15. PL 8.2 Item 16)
3	_	Waste Toner Bottle Full Sensor
		(P/O PL 8.2 Item 15, PL 8.2 Item
		16)
4	130E81600	Waste Toner Bottle Position Sensor
5	052K97773	Waste Toner Pipe Assembly
6	068K59502	Agitator Motor Assembly (REP 9.8)
7	068K59510	Gear Bracket Assembly
8	807E19540	Helical Gear (29T)
9	807E19530	Helical Gear (31T)
10	006K86982	Drive Shaft Assembly
11	807E19511	Helical Gear (20T)
12	-	Harness Holder (Not Spared)
13	013E41040	Sleeve Bearing
14	-	Waste Toner Container
15	068K58211	Sensor And Bracket Assembly
16	032K05160	Bottle Guide And Sensor Assembly
15 16	068K58211 032K05160	Sensor And Bracket Assembly Bottle Guide And Sensor Assembly



## PL 9.1 Tray 1/2 (1 of 2)

	-	. ,
Item	Part	Description
1	014E59990	Slide Lock Block
2	003E76461	Front Stopper
3	059E03500	Front Left Roller
4	059E03510	Front Right Roller
5	050K69610	Tray 1 Assembly
6	110K11680	Paper Size Sensor Assembly
-	110K12100	Paper Size Sensor Assembly
		(Alternate)
7	_	Switch Bracket (Not Spared)
8	_	Tray 1, Tray 2 Label
9	-	Instruction Label
10	_	Side Size Label (Not Spared)
11	_	End Size Label (Not Spared)
12	604K62240	Tray Label Kit (REF: PL 10.2 Item
		10, PL 10.2 Item 11)

PL9.1





### PL 9.2 Tray 1/2 (2 of 2)

ltem	Part	Description
1	050K69610	Tray Assembly
2	848E15051	Front Trim Cover
3	011E24400	Tray Lever
4	003E75440	Latch
5	809E75730	Latch Spring
6	-	Label (Max) (Not Spared)
7	848E21141	Rail Cover
8	059E03522	Roller
9	007E78450	Gear (13/60T)
10	007E78431	Gear (13T)
11	007E78441	Gear (60T)
12	-	Link (Not Spared)
13	-	Bottom Pad Assembly (Not Spared)
		(Not Spared)
14	-	End Guide (Not Spared)
15	-	Front Side Guide Assembly (Not
		Spared)
16	-	Rear Side Guide (Not Spared)
17	-	Pad (Not Spared)
18	120E33930	End Guide Actuator (P/O PL 9.1
		Item 1)
19	-	Side Actuator
20	-	Bottom Plate (Not Spared)
21	-	Spring (Not Spared)
22	807E13520	Pinion
23	010E93341	Slide Lock
24	604K20541	Gear Kit

NOTE: j0kt50902.tif 0509002anwd.tif



#### PL 9.3 Tray 1 Feeder

	•		
ltem	Part	Description	PL
1	059K75190	Tray 1 Feeder Assembly (7830/35)	
-	059K74820	Tray 1 Feeder Assembly (7845/55)	2.
2	054K35142	Chute Assembly	-
3	-	Chute (P/O PL 9.3 Item 2)	
4	_	Pinch Guide (P/O PL 9.3 Item 2)	
5	_	Spacer (P/O PL 9.3 Item 2)	
6	-	Spring (P/O PL 9.3 Item 2)	
7	_	Pinch Shaft (P/O PL 9.3 Item 2)	
8	-	Pinch Roll (P/O PL 9.3 Item 2)	





#### PL 9.4 Tray 1 Feeder Assembly (1 of 2)

ltem	Part	Description	
1	_	Upper Frame Assembly	PL
2	-	Drive Bracket Assembly (P/O PL	
		9.3 Item 1)	
3	127K52790	Tray 1 Feed/Lift Up Motor	
4	-	Chute (Not Spared)	
5	930W00113	Tray 1 Nudger Level Sensor, No	
		Paper Sensor	
6	120E22481	Actuator	
7	-	Upper Harness Holder (P/O PL 9.3	
		Item 1)	
8	-	Rear Harness Holder (P/O PL 9.3	
		Item 1)	
9	807E00390	Gear (31T)	
10	014E44770	Spacer	
11	-	Bearing (P/O PL 9.3 Item 1)	
12	006K23221	Drive Shaft	
13	807E00800	Gear (13T)	AG
14	007K16960	One Way Gear	
-	005K83081	One Way Clutch	
-	005K10100	One Way Clutch	
-	007K98130	One Way Gear	
16	807E20300	Helical Gear (25T)	
17	807E20310	Helical Gear (29T/19T) (7830/35)	
-	807E30640	Helical Gear (29T/19T) (7845/55)	
		(4475, 5575)	
19	-	Wire Harness (P/O PL 9.3 Item 1)	
20	-	Spring (P/O PL 9.3 Item 1)	
21	-	Roller Assembly (P/O PL 9.5)	
22	930000211	Tray 1 Pre Feed Sensor (7845/55)	
23	-	Pre-Feed Sensor Harness	ค
		(7845/55)	R



### PL 9.5 Tray 1 Feeder Assembly (2 of 2)

PL 9.5

• • •	Dort	
Item	Part	Description
1	-	Frame Assembly (P/O PL 9.3 Item 1)
2	604K56080	Feed/Nudger/Retard Roll Kit (3 Rolls/Kit) (REP 7.2)
3	_	Spring (P/O PL 9.3 Item 1)
4	-	Spring (P/O PL 9.3 Item 1)
5	-	Holder (P/O PL 9.3 Item 1)
6	-	Lever (P/O PL 9.3 Item 1)
7	-	Feed In Chute (P/O PL 9.3 Item 1)
8	-	Feed Shaft (P/O PL 9.3 Item 1)
9	-	Bearing (P/O PL 9.3 Item 1)
10	-	Sleeve Bearing (P/O PL 9.3 Item 1)
11	-	Helical Gear (30T) (P/O PL 9.3
12	-	Nudger Support (P/O PL 9.3 Item 1)
13	-	Spur Gear (29T) (P/O PL 9.3 Item 1)
14	-	Clutch Assembly (25T) (P/O PL 9.3 Item 1)
15	005K05890	One Wat Clutch
-	005K10080	One Way Clutch
16	-	Nudger Shaft (P/O PL 9.3 Item 1)
17	-	Gear (25T) (P/O PL 9.3 Item 1)
18	-	Retard Support (P/O PL 9.3 Item 1)
19	005K09290	Friction Clutch
-	005K83300	Friction Clutch
20	014E45030	Spacer
21	-	Retard Shaft (P/O PL 9.3 Item 1)
22	-	Retard Bearing (P/O PL 9.3 Item 1)
23	-	Spring (P/O PL 9.3 Item 1)

1000 2000 AG AG



## PL 10.1 Three Tray Module (3TM - 7830/35)

Item	Part	Description
1	059K74830	Tray 2, Tray 3, Tray 4 Feeder Assembly
3	054E36441	Feed Out Chute
4	050K69770	Tray 2, Tray 3, Tray 4 Unit
5	059E03500	Roller
6	059E03510	Roller
7	003E75431	Stopper
8	110K11680	Paper Size Sensor
12	-	Feeder Bracket (Not Spared)
13	_	Clamp (Not Spared)



Initial Issue WorkCentre 7855 Family Service Documentation

# PL 10.2 Tray 2, 3, 4 Assembly (3TM - 7830/35)

Item	Part	Description	r E 10.2
1	050K69770	Tray Assembly	1 { 2-15
2	-	Tray Assembly (P/O PL 10.2 Item	-
		1)	15
3	848E64771	Front Cover (P/O PL 10.2 Item 1)	
4	011E24092	Lever (P/O PL 10.2 Item 1)	$\langle \rangle$
5	003E76330	Latch (P/O PL 10.2 Item 1)	
6	809E80250	Spring (P/O PL 10.2 Item 1)	
7	893E09490	Label (Max) (P/O PL 10.2 Item 1)	
8	-	Side Size Label	
9	-	End Size Label	X
10	897E09931	Label (Instruction)	
11	-	Tray Label (No 2)	10
12	-	Tray Label (No 3)	10
13	-	Tray Label (No 4)	
14	-	Slide Lock Block (P/O PL 10.2 Item	
		1)	
15	059E03522	Rear Roller (P/O PL 10.2 Item 1)	11 0
16	007E78431	Gear (13T) (P/O PL 10.2 Item 1)	
17	007E78450	Gear (13T/60T) (P/O PL 10.2 Item	8
		1)	
18	007E78441	Gear (60T) (P/O PL 10.2 Item 1)	
19	-	Pinion (P/O PL 10.2 Item 1)	
20	_	Link (P/O PL 10.2 Item 1)	
21	120E33840	End Actuator (P/O PL 10.2 Item 1)	
22	-	Bottom Plate (P/O PL 10.2 Item 1)	



j0kt51002

#### PL 10.3 Tray 2, 3 & 4 Feeder Assembly (1 of 2) (3TM - 7830/35)

24 { 13	3, 23
---------	-------

Item	Part	Description
1	-	Upper Frame Assembly (P/O PL
		10.1 Item 1)
2	-	Drive Bracket Assembly (Not
		Spared)
3	127K52790	Feed/Lift Up Motor Assembly
5	_	Chute (Not Spared)
6	930W00113	Nudger Level Sensor, No Paper
		Sensor (Not Spared)
-	930W00123	Photo Int Sensor (Alternate)
7	120E22481	Actuator
8	_	Upper Harness Holder (P/O PL
		10.1 Item 1)
9	-	Rear Harness Holder (P/O PL 10.1
		Item 1)
10	807E00390	Gear (31T)
11	014E44770	Spacer
12	-	Shaft Bearing (Not Spared)
13	006K23221	Drive Shaft (P/O PL 10.3 Item 24)
14	807E00800	Gear (13T)
15	005K83081	One Way Clutch Assembly
-	005K10100	One Way Clutch (Alternate)
16	007K16960	One Way Gear
-	007K98130	One Way Gear Assembly
		(Alternate)
17	807E20300	Helical Gear (25T)
18	807E20310	Helical Gear (29T/19T)
20	-	Motor Harness Assembly (P/O PL
		10.1 Item 1)
21	-	Sensor Motor Harness (P/O PL
		10.1 Item 1)
22	-	Spring (P/O PL 10.1 Item 1)
23	-	Roller Assembly (P/O PL 10.3 Item
		24)
24	-	Clamp





# PL 10.4 Tray 2, 3 & 4 Feeder Assembly (3TM) (2 of 2)

ltem	Part	Description
1	-	Lower Frame Assembly (P/O PL 10.1 Item 1)
2	604K56080	Feed Roll, Nudger Roll, Retard Roll
		Kit (Qty 3 Per Kit)
5	-	Holder (P/O PL 10.1 Item 1)
6	-	Lever (P/O PL 10.1 Item 1)
7	-	Feed In Chute (P/O PL 10.1 Item 1)
8	-	Feed Shaft (P/O PL 10.1 Item 1)
9	-	Bearing (P/O PL 10.1 Item 1)
10	-	Plastic Bearing (P/O PL 10.1 Item
		1)
11	-	Helical Gear (30T) (P/O PL 10.1
		Item 1)
12	-	Nudger Support (Not Spared)
13	-	Spur Gear (29T) (P/O PL 10.1 Item
		1)
14	005K10090	Clutch Assembly
-	005K08820	Clutch Assembly (25T) (Alternate)
15	005K05890	One Way Clutch
-	005K10080	One Way Clutch Assembly
16	-	Nudger Shaft (P/O PL 10.1 Item 1)
17	-	Gear (25T) (P/O PL 10.1 Item 1)
18	-	Retard Support (P/O PL 10.1 Item
		1)
19	005K09290	Friction Clutch
-	005K83300	Friction Clutch Assembly
	_	(Alternate)
20	014E45030	Spacer
21	-	Retard Shaft (P/O PL 15.1 Item 1)
22	-	Retard Bearing (P/O PL 10.1 Item
		1)
23	-	Compression Retard Spring (P/O
~ 1		PL 15.1 Item 1)
∠4	-	Nuager Compression Spring (P/O
25		PL 10.1 Item 1)
25	-	Compression Lever Spring (P/O PL
		10.1 lient 1)



0515004A-OAK

#### PL 10.9 Electrical (3TM)

ltem	Part	Description
1	960K62150	Tray Module PWB
2	807E20700	Gear (34T)
3	807E20720	Gear (39T)
4	127K65820	Take Away Motor
5	-	Sensor Harness Assembly (Not Spared)
6	_	Harness Assembly (Not Spared)
7	_	I/F Harness (Not Spared)
9	_	Fax Box Assembly (Not Spared)
10	_	USB Cable (Not Spared)
11	_	PWB Bracket (FAX G4) (Not
		Spared)
12	_	DC/DC Convert PWB (Not Spared)
13	_	PWB Support Bracket (Fax G4)
		(Not Spared)
14	_	Fax Clamp (Not Spared)
15	_	Wire Harness (Fax Mini) (Not
		Spared)
16	_	Wire Harness (Fax G4) (Not
		Spared)
17	_	Clamp (Not Spared)
18	_	Take Away Motor 2 Assembly



## PL 10.12 Roller (3TM)

ltem	Part	Description
1	848E12671	Cover
2	110E12220	L/H Switch
3	-	Harness Assembly (Not Spared)
4	054K34143	Chute Assembly
5	-	Chute (P/O PL 10.12 Item 4)
6	-	Tray 3 Feed Out Sensor, Tray 4
		Feed Out Sensor (P/O PL 10.12
		Item 4)
7	-	Actuator Sensor (P/O PL 10.12
		Item 4)
8	-	Spring (P/O PL 10.12 Item 4)
9	-	Harness Assembly (P/O PL 10.12
		Item 4)
10	-	Swensor Guide (Not Spared)
11	130K64121	Tray 2 Feed Out Sensor
12	054E34301	Takeaway Chute
13	059K60191	Roll Assembly
14	413W14860	Bearing
15	120E18070	Clamp
16	-	EDS TTM Cover



0515011B-NWD

## PL 10.13 Left Hand Cover Assembly (3TM)

ltem	Part	Description
1	848K62280	Left Hand Cover Assembly (Not Spared)
2	019E69600	Hook
3	803E08671	Latch (P/O PL 10.13 Item 1)
4	_	Spring Pinch (P/O PL 10.13 Item 1)
5	-	Chute Pinch
6	068K55791	Bracket Assembly (P/O PL 10.13 Item 1)
7	-	Spring (P/O PL 10.13 Item 1)
8	_	Pinch Shaft (P/O PL 10.13 Item 1)
9	059E99241	Pinch Roll
10	_	Left Hand Cover (P/O PL 10.13
		Item 1)
11	003E75571	Handle
12	-	Pinch Bearing (Front)
13	068K55701	Upper Bracket Assembly
14	068K55711	Lower Bracket Assembly (Not
		Spared)
15	-	Bracket (Not Spared)
16	054E38240	Left Hand Chute (P/O PL 10.13
		Item 1)
17	-	Pinch Bearing (Rear)
18	-	Front Pinch Bearing (Not Spared)
19	-	Right Pinch Bearing (Not Spared)
20	-	Left Hand Spring (Not Spared)
21	-	Pinch Chute (Not Spared)


## PL 10.14 Covers (3TM)

ltem	Part	Description
1	417W41449	Caster Assembly
2	417W41349	Locking Caster Assembly
3	_	Screw
4	_	Docking Screw (Not Spared)
5	-	Docking Bracket (Not Spared)
6	-	Top Cover
7	-	Left Cover
9	848K56600	Rear Cover Assembly (Not Spared)
11	-	Right Cover
12	868E15860	Foot Bracket
14	868E20860	Foot Bracket L
15	848E45610	Foot Cover L
16	017K94590	Adjuster Foot Assembly



j0kt51118

#### PL 11.1 Tandem Tray Assembly (TTM)

Item	Part	Description
1	050K60520	Tray 4 Assembly (REP 7.11)
2	_	Tray 4 (P/O PL 11.1 Item 1)
3	_	Tray 4 Cover (P/O PL 11.1 Item 14)
4	_	Lever (P/O PL 11.1 Item 14)
5	-	Link (P/O PL 11.1 Item 14)
6	_	Link (P/O PL 11.1 Item 14)
7	_	Spring (P/O PL 11.1 Item 14)
8	-	Latch (P/O PL 11.1 Item 14)
9	-	Cover (P/O PL 11.1 Item 14)
10	-	Transport Bracket (P/O PL 11.1
		Item 14)
11	-	Label (Instruction) (P/O PL 11.1
		Item 1)
12	-	Label (Tray No 4) (P/O PL 11.1
		Item 1)
13	-	Label (P/O PL 11.1 Item 1)
14	848K20080	Tray 4 Cover
15	050K60500	Tray 3 Assembly
16	-	Tray 3 (P/O PL 11.1 Item 15)
17	-	Tray 3 Cover (P/O PL 11.1 Item 15)
18	-	Label (Tray No.3) (P/O PL 11.1
		Item 15)
19	848K20090	Tray 3 Cover
20	050K69770	Tray 2 Assembly



# PL 11.2 Tray 2 (TTM)

Item	Part	Description	PL 11.2
1	050K69770	Tray 2 Assembly (P/O PL 11.2 Item	1 \$ 2.15
2		1) Trou Assembly (D/O DL 11 2 Item	1 (2-13
Z	-	1)	15 BV
3	848E64771	Front Cover	
4	011E24092	Lever	
5	003E76330	Latch	
6	809E80250	Spring	
7	893E09490	Lab (Max) Kit	
8	059E03522	Rear Koller	
10	007E78450	Gear (13T/60T)	
11	007E78441	Gear (60T)	10 8 18
12	807E13520	Pinion	
13	-	Link (P/O PL 11.2 Item 1)	
14	120E33840	End Actuator	$\left( \begin{array}{c} c \end{array} \right)$ 7 $\frac{12}{AC}$ AC
15	- 907E00021	Bottom Plate (P/O PL 11.2 Item 1)	
19	_	Label Kit	
20	604K20541	Gear Kit	8
21	-	Slide Lock Block	
			14 Television
			(Piles)
			/ AB / 3

ron

j0kt51102

13

20

## PL 11.3 Tray 3 (TTM)

ltem	Part	Description
1	_	Base Tray (P/O PL 11.1 Item 15)
2	-	Size Actuator (P/O PL 11.1 Item 15)
3	-	Side Rear Guide (P/O PL 11.1 Item
		15)
4	-	Side Front Guide (P/O PL 11.1 Item
		15)
5	-	Knob (P/O PL 11.1 Item 15)
6	-	Knob Assembly (P/O PL 11.1 Item
		15)
7	-	Spring (P/O PL 11.1 Item 15)
8	-	Bracket (P/O PL 11.1 Item 15)
9	-	Rack Gear (P/O PL 11.1 Item 15)
10	007E78190	Pinion (P/O PL 11.1 Item 15)
11	020E37360	Pulley (P/O PL 11.1 Item 15)
12	020E36560	Pulley (P/O PL 11.1 Item 15)
13	604K20730	Pulley (P/O PL 11.1 Item 15)
14	-	Gasket (P/O PL 11.1 Item 15)
15	-	Bottom Plate (P/O PL 11.1 Item 15)
16	019K93921	Brake
17	893E09490	Label (Max) Kit
18	019E71680	Pad
19	012E11112	Front Left Cable
20	012E11122	Front Right Cable
21	012E11101	Cable (Rear)
22	006K86350	Lift Shaft (P/O PL 11.1 Item 15)
23	032E20890	Cable Guide
24	032E27990	Cable Guide
25	059E05060	Side Roll
26	059E05040	Lower Roll

PL11.3



#### PL 11.4 Tray 4 (TTM)

Item	Part	Description
1	_	Base Tray (P/O PL 11.1 Item 1)
2	-	Side Rear Guide (P/O PL 11.1 Item
		1)
3	-	Side Front Guide (P/O PL 11.1 Item
		1)
4	-	Knob (P/O PL 11.1 Item 1)
5	003K87450	Knob Assembly
6	-	Spring (P/O PL 11.1 Item 1)
7	019K93921	Brake
8	-	Bottom Plate (P/O PL 11.1 Item 1)
9	006K86350	Lift Shaft
10	-	Rack Gear (P/O PL 11.1 Item 1)
11	007E78190	Pinion
12	007E78390	Gear
13	-	Bracket (P/O PL 11.1 Item 1)
14	019E71680	Pad (P/O PL 11.1 Item 1)
15	020E37360	Pulley (P/O PL 11.1 Item 1)
16	604K20730	Pulley (P/O PL 11.1 Item 1)
17	604K20740	Cable Guide
18	012E11141	Front Cable
19	012E11131	Rear Cable
20	-	Size Actuator (P/O PL 11.1 Item 1)
21	893E09490	Label (Max) Kit
22	-	Gasket (P/O PL 11.1 Item 1)
23	-	Lower Roll (P/O PL 11.1 Item 1)
24	-	Side Roll (P/O PL 11.1 Item 1)





### PL 11.5 Tray 4 Paper Feed (TTM)

ltem	Part	Description
1	059K75360	Tray 4 Feeder (REP 7.13)
2	_	Bracket (Not Spared)
3	_	Bracket (Not Spared)
4	054E34200	Lower Chute
5	054E34210	Upper Chute
6	930W00212	Tray 4 Feed Out Sensor
7	_	Sensor Wire Harness (Not Spared)
8	-	Motor Wire Harness
9	-	Cover (Not Spared)
10	_	Stud Bracket (Not Spared)
11	059K54320	Tray 4 Transport Assembly
12	-	Transport Rail (P/O PL 11.5 Item
		11)
13	-	Lower Chute (P/O PL 11.5 Item 11)
14	059K54330	Tray 4 Transport Roll
15	-	Bearing (P/O PL 11.5 Item 11)
16	059E98860	Pinch Roll
17	_	Bearing (P/O PL 11.5 Item 11)
18	_	Bearing (P/O PL 11.5 Item 11)
19	-	Spring (P/O PL 11.5 Item 11)
20	-	Cover (P/O PL 11.5 Item 11)
21	-	Upper Chute (Not Spared)
22	_	Label Kit (P/O PL 11.5 Item 11)
23	-	Spacer (P/O PL 11.5 Item 11)



## PL 11.6 Tray 2/3 Paper Feed (TTM)

Part	Description
_	Chute (Not Spared)
930W00111	Tray 3 Feed Out Sensor
-	Actuator (Not Spared)
809E82720	Spring
-	Wire Harness (Not Spared)
-	Sensor Guide
130K64121	Tray 2 Feed Out sensor
054E34301	Chute
-	Ball Bearing (Not Spared)
059K74830	Tray 2 Feeder
054E36441	Feed Out Chute
059K75360	Tray 3 Feeder
054E33802	Feed Out Chute (Not Spared)
-	Cover (Not Spared)
054E39560	Lower Chute
059K60191	Takeaway Roll Assembly
-	Clamp (Not Spared)
-	ESD Cover
-	Low ESD Cover
	Part - 930W00111 - 809E82720 130K64121 054E34301 - 059K74830 054E36441 059K75360 054E33802 - 054E39560 059K60191



## PL 11.7 Tray 2 Feeder (TTM) (1 of 2)

ltem	Part	Description	
1	_	Upper Frame Assembly (P/O PL	
		11.6 Item 10)	
2	_	Drive Bracket Assembly (P/O PL	
		11.6 Item 10)	He low v
3	127K52790	Tray 2 Feed/Lift UP Motor	1
4	_	Clamp	
5	_	Chute (P/O PL 11.6 Item 10)	
6	930W00113	Tray 2 Nudge Level, Paper Sensor	
_	930W00123	Sensor	
7	120E22481	Actuator	
8	-	Upper Harness Holder (P/O PL	
		11.6 Item 10)	
9	-	Rear Harness Holder (Not Spared)	
10	807E00390	Gear (31T)	AG (G)
11	014E44770	Spacer	
12	-	Bearing (Not Spared)	
13	006K23221	Drive Shaft	
14	807E00800	Gear (13T)	
15	005K10100	One Way Clutch	
-	005K83081	One Way Clutch	
16	007K16960	One Way Gear	
17	807E20300	Helical Gear (25T)	
18	807E20310	Helical Gear (29T/19T)	5 4
20	-	Harness Assembly (P/O PL 11.6	18 2
21	_	Rent TU) Sensor Harness Assembly (P/O PI	
21		11.6 Item 10)	AG
22	_	Spring (P/O PL 11.6 Item 10)	
23	_	Roll Assembly (P/O PL 11.6 Item	A-AG
		10)	
			The second
			and a second a second a second a
			(D + 11.8) $(12.12)$ $(22.12)$
			23 (FL 11.0) + 16 + 14 + 10
			$\frac{1}{12}$ 15
			13



#### PL 11.8 Tray 2 Feeder (TTM) (2 of 2)

			DI 44 0
ltem	Part	Description	PL11.8
1	-	Frame Assembly (Not Spared)	
2	604K56080	Feed Roll Kit	
3	-	Nudger, Retard, Feed Roll (P/O PL	213
		11.8 Item 2)	2 { 3
4	-	Spring (Not Spared)	
5	-	Holder (Not Spared)	
6	-	Level (Not Spared)	
7	-	Feed In Chute (Not Spared)	
8	-	Feed Shaft (Not Spared)	
9	-	Bearing (Not Spared)	
10	-	Sleeve Bearing (Not Spared)	
11	-	Helical Gear (30T) (Not Spared)	3 (FE
12	-	Nudger Support (Not Spared)	N N
13	-	Spur Gear (29T) (Not Spared)	
14	005K10090	Clutch Assembly	k
-	005K08820	Clutch Assembly	Ð
15	005K05890	One Way Clutch	4
-	005K10080	One Way Clutch (Alternate)	
16	-	Nudger Shaft (Not Spared)	
17	-	Gear (25T) (Not Spared)	
18	-	Retard Support (Not Spared)	
19	005K09290	Friction Clutch	
-	005K83300	Friction Clutch	
20	014E45030	Spacer	
21	-	Retard Shaft (Not Spared)	
22	-	Retard Bearing (Not Spared)	
23	-	Spring (Not Spared)	
24	-	Spring (Not Spared)	





#### PL 11.9 Tray 3 Feeder (TTM) (1 of 2)

ltem	Part	Description	F
1	_	Frame (P/O PL 11.6 Item 13)	
2	-	Bracket (P/O PL 11.6 Item 13)	
3	-	Frame (P/O PL 11.6 Item 13)	
4	127K52790	Tray 3 Feed/Lift Up	
5	801E03601	Rail	
6	054E23461	Chute	
7	930W00123	Tray 3 Nudger Level, No Paper	
		Sensor (Alternate)	
-	930W00113	Tray 3 Nudger Level, No Paper	
		Sensor	
8	-	Harness Holder (Not Spared)	
9	120E22481	Actuator	
10	-	Holder (P/O PL 11.6 Item 13)	
11	-	Level (P/O PL 11.6 Item 13)	
12	-	Upper Harness Holder (Not	
		Spared)	
13	-	Rear Harness Holder (Not Spared)	
14	807E00390	Gear	
15	014E44770	Spacer	
16	013E26530	Bearing	
17	006K23221	Drive Shaft	
18	807E00800	Gear	
19	005K83081	One Way Clutch	
-	005K10100	One Way Clutch (Alternate)	
20	007K16960	One Way Gear	
-	007K98130	One Way Gear (Alternate)	
21	807E20300	Gear (25T)	
22	807E30640	Gear (29T/24T)	
24	-	Harness Assembly (Motor) (Not	
		Spared)	
25	-	Harness Assembly Sensor (P/O PL	
		11.6 Item 13)	
26	-	Spring (P/O PL 11.6 Item 13)	
27	-	Spring (P/O PL 11.6 Item 13)	
28	-	Label (Not Spared)	Ċ
29	-	Clamp (Not Spared)	Í
30	930W00211	Tray 3 Pre Feed Sensor	



0511009A-NWD

0

#### PL 11.10 Tray 3 Feeder (TTM) (2 of 2)

ltem	Part	Description	PL1
1	_	Frame (Not Spared)	
2	604K56080	Reed Roll Kit	~ ~ ~
3	-	Nudger, Retard, Feed Roll (P/O PL	2 {
		11.10 Item 2)	
4	-	Spring (Not Spared)	
5	-	Feed In Chute (Not Spared)	
6	-	Feed Shaft (P/O PL 11.6 Item 13)	
7	-	Bearing (Not Spared)	
8	-	Sleeve Bearing (Not Spared)	
9	-	Gear (25T) (Not Spared)	
10	-	Support (Not Spared)	
11	-	Gear (29T) (Not Spared)	
12	005K10090	Clutch (25T) (Alternate)	
-	005K08820	Clutch (25T) (Alternate)	
13	005K05890	One Way Clutch (Alternate)	
-	005K10080	One Way Clutch (Alternate)	
14	-	Nudger Shaft (P/O PL 11.6 Item 13)	
15	-	Gear (25T) (Not Spared)	
16	-	Support (Not Spared)	
17	005K09290	Friction Clutch	
18	014E45030	Spacer	
19	-	Retard Shaft (Not Spared)	
20	-	Retard Bearing (Not Spared)	
21	-	Spring (Not Spared)	



0511010A-NWD

#### PL 11.11 Tray 4 Feeder (TTM) (1 of 2)

ltem	Part	Description	PL
1	_	Frame (P/O PL 11.6 Item 13)	
2	-	Bracket (P/O PL 11.6 Item 13)	
3	-	Frame (P/O PL 11.6 Item 13)	
4	127K52790	Tray 4 Feed/Lift Up	
5	801E03601	Rail	
6	054E23461	Chute	
7	930W00123	Tray 4 Nudger Level, No Paper Sensor (Alternate)	
-	930W00113	Tray 4 Nudger Level, No Paper Sensor	
8	_	Harness Holder (Not Spared)	
9	120E22481	Actuator	
10	_	Holder (P/O PL 11.6 Item 13)	
11	-	Level (P/O PL 11.6 Item 13)	
12	-	Upper Harness Holder (Not	
		Spared)	
13	-	Rear Harness Holder (Not Spared)	
14	807E00390	Gear	
15	014E44770	Spacer	
16	013E26530	Bearing	
17	006K23221	Drive Shaft	
18	807E00800	Gear	
19	005K10100	One Way Clutch (Alternate)	
-	005K83081	One Way Clutch	
20	007K16960	One Way Gear	
-	007K98130	One Way Gear (Alternate)	
21	807E20300	Gear (25T)	
22	807E30640	Gear (29T/24T) High	
-	807E20310	Gear (29T/19T) Low	
24	-	Harness Assembly (Motor) (Not Spared)	
25	-	Harness Assembly Sensor (P/O PL 11.6 Item 13)	
26	_	Spring (P/O PL 11.6 Item 13)	/
27	_	Spring (P/O PL 11.6 Item 13)	
28	_	Label (Not Spared)	1
29	-	Clamp (Not Spared)	0
30	930W00211	Tray 3 Pre Feed Sensor	000



0511011A-NWD

0

#### PL 11.12 Tray 4 Feeder (TTM) (2 of 2)

ltem	Part	Description	PL
1	_	Frame (Not Spared)	
2	604K56080	Feed Roll Kit	
3	-	Nudger, Retard, Feed Roll (P/O PL	
		11.12 Item 2)	2 {
4	-	Spring (Not Spared)	
5	-	Feed In Chute (Not Spared)	
6	-	Feed Shaft (Not Spared)	
7	-	Bearing (Not Spared)	
8	-	Sleeve Bearing (Not Spared)	
9	-	Gear (25T) (Not Spared)	
10	-	Support (Not Spared)	
11	-	Gear (29T) (Not Spared)	
12	005K10090	Clutch (25T) (Alternate)	
-	005K08820	Clutch (25T) (Alternate)	
13	005K05890	One Way Clutch	
-	005K10080	One Way Clutch	
14	-	Nudger Shaft	
15	-	Gear (25T) (Not Spared)	
16	-	Support (Not Spared)	
17	005K09290	Friction Clutch	
18	014E45030	Spacer	
19	-	Retard Shaft (Not Spared)	
20	-	Retard Bearing (Not Spared)	
21	-	Spring (Not Spared)	



#### PL 11.13 Left Cover Assembly (TTM)

	-	
-	Upper Bracket (Not Spared)	-
-	Lower Bracket (Not Spared)	1
-	Cover (Not Spared)	
10E12220	Left Hand Cover Switch	
-	Wire Harness (Not Spared)	
)68K55791	Hinge Bracket	
348K17711	Left Cover Assembly	
-	Left Cover (P/O PL 11.13 Item 7)	
03E75571	Handle	
303E08671	Latch	
19E69600	Hook	
)59E99241	Pinch Roll	
-	Pinch Shaft (P/O PL 11.13 Item 7)	11 🔨
-	Front Pinch Bearing (P/O PL 11.13	
	Item 7)	19、
-	Pinch Spring (P/O PL 11.13 Item 7)	
)54E38240	Upper Chute (P/O PL 11.13 Item 7)	
-	Chute Pinch	
-	Hinge (P/O PL 11.13 Item 7)	
-	Spring (P/O PL 11.13 Item 7)	10 -
-	Rear Pinch Bearing (P/O PL 11.13	10
	Item 7)	
-	Rear Pinch Bearing (P/O PL 11.13	
	Item 7)	
	10E12220 10E12220 108K55791 148K17711 103E75571 103E08671 119E69600 159E99241 154E38240 154E38240	<ul> <li>Upper Bracket (Not Spared)</li> <li>Lower Bracket (Not Spared)</li> <li>Cover (Not Spared)</li> <li>Cover (Not Spared)</li> <li>10E12220 Left Hand Cover Switch</li> <li>Wire Harness (Not Spared)</li> <li>68K55791 Hinge Bracket</li> <li>68K55791 Left Cover Assembly</li> <li>Left Cover (P/O PL 11.13 Item 7)</li> <li>103E75571 Handle</li> <li>103E08671 Latch</li> <li>119E69600 Hook</li> <li>159E99241 Pinch Roll</li> <li>Pinch Shaft (P/O PL 11.13 Item 7)</li> <li>Front Pinch Bearing (P/O PL 11.13 Item 7)</li> <li>Pinch Spring (P/O PL 11.13 Item 7)</li> <li>Chute Pinch</li> <li>Hinge (P/O PL 11.13 Item 7)</li> <li>Spring (P/O PL 11.13 Item 7)</li> <li>Rear Pinch Bearing (P/O PL 11.13 Item 7)</li> </ul>





### PL 11.14 Tray Front Supports (TTM)

ltem	Part	Description
1	_	Spacer (Not Spared)
2	068K63522	Roll and Bracket
3	-	Bracket (P/O PL 11.14 Item 2)
4	_	Roll (P/O PL 11.14 Item 2)
5	_	Shaft (P/O PL 11.14 Item 2)
6	059E05060	Roll
7	003E75551	Stopper
8	803E02420	Stopper
9	803E02430	Stopper
10	803E01200	Stopper
11	059E05131	Roll
12	003E75431	Stopper
13	059E03500	Roll
14	059E03510	Roll



0511014A-NWD

# PL 11.15 Tray 2/3/4 Paper and Lift Sensors (TTM)

ltem	Part	Description
1	110K11820	Tray 3, 4 Paper Size Sensor
2	110K11680	Tray 2 Paper Size Sensor
3	007E78320	Gear (17T/50T)
4	007E78330	Gear (16T/48T)
5	007E78340	Gear (57T)
6	807E16730	Gear (18T)
7	007E78350	Gear (51T)
8	_	Bracket (Not Spared)
9	-	Bracket (Not Spared)

PL11.15



0511015A-NWD

#### PL 11.16 Drive (TTM)

ltem	Part	Description
1	_	Gear (52T) (Not Spared)
2	_	Gear (32T) (Not Spared)
3	_	Gear (20T/65T) (Not Spared)
4	-	Collar (Not Spared)
5	_	Pulley Gear (Not Spared)
6	_	Roll (Not Spared)
7	423W56254	Belt
8	_	Spring (Not Spared)
9	_	Tension Bracket (Not Spared)
10	-	Bracket (P/O PL 11.16 Item 18)
11	_	Gear Bracket (Not Spared)
12	_	Take Away Motor Assembly
13	127K52880	Take Away Motor (Alternative)
14	-	Bracket (P/O PL 11.16 Item 12)
15	-	Gear (81T) (P/O PL 11.16 Item 12
16	_	Gear (70T) (P/O PL 11.16 Item 12
17	-	Collar (High Speed) (P/O PL 11.16 Item 12)
18	127K61540	Take Away Motor Assembly



## PL 11.17 Electrical (TTM)

ltem	Part	Description
1	_	Ground Plate (Not Spared)
2	_	Transport Guide (Not Spared)
3	960K62150	Tray Module PWB
4	_	Harness Assembly Sensor (Not
		Spared)
5	-	Harness Assembly Motor (Not
		Spared)
6	-	Harness Assembly (I/F) (Not
		Spared)

PL11.17





-----

## PL 11.18 Covers (TTM)

ltem	Part	Description
1	417W41349	Caster Assembly
2	017K94580	Swizzle Caster
3	-	Screw
4	-	Docking Screw
5	-	Docking Bracket
6	-	Top Cover (Not Spared)
7	-	Left Cover (Not Spared)
9	848K56600	Rear Cover
11	-	Right Cover
12	868E15860	Foot Bracket
14	868E20860	Foot Bracket
15	848E45610	Foot Cover
16	017K94590	Adjuster Foot Assembly



j0kt51118

#### PL 13.1 Bypass Tray Assembly (1 of 5)

Item	Part	Description
1	059K75180	Bypass Tray Assembly
2	-	Feeder Assembly
3	050K64540	Tray Assembly
4	897E04930	Label (Instruction)
5	896E46040	Label (Max)
6	848E44583	Top Cover
7	120E29441	Actuator
8	_	Label Kit





#### PL 13.2 Bypass Tray Assembly (2 of 5)

ltem	Part	Description
1	-	Upper Frame Assembly
2	_	Lower Tray Assembly
3	_	Drive Bracket Assembly
4	_	Gear (29T/19T) (P/O PL 13.1 Item
		1)
5	-	Gear (31T/15T) (P/O PL 13.1 Item
		1)
6	127K52790	Feeder/Nudger Motor
7	_	Sensor Bracket
8	930W00113	Nudger Position Sensor
-	930W00123	Nudger Position Sensor (Alternate)
9	_	Harness Holder

PL 13.2





### PL 13.3 Bypass Tray Assembly (3 of 5)

ltem	Part	Description
1	-	Pinch Chute Assembly (P/O PL 13.1 Item 1)
2	-	Gear Support (P/O PL 13.1 Item 1)
3	-	Gear (21T) (P/O PL 13.1 Item 1)
4	-	Gear (23T) (P/O PL 13.1 Item 1)
5	-	Lock Stopper (P/O PL 13.1 Item 1)
6	-	Nudger Support (P/O PL 13.1 Item 1)
7	_	Nudger Shaft (P/O PL 13.1 Item 1)
8	-	Gear (25T) (P/O PL 13.1 Item 1)
9	-	Stopper (P/O PL 13.1 Item 1)
10	-	Feed Shaft (P/O PL 13.1 Item 1)
11	413W85459	Bearing
12	413W11660	Sleeve Bearing
13	-	Gear (30T) (P/O PL 13.1 Item 1)
14	005K08370	One Way Clutch (22T)
15	-	One Way Clutch (P/O PL 13.1 Item 1)
16	-	Spring (P/O PL 13.1 Item 1)
17	022K77220	Feed Roll, Nudger Roll (P/O PL
		13.3 Item 23) (REP 7.22)
18	-	Guide (P/O PL 13.1 Item 1)
19	-	Pinch Chute Assembly (P/O PL 13.1 Item 1)
20	_	Spacer (P/O PL 13.1 Item 1)
21	_	Shaft (P/O PL 13.1 Item 1)
22	059E04040	Pinch Roll
23	604K66430	MSI Roll Kit (W/TAG P-002)



0513003B-NWD

## PL 13.4 Bypass Tray Assembly (4 of 5)

ltem	Part	Description
1	-	Bypass Lower Frame (P/O PL 13.2 Item 2)
2	_	Tray Wire Harness
3	-	Retard Support (P/O PL 13.2 Item
4	_	2) Shaft (P/O PL 13.2 Item 2)
5	005K08830	Friction Clutch
6	014E45030	Spacer
7	_	Retard Roll (P/O PL 13.2 Item 2)
8	-	Retard Spring (P/O PL 13.2 Item 2)
9	-	Plate (P/O PL 13.2 Item 2)
10	059K53691	Drive Roll Assembly
11	-	Collar (P/O PL 13.2 Item 2)
12	-	Gear (23T) (P/O PL 13.2 Item 2)
13	-	Sleeve Bearing (P/O PL 13.2 Item 2)
14	413W11860	Sleeve Bearing
15	_	Sensor Plate (P/O PL 13.2 Item 2)
16	130K72110	Bypass Feed Out Sensor
17	930W00123	Bypass No Paper Sensor
-	930W00113	Bypass No Paper Sensor
18	019E68980	Bottom Pad
19	054E33950	Front Chute



## PL 13.5 Bypass Tray Assembly (5 of 5)

ltem	Part	Description
1	_	Bypass Tray (P/O PL 13.1 Item 3)
2	-	Front Rack (P/O PL 13.1 Item 3)
3	-	Rear Rack (P/O PL 13.1 Item 3)
4	130K70660	Paper Size Sensor
5	007E79700	Pinion Gear
6	-	Front Side Guide (P/O PL 13.1 Item
		3)
7	-	Rear Side Guide (P/O PL 13.1 Item
		3)
8	-	Wire Harness (P/O PL 13.1 Item 3)
9	-	Wire Harness (P/O PL 13.1 Item 3)
10	-	Plate (P/O PL 13.1 Item 3)
11	-	Extension Tray (L1) (P/O PL 13.1
		Item 3)
12	-	Extension Tray (L2) (P/O PL 13.1
		Item 3)
13	012E11760	Sensor Link
14	809E49930	Sensor Spring



j0kt51305

## PL 14.1 Left Hand Cover (1 of 2)

ltem	Part	Description
1	110K17101	L/H Cover Interlock Switch
2	806E21420	Shaft
3	896E89601	Label Kit
4	_	Left Hand Cover Unit

PL 14.1





#### PL 14.2 Left Hand Cover (2 of 2)

ltem	Part	Description
1	008R13064	2nd BTR Unit (REP 9.9)
2	848K70180	Left Hand Cover Assembly (7845/55)
-	848K70170	Left Hand Cover Assembly (7830/35)
3	059K74880	Duplex Assembly (7845/55) (REP 10.2)
-	059K66711	Duplex Assembly (7830/35) (REP 10.2)
4	-	Left Hand Cover (P/O PL 14.2 Item 2)
5	054E43022	Left Hand Cover Chute (7845/55)
_	054E41572	Left Hand Cover Chute (7830/35)
6	_	Left Hand Frame Assembly
7	_	Latch (Front) (P/O PL 14.2 Item 2)
8	-	Latch (Rear) (P/O PL 14.2 Item 2)
9	-	Harness Asembly
10	-	Fan Holder
11	-	Lelf Hand Fan1
12	-	Left Hand Fan2
13	-	Left Hand Fan3
14	-	Connector
15	-	Left Hand Fan PWB
16	-	Conductor
17	-	Screw
18	-	Wire Harness
19	-	Harness Guide
20	-	Wire Harness



# PL 14.3 Left Hand Cover Assembly (1 of 2)

Part	Description
054K48291	Chute Assembly
-	Chute Support
809E65260	Spring
054K35160	Duplex Chute Assembly
809E76900	Spring
011E23951	Front Latch Lever (7830/35)
011E24361	Front Latch Lever (7845/55)
-	Latch Plate
011E20740	Rear Latch Lever (7830/35)
011E24380	Rear Latch Lever (7845/55)
120E34041	Actuator
-	Spring
849E97370	Rear Support
868E05450	Front Support
848K61850	2nd Bias Housing
-	Left Hand Frame Assembly
	Part 054K48291 - 809E65260 054K35160 809E76900 011E23951 011E24361 - 011E20740 011E24380 120E34041 - 849E97370 868E05450 848K61850 -



# PL 14.4 Left Hand Cover Assembly (2 of 2)

ltem	Part	Description
1	_	Frame Assembly
י כ	_	Bracket
2	-	Brooket
3	-	
4	-	Conductor Housing
5	-	Conductor Cover
6	-	Conductor
7	-	Conductor Housing
8	-	Conductor
9	-	Plate
10	-	Spring Holder
11	-	Holder
12	-	Spring
13	-	Roll Braket
14	_	Shaft
15	-	Roll (Side)
16	-	Roll (Center)
17	_	Retract Shaft
18	130E87410	POB Sensor
19	-	Sensor Holder
20	-	Harness Guide
21	-	Harness Guide
22	_	Harness Holder
23	_	Harness Holder (P/O PL 14.2 Item 2)



## PL 14.5 Chute Assembly

ltem	Part	Description
1	-	Chute Assembly
2	059K56660	Pinch Roller Assmbly
3	-	Pulley
4	809E79750	Spring
5	-	Heater Bracket
6	-	DC Heater

PL 14.5



#### PL 14.6 Duplex Assembly (1 of 2)

ltem	Part	Description
1	848E24142	Duplex Cover
2	011E23681	Duplex Lever
3	848E43860	Level Cover
4	-	Frame Assembly
5	-	Spring
6	127K65880	Duplex Motor (7845/55)
-	127K58390	Duplex Motor (7830/35)
7	120E32340	Actuator
8	-	Spring
9	930W00113	Duplex Wait Sensor
10	-	Wire Harness
11	110E11580	Dulpex Cover Switch
12	-	Motor Bracket

PL 14.6





#### PL 14.7 Duplex Assembly (2 of 2)

ltem	Part	Description
1	_	Inner Chute (P/O PL 14.2 Item 3)
2	_	Duplex Pinch Roll (7525, 7530,
		7535)
3	_	Pinch Spring 1
4	-	Pinch Spring 2
5	-	Lower Chute (P/O PL 14.2 Item 3)
6	-	Duplex Roller 1
7	-	Duplex Roller 2
8	-	Duplex Roller 3 (P/O PL 14.7 Item
		20) (W/TAG P-001)
9	-	Duplex Rear Frame (P/O PL 14.2
		Item 3)
10	-	Idle Gear (13T/46T) (7525, 7530,
		7535)
11	-	Pin
12	-	Helical Gear (P/O PL 14.7 Item 20)
		(W/TAG P-001)
13	-	Sleeve Bearing (P/O PL 14.2 Item
		3)
14	-	Sleeve Bearing (P/O PL 14.2 Item
		3)
15	-	Belt
16	-	Belt
17	-	Pulley
18	-	Shaft (7545, 7556)
19	-	Duplex Pinch Roll (7545, 7556)
20	-	Duplex Roller Kit



#### PL 15.1 Registration (1 of 2)

ltem	Part	Description
1	121K41242	Takeaway Clutch (2275, 3373, 3375)
2	-	Shaft (2275, 3373, 3375)
3	807E20050	Gear (40T)
4	013E33420	Bearing
5	013E33460	Takeaway Bearing
6	-	Bracket (Not Spared)
7	-	Bracket (Not Spared)
8	059K75155	Registration Transport Assembly
		(High Speed) (REP 7.24)
-	059K75651	Registration Transport Assembly
		(Low Speed)
9	127K60770	Take Away Motor
10	-	Shaft (Not Spared) (7545, 7556)
11	013E36280	Bearing
12	-	Bracket (Not Spared) (7545, 7556)
13	807E30540	Gear (29T)
14	807E30531	Gear (60T) (7545, 7556)



## PL 15.2 Registration (2 of 2)

ltem	Part	Description
1	059K75590	Registration Roll
2	013E40520	Bearing
3	013E36270	Sleeve Bearing
4	121K46000	Registration Clutch (High Speed)
-	121K41201	Registratikon Clutch (Low Speed)
5	054E33634	Registration Chute
6	054K33690	Inlet Chute Assembly
8	-	Saftey Cover (P/O PL 15.1 Item 8)
9	019E70091	Sensor Holder
10	930W00111	Registration Sensor
-	930W00121	Registration Sensor (Alternate)
11	120E29700	Actuator
12	809E78760	Spring
13	-	Registration Wire Harness (P/O PL
		15.1 Item 8)
14	-	Skew Adjust Block (P/O PL 15.1
		Item 8)
15	103E45060	Inlet Resistor
16	-	Conductor (In) (P/O PL 15.1 Item
		8)
17	-	Conductor (Out) (P/O PL 15.1 Item
		8)
18	059K53370	Takeaway Roll
19	807E20190	Gear (23T)
20	-	Conductor (P/O PL 15.1 Item 8)
21	-	Conductor (P/O PL 15.1 Item 8)
22	-	Traceability Label (High Speed)





#### PL 17.1 Exit 1/OCT, Exit 2

ltem	Part	Description
1	_	Exit/OCT 1 Assembly (REF: PL
		17.2) (REP 11.1)
2	_	Motor Cover
3	_	Washer (Not Spared)
4	930W00113	Exit 1 OCT Home Position Sensor
5	807E20620	Gear (19T)
6	013E33410	Bearing
7	036K91890	Paper Weight
8	059K78440	Exit 2 Assembly (7845/55)
-	059K68315	Exit 2 Assembly (7830/35)
9	055E58430	Exit 1 Guard

PL 17.1



0517001A-NWD

## PL 17.2 Exit 1/OCT

ltem	Part	Description	F
1	-	Exit 1 Base Assembly (7830/35)	
		(Not Spared)	
2	-	Exit 1 Base Assembly (7845/55)	-
		(P/O PL 17.2 Item 1)	
3	-	Exit 1 Gear (P/O PL 17.2 Item 1)	
4	127K52280	Exit 1 OCT Motor (7830/35)	
-	127K60880	Exit 1 OCT Motor (7845/55)	
5	-	OCT Gear (P/O PL 17.2 Item 1)	
6	013E30050	Bearing (P/O PL 17.2 Item 1)	
7	-	Ground Plate (P/O PL 17.2 Item 1)	
8	-	OCT Chute (P/O PL 17.2 Item 13)	
9	-	OCT 1 Roller (P/O PL 17.2 Item 13)	
10	-	Exit Pinch Spring (P/O PL 17.2 Item	
		13)	
11	013E36390	Sleeve Bearing	
12	059K65781	Exit Pinch Roller	
13	054K44141	Oct 1 Assembly	
14	-	Sensor (P/O PL 17.2 Item 1)	
15	055E57522	Exit Guide (P/O PL 17.2 Item 13)	
16	-	Clip	



## PL 17.3 Exit 2 (1 of 3)

Part	Description
_	Exit 2 Front Stopper
_	Bearing (P/O PL 17.1 Item 8)
054E35673	Exit 2 Chute (Not Spared)
054E41602	Left Hand High Chute
059K53741	Inverter Roll
413W14760	Sleeve Bearing
_	Gear (22T) (P/O PL 17.1 Item 8)
-	Ground Plate (P/O PL 17.1 Item 8)
_	Exit 2 Drive Assembly
_	Tray 2 Guide (P/O PL 17.3 Item 21)
-	Gate 1 Spring (P/O PL 17.3 Item
	21)
_	Exit Gate (P/O PL 17.3 Item 21)
-	Ground Plate (P/O PL 17.3 Item 21)
925W00001	Eliminator
-	Gate Stopper (P/O PL 17.3 Item 21)
-	Ground Plate (Not Spared)
-	Elimiator
003E75360	Exit 2 Stopper
-	Gear (52T) (Not Spared)
-	Gear Cover
-	Exit 2 Guide Assembly
	Part





0517003A-NWD
# PL 17.4 Exit 2 (2 of 3)

ltem	Part	Description
1	-	Exit 2 OCT Assembly (P/O PL 17.1 Item 8)
2	059E98780	Actuator Roller
3	110E11580	Face Up Tray Detect Switch; L/H High Cover Switch
4	_	Actuator (Not Spared)
5	127K65890	Exit 2 Drive Motor (High Speed)
-	127K58400	Exit 2 Drive Motor (Low Speed)
6	-	Wire Harness (Exit 2) (Not Spared)
7	-	Gear Shaft
8	-	Gear (28T) (Not Spared)
9	-	Gear (16T/48T) (Not Spared)
10	809E37332	Spring
11	-	Rear Cover (Not Spared)
12	-	Shaft Cover (Not Spared)
13	-	Rear Bracket (P/O PL 17.1 Item 8)
14	930W00123	Exit 2, OCT Home Position, Exit 2 Sensor
15	-	Switch Cover (Not Spared)
16	-	Motor Bracket (4475, 5575)
17	_	Gear Shaft (Not Spared) (7545, 7556)



# PL 17.5 Exit 2 (3 of 3)

Item	Part	Description	PL 17 5
1	-	Exit Gate Link (P/O PL 17.1 Item 8)	
2	-	Face Up Gate Solenoid Link (P/O	12
		PL 17.1 Item 8)	
3	-	Bearing (P/O PL 17.1 Item 8)	
4	013E33410	Bearing	S S S S S S S S S S S S S S S S S S S
5	-	OCT 2 Chute (P/O PL 17.1 Item 8)	
6	-	Low 2 Chute (P/O PL 17.1 Item 8)	
7	059K65781	Exit Pinch Roller	12
8	059E03531	Inverter Pinch Roll	
9	-	OCT Roller (P/O PL 17.1 Item 8)	
10	921W11601	Exit 2 Gate Solenoid; Face Up Gate	
		Solenoid	
11	127K60880	Exit 2 OCT Motor (7845/55)	
-	127K52280	Exit 2 OCT Motor (7830/35)	$6 \qquad 23 \qquad 6 \qquad 23$
12	013E36390	Sleeve Bearing	
13	-	Inverter Pinch Shaft (P/O PL 17.1	
		Item 8)	
14	-	Offset 2 Gear (Not Spared)	
15	-	Gear (22T) (P/O PL 17.1 Item 8)	
16	809E99520	Exit Pinch Spring	
17	809E75460	Inverter Pinch Spring	
18	-	Ground Plate (P/O PL 17.1 Item 8)	
19	-	Exit 2 Gate Solenoid Cover (P/O PL	
		11.1 Item 8)	
20	-	Face Up Gate Solenoid Cover (P/O	
04		PL 17.1 Item 8)	
21	-	Connector Cover (P/O PL 17.1 Item	
22	055557504	8) Evit 2 Ouerd	
22	000E0/021	EXILZ GUARU Matar Caver (Nat Sparad)	5 20
23	-	Notor Cover (Not Spared)	
24	-	Clip (Not Spared)	
			$16$ $10$ $\sqrt{2}$
			14 19 /



0517005A-NWD

14

10

# PL 17.6 Side Tray Unit (1 of 2)

Part	Description	PL 17.6
848E21532	Tray Cover	
050K62502	Left Side Output Tray	C
_	Left Side Output Tray Transport	3 { 4 ·
	Assembly (Not Spared)	-
803E04720	Latch Handle	
_	Exit 2 Gate (P/O PL 17.6 Item 3)	
_	Upper Chute (P/O PL 17.6 Item 3)	
-	Pinch Roll (P/O PL 17.6 Item 3)	
-	Spring (P/O PL 17.6 Item 3)	
-	Pinch Spring (P/O PL 17.6 Item 3)	
-	Spring (P/O PL 17.6 Item 3)	
-	Transport Roll Assembly	
	Part 848E21532 050K62502 - 803E04720 - - - - - - - - - - - - - -	PartDescription848E21532Tray Cover050K62502Left Side Output Tray-Left Side Output Tray Transport Assembly (Not Spared)803E04720Latch Handle-Exit 2 Gate (P/O PL 17.6 Item 3)-Upper Chute (P/O PL 17.6 Item 3)-Pinch Roll (P/O PL 17.6 Item 3)-Spring (P/O PL 17.6 Item 3)-Spring (P/O PL 17.6 Item 3)-Transport Roll Assembly





# PL 17.7 Side Tray Unit (2 of 2)

Item	Part	Description
1	_	Link (P/O PL 17.6 Item 11)
2	-	Link Bracket (P/O PL 17.6 Item 11)
3	-	Spacer (P/O PL 17.6 Item 11)
4	-	Bearing (P/O PL 17.6 Item 11)
5	-	Inverter Roll (P/O PL 17.6 Item 11)
6	-	Roll (P/O PL 17.6 Item 11)
7	-	Bearing (P/O PL 17.6 Item 11)
8	-	Gear (52T) (P/O PL 17.6 Item 11)
9	-	Gear (22T)
10	-	Gear Cover (P/O PL 17.6 Item 11)
11	-	Tray Support (P/O PL 17.6 Item 11)
12	-	Exit Guard (P/O PL 17.6 Item 11)
13	-	Cover Assembly (P/O PL 17.6 Item
		11)
14	-	Gear (P/O PL 17.6 Item 11)

PL 17.7





0517007A-NWD

# PL 18.1 PWB Chassis Unit (1 of 2)

Item	Part	Description
1	_	PWB Chassis Unit (Not Spared)
2	117K39082	IIT Control Cable



0518001A-NWD

# PL 18.2A PWB Chassis Unit (Low Speed)

ltem	Part	Description
1	960K61591	Backplane PWB (P/O PL 18.2A
		Item 11) (REP 1.3)
2	-	Fan Wire Harness (P/O PL 18.2A
		Item 11)
3	-	Chassis Assembly (P/O PL 18.2A
		Item 11)
4	960K61271	MDM PWB (P/O PL 18.2A Item 11)
		(REP 1.6)
5	960K61280	MDS PWB (REP 1.4)
6	-	Cable Holder
7	-	SBC Cover (P/O PL 18.2A Item 11)
8	-	SCB Fan (P/O PL 18.2A Item 11)
11	101K63301	PWB Chassis
15	-	Screw (P/O PL 18.2A Item 11)
16	-	Harness Guide (P/O PL 18.2A Item
		11) (REP 1.5)
17	_	Bracket (P/O PL 18.2A Item 11)
18	_	Bracket (P/O PL 18.2A Item 11)
19	960K57361	MCU-PF PWB (REP 1.5)
20	_	Connector (P/O PL 18.2A Item 11)
21	-	EEPROM (P/O PL 18.2A Item 11)



## PL 18.2B PWB Chassis Unit (High Speed)

Item	Part	Description
1	960K60311	Backplane PWB (REP 1.3)
2	-	Fan Wire Harness (P/O PL 18.2B Item 22)
3	-	Chassis Assembly (P/O PL 18.2B Item 22)
4	960K60391	MDM PWB (REP 1.6)
5	960K60400	MDS PWB (REP 1.4)
6	_	Cable Holder
7	-	SCB Cover
8	-	SCB Fan (P/O PL 18.2B Item 22)
11	-	Duct Assembly
12	-	Duct (P/O PL 18.2B Item 11)
13	-	Duct (P/O PL 18.2B Item 11)
15	-	Screw (P/O PL 18.2B Item 22)
16	-	Harness Guide (P/O PL 18.2B Item 22)
17	_	Bracket (P/O PL 18.2B Item 22)
18	_	Bracket (P/O PL 18.2B Item 22)
19	960K57361	MCU-PF PWB (REP 1.5)
20	_	Connector (P/O PL 18.2B Item 22)
21	-	EEPROM (P/O PL 18.2B Item 22)
22	101K61721	PWB Chassis



#### PL 18.3 IOT Rear

ltem	Part	Description
1	_	Harness Guide (Not Spared)
2	-	Harness Guide (Not Spared)
3	-	GFI Chassis Assembly (Not
		Spared)
4	105E20561	IH PWB (120V)
-	105E20631	IH PWB (220V)
5	962K99240	Fuser Harness (120V)
-	952K01361	Fuser Drawer Harness (220V)
6	-	Shield (Not Spared)
7	105E20430	Sub LVPS
8	-	Bracket (Not Spared) (7545, 7556)
9	-	Harness Guide (FAX)

PL 18.3



# PL 18.4 GFI Chassis

ltem	Part	Description
1	908W01201	GFI
2	113E23720	Finisher Outlet
3	-	GFI Chassis (Not Spared)
4	952K02851	Wire Harness (7845/55)
-	952K02841	Wire Harness (XC) (7830/35)
5	-	Bracket (Not Spared)
6	-	Wire Harness (Not Spared)
7	-	Wire Harness (Not Spared)
8	-	Wire Harness (Not Spared)



### PL 18.5 Front/Right

ltem	Part	Description
1	101K65530	Main Power Switch And Harness
2	110E13090	Main Power Switch
3	-	Bracket (P/O PL 18.5 Item 1)
4	-	Wire Harness (P/O PL 18.5 Item 1)
5	110K15981	Power Switch
6	-	Harness Guide (Not Spared)
7	110E14800	Front Cover Interlock Switch
8	130K78581	MOB ADC Assembly (REP 9.16)
9	-	Bracket (Not Spared)
10	-	IBT Front Cover Switch (Not
		Spared)
11	105E20421	Main LVPS





## PL 18.6A Bottom (Low Speed)





0518A06A-NWD

## PL 18.6B Bottom (High Speed)

ltem	Part	Description	Ρ
1	_	HVPS Housing (P/O PL 18.6B Item 4)	
2	-	HVPS Housing (P/O PL 18.6B Item 4)	
3	105E19352	HVPS (BCR) (REP 1.7)	
4	848K36390	HVPS Housing	



#### PL 18.7 Wire Harness

#### PL18.7

- Description Item Part Left Wire Harness (Not Spared) Right Wire Harness (Not Spared) 1 \_ 2
- \_ 3 Right Wire Harness (Not Spared)
- Front Wire Harness (Not Spared) 4 \_





# PL 19.1 Covers (1 of 3)

ltem	Part	Description
1	815E58600	Plate (Y)
2	815E58610	Plate (M)
3	815E58620	Plate (C)
4	815E43300	Plate (K)
5	121E21331	Magnet Catch
6	848E14020	Strip (A)
7	_	Front Cover Assembly (Not Spared
8	-	Front Cover (P/O PL 19.1 Item 7)
9	848E14030	Strip (B) (P/O PL 19.1 Item 7)
10	848K42190	Inner Cover Assembly
11	032K05330	Guide
12	014E63022	Block
13	-	Logo Badge (Not Spared)
14	-	Tapping Screw
15	848K44762	Front Cover Assembly w/ Logo Badge



# PL 19.2 Covers (2 of 3)

ltem	Part	Description
1	050E25450	Add Tray (High Speed)
-	050E25690	Add Tray (Low Speed)
2	050E25661	Exit 2 Tray
3	-	Top Cover (Not Spared)
4	-	MSI Front Cover
5	-	Left Rear Upper Cover (Not
		Spared)
6	-	Number Label (5) (Not Spared)
7	-	Left Rear Lower Cover
8	-	Left Upper Cover (Not Spared)
9	-	Exit Front Cover (Not Spared)
10	-	Exit Upper Cover (Not Spared)
11	-	Top Rear Cover (Not Spared)
12	848E45051	Front Left Cover



# PL 19.3 Covers (3 of 3)

ltem	Part	Description
1	_	Right Cover (Not Spared)
2	-	Right Rear Cover (Not Spared)
3	-	Rear Lower Cover (Not Spared)
4	-	Rear Upper Cover (Not Spared)
5	-	DFE Outlet Cover (Not Spared)
6	-	Filter Cover (Not Spared)
7	-	MCU Cover (Not Spared)
8	-	Data Plate (Not Spared)
10	-	Label (Outlet) (Not Spared)
11	-	GFI Label (Not Spared)
12	-	Rear Control Unit Cover (Not
		Spared)
13	-	Control Unit Connector Cover (Not
		Spared)
14	-	DFE Cover (Not Spared)



#### PL 21.1 Professional Finisher

ltem	Part	Description
1	-	A/P Finisher (Not Spared) (REP
		21.11)
2	059K66485	H-Transport Assembly (REP 21.12)
3	-	Booklet Maker (Not Spared) (REP
		21.16)
4	-	Booklet Tray (Not Spared)
5	-	Decurler Transport Assembly (Not
		Spared)
6	-	Finisher Plate (Not Spared)



# PL 21.2 Finisher Cover (1 of 2)

ltem	Part	Description
1	802E78090	Top Cover (REP 21.4)
2	038E31290	Tray Spring Guide (Not Spared) (REP 21.8)
3	050K51270	Top Tray (REP 21.6)
4	-	Eject Cover (Not Spared) (REP 21.7)
5	050K51280	Stacker Tray (REP 21.19)
6	_	Bottom Cover (Not Spared)
7	017E98040	Caster
8	017E97230	Caster
9	-	Rear Lower Cover (Not Spared) (REP 21.3)
10	-	H-Transport Connector Cover (Not Spared)
11	_	Rear Upper Cover (Not Spared) (REP 21.2)
12	_	Nut M12X1.25 (Not Spared)



### PL 21.3 Finisher Cover (2 of 2)



#### PL 21.4 Finisher Stack

Item	Part	Description		1
1	_	Stacker Tray Bracket (Not Spared)	2{3-5	s /
2	041K94721	Left Carriage Assembly	8 { 9 - 12	S
3	_	Stacker Drive Belt (P/O PL 21.4		S L
		Item 2) (REP 21.21)	24 { 25, 26, 28	
4	_	Left Carriage Bracket (P/O PL 21.4		
		Item 2)	17 (ENCODER)	
5	_	Belt Clamp (P/O PL 21.4 Item 2)	$\langle 23 \rangle$	
6	809E56850	Spring	and I	
7	013E27150	Carriage Bearing	s as	
8	041K94970	Right Carriage Assembly		
9	-	Stacker Drive Belt (P/O PL 21.4	22 S	S S S S S S S S S S S S S S S S S S S
		Item 8) (REP 21.21)	s_	
10	-	Belt Clamp (P/O PL 21.4 Item 8)	26-5	
11	-	Right Carriage Bracket (P/O PL	P	
		21.4 Item 8)		
12	-	Stacker Sensor Actuator (P/O PL		
		21.4 Item 8)		
13	802K67140	Stack Height Sensor (Front, Rear)		S S
14	-	Elevator Drive Shaft (Not Spared)	21.00	
15	413W11860	Bearing		
16	020E37720	Pulley (18T)		
17	130K88770	Stacker Encoder Sensor, Stacker		
10	000507740	No Paper Sensor (No Paper)	♥ ♥ E-@-	S S
18	020E37710	Clutch Pulley	~   ·	
19	807E04730	Clutch Gear	27 ( LIMIT )	
20	809E56860	Spring		
21	-	wasner		
22	- 146E01770	Sensor Bracket (Not Spared)	17 ( NO PAPER )	
23	140E01770	Slacker Elicouer	. , ,	
24	015109750	Elevator Motor Drive Bolt (D/O DI		
25	_	21  A Item  24		
26	_	Elevator Motor (P/O PL 21.4 Item		
20		24)	16	
27	_	Upper Limit Sensor (Limit)		
28	_	Bracket (P/O PL 21.4 Item 24)	E	29
29	962K61050	Stack Height Front Harness	v	
		Assembly		
		2		
			$\triangleleft$	
				₩U <sup>™</sup> E · B

0521004A-NWD

#### PL 21.5 Finisher Punch

Item	Part	Description	1{2-8
1	801K30940	2/4 Hole Punch Assembly (REP 21.13)	6{8,21
2	-	Puncher Unit Harness (P/O PL 21.5 Item 9)	9{2,6-16
3	-	Puncher Motor Cover (P/O PL 21.5 Item 1)	14{12, 13, 23 18{17, 22
4 5	015K65880 -	Puncher Move Motor Frame Assembly Holder (P/O PL 21.5 Item 1)	
6	-	Sensor Registration Bracket Assembly (P/O PL 21.5 Item 1)	
7	-	Front Punch Cover (P/O PL 21.5 Item 1)	
8	-	Side Registration Sensor 1 (Reg 1) and 2 (Reg 2) (P/O PL 21.5 Item 1)	
9	-	2/3 Hole Punch Bracket Assembly	
10	-	Left Punch Cover (P/O PL 21.5 Item 9)	
11	-	Guide Assembly (P/O PL 21.5 Item 9)	
12	127K40260	Punch Motor Assembly	
13	-	Punch Motor Sensor (P/O PL 21.5 Item 9)	
14 15	_	Punch Motor Bracket Assembly Front Punch Sensor (Front), Home Punch Sensor (Home), Hole Select Punch Sensor (Hole) (P/O PL 21.5 Item 9)	
16	-	Sensor Bracket (P/O PL 21.5 Item 9)	
17	-	Punch Move Home Sensor (P/O PL 21.5 Item 18)	
18	-	Punch Move Home Sensor Assembly	
19	060E91300	Puncher Waste Bin	
20	130K88770	Puncher Box Set Sensor	
21	-	Bracket (P/O PL 21.5 Item 1)	
22	-	Bracket (P/O PL 21.5 Item 18)	
23	-	Motor Bracket (P/O PL 21.5 Item 14)	
24	_	Bracket (Not Spared)	



0521005A-OAK

### PL 21.6 Finisher Stapler

ltem	Part	Description
1	050K51250	Staple Cartridge
2	029K92350	Stapler Assembly (REP 21.14)
3	_	Stapler Cover (Not Spared)
4	_	Stapler Holder (Not Spared)
5	130K88770	Stapler Move Position Sensor
6	-	Stapler Harness Guide (Not
		Spared)
7	962K59060	Staple Harness
8	_	Upper Stapler Carriage (Not
		Spared)
9	041K94970	Stapler Move Motor
10	001E66640	Stapler Rail (REP 21.15)
11	_	Stapler Frame (Not Spared)



0521006A-OAK

# PL 21.7 Finisher Eject (1 of 3) Item Part Description

ltem	Part	Description	1 { 2, 28	
1	-	Eject Chute Assembly	7 3 6 27	28 2
2	121E92720	Magnet	7 { 3 - 0, 27	
3	-	Sub Paddle Solenoid	10 { 11, 31	
4	-	Solenoid Bracket (P/O PL 21.7 Item 29)	29 { 1 - 4, 6, 7, 27	5
5	809E56870	Pinch Spring		
6	-	Cyclone Paddle (P/O PL 21.7 Item 29)		
7	121K35710	Sub Paddle Solenoid Assembly		
8	-	Solenoid Spring	07	
9	006K23861	Paddle Shaft	27	
10	-	Eject Clamp Motor Assembly	$\backslash$	
11	127K52690	Eject Clamp Motor	$\mathbf{X}_{\mathbf{r}}$	
12	-	Eject Clamp Bracket (P/O PL 21.7		
		Item 10)		
13	130K70160	Eject Clamp Home Sensor		
14	011697710	Eject Cam Follower	11 a <sup>s</sup>	
10	413W11000	Dusining Coor (22T)	31	
17	-	Bushing	and h	° 9
18		Cam Gear (70T)		
19	807E08990	Gear (23T)	s s	
20	807E20800	Gear (68T/20T)		20 20
21	_	Wire Clip (Not Spared)		
22	-	Switch Bracket (Not Spared)	S I IIIIII	
23	-	Eject Cover Switch	12	
24	-	Entrance Knob (Not Spared)	12 10	
25	-	Wire Clamp (Not Spared)		
26	-	Wire Clip (Not Spared)	NAR S VE	
27	-	Eject Pinch Shaft (P/O PL 21.7 Item	Hale 40	
		7, PL 21.7 Item 29)		
28	-	Eject Chute (P/O PL 21.7 Item 1)	14	
29	-	Eject Chute Unit Assembly (REP	14 15 /	
20	422\1/20454	21.28) Polt	16 17	S
30	4231129404	Dell Motor Procket (D/O DL 21 7 Item		S S S S S S S S S S S S S S S S S S S
31	-			
		10)		the second
				S S S S S S S S S S S S S S S S S S S

0521007A-NWD

## PL 21.8 Finisher Eject (2 of 3)

ltem	Part	Description
1	050K65131	Compiler Tray Assembly (REP 21.18)
2	130K88770	Tamper Home Sensor (Front, Rear)
3	130K70160	Compiler Tray No Paper Sensor, Set Clamp Home Sensor
4	120E24290	Sensor Actuator
5	-	Torsion Spring (P/O PL 21.8 Item 20)
6	-	Front Tamper Motor (Not Spared)
7	_	Rear Tamper Motor (Not Spared)
8	962K59070	Compiler Harness
9	006K86372	Eject Roll Shaft Assembly
10	033E93751	Set Paddle Clamp
11	-	Paddle Guide (Not Spared)
12	-	Bushing (Not Spared)
13	-	Bushing (Not Spared)
14	807E04760	Gear (39T)
15	121K34631	Set Clamp Clutch (34T)
16	120E29570	Set Clamp Actuator
17	049K02710	Eject Motor Bracket Assembly
18	-	Motor (P/O PL 21.8 Item 17)
19	-	Inner Cover (Not Spared) (REP 21.9)
20	-	Actuator Kit



0521008A-OAK

## PL 21.9 Finisher Eject (3 of 3)

Item	Part	Description
1	-	Sensor Bracket Assembly (Not Spared)
2	-	Compiler Sensor Harness (P/O PL 21.9 Item 1)
3	130K88190	Compiler Exit Sensor
4	105E13100	Static Eliminator
5	-	Upper Exit Chute (Not Spared)
6	-	Lower Exit Roll (Not Spared)
7	-	Lower Exit Roll Chute Assembly
8	-	Lower Exit Roll Chute (P/O PL 21.9 Item 7)
9	-	Bushing (P/O PL 21.9 Item 7)
10	022K67870	Exit Pinch Roller 1
11	022K67880	Exit Pinch Roller 2
12	006K87430	Paddle Shaft (REP 21.20)
13	-	Synchronous Belt (55T)
14	-	Pulley (17T) (Not Spared)
15	-	Paddle Drive Shaft (Not Spared)
16	-	Pulley (Not Spared)
17	-	Bearing (Not Spared)
18	020E37690	Pulley (20T)
19	807E10820	Gear (23T)
20	020E37660	Pulley (20T)
21	020E37670	Pulley (44T/20T)
22	807E04780	Gear (23T)



0521009B-OAK

# PL 21.10 Finisher Transport (1 of 2)

ltem	Part	Description
1	-	Lower Exit Chute Assembly (Not Spared)
2	-	Pinch Roller (P/O PL 21.10 Item 1)
3	-	Spring (P/O PL 21.10 Item 1)
4	-	Shaft (P/O PL 21.10 Item 1)
5	-	Torsion Spring (P/O PL 21.10 Item 1)
6	809E56910	Transport Gate
7	050K65450	Buffer Gate Assembly
8	121E92720	Magnet
9	-	Bushing
10	-	Top Buffer Chute Assembly (Not Spared)
11	-	Sensor Bracket (Not Spared)
12	130K88190	Buffer Path Sensor (REP 21.22)
13	022K67891	Buffer Roll (REP 21.25)
14	054K27160	Bottom Buffer Chute Assembly (REP 21.26)
15	-	Exit Pinch roller (P/O PL 21.10 Item 14)
16	054K38821	Upper Entrance Chute Assembly (XE)
17	-	Entrance Pinch Roller
18	-	Sensor Bracket (P/O PL 21.10 Item 14,
		PL 21.10 Item 16)
19	130E87370	Transport Entrance Sensor
20	022K67811	Entrance Roll
21	127K40282	Finisher Transport Motor
22	-	Motor Bracket (Not Spared)
23	423W87054	Finisher Transport Motor Belt
24	020E43210	Pulley
25	-	Tension Spring (Not Spared)
26	-	Iension Bracket (Not Spared)
27	4130066250	Bearing
28	-	Gear (461)
29	020E37660	Pulley (201)
30	012E11991	
31	-	Gear (231)
32	000000200	Transport Gale Solenoid
33	012E11960	Transport Link Realist Cate Calencid
34	01000021	Booklet Cate
30	05060610	$\frac{1}{2} \frac{1}{2} \frac{1}$
30	-	Duffer Cote
31	-	Duiler Gale Quide $(P/Q PL 21 \ 10 \ \text{Itom} 7)$
20	-	Upper Entropee Chute (P/O PL 21.10
29	-	Item 16)
40	-	Guide (P/O PL 21 10 Item 16)
41	_	Harness Guide
42	_	Wire Harness (P/O PL 21 10 Item 16)
43	_	Lower Exit Chute (P/O PL 21.10 Item 1)
44	068K55840	Buffer Gate Solenoid
·		



## PL 21.11 Finisher Transport (2 of 2)

Item	Part	Description
1	054K38200	Top Tray Exit Baffle Assembly (Not
		Spared)
2	130K88190	Top Tray Exit Sensor
3	022K74720	Left Exit Pinch Roller
4	-	Top Tray Lower Exit Baffle (Not Spared)
5	022K75720	Exit Drive Shaft
6	-	Sensor Bracket (Not Spared)
7	130E87370	Top Tray Full Sensor (REP 21.24)
8	-	Magnet (Not Spared)
9	-	Bushing
10	054K28220	Upper Exit Chute Assembly
11	-	Pinch Roller (P/O PL 21.11 Item 10)
12	-	Spring (P/O PL 21.11 Item 10)
13	-	Shaft (P/O PL 21.11 Item 10)
14	-	Chute Assembly
15	130E87410	Gate Sensor (REP 21.23)
16	-	Sensor Harness (Not Spared)
17	-	Sensor Bracket (Not Spared)
10	UZZK7 1431	Transport Roll Dulloy (527/227)
19	-	Pulley (531/231)
20	413000100	Bulloy (20T)
21	020E37090	Fulley (201) Pulley (Not Spared)
22	-	Tonsion Bracket (Not Spared)
23	_	Tension Spring (Not Spared)
25		Pulley (20T/20T)
26	807E04720	Gear (20T)
27	423W40054	Registration Motor Drive Belt
28	423W86454	Exit Motor Drive Belt
29	_	Motor Bracket (Not Spared)
30	127K40282	Registration Motor (Reg) and Exit Motor
		(Exit)
31	-	Upper Exit Chute (P/O PL 21.11 Item 10)
32	022K74730	Right Exit Pinch Roll
33	-	Booklet Entrance Roll (Not Spared)
34	054K27641	Booklet Chute Assembly
35	-	Chute Assembly (P/O PL 21.11 Item 34)
36	-	Booklet Chute (P/O PL 21.11 Item 34)
37	-	Torsion Spring (P/O PL 21.11 Item 34)
38	-	Pinch Roll Assembly
39	-	Plate (Not Spared)
40	054K27650	Booklet Upper Chute
41	121E92720	Magnet
42	054E27390	Lower Entrance Chute
43	020E44920	Ball Pulley



#### PL 21.12 Finisher Electrical

Item	Part	Description
1	-	Left Harness Guide (Not Spared)
2	-	Right Harness Guide (Not Spared)
3	960K51453	Finisher PWB (REP 21.29)
4	-	Finisher PWB Cover (Not Spared)
5	-	Finisher PWB Cover (Not Spared)
6	962K38740	AC Inlet Harness
7	105E15200	Finisher LVPS
8	-	LVPS Wire Harness (Not Spared)
9	-	Screw (Not Spared)
10	960K31130	AC Filter
11	-	Bracket (Not Spared)
12	962K67080	I/F Finisher Cable
13	-	Harness Assembly (Not Spared)
14	-	Harness Guide (Not Spared)
15	-	Harness Guide (Not Spared)
16	-	Connector Plate (Not Spared)
17	962K29160	Harness
18	960K04681	H-Transport PWB



0521012B-OAK

#### PL 21.13 Finisher Harness

ltem	Part	Description
1	_	Main Sensor Harness (Not Spared)
2	-	Main Drive Harness (Not Spared)
3	-	Interface Harness (Not Spared)
4	-	Transport Entrance Sensor
		Harness (Not Spared)
5	-	Buffer Sensor Harness (Not
		Spared)
6	_	Top Exit Sensor Harness (Not
		Spared)
7	-	Top Sensor Harness (Not Spared)
8	-	Punch Drive Harness (Not Spared)
9	-	Punch Sensor Harness (Not
		Spared)
10	-	LVPS Harness (Not Spared)
11	962K58950	Interlock Harness
12	960K54831	Booklet PWB



0521013B-OAK

#### PL 21.15 Booklet Accessory

ltem	Part	Description
1	-	Tray Guide Assembly (Not Spared)
2	-	Screw (Not Spared)
3	-	Right Rail
4	-	Wire Harness
5	050K62855	Booklet Tray Assembly
6	-	Knob Screw (Not Spared)
7	130K88770	Booklet Drawer Set Sensor
8	-	Label (Not Spared)
9	-	Label (Not Spared)
10	-	Label (Not Spared)
11	015K79780	Right Side Assembly
12	801K29032	Booklet Drawer Assembly
13	-	Left Rail
14	015K67980	Left Rail Assembly
15	068K55260	Connector Assembly
16	962K59080	Wire Harness
17	962K59090	Wire Harness
18	962K59100	Wire Harness



## PL 21.16 Booklet Component (1 of 7)

Item

Part	Description		
_	Right Stapler Rail		
423W45954 -	Belt Harness Cover (P/O PL 21.15 Item	20 { 11 - 15, 28	
_	12) Bearing (P/O PL 21.15 Item 12)	26 { 3 - 9, 16, 21 - 23, 25, 27, 30 , 31	
499W14432	Gear (31T)	(B) ~	1
005E24900	Collar		
-	Shaft (P/O PL 21.15 Item 12) Ball Boaring (P/O PL 21.15 Item		$\sim 1$
-	12)		
003E63390	Knob	29	
_	Bracket (P/O PL 21.15 Item 12)	11 (1/2Pcs) 14-	20
-	Staple (REP 21.17)		<sup>20</sup> _15 /
-	Latch		28 5 /
-	Stapler Base (P/O PL 21.15 Item		
_	12) Front Cover		· 12
_	Paper Guide	23 $19$ $17$	
_	Left Cover (P/O PL 21.15 Item 12)	31	X (°)
-	Left Stapler Rail (P/O PL 21.15 Item		
	12)		La bit
-	Label (P/O PL 21.15 Item 12)		
- 020K02175	Label (P/O PL 21.15 item 12) Booklet Stapler Unit	30 17	13
-	Front Cover (P/O PL 21.15 Item 12)		
_	Cover (P/O PL 21.15 Item 12)		
-	Paper Guide (Clinch)		
-	Label (4a) (P/O 21.15 Item 12)		-
105E15120	Eliminator		( 9
-	Booklet Assembly (P/O PL 21.15		/ /
_	Frame Assembly (P/O PL 21 15		ma l
	Item 12)		6 <del>8</del> (G-)
_	Paper Guide (P/O PL 21.16 Item		m /
	20)		24
-	Label (Not Spared)		
020E45160	Pulley		
-	Guide		
			Left Front
		16'	
			0521016B-OAK

## PL 21.17 Booklet Component (2 of 7) (End Guide)

Item	Part	Description	1 { 2 - 17, 19 - 21, 24 7
1	054K39250	Compile Chute Assembly	23
2	127K51990	Booklet End Guide Motor	14 \ 11 - 13
3	-	Pulley (P/O PL 21.17 Item 1)	
4	-	Gear Pulley (40T/20T) (P/O PL	
		21.17 Item 1)	
5	-	Washer (P/O PL 21.17 Item 1)	
6	-	Belt (P/O PL 21.17 Item 1)	A MARINA AND A
7	130K70160	Booklet End Guide Home Sensor	
8	-	Shaft (P/O PL 21.17 Item 1)	
9	-	Bracket (P/O PL 21.17 Item 1)	
10	-	Gear (14T) (P/O PL 21.17 Item 1)	
11	-	Booklet Paddle Motor (P/O PL	
		21.17 Item 1, PL 21.17 Item 14)	
12	-	Gear (14T) (P/O PL 21.17 Item 1,	
		PL 21.17 Item 14)	$\mathbb{B}$ $\mathbb{A}$ $\mathbb{A}$ $\mathbb{A}$
13	-	Bracket (P/O PL 21.17 Item 1, PL	
		21.17 Item 14)	
14	-	Booklet Paddle Motor Assembly	
		(P/O PL 21.17 Item 1)	
15	-	Belt Clamp (P/O PL 21.17 Item 1)	
16	-	Paddle Bracket (P/O PL 21.17 Item	
		1)	8 8
17	-	Paddle Shaft Assembly (P/O PL	
		21.17 Item 1)	
18	-	Chute (Rear) (P/O PL 21.17 Item	
		1)	
19	-	End Guide (P/O PL 21.17 Item 1)	
20	-	Support Bracket (P/O PL 21.17	
		Item 1)	
21	-	Adjust Bracket (P/O PL 21.17 Item	
		1)	
22	-	Compile Chute (P/O PL 21.17 Item	
		1)	
23	-	Chute (Front) (P/O PL 21.17 Item	
		1)	
24	-	Gear (14T) (P/O PL 21.17 Item 1)	
25	-	Guide (Not Spared)	

## PL 21.18 Booklet Component (3 of 7)

ltem	Part	Description
1	_	Bracket (P/O PL 21.15 Item 12)
2	-	Wire Harness (Not Spared)
3	130K70160	Knife Home Sensor, Knife Folder
		Sensor
4	-	Chute (P/O PL 21.15 Item 12)
5	-	Shaft (P/O PL 21.18 Item 20)
6	-	Actuator (Not Spared)
7	413W11860	Bearing
8	-	Joint (P/O PL 21.18 Item 20)
9	-	Shaft (P/O PL 21.18 Item 20)
10	-	Shaft (P/O PL 21.18 Item 20)
11	-	Bearing (P/O PL 21.18 Item 20)
12	-	Bracket (P/O PL 21.18 Item 20)
13	-	Knife Bracket Assembly (P/O PL
		21.18 Item 20)
14	-	Guide (P/O PL 21.18 Item 20)
15	-	Shaft (P/O PL 21.18 Item 20)
16	-	Shaft (P/O PL 21.18 Item 20)
17	807E02061	Gear (42T)
18	-	Bracket (P/O PL 21.15 Item 12)
19	130E87410	Booklet Compile No Paper Sensor
20	015K75682	Knife Assembly
21	-	Tie Plate (P/O PL 21.18 Item 20)
22	-	Edge Saddle (P/O PL 21.18 Item
		20)
23	-	Clamp (Not Spared)



0521018B-OAK

# PL 21.19 Booklet Component (4 of 7)

ltem	Part	Description
1	-	Front Tamper Guide
2	-	Rear Tamper Guide (P/O PL 21.15 Item 12)
3	_	Clamp (P/O PL 21.15 Item 12)
4	_	Clamp (P/O PL 21.15 Item 12)
5	032E27380	Guide
6	-	Frame (P/O PL 21.15 Item 12)
7	130K88770	Booklet Tamper Home Sensor
8	-	Static Eliminator (P/O PL 21.15
		Item 12)
9	127K58040	Booklet Tamper Motor
10	-	Bracket (P/O PL 21.15 Item 12)
11	038K18720	Compile Guide



## PL 21.20 Booklet Component (5 of 7)

Item	Part	Description
1	022K71020	Booklet Pre-Folding Roll
2	022K71040	Booklet Pre-Folding Nip Roll
3	022K66870	Booklet Folding Roll
4	022K66880	Booklet Folding Nip Roll
5	-	Ball Bearing (P/O PL 21.15 Item
6		IZ) Shoft (P/O PL 21 15 Itom 12)
7	_	$\frac{(F/O F E 21.15 \text{ ltem 12})}{\text{Rearing } (P/O PL 21.15 \text{ ltem 12})}$
8		Tension Plate 1
9	-	Spring (P/O PL 21.15 Item 12)
10	815E44920	Tension Plate 2
11	-	Spring (Not Spared)
12	-	Booklet Eject Roll (P/O PL 21.15
		Item 12)
13	020E37140	Pulley (16T)
14	815E36110	Spring Plate
15	807E02040	Gear Pulley (20T/25T)
16	-	Belt (P/O PL 21.15 Item 12)
17	007E89980	Gear (16T)
18	007E89990	Gear (38T/18T)
19	007E89970	Gear (18T)
20	807E09510	Gear (16T)
21	007E77770	Gear (38T)
22	022E96060	Roll



# PL 21.21 Booklet Component (6 of 7) (Chute)

ltem	Part	Description
1	_	Chute (P/O PL 21.15 Item 12)
2	-	Static Eliminator (P/O PL 21.15 Item 12)
3	-	Screw (P/O PL 21.21 Item 15)
4	-	Bracket (P/O PL 21.15 Item 12)
5	130E87370	Booklet In Sensor
6	-	Pinch Roll (P/O PL 21.15 Item 12)
7	-	Chute (P/O PL 21.15 Item 12)
8	-	Booklet In Roll (P/O PL 21.15 Item 12)
9	-	Ball Bearing (P/O PL 21.15 Item 12)
10	-	Gear (16T) (P/O PL 21.15 Item 12)
11	-	Shaft (P/O PL 21.15 Item 12)
12	-	Harness Cover (P/O PL 21.15 Item 12)
13	-	Bearing (P/O PL 21.15 Item 12)
14	-	Gear (17T) (P/O PL 21.15 Item 12)
15	054K33910	Upper Exit Chute Assembly
16	003E63380	Knob
17	-	Static Eliminator (P/O PL 21.15 Item 12)
18	-	Upper Exit Chute (P/O PL 21.21 Item 15)
19	_	Bracket (P/O PL 21.15 Item 12)
20	-	Wire Harness (P/O PL 21.15 Item 12)
21	130E87410	Booklet Folder Roll Exit Sensor
22	-	Lower Exit Chute (P/O PL 21.21 Item 15)
23	121E92720	Magnet



0521021B-OAK
#### PL 21.22 Booklet Component (7 of 7)

Item	Part	Description
1	-	Bracket (P/O PL 21.15 Item 12)
2	127K52400	Booklet Fold Motor
3	_	Bracket (P/O PL 21.15 Item 12)
4	127K51990	Booklet Paper Path Motor
5	-	Bracket (P/O PL 21.15 Item 12)
6	-	Bracket (P/O PL 21.15 Item 12)
7	007E77620	Gear (45T)
8	807E20000	Gear (43T/14T)
9	007E77600	Gear (44T/16T)
10	120E28080	Knife Solenoid
11	807E01750	Gear (27T/34T)
12	-	Ball Bearing (P/O PL 21.15 Item
		12)
13	809E41620	Spring
14	962K57710	Wire Harness
15	962K57680	Wire Harness
16	962K57690	Wire Harness
17	-	Bracket (P/O PL 21.15 Item 12)
18	-	Bracket (P/O PL 21.15 Item 12)
19	-	Bracket (P/O PL 21.15 Item 12)
20	-	Spring (P/O PL 21.15 Item 12)
21	-	Spacer (P/O PL 21.15 Item 12)
22	807E02080	Gear (48T/18T)
23	049K00770	Link
24	-	Belt (P/O PL 21.15 Item 12)
25	807E19210	Gear Pulley (41T/14T)



0521022-OAK

#### PL 21.23 Booklet Tray Component

ltem	Part	Description
1	-	Tray
2	-	Upper Tray (P/O PL 21.15 Item 5)
3	-	Bracket (P/O PL 21.15 Item 5)
4	127K58932	Tray Belt Drive Motor
5	-	Bracket (P/O PL 21.15 Item 5)
6	-	Spring (P/O PL 21.15 Item 5)
7	-	Gear Pulley (P/O PL 21.15 Item 5)
8	-	Roll (P/O PL 21.15 Item 5)
9	-	Belt (P/O PL 21.15 Item 5)
10	-	Pulley (P/O PL 21.15 Item 5)
11	-	Bearing (P/O PL 21.15 Item 5)
12	-	Roll (P/O PL 21.15 Item 5)
13	-	Shaft (P/O PL 21.15 Item 5)
14	-	Shaft (P/O PL 21.15 Item 5)
15	930W00112	Booklet No Paper Sensor
16	-	Bracket (P/O PL 21.15 Item 5)
17	-	Actuator (P/O PL 21.23 Item 21)
18	-	Spring (P/O PL 21.23 Item 21)
19	-	Bracket (P/O PL 21.15 Item 5)
20	-	Lower Tray (P/O PL 21.15 Item 5)
21	-	Bracket (P/O PL 21.15 Item 5)
22	023E27160	Belt



0521023B-OAK

#### PL 21.24 H-Transport (1 of 5)

Item	Part	Description
1	-	H-Transport Assembly (REF: PL 21.1 Item 2) (REP 21.12)
2	003K17251	Knob
3	-	Lower Chute Assembly (P/O PL 21.24 Item 1)
4	-	Left Upper Chute Assembly
5	059K55857	Decurler Transport Assembly
6	423W27054	Belt
7	-	Connector Cover (P/O PL 21.24 Item 1)
8	_	Bracket (P/O PL 21.24 Item 1)
9	_	Decurler Front Cover (P/O PL
		21.24 Item 1)
10	848E18480	Rear Cover
11	848E18490	Decurler Rear Cover
12	848E18501	Decurler Right Hand Cover
13	848E18522	Decurler Top Cover
14	-	Top Cover Assembly (P/O PL 21.24
		Item 1)
15	-	Stud Bracket (P/O PL 21.24 Item 1)
16	962K61011	Wire Harness
17	-	Shield (P/O PL 21.24 Item 1)
18	-	Shield (P/O PL 21.24 Item 1)



#### PL 21.25 H-Transport (2 of 5)

ltem	Part	Description
1	_	Top Cover Assembly (Not Spared)
2	-	Hinge Assembly (P/O PL 21.25 Item 1)
3	-	Bracket (P/O PL 21.25 Item 1)
4	-	Pinch Roll Assembly (P/O PL 21.25
		Item 1, PL 21.25 Item 9)
5	-	Upper Chute (P/O PL 21.25 Item 1, PL 21.25 Item 9)
6	_	Upper Plate Chute (P/O PL 21.25
		Item 1, PL 21.25 Item 9)
7	-	Upper Chute Spring (Not Spared)
8	848K37393	Top Cover Assembly
9	054K35352	Upper Chute Assembly



#### PL 21.26 H-Transport (3 of 5)

Item	Part	Description	1 [ 0 04		
1	_	Lower Chute Assembly	{ Z - Z		
2	005E19650	Clutch	4454 40		
3	011E16881	loint	14 { 4, 16	<b>1</b>	
4	020E37740	Pulley		$    \qquad	
5	020E37740	Pulley		BL I DI	
5	020045020	Bullov			
7	020E45050				
1	020E45640	Pulley	p= p=1 1/		
0	059655790	Roll Assembly	12 / AC /		
9	_	Roll Shaft Assembly (P/O PL 21.26	' 13 🖱 🔀		
40	4001/70400	Item 1)			
10	130K70160	H-Transport Interlock Sensor			
11	-	Sensor Bracket (P/O PL 21.26 Item			
		1)			
12	-	H-Transport Entrance Sensor (P/O			
		PL 21.26 Item 1)	i i	18	
13	-	Sensor Bracket (P/O PL 21.26 Item			
		1)			
14	068K58521	Tension Bracket Assembly	jan, I		
15	-	Belt (P/O PL 21.24 Item 6)			
16	-	Bracket Assembly Tension (P/O PL	10 500	A 1 16	
		21.26 Item 14)	11 AC		
17	121E92720	Magnet	11		
18	-	Spring (Not Spared)		$  \langle \mathbf{x} \rangle = \frac{2}{3}   \mathbf{x}  $ 15	
19	-	Bearing (Not Spared)			
20	-	Sleeve Bearing (Not Spared)			
21	-	H-Transport Drive Belt (Not Spared)			2
		(REP 21.27)		BL	Y
			/ 9	19 BL $4 C$	
				$19$ $x^{BL}$ $7$	
				BL 21	
			a the second sec	19	
			I_BL	<b>9</b>	
			N Ø		
				BL V	
			20 N 🔍		
				T BL	
				20 N 2 8	
				20	
					>
				<u> </u>	- 1



#### PL 21.27 H-Transport (4 of 5)

Item	Part	Description
1	007K14910	One Way Gear Assembly
2	008E96860	Decurler Cam
3	-	Bracket (P/O PL 21.24 Item 5)
4	130K70160	H-Transport Interlock Sensor-R,
		Decurler Cam Home Sensor
5	-	Sensor Bracket (P/O PL 21.24 Item
		5)
6	-	Actuator (P/O PL 21.24 Item 5)
7	121K41980	Decurler Cam Clutch
8	-	Bearing (P/O PL 21.24 Item 5)
9	-	Bearing (P/O PL 21.24 Item 5)
10	-	Shaft (P/O PL 21.24 Item 5)
11	807E24170	Knob Gear (18T)
12	807E24180	Gear (18T)
13	807E24190	Gear (16T)
14	-	Bracket (P/O PL 21.24 Item 5)
15	-	Harness Bracket (P/O PL 21.24
		Item 5)
16	-	Sensor Bracket (P/O PL 21.24 Item
		5)
17	801K30761	Decurler Frame Assembly





#### PL 21.28 H-Transport (5 of 5)

tem	Part	Description
1	-	Collar (P/O PL 21.24 Item 5)
2	_	Shaft (P/O PL 21.24 Item 5)
3	_	Gear (P/O PL 21.24 Item 5)
4	031E97550	Arm
5	-	Decurler Upper Chute Assembly
		(P/O PL 21.24 Item 5)
6	_	Decurler Lower Chute Assembly
		(P/O PL 21.24 Item 5)
7	059K55801	Decurler Roll Assembly
8	068K58501	H-Transport Exit Sensor
9	-	Bearing (P/O PL 21.24 Item 5)
10	-	Bearing (P/O PL 21.24 Item 5)
11	-	Bearing (P/O PL 21.24 Item 5)
12	423W29254	Belt
13	423W26654	Belt
14	-	Shaft (P/O PL 21.24 Item 5)
15	-	Gear (16T) (P/O PL 21.24 Item 5)
16	-	Gear (18T/36T) (P/O PL 21.24
		Item 5)
17	-	Gear (24T/20T) (P/O PL 21.24
		Item 5)
18	-	Gear (27T/18T) (P/O PL 21.24
		Item 5)
19	-	Harness Bracket (P/O PL 21.24
		Item 5)
20	-	Decurler Shield (P/O PL 21.24 Item
		5)
21	-	Plate (P/O PL 21.28 Item 23)
22	-	H-Transport Motor (P/O PL 21.28
		Item 23)
23	127K57061	H-Transport Motor Assembly



# PL 22.1 Finisher Assembly (Part 1 of 2) (Integrated Office Finisher)

Part	Description
848K36702	Front Cover Assembly
-	Front Cover (P/O PL 22.1 Item 1)
-	Bracket (P/O PL 22.1 Item 1)
-	Magnet (P/O PL 22.1 Item 1)
-	Label (P/O PL 22.1 Item 1)
848E50760	Front Inner Cover
068K29871	Hinge
068K29880	Hinge
848K38630	Top Cover Assembly
-	Top Cover (P/O PL 22.1 Item 9)
-	Bracket (P/O PL 22.1 Item 9)
-	Stopper (P/O PL 22.1 Item 9)
-	Magnet (P/O PL 22.1 Item 9)
848E50790	Rear Cover
-	Hinge (Not Spared)
815E60280	IIT Cover
042E92330	Eliminator
	Part 848K36702 - - - 848E50760 068K29871 068K29880 848K38630 - - - 848E50790 - 848E50790 - 815E60280 042E92330



# PL 22.2 Finisher Assembly (Part 2 of 2) (Integrated Office Finisher)

ltem	Part	Description
1	_	Bottom Cover (Not Spared)
2	_	Spacer (Not Spared)
3	_	Tray Cover (Not Spared)
4	848E50770	Left Cover
5	068K69530	Tray Support
6	-	Rear Bracket (Not Spared)
7	962K42291	Wire Harness
8	050K64830	Stacker Tray Assembly (REP 22.16)
9	_	Stacker Base Assembly (Not
		Spared)
10	-	Extended Tray Assembly (Not
		Spared)
11	-	Screw (Not Spared)



### PL 22.3 Stacker Base Assembly (Part 1 of 5) (Integrated Office Finisher)

ltem	Part	Description	•
1	003E65500	Knob	15
2	005E89470	Collar	
3	423W10454	Belt	18
4	012K96370	Link Shaft Assembly	
5	-	Link Shaft (P/O PL 22.3 Item 4)	
6	012E16150	Support	
7	-	Sub Paddle Shaft Assembly (P/O	
		PL 22.3 Item 4)	
8	-	Bearing (P/O PL 22.3 Item 4)	
9	423W06054	Paddle Belt (REP 22.2)	
10	413W75959	Bearing	
11	020K13900	Pulley	
12	005E89490	Collar	
13	807E13260	Gear (21T)	
14	120E27240	Actuator	
15	802K85560	Knob Cover Assembly	
16	-	Knob Cover (P/O PL 22.3 Item 15)	
17	-	Spring (P/O PL 22.3 Item 15)	
18	012K94990	Sub Paddle Solenoid Assembly	
19	-	Bracket (Not Spared)	
20	130K70160	Finisher Top Cover Interlock	
		Sensor	
21	110K12980	Finisher Top Cover Interlock (+24V)	
22	-	Support (P/O PL 22.3 Item 18)	
23	-	Cushion (P/O PL 22.3 Item 18)	
24	-	Link (P/O PL 22.3 Item 18)	
25	-	Arm (P/O PL 22.3 Item 18)	
26	-	Bracket (P/O PL 22.3 Item 18)	
27	121K34620	Sub Paddle Solenoid (REP 22.3)	
28	-	Spring (P/O PL 22.3 Item 18)	



#### PL 22.4 Stacker Base Assembly (Part 2 of 5) (Integrated Office Finisher)

ltem	Part	Description
1	_	Compile Assembly (REP 22.20)
2	029K92350	Staple Assembly (REP 22.5)
3	-	Cartridge (P/O PL 22.4 Item 2)
4	-	Stapler (P/O PL 22.4 Item 2)
5	-	Bracket (Not Spared)
6	-	Support (Not Spared)
7	930W00111	Set Clamp Home Sensor (REP
		22.6)
8	962K44980	Wire Harness
9	022K72790	Exit Roll Assembly (REP 22.7)
10	-	Exit Roll (P/O PL 22.4 Item 9)
11	004E15340	Damper
12	004E15330	Center Damper
13	-	Bearing (Not Spared)
14	007K94220	One Way Gear
15	005E89470	Collar
16	807E13230	Gear Pulley (16T/18T)
17	127K49800	Finisher Transport Motor
18	423W06954	Belt



j0fa52204

# PL 22.5 Stacker Base Assembly (Part 3 of 5) (Integrated Office Finisher)

ltem	Part	Description
1	807E13250	Gear Pulley (37T/45T)
2	005E89480	Collar
3	413W75959	Bearing
4	006K25001	Main Paddle Shaft Assembly (REP 22.11)
5	423W09854	Belt
6	-	Shaft (Not Spared)
7	413W11860	Bearing
8	020E43500	Pulley (19T)
9	054K30361	Lower Chute Assembly (REP
		22.12)
10	-	Lower Chute (P/O PL 22.5 Item 9)
11	022K73190	Pinch Roll (REP 22.8)
12	809E65931	Spring
13	-	Support (Not Spared)
14	-	Bracket (Not Spared)
15	-	Bracket (Not Spared)
16	130K93251	Compile Exit Sensor (REP 22.10)
17	807E13240	Gear (27T)
18	-	Bracket (Not Spared)
19	130K88190	Finisher Entrance Sensor (REP 22.9)



### PL 22.6 Stacker Base Assembly (Part 4 of 5) (Integrated Office Finisher)

Bart		3 { 4, 5, 11, 12		11
C69K20021	Bracket			/ 5
068K29941	Bracket		•	1 12
054K42690	Upper Chute Assembly (REP			
	22.14)			
-	Upper Chute (P/O PL 22.6 Item 3)			
042E92241	Eliminator	1		
022K72782	Entrance Roll Assembly (REP			$\times$
004 50 70 44	22.13)	AG		
031E97041	Arm			$\sim$
413W66250	Allii Ball Bearing			
-	Spring (Not Spared)			
042E92330	Eliminator	7		
_	Guide Paper (P/O PL 22.6 Item 3)	BL / I		
		A 1000000000000		
		000000000000000000000000000000000000000	0000	
			000000	
				in the
			•••••	
			0000000000 ( ) · · ·	
				EU
				8
		$\sim$		
		2		
		V - V		BL
		1 Aca		
			9	BL
				ar i
		6		
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
			~	/
				10
				0522006A-OAK

# PL 22.7 Stacker Base Assembly (Part 5 of 5) (Integrated Office Finisher)

ltem	Part	Description
1	960K50450	Finisher PWB (REP 22.15)
2	055K30850	Connector Bracket
3	_	Harness Guide (Not Spared)
4	_	PWB Bracket (Not Spared)
5	_	Wire Harness (Drive) (Not Spared)
6	-	Wire Harness (Stapler) (Not
		Spared)
7	_	Wire Harness (Interlock) (Not
		Spared)
8	-	Wire Harness (Front Sensor) (Not
		Spared)
9	-	Wire Harness (Compile) (Not
		Spared)
10	_	Wire Harness (Stacker) (Not
		Spared)
11	-	Bracket (Not Spared)
12	110E97990	Finisher Front Interlock Switch



# PL 22.8 Stacker Tray Assembly (Integrated Office Finisher)

Item	Part	Description
1	-	Bearing (P/O PL 22.2 Item 8)
2	-	Top Tray (P/O PL 22.2 Item 8)
3	-	Bracket (P/O PL 22.2 Item 8)
4	-	Plate (P/O PL 22.2 Item 8)
5	-	Bracket (P/O PL 22.2 Item 8)
6	-	Base Tray (P/O PL 22.2 Item 8)
7	-	Base Bracket (P/O PL 22.2 Item 8)
8	006K25031	Stacker Shaft Assembly (REP
		22.17)
9	127K49420	Stacker Motor (REP 22.18)
10	-	Pulley (60T) (P/O PL 22.2 Item 8)
11	-	Worm Gear (P/O PL 22.2 Item 8)
12	-	Gear (16T/32T) (P/O PL 22.2 Item
		8)
13	-	Stud (P/O PL 22.2 Item 8)
14	-	Bracket (P/O PL 22.2 Item 8)
15	-	Bearing (P/O PL 22.2 Item 8)
16	423W07354	Belt (P/O PL 22.2 Item 8)
17	-	Bracket (P/O PL 22.2 Item 8)
18	930W00111	Stacker Sensor 1 (Q1), Sensor 2
		(Q2) (REP 22.19)
19	-	Actuator (P/O PL 22.2 Item 8)
20	-	Wire Harness (P/O PL 22.2 Item 8)



# PL 22.9 Compile Assembly (Part 1 of 2) (Integrated Office Finisher)

ltem	Part	Description
1	006K25010	Set Clamp Shaft (REP 22.21)
2	120E27220	Actuator
3	413W11860	Bearing
4	006K25020	Eject Shaft Assembly (REP 22.25)
5	_	Eject Shaft (P/O PL 22.9 Item 4)
6	_	Spacer (P/O PL 22.9 Item 4)
7	_	Pulley (P/O PL 22.9 Item 4)
8	068K29830	Eject/Set Clamp Motor Assembly
9	930W00111	Rear Tamper Home Sensor (REP 22.24)
10	_	Support (Not Spared)
11	423W26754	Belt
12	_	Belt (Not Spared)
13	023K91530	Eject Belt (REP 22.22)
14	-	Spring (P/O PL 22.9 Item 8)
15	-	Eject Motor, Set Clamp Motor (P/O
		PL 22.9 Item 8)
16	-	Bracket (P/O PL 22.9 Item 8)



# PL 22.10 Compile Assembly (Part 2 of 2) (Integrated Office Finisher)

Part	Description
068K30510	Bracket Assembly
-	Bracket (P/O PL 22.10 Item 1)
_	Wire Harness (P/O PL 22.10 Item
	1)
050E25900	Compile Tray
-	Support (Not Spared)
930W00111	Front Tamper Home Sensor (REP
	22.27)
038E34860	Paper Guide
-	Bracket (Not Spared)
-	Stack Height Sensor (REP 22.29)
930W00212	Eject Clamp Home Sensor (REP
	22.28)
962K42270	Wire Harness
-	Bracket (Not Spared)
-	Wire Harness (Not Spared)
038K88990	Tamper Guide, Rear
068K30740	Front/Rear Tamper Motor Assembly
	(REP 22.26)
-	Front/Rear Tamper Motor (P/O PL
	22.10 Item 14)
-	Bracket (P/O PL 22.10 Item 14)
001E70981	Rail
038K89260	Tamper Guide, Front
	Part 068K30510 - - 050E25900 - 930W00111 038E34860 - - 930W00212 962K42270 - - 038K88990 068K30740 - - 001E70981 038K89260



#### PL 23.1 H-Transport Assembly (1 of 5) (Office Finisher LX)

ltem	Part	Description
1	059K65560	H-Transport Assembly (REP 23.1)
2	068K59494	Docking Plate Assembly
3	_	Docking Plate (P/O PL 23.1 Item 2)
4	_	Side Guide (P/O PL 23.1 Item 2)
5	_	Center Guide (P/O PL 23.1 Item 2)
6	826E07210	Thumb Screw
7	868E51550	Bracket
8	_	Finisher Plate
9	-	Finisher LX Assembly (Not Spared)
10	-	HTU Spacer (Not Spared)



# PL 23.2 H - Transport Assembly (2 of 5) (Office Finisher LX)

Item	Part	Description	
1	848K34182	Left Cover Assembly	
2	848E43672	Left Cover	;
3	-	Paper Guide (P/O PL 23.2 Item 1)	
4	848K34170	Top Cover Assembly	
5	-	Lower Chute Assembly (P/O PL	
		23.1 Item 1)	
6	-	Lower Chute Assembly (P/O PL	
		23.2 Item 5)	
7	054K35264	Chute Assembly	
8	026K81200	Thumb Screw	
9	-	Rear Cover (Not Spared)	
10	180K00391	Punch Assembly (2/3 Hole) (REP	
		23.2)	
-	180K00401	Punch Assembly (2/4 Hole) (REP	
		23.2)	
11	-	Punch Box (Not Spared)	
12	-	Wire Harness (Not Spared)	
13	848E28010	Connector Cover	



# PL 23.3 H - Transport Assembly (3 of 5) (Office Finisher LX)

ltem	Part	Description
1	_	Bracket (P/O PL 23.2 Item 4)
2	054K35239	Left Chute Assembly
3	-	Left Chute (P/O PL 23.3 Item 2)
4	_	Pinch Spring (P/O PL 23.3 Item 2)
5	_	Pinch Roller (P/O PL 23.3 Item 2)
6	054K35245	Right Chute Assembly
7	_	Right Chute (P/O PL 23.3 Item 6)
8	022E27660	Pinch Roller
9	809E76211	Pinch Spring
10	848E43662	Top Cover
11	003K15985	H - Transport Counter Balance
12	-	(Left) H - Transport Counter Balance (Right) (P/O PL 23.2 Item 4)
13	809E76240	Spring
14	809E78940	Spring



#### PL 23.4 H - Transport Assembly (4 of 5) (Office Finisher LX)

5) (O	ffice Finis	her LX)		29	1	
ltem	Part	Description	7 { 8, 9, 27			40
1	-	Lower Chute (P/O PL 23.2 Item 6)				10 🔊 8
2	_	Magnet (P/O PL 23.2 Item 6)				
3	130E81600	H - Transport Open Sensor				N
4	868E15540	Sensor Bracket				
5	809E81720	Actuator			1	
6	930W00211	H - Transport Entrance Sensor		31	- Contraction	
7	848K34192	H - Transport Front Cover		10	ATT it it	
		Assembly		10 13	1. HARLAN	
8	848E43641	H - Transport Front Cover	17 33			
9	921W41142	Gasket			At is a second second	Line V
10	803E04690	Hinge			PH I FL	
11	-	Bracket (P/O PL 23.2 Item 6)	M m	25		AL THE
12	-	Rear Frame Assembly (P/O PL	6.8	····		ALIMAN
		23.2 Item 6)	CL 16	26	And in the second	Fitzer
13	127K57622	H - Transport Motor (REP 23.4)			Real Parties	3
14	020E45330	Tension Pulley	CL-20			
15	020K15720	Pulley (43T)		AM <sup>-</sup>		
16	020E45210	Pulley (43T)			32	
17	-	Iension Bracket (P/O PL 23.2 Item				32     AP
40	000570050	6) Opering Transie	22 UL <sup>4</sup> 🥯		21   🗠 🖓	AM
18	809E78950	Spring Tension		19 9 12 19	$\langle      $	4 5
19	059K54480				AM	01
20	059655070	Drive Roll Rearing				21
21	013E33140 422\M01154	H Transport Bolt (PED 22.2)		D	AM /	
22	423001134	Sloovo Boaring			D-W	21
23	962K60422	Wire Harness				
25	127E85570	Fan Blade		23		
26	016E97311	Pinch Bushing	24		20	
27	_	Lower Hinge (P/O PL 23.4 Item 7)	<b>~</b>		D	AM
28	848E43630	Front Cover	$\backslash$			
29	848E43651	Switch Cover			\ 20	
30	-	Cover (Not Spared)			23	
31	_	Bracket (Not Spared)	ſ	N		
32	004E18112	Pinch Cushion			(A)	
33	921W41162	Gasket				R
			//	× ~~		
			//	÷		-
			les .			$\sim$
			$\rightarrow$			



# PL 23.5 H - Transport Assembly (5 of 5) (Office Finisher LX)

ltem	Part	Description
1	_	Punch Motor (P/O PL 23.2 Item 10)
2	-	Punch Lower Cover (P/O PL 23.2 Item 10)
3	-	Punch Motor Cover (P/O PL 23.2 Item 10)
4	-	Sensor Bracket (P/O PL 23.2 Item 10)
5	930W00111	Punch Encoder Sensor, Punch Home Sensor, Punch Box Set Sensor
6	-	Punch Frame Assembly (P/O PL 23.2 Item 10)
7	-	Encoder/Gear Assembly (P/O PL 23.2 Item 10)
8	_	Gear (P/O PL 23.2 Item 10)
9	-	Motor Bracket (P/O PL 23.2 Item 10)
10	_	Punch Top Cover (P/O PL 23.2 Item 10)
11	_	Bracket (P/O PL 23.2 Item 10)



### PL 23.6 Finisher Covers (Office Finisher LX)

ltem	Part	Description
1	_	Plate (Not Spared)
2	-	Lower Plate (Not Spared)
3	-	Docking Lever (Not Spared)
4	-	Front Cover (REP 23.6)
5	-	Front Door (Not Spared)
6	-	Bracket (Not Spared)
7	068K59531	Hinge
8	848E15210	Rear Lower Cover (REP 23.8)
9	848E15221	Rear Upper Cover (REP 23.7)
10	848E15231	Connector Cover
11	848E15241	Stacker Lower Cover (REP 23.11)
12	848E48791	LH Cover
13	-	Cover (Not Spared)
14	-	Spring (Not Spared)
15	848E22450	Foot Cover (REP 23.10)
16	801K30701	Booklet Assembly (REP 23.31)
17	826E31870	Thumb Screw
18	-	Upper Adjust Cover (Not Spared)
19	-	Lower Adjust Cover (Not Spared)
20	-	Base Frame Assembly (Not
		Spared)
21	921W41162	Gasket
22	-	Extension Spring (Not Spared)
23	-	Paper Guide



### PL 23.7 Finisher Stacker (Office Finisher LX)

ltem	Part	Description
1	041K95980	Front Carriage Assembly (REP 23.29)
2	-	Bearing (P/O PL 23.7 Item 1)
3	809E56850	Spring
4	-	Front Stacker Belt (P/O PL 23.7 Item 1)
5	-	Clamp (P/O PL 23.7 Item 1)
6	-	Front Carriage Assembly (P/O PL 23.7 Item 1)
7	041K95990	Rear Carriage Assembly (REP 23.29)
8	-	Bearing (P/O PL 23.7 Item 7)
9	-	Clamp (P/O PL 23.7 Item 7)
10	017K94890	Knob Caster Assembly
11	-	Rear Stacker Belt (P/O PL 23.7 Item 7)
12	-	Rear Carriage (P/O PL 23.7 Item 7)
13	-	Actuator (P/O PL 23.7 Item 7)
14	-	Carriage Tray (Not Spared)
15	050K61106	Stacker Tray (REP 23.20)
16	-	Shaft (Not Spared)
17	807E08990	Gear
18	020E37710	Pulley
19	146E90650	Encoder
20	009E30000	Spring Bullov (18T)
21	020E37720	Fulley (101) Stocker Floyeter Meter Accombly (PED
22	000030304	
23	_	Bearing (P/Ω PL 23.7 Item 22)
20	020E44181	Pulley (60T)
25	-	Gear (15T/37T) (P/O PL 23 7 Item 22)
26	_	Motor Bracket (P/O PL 23.7 Item 22)
27	_	Worm Shaft (P/O PL 23.7 Item 22)
28	423W27654	Belt
29	-	Stacker Elevator Motor (P/O PL 23.7
		Item 22)
30	-	Stacker Encoder Sensor Assembly (Not
31	_	Bracket ( $P/O$ PL 23.7 Itom 30)
32	930\W/00111	Stacker Encoder Sensor, Stacker No
52	350000111	Paper Sensor
33	-	Stacker Upper Cover (Not Spared) (REP
24	412\//70250	20.12) Rearing
34 25	413119339	Castor Accombly
36	251\M/31178	Washer
37	017K94900	Adjustable Foot Assembly
51	017134300	Aujusiasie I OULASSEIIISIY



#### PL 23.8 Finisher Stapler (Office Finisher LX)

sher LX)			
Part	Description	0{7,8	
-	Base Frame (P/O PL 23.8 Item 16)	9 { 19, 20	
_	Rail (P/O PL 23.8 Item 16)	16 (1 12 15	
	Stapler Assembly (REP 23.16)	10{1-13 AG	
_	Holder (Not Spared)		
-	Stapler Move Position Sensor		
	Assembly (Not Spared) Bracket (B/O BL 22 & Itom 6)	F F F	
	Stapler Move Position Sensor		
-	Stapler Move Motor Assembly (Not		
_	Spared) Harness Guide (P/O PL 23.8 Item	$CK \longrightarrow 17$ 11	
_	16)		
-	Harness Support Guide (P/O PL		
_	23.8 Item 16) Harness Guide (P/O PL 23.8 Item		
_	16)	R $3 < h$	
-	Stapler Cover (Not Spared)		9
-	Clamp (Not Spared)		
_	Stapler Cartridge (Not Spared) Stapler Unit (Not Spared)		
-	Cable Band (Not Spared)		
-	Harness Guide (Not Spared)		20
-	Stapler Motor Assembly (P/O PL		10
127K57622	Motor Assembly		
		in the second seco	
		AG	
			ן
			נ
			K

### PL 23.9 Finisher Eject (1 of 5) (Office Finisher LX)

tem	Part	Description
1	-	Eject Cover Assembly (Not Spared)
2	-	Eject Assembly (Not Spared)
3	031K93790	Clamp Arm Assembly
4	807E21370	Gear (25T)
5	059K55111	Eject Roller
6	807E21380	Gear (72T)
7	807E21391	Gear (18T)
8	120E29772	Actuator
9	006K86731	Set Clamp Shaft Assembly
10	-	Spring (P/O PL 23.9 Item 9)
11	019K09391	Set Clamp Holder
12	-	Shaft (Not Spared)
13	809E79060	Spring
14	809E79080	Spring
15	006K86741	Guide Paper Shaft Assembly
16	-	Guide Paper Shaft (P/O PL 23.9
		Item 15)
17	-	Gear (20T) (P/O PL 23.9 Item 15)
18	-	Shaft (Not Spared)
19	807E21420	Gear (19T)
20	807E21400	Gear (31T)
21	038E36490	Guide Paper (Left/Right)
22	005E25820	Clutch
23	807E21970	Gear (23T)
24	-	Stopper (Not Spared)
25	-	Bracket (Front) (Not Spared)
26	-	Bracket (Rear) (Not Spared)
27	-	Option Switch Assembly (Not
		Spared)
28	-	Bracket (Not Spared)
29	-	Option Switch (Not Spared)
30	413W11860	Sleeve Bearing
31	-	Bearing (Not Spared)
32	-	Clamp Arm (P/O PL 23.9 Item 3)
33	-	Roll (P/O PL 23.9 Item 3)
34	-	Shaft (P/O PL 23.9 Item 3)



### PL 23.10 Finisher Eject (2 of 5) (Office Finisher LX)

ltem	Part	Description
1	848E15291	Top Right Hand Cover
2	011E20781	Top Cover Lever
3	003E76111	Top Cover Latch
4	-	Shaft (Not Spared)
5	809E79031	Spring
6	848E15301	Eject Cover (REP 23.9)
7	054K35302	Eject Chute
8	121K41632	Sub Paddle Solenoid Assembly (REP 23.14)
9	-	Bracket (P/O PL 23.10 Item 8)
10	-	Damper (P/O PL 23.10 Item 8)
11	-	Sub Paddle Solenoid (P/O PL
		23.10 Item 8)
12	-	Eject Roller Assembly (Not Spared)
13	031K93770	Paddle Arm Assembly
14	-	Sub Paddle Arm (Not Spared)
15	423W08655	Belt
16	-	Sub Paddle (P/O PL 23.10 Item 13)
17	-	Pulley (P/O PL 23.10 Item 13)
18	-	Pulley (P/O PL 23.10 Item 13)
19	-	Gear/Pulley (31T/20T) (Not
		Spared)
20	-	Eject Pinch Roller Assembly (Not Spared)
21	-	Bearing (P/O PL 23.10 Item 20)
22	059K55102	Eject Pinch Roller
23	-	Bracket (P/O PL 23.10 Item 20)
24	-	Shaft (P/O PL 23.10 Item 12)
25	-	Spring (Not Spared)
26	-	Bracket (P/O PL 23.10 Item 12)
27	809E79050	Spring
28	006K86690	Eject Drive Shaft
29	-	Bearing (Not Spared)
30	-	Bearing (Not Spared)
31	-	Eject Chute Assembly (Not Spared)
32	-	Eject Eliminator (P/O PL 23.10 Item 20)



#### PL 23.11 Finisher Eject (3 of 5) (Office Finisher LX)

Finis	her LX)		2 \$ 1 7	40.36	15	35
Item	Part	Description	3 (4-7	1.9 5		
1	807E20931	Gear (82T/77T/51T)				
2	807E20940	Gear (38T)	141 15, 10 32			16
3	-	Eject Motor Assembly (Not Spared)				
		(REP 23.22)	17√16 18 \		39	
4	127K53140	Eject Motor (REP 23.25)		29 *	A O Dis	
5	-	Bracket (P/O PL 23.11 Item 3)	and an an AL	28		3
6	807E22030	Gear/Pulley (20T/49T)	22723-32 K			
7	423W31054	Belt			- Linel X	- T 🐨
8	807E21330	Gear (281/221/381)	34 { 16 - 35	30		00
9	807E21340	Gear (251)				<u> </u>
10	807E21350	Gear/Pulley (321/251)	27 (19,36		1	I I
12	121/24621	Set Clamp Clutch (24T)	37(10,00		23	
12	12000000	Set Clamp Cam Actuator			16	A France
14	130K72170	Stacker Height Sensor 1 Assembly			/ 32 ''	
15	-	Bracket (P/O PL 23.11 Item 14)	·			6.4
16	930W00111	Stacker Height Sensor 1. Stacker Height			$\frac{1}{8}$ / 2	~ <u>18</u>
		Sensor 2. Elect Clamp Home Sensor.				10
		Set Clamp Home Sensor (REP 23.13)				
17	130K72180	Stacker Height Sensor 2 Assembly		31		
18	-	Bracket (P/O PL 23.11 Item 17)		25 BAR		
19	-	Eject Cover Switch (P/O PL 23.11 Item				
		37)			1 × 60	
20	_	Harness Guide (Not Spared)				
21	120E29851	Gear Select Actuator				
22	-	Eject Drive Bracket Assembly (Not			V VVE	3
22		Spared)		AG	$\leq$ 1 / $^{\circ}$	
23	-	Bracket (P/O PL 23.11 Item 22)		]		
24	_	Shaft $(P O P =23.11$ item 22)	ho 1 7 min		<u> </u>	
26		Clamp Set Cam				
27	809F79070	Spring				
28	-	Bracket (P/O PL 23.11 Item 22)			33	
29	-	Shaft (P/O PL 23.11 Item 22)				
30	008E96691	Eject Clamp Cam			<u> </u>	
31	413W11660	Sleeve Bearing				
32	-	Sleeve Bearing (P/O PL 23.11 Item 22)		<b>[</b>		
33	005E25810	Drive Eject Flange		3	And the last	
34	130K72190	Eject Clamp Home Sensor Assembly		1 🔨 🛛 🖓 🖌		
35	-	Bracket (P/O PL 23.11 Item 34)		↓ → ,		
36	-	Bracket (P/O PL 23.11 Item 37)			Se /	
31	-	Eject Cover Switch Assembly (Not	'		4	
20	900E70920	Spring			. 10 ·	
30	807E22040	Gear (30T)				5 🐨 🛝
40	423W25954	Belt			a [	$\overline{\mathbf{J}}$
10	1201120001	Bolt			AG	1
				ぼ 26 (	Jest and a start of the start o	
				= 0	₁́/ /́́BL	
				24		$\sim$
					JI NGR	$\sim $
						Right near
					12	
					13	0523011A-OAK

# PL 23.12 Finisher Eject (4 of 5) (Office Finisher LX)

ltem	Part	Description
1	050K61091	Compiler Tray Assembly (REP
2	038E36462	Tamper Guide, Rear
3	-	Compiler Center Paper Guide (P/O
4	-	PL 23.12 Item 1) Compiler Rear Paper Guide (P/O PL 23.12 Item 1)
5	_	Bracket (P/O PL 23.12 Item 1)
6	127K48210	Tamper Motor
7	-	Rack (Front) (P/O PL 23.12 Item 1)
8	930W00111	Front Tamper Home Sensor, Rear Tamper Home Sensor (REP 23.27)
9	130E81600	Compiler Tray No Paper Sensor (REP 23.28)
10	_	Spring (P/O PL 23.12 Item 1)
11	-	Tamper Front Guide (P/O PL 23.12
12	-	Tamper Rear Guide (P/O PL 23.12 Item 1)
13	-	Compiler Tray (P/O PL 23.12 Item 1)
14	-	Paper Paddle Guide (P/O PL 23.12 Item 1)
15	809E79000	Spring
16	-	Paper End Guide (P/O PL 23.12 Item 1)
17	-	Paper Tray Guide (P/O PL 23.12
18	_	Spring (P/O PL 23 12 Item 1)
19	_	Spring (P/O PL 23.12 Item 1)
20	-	Harness Guide (P/O PL 23.12 Item
21	120E29760	i) Actuator
22	801E04903	Tamper Base
23	038E36452	Tamper Guide Front
20	000000402	Tamper Guide, From



# PL 23.13 Finisher Eject (5 of 5) (Office Finisher LX)

ltem	Part	Description
1	068K58823	Transport Motor
2	068K58832	Tension Roller Assembly
3	809E78980	Spring
4	020E45341	Pulley (30T)
5	020E45571	Pulley (41T)
6	-	Gear/Pulley (27T/30T) (Not
		Spared)
7	007K98300	Gear
8	059K55080	Entrance Roller
9	059K55090	Exit Roller
10	423W18754	Eject Belt (REP 23.21)
11	006K86813	Paddle Shaft Assembly
12	033E92850	Cyclone Paddle
13	-	Paddle Shaft (P/O PL 23.13 Item
		11)
14	413W75959	Bearing



#### PL 23.14 Finisher Exit/Folder Assembly (Office Finisher LX)

Item	Part	Description
1	-	Lower Chute Assembly (Not
		Spared)
2	-	Lower Chute (P/O PL 23.14 Item 1)
3	806E22121	Shaft
4	059E03710	Pinch Roll
5	809E78960	Spring
6	054K35540	Exit Upper Chute Assembly
7	-	Exit Upper Chute (P/O PL 23.14
		Item 6)
8	105E18000	Static Eliminator
9	038E36420	Paper Guide
10	130K88311	Compiler Exit Sensor, Finisher
		Entrance Sensor
11	054K48530	Exit Lower Chute Assembly
12	-	Exit Lower Chute (P/O PL 23.14
		Item 11)
13	-	Pinch Roll Assembly (P/O PL 23.14
		Item 11)
14	-	Spring (P/O PL 23.14 Item 13)
15	059K56321	Pinch Roll
16	054K35264	Chute Assembly
17	-	Lower Chute (P/O PL 23.14 Item
		16)
18	-	Upper Chute (P/O PL 23.14 Item
		16)
19	026K81200	Thumb Screw
20	-	Chute Assembly (Not Spared)
21	695K18691	Crease Assembly (Option) (REP
		23.18)



# PL 23.15 Folder Assembly (Office Finisher LX)

1 1113				$\langle \langle \rangle$	0	
Item	Part	Description	1~		2	3 { 4-9
1	-	Upper Chute (P/O PL 23.14 Item		- ANN /		
2	_	Upper Plate (P/O PL 23.14 Item 21)	6			13 { 14 - 16
3	_	Knife Assembly (P/O PL 23.14 Item	0-			
-		21)	$\frown$	E T		
4	_	Blade Holder (P/O PL 23.15 Item 3)				
5	_	Lower Holder 1 (P/O PL 23.15 Item				
		3)	d h			
6	-	Lower Holder 2 (P/O PL 23.15 Item			200	
		3)	U I			$\geq$
7	-	Bracket (P/O PL 23.15 Item 3)	9_ 6			
8	-	Blade (P/O PL 23.15 Item 3)	8	9		
9	-	Spring (P/O PL 23.14 Item 2)				25 X
10	-	Frame (P/O PL 23.14 Item 21)			24	
11	-	Front Cover (P/O PL 23.14 Item 21)	Sol le Conse	9-9-9		
12	-	Bracket (P/O PL 23.14 Item 21)			<b>(</b> a) <b>14</b>	A
13	-	Folder Knife Motor Assembly (P/O	les les			
		PL 23.14 Item 21)			AL C	
14	_	Motor Bracket (P/O PL 23.15 Item	7			
15		13) Folder Knife Motor (D/O DL 22.15				15
15	-	Folder Khife Motor (P/O PL 23.15		New Market	P & S	15
16		Folder Home Sensor (D/O DL 22.15	Y Z			
10	-	Item 13)			1 4. 13	A 11
17	_	Cam Shaft Assembly (P/O Pl			Y / Y	0)
.,		23 14 Item 21)		17 4	Reg is	
18	_	Guide (P/O PL 23.14 Item 21)	La Carta da Cart		16	
19	_	Gear (28T/8T) (P/O PL 23.14 Item	18			
		21)			<u></u> <u> </u>	
20	_	Encoder (P/O PL 23.14 Item 21)		ANT KR		
21	-	Bearing (P/O PL 23.14 Item 21)	AL []			`CK
22	-	Gear (12T/27T) (P/O PL 23.14				23
		Item 21)				20 ⁄
23	-	Gear (12T/30T) (P/O PL 23.14	21 \			22
		Item 21)				
24	-	Gear (12T/51T) (P/O PL 23.14	· · · · · · · · · · · · · · · · · · ·		T Q	- Nor Y
		Item 21)				$\ell \sim -$
25	-	Wire Harness (P/O PL 23.14 Item				$\sim$ - +
		21)	$\rightarrow$		<u>د از (</u>	SAL -
					21 ``	$\uparrow^{AL}$ $\swarrow$
					- 19	Leit Front
			10			20
						DEDDD4EA OAK

 $\langle$ 

### PL 23.16 Finisher Electrical (Office Finisher LX)

Item	Part	Description
1	_	LVPS Cover (Not Spared)
2	960K51447	Finisher PWB (REP 23.23)
-	960K50992	Finisher PWB
3	_	Harness Guide (Not Spared)
4	-	Harness Guide (Not Spared)
5	_	Harness Guide (Not Spared)
6	_	Magnet (Not Spared)
7	815K04920	Gasket Plate Assembly
8	962K60592	Wire Harness
9	-	Wire Harness (Not Spared)
10	-	Wire Harness (Not Spared)
11	-	Wire Harness (Not Spared)
12	-	Wire Harness (Not Spared)
13	962K60481	Wire Harness
14	-	Wire Harness (Not Spared)
15	-	Wire Harness (Not Spared)
16	962K74540	Power Cable
17	105E17550	Finisher LVPS (REP 23.24)
18	-	Bracket (Not Spared)
19	110E97990	Finisher Front Door Interlock Switch



# PL 23.17 Booklet Cover (Office Finisher LX)

ltem	Part	Description
1	_	Frame Assembly (Not Spared)
2	-	Booklet Stapler Assembly (Not Spared)
3	848E15333	Rear Cover (REP 23.33)
4	-	Front Cover (Not Spared) (REF 23.32)
5	-	Top Cover (REP 23.34)
6	848E15350	Side Cover
7	848E15361	PWB Cover (REP 23.35)
8	-	Left Cover (Not Spared) (REP 23.36)
9	-	Harness Guide (Not Spared)



### PL 23.18 Booklet Stapler Assembly (Office Finisher LX)

ltem	Part	Description
1	_	Front Carriage Rail (Not Spared)
2	-	Frame (P/O PL 23.18 Item 1)
3	-	Core (P/O PL 23.18 Item 1)
4	127K57051	Booklet Stapler Move Motor
		Assembly (REP 23.38)
5	-	Belt (P/O PL 23.18 Item 4)
6	-	Bracket (P/O PL 23.18 Item 4)
7	-	Gear (12T) (P/O PL 23.18 Item 4)
8	-	Pulley (50T) (P/O PL 23.18 Item 4)
9	127K57622	Booklet Stapler Move Motor
10	-	Wire Harness (P/O PL 23.18 Item
		4)
11	-	Sensor Bracket Assembly (P/O PL
		23.18 Item 1)
12	-	Sensor Bracket (P/O PL 23.18 Item
		11)
13	930W00111	Booklet Stapler Move Home
		Sensor, Booklet Stapler Move
		Position Sensor
14	-	Rear Rack Gear (Not Spared)
15	-	Carriage Assembly (Not Spared)
16	-	Carriage (P/O PL 23.18 Item 15)
17	-	Core (P/O PL 23.18 Item 15)
18	-	Core (Not Spared)
19	-	Front Rack Gear (Not Spared)
20	848E15400	Motor Cover
21	032K05222	Harness Guide Assembly
22	-	Harness Strap (P/O PL 23.18 Item
		21)
23	920W01210	Locking Clamp
24	-	Harness Guide (Front) (Not
		Spared)
25	-	Harness Guide (Rear) (Not
		Spared)
26	-	Rear Rack Guide (Not Spared)



#### PL 23.19 Booklet Front Stapler Assembly (Office Finisher LX)

Item	Part	Description
1	_	Booklet Front Stapler Assembly
2	_	Bracket (P/O PL 23.19 Item 1)
3	_	Rear Cover (P/O PL 23.19 Item 1)
4	_	Bracket (P/O PL 23.19 Item 1)
5	_	Chute
6	_	Sub Chute (P/O PL 23.19 Item 1)
7	-	Support (P/O PL 23.19 Item 1)
8	-	Spring (P/O PL 23.19 Item 1)
9	_	Exit Sub Chute (P/O PL 23.19 Item
		1)
10	-	Spring (P/O PL 23.19 Item 1)
11	_	Front Cover (P/O PL 23.19 Item 1)
12	848E15421	Lower Cover
13	_	Booklet Stapler Assembly (P/O PL
		23.19 Item 1) (REP 23.37)
14	-	Wire Harness (P/O PL 23.19 Item
		1)
15	-	Guide (P/O PL 23.19 Item 1)
16	-	Booklet Staple Cassette Assembly
		(Not Spared)



j0fb52319B
#### PL 23.20 Booklet Rear Stapler Assembly (Office Finisher LX)

Item	Part	Description
1	029K92500	Booklet Rear Stapler Assembly
2	-	Bracket (P/O PL 23.20 Item 1)
3	-	Rear Cover (P/O PL 23.20 Item 1)
4	-	Bracket (P/O PL 23.20 Item 1)
5	054K35282	Chute
6	-	Sub Chute (P/O PL 23.20 Item 1)
7	-	Support (P/O PL 23.20 Item 1)
8	-	Spring (P/O PL 23.20 Item 1)
9	-	Sub Chute (P/O PL 23.20 Item 1)
10	-	Spring (P/O PL 23.20 Item 1)
11	-	Front Cover (P/O PL 23.20 Item 1)
12	848E15421	Lower Cover
13	-	Booklet Stapler Assembly (P/O PL
		23.20 Item 1) (REP 23.37)
14	-	Wire Harness (P/O PL 23.20 Item
		1)
15	-	Guide (P/O PL 23.20 Item 1)
16	-	Booklet Staple Cassette Assembly
		(P/O PL 23.20 Item 1)



Parts List PL 23.20

# PL 23.21 Booklet Electrical (Office Finisher LX)

Part	Description
068K58350	Booklet Stapler Safety Switch
440540070	Assembly
110E12970	Booklet Stapler Safety Switch
-	Bracket (P/O PL 23.21 Item 1)
960K32543	Booklet PWB (REP 23.30)
_	Wire Harness (Not Spared)
-	Wire Harness (Not Spared)
-	Wire Harness (Not Spared)
-	Booklet Stapler Cover Switch
	Assembly (Not Spared)
-	Bracket (P/O PL 23.21 Item 8)
-	Booklet Stapler Cover Switch (P/C
	PL 23.21 Item 8)
-	Plate (Not Spared)
962K60533	Wire Harness
962K60540	Wire Harness
	Part 068K58350 110E12970 - 960K32543 - - - - - - 962K60533 962K60540



#### PL 28.1 HCF Unit

ltem	Part	Description
1	604K23535	Joint Plate
-	604K23830	HCF Docking Plate
2	003K91881	Knob
3	130K55590	HCF Tray Set Sensor
4	801K15700	Tray Rail
5	-	HCF Tray 6 (REF: PL 28.2, PL
		28.3) (REP 19.1)
6	-	Left Top Cover (Not Spared)
7	-	Right Cover (Not Spared)
8	-	Front Right Cover (Not Spared)
9	-	Left Cover (Not Spared)
10	-	Rear Cover
11	-	HCF Feeder (REP 19.2)
12	-	Label (Top)
13	-	Label (Tray Number) (Not Spared)
14	-	Label (Size) (Not Spared)
15	-	Label (End) (Not Spared)
16	-	Frame Assembly (Not Spared)



### PL 28.2 HCF Tray 6 (1 of 2)

ltem	Part	Description
1	_	Tray Latch Assembly (Not Spared)
2	003K13592	Tray Latch
3	-	Spring (P/O PL 28.2 Item 1)
4	-	Latch Lever (P/O PL 28.2 Item 1)
5	-	Magnet (P/O PL 28.1 Item 5)
6	-	Wave Washer (P/O PL 28.1 Item 5)
7	-	Front Cover (P/O PL 28.1 Item 5)
8	-	Gear Bracket (P/O PL 28.1 Item 5)
9	-	Label (Gauge) (P/O PL 28.1 Item
		5)
10	-	Frame (P/O PL 28.1 Item 5)
11	-	Plate (P/O PL 28.1 Item 5)
12	-	Bracket (P/O PL 28.1 Item 5)
13	-	Pin (P/O PL 28.1 Item 5)
14	-	Spring (P/O PL 28.1 Item 5)
15	-	Top Plate (P/O PL 28.1 Item 5)



### PL 28.3 HCF Tray 6 (2 of 2)

ltem	Part	Description	in the se	16-4		
1	_	Lift Shaft (P/O PL 28.1 Item 5)	17 { 18 - 23			
2	-	Bearing (P/O PL 28.1 Item 5)	·		0	
3	-	Bearing (P/O PL 28.1 Item 5)			-10	
4	020E37620	Tray Cable Pulley				
5	-	Gear (P/O PL 28.1 Item 5)				
6	-	Gear (P/O PL 28.1 Item 5)			A	11
7	-	Bottom Plate (P/O PL 28.1 Item 5)				Λ
8	019E58620	Pad Eront Sido Cuido (P/O PL 28.1 Itom				$\Lambda$
9	-	5)				
10	_	5) Rear Side Guide (P/O PL 28 1 Item				
10		5)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- 8	Λ / Ι
11	604K19981	Cable And Pulley Kit (REP 19.4)		ч <i>и</i>		N/1
12	032E22410	Wire Guide (L)			LOV	
13	-	Pulley (P/O PL 28.1 Item 5)				
14	-	Wire Guide (S) (P/O PL 28.1 Item				
		5)				
15	-	Pulley (P/O PL 28.1 Item 5)				26
16	-	Screw (P/O PL 28.1 Item 5)		4 6	~ //</td <td></td>	
17	015K65532	Gear Bracket (B/O BL 28.2 Itom 17)		14 15 - 6-0-		
10	-	Contact Coar (P/O PL 28.3 Item	24	4 15	Lange 1	
19	-	17)	$\sim$	10-0-1	I american for the second s	
20	_	Gear (P/O PL 28.3 Item 17)	(A)-c-A		and the second s	
21	_	Gear (P/O PL 28.3 Item 17)	-C	C-Ca		3
22	_	Brake (P/O PL 28.3 Item 17)	- 1 -			- Carden Co.
23	-	Spring (P/O PL 28.3 Item 17)	· · · · ·	-Ro El: The	and the second	>>> · · · · · · · · · · · · · · · · · ·
24	807E04500	Lift Gear			i de	
25	-	Plate (P/O PL 28.1 Item 5)	1	2 5 6 0 8		15 14
			22 '		print le	
			19 A			
			23 775			A TOPO A FRA
			20 0.20 1 2/1			
						15 14
			CARA TI		/ • H	. 4
			25 10 0			5 660
			ch Y The	elle internet		
						13 12
			C-J AW	~ ~ ~		
			6			
				18		



C

2

#### PL 28.4 HCF Feeder (1 of 3)

Item	Part	Description		
1	-	Shaft (P/O PL 28.1 Item 11)	19 { 20 - 24	
2	007E78760	Gear (19T)		
3	-	Gear (25T) (P/O PL 28.1 Item 11)		
4	007E78780	Gear (25T)	n	0
5	007E78790	Gear (40T)	4	2
6	013E25530	Bearing	~/	
7	-	Block (P/O PL 28.1 Item 11)	22	_
8	-	Spacer (P/O PL 28.1 Item 11)		C
9	019E56470	Holder		
10	-	Upper Feeder Assembly (P/O PL	24 12	
		28.1 Item 11)		
11	-	Lower Feeder Assembly (P/O PL		<
		28.1 Item 11)		
12	-	Ball Bearing (P/O PL 28.1 Item 11)		~
13	-	Front Frame (P/O PL 28.1 Item 11)		•C
14	-	Pin (P/O PL 28.1 Item 11)		×
15	-	Down Bracket (P/O PL 28.1 Item		ല്പ
		11)	3	ב
16	-	Link Bracket (P/O PL 28.1 Item 11)		
17	-	Rear Frame (P/O PL 28.1 Item 11)		~
18	-	Tension Spring (P/O PL 28.1 Item		
		11)		~~
19	-	Lift/Motor Frame (P/O PL 28.1 Item		
		11)	- <b>10</b> (PL 28	5)
20	-	Bracket (P/O PL 28.4 Item 19)		5,
21	007K88520	Gear (23T/27T)		
22	007K88530	Gear (31T/36T)		
23	127K37901	Lift/Feed Motor (REP 19.12)		2,
24	-	Plate (P/O PL 28.4 Item 19)	ABY I AND I A	~
25	-	Spring (P/O PL 28.1 Item 11)		<
				~

11 (PL28.6) 0528004A-NWD

17 20

B

16

18

15

25

4

#### PL 28.5 HCF Feeder (2 of 3)

tem	Part	Description
1	-	Upper Feeder Assembly (P/O PL 28.1 Item 11)
2	003E59570	Latch
3	-	Shaft Latch (P/O PL 28.5 Item 1)
4	006K23124	Feed Shaft Assembly
5	-	Feed Shaft (P/O PL 28.5 Item 4)
6	413W66250	Ball Bearing
7	-	Gear (20T) (P/O PL 28.5 Item 4)
8	007E78180	Feed Gear (25T)
9	-	Lever (P/O PL 28.5 Item 1)
10	-	Bearing (P/O PL 28.5 Item 1)
11	-	Spacer (P/O PL 28.5 Item 1)
12	-	Pin Drive (P/O PL 28.5 Item 1)
13	-	Guide (P/O PL 28.5 Item 1)
14	-	Rear Upper Chute (P/O PL 28.5
		Item 1)
15	-	Upper Chute (P/O PL 28.5 Item 1)
16	120E21900	Actuator
17	-	Upper Frame (P/O PL 28.5 Item 1)
18	-	Spring (P/O PL 28.5 Item 1)
19	930W00112	HCF Stack Height Sensor, HCF
		Paper Sensor
20	930W00211	HCF Pre Feed Sensor
21	-	Wire Harness (P/O PL 28.5 Item 1)
22	059K26691	Feed Roll (REP 19.5)
23	059K26702	Nudger Roll (REP 19.5)



#### PL 28.6 HCF Feeder (3 of 3)

ltem	Part	Description	1 5 0
1	059K26591	Lower Feed Assembly	1 { 2
2	-	Retard Roll Assembly (P/O PL 28.6	251
		Item 1) (REP 19.5)	9 ( 4
3	-	Retard Shaft Assembly (P/O PL	
		28.6 Item 1)	
4	-	Collar (P/O PL 28.6 Item 3)	
5	005K06701	Friction Clutch	
6	-	Shaft (P/O PL 28.6 Item 3)	
7	007E78170	Gear (15T)	
8	007E89760	Gear (22T)	
9	013E23600	Bearing	
10	013E23610	Bearing	
11	-	Retard Bracket (P/O PL 28.6 Item	
		1)	
12	-	Slide (P/O PL 28.6 Item 1)	
13	-	Lever (P/O PL 28.6 Item 1)	
14	-	Lower Chute (P/O PL 28.6 Item 1)	
15	-	Lower Frame (P/O PL 28.6 Item 1)	
16	-	Spring (P/O PL 28.6 Item 1)	
17	-	Spring (P/O PL 28.6 Item 1)	



0518006B-KOH

#### PL 28.7 HCF Top Cover Unit

ltem	Part	Description
1	013E17100	Bearing
2	_	Bracket (Not Spared)
3	_	Pivot Bracket (Not Spared)
4	_	Top Cover Assembly (Not Spared)
5	-	Bearing (P/O PL 28.7 Item 4)
6	-	Upper Chute (P/O PL 28.7 Item 4)
7	-	Top Cover (P/O PL 28.7 Item 4)
8	-	Knob (P/O PL 28.7 Item 4)
9	-	Latch (P/O PL 28.7 Item 4)
10	-	Latch (P/O PL 28.7 Item 4)
11	-	Spring (P/O PL 28.7 Item 4)
12	059E01430	Pinch Roller
13	-	Shaft (P/O PL 28.7 Item 4)
14	-	Shaft (P/O PL 28.7 Item 4)
15	-	Spring (P/O PL 28.7 Item 4)
16	-	Spring (P/O PL 28.7 Item 4)
17	-	Gasket (P/O PL 28.7 Item 4)
18	059K36260	Takeaway Roll (REP 19.10)
19	-	Spring (Left) (P/O PL 28.1 Item 16)
20	-	Spring (Right) (P/O PL 28.1 Item
		16)
21	-	Pivot Shaft (P/O PL 28.1 Item 16)
22	-	Bracket (P/O PL 28.1 Item 16)
23	-	Bracket (P/O PL 28.1 Item 16)
24	-	Lower Chute (P/O PL 28.1 Item 16)
25	130K88150	Takeaway Sensor
26	110E94770	Top Cover Interlock Switch



#### PL 28.8 HCF Electrical and Rail

ltem	Part	Description
1	_	Plate (Not Spared)
2	017E92820	Rack Caster (REP 19.9)
3	017E97191	Foot (Not Spared)
4	_	Latch Lever (Not Spared)
5	-	Spring (Not Spared)
6	801K15690	Rail
7	127K47150	Takeaway Motor
8	-	Docking Interlock Switch (Not Spared)
9	960K31492	HCF PWB (REP 19.11)
10	-	Wire Harness (P/O PL 28.1 Item 16)
11	130K55590	HCF Size Sensor R and L
12	_	Bracket (P/O PL 28.1 Item 16)



# PL 35.1 Single Board Controller (1 of 2)

ltem	Part	Description
1	-	SBC Unit (REF: PL 35.2)
2	960K65970	Two Line Fax Assembly
-	960K65960	One Line Fax Assembly
3	_	Fax Filler Panel
4	_	FDI Filler Panel
5	-	FDI Interface Board
6	962K41361	FDI Internal Cable



## PL 35.2 Single Board Controller (2 of 2)

-/		
ltem	Part	Description
2	121K56430	Hard Drive
3	962K40460	SATA/Power Cable Assembly
4	604K84731	SBC PWB Assembly
5	112K01140	Fax Riser PWBA
6	826E39370	Thumb Screw (M4)
7	_	Fax Filler Panel (P/O PL 35.1 Item
		3)
8	604K89991	PYXIS Board 7845/55
9	_	SIM Card (REP 1.15)
10	207E22290	Battery/RTC
11	833W39041	DDR3 Memory (2GB)
12	107K02810	Heat Sink Fan
13	237E27080	SD Card (7830/35)
-	237E27210	SD Card (7845/55)
14	137E30390	EPC Memory (1GB) DDR2



0535002A

#### PL 51.1 DADF Accessory

ltem	Part	Description
1	004K02962	DADF Platen Cushion ()
2	059K74373	DADF Assembly
3	-	Label (Not Spared)



#### PL 51.2 Covers, PWB

ltem	Part	Description
1	_	DADF Base Frame
2	-	DADF Feeder Assembly (REP 5.1,
		REP 55.1)
3	-	DADF Rear Cover (Not Spared)
		(REP 5.4, REP 55.4)
4	-	DADF Front Cover (Not Spared)
		(REP 5.3, REP 55.3)
5	117E27450	IIT DADF Cable
6	960K61172	DADF PWB (REP 5.6, REP 55.6)
7	-	Ground Wire (Not Spared)
8	-	Data Plate
9	003K87871	Stopper ()
10	-	P-Clamp (Not Spared)
11	-	Bracket (Not Spared)
12	-	DADF Front Cover (P/O PL 51.2
		Item 4)
13	-	Label (P/O PL 51.2 Item 4)



#### PL 51.3 Base Frame

ltem	Part	Description
1	_	DADF Base Frame (P/O PL 51.1
		Item 1)
2	036K91874	Left Counter Balance (REP 5.7)
3	036K91883	Right Counter Balance (REP 5.8)
4	-	Tie Plate (P/O PL 51.1 Item 2)
5	054K41230	CVT Chute
6	-	Stud Screw
7	-	Ground Plate (P/O PL 51.1 Item 2)
8	-	CVT Spring (Not Spared)
9	-	Floating Holder
10	-	Floating Spring
11	_	Bracket (P/O PL 51.1 Item 2)



#### PL 51.4 Document Tray

Item	Part	Description
1	050K64253	Document Tray Assembly (REP 5.9)
2	059K65064	Top Cover (REP 5.10)
3	-	Stud Bracket (P/O PL 51.1 Item 2)





#### PL 51.5 DADF Drives (1 of 2)

ltem	Part	Description
1	_	Harness Guide (REP 5.11)
2	110K15933	Interlock Switch and Harness Assembly
3	-	Bracket (P/O PL 51.5 Item 2)
4	-	Interlock Switch (P/O PL 51.5 Item 2)
5	-	Spring (P/O PL 51.5 Item 2)
6	-	Switch Wire Harness (P/O PL 51.5 Item 2)
7	127K60530	Feed Motor (REP 5.13)
8	127K60550	Registration Motor (REP 5.12)
9	-	Spring
10	-	Spring
11	-	Bracket (P/O PL 51.1 Item 2)
12	-	Bracket (P/O PL 51.1 Item 2)
13	-	Feeder Wire Harness (P/O PL 51.1 Item 2)
14	-	Motor Wire Harness (P/O PL 51.1 Item 2)
15	-	APS Wire Harness (Not Spared)
16	-	Connector (Not Spared)
17	-	Connector (Not Spared)



j0rk55105A

#### PL 51.6 DADF Drives (2 of 2)

Part	Description
011E22861	Nip Lever
_	Stopper Link (Not Spared)
012E17161	Release Link
019K10320	Brake
020E46551	Registration Roll Pulley
020E46561	Pulley Gear
020E46571	Pulley Gear
059E98620	Roll
121K46620	Gate Solenoid
-	Gate Solenoid (P/O PL 51.6 Item 9)
-	Cushion (P/O PL 51.6 Item 9)
121K43660	Exit Nip Release Solenoid
130K73000	Feed Out Sensor Assembly
-	Sensor Bracket (P/O PL 51.6 Item 13)
930W00121	Feed Out Sensor, Document Set Sensor
423W06555	Belt
423W31554	Belt
807E26971	Gear
807E26981	Exit Roll Gear
807E26991	Gear
807E27011	Take Away Roll Gear
809E86320	Spring
	Part 011E22861 - 012E17161 019K10320 020E46551 020E46561 020E46571 059E98620 121K46620 - - 121K43660 130K73000 - 930W00121 423W06555 423W31554 807E26971 807E26991 807E27011 809E86320



#### PL 51.7 Front Belt

PL51.7	
--------	--

Part Description Item Out Roll Pulley 1 020E46540 2 020E46551 Registration Roll Pulley 3 423W08855 Belt Belt (Alternate) 423W08854 \_ Belt (Not Spared) 4 423W06554 Knob Handle Ground Plate (Not Spared) 5 803E02200 6 \_ Document LED Set 7 960K48840 LED Bracket (P/O PL 51.7 Item 7) 8 \_ Document Set LED (P/O PL 51.7 9 Item 7)



PL51.8

#### PL 51.8 Registration, Retard, Invert, Output Chutes

Item	Part	Description
1	054K39700	Registration Chute (REP 5.14)
2	054K44171	Retard Chute (REP 5.15)
3	054K41044	Invert Chute
4	054K41050	Output Chute
5	-	Stamp Solenoid (Not Spared)



#### PL 51.9 Roll, Sensor Bracket

Item	Part	Description
1	-	Bearing (Not Spared)
2	059K65081	Registration Roll
3	059K65090	Take Away Roll (REP 5.16)
4	059K65100	Output Roll
5	059K65111	Exit Roll
6	068K69460	Sensor Bracket Assembly (REP
		5.17)
7	-	Bearing (Not Spared)
8	930W00121	Invert Sensor



#### PL 51.10 Document Tray

ltem	Part	Description
1	-	Sensor Bracket (P/O PL 51.4 Item 1)
2	930W00121	Tray Guide Set Sensor 1, Sensor 2, Sensor 3
3	_	Tray Cover (P/O PL 51.4 Item 1)
4	-	Tray Wire Harness (P/O PL 51.4 Item 1)
5	032K05861	Guide
6	-	Max Label (Not Spared)
7	-	Harness Cover (P/O PL 51.4 Item
		1)
8	-	Harness Cover (P/O PL 51.4 Item
		1)
9	-	Front Gear Rack (P/O PL 51.4 Item
		1)
10	-	Rear Gear Rack (P/O PL 51.4 Item
		1)
11	930W00241	Size Sensor 1, Size Sensor 2
12	897E26270	Instruction Label
13	-	Rack Spring (P/O PL 51.4 Item 1)
14	-	Pinion Gear (P/O PL 51.4 Item 1)
15	-	Rear Side Guide (P/O PL 51.4 Item 1)
16	_	Front Side Guide (P/O PL 51.4 Item 1)
17	-	Upper Tray (P/O PL 51.4 Item 1)



j0rk55110A

#### PL 51.11 Top Cover

Part	Description	
_	Top Cover (P/O PL 51.4 Item 2)	DI 51 11
-	Upper Feed Chute (P/O PL 51.4	1 2 31.11
	Item 2)	16 { 10
059K65070	Upper Feeder (REP 5.5)	
011K03520	Lever Latch	
059K61230	Take Away Pinch Roll	
120K92500	Document Set Actuator	
120E32200	Feed Out Actuator	
-	Bracket (P/O PL 51.4 Item 2)	
-	Ground Plate (P/O PL 51.4 Item 2)	
897E24011	Size Label	
897E24000	Jam Label	
-	Spring (Not Spared)	
-	Spring (Not Spared)	
-	Spring (Not Spared)	
-	Holder Shaft Latch	
-	Label Kit	
	Part	PartDescription-Top Cover (P/O PL 51.4 Item 2)-Upper Feed Chute (P/O PL 51.4 Item 2)059K65070Upper Feeder (REP 5.5)011K03520Lever Latch059K61230Take Away Pinch Roll120K92500Document Set Actuator120E32200Feed Out Actuator-Bracket (P/O PL 51.4 Item 2)-Ground Plate (P/O PL 51.4 Item 2)897E24011Size Label897E24000Jam Label-Spring (Not Spared)-Spring (Not Spared)-Holder Shaft Latch-Label Kit



#### PL 51.12 Upper Feeder

Item	Part	Description
1	_	Housing (P/O PL 51.11 Item 3)
2	-	Feeder Pulley (P/O PL 51.12 Item 3)
3	-	Nudger Pulley (P/O PL 51.11 Item 3)
4	-	Belt (P/O PL 51.11 Item 3)
5	-	Feed Shaft (P/O PL 51.11 Item 3)
6	-	Nudger Shaft (P/O PL 51.11 Item 3)
7	-	Feed Roll, Nudger Roll (P/O PL
		51.12 Item 11) (REP 5.18)
8	-	Bearing (P/O PL 51.11 Item 3)
9	-	Housing (P/O PL 51.12 Item 11)
10	-	Gear (P/O PL 51.11 Item 3)
11	604K58410	DADF Feed Roll Kit

PL51.12





#### PL 51.13 Registration Chute

P		5	1	1	3
	_	0			J

ltem	Part	Description
1	-	Registration Chute (P/O PL 51.8 Item 1)
2	_	Pinch Shaft (P/O PL 51.8 Item 1)
3	-	Registration Wide Pinch Roll (P/O PL 51.8 Item 1)
4	-	Registration Short Pinch Roll (P/O PL 51.8 Item 1)
5	_	Seal (P/O PL 51.8 Item 1)
6	_	Seal (P/O PL 51.8 Item 1)
7	-	Spring (P/O PL 51.8 Item 1)





#### PL 51.14 Retard Chute

PL51	.14
------	-----

Item	Part	Description
1	_	Chute (P/O PL 51.8 Item 2)
2	-	Set Gate (P/O PL 51.8 Item 2)
3	-	Housing (P/O PL 51.8 Item 2)
4	-	Spring (P/O PL 51.8 Item 2)
5	-	Retard Roll (P/O 51.12.11) ()
6	848K43600	Retard Roll Cover (P/O PL 51.12
		Item 11)
7	-	Seal (P/O PL 51.8 Item 2)
8	-	Seal (P/O PL 51.8 Item 2)
9	-	Label (P/O PL 51.8 Item 2)
10	-	Shaft (P/O PL 51.12 Item 11)
11	-	Pad (P/O PL 51.8 Item 2)



#### PL 51.15 Invert Chute

ltem	Part	Description
1	_	Invert Chute (P/O PL 51.8 Item 3)
2	-	Pre Registration Actuator (P/O PL
		51.8 Item 3)
3	-	Actuator (Aps 1) (P/O PL 51.8 Item
		3)
4	_	Actuator (Aps 2) (P/O PL 51.8 Item
		3)
5	_	Actuator (Aps 2) (P/O PL 51.8 Item
		3)
6	_	Actuator (Aps 3) (P/O PL 51.8 Item
		3)
7	_	Invert Actuator (P/O PL 51.8 Item
		3)
8	-	Invert Gate (P/O PL 51.8 Item 3)
9	-	Spring (P/O PL 51.8 Item 3)
10	_	Spring (P/O PL 51.8 Item 3)
11	-	Seal (P/O PL 51.8 Item 3)
12	_	Seal (P/O PL 51.8 Item 3)
13	-	Pad (P/O PL 51.8 Item 3)



### PL 51.16 Output Chute

#### PL51.16

Item	Part	Description
1	_	Chute (P/O PL 51.8 Item 4)
2	-	Exit Pinch Roll (P/O PL 51.8 Item 4)
3	-	Pinch Shaft (P/O PL 51.8 Item 4)
4	-	Wide Registration Pinch Roll (P/O
		PL 51.8 Item 4)
5	-	Short Registration Pinch Roll (P/O
		PL 51.8 Item 4)
6	-	Spring (P/O PL 51.8 Item 4)
7	-	Spring (P/O PL 51.8 Item 4)
8	-	Bearing (P/O PL 51.8 Item 4)
9	-	Pad (P/O PL 51.8 Item 4)



#### PL 51.17 Sensor Bracket





#### PL 55.1 DADF Accessory

ltem	Part	Description
1	059K74373	DADF



#### PL 55.2 DADF Cover, PWB

ltem	Part	Description
1	003K88740	Stopper
2	-	PWB Bracket (Not Spared)
3	-	DADF Feeder Assembly (Not
		Spared)
4	117E27450	DADF-IIT Cable
5	-	DADF Base Frame (Not Spared)
6	-	Rear Cover (Not Spared)
7	848E80010	Counter Balance Cover
8	-	Front Cover (Not Spared)
9	-	Clamp (Not Spared)
10	960K57793	DADF PWB
11	-	CIS PWB And Cable (Not Spared)
12	960K57971	CIS PWB
13	117E33270	DADF-ESS Cable
14	-	PWB Bracket (P/O PL 55.2 Item 11)
15	237W00178	Special Nut
16	-	Fastener Tape (Not Spared)
17	-	Core (Not Spared)
18	-	CVT Chute
19	-	Stud Screw (Not Spared)
20	-	CVT Spring (Not Spared)
21	-	Cloth Holder (Not Spared)
22	-	Angle Pad (Not Spared)
23	-	Cleaner Cloth (Not Spared)



#### PL 55.3 DADF Base Frame

ltem	Part	Description
1	_	DADF Base Frame (Not Spared)
2	036K92080	Left Counter Balance
3	036K92090	Right Counter Balance
4	_	Tie Plate (Not Spared)
5	-	Ground Plate (Not Spared)
6	-	Floating Holder (Not Spared)
7	_	Floating Spring (Not Spared)
8	-	Bracket (Not Spared)
9	-	Bracket (Not Spared)
10	_	Ground Plate (Not Spared)
11	-	Ground Plate (Not Spared)
12	_	Bracket
13	_	Ground Plate (Not Spared)

PL 55.3



#### PL 55.4 DADF Document Tray, Top Cover

Item	Part	Description
1	050K68820	DADF Document Tray
2	059K74400	Top Cover
3	-	Rear Stud Bracket (Not Spared)
4	-	Front Stud Bracket (Not Spared)



#### PL 55.5 DADF Motor, Wire Harness

tem	Part	Description	
1	007K18200	Gear (35T)	
2	007K18210	Gear (39T)	C
3	019K12410	Brake	
4	020E46551	Pulley	
5	020E49060	Gear Pulley	Б
6	020E49070	Gear Pulley	
7	020E49110	Pulley (50T)	
8	020E49370	Pulley (20T)	
9	-	Tension Pully Bracket (Not Spared)	
10	-	Tension Pully Bracket (Not Spared)	Ľ
11	-	Tension Pully Bracket (Not Spared)	
12	-	Roller (Not Spared)	
13	110K17110	DADF Interlock Switch and	
		Harness	
14	-	Bracket (P/O PL 55.5 Item 13)	
15	-	DADF Interlock Switch	
16	-	Spring (P/O PL 55.5 Item 13)	
17	-	Switch Wire Harness (P/O PL 55.5	
		Item 13)	
18	127K66070	Feed Motor	
19	-	Motor Bracket (Not Spared)	
20	127K60562	Regi Motor	
21	-	Motor Bracket (Not Spared)	
22	-	Pre-Regi Motor (Same as Item 20)	
23	-	Motor Bracket (Not Spared)	
24	-	Belt (Alternate)	
-	423W28655	Belt (Alternate)	
25	423W87655	Belt (Alternate)	
-	423W32255	Belt (Alternate)	
26	423W86454	Belt (Alternate)	
-	423W32254	Belt (Alternate)	
27	807E37950	Gear (18T)	
28	807E37960	Gear (16T/32T)	
29	809E98250	Spring	
30	809E98260	Spring	
31	809E98271	Spring	
32	_	Motor Bracket (Not Spared)	
33	930W00121	Sensor	
34	_	Harness Guide (Not Spared)	
35	-	Wire Harness (Motor) (Not Spared)	
30 07	-	Wire Harness (Regi) (Not Spared)	
37	-	vvire Harness (Feed) (Not Spared)	
38	-	DAdiFeed Motor and Bracket	
39	-	DADE Regi Motor and Bracket	
40	-	DADF Pre-Regi Motor and Bracket	



#### PL 55.6 DADF Front Belt

tem	Part	Description
1	020E46551	Pulley (Out Roller)
2	020E49050	Pulley
3	020E49080	Pulley (Exit Roll)
4	020E49090	Pulley (CIS)
5	020E49380	Pulley (Regi Roll)
6	-	Tension Roll Bracket
7	-	Roller (Not Spared)
8	423W23855	Belt (Alternate)
9	423W85254	Belt (Alternate)
10	423W86255	Belt (Alternate)
11	803E11160	Knob Handle
12	809E98250	Spring
13	960K48840	DADF Document Set LED

PL 55.6



#### PL 55.7 DADF Regi/Retard/Out Chute

Item	Part	Description	
1	049K10080	Exit Sensor and Bracket	
2	_	Bracket (P/O PL 55.7 Item 1)	P£ 55.7
3	_	Actuator (P/O PL 55.7 Item 1)	1 {2-6
4	-	Spring (P/O PL 55.7 Item 1)	
5	_	Exit Sensor (P/O PL 55.7 Item 1)	15 { 16-19 8 (PL55.14)
6	_	Pad (P/O PL 55.7 Item 1)	
7	050K68830	Set Gate	
8	054K47690	Retard Chute	
9	_	Regi Chute (Not Spared)	
10	_	Out Chute (Not Spared)	
11	_	Bearing (Not Spared)	A A A A A A A A A A A A A A A A A A A
12	_	Front Hinge (Not Spared)	
13	_	Rear Hinge (Not Spared)	AC AC
14	809E98140	Spring	
15	_	Sensor Housing Assembly	
16	-	Housing (P/O PL 55.7 Item 15)	
17	_	Feed In Sensor (P/O PL 55.7 Item	
		15)	
18	_	Feed Out Sensor (P/O PL 55.7 Item	
		15)	
19	_	Senor Wire Harness (P/O PL 55.7	
		Item 15)	
20	-	Stamp Wire Harness (Not Spared)	
21	-	Stamp Solenoid (Option) (Not	
		Spared)	
22	-	Stamp Wire Harness (Option) (Not	
		Spared)	
23	-	Stamp Bracket (Option) (Not	
		Spared)	
24	-	Stamp Plunger (Not Spared)	20
25	-	SCC Harness Wire (Not Spared)	
			24
			12 J

9 (PL55.13)

j0kt55507

2

- 23

9**9**5 AC

10 (PL55.15)

AC
## PL 55.8 DADF CIS

ltem	Part	Description
1	_	CIS Bushing (Not Spared)
2	049K17400	CIS Cable and Bracket
3	_	Bracket (Not Spared)
4	_	CIS Cable
5	130K78710	CIS Sensor
6	_	Spring (Not Spared)
7	-	Harness Guide (Not Spared)
8	_	Wire Harness (Not Spared)
9	_	Washer (Not Spared)
10	_	CIS Plate
11	_	Spring
12	_	Sholder Screw
13	_	Frame (P/O PL 55.8 Item 16)
14	-	Seal
15	-	Eliminator
16	-	(SCC) Frame Assembly



## PL 55.9 DADF Roll, Sensor Bracket

Item	Part	Description
1	413W93450	Bearing
2	413W11460	Bearing
3	-	Sensor Bracket Assembly (PL
		55.16
4	-	Slide Roll
5	059K73240	Take Away Roll
6	059K73250	Pre Registartion Roll
7	059K73261	Registration Roll
8	059K73270	Out Roll
9	059K73280	CIS Roll
10	059K73291	Exit Roll
11	-	Bearing
12	_	Block Bearing
13	_	Plate Spring



## PL 55.10 DADF Document Tray

ltem	Part	Description	
1	_	Sensor Bracket	
2	930W00121	Document Tray Set Guide Sensor	
		123J2	<b>PI 5510</b>
3	-	Document Tray Set Guide	
		Sensor223J3	
4	-	Document Tray Set Guide Sensor	
		323J4	
5	-	Guide	
6	-	Label (Max)	18
7	-	Harness Cover	
8	-	Harness Cover	Į
9	-	Rack Rear (Front)	السل
10	-	Rack Rear (Rear)	
11	930W00241	Document Tray Size Sensor 123JC	
12	-	Document Tray Size Sensor 223JD	جرابتسر و
13	-	Rack Spring	
14	-	Pinion	
15	-	Side Guide	
16	-	Side Guide	8 4
17	-	Upper Tray	
18	-	Tray Cover	\_19
19	897E26270	Label Kit	2
20	-	Tray Wire Harness	
21	-	End Tray	
			<b>F</b> .



## PL 55.11 DADF Top Cover

ltem	Part	Description
1	_	Top Cover
2	_	Feed Upper Chute
3	059K73510	Upper Feed
4	011K04040	(SCC) Latch Lever
5	059K74420	Take Away Pinch Roll
6	-	Shaft
7	_	Pinch Roll
8	-	Pinch Roll (Side)
9	120K92810	Actuator
10	-	Actuator (Base)
11	-	Actuator (Arm)
12	-	Spring
13	-	Regi. Pinch Roll
14	-	Bracket
15	-	Ground Plate
16	897E24011	Label (Size)
17	-	Label (Jam)
18	-	Spring
19	-	Spring (Lever)
20	-	Spring (Nudger)
21	-	Bracket
22	-	Spring
23	-	Link
24	-	Label Kit

## PL 55.12 DADF Upper Feeder

ltem	Part	Description
1	-	Nudger Housing
2	-	Pulley (Feeder)
3	-	Pulley (Nudger)
4	-	Belt (Alternate)
5	-	Feed Shaft
6	-	Nudger Shaft
7	-	Feed Roll
8	-	Nudger Roll
9	-	Housing
10	-	Gear
11	-	Bearing
12	-	Collar
13	604K77810	Kit

13 { 7, 8



## PL 55.13 DADF Regi Chute

ltem	Part	Description
1	_	Regi. chute
2	-	SeaCa
3	-	Pinch Shaft
4	_	Regi. Pinch Roll (W)
5	-	Regi. Pinch Roll (S)
6	-	Spring
7	_	Bearing

PL 55.13



## PL 55.14 DADF Retard Chute

ltem	Part	Description
1	_	Pad
2	_	Pad (Gate)
3	_	Retard Chute
4	_	Retard Roll
5	-	Retard Shaft
6	-	Spring Retard
7	-	Retard Housing
8	848K43600	Retard Roll Cover
9	-	Seal (W)
10	-	Seal (S)
11	-	Actuator (APS1)
12	-	Actuator (APS2)
13	-	Actuator (APS dummy 1)
14	-	Actuator (APS Dummy 2)
15	-	Actuator (Feed In)
16	-	Actuator (Feed Out)
17	-	Actuator (Regi.)
18	-	Torsion Spring



## PL 55.15 DADF Out Chute

ltem	Part	Description
1	_	Out Chute
2	_	Seal
3	_	Pinch Shaft
4	-	Regi. Pinch Roll (W)
5	-	Regi. Pinch Roll (S)
6	-	Exit Pinch Roll
7	-	Pinch Roll
8	-	Exit Holder
9	-	Latch Shaft
10	-	Latch (Front)
11	-	Latch (Rear)
12	-	Spring
13	-	Link
14	-	Spring
15	-	Seal (W)
16	-	Seal (S)
17	-	Spring
18	-	Spring
19	-	Ground Plate
20	-	Handle



## PL 55.16 DADF Sensor Bracket

ltem	Part	Description
1	-	Sensor Bracket 23Q1
2	_	Sensor Guide 23Q2
3	120E31741	Actuator (Regi.)
4	120E33740	Actuator (Out)
5	930W00121	DADF Regi Sensor
6	_	DADF Pre Regi. Sensor
7	_	DADF Out Sensor
8	_	Pad (Gate)
9	_	Pad
10	_	Torsion Spring 23Qb
11	_	Sensor Guide
12	_	Wire Harness
13	_	DADF APS Sensor
14	_	DADF APS Sensor 2
15	-	DADF APS Sensor 3



## **Common Hardware**

Common Hardware		BB	271W16250	Dowel Pin (2x12)	
l t a ma	Dort	Description	BC	271W28250	Dowel Pin (3x12)
item	Part	Description	BD	271W28450	Dowel Pin (3x14)
A	112W27677	Sems Screw (M3x6)	BE	271W28650	Dowel Pin (3x16)
В	112W27678	Sems Screw (M3x6)	BF	271W36650	Dowel Pin (4x16)
С	112W27898	Screw (M3x8)	BG	285W16251	Pin Spring (2x12)
D	112W28098	Sems Screw (M3x10)	BH	285W28051	Spring Pin (3x10)
E	113W15588	Pan Head Screw (M2x5)	BJ	285W28651	Spring Pin (3x16)
F	113W16088	Screw (M2x10)	BK	351W29250	C-Clip (8)
G	113W20478	Tapping Screw (M3x4)	BL	354W13278	E-Clip (1.5)
Н	113W20677	Screw (M3x6)	BM	354W15278	E-Ring (2)
J	113W20678	Screw (M3x6)	BN	354W19278	E-Ring (2.5)
K	113W20688	Pan Head Screw (M2.5x6)	BP	354W21254	Ring KL (4)
L	113W20878	Screw (M3x8)	BQ	354W21278	E-Ring (3)
М	113W21078	Screw (M3x10)	BR	354W24254	KL Ring (6)
Ν	113W21278	Screw (M3x12)	BS	354W24278	E-Clip (4)
Р	113W21478	Screw	BT	354W26278	E-Clip (5)
Q	113W27488	Pan Head Screw (M3x4)	BU	354W27254	KL-Clip (8)
R	113W27588	Pan Head Screw (M3x5)	BV	354W27278	E-Ring (6)
S	113W27688	Pan Head Screw (M3x6)	BW	354W29278	E-Ring (8)
Т	113W27888	Pan Head Screw (M3x8)	BX	180W16878	Wing Screw
U	113W35878	Screw (M4x8)	BY	113W35678	Screw (M4x6)
V	113W35888	Pan Head Screw (M4x8)	BZ	153W27678	Screw (M6x6)
W	114W27678	Bind Head Screw (M3x6)	CA	271W16050	Dowel Pin (2x10)
Х	141W27451	Set Screw (M3x4)	СВ	112W27659	Sems Screw (M3x6)
Y	141W35651	Set Screw (M4x6)	CC	158W27663	Screw (M3x6)
Z	153W15888	Tapping Screw (M4x8)	CD	113W27551	Screw (M3x5)
AA	153W16288	Tapping Screw (M4x12)	CE	113W16051	Screw (M2x10)
AB	153W17688	Tapping Screw (M3x6)	CF	114W27878	Bind Head Screw (M3x8)
AC	153W17888	Tapping Screw (M3x8)	CG	113W21778	Screw (M3x18)
AD	153W18088	Tapping Screw (M3x10)	СН	113W20698	Round Screw (M3x6)
AE	153W27878	Tapping Screw (M3x8)	CJ	153W16088	Tapping Screw (M4x8)
AF	153W28078	Tapping Screw (M3x10)	СК	271W21050	Dowel Pin (3x10)
AG	158W27678	Screw	CI	158W27888	Round Screw (M3x9)
AH	158W27688	Round Screw (M3x7)	CM	252W29450	Nylon Washer (8) (11)
AJ	158W27878	Screw (M3x8)	CP	_	F-Ring
AK	158W28078	Screw (M3x10)	CS	285W16051	Dowel Pin (2x10)
AL	158W35878	Tapping Screw (M4x8)	СТ	285W15851	Pin Spring $(2x8)$
AM	220W21278	Flange Nut (3)	CV	113W35578	Tapping Screw (M4x5)
AN	251W19278	Washer (2.5) (10.5)	CW	113W27651	Screw (M3x6)
AP	251W21278	Washer (3) (10.5)	CX	251W21178	Washer $(3)$ (10.5)
AQ	251W24278	Washer (4) (10.8)	CY	354W31278	F-Clip (10)
AR	251W26278	Washer (5)	C7	112W27851	Screw (M3x8)
AS	252W24350	Nylon Washer (4)		113W15488	Screw (M2x4)
AT	252W26450	Nylon Washer (5)	DB	113W20857	Screw (M3x8)
AU	252W27350	Nylon Washer (6) (10.5)	DC	237\\/00178	Nut Screw
AV	252W27450	Nylon Washer (6) (11)	סס	826E08490	Screw
AW	252W29350	Nylon Washer (8) (10.5)	DF	826E06490	Screw
AX	252W31250	Nylon Washer (10) (10.25)		020200-00	001011
AY	252W31350	Nylon Washer (10) (10.5)			
AZ	256W15278	Spring Washer (2) (10.5)			
BA	271W10850	Dowel Pin (1.6x8)			

Initial Issue

# **6 General Procedures**

#### **UI Diagnostics**

LIL Diagnostic (CSE) Mode	6-3
Service Copy (Tools) Mode	6-3
III Panel Testing	6-4
dC104 System Lleage Counters	6-4
dC108 Software Versions	6-5
dC120 Fault Counter	6-5
dC122 Fault History	6-6
dC128 Fold Position Adjustment	6-6
dC120 System Registration Satur	6-7
dC121 NVM Read/M/rite	6-7
dC132 Serial Number Synchronize	6-8
dC125 HESI Countors	6.0
dC140 Analog Monitor	6.0
dC201 NV/M Initialization	6 10
	6 11
dC212 Network Eele Testa	6 1 1
dC220 Component Control	6 1 2
dC361 NVM Save and Postero	6 20
dCS02 Image Size Adjustment	6 40
dC608 Decument Fooder Desistration	6 41
dC600 Document Clean Desistration	0-41
dC609 Document Glass Registration	6-41
dC612 Test Pattern Print	6-42
dCC74 DeciCer Measurement Curle Centrel	0-42
dC671 RegiCon Measurement Cycle Control	6-43
dC673 RegiCon Control Sensor Check Cycle	6-43
dC6/5 RegiCon Setup Cycle Control	6-44
	6-44
dC/40 Tray 5 (MSI) Guide Adjustment	6-45
dC909 Calibrate for Paper	6-45
dC919 Color Balance Adjustment	6-46
dC924 TRC Adjustment	6-47
dC937 ProCon On/Off Print	6-47
dC945 IIT Calibration	6-48
dC949 ATC Default Developer Setup	6-48
dC950 ATC Sensor Setup	6-49
dC991 Tone Up/Tone Down	6-49
dC1202 Hole Position Adjustment	6-50
dC2006 Side 1 to Side 2 Color Matching	6-50
General Procedures	

GP 1 FAX PWB Internal Selftest
GP 2 Accessing Tools
GP 3 Controller Boot Sequence
GP 5 Image Quality Calibration
GP 6 Printing Configuration Reports
GP 7 Network Printing Simulation
<b>C</b>

GP 9 Installing System Software	6-55
GP 10 PWS Communication with the SBC	6-60
GP 11 Resetting the System Administrator Password	6-61
GP 13 Cloning Network Configurations	6-61
GP 14 External Fax Line Test	6-63
GP 16 Toner CRUM Conversion	6-64
GP 18 Restoring the Public Address Book	6-65
GP 20 Reporting Billing Meter Resets	6-66
GP 22 Foreign Device Interface Setup	6-66
GP 23 Intermittent or Noise Problem RAP	6-67
GP 24 How to turn off the Power Saver Functions	6-68
GP 25 Remote Control Panel	6-69
GP 26 Obtaining a Replacement SIM Card	6-70

### **General Information**

Product Codes	6-71
Common Tools	6-71
Product Tools and Test Patterns	6-72
Cleaning Materials	6-72
CRUs and Consumables	6-73
Glossary of Terms	6-73
Change Tags	

-	-	
Change	Tags	6-75

Processor (IOT) Tags

## UI Diagnostic (CSE) Mode

### Procedure

- 1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button. Release both buttons after a few seconds.
- 2. On the Service Diagnostics Login screen, enter 6789, then select Enter.
- 3. The UI Diagnostic menu opens and Diagnostics appears in the upper right corner of the display.

### **UI Diagnostic tabs**

When the UI Diagnostic menu screen is displayed, you will see the following tab choices: **Service Info**, **Diagnostics**, **Adjustments**, **Maintenance**, and **Call Closeout**. Touch a tab to see the routines available within that group. Touch a dC routine to launch it.

#### Service Info

This is the default tab for UI Diagnostics. It contains the following:

General information (serial #, product code, image count, s/w version, IP address). dC104, dC108, dC120, dC122, and dC135

Diagnostics

This tab contains:

dC140, dC304, dC312, dC330, dC612, and dC640.

- Adjustments
  - This tab contains:

dC128, dC129, dC131, dC301, dC361, dC603, dC608, dC609, dC671, dC673, dC675, dC740, dC909 dC919, dC924, dC937, dC945, dC949 , dC950, dC991, dC1202 and dC2006.

Maintenance

This tab contains:

dC120, dC122, dC132, dC135, and dC710.

Call Closeout

The selections within this tab allow you to choose whether the machine is rebooted when you exit UI diagnostic mode, and whether the fault counters are cleared. Touch the **Reset Counters?** square to clear fault history

## Service Copy (Tools) Mode

The CSE Service Copy (Tools) mode provides access to the machine that is greater than that of a user but less than that of the System Administrator. This mode allows you to perform a number of checks and run copies without compromising the customer's security settings. This mode can be used if the Administrator user name and passcode are not at the default, and the Administrator is not available to enter the admin passcode. (GP 2)

## Entering CSE Service Copy mode

- 1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button on the UI. Release both buttons after a few seconds.
- 2. On the Service Diagnostics Login screen, enter 2732, then select Enter.
- 3. The CSE Service Copy mode menu opens and CSE appears in the upper right corner of the display.
- 4. The Tools available in this mode are a subset of those available in Administrator mode.

**NOTE:** CSE Service Copy mode remains active until the **Log In/Out** button is pressed again or the session times out. When finished with Tools, always log out by pressing the **Log In/Out** button and confirming logout.

## **UI Panel Testing**

This utility is used to test UI operation. Access the UI tests by simultaneously pressing the \*, **#**, and C buttons. The utility consists of six (6) tests which are detailed in ADJ 4.1.

## dC104 System Usage Counters

#### Purpose

Displays a history of system usage.

#### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Service Info tab.
- 3. Select dC104 System Usage. The System Usage screen will be displayed.
- 4. Touch the Impression Counters button to filter the results:
  - Impressions lists all impressions, categorized by B/W, Color, Large, Small. Print, Copy
  - Sheet Counters Color, B/W, Large, Small
  - Images Sent Counters Fax and Scan
  - Fax Impressions Counters If Fax is enabled, lists the number of received Faxes that were printed
  - All Usage Counters

Press the Update button for the most current count.

## dC108 Software Versions

### Purpose

Displays the installed software versions for the various modules installed in the system.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Service Info tab.
- 3. Select **dC108 SW Version**. The versions of the following software modules will be displayed (dependent on installed options):
  - Software Upgrade
  - Copy Controller
  - Copy Controller OS
  - DUI H8
  - Fax
  - Imaging Output Terminal
  - Finisher
  - Network Controller
  - Image Input Terminal
  - Document Feeder
  - User Interface
  - XUI Language Version

## dC120 Fault Counter

### Purpose

Displays the number of occurrences of each IOT fault since the last Service Exit with the **Clear Counters** option selected.

### NOTE:

- 1. Faults detected while in Service Mode are not counted.
- 2. An Interlock open while the machine is stopped is not counted.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Service Info tab.
- 3. Select dC120 Fault Counters.
- 4. Selecting **Include Zero Occurrences** list all faults in the database; deselecting list only those faults with a recorded occurrence.
- 5. The screen displays all fault codes in the machine database by **Chain-Link**, **Description**, and **Occurrences** of the fault that have occurred since the last time the **Clear Counters** option was selected when exiting Diagnostic Mode.
- 6. Select the Sort On Occurrences button to list the most frequent faults first.
- 7. To jump to the start of the listing for a particular chain, press the **Chain** button, enter the chain number and press **Find**.

## dC122 Fault History

### Purpose

To display the Last 40 faults.

### NOTE:

- 1. Faults detected while in Service Mode are not counted.
- 2. An Interlock open while the machine is stopped is not counted.
- 3. If multiple faults occurred in the machine, the primary fault is recorded.

## Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Service Info** tab.
- 3. Select dC122 Fault History.
- 4. A three column table appears, listing the **Chain Link**, **Description**, and **Date and Time** of the last 40 machine faults.
- 5. To clear the shutdown history, select **Clear Counters** in the Call Closeout screen.

## dC128 Fold Position Adjustment

### Purpose

This procedure allows access to the NVM locations affecting the Finisher folding and staple position setup. There are several different adjustments, depending on the Finisher:

- ADJ 12.3 Professional Finisher Booklet Fold Position
- ADJ 12.4 Professional Finisher Booklet Staple Position (Staple on Fold)
- ADJ 12.5 Professional Finisher Booklet Staple Alignment
- ADJ 12.7 Professional Finisher Booklet Fold Position (Fine Adjustment)
- ADJ 12.8 Professional Finisher Booklet Staple Position (Staple on Fold Fine Adjustment)
- ADJ 12.10 Finisher LX Booklet Crease/Staple Position

## dC129 System Registration Setup

### Purpose

This procedure is used to align the Lead Edge and Side Edge of the developed image with media fed from the various paper trays. Refer to ADJ 9.1 for instructions

## dC131 NVM Read/Write

**NOTE:** NVM values are listed in the procedures where they are called out.

NOTE: For location of Professional Finisher NVM list see Figure 1

#### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dc131 NVM Read/Write.
- 4. Enter the NVM Chain/Link (as listed in the procedure that called dC131) in the **NVM ID** window.
- 5. Select Read.

**NOTE:** When an NVM is displayed in the table it will remain displayed until Clear is selected. The Clear button only clears the table display, not an NVM value.

- 6. In Value window enter new NVM Value. Use the +/- key to enter negative numbers.
- 7. Select **Write** to load the new value.



Figure 1 NVM List Location

## dC132 Serial Number Synchronize

### Purpose

Serial number data is stored at three locations:

- MCU NVM PWB
- SBC NVM PWB
- IIT/IPS PWB.

This procedure is used to restore serial number data integrity if these PWBs were replaced incorrectly, or if multiple failures occurred.

It is not necessary to run this procedure if a single PWB is replaced; if these boards are replaced one-at-a-time, the machine automatically synchronizes data on the new PWB to match the other two. It is only required to perform the procedure if the removal/replacement procedure is not followed correctly.

### **Initial Action**

Check dC122 for Communications faults (Chain 303). These can prevent serial number synchronization and must be addressed before proceeding

### Procedure

#### Part 1 - Notify service support.

NOTE: It may take up to 24 hours to receive a password from ACAST

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Maintenance Routines tab.
- 3. Select dC132 Machine Serial Number.

#### CAUTION

After the Unique Machine Identifier is generated, **DO NOT** touch the **Generate Id** button again, as this will invalidate the Password that will be provided.

4. Select Generate New Identifier Code. Record the Unique Machine Identifier

**NOTE:** Follow all instructions included in the form. You must complete the form, print it, obtain required signatures and data, then scan it.

- 5. Contact service support to obtain the form and instruction on how to complete it.
- 6. Follow form instructions and warnings carefully.
- 7. Note that there is a cost for this service.
- 8. Fill all the information. Print the completed form. Have your budget center manager sign the form. If **any** information is missing, we cannot perform the service.
- 9. Have National Technical Specialist (NTS, RSE or FE) forward a copy of service log and proof of the location of the machine to **acst01@xerox.com**. This information must indicate machine location, customer name and address.

The proof may be screen capture of NTS customer support database (account management database), FWSS, ICSS, DFM BT, VQMS, VALE, STPR, etc. The information on the proof must match with the information on the form.

10. Scan the completed form and email to acast01@xerox.com.

#### Part 2 - Re-serialize machine

1. Enter the UI Diagnostic (CSE) Mode.

#### CAUTION

**DO NOT** touch the **Generate Id** button, as this will invalidate the Password that will be provided.

- 3. Enter the Password received from ACAST in the space for **Submit Password**.
- 4. Select Submit Password.
- 5. Exit Diagnostic mode
- 6. Switch the machine power off, then on.

Serial numbers are now synchronized.

## dC135 HFSI Counters

### Purpose

This routine displays the percentage of service life remaining for the periodic replacement parts.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Service Info** or **Maintenance** tab.
- 3. Select dC135 CRU/HFSI Counters.
- 4. The CRU/HFSI screen lists the serviceable items and displays Estimated Pages Remaining.
- Refer to Detailed Maintenance Activities Detailed Maintenance Activities (HFSI) in Section 1. Perform the listed Service Action for all HSFI counters that are at or near end of life.
- 6. To reset the count after replacing the parts, select the appropriate HFSI item, then select the **Reset HFSI** button.

## dC140 Analog Monitor

### Purpose

This routine allows you to monitor the status of certain analog machine sensors (Fuser temperature sensors and paper tray size sensors). Temporary change of output values is possible.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Diagnostics tab.
- 3. Select dC140 Analog Monitor.

The system displays the **Analog Monitor** screen.

- a. The system displays the Component names with the ID, Status, Range and Value.
- b. The status of all output components show **Inactive**. The **Value** columns are blank.
- 4. To run an output component check:
  - a. Select a component to check.
  - b. Select Start on the menu screen displayed.
  - c. The output component in the machine is switched on.
  - d. The output component status changes to Active.
  - e. The bit count is displayed in the Value column.
  - f. You can switch on an input component to monitor an output component.

**NOTE:** If the component has a runtime restriction, the component is switched on for that period and automatically switched off.

**NOTE:** Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off.

**NOTE:** If the component cannot be automatically turned off, the following message appears: **Cannot check the component. Stop another output component**.

#### Checking multiple components

- 1. To check multiple components simultaneously, repeat Step 4a through 4f.
- 2. To stop the check, select **Stop** while the component is selected, or select **Stop All**, which switches off all output components.

#### Table 1 dC140 Analog Monitor Codes List

ID	Component	Description
010.200	Heat Belt STS Center	Heat Belt Center STS temperature AD value
010.201	Heat Belt STS Rear	Heat Belt Rear STS temperature AD value
042.200	Environment Temp Sensor	Environmental Sensor value
071.200	Tray1 Size Sensor	Displays AD value for Tray1 Paper Size.
072.200	Tray2 Size Sensor	Displays AD value for Tray2 Paper Size.
073.200	Tray3 Size Sensor	Displays AD value for Tray3 Paper Size.
074.200	Tray4 Size Sensor	Displays AD value for Tray4 Paper Size.
075.200	MSI Size Sensor	Displays AD value for MSI Paper Size.
091.200	BCR DC I MONI Y	Y-color BCR DC Current Monitor

#### Table 1 dC140 Analog Monitor Codes List

ID	Component	Description
091.201	BCR DC I MONI M	M-color BCR DC Current Monitor
091.202	BCR DC I MONI C	C-color BCR DC Current Monitor
091.203	BCR DC I MONI K	K-color BCR DC Current Monitor
092.200	ADC_SNR	ADC Sensor input value
092.201	EMV_TEMP_SNR	Temp Sensor input value
092.202	EMV_HUM_SNR	Humidity Sensor input value
092.203	ATC_SNR_Y	Detection of TC in Y-color Developer Housing
092.204	ATC_SNR_M	Detection of TC in M-color Developer Housing
092.205	ATC_SNR_C	Detection of TC in C-color Developer Housing
092.206	ATC_SNR_K	Detection of TC in K-color Developer Housing

## dC301 NVM Initialization

### Purpose

This procedure may be needed when the machine cannot recover for some unknown reasons, including problems such as producing blank copies/prints, continuously declaring system faults, etc. It is also required as part of the software upgrade process.

### **Initial Actions**

- Disconnect any Foreign Interface devices.
- Obtain all of the following information:
  - Saved Machine Settings, if possible.
  - NVM value factory setting report (typically it is located in the Tray 1 pocket)
  - Any customer setting Auditron account from the system administrator
  - Any setting changes (specifically NVM settings) shown on the machine's service log.
  - Any customer settings in the Tools mode.
- If possible, save Critical NVM (dC361).

#### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select the **dC301 NVM Initialization** tab.
- 4. Select the **Domain, Sub Domain,** and **NVM Data** location using the radio buttons on the UI screen.
- 5. Select **Initialize** to run the routine. (Select **Close** to exit the routine without running it.)
- 6. When prompted by the software Are you sure you want to initialize? select Initialize.
- 7. After the initialization is complete, use the data accumulated in **Initial Actions** to restore the machine to its previous configuration.

## dC304 LPH EEPROM Self test

### Purpose

To check the integrity of data in the control logic of the LED Print Heads.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Diagnostics** tab.
- 3. Select dC304 LPH EEPROM Self Test
- 4. Press Start.
- 5. If the data are correct and communication is possible, OK will appear.
- 6. If any color reports NG, check the display and fault history for any Chain 061 faults.

## dC312 Network Echo Tests

### Purpose

Tests the machine's capability to communicate on the network.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Diagnostics tab.
- 3. Select dC312 Network Echo Test. The Network Echo Test screen will then appear.

NOTE: Protocols that are not enabled will not be selectable (they will be grayed out).

- 4. Select the **Protocol** to be tested
- 5. Select the **Start Test** button. The test will run. A message will be displayed on the UI indicating if. the test was successful

## dC330 Component Control

### Purpose

The purpose of dC330 Component Control is to actuate or monitor the operation of individual or multiple related components.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Diagnostics** tab.
- 3. Select dC330 Component Control.
- 4. The dC330 screen is displayed. There are two tables. the upper table is a listing of all component control codes, selectable by Chain. The lower table contains codes to be activated.

The display indicates the following:

- Chain/Link
- I/O (whether component is Input (I) or Output (O))
- Description

#### Finding a code

Locate a specific code by scrolling through the UI or select from the following tables:

1. DADF Chain 005 Component Control Codes - Table 1

Fuser Chain 10 Component Control Codes - Table 2

A-Finisher (Integrated) Chain 12 Component Control Codes - Table 3

SB-Finisher (LX) Chain 12 Component Control Codes - Table 4

C-Finisher (Professional) Chain 12 Component Control Codes - Table 5

C-Finisher (Professional) Booklet Maker Chain 13 Component Control Codes - Table 6

SB-Finisher (LX) Booklet Maker Chain 13 Component Control Codes - Table 7

- FAX Chain 20 Component Control Codes Table 8
- Drives/Fans Chain 42 Component Control Codes Table 9
- LED Print Head Chain 61 Component Control Codes Table 10
- Scanner Chain 62 Component Control Codes Table 11
- Tray 1 Chain 71 Component Control Codes Table 12
- Tray 2 Chain 72 Component Control Codes Table 13
- Tray 3 Chain 73 Component Control Codes Table 14
- Tray 4 Chain 74 Component Control Codes Table 15

Tray 5 Bypass Chain 75 Component Control Codes - Table 16

IOT Media Path Chain 77 Component Control Codes - Table 17

HCF Chain 78 Component Control Codes - Table 18

- MOB Chain 89 Component Control Codes Table 19
- IOT Xerographics Chain 91 Component Control Codes Table 20
- IOT ADC Chain 92 Component Control Codes Table 21
- IOT Developer Drive Chain 93 Component Control Codes Table 22
- IOT Transfer Belt Component Control Codes Table 23
- 2. Component control codes in the tables are arranged by Chain. Touch the **Chain** button and select a chain. The codes within that chain are listed.
- 3. Select the desired code. A popup menu gives you the choice to either **Close Menu** or **Add** the code to the lower table.

#### Activating a code

#### CAUTION

Some components have special machine safety requirements, such as removing the IBT assembly before running the IBT Drive, etc. Read the code description in tables 1 - 17 in order to avoid machine damage.

- 1. To add a code directly to the lower table, touch the **Chain-link** icon on the UI. Use the keypad to enter the complete 6-digit component control code, then touch the **Add** button.
- 2. Codes are activated by touching the entry in the lower table. Select the desired action from the popup table that occurs.

**NOTE:** If the component has a runtime restriction, the component is switched on for that period and automatically switched off.

3. Press the **Stop** or **Stop All** button, or double click the active component in the Active Stack box to end the test. The ID and Active Stack components are removed from the Active Stack box.

#### **Stacking Component Codes**

**NOTE:** Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off. If the component cannot be automatically turned off, the following message appears:! **Cannot check the component. Stop another output component** 

- 1. To stack several codes, select the first code and press **Start**, then select the next code and press **Start**. Continue to enter up to eleven codes.
- 2. The state changes to Run; H or L as applicable.
- 3. Stop a highlighted component by pressing **Stop** or
- 4. To switch off all components, press Stop All.

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
005.001	CVT-DADF feed motor _ speed 1	IIT	DADF	Output	005.002 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 1
005.002	CVT- ADF feed motor _ speed 2	IIT	DADF	Output	005.001, 005.003 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 2
005.003	CVT-DADF feed motor _ speed 3	IIT	DADF	Output	005.001, 005.002, 005.004 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 3

#### Table 1 DADF Chain 005 Component Control Codes

#### Table 1 DADF Chain 005 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
005.004	CVT-DADF feed motor _ speed 4	IIT	DADF	Output	005.001 thru 005.003,005.005 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 4
005.005	CVT-DADF feed motor _ speed 5	IIT	DADF	Output	005.001 thru 005.004, 005.006 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 5
005.007	CVT-DADF Feed Motor_speed 7	IIT	DADF	Output	005.001 thru 005.006, 005.008 thru 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 7
005.008	CVT-DADF feed motor _ speed 8	ШТ	DADF	Output	005.001 thru 005.007, 005.009, 005.010, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 8
005.010	CVT-DADF feed motor _ speed 10	IIT	DADF	Output	005.001 thru 005.009, 005.013, 005.014, 005.074	50 sec	On	Run Feed Motor at speed 10
005.014	CVT-DADF feed motor _ Reverse	IIT	DADF	Output	005.001 thru 005.010, 005.013, 005.074	50 sec	On	Run Feed Motor in reverse
005.015	CVT-DADF pre reg motor _ speed 1	IIT	DADF	Output	005.016 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 1
005.017	CVT-DADF pre reg motor _ speed 3	IIT	DADF	Output	005.015, 005.016, 005.018 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 3
005.019	CVT-DADF pre reg motor _ speed 5	ШТ	DADF	Output	005.015 thru 005.018, 005.020 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 5
005.020	CVT-DADF pre reg motor _ speed 6	ШТ	DADF	Output	005.015 thru 005.019, 005.021 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 6
005.021	CVT-DADF pre reg motor _ speed 7	ШТ	DADF	Output	005.015 thru 020, 005.022 thru 005.025, 005.076, 005.077, 005.089	50 sec	On	Run Pre Reg Motor at speed 7
005.026	CVT-DADF reg motor _ speed 1	IIT	DADF	Output	005.027 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 1
005.027	CVT-DADF reg motor _ speed 2	IIT	DADF	Output	005.026, 005.028 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 2
005.028	CVT-DADF reg motor _ speed 3	IIT	DADF	Output	005.026, 005.027, 005.029 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 3
005.029	CVT-DADF reg motor _ speed 4	IIT	DADF	Output	005.026 thru 005.028, 005.030 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 4
005.030	CVT-DADF reg motor _ speed 5	IIT	DADF	Output	005.026 thru 005.029, 005.031 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 5
005.032	CVT-DADF reg motor _ speed 7	IIT	DADF	Output	005.026 thru 005.031, 005.033 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 7
005.033	CVT-DADF reg motor _ speed 8	IIT	DADF	Output	005.026 thru 005.032, 005.034 thru 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor at speed 8
005.035	CVT-DADF reg motor _ speed 10	IIT	DADF	Output	005.026 thru 005.034, 005.036, 005.078 thru 005.080	50 sec	On	Run Registration Motor speed 10 Note: Not in SM but on DADF K15.
005.038	CVT-DADF platen motor _ speed 2	IIT	DADF	Output	005.037, 005.039, 005.041 thru 005.047, 005.085	50 sec	On	Run Platen Motor at speed 2
005.041	CVT-DADF platen motor _ speed 4	IIT	DADF	Output	005.037 thru 005.039, 005.042 thru 005.047, 005.085	50 sec	On	Run Platen Motor at speed 4
005.067	Gate solenoid duplex open	IIT	DADF	Output	005.068, 005.070	100 msec	On	Move gate to duplex
005.068	Gate solenoid simplex open	IIT	DADF	Output	005.067, 005.070	100 msec	On	Move gate to simplex
005.069	Exit Gate solenoid	IIT	DADF	Output	005.062	2 sec	On	Actuate gate solenoid
005.070	Nip release solenoid_PF1	IIT	DADF	Output	005.067, 005.068	2 sec	On	Actuate nip release solenoid 1
005.072	Nip release solenoid_PF2	IIT	DADF	Output		3 sec	Ön	Actuate nip release solenoid 2

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
005.073	CVT stamp solenoid	IIT	DADF	Output		10 msec	On	Actuate CVT stamp solenoid
005.083	Doc ready	IIT	DADF	Output		None	On	Turn doc ready signal on
005.084	Doc SetLED	IIT	DADF	Output		5 sec	On	Turn SetLED on CVT mode.
005.088	Image area	IIT	DADF	Output		5 sec	On	Not in BSD but listed elsewhere
005.090	Nudger initialize	IIT	DADF	Output		None	On	Initialization of Nudger roll
005.093	Nudger Motor CW (PF2)	IIT	DADF	Output	005.09, 005.094	5 sec	On	Not in BSD but listed elsewhere
005.102	DADF Document Set Sensor	IIT	DADF	Input		None	High/Low	Low if document present
005.110	DADF Regi Sensor	IIT	DADF	Input		None	High/Low	Low if document present
005.205	CVT-DADF feed out sensor	IIT	DADF	Input		None	High/Low	Paper at Feed Out Sensor
005.206	CVT-DADF pre-reg sensor	IIT	DADF	Input		None	High/Low	Paper at Pre-Reg Sensor
005.211	CVT-DADF invert sensor	IIT	DADF	Input		None	High/Low	Paper at DADF invert sensor
005.212	CVT-DADF feeder interlock switch	IIT	DADF	Input		None	High/Low	DADF Top cover interlock open
005.213	CVT-DADF Platen interlock switch	IIT	DADF	Input		None	High/Low	DADF Platen interlock open
005.215	CVT-DADF #1 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Auto- matic Paper Selection (APS) sensor #1.
005.216	CVT-DADF #2 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Auto- matic Paper Selection (APS) sensor #2.
005.217	CVT-DADF #3 Tray APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Feeder Tray Auto- matic Paper Selection (APS) sensor #3.
005.218	CVT-DADF #1 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Auto- matic Paper Selection (APS) sensor #1
005.219	CVT-DADF #2 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Auto- matic Paper Selection (APS) sensor #2
005.220	CVT-DADF #3 APS sensor	IIT	DADF	Input		None	High/Low	Paper at DADF Upper chute Auto- matic Paper Selection (APS) sensor #3
005.221	CV -DADF Tray size sensor #1	IIT	DADF	Input		None	High/Low	DADF Tray size sensor #1
005.222	CVT-DADF Tray size sensor #2	IIT	DADF	Input		None	High/Low	DADF Tray size sensor #2
005.224	Scan start	IIT	DADF	Input		None	High/Low	Scan Start
005.226	CVT-DADF #2 invert sensor	IIT	DADF	Input		None	High/Low	DADF invert sensor #2. Not in BSD but listed elsewhere
005.227	A3 Exist	IIT	DADH	Input		None	High/Low	L:A3, H:A4
005.228	APS Sensor exist	IIT	DADH	Input		None	High/Low	L: No Sensor; H: Sensor

#### Table 2 Fuser Chain 10 Component Control Codes

Chain	Component	Davias	Madula	Turne	Conflicto	Timeout	Diaplay	Description
LINK	Component	Device	wodule	туре	Connicts	Timeout	Display	Description
010.001	Fuser Motor 255mm/s	IOT	Fuser	Output	010.002 thru 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed.
010.002	Fuser Motor 225mm/s	IOT	Fuser	Output	010.001, 010.003 thru 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.003	Fuser Motor 200mm/s	IOT	Fuser	Output	010.001thru 010.002, 010.004, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.004	Fuser Motor 175mm/s High Speed	IOT	Fuser	Output	010.001thru 010.003, 010.009, 010.010	None	On/Off	Run the Fuser Motor at speed
010.005	Fuser Motor 121mm High Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.006	Fuser Motor 175mm/s Low Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.007	Fuser Motor 121mm Low Speed	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.008	Fuser Motor 79mm/s	IOT	Fuser	Output		None	On/Off	Run the Fuser Motor at speed
010.009	P/Roll Latch On	IOT	Fuser	Output		None	On/Off	Pressure roller latch On
010.010	P/Roll Latch Off	IOT	Fuser	Output		None	On/Off	Pressure roller latch Off
010.011	P/Roll Half Latch	IOT	Fuser	Output		None	On/Off	Pressure roller latch On
010.201	Fuser Thermostat Status	IOT	Fuser	Input		None	High/Low	Fuser Thermostat operational status
010.202	P/Roll Latch Sensor	IOT	Fuser	Input		None	High/Low	Pressure roller latch Sensor status
010.203	Belt Speed Sensor	IOT	Fuser	Input		None	High/Low	Fuser belt sensor status

#### Table 3 A-Finisher (Integrated) Chain 12 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
LIIIK	Component	Device	Module	турс	Connicta	Timeout	Display	Description
012.013	Sub Paddle Solenoid	IOT	A-Finisher	Output	012.014	660ms	On/Off	Rotation of the sub paddle
012.014	Sub Paddle rotation	IOT	A-Finisher	Output	012.013, 012.095 thru 012.097	Mot: 3262 pulses and sol: 660ms	On/Off	A 360 degree roll of the sub paddle (move the transport motor forward on at the same time when the sub paddle.)
012.017	Set Clamp Motor On	IOT	A-Finisher	Output		250 pulse	On/Off	Normal rotation of the Set Clamp Motor
012.020	Front Tamper Motor Low Speed - Front	IOT	A-Finisher	Output	012.021 thru 012.025	100 pulse	On/Off	Move front tamper to front at low speed.
012.021	Front Tamper Motor Medium Speed - Front	IOT	A-Finisher	Output	012.020, 012.022 thru 012.025	100 pulse	On/Off	Move front tamper to front at middle speed.
012.022	Front Tamper Motor High Speed - Front	IOT	A-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	100 pulse	On/Off	Move front tamper to front at high speed.
012.023	Front Tamper Motor Low Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.022, 012.024, 012.025	100 pulse	On/Off	Move front tamper to rear at low speed.
012.024	Front Tamper Motor Medium Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.023, 012.025	100 pulse	On/Off	Move front tamper to rear at medium speed
012.025	Front Tamper Motor High Speed - Rear	IOT	A-Finisher	Output	012.020 thru 012.024	100 pulse	On/Off	Move front tamper to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	A-Finisher	Output	012.027 thru 012.031	100 pulse	On/Off	Move rear tamper to front at low speed.
012.027	Rear Tamper Motor Middle Speed - Front	IOT	A-Finisher	Output	012.026, 012.028 thru 012.031	100 pulse	On/Off	Move rear tamper to front at middle speed.
012.028	Rear Tamper Motor High Speed - Front	IOT	A-Finisher	Output	012.026, 012.027, 012.029 thru 012.031	100 pulse	On/Off	Move rear tamper to front at high speed.
012.029	Rear Tamper Motor Low Speed - Rear	IOT	A-Finisher	Output	012.026, 012.028, 012.031	100 pulse	On/Off	Move rear tamper to rear at low speed.
012.030	Rear Tamper Motor Middle Speed - Rear	IOT	A-Finisher	Output	012.026 thru 012.029, 012.031	100 pulse	On/Off	Move rear tamper to rear at medium speed
012.031	Rear Tamper Motor High Speed - Rear	IOT	A-Finisher	Output	012.026 thru 012.030	100 pulse	On/Off	Move rear tamper to rear at high speed
012.046	Staple Motor Forward On	IOT	A-Finisher	Output	012.047	None	On/Off	Normal rotation of the Staple Motor

Table 3 A-Finisher	(Integrated)	Chain 12	Component	Control Codes
--------------------	--------------	----------	-----------	---------------

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.047	Staple Motor Reverse On	IOT	A-Finisher	Output	012.046	180ms	On/Off	Reverse rotation of the Staple Motor
012.054	Eject Motor Low Forward On	IOT	A-Finisher	Output	012.055 thru 012.057	2000 pulse	On/Off	Rotate Eject Motor at low speed
012.055	Eject Motor High Forward On	IOT	A-Finisher	Output	012.054, 012.056, 012.057	2000 pulse	On/Off	Rotate Eject Motor at high speed
012.056	Eject Motor Low Reverse On	IOT	A-Finisher	Output	012.054, 012.055, 012.057	2000 pulse	On/Off	Reverse the Eject Motor at low speed
012.057	Eject Motor High Reverse On	IOT	A-Finisher	Output	012.054 thru 012.056	2000 pulse	On/Off	Reverse the Eject Motor at High speed
012.060	Stacker Motor Up On	IOT	A-Finisher	Output	012.061	80ms	On/Off	Lift Stacker Tray
012.061	Stacker Motor Down On	IOT	A-Finisher	Output	012.060	80ms	On/Off	Move down the stack tray
012.095	Transport Motor Low	IOT	A-Finisher	Output	012.014, 012.096, 012.097	None	On/Off	Rotate transport motor at low speed - equiva- lent to IOT at full process speed.
012.097	Transport Motor Half Forward	IOT	A.Finisher	Output	012.014, 012.096, 012.097	None	On/Off	marked as not available in ABC spreadsheet. see BSD
012.110	Regi Clutch ON	IOT	A-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = Low
012.140	Entrance Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = High
012.150	Compile Exit Sensor	IOT	A-Finisher	Input		None	High/Low	Paper exits = High
012.220	Front Tamper Home Sensor	IOT	A-Finisher	Input		None	High/Low	Not home = High
012.242	Low Staple Sensor	IOT	A-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	A-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	A-Finisher	Input		None	High/Low	High= not home
012.251	Set Clamp Home Sensor	IOT	A-Finisher	Input		None	High/Low	Not home = High
012.252	Eject Home Sensor	IOT	A-Finisher	Input		None	High/Low	High= Not home
012.267	Stack Height Sensor	IOT	A-Finisher	Input		None	High/Low	Low = Stack height
012.278	Stack Height 1	IOT	A-Finisher	Input		None	High/Low	Light shield exits
012.279	Stack Height 2	IOT	A-Finisher	Input		None	High/Low	Light shield exits
012.300	Top Cover Interlock	IOT	A-Finisher	Input		None	High/Low	High = Open
012.302	Finisher Front Door switch	IOT	A-Finisher	Input		None	High/Low	High = Open

#### Table 4 SB-Finisher (LX) Chain 12 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.013	Sub Paddle Solenoid	IOT	SB-Finisher	Output		250ms	On/Off	Activate Sub paddle Solenoid
012.018	Transport Motor Reverse	IOT	SB-Finisher	Output	012.036 thru 012.038	None	On/Off	Revers Transport Motor rotation
012.020	Front Tamper Motor Low Speed - Front	IOT	SB-Finisher	Output	012.022, 012.023, 012.025	82 pulses	On/Off	Front Tamper Motor to front at low speed
012.022	Front Tamper Motor High Speed - Front	IOT	SB-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	82 pulses	On/Off	Front Tamper Motor to front at high speed
012.023	Front Tamper Motor Low Speed - Rear	IOT	SB-Finisher	Output	012.020 thru 012.022, 012.025	100 pulses	On/Off	Front Tamper Motor to rear at low speed
012.025	Front Tamper Motor High Speed - Rear	IOT	SB-Finisher	Output	012.020, 012.022, 012.023	82 pulses	On/Off	Front Tamper Motor to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	SB-Finisher	Output	012.028, 012.029, 012.031	82 pulses	On/Off	Rear Tamper Motor to front at low speed

#### Table 4 SB-Finisher (LX) Chain 12 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.028	Rear Tamper Motor High Speed -	IOT	SB-Finisher	Output	012.026, 012.029, 012.031	82 pulses	On/Off	Rear Tamper Motor to front at high speed
012 020	FIUIL Roar Tamper Motor Low Speed Rear	IOT	SR Einichor	Output	012 026 012 028 012 021	82 pulsos	On/Off	Poor Tompor Motor to roor at low speed
012.029	Real Tamper Motor High Speed - Real		SB-Finisher	Output				Rear Tamper Motor to rear at high speed
012.031	Kear Tamper Motor High Speed - Kear		SD-Finisher	Output	012.020, 012.020, 012.029	oz puises		Kear famper wotor to rear at high speed
012.032	Aport Motor 2		SD-Finisher	Output	012.035, 012.034, 012.035, 012.039	None		Aport Motor at speed 1
012.033	Aport Motor 2		SB-Finisher	Output	012.032, 012.034, 012.035, 012.039	None		Aport Motor at speed 2
012.034	Xport Motor 3		SB-Finisher	Output	012.032, 012.033, 012.035, 012.039	None		Aport Motor at speed 3
012.035	Xport Motor 4		SB-Finisher	Output	012.032 thru 012.034, 012.039	None		Aport Motor at speed 4
012.036		101	SB-Finisher	Output	012.037, 012.038, 012.018	None		Transport Motor at speed 1
012.037	Transport Motor 2	101	SB-Finisher	Output	012.036, 012.038, 012.018	None		Transport Motor at speed 1
012.038	Transport Motor 3	101	SB-Finisher	Output	012.037, 012.038, 012.018	None	On/Off	Transport Motor at speed 1
012.039	Xport Motor Reverse	101	SB-Finisher	Output	012.032 thru 012.035	None	On/Off	Reverse Xport Motor rotation
012.040	Stapler Move Front Move - Low speed	IOT	SB-Finisher	Output	012.042, 012.043, 012.035	400 pulses	On/Off	Stapler Move Motor to front at low speed
012.042	Stapler Move Motor High Front On	IOT	SB-Finisher	Output	012.040, 012.043, 012.045	400 pulses	On/Off	Stapler Move Motor to front at high speed
012.043	Stapler Move Motor Low Rear On	IOT	SB-Finisher	Output	012.040, 012.042, 012.045	400 pulses	On/Off	Stapler Move Motor to rear at low speed
012.045	Stapler Move Motor High Rear On	IOT	SB-Finisher	Output	012.040, 012.042, 012.043	400 pulses	On/Off	Stapler Move Motor to rear at high speed
012.046	Staple Motor Forward On	IOT	SB-Finisher	Output	012.047	None	On/Off	Stapler Motor forward rotation
012.047	Staple Motor Reverse On	IOT	SB-Finisher	Output	012.046	None	On/Off	Stapler Motor reverse rotation
012.050	Set Clamp Clutch On	IOT	SB-Finisher	Output		200msec	On/Off	Actuate Set Clamp Clutch
012.052	Eject Clamp Up	IOT	SB-Finisher	Output	012.053 thru 012.055	None	On/Off	Raise Eject Clamp
012.053	Eject Clamp Down	IOT	SB-Finisher	Output	012.052, 012.054, 012.055	None	On/Off	Lower Eject Clamp
012.054	Eject Motor Low Forward On	IOT	SB-Finisher	Output	012.052, 012.053, 012.055	1136 pulse	On/Off	Eject Motor forward at low speed
012.055	Eject Motor High Forward On	IOT	SB-Finisher	Output	012.052 thru 012.054	1136 pulse	On/Off	Eject Motor forward at high speed
012.060	Stacker Motor Up On	IOT	SB-Finisher	Output	012.061	500msec	On/Off	Move Stacker Tray up with Stacker Motor
012.061	Stacker Motor Down On	IOT	SB-Finisher	Output	012.060	500msec	On/Off	Move Stacker Tray down with Stacker Motor
012.074	Punch Motor Home Move	IOT	SB-Finisher	Output	012.074, 012.078, 012.079	None	On/Off	Move Punch motor to home position
012.077	Punch - 2 hole	IOT	SB-Finisher	Input	012.074, 012.078, 012.079	None	On/Off	Actuate 2-hole punch
012.078	Punch - 3 hole	IOT	SB-Finisher	Input	012.074, 012.077, 012.079	None	On/Off	Actuate 3-hole punch
012.079	Punch - 4 hole	IOT	SB-Finisher	Input		None	On/Off	Actuate 4-hole punch
012.100	Transport Entrance Sensor	IOT	SB-Finisher	Input		None	High/Low	high with paper
012.110	Regi Clutch ON	IOT	SB-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	SB-Finisher	Input		None	High/Low	Paper exits = Low
012.150	Compile Exit Sensor	IOT	SB-Finisher	Input		None	High/Low	Paper exits = High
012.151	Compile Tray NO Paper Sensor	IOT	SB-Finisher	input		None	High/Low	
012.190	H-Xport Entrance Sensor	IOT	SB-Finisher	Input		None	High/Low	High with paper
012.241	Stapler Move Position Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.250	Eject Clamp Home Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.262	Stacker NO Paper Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.263	Stack Encoder Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.264	Stack Height Sensor 1	IOT	SB-Finisher	Input		None	High/Low	

#### Table 4 SB-Finisher (LX) Chain 12 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
				- 16 -				
012.265	Stack Height Sensor 2	IOT	SB-Finisher	Input		None	High/Low	
012.271	Puncher Home Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.274	Puncher Encoder Sensor	IOT	SB-Finisher	input		None	High/Low	
012.275	Punch BOX Set Sensor	IOT	SB-Finisher	input		None	High/Low	
012.277	Puncher Detect	IOT	SB-Finisher	input		None	High/Low	
012.300	Eject Cover Switch	IOT	SB-Finisher	input		None	High/Low	
012.303	H-Xport Open Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.220	Front Tamper Home Sensor	IOT	SB-Finisher	Input		None	High/Low	Not home = High
012.242	Low Staple Sensor	IOT	SB-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	SB-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	SB-Finisher	Input		None	High/Low	High= not home
012.251	Set Clamp Home Sensor	IOT	SB-Finisher	Input		None	High/Low	Not home = High
012.302	Finisher Front Door switch	IOT	SB-Finisher	Input		None	High/Low	High = Open

Table 5 C-Finisher (Professional) Chain 12 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.001	Fin Transport Motor 350 On	IOT	C-Finisher	Output		None	On/Off	
012.002	Fin Transport Motor 600 On	IOT	C-Finisher	Output		None	On/Off	
012.003	Regi Motor 285 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.004	Regi Motor 350 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.005	Regi Motor 600 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.006	Regi Motor 285 Reverse On	IOT	C-Finisher	Output		None	On/Off	
012.007	Exit Motor 285 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.008	Exit Motor 350 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.009	Exit Motor 600 Forward On	IOT	C-Finisher	Output		None	On/Off	
012.010	Exit Motor 285 Reverse On	IOT	C-Finisher	Output		None	On/Off	
012.011	Transport Gate Solenoid TOP	IOT	C-Finisher	Output		None	On/Off	
012.012	Transport Gate Solenoid Stacker	IOT	C-Finisher	Output		None	On/Off	
012.013	Sub Paddle Solenoid	IOT	C-Finisher	Output		100msec	On/Off	
012.015	Paper to Stacker Solenoid	IOT	C-Finisher	Output		None	On/Off	marked not available in ABC spreadsheet. see BSD
012.016	Buffer Gate Solenoid BUF	IOT	C-Finisher	Output		None	On/Off	
012.020	Front Tamper Motor Low Speed - Front	IOT	C-Finisher	Output	012.021 thru 012.025	100 pulse	On/Off	Move front tamper to front at low speed.
012.021	Front Tamper Motor Medium Speed - Front	IOT	C-Finisher	Output	012.020, 012.022 thru 012.025	100 pulse	On/Off	Move front tamper to front at middle speed.
012.022	Front Tamper Motor High Speed - Front	IOT	C-Finisher	Output	012.020, 012.021, 012.023 thru 012.025	100 pulse	On/Off	Move front tamper to front at high speed.
012.023	Front Tamper Motor Low Speed - Rear	IOT	C-Finisher	Output	012.020 thru 012.022, 012.024, 012.025	100 pulse	On/Off	Move front tamper to rear at low speed.

Table 5 C-Finisher	(Professional	) Chain 1	2 Com	ponent	Control	Codes
		,				

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.024	Front Tamper Motor Medium Speed - Rear	ЮТ	C-Finisher	Output	012.020 thru 012.023, 012.025	100 pulse	On/Off	Move front tamper to rear at medium speed
012.025	Front Tamper Motor High Speed - Rear	IOT	C-Finisher	Output	012.020 thru 012.024	100 pulse	On/Off	Move front tamper to rear at high speed
012.026	Rear Tamper Motor Low Speed - Front	IOT	C-Finisher	Output	012.027 thru 012.031	100 pulse	On/Off	Move rear tamper to front at low speed.
012.027	Rear Tamper Motor Middle Speed - Front	IOT	C-Finisher	Output	012.026, 012.028 thru 012.031	100 pulse	On/Off	Move rear tamper to front at middle speed.
012.028	Rear Tamper Motor High Speed - Front	IOT	C-Finisher	Output	012.026, 012.027, 012.029 thru 012.031	100 pulse	On/Off	Move rear tamper to front at high speed.
012.029	Rear Tamper Motor Low Speed - Rear	IOT	C-Finisher	Output	012.026, 012.028, 012.031	100 pulse	On/Off	Move rear tamper to rear at low speed.
012.030	Rear Tamper Motor Middle Speed - Rear	IOT	C-Finisher	Output	012.026 thru 012.029, 012.031	100 pulse	On/Off	Move rear tamper to rear at medium speed
012.031	Rear Tamper Motor High Speed - Rear	IOT	C-Finisher	Output	012.026 thru 012.030	100 pulse	On/Off	Move rear tamper to rear at high speed
012.041	Stapler Move Motor Middle Front On	IOT	C-Finisher	Output		400 pulse	On/Off	
012.042	Stapler Move Motor High Front On	IOT	C-Finisher	Output	012.040, 012.043, 012.045	400 pulse	On/Off	
012.044	Stapler Move Motor Middle Rear On	IOT	C-Finisher	Output		None	On/Off	
012.045	Stapler Move Motor High Rear On	IOT	C-Finisher	Output	012.040, 012.042, 012.043	400 pulse	On/Off	
012.046	Staple Motor Forward On	IOT	C-Finisher	Output	012.047	None	On/Off	Normal rotation of the Staple Motor
012.047	Staple Motor Reverse On	IOT	C-Finisher	Output	012.046	180ms	On/Off	Reverse rotation of the Staple Motor
012.050	Set Clamp Clutch On	IOT	C-Finisher	Output		200msec	On/Off	
012.051	Sub Paddle Solenoid	IOT	C-Finisher	Output		None	On/Off	
012.052	Eject Clamp Up	IOT	C-Finisher	Output	012.053 thru 012.055	None	On/Off	
012.053	Eject Clamp Down	IOT	C-Finisher	Output	012.052, 012.054, 012.055	None	On/Off	
012.054	Eject Motor Low Forward On	IOT	C-Finisher	Output	012.055 thru 012.057	2000 pulse	On/Off	Rotate the Eject Motor at low speed
012.055	Eject Motor High Forward On	IOT	C-Finisher	Output	012.054, 012.056, 012.057	2000 pulse	On/Off	Rotate the Eject Motor at high speed
012.056	Eject Motor Low Reverse On	IOT	C-Finisher	Output	012.054, 012.055, 012.057	2000 pulse	On/Off	Reverse the Eject Motor at low speed
012.057	Eject Motor High Reverse On	IOT	C-Finisher	Output	012.054 thru 012.056	2000 pulse	On/Off	Reverse the Eject Motor at High speed
012.060	Stacker Motor Up On	IOT	C-Finisher	Output	012.061	500msec	On/Off	Move Stacker Tray up
012.061	Stacker Motor Down On	IOT	C-Finisher	Output	012.060	500msec	On/Off	Move Stacker Tray down
012.070	Puncher Move Motor Low Front On	IOT	C-Finisher	Output		None	On/Off	
012.071	Puncher Move Motor High Front On	IOT	C-Finisher	Output		None	On/Off	
012.072	Puncher Move Motor Low Rear On	IOT	C-Finisher	Output		None	On/Off	
012.073	Puncher Move Motor High Rear On	IOT	C-Finisher	Output		None	On/Off	
012.074	Puncher Motor 2 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.075	Puncher Motor 3 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.076	Puncher Motor 4 Hole Home Move	IOT	C-Finisher	Output		None	On/Off	
012.077	Punch - 2 hole	IOT	C-Finisher	Input	012.074, 012.078, 012.079	None	On/Off	
012.078	Punch - 3 hole	IOT	C-Finisher	Input	012.074, 012.077, 012.079	None	On/Off	
012.079	Punch - 4 hole	IOT	C-Finisher	Input		None	On/Off	

Table 5 C-Finisher (Professional) Chain 12 Component Control Code	Table 5 C-Finisher	(Professional)	) Chain 12 Co	omponent (	Control	Codes
-------------------------------------------------------------------	--------------------	----------------	---------------	------------	---------	-------

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
012.091	H Xport Motor 242 On	IOT	C-Finisher	Output		None	On/Off	
012.099	Decurler Cam Clutch	IOT	C-Finisher	Output		None	On/Off	
012.100	Xport Entrance Sensor	IOT	C-Finisher	Input		None	High/Low	high with paper
012.101	Buffer Path Sensor	IOT	C-Finisher	Input		None	High/Low	
012.102	Gate Sensor	IOT	C-Finisher	Input		None	High/Low	
012.110	Regi Clutch ON	IOT	C-Finisher	Input		None	High/Low	IOT registration clutch. Clutch On = High
012.111	IOT Exit Sensor	IOT	C-Finisher	Input		None	High/Low	Paper exits = Low
012.115	Top Tray Exit Sensor	IOT	C-Finisher	Input		None	High/Low	
012.150	Compile Exit Sensor	IOT	C-Finisher	Input		None	High/Low	Paper exits = High
012.151	Compile Tray NO Paper Sensor	IOT	C-Finisher	input		None	High/Low	
012.190	H-Xport Entrance Sensor	IOT	C-Finisher	Input		None	High/Low	High with paper
012.191	H-Xport Exit Sensor	IOT	C-Finisher	Input		None	High/Low	High with paper
012.200	Side Regi Sensor 1	IOT	C-Finisher	Input		None	High/Low	
012.201	Side Regi Sensor 2	IOT	C-Finisher	Input		None	High/Low	
012.215	Top Tray Full Sensor	IOT	C-Finisher	Input		None	High/Low	
012.220	Front Tamper Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.221	Rear Tamper Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.241	Stapler Move Position Sensor	IOT	C-Finisher	Input		None	High/Low	
012.242	Low Staple Sensor	IOT	C-Finisher	Input		None	High/Low	
012.243	Self Priming Sensor	IOT	C-Finisher	Input		None	High/Low	High= Not ready
012.244	Staple Home Sensor	IOT	C-Finisher	Input		None	High/Low	High= not home
012.250	Eject Clamp Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.251	Set Clamp Home Sensor	IOT	C-Finisher	Input		None	High/Low	Not home = High
012.260	Upper Limit Sensor	IOT	C-Finisher	Input		None	High/Low	
012.262	Stacker NO Paper Sensor	IOT	C-Finisher	Input		None	High/Low	
012.263	Stack Encoder Sensor	IOT	C-Finisher	Input		None	High/Low	
012.264	Stack Height Sensor 1	IOT	C-Finisher	Input		None	High/Low	
012.265	Stack Height Sensor 2	IOT	C-Finisher	Input		None	High/Low	
012.270	Puncher Move Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.271	Puncher Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.272	Puncher Front Sensor	IOT	C-Finisher	Input		None	High/Low	
012.273	Punch Hole Select Sensor	IOT	C-Finisher	Input		None	High/Low	
012.274	Puncher Motor Sensor	IOT	C-Finisher	Input		None	High/Low	
012.275	Punch BOX Set Sensor	IOT	C-Finisher	input		None	High/Low	
012.276	Punch Full Sensor	IOT	C-Finisher	Input		None	High/Low	
012.282	Decurler Home Sensor	IOT	C-Finisher	Input		None	High/Low	
012.300	Eject Cover Switch	IOT	C-Finisher	input		None	High/Low	
012.302	Finisher Front Door switch	IOT	C-Finisher	Input		None	High/Low	High = Open
012.303	H-Xport Interlock Sensor	IOT	C-Finisher	Input		None	High/Low	

Table 6 C-Einisber	Professional	with Booklet	Maker Chain	13 Com	nonent Contro	Codes
Table 6 C-Fillistier	FIDIessional	) with bookiet		13 COIII	ponent Contro	Coues

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
013.008	Booklet Folder Roll Motor Forward	PRO	C-Finisher	Output		None	On/Off	
013.009	Booklet Folder Roll Motor Reverse	PRO	C-Finisher	Output		None	On/Off	
013.010	Booklet Knife Flapper Solenoid	PRO	C-Finisher	Output		None	On/Off	
013.011	Booklet End guide Motor Low Down	PRO	C-Finisher	Output		None	On/Off	
013.013	Booklet End guide Motor Hi Down	PRO	C-Finisher	Output		None	On/Off	
013.014	Booklet End guide Motor Low Up	PRO	C-Finisher	Output		None	On/Off	
013.016	Booklet End guide Motor Hi Up	PRO	C-Finisher	Output		None	On/Off	
013.017	Booklet Staple On	PRO	C-Finisher	Output		None	On/Off	
013.020	Tray Belt Drive Motor On	PRO	C-Finisher	Output		None	On/Off	
013.021	Booklet Paddle Motor On	PRO	C-Finisher	Output		None	On/Off	
013.048	Booklet Tamper Motor F Rear 1	PRO	C-Finisher	Output		None	On/Off	
013.049	Booklet Tamper Motor F Rear 2	PRO	C-Finisher	Output		None	On/Off	
013.050	Booklet Tamper Motor F Rear 3	PRO	C-Finisher	Output		None	On/Off	
013.051	Booklet Tamper Motor F Rear 4	PRO	C-Finisher	Output		None	On/Off	
013.052	Booklet Tamper Motor F Front 1	PRO	C-Finisher	Output		None	On/Off	
013.053	Booklet Tamper Motor F Front 2	PRO	C-Finisher	Output		None	On/Off	
013.054	Booklet Tamper Motor F Front 3	PRO	C-Finisher	Output		None	On/Off	
013.055	Booklet Tamper Motor F Front 4	PRO	C-Finisher	Output		None	On/Off	
013.056	Booklet Tamper Motor R Front 1	PRO	C-Finisher	Output		None	On/Off	
013.057	Booklet Tamper Motor R Front 2	PRO	C-Finisher	Output		None	On/Off	
013.058	Booklet Tamper Motor R Front 3	PRO	C-Finisher	Output		None	On/Off	
013.059	Booklet Tamper Motor R Front 4	PRO	C-Finisher	Output		None	On/Off	
013.060	Booklet Tamper Motor R Rear 1	PRO	C-Finisher	Output		None	On/Off	
013.061	Booklet Tamper Motor R Rear 2	PRO	C-Finisher	Output		None	On/Off	
013.062	Booklet Tamper Motor R Rear 3	PRO	C-Finisher	Output		None	On/Off	
013.063	Booklet Tamper Motor R Rear 4	PRO	C-Finisher	Output		None	On/Off	
013.064	Booklet Paper Path Motor 1	PRO	C-Finisher	Output		None	On/Off	
013.065	Booklet Paper Path Motor 2	PRO	C-Finisher	Output		None	On/Off	
013.066	Booklet Paper Path Motor 3	PRO	C-Finisher	Output		None	On/Off	
013.067	Booklet Paper Path Motor 4	PRO	C-Finisher	Output		None	On/Off	
013.068	Booklet Gate Solenoid Stacker	PRO	C-Finisher	Output		None	On/Off	
013.069	Booklet Gate Solenoid Booklet	PRO	C-Finisher	Output		None	On/Off	
013.101	Booklet Knife Home Sensor	PRO	C-Finisher	Input		None	High/Low	
013.102	Booklet Compile No Paper Sensor	PRO	C-Finisher	Input		None	High/Low	
013.103	Booklet Folder Roll Exit Sensor	PRO	C-Finisher	Input		None	High/Low	
013.104	Booklet Drawer Set Sensor	PRO	C-Finisher	Input		None	High/Low	
013.105	Booklet Stapler Ready	PRO	C-Finisher	Input		None	High/Low	
013.106	Booklet Staple Error Signal	PRO	C-Finisher	Input		None	High/Low	
013.107	Booklet Low Staple F Switch	PRO	C-Finisher	Input		None	High/Low	
013.108	Booklet Low Staple R Switch	PRO	C-Finisher	Input		None	High/Low	

Table 6 C-Finisher (Professional) with Booklet Maker Chain 13 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
013.134	Booklet Tamper Home Sensor Front	PRO	C-Finisher	Input		None	High/Low	
013.135	Booklet In Sensor	PRO	C-Finisher	Input		None	High/Low	detects of paper in by Booklet In sensor
013.136	Booklet Tamper Home Sensor Rear	PRO	C-Finisher	Input		None	High/Low	
013.137	Booklet End Guide Home Sensor	PRO	C-Finisher	Input		None	High/Low	
013.139	Booklet No Paper Sensor	PRO	C-Finisher	Input		None	High/Low	
013.140	Booklet Knife Folding Sensor	PRO	C-Finisher	Input		None	High/Low	

#### Table 7 SB-Finisher (LX) with Booklet Maker Chain 13 Component Control Codes

Chain Link	Component	Device	Module	Type	Conflicts	Timeout	Display	Description
LIIIK		Device		турс		Timeout	Display	
013.022	Knife Motor Forward On	PRO	SB-Finisher	Output	013.023	None	On/Off	
013.023	Knife Motor Reverse On	PRO	SB-Finisher	Output	013.022	None	On/Off	
013.024	Booklet Staple Motor F Forward	PRO	SB-Finisher	Output	013.025	None	On/Off	
013.025	Booklet Staple Motor F Reverse	PRO	SB-Finisher	Output	013.024	None	On/Off	
013.026	Booklet Staple Motor R Forward	PRO	SB-Finisher	Output	013.027	None	On/Off	
013.027	Booklet Staple Motor R Reverse	PRO	SB-Finisher	Output	013.026	None	On/Off	
013.028	Booklet Staple Move Motor In	PRO	SB-Finisher	Output	013.029	350 pulse	On/Off	
013.029	Booklet Staple Move Motor Out	PRO	SB-Finisher	Output	013.028	350 pulse	On/Off	
013.101	Knife Home Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.107	Booklet Low Staple F Switch	PRO	SB-Finisher	Input		None	High/Low	
013.108	Booklet Low Staple R Switch	PRO	SB-Finisher	Input		None	High/Low	
013.141	Booklet Staple Cam Front Switch	PRO	SB-Finisher	Input		None	High/Low	
013.142	Booklet Staple Cam Rear Switch	PRO	SB-Finisher	Input		None	High/Low	
013.143	Booklet Staple Move Home Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.144	Booklet Staple Move Position Sensor	PRO	SB-Finisher	Input		None	High/Low	
013.160	Folder Detect	PRO	SB-Finisher	Input		None	High/Low	
013.161	Booklet Detect	PRO	SB-Finisher	Input		None	High/Low	
013.300	Booklet Cover Open Switch	PRO	SB-Finisher	Input		None	High/Low	
013.301	Booklet Safety Switch	PRO	SB-Finisher	Input		None	High/Low	

#### Table 8 IOT FAX Chain 20 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
020.010	Single Tone 0Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 0Hz on line 1
020.011	Single Tone 400Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 400Hz on line 1
020.012	Single Tone 1100Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1100Hz on line 1
020.013	Single Tone 1300Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1300Hz on line 1
020.014	Single Tone 1650Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1650Hz on line 1
020.015	Single Tone 1850Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 1850Hz on line 1
020.016	Single Tone 2100Hz Ln1	FAX	FAX	Output			On/Off	Emits single tone 2100Hz on line 1

Table 8 IOT	FAX Chain	20 Component	Control Codes
-------------	-----------	--------------	---------------

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
020.017	ANSAM Ln1	FAX	FAX	Output			On/Off	
020.018	CI Ln1	FAX	FAX	Output			On/Off	
020.020	DTMF # Line1	FAX	FAX	Output			On/Off	Emits DTMF # on line 1
020.021	DTMF * Line1	FAX	FAX	Output			On/Off	Emits DTMF * on line 1
020.022	DTMF 0 Line1	FAX	FAX	Output			On/Off	Emits DTMF 0 on line 1
020.023	DTMF 1 Line1	FAX	FAX	Output			On/Off	Emits DTMF 1 on line 1
020.024	DTMF 2 Line1	FAX	FAX	Output			On/Off	Emits DTMF 2 on line 1
020.025	DTMF 3 Line1	FAX	FAX	Output			On/Off	Emits DTMF 3 on line 1
020.026	DTMF 4 Line1	FAX	FAX	Output			On/Off	Emits DTMF 4 on line 1
020.027	DTMF 5 Line1	FAX	FAX	Output			On/Off	Emits DTMF 5 on line 1
020.028	DTMF 6 Line1	FAX	FAX	Output			On/Off	Emits DTMF 6 on line 1
020.029	DTMF 7 Line1	FAX	FAX	Output			On/Off	Emits DTMF 7 on line 1
020.030	DTMF 8 Line1	FAX	FAX	Output			On/Off	Emits DTMF 8 on line 1
020.031	DTMF 9 Line1	FAX	FAX	Output			On/Off	Emits DTMF 9 on line 1
020.032	DTMF A Line1	FAX	FAX	Output			On/Off	Emits DTMF A on line 1
020.033	DTMF B Line1	FAX	FAX	Output			On/Off	Emits DTMF B on line 1
020.034	DTMF C Line1	FAX	FAX	Output			On/Off	Emits DTMF C on line 1
020.035	DTMF D Line1	FAX	FAX	Output			On/Off	Emits DTMF D on line 1
020.040	V.21 300 bps Line1	FAX	FAX	Output			On/Off	Emits V.21 300 bps Line1
020.041	V.27ter 2400 bps Line1	FAX	FAX	Output			On/Off	Emits V.27ter 2400 bps Line1
020.042	V.27ter 4800 bps Line1	FAX	FAX	Output			On/Off	Emits V.27ter 4800 bps Line1
020.043	V.29 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.29 7200 bps Line1
020.044	V.29 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.29 9600 bps Line1
020.045	V.17 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 7200 bps Line1
020.046	V.17 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 9600 bps Line1
020.047	V.17 12000 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 12000 bps Line1
020.048	V.17 14400 bps Line1	FAX	FAX	Output			On/Off	Emits V.17 14400 bps Line1
020.049	V.34 2400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 2400 bps Line1
020.050	V.34 4800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 4800 bps Line1
020.051	V.34 7200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 7200 bps Line1
020.052	V.34 9600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 9600 bps Line1
020.053	V.34 12000 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 12000 bps Line1
020.054	V.34 14400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 14400 bps Line1
020.055	V.34 16800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 16800 bps Line1
020.056	V.34 19200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 19200 bps Line1
020.057	V.34 21600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 21600 bps Line1
020.058	V.34 24000 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 24000 bps Line1
020.059	V.34 26400 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 26400 bps Line1
020.060	V.34 28800 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 28800 bps Line1
020.061	V.34 31200 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 31200 bps Line1

#### Table 8 IOT FAX Chain 20 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
020.062	V.34 33600 bps Line1	FAX	FAX	Output			On/Off	Emits V.34 33600 bps Line1
020.080	Single Tone 0Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 0Hz on line 2
020.081	Single Tone 400Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 400Hz on line 2
020.082	Single Tone 1100Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1100Hz on line 2
020.083	Single Tone 1300Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1300Hz on line 2
020.084	Single Tone 1650Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1650Hz on line 2
020.085	Single Tone 1850Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 1850Hz on line 2
020.086	Single Tone 2100Hz Ln2	FAX	FAX	Output			On/Off	Emits single tone 2100Hz on line 2
020.087	ANSAM Ln2	FAX	FAX	Output			On/Off	
020.088	CI Ln2	FAX	FAX	Output			On/Off	
020.090	DTMF # Line2	FAX	FAX	Output			On/Off	Emits DTMF # on line 2
020.091	DTMF * Line2	FAX	FAX	Output			On/Off	Emits DTMF * on line 2
020.092	DTMF 0 Line2	FAX	FAX	Output			On/Off	Emits DTMF 0 on line 2
020.093	DTMF 1 Line2	FAX	FAX	Output			On/Off	Emits DTMF 1 on line 2
020.094	DTMF 2 Line2	FAX	FAX	Output			On/Off	Emits DTMF 2 on line 2
020.095	DTMF 3 Line2	FAX	FAX	Output			On/Off	Emits DTMF 3 on line 2
020.096	DTMF 4 Line2	FAX	FAX	Output			On/Off	Emits DTMF 4 on line 2
020.097	DTMF 5 Line2	FAX	FAX	Output			On/Off	Emits DTMF 5 on line 2
020.098	DTMF 6 Line2	FAX	FAX	Output			On/Off	Emits DTMF 6 on line 2
020.099	DTMF 7 Line2	FAX	FAX	Output			On/Off	Emits DTMF 7 on line 2
020-100	DTMF 8 Line2	FAX	FAX	Output			On/Off	Emits DTMF 8 on line 2
020-101	DTMF 9 Line2	FAX	FAX	Output			On/Off	Emits DTMF 9 on line 2
020-102	DTMF A Line2	FAX	FAX	Output			On/Off	Emits DTMF A on line 2
020-103	DTMF B Line2	FAX	FAX	Output			On/Off	Emits DTMF B on line 2
020-104	DTMF C Line2	FAX	FAX	Output			On/Off	Emits DTMF C on line 2
020-105	DTMF D Line2	FAX	FAX	Output			On/Off	Emits DTMF D on line 2
020-110	V.21 300 bps Line2	FAX	FAX	Output			On/Off	Emits V.21 300 bps Line2
020-111	V.27ter 2400 bps Line2	FAX	FAX	Output			On/Off	Emits V.27ter 2400 bps Line2
020-112	V.27ter 4800 bps Line2	FAX	FAX	Output			On/Off	Emits V.27ter 4800 bps Line2
020-113	V.29 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.29 7200 bps Line2
020-114	V.29 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.29 9600 bps Line2
020-115	V.17 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 7200 bps Line2
020-116	V.17 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 9600 bps Line2
020-117	V.17 12000 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 12000 bps Line2
020-118	V.17 14400 bps Line2	FAX	FAX	Output			On/Off	Emits V.17 14400 bps Line2
020-119	V.34 2400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 2400 bps Line2
020-120	V.34 4800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 4800 bps Line2
020-121	V.34 7200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 7200 bps Line2
020-122	V.34 9600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 9600 bps Line2
020-123	V.34 12000 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 12000 bps Line2

#### Table 8 IOT FAX Chain 20 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
020-124	V.34 14400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 14400 bps Line2
020-125	V.34 16800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 16800 bps Line2
020-126	V.34 19200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 19200 bps Line2
020-127	V.34 21600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 21600 bps Line2
020-128	V.34 24000 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 24000 bps Line2
020-129	V.34 26400 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 26400 bps Line2
020-130	V.34 28800 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 28800 bps Line2
020-131	V.34 31200 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 31200 bps Line2
020-132	V.34 33600 bps Line2	FAX	FAX	Output			On/Off	Emits V.34 33600 bps Line2

#### Table 9 IOT Drives/Fans Chain 42 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
042.001	Main motor 79mm/s	IOT	Drives	Output	042.002, 042.003		On/Off	Low Speed mach 7830/35only
042.002	Main motor _121mm/s	IOT	Drives	Output	042.001, 042.003		On/Off	Both High and Low speed machines.
042.003	Main motor 175mm/s	IOT	Drives	Output	042.001, 042.002		On/Off	
042.004	Main motor 220mm/s	IOT	NOHAD	Output			On/Off	Rotates at high speed on Start and returns to low speed at Stop
042.005	Main motor 228mm/s	IOT	NOHAD	Output			On/Off	
042.006	Main motor 255mm/s	IOT	NOHAD	Output			On/Off	
042.011	Fuser Fan	IOT	NOHAD	Output			On/Off	
042.012	MHVPS Fan	IOT	NOHAD	Output			On/Off	
042.013	Process 2 Fan	IOT	NOHAD	Output			On/Off	
042.014	LVPS Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.015	Rear Bottom Fan	IOT	NOHAD	Output			On/Off	
042.016	IH Intake Fan	IOT	NOHAD	Output			On/Off	
042.017	IH Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.018	LVPS Fan	IOT	NOHAD	Output			On/Off	
042.019	IBT Fan	IOT	NOHAD	Output			On/Off	
042.020	Suction Drive Fan	IOT	NOHAD	Output			On/Off	
042.021	Cartridge Fan	IOT	NOHAD	Output			On/Off	
042.022	Process 1 Fan	IOT	NOHAD	Output			On/Off	
042.024	C Exhaust Fan	IOT	NOHAD	Output			On/Off	
042.025	NOHAD Fan Failure Detection	IOT	NOHAD	Output			On/Off	
042.026	LH Fan	IOT	NOHAD	Output			On/Off	
042.201	IBT Belt Home Sensor	IOT	Drives	Input			High/Low	IBT belt home sensor.
042.202	Fuser Fan Fail	IOT	NOHAD	Input			High/Low	Fuser Fan rotation state detection
042.203	Drive Fan Fail	IOT	NOHAD	Input			High/Low	Drive Fan rotation state detection. Low speed.only
042.204	Rear Bottom Fan Fail	IOT	NOHAD	Input			High/Low	Rear Bottom Fan rotation state detection
042.205	IBT Fan Fail	IOT	NOHAD	Input			High/Low	IBT Fan rotation state detection. Low speed only.
#### Table 9 IOT Drives/Fans Chain 42 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
042.206	MHVPS Fan Fail	IOT	NOHAD	Input			High/Low	HV Fan rotation state detection
042.207	Process 2 Fan Fail	IOT	NOHAD	Input			High/Low	Process 2 Fan rotation state detection
042.208	LVPS Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	LVPS Exhaust Fan rotation state detection.
042.209	Cartridge Fan Fail	IOT	NOHAD	Input			High/Low	
042.210	Process 1 Fan Fail	IOT	NOHAD	Input			High/Low	
042.211	Suction Fan Fail	IOT	NOHAD	Input			High/Low	
042.213	C Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	
042.214	IH Intake Fan Fail	IOT	NOHAD	Input			High/Low	
042.215	IH Exhaust Fan Fail	IOT	NOHAD	Input			High/Low	
042.216	LH Fan Fail	IOT	NOHAD	Input			High/Low	

### Table 10 IOT LED Print Head Chain 61 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
061-001	LPH Forced On C in 100%	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern of C in set to 100%
061-002	LPH Forced On Light Cin 50%	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern of C in 50%.
061-003	LPH Forced Light Line Evaluation	IOT	IOT	Output		None	On/Off	LED Print head is turned on pattern for streaks evaluation
061-004	LPH Forced Light Thyristor only	IOT	IOT	Output		None	On/Off	Thyristor transfer only performed.

### Table 11 IIT Scanner Chain 62 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
062-002	Exposure Lamp	IIT	Scanner	Output		300 sec	On/Off	Can stop before time out time.
062-018	Carriage Home Sensor	IIT	Scanner	Input		None	High/Low	High = Carriage Home
062-019	Platen Down Sensor	IIT	Scanner	Input		None	High/Low	High =Platen Down
062-022	DADH Hotline Detect	ШΤ	Scanner	Input	Can stack with DADH Active Hot- line	None	High/Low	High = Hotline Active
062-023	Carriage Move Home	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves carriage to the home position
062-024	Carriage Move Doc Size	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to Document Size sensing position
062-025	Carriage Move CVT	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to CVT position
062-026	Carriage Move A Pos	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position A
062-027	Carriage Move B Pos	IIT	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position B
062-028	Carriage Move C Pos	ШТ	Scanner	Output	Can only be run independently of other Carriage Move components	None	On/Off	Moves Carriage to scan audit position C
062-251	Document Size Sensor 1	IIT	Scanner	Input		None	High/Low	High = Paper
062-253	Document Size Sensor 2	IIТ	Scanner	Input		None	High/Low	High = Paper

#### Table 11 IIT Scanner Chain 62 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
062-301	Angle sensor	IIT	Scanner	Input		None	High/Low	Angle sensor

### Table 12 Tray 1 Chain 71 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
071.001	#1 Feed Motor (CW2) feed direction	IOT	Media	Output	071.002 thru 071.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
071.002	#1 Feed Motor (CCW2) lift up direc- tion	IOT	Media	Output	071.001, 071.003, 071.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
071.003	#1 Feed Motor (CW1-2) feed direc- tion	ΙΟΤ	Media	Output	071.001, 071.002, 071.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
071.004	#1 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	071.002 thru 071.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
071.101	#1 No Paper Sensor	IOT	Media	Input		None	High/Low	
071.102	#1 Level Sensor	IOT	Media	Input		None	High/Low	
071.104	#1 Tray Paper Size Switch	IOT	Media	Input		None	High/Low	T Size digit
071.105	#1 Pre Feed Sensor	IOT	Media	Input		None	High/Low	

### Table 13 Tray 2 Chain 72 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
072.001	#2 Feed Motor (CW2) feed direction	IOT	Media	Output	072.002, 072.003, 072.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
072.002	#2 Feed Motor (CCW2) lift up direc- tion	IOT	Media	Output	072.001, 072.003, 072.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
072.003	#2 Feed Motor (CW1-2) feed direc- tion	IOT	Media	Output	072.001, 072.002, 072.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
072.004	#2 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	072.001, 072.002, 072.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
072.101	#2 No Paper Sensor	IOT	Media	Input	072-102 thru 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.102	#2 Level Sensor	IOT	Media	Input	072.101, 072.103 thru 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.103	#2 Feed Out Sensor	IOT	Media	Input	072-101, 072.102, 072.104, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	
072.104	#2 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.103, 073.101 thru 073.104, 074.101 thru 074.104, 077.036	None	High/Low	T size digit

Table 14 Trav	/ 3 Chain	73 Compo	onent Control	Codes
	y 5 Onann	75 Compo		oouea

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
073.001	#3 Feed Motor (CW2) feed direc- tion	IOT	Media	Output	073.002 thru 073.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
073.002	#3 Feed Motor (CCW2) lift up direc- tion	ΙΟΤ	Media	Output	073.001, 073.003, 073.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0 pps and stops.
073.003	#3 Feed Motor (CW1-2) feed direc- tion	IOT	Media	Output	073.001, 073.002, 073.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
073.004	#3 Feed Motor (CCW1-2) lift up direction	ΙΟΤ	Media	Output	073.001, 073.002, 073.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
073.101	#3 No Paper Sensor	IOT	Media	Input	072.101 thru 072.104, 073.102 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	

#### Table 14 Tray 3 Chain 73 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
073.102	#3 Level Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101, 073.103 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.103	#3 Feed Out Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101, 073.102, 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.104	#3 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	
073.105	#3 Pre Feed Sensor (TTM Only)	IOT	Media	Input		None	High/Low	In SM but in BSD

## Table 15 Tray 4 Chain 74 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
074.001	#4 Feed Motor (CW2) feed direc- tion	IOT	Media	Output	074.002 thru 074.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
074.002	#4 Feed Motor (CCW2) lift up direction	IOT	Media	Output	074.001, 074.003, 074.004	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
074.003	#4 Feed Motor (CW1-2) feed direc- tion	IOT	Media	Output	074.001, 074.002, 074.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
074.004	#4 Feed Motor (CCW1-2) lift up direction	IOT	Media	Output	074.001 thru 074.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
074.101	#4 No Paper Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.102 thru 073.104, 077.036	None	High/Low	
074.102	#4 Level Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.103, 073.104, 077.036	None	High/Low	
074.103	#4 Feed Out Sensor	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.102, 073.104, 077.036	None	High/Low	
074.104	#4 Tray Paper Size Switch	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101, 074.102, 073.103, 077.036	None	High/Low	

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
074.105	#4 Pre Feed Sensor (TTM Only)	IOT	Media	Input		None	High/Low	In SM but in BSD

### Table 16 Tray 5 Bypass Chain 75 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
075.001	MSI Feed Motor 2 phase CW2 Feed	IOT	Media	Input		None	High/Low	
075.002	MSI Feed Motor 2 phase CCW2 Nudger	IOT	Media	Input		None	High/Low	
075.003	MSI Feed Motor CW1-2	IOT	Media	Output	075.001, 075.002, 075.004	None	On/Off	Motor rotates with 2-phase excitation in feed direction at feed speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed.
075.004	MSI Feed Motor CCW1-2	IOT	Media	Output	075.001 thru 075.003	None	On/Off	Motor rotates with 2-phase excitation in lift-up direction at lift-up speed. If, however, rotation speed is specified by NVM, motor rotates at the specified speed. Constraints. Motor does not rotate if Level Sensor is already on at the time of rotation start. When Level Sensor On is detected, motor steps down up to 0pps and stops.
075-101	MSI No Paper Sensor	IOT	Media	Input		None	High/Low	
075-102	MSI Nudger Position Sensor	IOT	Media	Input		None	High/Low	

### Table 17 IOT Media Path Chain 77 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
077.001	Take away Clutch	ЮТ	Media	Output		None	On/Off	Turn on Take Away Clutch I/OTA Clutch (Doubled as TA Clutch for MSI). Component Able to drive with #1 Take Away Roll or MSI Take Away Roll by combining with Main Drive Motor 042-XXX.
077.002	Regi Clutch	IOT	Media	Output		None	On/Off	Turn on Regi Clutch I/OTA Clutch (Doubled as TA Clutch for MSI), Component able to drive with Regi Roll by combining with Main Drive Motor 042-XXX.
077.003	Exit Gate Solenoid	IOT	Media	Output		None	On/Off	Exit Gate Switching Heavy current for 110mm/sec after paper pulling start, then change to low current Off: output to Exit 1 On: output to Exit 2 I/O Exit Gate Solenoid.
077.004	Face Up Gate Solenoid	IOT	Media	Output		None	On/Off	Exit Up Gate Switching Heavy current for 110mm/ sec after paper pulling start, then change to low current Off: output to Exit 2 On: output to Face Up Tray I/O Face Up Gate Solenoid.
077.030	TM T/A Clutch	IOT	Media	Output		None	On/Off	In SM, but not in BSDs
077.031	TM T/A Motor - Low	IOT	Media	Output		None	On/Off	Low Speed Only
077.032	TM Feed Ready Signal	IOT	Media	Output		None	On/Off	
077.033	IOT Regi Stop Signal	IOT	Media	Output		None	On/Off	

#### Table 17 IOT Media Path Chain 77 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
077.034	IOT Feed On Signal	IOT	Media	Output		None	On/Off	
077.035	TM T/A Motor1 Full Speed High	IOT	Media	Output		None	On/Off	High Speed Only
077.036	TM T/A Motor1 Half Speed High	IOT	Media	Output		None	On/Off	High Speed Only
077.037	TM T/A Motor2 Full Speed High TTM only	IOT	Media	Output		None	On/Off	High Speed Only
077.038	TM T/A Motor2 Half Speed High TTM only	IOT	Media	Output		None	On/Off	High Speed Only
077.040	#2 OCT Motor CW1-2 Mode	IOT	Media	Output	077.041	None	On/Off	
077.041	#2 OCT Motor CCW1-2 Mode	IOT	Media	Output	077.040	None	On/Off	
077.042	#1 OCT Motor CW1-2 Mode	IOT	Media	Output	077.043	None	On/Off	
077.043	#1 OCT Motor CCW1-2 Mode	IOT	Media	Output	077.042	None	On/Off	
077.045	#2 OCT Motor CW 1-2 phase excitation	IOT	Media	Output		None	On/Off	
077.046	#2 OCT Motor CCW 1-2 phase excitation	IOT	Media	Output		None	On/Off	
077.047	#2 OCT Motor CW 2 phase excitation	IOT	Media	Output		None	On/Off	In SM but not BSDs
077.048	#2 OCT Motor CCW 2 phase excitation	IOT	Media	Output		None	On/Off	
077.050	Take away motor 1-2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.060	Exit2 Drive Motor 1-2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.061	Exit2 Drive Motor 1-2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.062	Exit2 Drive Motor 2 phase CW2 normal	IOT	Media	Output		None	On/Off	
077.063	Exit2 Drive Motor 2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.071	Duplex Drive Motor 1-2 phase CW2 reverse	IOT	Media	Output		None	On/Off	
077.073	Duplex Drive Motor 2 phase CW2 reverse.	IOT	Media	Output		None	On/Off	
077.100	#2 Exit Sensor	IOT	Media	Input		None	High/Low	
077.101	#1 Exit Sensor	IOT	Media	Input		None	High/Low	
077.102	POB Sensor	IOT	Media	Input		None	High/Low	
077.103	Regi sensor	IOT	Media	Input		None	High/Low	
077.104	MSI Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.105	#2 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.106	#3 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.107	#4 Feed Out Sensor	IOT	Media	Input		None	High/Low	
077.108	Duplex Path sensor	IOT	Media	Input		None	High/Low	
077.109	#1 OCT Home Position Sensor	IOT	Media	Input		None	High/Low	
077.110	#2 OCT Home Position Sensor	IOT	Media	Input		None	High/Low	
077.120	IOT Feed Ready Signal	IOT	Media	Input		None	High/Low	Feed Ready Signal OFF/On Detection
077.121	TM Regi Stop Signal	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104	None	High/Low	Regi Stop Signal OFF/On Detection
077.123	TM Feed On Signal	IOT	Media	Input	072.101 thru 072.104, 073.101 thru 073.104, 074.101 thru 073.104, 077.036	None	High/Low	Feed On Signal OFF/On Detection
077.124	Full Stack Sensor 1	IOT	Media	Input		None	High/Low	In SM but not BSDs
077.125	Full Stack Sensor 2	IOT	Media	Input		None	High/Low	In SM but not BSDs

#### Table 17 IOT Media Path Chain 77 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
077-201	Face Up Tray Detect Switch	IOT	Media	Input		None	High/Low	
077-300	Left Hand Cover Interlock switch	IOT	Media	Input		None	High/Low	
077-302	Left Hand High Cover Switch	IOT	Media	Input		None	High/Low	
077-303	Front Interlock Switch	IOT	Media	Input		None	High/Low	
077-305	Duplex Cover Switch	IOT	Media	Input		None	High/Low	
077-306	TM Left Hand Interlock switch	IOT	Media	Input		None	High/Low	
077-307	IBT Cover Switch	IOT	Media	Input		None	High/Low	

### Table 18 HCF Chain 78 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
078-003	HCF1 Feed Motor - Feed direction	IOT	HCF1	Output		None	On/Off	Rotate motor at frequency of 2320PPS(307.5mm/s) in feed direction. I/O HCF1 Feed Motor I/O HCF1 Feed Motor Direction I/O HCF1 Feed Motor Low I/O HCF1 Feed Motor Clock
078-004	HCF1 Feed Motor - Lift Up	ΙΟΤ	HCF1	Output		None	On/Off	Rotates motor at 450mm/s in lift direction. Rotates only when HCF1 Tray Level Sensor is OF does not rotate when HCF1 Tray Level Sensor is ON or when HCF1 Tray In Sensor is OFF I/O HCF1 Feed Motor I/O HCF1 Feed Motor Direction I/O HCF1 Feed Motor Low I/O HCF1 Feed Motor Clock I/O HCF1 Level Sensor I/O HCF1 Tray In Sensor.
078-096	HCF1 T/A Motor On 400mm/sec	IOT	HCF1	Output		None	On/Off	Drive HCF1 T/A Roll at 400mm/s I/O HCF1 T/A Motor I/O HCF1 T/A Motor Low I/O HCF1 T/A Motor Clock
078.100	HCF1 Pre Feed Sensor	IOT	HCF1	Input		None	High/Low	
078.101	HCF1 Feed Out Sensor	IOT	HCF1	Input		None	High/Low	
078.200	HCF1 No Paper Sensor	IOT	HCF1	Input		None	High/Low	
078.201	HCF1 Level Sensor	IOT	HCF1	Input		None	High/Low	
078.202	HCF1 Size Sensor A	IOT	HCF1	Input		None	High/Low	
078.203	HCF1 Size Sensor B	IOT	HCF1	Input		None	High/Low	
078.204	HCF1 Tray in Sensor	IOT	HCF1	Input		None	High/Low	
078.300	HCF1 Transport Interlock	IOT	HCF1	Input		None	High/Low	
078.301	HCF1 Side Out Switch	IOT	HCF1	Input		None	High/Low	

#### Table 19 MOB Chain 89 Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
089.001	MOB LED: Low power	ΙΟΤ	Xerographic	Output	089.002	None	On/Off	MOB LED On Low Power. Control all LED's used as diffuse light for MOB In/Out
089.002	MOB LED: High power	IOT	Xerographic	Output	089.001	None	On/Off	MOB LED On High Power. Control all LED's used as diffuse light for MOB In/Out

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
091.001	BCR DC Y	IOT	Xerographic	Output	091.009, 091.010, 091.044, 091.045	None	On/Off	Output value set at top speed: NVM BCR_DC_OUT Y 752- xxx
091.002	BCR DC M	IOT	Xerographic	Output	091.009, 091.011, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM 752-xxx
091.003	BCR DC C	IOT	Xerographic	Output	091.009, 091.012, 091.047, 091.048	None	On/Off	Output value set at top speed. NVM 752-xxx
091.004	BCR DC K	IOT	Xerographic	Output	091.009, 091.013, 091.047, 091.048	None	On/Off	Output value set at top speed NVM 752-xxx
091.005	BCR AC Y	ΙΟΤ	Xerographic	Output	091.009, 091.010, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #Y_BCR AC 121 Out 751-xxx Frequency: NVM PWM 121/79 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/79 Clock Ratio 751-xxx
091.006	BCR AC M	IOT	Xerographic	Output	091.009, 091.011, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #M_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/175 Clock Ratio 751-xxx
091.007	BCR AC C	IOT	Xerographic	Output	091.009, 091.012, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #C_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: [NVM]BCR AC 121/175 Clock Ratio 751-xxx
091.008	BCR AC K	IOT	Xerographic	Output	091.009, 091.013, 091.047, 091.048	None	On/Off	Output value set at top speed: NVM #K_BCR AC 121/175 Out 751-xxx Frequency: NVM PWM 121/175 Clock Ratio 751-xxx At the same time, BCR AC Clock is output at the following frequency. Frequency: NVM BCR AC 121/175 Clock Ratio 751-xxx
091.009	BCR DC/AC YMCK	IOT	Xerographic	Output	091.001 thru 091.013, 091.047	None	On/Off	Output value set at top speed Perform the following complex component. Component BCR DC Y/M/C/K 091.001 to 004 Component BCR AC Y/M/C/K 091.005 to 004
091.010	BCR DC/AC Y	IOT	Xerographic	Output	091.001, 091.005, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC Y 091.001 Component BCR AC Y 091.005

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
091.011	BCR DC/AC M	IOT	Xerographic	Output	091.002, 091.006, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC M 091.002 Component BCR AC M 091.006.
091.012	BCR DC/AC C	IOT	Xerographic	Output	091.003, 091.007, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component BCR DC C 091.003 Component BCR AC C 091.007
091.013	BCR DC/AC K	IOT	Xerographic	Output	091.004, 091.008, 091.009, 091.047, 091.048	None	On/Off	Perform following complex component. Component] BCR DC K (091.004 Component] BCR AC K 091.008
091.014	Drum YMC Drum K IBT Motor 79 speed	IOT	Xerographic	Output	091.015 thru 091.048	None	On/Off	Low Speed Only 7830/35. Set to 175mm/sec according to combination of I/O Clock: NVM 741.001:IBT Motor seed fine-tuning for 175mm/sec. NVM 741-005:Drum YMC Motor seed fine-tuning for 175mm/sec. NVM 741-0012:Drum K Motor seed fine-tuning for 175mm/ sec
091.015	Drum YMC Drum K IBT Motor 121 speed	IOT	Xerographic	Output	091.014, 091.016 thru 091.048	None	On/Off	Set to 121mm/sec according to combination of I/O Clock: NVM 741-002:IBT Motor seed fine-tuning for 121mm/sec NVM 741-007:Drum YMC Motor seed fine-tuning for 121mm/sec NVM 741-0014:Drum K Motor seed fine tuning for 121mm/ sec
091.016	Drum YMC Drum K IBT Motor 175 speed	IOT	Xerographic	Output	091.014, 091.015, 091.017 thru 091.048	None	On/Off	Set to 79mm/sec according to combination of I/O Clock: NVM 741-003:IBT Motor seed fine-tuning for 79mm/sec NVM 741-009:Drum YMC Motor seed fine-tuning for 79mm/ sec NVM 741-0016:Drum K Motor seed fine-tuning for 79mm/ sec
091.017	Drum YMC K IBT Motor 200 speed	IOT	Xerographic	Output	091.014 thru 091.016, 091.018 thru 091.048	None	On/Off	
091.018	Drum YMC Drum K IBT Motor 225 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.019 thru 091.048	None	On/Off	Set to 175mm/sec according to combination of I/O Clock: NVM 741-001:IBT Motor seed fine-tuning for 175mm/sec NVM 741-0012:Drum K Motor seed fine-tuning for 175mm/ sec
091.019	Drum Motor IBT Motor YMC 121 Reverse speed	IOT	Xerographic	Output	091.014 thru 091.018, 091.020 thru 091.048	None	On/Off	Set to 121mm/sec according to combination of I/O Clock: NVM 741-002:IBT Motor seed fine-tuning for 121mm/sec NVM 741-0014:Drum K Motor seed fine-tuning for 121mm/ sec
091.020	Drum Motor IBT Motor K 79 speed	IOT	Xerographic	Output	091.014 thru 091.019, 091.021 thru 091.048	None	On/Off	Set to 79mm/sec according to combination of I/O Clock NVM 741-003: IBT Motor seed fine-tuning for 79mm/sec NVM 741-016:Drum K Motor seed fine-tuning for 79mm/ sec. Low Speed mach 7830/35 only.
091.021	Drum Motor IBT K 121 speed	IOT	Xerographic	Output	091.014 thru 091.020, 091.029 thru 091.048	None	On/Off	

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
091.022	Drum YMC Motor K 175 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.023 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 175_1 according to combination of I/O Clock NVM 741-005:Drum YMC Motor speed fine tuning for 175_2
091.023	Drum YMC Motor K 200 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022, 091.024 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 175_2 according to combination of I/O Clock NVM 741-006:Drum YMC Motor speed fine tuning for 175_2
091.024	Drum Motor IBT K 225 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022, 091.023, 091.025 thru 091.028, 091.042 thru 091.048	None	On/Off	NVM 741-007:Drum YMC Motor speed fine tuning for 121_1
091.025	Drum Motor IBT K 121 speed reverse	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.024, 091.026 thru 091.028, 091.042 thru 091.048	None	On/Off	Set to 121_2 according to combination of I/O Clock NVM 741-008:Drum YMC Motor speed fine tuning for 121_2
091.026	Drum YMC Motor 79_1 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.025, 091.027 thru 091.028, 091.042 thru 091.048	None	On/Off	Low Speed Only. Set to 79_1 according to combination of I/ O Clock NVM 741-009:Drum YMC Motor speed fine tuning for 79_1
091.027	Drum YMC Motor 121_1 speed	IOT	Xerographic	Output	091.014 thru 091.017, 091.022 thru 091.026, 091.028, 091.042 thru 091.048	None	On/Off	Low Speed Only. Set to 79_2 according to combination of I/ O Clock NVM 741-010:Drum YMC Motor speed fine tuning for 79_2
091.028	Drum YMC Mot 175_1 speed	IOT	Xerographic	Output		None	On/Off	Low Speed Only 7830/35.
091.029	Drum YMC Motor 200_1 speed	IOT	Xerographic	Output		None	On/Off	
091.030	Drum YMC motor 225_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029, 091.031 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 175_2 according to combination of I/O Clock NVM 741-013:Drum K Motor speed fine tuning for 175_2
091.031	Drum YMC motor reverse on	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.030, 091.032 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 121_1 according to combination of I/O Clock NVM 741-014:Drum K Motor speed fine tuning for 121_1
091.032	K Drum motor 79_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.030, 091.032 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 121_2 according to combination of I/O Clock NVM 741-015:Drum K Motor speed fine tuning for 121_2 Low Speed only.
091.033	K Drum motor 121_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.032, 091.034 thru 091.035, 091.042 thru 091.048	None	On/Off	Set to 79_1 according to combination of I/O Clock NVM 741-016:Drum K Motor speed fine tuning for 79_1
091.034	K Drum motor 175_1 speed	IOT	Xerographic	Output	091.014 thru 091.021, 091.029 thru 091.033, 091.035, 091.042 thru 091.048	None	On/Off	Set to 79_2 according to combination of I/O Clock NVM 741-017:Drum K Motor speed fine tuning for 79_2
091.035	Drum K motor 200_1 speed	IOT	Xerographic	Output		None	On/Off	
091.036	Drum K motor 255_1 speed	IOT	Xerographic	Output		None	On/Off	
091.037	K Drum motor reverse on	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	
091.038	Erase Lamp Y	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	
091.039	Erase Lamp M	IOT	Xerographic	Output	091.040, 091.042 thru 091.048	None	On/Off	

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
091.040	Erase Lamp C	IOT	Xerographic	Output	091.036 thru 091.039, 091.042 thru 091.048	None	On/Off	Perform following complex component. Component ERASE LAMP Y 091-xxx Component ERASE LAMP M 091-xxx Component ERASE LAMP C 091-xxx Component ERASE LAMP K 091-xxx
091.041	Erase Lamp K	IOT	Xerographic	Output	091.047, 091.048	None	On/Off	
091.042	Erase Lamp YMCK	IOT	Xerographic	Output	091.014 thru 091.040, 091.043 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-008: Drum YMC Motor speed fine tuning for 121_3,and by NVM 741 015: Drum K Motor speed fine tuning for 121_3, and IBT motor operates at process speed of 121mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.043	Agitator Motor	IOT	Xerographic	Output	091.014 thru 091.040, 091.042, 091.044 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-008: Drum YMC Motor speed fine tuning for 121_3,and by NVM 741 015: Drum K Motor speed fine tuning for 121_3, and IBT motor operates at process speed of 79mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.044	CF Leak Recovery	IOT	Xerographic	Output	091.014 thru 091.040, 091.042, 091.043, 091.045 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-010: Drum YMC Motor speed fine tuning for 79_3,and by NVM 741 017: Drum K Motor speed fine tuning for 79_3, and IBT motor operates at process speed of 121mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and turn them off at the same time in NVM sec (drum refresh time)
091.045	CRU CHG Agitator	IOT	Xerographic	Output	091.014 thru 091.040, 091.042 thru 091.044, 091.046 thru 091.048	None	On/Off	YMCK drum motor/YMCK deve motor operates at process speed set by NVM 741-010: Drum YMC Motor speed fine tuning for 79_3,and by NVM 741 017: Drum K Motor speed fine tuning for 79_3, and IBT motor operates at process speed of 79mm/sec. Turn on YMC drum motor/YMC deve motor/IBT motor/erase lamp at the same time, and then turn off at the same time in NVM sec (drum refresh time)
091.200	Bottle Position SNR	IOT	Xerographic	Input		None	High/ Low	
091.201	Bottle Full SNR	IOT	Xerographic	Input		None	High/ Low	

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
091.202	SNR Photo	IOT	Xerographic	Input		None	High/ Low	

### Table 21 IOT ADC Chain 92 Component Control Codes

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
092.001	ADC specular	IOT	Develop	Output		None	On/Off	Turn On the ADC Mirror LED.
092.002	ADC Diffuse	IOT	Develop	Output		None	On/Off	Turn On the ADC Diffusion LED.
092.003	ADC shutter open	IOT	Xerographic	Output		100 msec	On/Off	CAUTION
								After executing this test, close the ADC Shutter with 092.004. Otherwise, the ADC Sensor may be contaminated.
								ADC shutter is automatically closed when printing.
092.004	ADC shutter close	IOT	Xerographic	Output		100 msec	On/Off	Use this code to close the ADC Shutter.

#### Table 22 IOT Developer Drive Chain 93 Component Control Codes

Chain	0	During	Maria	-	O and the factor	<b>-</b>	D'	Description
LINK	Component	Device	wodule	туре	Conflicts	Timeout	Display	Description
093.001	Toner motor Y at 79mm/sec	IOT	Develop	Output	093.002, 93.003	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.002	Toner motor Y at 121mm/sec	IOT	Develop	Output	093.001, 93.003	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.003	Toner motor Y at 175mm/sec	IOT	Develop	Output	093.001, 93.002	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.004	Toner motor Y at 200mm/sec	IOT	Develop	Output	093.005, 93.006	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.005	Toner motor Y at 225mm/sec	IOT	Develop	Output	093.004, 93.006	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.006	Toner motor M at 79mm/sec	IOT	Develop	Output	093.004, 93.005	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.007	Toner motor M at 121mm/sec	IOT	Develop	Output	093.008, 93.009	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.008	Toner motor M at 175mm/sec	IOT	Develop	Output	093.007, 93.009	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.009	Toner motor M at 200mm/sec	IOT	Develop	Output	093.007, 93.008	10 sec	On/Off	Motor runs for 175mm/sec toner dispense.
093.010	Toner motor M at 225mm/sec	IOT	Develop	Output	093.011, 93.012	10 sec	On/Off	Motor runs for 79mm/sec toner dispense.
093.011	Toner motor C at 79mm/sec	IOT	Develop	Output	093.010, 93.012	10 sec	On/Off	Motor runs for 121mm/sec toner dispense.
093.012	Toner motor C at 121mm/sec	IOT	Develop	Output	093.010, 93.011	10 sec	On/Off	
093.013	Toner motor C at 175mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT Y 752-XXX
093.014	Toner motor C at 200mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT M 752-XXX
093.015	Toner motor C at 225mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT C 752-XXX
093.016	Toner motor K at 79mm/sec	IOT	Develop	Output			On/Off	Output value NVM BIAS DC OUT K 752-XXX
093.017	Toner motor K at 121mm/sec	IOT	Develop	Output			On/Off	Output value NVM YMC DEVE AC 121 Duty 752-XXX
093.018	Toner motor K at 175mm/sec	IOT	Develop	Output			On/Off	Output value NVM K DEVE AC 121 Duty 752-XXX
093.019	Toner cartridge motor _ K at 200mm/sec	IOT	Develop	Output			On/Off	
093.020	Toner cartridge motor _ K at 225mm/sec	IOT	Develop	Output			On/Off	
093.021	Toner cartridge motor _ K at 255mm/sec	IOT	Develop	Output			On/Off	
093.022	Developer YMC Motor 121mm/s	IOT	Develop	Output			On/Off	

Chain								
Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
093.023	Developer YMC Motor 175mm/s	IOT	Develop	Output			On/Off	
093.024	Developer YMC Motor 200mm/s	IOT	Develop	Output			On/Off	
093.025	Developer YMC Motor 225mm/s	IOT	Develop	Output			On/Off	
093.026	Developer YMC Motor 255mm/s	IOT	Develop	Output			On/Off	
093.027	Developer Bias DC Minus Y	IOT	Develop	Output			On/Off	
093.028	Developer Bias DC Minus M	IOT	Develop	Output			On/Off	
093.029	Developer Bias DC Minus C	IOT	Develop	Output			On/Off	
093.030	Developer Bias DC Minus K	IOT	Develop	Output			On/Off	
093.031	Developer Bias AC-YMC	IOT	Develop	Output			On/Off	
093.032	Developer Bias AC-K	IOT	Develop	Output			On/Off	

#### Table 23 IOT Transfer Belt Component Control Codes

Chain Link	Component	Device	Module	Туре	Conflicts	Timeout	Display	Description
094.001	2nd BTR (-)	IOT	Develop	Output	094.002	None	On/Off	2nd BTR negative Bias Output.
094.002	2nd BTR (+)	IOT	Develop	Output	094.001	None	On/Off	2nd BTR positive Bias Output.
094.003	2nd BTR contact	IOT	Develop	Output	094.004	None	On/Off	Automatically stops at contact position detected by 2nd BTR retract sensor.
094.004	2nd BTR retract	IOT	Develop	Output	094.003	None	On/Off	Automatically stops at contact position detected by 2nd BTR retract sensor.
094.005	IBT Motor On 79mm/s	IOT	Develop	Output	094.006 thru 094.008	None	On/Off	IBT motor rotation at process speed of 79mm/s Low Speed mach 7830/35only
094.006	IBT Motor On 121mm/s	IOT	Develop	Output	094.005, 094.007, 094.008	None	On/Off	IBT motor rotation at process speed of 121mm/s
094.007	IBT Motor On 175mm/s	IOT	Develop	Output	094.005, 094.006, 094.008	None	On/Off	IBT motor rotation at process speed of 175mm/s
094.008	IBT Motor On 200mm/s	IOT	Develop	Output	094.005 thru 094.007	None	On/Off	IBT motor rotation at process speed of 200mm/s
094.009	IBT Motor On 225mm/s	IOT	Develop	Output	094.010, 010.001 thru 010.004	None	On/Off	Turn on fuser motor at 60.5 mm/s and retract 1st BTR. 1st BTR stops at contact position detected by 1st BTR retract sensor, and fuser motor stops.
094.010	IBT Motor On 255mm/s	IOT	Develop	Output	094.009, 010.001 thru 010.004	None	On/Off	Turn on fuser motor at 60.5 mm/s and contact 1st BTR. 1st BTR stops at retract position detected by 1st BTR retract sensor, and fuser motor stops.
094.011	IBT Motor Reverse On	IOT	Develop	Output		None	On/Off	
094.012	1st BTR Contact	IOT	Develop	Output		None	On/Off	
094.013	1st BTR Retract	IOT	Develop	Output		None	On/Off	
094.200	1st BTR retract sensor	IOT	Develop	Input		None	High/Low	
094.201	2nd BTR retract sensor	IOT	Develop	input		None	High/Low	
094.202	POB Jam Sensor	IOT	Develop	Input		None	High/Low	

# dC361 NVM Save and Restore

### Purpose

Provides a method to capture the state of NVM to a file and write NVM file back to the NVM device when desired.

### Procedure

#### CAUTION

In this procedure it is important to follow the steps in order, read and understand all notes, and perform all actions correctly for each step. Failure to do so may result in saving an old and/or incorrect NVM file and then inadvertently reloading it when NVM is restored.

**NOTE:** The NVM Save and Restore process does not write or read directly from a USB drive to the NVM in the machine. Instead, for NVM save, the NVM data files are first saved to the hard drive, then, if necessary, transferred to the USB drive. For NVM restore when an AltBoot or Forced AltBoot has been performed, the files are first copied to the hard drive from the USB drive, then written to the various NVM locations in the machine.

**NOTE:** Always save NVM data to a USB drive if you are going to perform an AltBoot or Forced AltBoot. Performing AltBoot or Forced AltBoot will delete all data from the Hard Drive

#### To Save NVM

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. If you are saving to a USB drive, connect your USB drive to one of the USB ports on the machine.
- 3. Select the Adjustments tab.
- 4. Select **dc361 NVM Save and Restore**. The dc361 NVM Save and Restore window opens (Figure 1)

Diagnostics are act Remote Session is o The device is offlin	ive. The system is not active. e.	available. Please wait.	Diagnostics     Remote User	
🕂 dc361 NV	M Save and Res	tore	Close	
Location	Serial Number	Date	Platform	
Machine NVM	MX4463576			
Hard Drive	MX4463576	Oct-31-2012 at 15:59:40	Copier	
Hard Drive	MX4463576	Oct-31-2012 at 15:11:02	Copier	
Hard Drive	MX4463576	Oct-31-2012 at 12:28:14	Copier	
USB Device	MX4463576	Oct-31-2012 at 15:11:02	Copier	
USB Device	MX4463576	Oct-31-2012 at 12:28:14	Copier	-

Figure 1 dc361 NVM Save and Restore

**NOTE:** The top line represent the data stored in the various NVM PWBs and chips in the machine. Subsequent lines represent the data stored on the hard drive and USB drive. Each time NVM is saved to the hard drive a new file is created on the hard drive. Each file shows up as a separate line in the window and each has a unique date and time. Unless the hard drive is replaced, or an AltBoot or Forced AltBoot is done, these files will remain and be listed each time dc361 is accessed. The USB Device lines are always listed at the bottom.

- 5. Touch the **Machine NVM** line. A popup menu will open.
- 6. Select Save to Hard Drive from the popup menu.
- 7. New line(s) will be added to the screen in date and time order.
- 8. If it is necessary to copy the NVM files to a USB drive, touch the **Hard Drive** line from the save you just made. A popup menu will open.
- 9. Select Copy to USB Device from the popup menu.

#### To Restore NVM

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. If you are restoring from a USB drive, connect your USB Drive to one of the USB ports on the machine.
- 3. Select the Adjustments tab.
- 4. Select **dc361 NVM Save and Restore**. The dc361 NVM Save and Restore window opens (Figure 1)

**NOTE:** The top line represent the data stored in the various NVM PWBs and chips in the machine. Subsequent lines represent the data stored on the hard drive and USB drive. Each time NVM is saved to the hard drive a new file is created on the hard drive. Each file shows up as a separate line in the window and each has a unique date and time. Unless the hard drive is replaced, or an AltBoot or Forced AltBoot is done, these files will remain and be listed each time dc361 is accessed. The USB Device lines are always listed at the bottom.

- 5. If you are restoring from the hard drive only, skip to step 9.
- 6. Touch the USB Device line. A popup menu will open.
- 7. Select Copy to Hard Drive from the popup menu.
- 8. New line(s) may be added to the screen in date and time order.
- 9. Touch the **Hard Drive** line corresponding to either the save made previously, or to the copy just made from the USB drive. A popup menu will open.
- 10. Select Restore Machine NVM from the popup menu.

**NOTE:** You must switch power off and on before the restored data will be available to the machine.

# dC603 Image Size Adjustment

## Purpose

The purpose of the dc603 Image Size Adjustment Routine is to compensate for minor variations in machine speed which result in process direction elongation or compression of the image placed on the media. Compensation of process direction image size offset shall be approximately +/- 1.0mm over a 200mm length on the test pattern image.

### **Initial Actions**

### Check

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dc603 Image Size Adjustment. The Image Size Adjustment screen will be displayed.
- 4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
- 5. Select output color. (Default Color)
- 6. Select Print Sample.
- 7. Check the measured value in process direction of 10 grid squares. The results should be 199.8 mm as in Figure 1. If the desired result is not achieved continue with this procedure.

### Procedure

- **NOTE:** Total range of adjustment (-1.0mm to +1.0mm). The actual range of adjustment is limited by the current setting or default value of NVM. Refer to Table 1.
- Successful adjustment is indicated with a message.
- Failure to adjust the Image Size (% Offset) is indicated by a message informing of the failure. Failure messages require a user response to close the message.
- A typical reason that the image size% offset fails to adjust is because the value being written exceeds the narrow NVM range.
- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select **dc603 Image Size Adjustment**. The Image Size Adjustment screen will be displayed.
- 4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
- 5. Select output color. (Default Color)
- 6. Select Print Sample.
- 7. Follow the directions at the UI.

#### 10 Consecutive squares = 199.8mm



#### Figure 1 Image Size Adjustment Check

#### Table 1 Size Adj.

dC603 Image Size Adjustments (Slow Scan%)									
Chain	Link	Description	Model Speed	Speed	Media	Range	Default		
760	070	79mm/sec Slow Scan direction Enlargement Offset	Low	79	Extra Heavyweight	-10 to +10	Low 2		
760	071	121mm/sec Slow Scan direction Enlargement Offset	Both	121	Extra Heavyweight for high, Heavy- weight for Low, SEF plain for Low	-10 to +10	High 3 Low 0		
760	072	175mm/sec Slow Scan direction Enlargement Offset	Both	175	Heavyweight for High, Plain for Low	-10 to +10	High 2 Low -2		
760	073	200mm/sec Slow Scan direction Enlargement Offset	High	200		-10 to +10	High -2		
760	074	225mm/sec Slow Scan direction Enlargement Offset	High	225		-10 to +10	High -3		
760	075	255mm/sec Slow Scan direction Enlargement Offset	High	255	Plain for High	-10 to +10	High -3		
760	076	Special Paper Slow Scan direction Enlargement Offset				-10 to +10	High 0 Low 0		

Initial Issue

# dC608 Document Feeder Registration

## Purpose

This feature checks the registration of the document feeder and corrects any misalignments. The process runs automatically and does not require any user intervention other than inserting three blank sheets in the document feeder.

## Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Adjustments** tab.
- 3. Select **dC608 Document Feeder Registration**. The screen displays the current registration values
- 4. Insert 3 blank A4 (or 8.5 x 11 inch) white sheets, SEF, into the document feeder.
- 5. Ensure the document feeder guides are correctly adjusted.
- 6. Select Start.

The document feeder feeds the documents.

The screen displays the values for before and after registration.

- 7. Select **Close** to exit the routine.
- 8. Select Call Closeout to exit service mode

# dC609 Document Glass Registration

## Purpose

This feature checks the registration of the document glass and corrects any misalignments. The process runs automatically and does not require any user intervention other than keeping the document feeder open during the operation.

**NOTE:** High levels of ambient light illuminating the platen during this procedure can affect the accuracy of the result. Lower the DADF to 45 degrees to limit ambient light and block direct light from windows or other sources.

## Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the **Adjustments** tab.
- 3. Select **dC609 Document Glass Registration**. The screen displays the current registration values.
- 4. Open the document feeder and remove any paper from the document glass.

NOTE: The document feeder should remain open until this procedure is complete.

- Select Start to run the routine. The screen displays the values for before and after registration.
- 6. Select **Close** to exit the routine.
- 7. Select Call Closeout to exit service mode

# dC612 Test Pattern Print

### Purpose

Outputs the built-in test patterns, to help identify Image Quality problems.

### Procedure

- 1. Enter UI Diagnostic (CSE) Mode.
- 2. Select the Diagnostics tab > dC 612 Print Test Pattern.
- 3. Select a pattern from the Test Patterns menu.

**NOTE:** Not all of the following parameters are applicable to all test patterns; and some test patterns require a specific set of parameters. Refer to Table 1.

- 4. Select the Color Mode.
- 5. Select the paper Tray to be used.

**NOTE:** If you open the paper tray to change size, but do not get a "Confirm paper tray status" screen on the UI, you must exit diagnostics in order to confirm the change. Reenter diagnostics and continue with the procedure.

- 6. From the **Plex Mode** drop-down menu, select simplex or duplex.
- 7. Select the number of **Copies** (prints) to be made.
- 8. Select Start.

#### CAUTION

Test Pattern 8 (16 Tones) will cause print deletions if run in 4 color mode. Test Pattern 9 (All Half Tone) will cause print jams if run in 3 or 4 color mode. These patterns should be run in a single color only.

#	Description	Paper Size	Color Mode
1	90 Degree Print (90 Degree Grid)	11x17/A3	4C
2	Diagonal Print (45 Degree Grid)	11x17/A3	4C, red, blue
3	A1 Patch Pattern	11x17/A3	4C
4	B Patch Pattern	11x17/A3	4C
5	C Patch Pattern	LTR/A4 SEF	4C
6	C-TRACS Check PG	LTR/A4 SEF	4C
7	ProCon PG	LTR/A4 LEF	4C
8	16 Tone PG	LTR/A4 LEF	K, cyan, magenta, yellow, 3C
9	Full Halftone	LTR/A4 LEF	K, cyan, magenta, yellow
10	Single K Full Halftone	11x17/A3	к
11	Drum Pitch Halftone	11x17/A3	4C
12	LPH Streak Adj. chart (IOT Mounted)	11x17/A3	4C
13	LPH Streak Adj. chart (LPH Mounted)	11x17/A3	4C
14	Xtalk Test Chart (Failure Analysis)	LTR/A4 SEF	4C
15	Grid (Fold Position Adjustment)	LTR/A4 SEF	4C
16	Ladder	LTR/A4 SEF	4C

#### Table 1 Test Patterns

# dC640 Video Path Tests

### Purpose

Provides a method to test EPC memory, video path integrity, and SBC <-> CCs communication on the SBC PWB.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select Diagnostics tab.
- 3. Select the **POST** tab.
- 4. Select dc640 Video Path Integrity...
- 5. Select Start. For any failure, replace the SBC PWB (PL 35.2).

# dC671 RegiCon Measurement Cycle Control

## Purpose

This procedure checks and adjusts color registration.

- Performs measurement to determine the condition of the registration control.
- Checks that the Belt control etc. are operating normally.
- Measures/displays the amount of color shift relative to Black in the Fast Scan/Slow Scan direction.
- Displays the results as either **OK** or **NG**

For instructions, refer to ADJ 9.10.

# dC673 RegiCon Control Sensor Check Cycle

## Purpose

This is a self-diagnostic cycle for checking that the registration detection system is operating normally. Color shift is detected using a Cyan patch. Any misregistration detected in the MOB sensor is displayed on the UI screen. This result is compared with the target value to determine the **OK** or **NG** status. Correction is not performed.

For instructions, refer to ADJ 9.11.

# dC675 RegiCon Setup Cycle Control

## Purpose

This is a setup procedure to be used after replacement of the ROS, the Transfer Belt, or the IBT Assembly

For instructions, refer to ADJ 9.10.

# dC710 No Paper Run

## Purpose

This routine operates all of the media feed and transport functions without actually feeding media, to enable examination of the subsystem operation.

**NOTE:** Even though no paper is fed, Tray 1 must be loaded with 8.5 x 11 or A4 paper in order to run this routine.

If you open the paper tray to change size, but do not get a "Confirm paper tray status" screen on the UI, you must exit diagnostics in order to confirm the change. Reenter diagnostics and continue with the procedure.

### Procedure

- 1. Enter the Diagnostic Mode. Refer to UI Diagnostic (CSE) Mode.
- 2. Select the Maintenance tab.
- 3. Select the Paper Path tab (not in UI Diagnostics).
- 4. Select No Paper Run (dC710).
- 5. Select Color Mode (Color or Fast Black).
- 6. Enter the number (1 99) of simulated print cycles you wish to run. Select **Start** to activate.
- 7. Select Stop to immediately halt the Routine.

# dC740 Tray 5 (MSI) Guide Adjustment

## Purpose

This procedure calibrates the paper size detection circuits for Tray 5.

Refer to ADJ 7.1 for instructions

# dC909 Calibrate for Paper

### Purpose

Calibrate for Paper Type provides adjusts the 2nd Image Transfer Power output (ATVC) to compensate for thick or specialty media. Use dC909 to correct these types of defects on simplex and duplex prints:

- Low density
- Foggy background
- Voids
- White spots

 Table 1 Relationship Between UI Classification and Paper Type (Factory Settings)

UI Classification	Paper Type
Plain	Plain B
Hole Punched	
Transparency	
Precut Tab	
Light Card	
Light Card RL (reload)	
Card stock	
Card Reload	
Recycled	
Labels	
LW (light weight) Glossy Card	
LW Glossy Card R (reload)	
Glossy Card	
Glossy Card RL (reload)	
Letterhead	
Pre-Printed	
Bond	Plain
Heavy Labels	
Envelope	
Custom 1~7	User Defined
Other Type	
HW (heavy weight) Gloss Card	
HW Gloss Card R (reload)	
X-HW (extra heavy weight) Labels	
Heavy Card	
HW Card R (reload)	
Postcard	

## Procedure

- 1. Load the paper to be adjusted into the paper tray (11x17 is recommended) and change the **Paper Type Settings** to match the paper.
- 2. Enter the UI Diagnostic (CSE) Mode.
- 3. Select the Adjustments tab.
- 4. Select **dc909 Calibrate for Paper**. The Calibrate for Paper Adjustment screen will be displayed.
- 5. Select **[Paper Supply]** and select the tray containing the paper to be adjusted.
- 6. Select **[Paper Type]** and select the paper type that was set in Step 1.
- 7. Select Test Print to output the Test Pattern (Figure 1).

# dC919 Color Balance Adjustment

### Purpose

This procedure enables fine adjustment of the center value of the low density/medium density/ high density output balance for each color for copy images.

NOTE: This procedure has no effect on printing output.

### CAUTION

Do not run this procedure unless strongly requested to by the customer.

Ensure that the customer understands that when this procedure is completed, color balance for the Copy function will be permanently altered and can only be reset back to defaults or to previous settings by a CSE.

Refer to ADJ 9.12 for instructions.



### Figure 1 Test Pattern

**NOTE:** The Test Pattern is meant to be printed on 11x17''/A3 paper; portions of the pattern may be missing when printed on other sizes. LTR/ A4 LEF only shows the latter half of the pattern; although the patch number at the paper lead edge is **9**, the transfer output will be printed as **1**.

- 8. Select what you would consider as the best value from the columns (1~16) on the Test Pattern. The selection criteria are:
  - a. Whether there are any white spots in the K color patch (if there are, it indicates excessive voltage)
  - b. Whether the mixed K looks bluish (if it is, it indicates insufficient voltage)
  - c. Whether the halftone granularity is good (if it is bad, it indicates excessive voltage)
- 9. Select **[Type Offset]**, **Up** or **Down** buttons to raise or lower 2nd Transfer Voltage.
- 10. Select Write NVM.
- 11. Select **Test Print**. Verify that the desired outcome is achieved. If desired outcome is not achieved, repeat this procedure. If desired outcome is achieved, continue to step 12.
- 12. Select Close to end.

# dC924 TRC Adjustment

### Purpose

This procedure allows you to perform a manual density adjustment. It sets an offset amount of the ADC-LUT created by the ADC patch to finely adjust the gradation.

**NOTE:** This procedure affects both copy and print output.

### CAUTION

Do not run this procedure unless strongly requested to by the customer.

Ensure that the customer understands that when this procedure is completed, color balance for both the Copy and the Print functions will be permanently altered and can only be reset back to defaults or to previous settings by a CSE.

Refer to ADJ 9.13 for instructions.

# dC937 ProCon On/Off Print

### Purpose

This procedure prints out the Process Control Test Pattern in two different modes. The comparison between the two prints can help isolate process control-related image quality problems.

Refer to ADJ 9.3 for instructions.

# dC945 IIT Calibration

## Purpose

This procedure sets the following:.

- White Reference Correction Coefficient.
- IIT sensitivity dispersion (CCD Calibration).
- Platen-to-Lens-to-CCD alignment (Optical Axis)

Refer to ADJ 6.5 and ADJ 6.6 for instructions.

# dC949 ATC Default Developer Setup

Purpose

**NOTE:** For details, see adjustment ADJ 9.8 Default Developer ATC Setup.

# dC950 ATC Sensor Setup

### Purpose

To set the calibration values [ATC Correction Coefficient], [ATC Correction Offset] in NVM to calibrate the new ATC Sensor

Refer to ADJ 9.7 for instructions.

# dC991 Tone Up/Tone Down

### Purpose

This procedure compares measured toner concentration against a target, and allows manual adjustment of TC.

Refer to ADJ 9.14 for instructions.

# dC1202 Hole Position Adjustment

## Purpose

dc1202 Punch Position Adjust is used to align the hole punch position. After installation of the Punch Assembly into the LX finisher and subsequent power On, a configuration prompt appears on the UI for hole punch adjustment. This routine is typically performed by the customer in administrator mode.

**NOTE:** The distance between each hole punch in the cross process direction, on the same page, is not adjustable.

Refer to ADJ 12.9 for instructions.

# dC2006 Side 1 to Side 2 Color Matching

### Purpose

The purpose of Side 1 to Side 2 Color matching is to compensate for minor variations in output color. This routine is available to users. Compensation of process direction image size offset shall be approximately +/- 1.0mm over a 200mm length on the test pattern image.

### Procedure

- 1. Enter the UI Diagnostic (CSE) Mode.
- 2. Select the Adjustments tab.
- 3. Select dc2006 Color Matching. The Color Matching screen will be displayed.
- 4. Select paper type. Plain, Glossy, Heavyweight, Heavyweight Glossy, Extra Heavyweight and Extra Heavyweight Glossy. (Default Plain).
- 5. Select output color. (Default Color)
- 6. Select Print Sample.
- 7. Follow the directions at the UI.



10 Consecutive squares = 199.8mm

Process Direction

Figure 1 Color Matching Test Print

# **GP 1 FAX PWB Internal Selftest**

### Procedure

- 1. Insert a document in the DADF or place on the glass
- 2. Select the Fax feature from the All Features screen on the UI.
- 3. Enter 0000 as the phone number
- 4. Select Start. The machine will scan the document.
- 5. The scanned image(s) will be received by the Fax PWB from the SBC PWB. The Fax PWB sends it back to the SBC PWB which sends it to the IOT to print the scanned image.

This is a closed loop test. It does not check the phone line. It does prove that the image path in the machine is working correctly. You should end up with a copy of the scanned document with a fax header on the top of the page. It also will print a transmission report if this feature is enabled in Tools.

# **GP 2 Accessing Tools**

The Tools menu has four levels of access: User (walk-up), Administrator, CSE, and Diagnostics. User mode offers copy and print color calibration adjustments; Administrator mode offers a more comprehensive suite of options and CSE mode offers a subset of Administrator options. CSE mode is available if the Administrator user name and passcode are not at the default, and the Administrator is not available to enter the code. Diagnostics mode provides the CSE with access to onboard diagnostic tools.

# Accessing Tools as Administrator

- 1. Press the Log in/out button on the UI.
- 2. Enter the administrator User Name (default is admin) and select Next.
- 3. Enter the Administrator passcode (default is **1111**) and select Done. The Log In/Out button is illuminated and Admin appears in the upper right corner of the screen.

**NOTE:** Administrator mode remains active until the **Log in/out** button is pressed or the session times out. When finished, always log out of Administrator mode by pressing the **Log in/out** button and confirming logout.

- 4. Press the Machine Status button on the UI.
- 5. Select the **Tools** tab. The Tools menu appears.
  - On the left side of the screen are several buttons for the categories of features. Within each category are **Groups** of features. Each **Group** contains one or more **Features**.
- 6. Select the category, then the group, then the feature.

# Accessing Tools as CSE

If administrator credentials are unknown, log in as a CSE.

- 1. Press and hold the **0** button for approximately 10 seconds then simultaneously press the **Start** button on the UI. Release both buttons after a few seconds.
- 2. On the Service Diagnostics Login screen, enter **2732**, then select **Enter**. The Log in/out button is illuminated and CSE appears in the upper right corner of the screen.

**NOTE:** CSE mode remains active until the **Log in/out** button is pressed or the session times out. When finished, always log out of CSE mode by pressing the **Log in/out** button and confirming logout.

- 3. Press the Machine Status button on the UI.
- 4. Select the **Tools** tab. The Tools menu appears.

On the left side of the screen are several buttons for the categories of features. Within each category are **Groups** of features. Each **Group** contains one or more **Features**.

5. Select the category, then the group, then the feature.

**NOTE:** The Tools available in CSE mode are a subset of those available in Administrator mode.

# **GP 3 Controller Boot Sequence**

### Sequence

The on-screen indications of a normal bootup are:

- Switch on the power. The Flash screen appears within 10 seconds
- At approximately 45 seconds you should see the XUI start up screen
- At approximately 55 seconds, you will hear the trays initialize.
- At approximately 75 seconds, the Model Information screen appears.
- At approximately 120 seconds, the Configuration Report will print (if enabled).
- Approximate total boot time = 140 seconds for basic services. (2 min. 20 seconds)

**NOTE:** Additional installed services (like EFAX, E-mail) require additional pre-loading time (approximately 30 seconds)

# **GP 5 Image Quality Calibration**

This procedure details the method by which customers can calibrate the Image Quality in either Print or Copy mode.

## Procedure

NOTE: It is not necessary to enter SA mode (log in) in order to perform this procedure.

- 1. Press the Machine Status button on the UI.
- 2. Select the **Tools** tab.
- 3. Select Troubleshooting.
- 4. In the Troubleshooting Group, select Calibration.
- 5. Select either Copy Calibration or Print Calibration.
- 6. The steps to perform the procedure will be displayed on the UI; take care to follow the instructions exactly.

# **GP 6 Printing Configuration Reports**

## Purpose

This procedure describes the procedure for accessing Configuration Reports.

## Procedure

A Configuration Report can be produced in three ways:

- 1. Switching power off then on (if configured)
- 2. Through use of Centreware® Internet Services.
- 3. From the local UI:

NOTE: It is not necessary to enter SA mode (log in) in order to perform this procedure.

- Press the Machine Status button on the UI.
- Select Machine Information tab.
- Select Information Pages...
- Select Configuration Report and press the Print button.

# **GP 7 Network Printing Simulation**

## Purpose

This procedure details a method of troubleshooting network printing problems using a PC connected to the printer with a network crossover cable.

Depending on your operating system, follow one of the two network connection procedures provided:

- Windows XP Connection
- Windows 7 Connection

## Prerequisites

- Crossover cable and a PWS equipped with a network interface card.
- Clear Internet Explorer proxy settings.
- User software CD or driver files downloaded and extracted to a folder on the PWS.

# **Clear IE Proxy Settings**

The following steps will ensure that the Proxy Server Settings are correct.

- 1. Open Internet Explorer.
- 2. Select Tools Internet Options.
- 3. Select the **Connections** Tab.
- 4. Select the LAN Settings box.
- 5. Ensure that the "Use a proxy server for your LAN" box is **un-checked**.
- 6. Select OK to close the Local Area Network Settings window.
- 7. Select **OK** to close the **Internet Options window**.
- 8. Close Windows Internet Explorer.

# Windows XP Connection Procedure

- 1. Print a Configuration Report. Refer to GP 6.
- 2. Configure the PWS IP Address:
  - a. Right click on the **My Network Places** icon.
  - b. Select **Properties** to bring up the Network and Dial-up Connections window.
  - c. Right click on Local Area Connection and select Properties.
  - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/** IP and select **Properties**.
  - e. Select the Use the following IP address radio button.
  - f. Enter an **IP address** one digit different than the printer's IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - g. Enter 255.255.255.0 for Subnet mask.
- 3. Connect the PWS to the printer with the crossover cable.
- 4. Click the Windows **Start** button.
- 5. Select Settings, then Printers and Faxes.
- 6. Select Add Printer.
- 7. On the Add Printer Wizard screen, click Next.

- 8. On the next screen, select **Local printer**, then click **Next**.
- 9. When the Add Printer Wizard asks you to select the printer port, select Create a new port. In the Type: menu, select Standard TCP/IP Port, then click Next. This opens the Add Standard TCP/IP Printer Port Wizard. Click Next.
- 10. Enter the printer's IP address. Click **Next**.
- 11. Select **Custom**, then click on **Settings.**
- 12. In the **Protocol** box, select **LPR**. In the **LPR Settings** box, type **print** for **Queue Name**:, then click **OK**.
- 13. Click Next. Click Finish to return to the Add Printer Wizard.
- 14. If the printer driver was previously loaded on the PWS, select the printer from the list and click Next. Otherwise, click Have Disk. Print Drivers can be found on the customer's User Software CD, downloaded from the UI via Web Tools or Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click OK.
- 15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
- 16. Select Do not share...
- 17. Select **Yes** when prompted to print a test page. Printing indicates a functioning network connection.

# Windows 7 Connection Procedure

NOTE: Clear Internet Explorer proxy settings.

- 1. Print a Configuration Report. Refer to GP 6.
- 2. Configure the PWS IP Address:
  - a. Click on the Windows Start button.
  - b. Select Control Panel.
  - c. Select Network and Sharing Center.
  - d. On the left Windows pane, Select Change Adaptor Settings.
  - e. Right click on Local Area Connection and select Properties.
  - f. Select the Networking tab and scroll down to Internet Protocol Version 4 (TCP/ IPv4). Highlight TCP/ IP and select Properties.
  - g. Select the Use the following IP address radio button.
  - Enter an IP address one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - i. Enter 255.255.255.0 for Subnet mask.
- 3. Connect the PWS to the printer with the Crossover Cable.
- 4. Click the Windows Start button.
- 5. Select Control Panel, then Devices and Printers.
- 6. Select Add Printer.
- 7. On the Add Printer Wizard screen, click Next.
- 8. On the next screen, select Local printer, then click Next.
- When the Add Printer Wizard asks you to select a printer port, select Create a New Port. In the Type menu, select Standard TCP/IP Port, then click Next. This opens the Add Standard TCP/IP Printer Port Wizard. Click Next.

- 10. Enter the printer's IP address. Click **Next**.
- 11. Select Custom, then click on Settings.
- 12. in the **Protocol** box, select **LPR**. In the **LPR Settings** box, type **print** for **Queue Name**:, then click **Next**.
- 13. Click Next. Click Finish to return to the Add Printer Wizard.
- 14. If the printer driver was previously loaded on the PWS, select the printer from the list and click Next. Otherwise, click Have Disk. Print Drivers can be found on the customer's User Software CD or download from the UI via Web Tools or Xerox Website. Navigate to the CD or downloaded driver for your PWS' operating system. Click OK.
- 15. On the **Name Your Printer** screen, enter a name for the printer. Do not set this printer as the default. Click **Next**.
- 16. Select Do not share...
- 17. Select **Yes** when prompted to print a test page. Printing indicates a functioning network connection.

# **Using Print Simulation**

To use this network printing simulation on different machines, modify the Setup as follows:

- 1. Print a new Configuration Report for the printer being tested. Refer to GP 6.
- 2. Reconfigure the PWS IP Address per step 2 in **Setup**.
- 3. Click the Windows Start button.
- 4. Select Settings, then Printers and Faxes.
- 5. Right-click on the name of the test printer you created, and select Properties
- 6. Select the **Ports** tab, then click on **Configure Port...**
- 7. Enter the printer's IP address then click on **OK**.

# **GP 9 Installing System Software**

## Purpose

Provide installation instructions to upgrade, downgrade, or restore system software. Four methods of software installation are described in this procedure:

- USB Upgrade using a USB Flash drive
- CWIS Upgrade using the network
- AltBoot or Forced AltBoot using a USB Flash drive
- PWS AltBoot using PWS AltBoot tools

Additional software installation options are available using CWIS when software updates are enabled. Customers can upload system software using CWIS or configure CWIS to monitor an FTP site for system software and automatically upgrade when a newer version is detected. Table 1 lists available software installation procedures and effects to each module.

Process	Network Controller	UI, Copy Controller, Fax	ШТ	DADH	ют	Finisher
USB Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
CWIS Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
Auto FTP Upgrade	Upgrade	Upgrade	Upgrade	N/A	Upgrade	Upgrade
Power On SW Upgrade (POSU)	N/A	Upgrade, Downgrade	Upgrade, Downgrade	N/A	Upgrade	Upgrade
AltBoot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	After Alt- Boot POSU may occur	N/A	After Alt- Boot POSU may occur	After Alt- Boot POSU may occur
Forced Alt- Boot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	Upgrade, Down- grade, Reload. May need NVM changes	Upgrade, Down- grade, Reload	Upgrade, Down- grade, Reload
PWS Alt- Boot	Upgrade, Downgrade, Reload	Upgrade, Downgrade, Reload	After Alt- Boot POSU may occur	N/A	After Alt- Boot POSU may occur	After Alt- Boot POSU may occur

Table 1 Software Loading Options

**NOTE:** If a component is installed that has a later version of software than the software set on the SBC PWB, at system startup the software on the new component is downgraded.

**NOTE:** Some hardware modules can only be upgraded by installing a newer version of the relevant PWB on the affected hardware module.

### Description

System software sets are compilations of software modules and a software compatibility database (SCD). The SCD lists software versions suitable for the system and installed options. System software is supplied as a .dlm file. Names for .dlm files follow this format:

Product Type\_Product Number\_system-sw#version number#optional text.dlm

- Product Type is WorkCentre
- Product Number is 7200
- Version number is a numeric series to identify product, version and release date
- Optional Text may or may not appear in the file name.

As an example: WorkCentre\_7200\_system-sw#071.030.002.33000#.dlm

**NOTE:** Software version information appears under Machine Details and on the Service Info screen in service mode.

At power On, the system checks version information for each installed module and compares it to SCDs stored locally. If a mismatch is detected, an automatic power On software upgrade (POSU) or downgrade of the affected module is initiated to correct the mismatch.

### **Software Installation Procedures**

**NOTE:** Depending on the procedures used, software installation could require up to 60 minutes. If the software installation procedure fails, go to Boot Failure RAP.

Installing system software requires:

- If possible, the system must be fully operational. Correct any active faults or jams.
- Obtain a USB Flash drive with a minimum capacity of 1GB.
- Download the latest dlm file from GSN or xerox.com.

#### Software Upgrade Installation

Two software upgrade procedures are described:

- Software Loading Using a USB Flash drive
- Software Loading Using a Network Connection

**NOTE:** Use AltBoot for downgrading and reloading. If the upgrade procedure fails, go to Boot Failure RAP.

#### Software Loading Using a USB Flash drive

Perform these steps:

- 1. Create a top level folder on the USB Flash drive named upgrade (not case sensitive).
- 2. Copy the WorkCentre\_7200-system-sw#pppmmmyyydddrr#.dlm file into the upgrade folder on the USB Flash drive.

**NOTE:** Make sure there is only one file in the upgrade folder.

- 3. If possible, complete or delete all pending print jobs. If the prints jobs cannot be deleted, warn the customer that all pending jobs will be lost.
- 4. Check Release Notes and currently loaded software. Ensure upgrades can be applied.
- 5. Connect the USB Flash drive into any of the USB ports.

**NOTE:** It is not necessary to switch Off the system to perform a software upgrade. Occasionally the USB Flash drive is incompatible with the system. Replace the USB Flash drive with a Xerox approved model. Restart the process.

- 6. The UI power on light will Intermittently light.
- 7. The Software Upgrade start screen appears, Figure 2.
- 8. The upgrade begins and the progress screen opens, Figure 3.
- 9. The system upgrade process should complete in about 5 minutes and the system return to a ready state.
- 10. If the process fails, the hard drive is corrupt. Use an AltBoot procedure to recover.
- 11. The system reboots several times before returning to a ready state. The system may also display the upgrade progress screen, Figure 3. If the power on failure screen is displayed, Figure 7, switch off, then switch on the machine.
- 12. After the software has upgraded a software upgrade report prints, Figure 1.



#### Figure 1 Software Upgrade Report

#### Software Loading Using a Network Connection

- 1. Connect to the system web page either from a PC connected to the network or using the PWS and an ethernet crossover cable.
- 2. Open a web browser. Enter the system IP address in the web browser Address field, then press the enter key. The system CWIS web page will open.
- 3. Enter the Administrator User ID and Password.
- 4. Click on Properties.
- 5. Select General Setup.
- 6. Select machine software.
- 7. Select upgrades. Then check the Enabled check box.
- 8. Select manual upgrade, then browse. Select the .dlm file from the Upgrade directory.
- 9. Select install software.

NOTE: All network connectivity is lost. Progress can be monitored from the UI.

10. The system reboots before returning to a ready state.

#### AltBoot Software Loading

#### CAUTION

The AltBoot Software Loading procedure erases customers unique network configuration settings. NVM data must be saved and restored during this procedure.

#### CAUTION

It may take several minutes for the upgrade to start. There is **no** indication until the UI displays the **Software Upgrade** screen. Do not remove the Flash drive or switch Off power until the system reboots.

**NOTE:** To restore the XSA data, use the customers XSA data backup (clone) file on the customers PC. Refer to the Customer Administrators Guide CD.

AltBoot reloads system software. It is used to upgrade, downgrade or reload software on systems that will not come to a ready state. It can also be used to upgrade or downgrade the software on system options.

AltBoot should be only be used under these circumstances:

- To attempt to recover a corrupt:
  - Hard drive
  - SBC PWB
- After installing a new hard disk drive
- To upgrade system software without running multiple software upgrades.
- To downgrade machine software.

A Forced Altboot uses the available .dlm file to upgrade or downgrade every component in the system regardless of installed software. A Forced Altboot is required to recover from corrupt application code on devices such as Fax, IOT, IIT. Use Forced AltBoot:

- If the Finisher software requires upgrade or reloading. After performing a Finisher SW upgrade only, reinitialize Finisher NVM.
- To downgrade the IOT/IIT software.

#### **AltBoot Procedure**

#### CAUTION

If the system appears to hang during the AltBoot process (stay on one screen without apparent progress), wait 10 minutes before switching the system off. The system may still be loading software in the background and switching the system off during this phase will corrupt the hard drive. A new hard drive is required to recover.

#### CAUTION

Use Forced AltBoot with extreme caution as it replaces boot and application code. Power failure during a Forced Altboot may result in certain PWBs (DUI, Finisher) being unrecoverable. Perform the following:

- 1. Create a top level folder on the USB Flash drive named AltBoot (not case sensitive).
  - Forced AltBoot only: Create a file named **FORCED\_UPGRADE** inside the altboot folder. This is an empty file and must not have an extension; the AltBoot routine only checks to see that a file with this name is present. To create the empty file:
  - Open the AltBoot folder
  - In a blank area of the screen, right click and select "New".
  - Select "Text Document".
  - The name "New Text Document.txt" will be highlighted.
  - Type "FORCED\_UPGRADE" and hit "Enter".
  - A pop-up with the message "If you change a file name extension, the file might become unusable. Are you sure you want to change it?" will appear.
  - Click on Yes.
  - To eliminate carryover of corrupt data, also create a file called **DISABLE\_DATA\_BACKUP** (case sensitive with no file extension). This prevents the NC from keeping data normally retained through an AltBoot.
- Copy the unzipped WorkCentre\_7200-system-sw#pppmmmyyydddrr#.dlm file into the AltBoot folder on the USB Flash drive. Make sure that there is only one .dlm file in the Altboot folder.

**NOTE:** Ensure the Microsoft Windows Safely remove hardware procedure is followed before the USB Flash drive is removed.

- 3. Insert the USB Flash drive into the system.
- 4. Use dC361 to save NVM settings. Verify NVM data was saved to the USB Flash drive.

**NOTE:** The same USB Flash drive that has the .dlm file can be used to store NVM data.

- 5. Perform GP 13 Network Clone Procedure.
- 6. If possible, complete or delete all pending print jobs. If the prints jobs cannot be deleted, warn the customer that all pending jobs will be lost.
- 7. Switch the system Off using both power switches.
- 8. Switch On the system. The Altboot process starts automatically. No button presses are required to initiate the Altboot.
- 9. The upgrade start screen is displayed, Figure 2.

**NOTE:** Occasionally a USB Flash drive is incompatible with the system and the upgrade start screen, Figure 2 is continually displayed. If after 10 minutes the screen has not changed, replace the USB flash drive with a Xerox approved model. Restart the process.

10. The upgrade begins and the progress screen opens in approximately 2 minutes, Figure 3.

**NOTE:** If the upgrade process screen is not displayed after 4 minutes, restart the process.

- 11. The AltBoot process should complete after approximately 5 minutes and the AltBoot complete screen opens, Figure 4. Follow the on screen instructions.
- 12. If the AltBoot process fails, the AltBoot failed screen opens, Figure 5. Follow the on screen instructions. Restart the procedure and troubleshoot as necessary.

**NOTE:** Do not switch the system Off unless directed to on the UI. During the next 2 reboots, the hard drive is encrypted. Switching the system off can result in partial encryption of the hard drive. The AltBoot process may need to be re-run if power is removed at this step.

- 13. The system reboots several times before returning to a ready state. In some instances, a second upgrade progress screen may appear, Figure 3 or the Data Encryption/Decryption in progress screen, Figure 6. If a power On failure screen appears, Figure 7, switch off, then switch on the machine.
- 14. Check that the software set has installed. Refer to the printed software upgrade report, Figure 7 or by pressing the **Status** button.
- 15. Use dC361 to restore saved NVM settings.
- 16. Perform a Network Clone Restore, refer to GP 13.

Please waitSoftware Upgrade is in progress.						
🐼 Software Upgrade						
	Please wait					

Figure 2 Upgrade start screen

Initial Issue

Software Upgrade is in progress.	
Software Upgrade	
User Interface	
Copy Controller	
Network Controller	
Print / Copy Engine	
Scan Engine	
Fax	DO NOT power off while upgrading.
Finishing	

Figure 3 Upgrade progress



Figure 5 AltBoot failed



Figure 4 AltBoot complete

The device is not available. Please wait Disk encryption operation in progress.	
Data Encryption / Decryption	
Data Encryption in progress. The device will remain offline until the encryption process is complete.	2
Upon completion the device will automatically reset.	2
Encryption Start Time: 6/19/12 1:21 PM	
Please wait	
	-
	Ser Marine La

Figure 6 Encryption progress



#### Figure 7 Power On failed

#### **PWS AltBoot Procedure**

PWS AltBoot is a tool used to load system software in accounts that do not permit the use of USB Flash drives. The PWS AltBoot tool and installation instructions are available on GSN.

**NOTE:** Before loading system software, the system should be fully operational. If possible, clear any active faults or jams before starting this procedure.

- 1. Perform an NVM Save, dC361.
- 2. Perform the Network Clone procedure, GP 13.
- 3. Print a Configuration Report, GP 6.
- 4. If possible, complete or delete all pending print jobs. If jobs cannot be deleted, warn the customer that all pending jobs will be lost.
- 5. Install the PWS AltBoot tool on the PWS using the installation instructions from GSN. Make sure to copy over the system software (.DLM) files, ulmage and uboot files.
- 6. Switch Off the system.

Initial Issue

7. Use these steps configure a PWS LAN connection so the PWS can communicate with the system Network Controller. Once established, settings remain in effect until changed.

**NOTE:** Record the original data for every place you make a change. You may or may not need to reset the IP address, depending on PWS usage and local network practice.

- a. Right click on the My Network Places icon.
- b. Select Properties to bring up the Network and Dial-up Connections window.
- c. Right click on Local Area Connection and select Properties.
- d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/** IP and select **Properties**.
- e. Select the Use the following IP address radio button.

- f. Enter an IP address one digit different than the system IP address listed on the Configuration Report for example, if the system IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43.
- g. Enter 255.255.255.0 for Subnet mask.
- h. Select OK to close the TCP/IP Properties window
- i. Select OK to close the Local Area Connection Properties window.
- j. You may need to reboot the PWS to load the settings.
- 8. Connect the PWS to the system with the Communication Data Cable to the RJ11 connector on the SBC PWB. Connect the other end to the serial port on your PWS.
- 9. Disconnect the customer's network connection. Connect a crossover cable between the network ports on the system and PWS.
- 10. Start the PWS AltBoot tool on the PWS.
- 11. A Browse for Folder window will open. Browse to and highlight the folder that contains the upgrade files. Select **OK**.
- 12. Switch on the machine. After approximately 10 seconds, the transfer of the ulmage and uboot files begins.
- 13. After file transfer, the settings menu appears in the terminal window. Check that the 'Received packet' line is displayed and that the IP address is set one digit away from the packet was received from address.

Press  $\mathbf{y}$  at the prompt and continue. If the valid netmask is not set, press  $\mathbf{n}$  and change it to 255.255.255.0

- 14. From the next menu, select **5> Install SBC software**.
- 15. At the Proceed? prompt, select Y.
- 16. At the second Proceed? prompt, select Y.
- 17. From the next menu, select **4> Continue**.
- A list will display the .DLM file(s) in the directory identified in step 2. Select the correct DLM file to download to the machine. A transfer progress window will then open.
- 19. After the DLM file has been downloaded to the machine, the Software Upgrade start screen will display on the UI.
- 20. After approximately 1 minute the upgrade will begin and the Software Upgrade in progress screen will open. If the upgrade process screen is not displayed after 2 minutes, restart the process.
- 21. The AltBoot process should complete after approximately 5 minutes and the Upgrade Complete screen will open. Ignore the instruction to remove the USB flash drive, only press **0** to continue.
- 22. The machine will reboot several times before returning to a ready state. During the reboot, the hard drive is encrypted. Switching off the machine can cause only partial encryption of the hard disks partitions. The AltBoot process may need to be re-run if power is removed at this step. The UI displays the Data Encryption/Decryption in Progress screen.
- 23. After the reboots have finished the machine will boot up and come online. In the SBC-AlternateBoot window on the PWS should display SBC System is 'OPERATIONAL.
- 24. Disconnect the cable from the PWS serial port and the machine. Disconnect the crossover cable from the PWS network and the machine.
- 25. Connect the customer's network cable to the machine.
- 26. Check that the software set has been installed. Refer to the printed software upgrade report or by pressing the machine status button.
- 27. Perform an NVM Restore, dC361.

#### 28. Perform a Network Clone Restore, GP 13.

#### Troubleshooting

Listed below are possible problems that may stop AltBoot software loading:

Possible causes and solutions are:

- Incompatible USB Flash drive. Use a Xerox approved model of USB Flash drive.
- Corrupt.dlm file. Replace the .dlm file.
- Incorrect spelling of the AltBoot directory on USB flash drive.
- AltBoot and upgrade folders on the USB Flash drive.
- Bad data connection to the Hard Drive. Reseat the Hard Drive harnesses.
- Hard drive corruption or failure.
- USB port or cable damage. Use a different USB port or cable.
- UI failure.
- SBC PWB failure.
- Check the +5V supply to the USB ports on the SBC PWB.

# **GP 10 PWS Communication with the SBC**

### Purpose

This procedure provides instruction on how to connect the PWS directly to the CCS communication port on the SBC using serial cable 600T80374 and level adaptor 600T80375 (XP) or USB cable 600T02332 and PWS Altboot tool (W7). Depending on your operating system, follow one these procedures:

- XP Connection
- W7 Connection

## Windows XP Connection Procedure

To configure your PWS for a HyperTerminal connection, connect the serial cable and level adaptor between the PWS and printer and perform the following:

- 1. In the Task bar at the bottom left of your PWS, select Start.
- 2. Select All Programs.
- 3. Select Accessories.
- 4. Select Communications.
- 5. Select HyperTerminal.
- 6. If a Default Telnet Program? dialog box appears, select No.
- 7. When the Connection Description dialog box appears, enter SBC in the Name space.
- 8. In the Connect To dialog box, select COM1 in the Connect using: pull-down
- 9. Ensure that the following are set in the COM1 Properties/Port Settings window:
  - Bits per second: = 115200
  - Data bits: = 8
  - Parity: = None
  - Stop bits: = 1
  - Flow Control: = None
- 10. Select Apply, then select OK.

## Windows 7 Connection Procedure

To configure your PWS for a USB connection, download and install the USB device driver from GSN. After rebooting the PWS, connect the PWS to the CCS communication port on the SBC. The GND indicator on the cable goes towards the top of the printer. With the PWS and printer connected, perform the following:

- 1. In the Task bar, select Start.
- 2. TBD.

# **GP 11 Resetting the System Administrator Password**

When a customer requires a new administrator password, the customer must call the Welcome Center and request an administrator password reset.

- 1. The Welcome Center will request the machine serial number and current copy count.
- 2. The Welcome Center generates a 12 digit Feature Key number.
- 3. Press the Machine Status button, then Tools tab.
- 4. Select the General feature, then Feature Installation.
- 5. Enter the Feature Key on the Feature Key screen to reset the Administrator credentials to the default values (**admin** and **1111**).
- 6. If Password reset has been disabled in CWIS, the password can only be reset by a CSE arriving on site and performing a **Regular AltBoot** (GP 9).

# **GP 13 Cloning Network Configurations**

### Purpose

Use this procedure to connect to the printer and capture Network Configuration settings. The clone file is used to duplicate settings to other machines or restore settings following AltBoot. If Internet Explorer is being used, clear browser proxy settings. Depending on your PWS operating system, follow one of the network connection procedures provided:

- Windows XP Connection
- Windows 7 Connection

### **Clear IE Proxy Settings**

Perform these steps to clear Internet Explorer proxy settings before connecting to the printer.

- 1. Open Internet Explorer.
- 2. Select Tools Internet Options.
- 3. Select the Connections Tab.
- 4. Select the LAN Settings box.
- 5. Ensure that the "Use a proxy server for your LAN" box is **un-checked**.
- 6. Select OK to close the Local Area Network Settings window.
- 7. Select **OK** to close the **Internet Options window**.
- 8. Close Windows Internet Explorer.

### Windows XP Connection Procedure

The following steps establish a Local Area Network (LAN) connection between the PWS and SBC network controller. Once established, settings remain in effect until changed.

**NOTE:** Record the original data for every place you make a change. You may or may not need to reset the IP address, depending on PWS usage and local network practice

- 1. Record any setting changes, so you can restore the original configuration when finished.
- 2. Print a Configuration Report (GP 6).
- 3. Configure the PWS IP Address:
  - a. Right click on the **My Network Places** icon.
  - b. Select **Properties** to bring up the Network and Dial-up Connections window.
  - c. Right click on Local Area Connection and select Properties.
  - d. Select the **General** tab and scroll down to Internet Protocol (TCP/IP). Highlight **TCP/** IP and select **Properties**.
  - e. Select the Use the following IP address radio button.
  - f. Enter an **IP address** one digit different than the machine IP address listed on the Configuration Report for example, if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - g. Enter 255.255.255.0 for **Subnet mask**.
- 4. Select **OK** to close the **TCP/IP Properties** window
- 5. Select OK to close the Local Area Connection Properties window.

NOTE: You may need to reboot the PWS to load the settings.

6. Connect the crossover cable between ethernet ports on the PWS and SBC.
### Windows 7 Connection Procedure

NOTE: Clear all Internet Explorer proxy settings.

- 1. Print a Configuration Report. Refer to GP 6.
- 2. Configure the PWS IP Address:
  - a. Click on the Windows Start button.
  - b. Select Control Panel.
  - c. Select Network and Sharing Center.
  - d. On the left Windows pane, Select Change Adaptor Settings.
  - e. Right click on Local Area Connection and select Properties.
  - f. Select the Networking tab and scroll down to Internet Protocol Version 4 (TCP/ IPv4). Highlight TCP/ IP and select Properties.
  - g. Select the Use the following IP address radio button.
  - h. Enter an IP address one digit different than the machine IP address listed on the Configuration Report (ex., if the machine IP address is 12.138.147.44, enter 12.138.147.45 or 12.138.147.43).
  - i. Enter 255.255.255.0 for Subnet mask.
- 3. Connect the crossover cable between ethernet ports on the PWS and SBC.

### Create the Clone File

**NOTE:** If the customer has enabled Administrator Password, you will be asked for a user name and password. Defaults are **admin** as the user name, and **1111** for the password.

- 1. Open Internet Explorer
- 2. Enter the machine's IP address in the **Address** line and select **Go**.
- 3. When **Centreware® Internet Services** opens, select the **Properties** Tab. Click on the **General Setup** link, then **Cloning** (Figure 1).



Figure 1 Cloning Screen

 Scroll down the page to see critical information about the cloning process (Figure 2). Click the View Feature Details link to get a list of data that is backed up and/or restored using the Cloning Feature.

Centreware Internet Services	XEROX WorkCentre 7220		🔏 admin - Logout   Home   Index   Site Hap   Help.,
Status Jobs Print Scan	Address Book Properties S	apport	
Properties Configuration Overview Description "General Setup Configuration Report Closing	Scan To Destination     Web Services     Paper Management     Clone	♥ Templates ♥ Customer Logo ♥ Accounting Validation	P Device Upprade P Copy
Entry Sorean Defaults Phope Management Data and Time Distantials environ Setup Extensible Service Setup Extensible Service Setup Configure Driver Links Energy Saver Anttrack Loga Supplies Plan Activation Code Silving Transassin Mode Placking Software	Note The Clone feature will create a .d. software for the .dm file in the de The software version a located on Install Clone File Install	Im file scrupt that can be used to configure other opped. I the Properties tab, under General Setup/Conf Browse.	r machines. All machines must have the same version of guration Report.
Connectivity	Software Upgrade must be en	abled to install a clone file. [[Joorades]	
Kopin / Permissions /      Note     Kocounting     Services     Using a clone Ne from a Multifunction Device is recommended.			
*Security	Once installation of the clone file t	begins, all internet services from this machine i nonitored from the machine's interface.	will be least, including the web user interface.

#### Figure 2 Important Notes!

5. Select the Clone button under the View Feature Details link (Figure 1).

#### CAUTION

#### Do NOT attempt to open the clone file as it may cause the file to become corrupt.

6. Right click on **Cloning.dlm** to save the clone file (Figure 3).

**NOTE:** When the file is saved, a .txt extension may automatically be placed at the end of the file name. Before loading this clone file, navigate to the saved file, right-click on the file and select **Rename**. The correct format for the file name is xxxxxxx.dlm.

Centreware Internet Services	XEROX WorkCentre 7220
Status Jobs Print Scan	Address Book Properties Support
Properties	Cloning
Configuration Overview Description	Classian Instructions
*General Setup Configuration Report Closing Entry Screen Defaults Paper Nanogement Date and Time	Right click on link to download file. Cloning.dlm
Internationalization Extensible Service Setup Start delations Setup Configure Driver Links Energy Sever Network Logs Supplier Rien Activation Cade Feature Installation Billing Impression Mode * Alect Notification * Nachine Software	E0012 Arms Corporation, All Rafats Reserved, Recold and XRACL and Possibility of an order constraints. Record Corporation for the Volumita States and a for other constraints.
*Connectivity	
Login/ Permissions/ Accounting	
Services	
Fermily	

Figure 3 Saving the Clone File

# Uploading a Clone file

**NOTE:** This procedure can be done from ANY PC connected to the network or the PWS connected to the machine using a crossover cable. The only requirement is an Internet Browser.

- 1. Open Internet Explorer
- 2. Enter the machine's IP address in the Address line and select Go.
- 3. When the **Centreware® Internet Services** window opens, select the **Properties** Tab. Click on the **General Settings** link, then the **Cloning** link (Figure 1).
- 4. Scroll to the bottom of the page (Figure 2).
- Use the Browse button to navigate to the clone file, or type the full path to the file. Click the Install button. If the machine does not reboot after five minutes, power the machine off/on.
- 6. Verify the cloned settings with a new Configuration Report.

# **GP 14 External Fax Line Test**

When the customer reports a fax issue sometimes it is very difficult to determine if the problem is with the customers phone line or the Xerox machine.

The preferred method of verifying the phone line functionality is to use the Modem saver device part number 600T2133 to ensure the fax line is wired correctly and to use the Analog hand set part number 600T1937 or customer's analog phone to place calls on the line. Be sure that both local and long distance calls can be placed and the line quality is clear, no static.

#### Use Handset:

- Can it dial externally on the line?
- Can it receive a call on the line?
- Evaluate Line quality. Check Line for unwanted beeps, or noise.

Use Breakout Box to measure voltages (Use the machine chassis as ground). Refer to Fax 101 training for Breakout Box usage instruction:

- Check ground continuity.
- Line Voltage -20 to -50 VDC?
- Loop Current 15 to 95 mA DC?
- Ring Signal 50 to 90 VAC?
- Check Ring-Ground and Tip-Ground <1VAC

If a line quality issue or incorrect voltage is found then the customer will need to resolve these problems.

# **GP 16 Toner CRUM Conversion**

# Purpose

This procedure explains how to set the Geographic Differentiation Code and Toner Cartridge Type to the correct values.

### Introduction

The WC 7850/7855 machines are shipped with "Worldwide Neutral" Toner Cartridges. When the cartridges shipped with the machine are installed, the machine is set to Worldwide Neutral configuration. When the first toner cartridge (any color) is replaced, the Geographic Differentiation Code and Toner Cartridge Type in NVM are automatically changed to the same settings as the replacement cartridge. Once these NVM are set, the toner configuration can only be changed with a CRUM conversion.

There are three types of toner: Metered Service, which is a single part number world wide, Sold toner that is specific to the DMO/XING market, and Sold toner that is specific to US/XCL/ XE market. See CRUs and Consumables for part numbers. If a toner cartridge of the wrong type (i.e., a "sold" cartridge in a "metered" configured machine) is installed, it will generate a fault code and/or a message on the UI indicating toner incompatibility.

If the problem occurs after several toner replacements, the customer may have received the wrong toner in a consumables order; either because the wrong part number was ordered, or the shipment did not match the order. Resolution in this case is simple; the customer should exchange the toner for the correct part.

If the wrong toner was installed at the first toner replacement after install, or if the configuration NVM have changed due to software or NVM corruption, perform the following procedure:

# Procedure (Non-Page Pack)

- 1. Record the machine serial number and the number of Total Impressions
- 2. Call Field Engineering or your NTS and provide the information collected in step 1.
- 3. You will be given a 6-character passcode.
- 4. Press the Machine Status button on the Control Panel.
- 5. Select the **Tools** tab. The Tools menu will be displayed.

On the left side of the screen are several buttons for the categories of features. Within each category are **Groups** of features. Each **Group** contains one or more **Features**.

6. Select the **Device Settings** category, then the **Supplies** group, then select **Enter Supplies Activation Code**.

**NOTE:** The passcode must be entered within 500 page counts of when it was issued, or it will not be valid.

- 7. Enter the passcode string provided in Step 4. If the Passcode contains a special character, the level of software installed on the machine may not allow entry of this character because it is grayed out. Use the following procedure to enter the special character.
  - a. Log into Tools
  - b. In the Features column, select [General...]
  - c. Select [Custom Keyboard Button...]

- d. The 3rd button on the bottom row is the customizable button
- e. Select [Clear Text]
- f. Select [Shift]
- g. Select the special character contained in the Passcode
- h. Select [Save]
- i. Log out of Tools
- 8. The Geographic Differentiation Code and Toner Cartridge Type will be reset to the values of the customer's agreed-to supplies plan.

### **Procedure (Page Pack)**

- 1. Before a 4000 page count is reached, a PIN number must be entered, otherwise the machine will not operate after the 4000 page limit.
- 2. If a bad PIN is entered 3 times consecutively, you must wait 24 hours before a good PIN can be entered.

# **GP 18 Restoring the Public Address Book**

The Public Address Book is not included in the clone file. To restore the Public Address Book use one of these procedures.

# **Restore from a USB Flash Drive**

Use this procedure to restore the address book using a Flash drive. Refer to Figure 1.

- 1. Press the Log In/Out button on the UI.
- 2. Log in as administrator (admin/1111 is the default).
- 3. Press the Machine Status button, then select the Tools tab.
- 4. Select Service Settings, then the Device Address Book feature.
- 5. Pull down the menu and select Import.
- 6. Insert the USB Flash drive and browse to the address book .csv file.
- 7. Select the proper delimiter and addition policy.
- 8. Click on the Import button to transfer the .csv file.

Mark Import			💥 Cancel	
ile (.csv)				
		Browse		
Delimiting Character		Addition Policy		
Comma (hex 2C)	-	Overwrite 👻		

#### Figure 1 UI Address book import screen.

# **Restore Using CWIS**

To import address books (.csv format), enable HTTPS (SSL) using Centreware® Internet Services. With HTTPS enabled, use this procedure to restore the Public Address Book. Refer to Figure 2:

- 1. On the CWIS Address Book pane, select Import From File.
- 2. Select the Browse button and locate the .csv file to import.
- 3. Select **Comma** for the record delimiter for .csv files.
- 4. Check the Remove Bracket checkbox if desired.
- 5. Select the radio button to specify whether to append or replace an existing address book.
- 6. Click on the **Upload File** button to transfer the .csv file.

Centreware Internet Services	XEROX WorkCentre 7220	💑 admin - Logost   Home   Jadex   Site Hap   Hel
Status Jobs Print Scan	Address Book Properties Support	
	Browse	
Record Delimiter		
Comma (hex 20)		
Remove Bracket		
Remove brackets from the beginning	ng and end of text fields (e.g., [FirstName]).	
Existing Contact Management		
Add new contacts to the existing D	evice Address Book.	
C Replace existing Device Address B	sok with the new contacts.	
Upfoat File		
2. Verify Address Book Field Happ	ings.	
Propert		
		Close

Figure 2 Address book file import screen

# **GP 20 Reporting Billing Meter Resets**

# Procedure

The CSE is required to call in billing meter reads to one of these Customer Business Centers when a machine's meters have been reset:

- Chicago CBC: 1-888-771-5225 (7am 7pm Central Time). Choose Option 4 (All other administrative Inquiries).
- St. Petersburg CBC: 1-888-435-6333 (8am 8pm Eastern Standard Time). Choose Option 4 (If you have questions regarding your Invoice or account.)
- Dallas CBC: 1-888-339-7887 (7am 6pm Central Time). Choose Option 4 (If you have questions regarding your Invoice or account.)

The Customer Business Centers will need the following information:

- CSE/Analyst/Service Agent Name and Employee Number
- 9 Digit Equipment Serial Number
- Old Meter Read and Date
- New Meter Read and Date

# **GP 22 Foreign Device Interface Setup**

### Purpose

This procedure explains the process for troubleshooting, installing and configuring the Foreign Device Interface (FDI).

# Procedure

- 1. The FDI Kit has been installed, but the Configuration sheet indicates that the Foreign Interface Board is not present. Go to Configuring the Foreign Device Interface.
- 2. The External Device does not enable the machine or does not count. Use the Foreign Interface and External Device Test Tool to resolve the problem.
- 3. Directions for the Foreign Device Test Tool are not packaged with the tool.

### Installation

Prerequisites: FDI Interface Kit.

**NOTE:** This is a purchased item and must be ordered through Sales.

**NOTE:** Observe all Electrostatic Discharge (ESD) precautions when performing this procedure.

- 1. Switch off the printer power. Disconnect the power cord.
- 2. Remove the Control Unit.
- 3. Remove the FDI Harness Connector Cutout Cover from the Control Unit (Figure 1)
- 4. Remove the two (2) standoffs from the FDI Connector, then using the Standoffs, secure the FDI Connector to the Control Unit. Figure 2.
- 5. Plug the Harness into the FDI PWB then mount the FDI PWB onto J12 of the SBC PWB.

**NOTE:** It is possible to connect the Foreign Interface Cable in reverse on the FDI PWB. Orient the cable properly.

6. Replace the Control Unit and Power On the Machine.

# **Configuring the Foreign Device Interface**

- 1. Press the Log In/Out button.
- 2. Log into the machine as **admin**, with default password of **1111**.
- 3. Touch [Machine Status], then from Tools, press the Accounting Settings button.
- 4. Press Accounting Mode
- 5. Press **Auxiliary Access** and select one of Auxiliary Device Type buttons available to configure the device and select **Save**.
- 6. From the Auxiliary Device Configuration menu, Select **Service Access & Accounting** and select those services that will be restricted by the auxiliary device. A check mark in the box will indicate those services which will be restricted, Select Save.

**NOTE:** If no selections are made, the Foreign Interface board will indicate **not present** on the configuration report.



Figure 1 FDI Cut Out Cover



Figure 2 Connector Standoff

# **GP 23 Intermittent or Noise Problem RAP**

#### Purpose

The purpose of this RAP is to provide guidance for resolving an intermittent or noise problem. This is not an exact procedure, but a set of recommended actions that use the resources of the service manual to help locate the cause of an intermittent or noise problem.

### Procedure

- 1. Check the service log. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may be the cause of the new intermittent problem.
- 2. Noise problems may be due to improper installation. Check for packing materials that have not been removed. Check for loose or missing hardware.
- 3. Run the machine in a mode that vigorously exercises the function that is suspected. The machine may fail more frequently or may fail completely under these conditions. Look for signs of failure or abnormal operation.

An intermittent problem can usually be associated with a RAP, since when it does fail, it results in a fault code, a jam code, or some other observable symptom.

- 4. Using the RAP that is associated with the symptom of the intermittent problem, examine all of the components that are referenced in the RAP. Look for:
  - contamination, such as a feed roller that has a build up of dirt or toner
  - wear, such as gear teeth that are rounded or have excessive backlash
  - HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
  - wires chafing against components of the machine, especially against moving components
  - misaligned, mis-adjusted, or incorrectly installed components
  - slow or slipping clutches; slow or binding solenoids
  - damaged components
  - excessive heat, or symptoms of excessive heat, such as the discoloration of a component
  - loose cables or wires
- 5. Using the RAP that is associated with the symptom of the intermittent problem, perform all of the adjustments for the components or functions that are referenced in the RAP. Check to ensure that the adjustment can be made and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem.
- 6. Operate all of the components in the appropriate RAP that is associated with the symptom of the intermittent problem with Component Control. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
- 7. Check that the AC and DC power are within specification.
- 8. Get technical advice or assistance when it is appropriate. This will depend upon the situation and the established local procedures.
- 9. Examine the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Look for:

- contamination, such as a feed roller that has a build up of dirt or toner
- wear, such as gear teeth that are rounded or have excessive backlash
- HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
- wires chafing against components of the machine, especially against moving components
- misaligned, mis-adjusted, or incorrectly installed components
- slow or slipping clutches; slow or binding solenoids
- damaged components
- excessive heat, or symptoms of excessive heat, such as the discoloration of a component
- loose cables or wires
- 10. Perform the adjustments for the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Check to ensure that the adjustment CAN BE MADE and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem
- 11. Operate all of the components that are not in the RAP, but are associated with the function that is failing with Component Control. Refer to the BSDs. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
- 12. Replace any components or consumables that are known to be a frequent cause of the problem. When doing this, consider the cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.
- 13. Leave an accurate and detailed record of your actions in the service log. Describe what you have observed, what actions you took, and the recommended next steps.

# GP 24 How to turn off the Power Saver Functions

The following procedure is to be used to disable the power saver and/or Low Power Mode per customer request or for testing purposes.

# Procedure

NOTE: Both the Engine and the Network Controller must be disabled.

- 1. To disable the Engine, perform the following:
  - a. Enter NVM Read/Write in the UI diagnostics and change the following locations from 1 (enabled) to 0 (disabled):
     616-002 Low Power Enabled
     616-008 Power Off Enabled
  - b. Exit diagnostics and power off then power on
- 2. To disable the Network Controller, perform the following:
  - a. Log into the webpage as Administrator and uncheck the box shown in the attachment
  - b. Select Apply then log out

# **GP 25 Remote Control Panel**

The Remote Control Panel feature enables users the ability to:

- Remotely view the local UI display graphics
- Operate both hard and soft buttons on the control panel

The Remote Control Panel on the remote user PC mimics the device control panel enabling the remote user to operate the device as though they were standing at the machine.

# Operation

**Feature enablement** – The feature is defaulted off when delivered to the customer. The System Administrator is required to enable the feature to allow usage.

- 1. In the Centreware window, login as admin.
- 2. Select [Support > Remote Control Panel].
- 3. Under Configuration, select [Edit].
- 4. Select [Enable].

**Feature access permissions** – The SA is required to set the permissions of the feature for it to be usable. When Enable is selected, the permission levels are displayed.

- SA only This setting will prevent any user including Service Engineer personal from using the feature.
- SA and Service Engineer This setting allows only the SA or Service Engineer to use the feature by authenticating their respective user credentials.
- All users This opens the feature to all users without the need to authenticate.

**Remote Session** – The Remote Control Panel session is initiated under Access. This feature allows only the Admin and Diagnostics User to interact with the machine's local Control Panel. Before starting the session, the remote user should determine if the session collaborative or blocked.

- **Collaborative** This mode means that both the Remote Control Panel and the Local UI are active. This mode can be used by System administrator, help desk support, IT support, or training when the person at the machine and the remote user need to see how the other is operating the machine.
- Local UI blocking Check the box by Block Local Control Panel (local user can only observe). This blocks the local panel when the remote session is initiated. This protects the machine during remote service procedures. When activated, the local user is notified by a message that the local panel hard and soft keys are not functional at this time.

Only one remote connection at a time is allowed. If a user attempts to initiate a session while another one is active, they will get a message indicating the system is busy and to try again later. This allows a service engineer to view the device remotely without concern that another non-Service Engineer session can also connect.

**NOTE:** If a general user has a remote session active and an SA initiates a session, the SA has a button that will disconnect the general user. This way the SA can take control when desired.

A secure connection is required to create a remote session. If SSL is not set on the machine, a message will appear stating that it must be set. The window for enabling SSL will be displayed and can be set so that the machine is configured to allow the remote session. After the machine reboots, the remote session can start.

**Remote session indication** – When the remote session is initiated, a temporary popup message is displayed on the Local UI alerting any local users that there is a remote user online. A status message is then indicated in the status region and soft login button. The soft login button region is meant to describe the user roles. Authenticated users, including CSEs, are displayed. These remain persistent until the session is closed. A local Service Engineer will know whether the device is being used.

**Remote Session Operation** - When the Remote Control Panel is opened, the remote user will see a mimic of the local UI.

- The soft and hard buttons from the machine control panel are displayed on the Remote Control Panel. The hard buttons are located in slightly different locations, but are labeled and function the same as on the local control panel.
- Operation of all the machine features is the same on the Remote Control Panel as at the local control panel and UI.

**NOTE:** If the browser magnification is set to 75%, then the viewing window will be smaller than the control panel and the touch screen will be truncated. Conversely, if the browser magnification is set to 125%, the viewing window is larger than the remote control panel. The entire control panel is visible but there will be large grey areas around the panel.

**Service Access** - The System Administrator has access to the machine within the customer firewall. The service engineer must be invited inside the firewall.

- The procedure for the customer to invite the service engineer to remotely access the machine is OPCO dependent. Contact your OPCO for instructions on how to engage the customer.
- After the customer has given the service engineer a portal through their firewall, the service engineer can connect to the machine.

Only the service engineer should have the diagnostic User ID and Password. Only the Service Engineer can launch a diagnostics session from the remote UI.

**NOTE:** If the device is in service mode when a remote session is initiated, the session will only connect if logged in as diag in CentreWare. This prevents non-service engineers from connecting into the device while it is being serviced.

- 1. Connect to the printer via CentreWare IS.
- 2. Login to Centerware
  - User ID diag
    - Password 3424
- 3. Select [Support], then select [Remote Control Panel].
- 4. If required, check Block Local Control Panel (user can only observe).
- 5. Select [Open Remote Control Panel].

**NOTE:** Only one Remote Control session at a time is allowed. If a remote session is in progress, a message (Remote Control Panel session is already active.) will appear. If approved by the SA, select Disconnect Current Session to enable access. If the message returns, the machine may need to be rebooted.

6. If the window "The web site's certificate cannot be verified. Do you want to continue." appears, select **[Yes.]**.

If the window "There is a problem with this website's security certificate." appears, select [Continue to this website (not recommended.)]

7. To start diagnostic mode on the machine, Select the Service Diagnostics button on the mimic and login (6789).



Figure 1 Diagnostic Access

**Ending the session** - A session can be terminated in several different ways. If in a diagnostic session, remember to perform Call Closeout on the machine before ending the session.

- Remote user closes the Remote Control Panel window.
- Machine reboots.
- Unplug the internet cable at the machine.
- Customer host that invited the service access closes their browser.
- System Timers The session will be terminated if the system timers time out.

# GP 26 Obtaining a Replacement SIM Card

Use this procedure when a customer requires a replacement SIM Card due to loss or damage of the original SIM Card.

1.

3. 4.

5.

6.

7.

- 2.

# **Product Codes**

#### Table 1 Product Codes

Item	Code
WC 7830/35 Base IOT w/ 3 Tray Module - 120 VAC	MX0
WC 7830/35 Base IOT w/ High Capacity Tandem Tray Module - 120 VAC	MX1
WC 7830/35 Base IOT w/ 3 Tray Module - 120 VAC GSA	MX0N
WC 7830/35 Base IOT w/ 3 Tray Module - 220 VAC	MX2
WC 7830/35 Base IOT w/ High Capacity Tandem Tray Module - 220 VAC	MX3
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF- 120 VAC	MX4
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF - 120 VAC GSA	MX4N
WC 7845/55 Base IOT w/High Capacity Tandem Tray Module, Single Pass DADF - 220 VAC	MX5
WC 7830/35 IOT w/3 Tray module - without SB Controller - 120V	MX0E
WC 7830/35 IOT w/ High Capacity Tandem Tray Module- without SB Controller - 120V	MX1E
WC 7830/35 IOT w/ 3 Tray module - without SB Controller - 220V	MX2
WC 7830/35 IOT w/ High Capacity Tandem Tray module- without SB Controller - 220V	MX3
WC 7845/55 IOT w/ High Capacity Tandem Tray module - without SB Controller - 120V	MX4E
WC 7845/55 IOT w/ High Capacity Tandem Tray module - without SB Controller - 220V	MX5
Finisher, Office LX (SB-Finisher)	XLN
Finisher, Integrated (A-Finisher)	XDE
Finisher, Professional (C-Finisher) w/Booklet Maker	XLP for WH XLR for EH
TTM (Tandem Tray Module)	XLF
3TM (Three Tray Module)	XLE
High Capacity Feeder	GBK

# **Common Tools**

Table 1 Common Tools		
Description	Part Number	
Screw Driver (-) 3 x 50	600T40205	
Screw Driver (+) 6 x 100	600T1989	
Screw Driver (+) NO.1	499T356	
Stubby Driver (+) (-)	600T40210	
Screw Driver (=) 100MM	499T355	
Spanner and Wrench 5.5 x 5.5	600T40501	
Spanner and Wrench 7x 7	600T40502	
Hex Key Set	600T02002	
Box Driver 5.5MM	600T1988	
Side Cutting Nipper	600T40903	
Round Nose Pliers	600T40901	
Digital Multi-meter Set	600T2020	
Interlock Cheater	600T91616	
Silver Scale 150MM	600T41503	
CE Tool Case	600T1901	
Magnetic Screw Pick-up Tool	600T41911	
Scribe Tool	600T41913	
Magnetic pickup	600T41911	
Eye Loop	600T42008	
Flash Light	600T1824	
Brush	600T41901	
Tester Lead Wire (red)	600T 9583	
Tester Lead Wire (black)	600T2030	

# **Product Tools and Test Patterns**

#### Table 1 Tools and Test Patterns

Description	Part Number
Color Test Pattern	82E13120
Geometric Test Pattern	82E8220
DADF Test Pattern	82E2000
DADF Test Pattern (A3)	82P521
Copy Paper Carrying Case	600T1999
Copy Paper Zip Lock Bag	600T2000
Xerox Color Xpressions Plus 24# 11×17 in,	3R5465
Colortech Plus - 90 gsm - A3	3R94642
Service and Machine NVM Log	700P97436
USB Cable	600T02231
PWS power cord adapter	600T2018
Micro Probe Kit	600T02177
Machine Service Log	Adobe PDF file on CD
USB Flash Drive	701P30980
Communication Data Cable	600T02304

# **Cleaning Materials**

#### Table 1 Cleaning Materials

Description	USSG Part Number	XE Part Number
Cleaning fluid (8oz., Formula A)	43P48	8R90034
Film remover (8 oz.)	43P45	8R90176
Lens/mirror cleaner	43P81	8R90178
Lint-free (white) cleaning cloth	19P3025	19P3025
Lint-free Optics cleaning cloth	499T90417	499T90417
Cleaning towels	35P3191	600S4372
Drop cloth	35P1737	35P1737
Cotton Swab	35P2162	35P2162

# **CRUs and Consumables**

#### Table 1 CRUs and Consumables

Name	Part Number	Comments
Black Toner Cartridge	006R01509	metered (worldwide)
	006R01513	US/XCL/XE sold
	006R01517	DMO sold
Cyan Toner Cartridge	006R01512	metered (worldwide)
	006R01516	US/XCL/XE sold
	006R01520	DMO sold
Magenta Toner Cartridge	006R01511	metered (worldwide)
	006R01515	US/XCL/XE sold
	006R01519	DMO sold
Yellow Toner Cartridge	006R01510	metered (worldwide)
	006R01514	US/XCL/XE sold
	006R01518	DMO sold
SMart Kit Drum Cartridge	013R00662	
SMart Kit Waste Toner Container	008R13061	
Transfer Belt Cleaner	001R00613	
2nd BTR	008R13064	
Staple Refills - Convenience Stapler	008R12941	3 refills/carton
Staple Refills - Integrated Office Finisher	008R12941	3 refills/carton
Staple Refills - Office Finisher LX	008R12941	3 refills/carton
Staple Refills - Professional Finisher	008R12941	3 refills/carton
Staple Cartridge - Convenience Stapler	008R12964	1 cartridge
Staple Cartridge - Office Finisher LX	008R12964	1 cartridge
Staple Cartridge - Office Finisher LX Booklet Maker	008R12897	8 cartridges/carton
Staple Cartridge - Professional Finisher	008R12964	1 cartridge
Staple Cartridge - Professional Finisher Booklet Maker	008R12925	4 cartridges/carton

# **Glossary of Terms**

#### Table 1 Glossary

Term	Description
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
AC	Alternating Current is type of current available at power source for machine.
ACT	Advanced Customer Training: teaches customers to perform some of service that is normally performed by Xerox Service Representative.
A/D	Analog to Digital refers to conversion of signal
ADC	Automatic Density Control
ADJ	Adjustment Procedure
AGC	Automatic Gain Control
A/P	Advanced/Professional (Finishers)
ATC	Automatic Toner Concentration
Bit	Binary digit, either 1 or 0, representing an electrical state.
BSD	Block Schematic Diagram
BTR	Bias Transfer Roll
BUR	Back up Roll
CCD	Charge Coupled Device (Photoelectric Converter)
CCM	Color Control Module
CD	1:Circuit Diagram; 2: Compact Disc
Chip	Integrated Circuit (IC)
CRU	Customer Replaceable Unit
CRUM	Customer Replaceable Unit Memory
CYMK	Toner colors for machine; Y=yellow, C=cyan, M=magenta, and K=black
DADF	Duplexing Automatic Document Feeder
DC	Direct Current is type of power for machine components. Machine converts AC power from power source to DC power.
DMM	Digital Multimeter is generic name for meter that measures voltage, current, or elec- trical resistance.
Duplex	2-sided printing or copying
EA	Emulsion Aggregation (toner)
EME	Electromagnetic Emissions are emitted from machine during normal operation and power of these emissions are reduced by machine design features.
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostatic potential.
ESG	European Solutions Group - also referred to as XE (Xerox Europe)
FE	Field Engineer
FS	Fast Scan (direction) - Inboard-to Outboard
GND	Ground
HCF	High Capacity Feeder
חחח	

Term	Description
HFSI	High Frequency Service Item
HGEA	High Grade Emulsion Aggregation (toner)
HVPS	High Voltage Power Supply
Hz	Hertz (Cycles per second)
IBT	Intermediate Belt Transfer
I/F	Interface
IIO	Intermediate Image Overwrite
IIT	Image Input Terminal - the Scanner/CCD portion of the machine
ΙΟΤ	Image Output Terminal - the ROS/Xero/paper handling/ fusing portion of the machine
IPS	Image Processing Subsystem
IQ	Image Quality
JBA	Job-based Accounting
KC	1000 copies
LCD	Liquid Crystal Display
LE	Lead Edge of copy or print paper, with reference to definition of term TE
LED	Light Emitting Diode
LEF	Long Edge Feed
LPH	SLED Print Head
LTR	Letter size paper (8.5 x 11 inches)
LUT	Look Up Table - array of NVM locations that store process control data
LVPS	Low Voltage Power Supply
MCU	Machine Control Unit
MF	Multi-Function
MN	Multinational
MOB	Marks On Belt
MRD	Machine Resident Disk
MSI	Multi Sheet Insert
NIC	Network Interface Card
NVM	Non Volatile Memory
OCT	Offset Catch Tray
OEM	Original equipment manufacturer
OGM	On-going Maintenance
PC	Personal Computer
PL	Parts List
P/O	Part of (Assembly Name)
PWB	Printed Wiring Board
PWS	Portable Workstation for Service
PJ	Plug Jack (electrical connections)
DAM	Pondom Access Momony

Term	Description
RAP	Repair Analysis Procedure for diagnosis of machine status codes and abnormal con- ditions
R/E	Reduction/Enlargement refers to features selection or components that enable reduction or enlargement
Regi- Con	Registration Control
REP	Repair Procedure for disassembly and reassembly of component on machine
RIS	Raster Input Scanner
ROM	Read Only Memory
SAD	Solid Area Density
SBC	Single Board Controller
SCP	Service Call Procedure
SEF	Short Edge Feed
Self- test	An automatic process that is used to check Control Logic circuitry. Any fault that is detected during self-test is displayed by fault code or by LEDs on PWB.
SIMM	Single Inline Memory Module used to increase printing capacity
Simplex	Single sided copies
SLED	Light-Emitting Diode print head
SOK	System Operation Key, Software Option Key
FS	Fast Scan (direction) - LE - to - TE
TE	Trail Edge of copy or print paper, with reference to definition of term LE
TRC	Tone Reproduction Curve
UM	Unscheduled Maintenance
UI	User Interface
USB	Universal Serial Bus
W/	With - indicates machine condition where specified condition is present
W/O	Without - indicates machine condition where specified condition is not present
XBRA	Xerox Brazil
XE	Xerox Europe - also referred to as ESG (European Solutions Group)
XLA	Xerox Latin America
YCMK	Toner colors for machine; Y=yellow, C=cyan, M=magenta, and K=black
XMEX	Xerox Mexico

# **Change Tags**

# **Change Tag Introduction**

Important modifications to the copier are identified by a tag number which is recorded on a tag matrix:

- The tag matrix for the IOT is molded into the inside of the Front Door.
- The tag matrix for the Finisher is a label affixed to the inside of the Finisher Front Door

This section describes all of the tags associated with the machine, as well as multinational applicability, classification codes, and permanent or temporary modification information.

# **Classification Codes**

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures.

A tag number may also be required to identify the presence of optional hardware, special nonvolatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made. The classification codes and their descriptions are listed in Table 1.

Classification Code	Description		
М	Mandatory tag.		
Ν	Tag not installed in the field.		
0	Optional tag.		
R	Repair tag.		

#### Table 1 Classification Codes

 TAG:
 P-001

 CLASS:
 R

 NAME:
 Duplex Assembly Clutch

 PURPOSE:
 Replace one-way clutch with gear for cost improvement

 KIT NUMBER:
 604K63890

 PARTS LIST ON:
 PL 14.6

# TAG: P-002

CLASS: R NAME: UI USB Cable

**PURPOSE:** Replace mounting bracket and two-piece UI-to-MCU USB cable with new bracket and single piece-cable.

PARTS LIST ON: PL 1.2

# 7 Wiring Data

### 7.1 Plug/Jack Location List

Plug/Jack Location	7-3
IOT Plug/Jack Illustrations	7-14
HCF Plug/Jack Illustrations	7-32
Professional Finisher Plug/Jack Illustrations	7-33
Integrated Office Finisher Plug/Jack Illustrations	7-40
Office Finisher LX Plug/Jack Illustrations	7-41

# 7.2 Wire Network

AC Wirenets	7-49
1.8 VDC Wirenets	7-51
1.8 VRTN Wirenet	7-52
+2.5 VDC Wirenet	7-53
2.5VDC RTN	7-54
+3.3 VDC-1 Wirenet	7-55
+ 3.3 VDC-2 Wirenet	7-56
3.3 VDC RTN-1 Wirenet	7-57
3.3 VDC RTN-2 Wirenet	7-58
+5VDC-1 Wirenet	7-59
+5VDC-2 Wirenet	7-60
+5VDC-3 Wirenet	7-61
+5VDC-4 Wirenet	7-62
+5VDC-5 Wirenet	7-63
+5VDC-6 Wirenet	7-64
5VRTN-1 Wirenet	7-65
5VDC RTN-2 Wirenet	7-66
5VDC RTN-3 Wirenet	7-67
5VDC RTN-4 Wirenet	7-68
5VDC RTN-5 Wirenet	7-69
5VDC RTN-6 Wirenet	7-70
+24VDC-1 Wirenet	7-71
+24VDC-2 Wirenet	7-72
+24VDC-3 Wirenet	7-73
+24VDC-4 Wirenet	7-74
24VDC RTN-1 Wirenet	7-75
24VDC RTN-2 Wirenet	7-76
24VDC RTN-3 Wirenet	7-77
IIT +3.3/+24VDC/ANA Wirenet	7-78
IIT_3.3/24/ANA VRTN Wirenet	7-79
IIT +5 VDC Wirenet	7-80
IIT +5 VDC RTN Wirenet	7-81
DADF +5VDC Wirenet (DADF-110)	7-82
DADF 5VRTN Wirenet (DADF-110)	7-83
DADF +5VDC Wirenet (DADF-130 / 1 Pass)	7-84
DADF 5VRTN Wirenet (DADF-130)	7-85
DADF +24VDC Wirenet (DADF-110)	7-86
DADF +24VDC Wirenet (DADF-130)	7-87

DADF +24VRTN Wirenet	7-88
HCF +24VDC Wirenet	7-89
HCF +5VDC Wirenet	7-90
HCF DC COM Wirenet	7-91
Finisher (Int) +24VDC/24VDC RTN	7-92
Finisher (Int) +5VDC Wirenet	7-93
Finisher (Int) DC COM Wirenet	7-94
Office Finisher LX Wirenets	7-95
A/P Finisher Wirenets	7-98

# Block Schematic Diagrams (BSDs)

WorkCentre 7830/7835/7845/7855 BSDs	7-109
Chain 1 BSDs	7-112
Chain 2 BSDs	7-127
Chain 3 BSDs	7-132
Chain 4 BSDs	7-143
Chain 5 BSDs	7-145
Chain 6 BSDs	7-161
Chain 7 BSDs	7-171
Chain 8 BSDs	7-185
Chain 9 BSDs	7-196
Chain 10 BSDs	7-226
Chain 12 BSDs	7-236
Chain 34 BSDs	7-294

# **Plug/Jack Location**

# How to Use the Plug/Jack Location List

- To find which position to install specific connectors to, refer to the table IOT Plug/Jack Location List for Figure No. and Item No.
- P/J No. on IOT Plug/Jack Location List is expressed in the four ways below:
  - J250 represents Jack 250.
  - P250 represents Plug 250.
  - CN1 represents Connector 1.
  - FS1 represents Faston Terminal 1.

Example:



Figure 1 Plug/Jack

Table 1 IOT Plug/Jack List				
P/J No.	Figure No.	Item No.	Remarks (where to connect)	
P/J1	21	6	Main Low Voltage Power Supply	
P/J1	23	4	LED Lamp PWB	
P/J1	25	7	UI I/F PWB	
P/J1	29	18	CIS (7845/55)	
J1	11	18	SBC PWB	
P1	10	30	Motor Driver Main PWB	
J1	14	1	MCU-PF PWB	
J1	36	2	Fax Option	
P/J2	29	17	CIS (7845/55)	
J2	36	3	Fax Option	
P/J3	25	1	UI I/F PWB	
P/J4	25	2	UI I/F PWB	
J4	11	8	SBC PWB	
P/J5	21	8	Main Low Voltage Power Supply	
P/J5	25	4	UI I/F PWB	
J5	11	4	SBC PWB	
P/J6	21	7	Main Low Voltage Power Supply	
J6	11	16	SBC PWB	
P/J7	25	3	UI I/F PWB	
J7	11	3	SBC PWB	
P/J8	22	4	Sub Low Voltage Power Supply (7845/55)	
J8	36	1	Fax Option	
P10	10	9	Motor Driver Main PWB	
J10	19	7	GFI (Blk)	
J10	11	20	SBC PWB	
J11	19	8	GFI (Wht)	
J11	11	19	SBC PWB	
P/J12	2	6	Main Power Switch (Blk)	
J12	11	15	SBC PWB (FDI Option)	
P/J13	2	3	Main Power Switch (Blk)	
P/J14	2	5	Main Power Switch (Wht)	
P14	10	26	Motor Driver Main PWB	
P/J15	2	4	Main Power Switch (Wht)	
P/J15	25	5	UI 10-key PWB	
J15	11	10	SBC PWB	
J16	11	6	SBC PWB	
P/J17	15	2	CIS PWB	
J21	11	1	SBC PWB	

Table	1	ΙΟΤ	<b>Plug/Jack List</b>	
-------	---	-----	-----------------------	--

	Figure		
P/J No.	No.	Item No.	Remarks (where to connect)
J22	11	14	SBC PWB
J23	11	9	SBC PWB
J25	11	12	SBC PWB
P/J30	22	7	IH Driver PWB
J32	11	17	SBC PWB
J35	11	13	SBC PWB
J37	11	11	SBC PWB
J39	11	7	SBC PWB
J60	22	6	IH Driver PWB
J61	22	5	IH Driver PWB
P85	19	6	Finisher Outlet (Blk)
P86	19	5	Finisher Outlet (Wht)
P87	19	10	Finisher Outlet
P90	19	9	GFI
J90	19	12	Connector
J91	19	13	Connector
J93	19	14	Connector
P/J100	16	6	L/H Cover Interlock Switch
P/J101	2	1	Front Cover Interlock Switch
P/J101	30	7	3T Module Tray 2 Paper Size Sensor
P/J101	35	1	TT Module-Tray 2 Paper Size Sensor
P/J102	16	7	L/H Cover Interlock Switch
P/J102	30	6	3T Module Tray 3 Paper Size Sensor
P/J102	35	3	TT Module-Tray 3 Paper Size Sensor
P/J103	30	5	3T Module Tray 4 Paper Size Sensor
P/J103	35	2	TT Module-Tray 4 Paper Size Sensor
P/J104	30	8	3T Module - TM L/H Cover Interlock Switch
P/J104	33	3	TT Module - TM L/H Cover Interlock Switch
P/J106	30	3	3T Module - Tray2 No Paper Sensor
P/J106	34	3	TT Module - Tray2 No Paper Sensor
P/J107	30	2	3T Module - Tray 2 Nudger Level Sensor
P/J107	34	2	TT Module - Tray 2 Nudger Level Sensor
P/J108	30	4	3T Module - Feed Out Sensor 2
P/J108	33	2	TT Module - Feed Out Sensor 2
P/J109	34	4	TT Module - Tray 3 Pre Feed Sensor
P/J110	21	17	Waste Toner Bottle Full Sensor
P/J110	30	3	3T Module - Tray 3 No Paper Sensor
P/J110	34	3	TT Module-Tray 3 No Paper Sensor
P/J111	21	16	Waste Toner Bottle Position Sensor
P/J111	30	2	3T Module - Tray 3 Nudger Level Sensor

Initial Issue

P/J No.	Figure No.	Item No.	Remarks (where to connect)	P/J No.
P/J111	34	2	TT Module -Tray 3 Nudger Level Sensor	P/J175
P/J112	1	10	Drum CRUM Coupler Assembly (Y)	P/J176
P/J112	30	10	3T Module Tray 3 Feed Out Sensor	P/J177
P/J112	33	1	TT Module-Tray 3 Feed Out Sensor	P/J178
P/J113	1	8	Drum CRUM Coupler Assembly (M)	P/J179
P/J113	34	8	TT Module - Tray 4 Pre Feed Sensor	P/J180
P/J114	1	6	Drum CRUM Coupler Assembly (C)	P/J183
P/J114	30	3	3T Module - Tray 4 No Paper Sensor	P/J192
P/J114	34	7	TT Module -Tray 4 No Paper Sensor	P/J193
P/J115	1	4	Drum CRUM Coupler Assembly (K)	P/J194
P/J115	30	2	3T Module - Tray 4 Nudger Level Sensor	P/J195
P/J115	34	6	TT Module -Tray 4 Nudger Level Sensor	P/J197
P/J116	30	9	3T Module - Tray 4 Feed Out Sensor	P/J198
P/J116	34	9	TT Module - Tray 4 Feed Out Sensor	P/J210
P/J120	3	4	Toner Cartridge CRUM PWB (Y)	P/J211
P/J121	3	3	Toner Cartridge CRUM PWB (M)	P/J212
P/J122	3	2	Toner Cartridge CRUM PWB (C)	P/J213
P/J123	3	1	Toner Cartridge CRUM PWB (K)	P/J215
P/J124	1	11	ATC PWB - ATC Sensor (Y)	P/J217
P/J125	1	14	ATC PWB - ATC Sensor (M)	
P/J126	1	15	ATC PWB - ATC Sensor (C)	P/J220
P/J127	1	16	ATC PWB - ATC Sensor (K)	P/J221
P/J130	21	11	NOHAD STS	P/J221
P/J144	16	3	1st BTR Contact/Retract Sensor	P/J221
P/J150	4	2	TMA Sensor IN	P/J222
P/J151	4	6	TMA Sensor OUT	P/J222
P/J153	4	5	TMA Sensor	P/J222
P/J154	4	4	Temp and Humidity Sensor	P/J223
P/J160	8	3	Registration Sensor	P/J223
P/J162	6	9	Exit 1 OCT Home Position Sensor	P/J223
P/J163	6	12	Exit 1 Full Stack Sensor (option)	P/J224
P/J164	6	4	Exit 2 Sensor	P/J224
P/J165	6	3	Exit 2 OCT Home Position Sensor	P/J224
P/J168	6	5	L/H Upper Cover Interlock Switch	P/J225
P/J169	6	6	Face Up Tray Detect Switch	P/J226
P/J170	7	1	DC Heater	P/J226
P/J171	8	6	Tray 1 Pre Feed Sensor (7845/55)	P/J226
P/J172	9	5	MSI No Paper Sensor	P/J227
P/J173	9	3	MSI Paper size Sensor	P/J228
P/J174	20	8	Tray 1 Paper Size Sensor	P/J230

### Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J175	7	3	Duplex Path Sensor
P/J176	7	8	Duplex Cover Switch
P/J177	8	9	Tray 1 Nudger Level Sensor
P/J178	8	8	Trav1 No Paper Sensor
P/J179	9	4	MSI Feed Out Sensor
P/J180	7	2	POB Sensor
P/J183	9	6	MSI Nudger Position Sensor
P/J192	5	4	Fuser Exit Sensor
P/J193	5	1	P/R Latch Sensor
P/J194	5	9	Fuser Belt Rotation Sensor
P/J195	5	8	Center STS / Rear STS (4 pin)
P/J197	5	6	Thermostat
P/J198	5	5	Thermostat
P/J210	1	9	Erase Lamp (Y)
P/J211	1	7	Erase Lamp (M)
P/J212	1	5	Erase Lamp (C)
P/J213	1	3	Erase Lamp (K)
P/J215	21	15	Agitator Motor
P/J217	7	12	L/H Fan 2 (option)
P/J218	7	13	L/H Fan 3 (option)
P/J220	19	1	Toner Dispense Motor (Y)
P/J221	19	4	Toner Dispense Motor (M)
P/J221	30	1	3T Module - Tray 2 Feed/Lift Up Motor
P/J221	34	1	TT Module -Tray 2 Feed/Lift Up Motor
P/J222	19	2	Toner Dispense Motor (C)
P/J222	30	1	3T Module - Tray 3 Feed/Lift Up Motor
P/J222	34	1	TT Module -Tray 3 Feed/Lift Up Motor
P/J223	19	3	Toner Dispense Motor (K)
P/J223	30	1	3T Module - Tray 4 Feed/Lift Up Motor
P/J223	34	5	TT Module -Tray 4 Feed/Lift Up Motor
P/J224	31	11	3T Module - TM Take Away Motor 1
P/J224	32	14	TT Module - TM Take Away Motor 1 (7845/55)
P/J224	32	15	TT Module - TM Take Away Motor 1 (7830/35)
P/J225	22	11	IH Exhaust Fan
P/J226	31	10	3T Module - TM Take Away Motor 2 (7845/55)
P/J226	22	9	IH Intake Fan
P/J226	32	13	TT Module - TM Take Away Motor 2 (7845/55)
P/J227	22	10	C Exhaust Fan
P/J228	1	12	Process 1 Fan
P/J230	16	5	Fuser Fan

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/.1231	16	11	Suction Fan
P/J233	17	1	SBC Fan
P/J234	19	11	Rear Bottom Fan
P/J235	21	14	Making Fan (7845/55), HV Fan (7830/35)
P/J238	1	17	Process 2 Fan (4 pin) (Option)
P/J239	21	9	Front LVPS Fan
P/J240	16	15	Drum/Deve Drive Motor (2 pin) (K)
P/J241	16	16	Drum/Deve Drive Motor (8 pin) (K)
P/J242	16	10	Fuser Drive Motor (2 pin)
P/J243	16	9	Fuser Drive Motor (8 pin)
P/J244	16	12	Main Drive Motor (2 pin) (7830/35)
P/J244	18	1	Main Drive Motor (2 pin) (7845/55)
P/J245	16	13	Main Drive Motor (8 pin) (7830/35)
P/J245	18	2	Main Drive Motor (8 pin) (7845/55)
P/J246	16	17	Drum/Deve Drive Motor (Y,M,C) (2 pin) (7830/35)
P/J246	18	7	Drum Drive Motor (Y,M,C) (2 pin) (7845/55)
P/J247	16	18	Drum/Deve Drive Motor (Y,M,C) (8 pin) (7830/35)
P/J247	18	6	Drum Drive Motor (Y,M,C) (8 pin) (7845/55)
P/J248	16	19	IBT Drive Motor (2 pin)
P/J249	16	20	
P/J250	16	2	1st BTR Contact/Retract Clutch
P/J251	18	5	Deve Drive Motor (2 pin) (7845/55)
P/J252	18	4	Deve Drive Motor (8 pin) (7845/55)
P/J253	18	3	Takeaway Motor (7845/55)
P/J254	16	8	P/R Latch Motor
P/J260	8	2	Registration Clutch
P/J261	16	14	Takeaway Clutch (7830/35)
P/J262	6	2	Exit gate solenoid
P/J263	6	8	Face Up Gate Solenoid
P/J265	6	7	Exit 2 Drive Motor
P/J266	6	1	Exit 2 OCT Motor
P/J268	8	4	Tray 1 Feed/Lift UP Motor
P/J269	9	2	MSI Feed/Nudger Motor
P/J271	6	11	Exit 1 OCT Motor
P/J272	1	1	IBT Front Cover Switch
P/J275	7	5	Duplex Motor
J300	17	5	Connector
J300	11	21	SBC PWB
P/J301	29	19	CIS (7845/55)
P/J302	29	20	CIS (7845/55)

### Table 1 IOT Plug/Jack List

P/ I No	Figure	Item No	Remarks (where to connect)
1200	14	0	
1309	11	2	SBC PWB
J309	12	2	
P/J313	17	4	
J335	11	5	
P335	12	9	Backplane (rear)
P336	12	1	Backplane (rear)
P2/J350	24	13	Connector
P/J390	12	3	Backplane (rear)
P/J411	10	1	Motor Driver Main PWB
P/J412	10	13	Motor Driver Main PWB
P/J414	10	11	Motor Driver Main PWB
P/J415	10	3	Motor Driver Main PWB
P/J416	10	2	Motor Driver Main PWB
P/J417	10	10	Motor Driver Main PWB
P/J431	10	4	Motor Driver Main PWB
P/J450	7	9	LH Fan PWB (option)
P451	10	31	Motor Driver Main PWB
J451	12	8	Backplane (rear)
P452	10	25	Motor Drive Main PWB
J452	13	3	Motor Drive Sub PWB
P/J453	7	11	LH Fan PWB (LH Fan 1) (option)
P/J454	7	10	LH Fan PWB (option)
P/J460	21	12	HVPS (DEVE/BCR) (7830/35)
P/J461	16	1	HVPS (1st/2nd/BTR)
P/J501	21	4	Main LVPS
P/J502	21	3	Main LVPS
P/J503	21	5	Main LVPS
P/J504	22	3	Sub LVPS (7845/55)
P/J505	22	1	Sub LVPS (7845/55)
P/J506	22	2	Sub LVPS (7845/55)
P/J510	21	1	Main LVPS
P/J513	21	10	HVPS (BCR) (7845/55)
P/J514	21	13	HVPS (DEVE) (7845/55)
P/J520	10	24	Motor Driver Main PWB
P/J521	10	22	Motor Driver Main PWB
P/J522	13	1	Motor Driver Sub PWB
P/J523	10	27	Motor Driver Main PWB
P/J524	13	2	Motor Driver Sub PWB
P/J525	10	- 29	Motor Driver Main PWB
P/J526	10	19	Motor Driver Main PWB

Initial Issue

P/J No.	Figure No.	Item No.	Remarks (where to connect)	P/
P/J527	10	17	Motor Driver Main PWB	P
P/J528	10	14	Motor Driver Main PWB	P
P/J529	13	8	Motor Driver Sub PWB	P
P/J530	22	8	IH Driver PWB	P
P/J532	10	20	Motor Driver Main PWB	P
P/J534	10	21	Motor Driver Main PWB	P
P/J535	10	12	Motor Driver Main PWB	P
P/J536	10	23	Motor Driver Main PWB	P
P/J537	10	15	Motor Driver Main PWB (7845/55)	P
P/J538	13	7	Motor Driver Sub PWB (7845/55)	P
P/J539	13	9	Motor Driver Sub PWB	P
P/J540	10	28	Motor Driver Main PWB	P
P/J541	31	2	3T Module - Tray Module PWB	P
P/J541	32	2	TT Module - Tray Module PWB	P
P/J542	31	1	3T Module - Tray Module PWB	P
P/J542	32	1	TT Module - Tray Module PWB	P
P/J545	31	6	3T Module - Tray Module PWB	P
P/J545	32	6	TT Module - Tray Module PWB	P
P/J548	31	9	3T Module - Tray Module PWB	P
P/J548	32	9	TT Module - Tray Module PWB	P
P/J549	31	8	3T Module - Tray Module PWB	P
P/J549	32	8	TT Module - Tray Module PWB	P
P/J550	20	7	LPH Rear PWB (K)	P
P/J550	31	3	3T Module - Tray Module PWB	P
P/J550	32	3	TT Module - Tray Module PWB	P
P/J551	20	7	LPH Rear PWB (C)	P
P/J551	31	4	3T Module - Tray Module PWB	J
P/J551	32	4	TT Module - Tray Module PWB	J
P/J552	20	7	LPH Rear PWB (M)	P
P/J552	31	5	TT Module -Tray Module PWB (7845/55)	P
P/J552	32	5	3T Module - Tray Module PWB (7845/55)	D
P/J553	20	7	LPH Rear PWB (Y)	D
P/J553	31	7	3T Module -Tray Module PWB	P
P/J553	32	7	TT Module -Tray Module PWB	P
P/J554	10	5	Motor Driver Main PWB	P
P/J555	10	6	Motor Driver Main PWB	P
P/J556	10	7	Motor Driver Main PWB	P
P/J557	10	8	Motor Driver Main PWB	P
P/J558	20	6	LPH Rear PWB (K)	P
P/J559	20	6	LPH Rear PWB (C)	P

Table '	1	ΙΟΤ	Plug/J	Jack	List
---------	---	-----	--------	------	------

	Figure		
P/J No.	No.	Item No.	Remarks (where to connect)
P/J560	20	6	LPH Rear PWB (M)
P/J561	20	6	LPH Rear PWB (Y)
P/J562	20	5	LPH H PWB (K)
P/J563	20	5	LPH H PWB (C)
P/J564	20	5	LPH H PWB (M)
P/J565	20	5	LPH H PWB (Y)
P/J566	20	4	LPH H PWB (K)
P/J567	20	4	LPH H PWB (C)
P/J567	5	7	Fuser Resistance Detector
P/J568	20	4	LPH H PWB (M)
P/J569	20	4	LPH H PWB (Y)
P/J570	20	3	LPH (K)
P/J571	20	3	LPH (C)
P/J572	20	3	LPH (M)
P/J573	20	3	LPH (Y)
P/J574	20	2	LPH (K)
P/J575	20	2	LPH (C)
P/J576	20	2	LPH (M)
P/J577	20	2	LPH (Y)
P/J578	20	1	LPH Rear PWB / LPH H PWB (K)
P/J579	20	1	LPH Rear PWB / LPH H PWB (C)
P/J580	20	1	LPH Rear PWB / LPH H PWB (M)
P/J581	20	1	LPH Rear PWB / LPH H PWB (Y)
P590	13	6	Motor Driver Sub PWB
P591	13	5	Motor Driver Sub PWB
P592	13	4	Motor Driver Sub PWB
J592	31	13	Connector (3TM)
J592	32	10	Connector (TTM)
P/J593	10	18	Motor Driver Main PWB (option)
P/J594	10	16	Motor Driver Main PWB (option)
DP600	5	2	Fuser
DJ600	5	3	Connector
P/J610	1	2	Connector (30 pin)
P/J610	4	1	Connector
P/J611	8	5	Connector
P/J612	7	6	Connector (24 pin)
P/J615	2	2	Power Switch
P/J616	9	1	Link Connector (18 pin) (MSI Unit)
P/J617	9	7	Connector
P/J618	8	7	Connector (7845/55)

Table 1 IOT Plug/Jack List

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J619	3	5	Cartridge Fan
P/J624	7	4	Connector
P/J631	16	4	Connector
P/J632	8	1	Connector (8 pin)
P/J633	1	13	ATC PWB
P/J635	7	7	Connector (5 Pin)
P/J640	6	10	Connector
P/J661	30	19	3T Module - Connector (4 pin)
P/J661	33	8	TT Module - Connector (4 pin)
P/J662	30	16	3T Module - Connector (4 pin)
P/J662	33	6	TT Module - Connector (4 pin)
P/J663	30	13	3T Module - Connector (4 pin)
P/J663	34	11	TT Module - Connector (4 pin)
P/J668	30	11	3T Module - Connector (2 pin)
P/J668	33	4	TT Module - Connector (2 pin)
P/J669	30	18	3T Module - Connector (9 pin)
P/J669	33	9	TT Module - Connector (9 pin)
P/J671	30	15	3T Module - Connector (9 pin)
P/J671	33	5	TT Module - Connector (9 pin)
P/J672	30	17	3T Module - Connector (3 pin)
P/J672	33	7	TT Module - Connector (3 pin)
P/J673	30	12	3T Module - Connector (9 pin)
P/J673	34	10	TT Module - Connector (9 pin)
P/J674	30	14	3T Module - Connector (3 pin)
P/J675	32	11	TT Module - Connector (4 pin)
P/J676	32	12	TT Module - Connector (12 pin)
P/J700	23	3	Connector
P/J700	23	6	CCD
P/J710	24	5	IIT Trans PWB
P/J720	24	6	IIT Trans PWB
P/J722	24	7	IIT Trans PWB
P/723	24	4	IIT Trans PWB
J740	28	25	Connector (7845/55)
P/J740	15	1	CIS PWB
P/J745	29	4	DCDC PWB (7845/55)
P/J746	29	6	DCDC PWB (7845/55)
P750	26	17	Connector (7830/35)
J750	24	3	IIT Trans PWB
P750	28	24	Connector (7845/55)
P/J751	27	12	Connector (7830/35)

Table 1	IOT	Plug/Jack	List
---------	-----	-----------	------

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J751	29	15	Connector (7845/55)
P/J752	27	11	Connector (7830/35)
P/J752	29	14	Connector (7845/55)
P/J753	27	10	Connector (7830/35)
P/J753	29	13	Connector (7845/55)
P/J754	27	4	Connector (7830/35)
P/J754	29	11	Connector (7845/55)
P/J755	27	9	Connector (7830/35)
P/J755	29	12	Connector (7845/55)
P/J756	27	3	Connector (7830/35)
P/J756	29	10	Connector (7845/55)
P/J757	27	1	Connector (7830/35)
P/J757	29	9	Connector (7845/55)
P/J758	27	2	Connector (7830/35)
P/J758	29	8	Connector (7845/55)
P/J759	27	14	Connector (7830/35)
P759	29	7	Connector (7845/55)
P/J760	27	13	Connector (7830/35)
P760	29	16	Connector (7845/55)
P/J761	26	19	Doc. Tray Size Sensor 2 (7830/35)
P/J762	26	3	Doc. Tray Set Guide Sensor 3 (7830/35)
P/J762	28	2	Doc. Tray Size Sensor 1 (7845/55)
P/J763	26	2	Doc. Tray Set Guide Sensor 2 (Blu conn.) (7830/ 35)
P/J763	28	1	Doc. Tray Size Sensor 2 (7845/55)
P/J764	26	1	Doc. Tray Size Sensor 2 (7830/35)
P/J764	28	3	Doc. Tray Set Guide Sensor 3 (7845/55)
P/J765	26	18	Doc. Tray Set Guide Sensor 1 (7830/35)
P/J765	28	4	Doc. Tray Set Guide Sensor 2 (7845/55)
P/J766	26	11	Connector (9 pin) (7830/35)
P/J766	28	23	Doc. Tray Set Guide Sensor 1 (7845/55)
P/J767	26	4	DADF APS Sensor 3 (7830/35)
P/J767	28	14	Connector (10 pin) (7845/55
P/J768	26	5	DADF APS Sensor 2 (7830/35)
P/J768	28	6	DADF APS Sensor 3 (7845/55)
P/J769	26	6	DADF APS Sensor 1 (7830/35)
P/J769	28	5	DADF APS Sensor 2 (7845/55)
P/J770	26	10	Connector (10 pin) (7830/35)
P/J770	28	7	DADF APS Sensor 1 (7845/55)
P/J771	23	8	APS Sensor 1

Initial Issue

P/J No.	Figure No.	Item No.	Remarks (where to connect)
P/J771	27	5	DADF Document Set Sensor (7830/35)
P/J771	28	13	Connector (9 pin) (7845/55)
J772	23	7	Connector
P/J772	27	6	DADF Feed Out Sensor (7830/35)
P/J772	28	10	DADF Reg. Sensor (7845/55)
P/J773	23	2	IIT Reg.Sensor
P/J773	26	7	DADF Invert Sensor (7830/35)
P/J773	28	8	DADF Out Sensor (7845/55)
P/J774	23	1	Platen Angle Sensor
P/J774	26	9	DADF Pre Reg. Sensor (7830/35)
P/J774	28	12	DADF Pre Reg. Sensor (7845/55)
P/J775	23	9	Platen Interlock Switch
P/J775	26	8	DADF Reg. Sensor (7830/35)
P/J775	28	17	DADF Document Set Sensor (7845/55)
P/J776	23	5	Carriage Motor
P/J776	27	8	DADF Feed Motor (7830/35)
P/J777	27	7	DADF Reg. Motor (7830/35)
P/J777	28	16	Connector (3 pin) (7845/55)
P/J778	26	15	Exit Nip Release Solenoid (7830/35)
P/J778	28	22	DADF Exit Sensor (7845/55)
P/J779	26	14	Document Set Gate Solenoid (Blu conn.) (DADF- 10)
P/J779	28	15	Connector (6 pin) (7845/55)
P/J780	26	16	Stamp Solenoid (7830/35) (option)
P/J780	28	9	DADF Feed Out Sensor (7845/55)
P/J781	28	11	DADF Feed In Sensor (7845/55)
P/J782	29	2	DADF Reg. Motor (7845/55)
P/J783	29	3	DADF Feed Motor (7845/55)
P/J784	29	1	DADF Pre Reg. MOTOR (7845/55)
P/J786	28	19	Connector (7845/55)
P/J790	28	21	Stamp Solenoid (7845/55) (option)
P/J791	26	20	DADF Document Set LED (7830/35)
P/J791	28	26	DADF Document Set LED (7845/55)
DP800	17	2	Connector (option)
P904	31	12	3T Module - Connector
P/J1301	12	4	BP PWB
P/J1311	12	6	BP PWB
P/J1312	12	7	BP PWB
P/J1313	12	5	BP PWB
P/J1343	17	3	Backplane (rear)

Table 1 IOT Plug/Jack List				
P/J No.	Figure No.	Item No.	Remarks (where to connect)	
P1395	12	10	BP PWB	
P/J7191	30	2	IIT Trans PWB	
P/J7192	30	1	IIT Trans PWB	
P/J7461	29	5	DCDC PWB (7845/55)	
CN101	21	2	LVPS Fan	
F1	26	13	DADF Interlock Switch (7830/35)	
F1	28	20	DADF Interlock Switch (7845/55)	
F2	26	12	DADF Interlock Switch (7830/35)	
F2	28	18	DADF Interlock Switch (7845/55)	
LCD CN1	25	6	UI LCD Module	
SJ1	23	10	Shunting Jack	
USB P2	25	8	USB Connector	

# HCF Plug/Jack Location List

P/J No.	Figure No.	ltem	Remarks (where to connect)
J678	1	10	AP/DC-II 7000G, 700DCP (FX)
J800	1	11	AP/DC-III C4100G, AP/DC-IV C5570G (FX)
PF/JF01	2	4	
PF/JF02	2	5	
PF/JF03	2	6	
PF/JF04	2	7	
PF/JF05	2	8	
PF/JF06	2	9	
PF/JF08	2	3	
PF/JF51	2	2	
PF/FJ52	2	1	
PF/JF53	2	10	
PF/JF54	1	2	
PF/JF56	1	9	
PF/JF56A	1	9	
PF/JF56B	1	9	
PF/JF57	2	11	
PF/JF58	1	1	
PF/JF60	1	7	
PF/JF61	1	5	
PF/JF62	1	6	
PF/JF67	1	4	
FS001	1	3	
FS002	1	3	
FS003	1	8	
FS004	1	8	

#### Table 2 HCF Plug/Jack List

# Professional Finisher Plug/Jack Location List

Table 3 Professional Finishe	r Plug/Jack Location List
------------------------------	---------------------------

Connector	Figure	ltem	
Number	Number	Number	Figure Title
P/J2	Figure 8	9	Stacker, H-Transport PWB, LVPS
P/J502	Figure 8	11	Stacker, H-Transport PWB, LVPS
P/J505	Figure 8	10	Stacker, H-Transport PWB, LVPS
P/J800	Figure 2	6	Professional Finisher Rear
P/J8175	Figure 11	5	Booklet Front -Professional Finisher
P/J8176	Figure 10	5	Booklet Rear - Professional Finisher
P/J8177	Figure 10	2	Booklet Rear -Professional Finisher

#### Table 3 Professional Finisher Plug/Jack Location List

Connector Number	Figure Number	ltem Number	Figure Title
P/J8178	Figure 10	4	Booklet Rear - Professional Finisher
P/J8179	Figure 10	12	Booklet Rear - Professional Finisher
P/J8180	Figure 10	11	Booklet Rear - Professional Finisher
P/J8181	Figure 11	4	Booklet Front -Professional Finisher
P/J8182	Figure 11	1	Booklet Front -Professional Finisher
P/J8183	Figure 11	2	Booklet Front -Professional Finisher
P/J8185	Figure 10	6	Booklet Rear - Professional Finisher
P/J8186	Figure 10	10	Booklet Rear - Professional Finisher
P/J8187	Figure 10	7	Booklet Rear - Professional Finisher
P/J8188	Figure 10	13	Booklet Rear - Professional Finisher
P/J8189	Figure 11	6	Booklet Front -Professional Finisher
P/J8190	Figure 10	3	Booklet Rear - Professional Finisher
P/J8191	Figure 10	1	Booklet Rear - Professional Finisher
P/J8196	Figure 10	9	Booklet Rear - Professional Finisher
P/J8197	Figure 10	8	Booklet Rear - Professional Finisher
J8201	Figure 11	9	Booklet Front -Professional Finisher
P8201	Figure 11	3	Booklet Front -Professional Finisher
J8202	Figure 13	6	Professional Finisher - Booklet PWB
P8202	Figure 9	7	Professional Finisher - Finisher PWB
J8203	Figure 9	7	Professional Finisher - Finisher PWB
P8203	Figure 9	8	Professional Finisher - Finisher PWB
P/J8218	Figure 12	3	Professional Finisher Booklet Tray Unit
P/J8300	Figure 9	7	Professional Finisher - Finisher PWB
P/J8301	Figure 9	8	Professional Finisher - Finisher PWB
P/J8302	Figure 9	16	Professional Finisher - Finisher PWB
P/J8303	Figure 7	8	Professional Finisher Rear
P/J8304	Figure 9	1	Professional Finisher - Finisher PWB
P/J8305	Figure 9	18	Professional Finisher - Finisher PWB
P/J8306	Figure 9	4	Professional Finisher - Finisher PWB
P/J8307	Figure 9	5	Professional Finisher - Finisher PWB
P/J8308	Figure 9	2	Professional Finisher - Finisher PWB
P/J8309	Figure 9	19	Professional Finisher - Finisher PWB
P/J8310	Figure 9	9	Professional Finisher - Finisher PWB
P8311	Figure 9	15	Professional Finisher - Finisher PWB
P/J8312	Figure 7	6	Professional Finisher - Rear
P/J8313	Figure 9	12	Professional Finisher - Finisher PWB
P/J8314	Figure 9	11	Professional Finisher - Finisher PWB
P/J8315	Figure 9	13	Professional Finisher - Finisher PWB
P/J8316	Figure 9	10	Professional Finisher - Finisher PWB
P/J8317	Figure 9	14	Professional Finisher - Finisher PWB

Initial Issue

#### Table 3 Professional Finisher Plug/Jack Location List

Connector Number	Figure Number	ltem Number	Figure Title		
P/J8319	Figure 2	8	Professional Finisher - Top Tray Exit Sensor, Gate Sen- sor		
P/J8320	Figure 3	1	Professional Finisher Compiler Exit Sensor, Buffer Path Sensor		
P/J8321	Figure 2	2	Professional Finisher - Top Tray Exit Sensor, Gate Sensor		
P/J8322	Figure 2	3	Professional Finisher - Top Tray Exit Sensor, Gate Sensor		
P/J8324	Figure 7	25	Professional Finisher - Rear		
P/J8325	Figure 7	23	Professional Finisher - Rear		
P/J8326	Figure 8	4	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS		
P/J8327	Figure 8	3	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS		
P/J8328	Figure 7	20	Professional Finisher - Rear		
P/J8330	Figure 8	1	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS		
P/J8331	Figure 8	2	Professional Finisher - Stacker Sensor, H-Transport PWB, LVPS		
P/J8332	Figure 7	16	Professional Finisher - Rear		
P/J8333	Figure 7	13	Professional Finisher - Rear		
P/J8334	Figure 7	4	Professional Finisher - Rear		
P/J8335	Figure 7	3	Professional Finisher - Rear		
P/J8336	Figure 7	24	Professional Finisher - Rear		
P/J8338	Figure 7	22	Professional Finisher - Rear		
P/J8339	Figure 7	2	Professional Finisher - Rear		
P/J8340	Figure 3	2	Professional Finisher - Compiler Exit Sensor, Buffer Path Sensor		
P/J8440	Figure 7	17	Professional Finisher - Rear		
P/J8341	Figure 7	19	Professional Finisher - Rear		
P/J8342	Figure 7	12	Professional Finisher - Rear		
P/J8343	Figure 7	11	Professional Finisher - Rear		
P/J800	Figure 9	6	Professional Finisher - Finisher PWB		
P/J8344	Figure 6	3	Professional Finisher - Puncher Unit		
P/J8345	Figure 7	10	Professional Finisher - Rear		
P/J8346	Figure 6	8	Professional Finisher - Puncher Unit		
P/J8347	Figure 6	7	Professional Finisher - Puncher Unit		
P/J8348	Figure 6	1	Professional Finisher - Puncher Unit		
P/J8349	Figure 7	9	Professional Finisher - Rear		
P/J8350	Figure 6	5	Professional Finisher - Puncher Unit		
P/J8351	Figure 6	4	Professional Finisher - Puncher Unit		

#### Table 3 Professional Finisher Plug/Jack Location List

Connector Number	Figure Number	ltem Number	Figure Title	
P/J8352	Figure 6	2	Professional Finisher - Puncher Unit	
P/J8353	Figure 6	6	Professional Finisher - Puncher Unit	
P/J8354	Figure 4	3	Professional Finisher - Stapler Unit	
P/J8355	Figure 7	14	Professional Finisher - Rear	
P/J8356	Figure 4	1	Professional Finisher - Stapler Unit	
P/J8357	Figure 4	2	Professional Finisher - Stapler Unit	
P/J8358	Figure 4	4	Professional Finisher - Stapler Unit	
P/J8359	Figure 5	2	Professional Finisher - Compile Tray Assembly	
P/J8360	Figure 5	3	Professional Finisher - Compile Tray Assembly	
P/J8361	Figure 5	1	Professional Finisher - Compile Tray Assembly	
P/J8362	Figure 5	5	Professional Finisher - Compile Tray Assembly	
P/J8363	Figure 5	4	Professional Finisher - Compile Tray Assembly	
J8364	Figure 2	4	Professional Finisher - Top Tray Exit Sensor, Gate Sensor	
J8365	Figure 2	7	Professional Finisher - Top Tray Exit Sensor, Gate Sensor	
P/J8371	Figure 8	5	Professional Finisher - Stacker, H-Transport PWB, LVPS	
P/J8373	Figure 8	7	Professional Finisher - Stacker, H-Transport PWB, LVPS	
P/J8376	Figure 9	17	Professional Finisher - Finisher PWB	
P/J8377	Figure 13	3	Professional Finisher - Booklet PWB	
P/J8378	Figure 13	1	Professional Finisher - Booklet PWB	
P/J8383	Figure 2	6	Professional Finisher - Top Tray Exit Sensor, Gate Sensor	
J8384	Figure 2	5	Professional Finisher - Top Tray Exit Sensor, Gate Sensor	
P8389	Figure 9	3	Professional Finisher - Finisher PWB	
P/J8391	Figure 7	26	Professional Finisher - Rear	
P/J8392	Figure 3	3	Professional Finisher Compiler Exit Sensor, Buffer Path Sensor	
P/J8393	Figure 7	1	Professional Finisher - Rear	
P/J8394	Figure 7	21	Professional Finisher - Rear	
P/J8396	Figure 8	6	Professional Finisher - Stacker, H-Transport PWB, LVPS	
P/J8405	Figure 13	4	Professional Finisher - Booklet PWB	
P/J8406	Figure 13	10	Professional Finisher - Booklet PWB	
P/J8407	Figure 13	9	Professional Finisher - Booklet PWB	
P/J8408	Figure 13	8	Professional Finisher - Booklet PWB	
P/J8409	Figure 7	7	Professional Finisher - Rear	
P/J8411	Figure 13	11	Professional Finisher - Booklet PWB	
P/J8429	Figure 13	5	Professional Finisher - Booklet PWB	
P/J8432	Figure 2	1	Professional Finisher - Top Tray Exit Sensor, Gate Sensor	

Connector Number	Figure Number	ltem Number	Figure Title
P/J8434	Figure 7	5	Professional Finisher - Rear
P/J8440	Figure 7	17	Professional Finisher - Rear
P/J8441	Figure 7	18	Professional Finisher - Rear
J8444	Figure 1	6	Professional Finisher - H-Transport Assembly
P8444	Figure 8	8	Professional Finisher - Stacker, H-Transport PWB, LVPS
P/J8445	Figure 1	8	Professional Finisher - H-Transport Assembly
P/J8446	Figure 1	2	Professional Finisher - H-Transport Assembly
P/J8447	Figure 1	1	Professional Finisher - H-Transport Assembly
P/J8448	Figure 1	7	Professional Finisher - H-Transport Assembly
P/J8449	Figure 1	3	Professional Finisher - H-Transport Assembly
P/J8450	Figure 1	4	Professional Finisher - H-Transport Assembly
P/J8453	Figure 1	5	Professional Finisher - H-Transport Assembly
P/J8460	Figure 12	2	Professional Finisher Booklet Tray Unit
P/J8461	Figure 8	12	Professional Finisher - Stacker, H-Transport PWB, LVPS

#### Table 3 Professional Finisher Plug/Jack Location List

# Integrated Office Finisher Plug/Jack Location List

#### Table 4 Integrated Office Finisher Plug/Jack Location List

Connector Number	Figure Number	ltem Number	Figure Title	
P/J8700	2	2	Integrated Office Finisher PWB Location	
P/J8701	2	1	Integrated Office Finisher PWB Location	
P/J8702	2	11	Integrated Office Finisher PWB Location	
P/J8703	2	10	Integrated Office Finisher PWB Location	
P/J8704	2	13	Integrated Office Finisher PWB Location	
P/J8705	2	12	Integrated Office Finisher PWB Location	
P/J8706	2	8	Integrated Office Finisher PWB Location	
P/J8707	2	3	Integrated Office Finisher PWB Location	
P/J8708	2	17	Integrated Office Finisher PWB Location	
P/J8709	2	16	Integrated Office Finisher PWB Location	
P/J8710	2	9	Integrated Office Finisher PWB Location	
P/J8711	2	4	Integrated Office Finisher PWB Location	
P/J8721	3	2	Integrated Office Finisher Bottom Location	
P/J8722	3	1	Integrated Office Finisher Bottom Location	
P/J8723	3	6	Integrated Office Finisher Bottom Location	
P/J8724	1	1	Integrated Office Finisher Front Location	
P/J8725	3	11	Integrated Office Finisher Bottom Location	
P/J8726	1	7	Integrated Office Finisher Front Location	
P/J8727	1	9	Integrated Office Finisher Front Location	
P/J8728	1	8	Integrated Office Finisher Front Location	
P/J8729	1	6	Integrated Office Finisher Front Location	
P/J8730	1	2	Integrated Office Finisher Front Location	
P/J8731	1	4	Integrated Office Finisher Front Location	
P/J8732	1	3	Integrated Office Finisher Front Location	
P/J8733	2	14	Integrated Office Finisher PWB Location	
P/J8734	2	15	Integrated Office Finisher PWB Location	
P/J8735	1	5	Integrated Office Finisher Front Location	
P/J8736	3	5	Integrated Office Finisher Bottom Location	
J8737A	3	9	Integrated Office Finisher Bottom Location	
J8737B	3	9	Integrated Office Finisher Bottom Location	
J8738A	3	10	Integrated Office Finisher Bottom Location	
J8738B	3	10	Integrated Office Finisher Bottom Location	
P/J8739	2	7	Integrated Office Finisher PWB Location	
P/J8740	2	5	Integrated Office Finisher PWB Location	
P/J8741	2	6	Integrated Office Finisher PWB Location	
J8742A	3	7	Integrated Office Finisher Bottom Location	
J8742B	3	8	Integrated Office Finisher Bottom Location	
CN3	3	4	Integrated Office Finisher Bottom Location	

#### Table 4 Integrated Office Finisher Plug/Jack Location List

Connector Number	Figure Number	ltem Number	Figure Title
CN4	3	3	Integrated Office Finisher Bottom Location

# Office Finisher LX Plug/Jack Location List

#### Table 5 Office Finisher (LX) Plug/Jack List

Connector Number	Figure Number	ltem Number	Figure Title
P/J590	3	15	Finisher (LX) Rear
P/J591	3	14	Finisher (LX) Rear
J8860	1	1	Finisher (LX) Horizontal Transport
J8861	1	4	Finisher (LX) Horizontal Transport
P/J8862	1	2	Finisher (LX) Horizontal Transport
J8863	1	7	Finisher (LX) Horizontal Transport
P8863	1	5	Finisher (LX) Horizontal Transport
J8864	1	8	Finisher (LX) Horizontal Transport
J8865	1	10	Finisher (LX) Horizontal Transport
J8866	1	6	Finisher (LX) Horizontal Transport
P/J8867	1	9	Finisher (LX) Horizontal Transport
J8868	4	4	Finisher (LX) Eject
J8869	4	3	Finisher (LX) Eject
J8870	3	24	Finisher (LX) Rear
J8871	3	23	Finisher (LX) Rear
J8872	3	21	Finisher (LX) Rear
J8873	3	2	Finisher (LX) Rear
J8874	3	1	Finisher (LX) Rear
J8875	3	22	Finisher (LX) Rear
P/J8876	4	5	Finisher (LX) Eject
P/J8877	3	20	Finisher (LX) Rear
P/J8878	3	7	Finisher (LX) Rear
P/J8879	3	5	Finisher (LX) Rear
J8880	4	7	Finisher (LX) Eject
J8881	4	11	Finisher (LX) Eject
J8882	4	6	Finisher (LX) Eject
P/J8883	4	8	Finisher (LX) Eject
P/J8884	4	10	Finisher (LX) Eject
J8885	2	7	Finisher (LX) Front
J8886	2	6	Finisher (LX) Front
J8887	2	5	Finisher (LX) Front
P/J8888	4	9	Finisher (LX) Eject
J8889	3	3	Finisher (LX) Rear

Table 5 Office Finisher (LX) Plug/Jack List

Connector Number	Figure Number	ltem Number	Figure Title
J8890	3	4	Finisher (LX) Rear
J8891	4	2	Finisher (LX) Eject
P/J8892	5	1	Booklet Maker Stapler Assembly
P/J8893	5	2	Booklet Maker Stapler Assembly
J8894	6	1	Booklet Maker PWB
J8895	6	3	Booklet Maker PWB
P/J8896	5	7	Booklet Maker Stapler Assembly
J8897	5	4	Booklet Maker Stapler Assembly
J8898	5	5	Booklet Maker Stapler Assembly
J8899	5	6	Booklet Maker Stapler Assembly
J8900	5	8	Booklet Maker Stapler Assembly
J8901	5	3	Booklet Maker Stapler Assembly
P/J8903	2	2	Finisher (LX) Front
P8903	4	1	Finisher (LX) Eject
J8904	2	3	Finisher (LX) Front
P/J8905	2	4	Finisher (LX) Front
P/J8906	6	2	Booklet Maker PWB
J8980	3	19	Finisher (LX) Rear
P/J8981	3	10	Finisher (LX) Rear
J8982	3	18	Finisher (LX) Rear
P/J8983	3	9	Finisher (LX) Rear
J8984	3	6	Finisher (LX) Rear
J8985	6	4	Booklet Maker PWB
P8985	3	17	Finisher (LX) Rear
P/J8986	3	8	Finisher (LX) Rear
J8987	1	3	Finisher (LX) Horizontal Transport
P8987	3	16	Finisher (LX) Rear
P/J8988	3	11	Finisher (LX) Rear
J8989	3	13	Finisher (LX) Rear
P/J8990	3	12	Finisher (LX) Rear
P/J8991	6	9	Booklet Maker PWB
P/J8992	6	7	Booklet Maker PWB
P/J8993	6	6	Booklet Maker PWB
P/J8994	6	5	Booklet Maker PWB
P/J8995	6	8	Booklet Maker PWB

# **IOT Plug/Jack Illustrations**



Figure 1 Front Xerographics



j0ki70002

Figure 2 Main Power/Front Cover Interlock Switch



Figure 3 Toner CRUM Coupler, IBT Fan 1/2



Figure 4 MOB ADC Assembly



Figure 5 Fuser



Figure 6 Exit

Figure 7 L/H Cover



Figure 8 IOT Paper Feed / Transport







Figure 10 Motor Driver (MD) Main PWB



Figure 11 SBC


Figure 12 Backplane PWB

Figure 13 Motor Driver Sub PWB



Figure 14 MCU-PF PWB



Figure 15 CIS PWB

j0kt71042



Figure 16 IOT Rear Location







Figure 18 Rear Location - Open (7845/55)



Figure 19 Toner Dispense Motor (Y,M,C,K), GFI Chassis, Bottom Fan



Figure 21 Main LVPS, HVPS (DEV/BCR), Agitator Motor



Figure 22 IH PWB, Sub LVPS



Figure 23 IIT (1 of 2)



Figure 24 IIT (2 of 2)

Figure 25 MCW Control Panel





j0kt71019

Figure 26 DADF Rear Location (7830/35)

j0ki70020

Figure 27 DADF PWB (7830/35)



Figure 28 DADF Rear Location (7845/55)



Figure 29 DADF PWB (7845/55)



Figure 30 3T Module - Tray2/3/4 Feeder, Feed Out Sensor, Paper Size Sensor



Figure 31 3T Module - Tray Module PWB, TM Take Away Motor



Figure 32 TT Module - Rear Location

Figure 33 TT Module - Left Location







盲

(2) P/J103

P/J101

1

P/J102

j0kt71037



Figure 36 FAX Option

**HCF Plug/Jack Illustrations** 



j0lt712801

Figure 1 HCF 1 of 2



### **Professional Finisher Plug/Jack Illustrations**



j0ha712802

Figure 2 HCF 2 of 2

Figure 1 Professional Finisher - H-Transport Assembly





j0sr7138

Figure 2 Professional Finisher - Top Tray Exit Sensor, Gate Sensor

Figure 3 Professional Finisher - Compiler Exit Sensor, Buffer Path Sensor

j0sr7139



Figure 4 Professional Finisher - Stapler Unit

Figure 5 Professional Finisher - Compile Tray Assembly



Figure 6 Professional Finisher - Puncher Unit

Figure 7 Professional Finisher - Rear



Figure 8 Professional Finisher - Stacker, H-Transport PWB, LVPS







Figure 11 Booklet Front -Professional Finisher

Rear

P/J8182

1

0

J8201

P/J8183

2

P8201

4 P/J8181

5)P/J8175

6)P/J8189

7)P8202

8)P8203

j0sr7147

C





j0sr7148

Figure 12 Professional Finisher Booklet Tray Unit

Figure 13 Professional Finisher - Booklet PWB

## Integrated Office Finisher Plug/Jack Illustrations



Figure 1 Integrated Office Finisher Front Location

Figure 2 Integrated Office Finisher PWB Location



Figure 3 Integrated Office Finisher Bottom Location



Figure 1 Finisher (LX) Horizontal Transport



Figure 2 Finisher (LX) Front



Figure 3 Finisher (LX) Rear



Figure 4 Finisher (LX) Eject



Figure 5 Booklet Maker Stapler Assembly



Figure 6 Booklet Maker PWB

# **AC Wirenets**



05/08/12 72001\_SPY.VSD

Figure 1 ACH



05/08/12 72002\_SPY.VSD

Figure 2 ACN Wirenet

## **1.8 VDC Wirenets**

#### IOT +1.8VDC



05/08/12 72003\_SPY.VSD

Figure 1 +1.8VDC Wirenet

# **1.8 VRTN Wirenet**

#### IOT 1.8V RTN



05/08/12 72004\_SPY.VSD

Figure 1 1.8VDC RTN Wirenet

# +2.5 VDC Wirenet

#### IOT +2.5VDC



05/08/12 72005\_SPY.VSD

Figure 1 +2.5VDC Wirenet

# 2.5VDC RTN

#### IOT 2.5V RTN



05/08/12 72006\_SPY.VSD

Figure 1 2.5VDC RTN Wirenet

# +3.3 VDC-1 Wirenet

#### IOT +3.3VDC-1 / AVREF



05/08/12 72007\_SPY.VSD

Figure 1 +3.3VDC-1 Wirenet
### + 3.3 VDC-2 Wirenet

### IOT +3.3VDC-2



05/08/12 720

72008\_SPY.VSD

Figure 1 +3.3VDC-2 Wirenet

### 3.3 VDC RTN-1 Wirenet

#### IOT 3.3VRTN







05/08/12

72009\_SPY.VSD

Figure 1 3.3VDC-1 RTN Wirenet

### 3.3 VDC RTN-2 Wirenet

### IOT AVREF (+3.3VDC) RTN





05/08/12 72010\_SPY.VSD

Figure 1 3.3 VDC RTN-2 Wirenet

# +5VDC-1 Wirenet

### IOT +5VDC-1



05/08/12 72011\_SPY.VSD

Figure 1 +5VDC-1 Wirenet

# +5VDC-2 Wirenet

### IOT +5VDC-2



05/08/12 72012\_SPY.VSD

Figure 1 +5VDC-2 Wirenet

### +5VDC-3 Wirenet

#### IOT +5VDC-3



05/08/12 72013\_SPY.VSD

Figure 1 +5VDC-3 Wirenet

# +5VDC-4 Wirenet

#### IOT +5VDC-4



Figure 1 +5VDC-4 Wirenet

### +5VDC-5 Wirenet

#### IOT +5VDC-5



05/08/12 72015\_SPY.VSD

Figure 1 +5VDC-5 Wirenet

### +5VDC-6 Wirenet

### IOT +5VDC-6



05/08/12 72016\_SPY.VSD

Figure 1 +5VDC-6 Wirenet

### **5VRTN-1 Wirenet**

#### IOT 5VRTN-1



05/08/12 72017\_SPY.VSD

Figure 1 5VDC RTN-1 Wirenet

### **5VDC RTN-2 Wirenet**

#### **IOT 5VRTN-2**



05/08/12

72018\_SPY.VSD

Figure 1 5VDC RTN-2 Wirenet

# **5VDC RTN-3 Wirenet**

### **IOT 5VRTN-3**



Figure 1 5VDC RTN-3 Wirenet

# **5VDC RTN-4 Wirenet**

#### **IOT 5VRTN-4**



Figure 1 5VDC RTN-4 Wirenet

# **5VDC RTN-5 Wirenet**

### **IOT 5VRTN-5**





Figure 1 5VDC RTN-5 Wirenet

# **5VDC RTN-6 Wirenet**

#### IOT 5VRTN-6



05/08/12 72022\_SPY.VSD

Figure 1 5VDC RTN-6 Wirenet

### +24VDC-1 Wirenet



05/08/12 72023\_SPY.VSD

Figure 1 +24VDC-1 Wirenet

### +24VDC-2 Wirenet

#### IOT +24VDC-2





05/08/12 72024\_SPY.VSD

Figure 1 +24VDC-2 Wirenet

### +24VDC-3 Wirenet

#### IOT +24VDC-3



05/08/12 72025\_SPY.VSD

Figure 1 +24VDC-3 Wirenet

IOT +24VDC-4



05/08/12 72026\_SPY.VSD

Figure 1 +24VDC-4 Wirenet

### 24VDC RTN-1 Wirenet

#### **IOT 24VRTN-1**



05/08/12 72027\_SPY.VSD

Figure 1 24VDC RTN-1 Wirenet

# 24VDC RTN-2 Wirenet

#### **IOT 24VRTN-2**



Figure 1 24VDC RTN-2 Wirenet

### 24VDC RTN-3 Wirenet

#### 7.2.20 IOT 24VRTN-3





# IIT +3.3/+24VDC/ANA Wirenet

#### IIT +3.3/+24/ANA



05/08/12 72030\_SPY.VSD

Figure 1 IIT +3.3/+24VDC/ANA Wirenet

### IIT\_3.3/24/ANA VRTN Wirenet

#### IIT +3.3/+24/ANA VRTN



05/08/12 72031\_SPY.VSD

Figure 1 IIT\_3.3/24/ANA VRTN Wirenet

# IIT +5 VDC Wirenet

#### IIT +5VDC



05/08/12 72032\_SPY.VSD

Figure 1 IIT +5 VDC Wirenet

# IIT +5 VDC RTN Wirenet

### **IIT 5VRTN**



05/08/12 72033\_SPY.VSD

Figure 1 IIT +5 VDC RTN Wirenet

# DADF +5VDC Wirenet (DADF-110)

#### DADF +5VDC (DADF-110 / 2 PASS)



05/08/12 72034\_SPY.VSD

Figure 1 DADF\_+5VDC Wirenet (DADF-110 / 2 Pass)

# DADF 5VRTN Wirenet (DADF-110)

#### DADF 5VRTN (DADF-110 / 2 PASS)



05/08/12 72035\_SPY.VSD

#### Figure 1 DADF\_5VRTN Wirenet (DADF-110 / 2 Pass)

# DADF +5VDC Wirenet (DADF-130 / 1 Pass)

#### DADF +5VDC (DADF-130/1PASS)





05/08/12 72036\_SPY.VSD

Figure 1 DADF\_+5VDC Wirenet (DADF-130 / 1 Pass)

# DADF 5VRTN Wirenet (DADF-130)

#### DADF 5VRTN (DADF-130/1PASS)





05/08/12 72037\_SPY.VSD

Figure 1 DADF\_5VRTN Wirenet (DADF-130 / 1 Pass)

# DADF +24VDC Wirenet (DADF-110)

### DADF +24VDC (DADF-110 / 2 PASS)



05/09/12 72038\_SPY.VSD

Figure 1 DADF\_+24VDC Wirenet (DADF-110 / 2 Pass)

# DADF +24VDC Wirenet (DADF-130)

### DADF +24VDC (DADF-130 / 1 PASS)



05/09/12 72039\_SPY.VSD

Figure 1 DADF\_+24VDC Wirenet (DADF-130 / 1 Pass)

### DADF +24VRTN Wirenet

#### DADF 24VRTN



05/09/12 72040\_SPY.VSD

Figure 1 DADF 24VRTN Wirenet

### HCF +24VDC Wirenet

#### **HCF +24VDC WIRENET**



72034\_NOR.VSD

11/30/11

Figure 1 HCF +24VDC Wirenet

#### **HCF +5VDC WIRENET**



72035\_NOR.VSD

11/30/11

Figure 1 HCF +5VDC Wirenet

### HCF DC COM Wirenet

### HCF DC COM WIRENET



72036\_NOR.VSD

11/30/11

Figure 1 HCF DC COM Wirenet
# Finisher (Int) +24VDC/24VDC RTN

## INTEGRATED OFFICE FINISHER +24VDC/24V RTN WIRENET



Figure 1 Int. Office Finisher +24VDC/24VDC RTN Wirenets

72037\_NOR

## INTEGRATED OFFICE FINISHER +5VDC WIRENET



12/12/11 72038\_NOR

Figure 1 Int. Office Finisher +5VDC Wirenet

# Finisher (Int) DC COM Wirenet

## INTEGRATED OFFICE FINISHER DC COM WIRENET



12/12/11 72039\_NOR.VSD

Figure 1 Int. Office Finisher DC COM Wirenet

## OFFICE FINISHER LX +24VDC WIRENET



Figure 1 Office Finisher LX +24VDC Wirenet

### OFFICE FINISHER LX +5VDC WIRENET



Figure 2 Office Finisher LX +5VDC Wirenet

## OFFICE FINISHER LX DC COM WIRENET



Figure 3 Office Finisher LX DC COM Wirenet

## A/P Finisher Wirenets

## A/P FINISHER +24VDC DISTRIBUTION (1 0F 3)



72040\_NOR.VSD

12/08/11

Figure 1 A/P Finisher +24VDC Wirenet (1 of 3)

## A/P FINISHER +24VDC DISTRIBUTION (2 0F 3)



72041\_NOR.VSD

12/08/11

Figure 2 A/P Finisher +24VDC Wirenet (2 of 3)

### A/P FINISHER +24VDC DISTRIBUTION (3 0F 3)



12/08/11

72042\_NOR.VSD

Figure 3 A/P Finisher +24VDC Wirenet (3 of 3)

## A/P FINISHER +5VDC DISTRIBUTION (1 OF 3)



. 12/08/11

Figure 4 A/P Finisher +5VDC Wirenet (1 of 3)

## A/P FINISHER +5VDC DISTRIBUTION (2 OF 3)



12/08/11

Figure 5 A/P Finisher +5VDC Wirenet (2 of 3)

72044\_NOR.VSD



12/08/11

Figure 6 A/P Finisher +5VDC Wirenet (3 of 3 - Booklet Maker)

72045\_NOR.VSD



12/08/11 72046\_NOR.VSD

Figure 7 A/P Finisher DC COM Wirenet (1 of 4)

#### A/P FINISHER DC COM DISTRIBUTION (2 OF 4)



12/08/11

72047\_NOR.VSD

Figure 8 A/P Finisher DC COM Wirenet (2 of 4)

## A/P FINISHER DC COM DISTRIBUTION (3 OF 4)



12/08/11

72048\_NOR.VSD

Figure 9 A/P Finisher DC COM Wirenet (3 of 4)

### A/P FINISHER DC COM DISTRIBUTION (1 OF 4) – BOOKLET MAKER



72049\_NOR.VSD

#### Figure 10 A/P Finisher DC COM Wirenet (4 of 4 - Booklet Maker)

## WorkCentre 7830/7835/7845/7855 BSDs

#### Table 1 7830/7835/7845/7855 BSDs

BSD 1.1 Main Power On
BSD 1.2 Machine Power Control
BSD 1.3 DC Power Generation (1 of 5)
BSD 1.4 DC Power Generation (2 of 5)
BSD 1.5 DC Power Generation (3 of 5)
BSD 1.6 DC Power Generation (4 of 5)
BSD 1.7 DC Power Generation (5 of 5)
BSD 1.8 IIT DC Power Distribution
BSD 1.9 DC Power Distribution - Options
BSD 1.10 DC Power Distribution - HCF Option
BSD 1.11 LVPS Cooling
BSD 1.12 Interlocked Power
BSD 1.13 Interlocked Cover Switches
BSD 1.14 PWB Fuse Status
BSD 1.15 PWB Location
BSD 2.1 Control Panel Switches (1 of 2)
BSD 2.2 Control Panel Switches (2 of 2)
BSD 2.3 Control Panel LEDS
BSD 2.4 LCD Control
BSD 2.5 Touch Panel Control
BSD 3.1 PWB Communication (1 of 9)
BSD 3.2 PWB Communication (2 of 9)
BSD 3.3 PWB Communication (3 of 9)
BSD 3.4 PWB Communication (4 of 9)
BSD 3.5 PWB Communication (5 of 9)
BSD 3.6 PWB Communication (6 of 9)
BSD 3.7 PWB Communication (7 of 9)
BSD 3.8 PWB Communication (8 of 9)
BSD 3.9 PWB Communication (9 of 9)
BSD 3.10 Poor Cable Connection
BSD 3.11 PWB Detection
BSD 4.1 Main Drive Control
BSD 4.2 Drive Unit Cooling
BSD 5.1 DADF Document Setting (DADF-110)
BSD 5.2 DADF Document Size Sensing (DADF-110)

### Table 1 7830/7835/7845/7855 BSDs

BSD 5.3 DADF Document Feeding (1 of 2) (DADF-110)
BSD 5.4 Document Feeding (2 of 2) (DADF-110)
BSD 5.5 DADF Document Scan and Invert (DADF-110)
BSD 5.6 DADF Document Exit (DADF-110)
BSD 5.7 DADF Document Path and Drive (DADF-110)
BSD 5.8 DADF Interlock & Document Setting (DADF-130 / 1 Pass)
BSD 5.9 DADF Document Size Sensing (DADF-130 / 1 Pass)
BSD 5.10 DADF Document Feeding (DADF-130 / 1 Pass) (1 of 2)
BSD 5.11 DADF Document Feeding (DADF-130 / 1 Pass) (2 of 2)
BSD 5.12 DADF Pre Registration (DADF-130 / 1 Pass)
BSD 5.13 DADF Registration (DADF-130 / 1 Pass)
BSD 5.14 DADF Document Scan (DADF-130 /1 Pass)
BSD 5.15 DADF Document Exit (DADF-130 / 1 Pass)
BSD 5.16 Document Path and Drive Transmission (DADF-130 / 1 Pass)
BSD 6.1 Platen Document Sensing
BSD 6.2 Document Illumination
BSD 6.3 Carriage Control
BSD 6.4 Image Input (1 of 2) (SBC to CCD)
BSD 6.5 Image Input (2 of 2) (CCD to SBC)
BSD 6.6 LPH Control (Y)
BSD 6.7 LPH Control (M)
BSD 6.8 LPH Control (C)
BSD 6.9 LPH Control (K)
BSD 6.10 Image Registration Control
BSD 7.1 Tray 1 Paper Size Sensing
BSD 7.2 Tray 2 Paper Size Sensing
BSD 7.3 Tray 3 Paper Size Sensing (3TM)
BSD 7.4 Tray 3 Paper Size Sensing (TTM)
BSD 7.5 Tray 4 Paper Size Sensing (3TM)
BSD 7.6 Tray 4 Paper Size Sensing (TTM)
BSD 7.7 MSI (Tray 5) Paper Size Sensing
BSD 7.8 Tray 1 Paper Stacking
BSD 7.9 Tray 2 Paper Stacking
BSD 7.10 Tray 3 Paper Stacking
BSD 7.11 Tray 4 Paper Stacking
BSD 7.12 MSI (Tray 5) Paper Stacking

#### Table 1 7830/7835/7845/7855 BSDs

BSD 7.13 Standard HCF Option (Tray 6) Paper Size Sensing	
BSD 7.14 Standard HCF Option (Tray 6) Paper Stacking	
BSD 8.1 Tray 1/3/4 Paper Pre-Feeding	
BSD 8.2 Tray 1 and MSI Paper Transportation	
BSD 8.3 Tray Module Paper Transportation (1 of 2)	
BSD 8.4 Tray Module Paper Transportation (2 of 2)	
BSD 8.6 Registration	
BSD 8.7 Paper Path (7845/55 - 3TM)	
BSD 8.8 Paper Path (7845/55 - TTM)	
BSD 8.9 Paper Path (7830/35 - 3TM)	
BSD 8.10 Paper Path (7830/35 - TTM)	
BSD 8.11 Standard HCF Option (Tray 6) Paper Feeding	
BSD 8.12 Standard HCF Option (Tray 6) Paper Transportation	
BSD 9.1 Drum/Developer Drive Control (Y,M,C)	
BSD 9.2 Drum/Developer Drive Control (K)	
BSD 9.3 Drum Life Control (Y,M)	
BSD 9.4 Drum Life Control (C,K)	
BSD 9.5 Toner Cartridge Life Control (Y,M)	
BSD 9.6 Toner Cartridge Life Control (C,K)	
BSD 9.7 Charging and Exposure (7845/55) (1 of 2)	
BSD 9.8 Charging and Exposure (7845/55) (2 of 2)	
BSD 9.9 Charging and Exposure (7830/35) (1 of 2)	
BSD 9.10 Charging and Exposure (7830/35) (2 of 2)	
BSD 9.11 Developer Drive Control (Y,M,C) (7845/55)	
BSD 9.12 Toner Suction and Marking Module	
BSD 9.13 Development (Y)	
BSD 9.14 Development (M)	
BSD 9.15 Development (C)	
BSD 9.16 Development (K)	
BSD 9.17 Toner Dispense Control (Y,M)	
BSD 9.18 Toner Dispense Control (C,K)	
BSD 9.19 Toner Cartridge Cooling (7845/55)	
BSD 9.20 IBT Belt Drive Control	
BSD 9.21 First Transfer	
BSD 9.22 First BTR Contact/Retract Control	
BSD 9.23 ADC Patch and Environment Sensing	

#### Table 1 7830/7835/7845/7855 BSDs

BSD 9.24 Second Transfer
BSD 9.25 Drum Cleaning
BSD 9.26 Second BTR Cleaning
BSD 9.27 Waste Toner Disposal (1 of 2)
BSD 9.28 Waste Toner Disposal (2 of 2)
BSD 9.29 Rear Bottom Fan Control
BSD 9.30 LH Fan Control (Option)
BSD 10.1 Fuser Drive Control (1 of 2)
BSD 10.2 Fuser Drive Control (2 of 2)
BSD 10.3 Fusing Heat Control (1 of 3)
BSD 10.4 Fusing Heat Control (2 of 3)
BSD 10.5 Fusing Heat Control (3 of 3)
BSD 10.6 Fusing
BSD 10.7 Fused Paper Exit 1
BSD 10.8 Fused Paper Exit 2 (1 of 4)
BSD 10.9 Fused Paper Exit 2 (1 of 2)
BSD 10.10 Fused Paper Exit 2 (2 of 2)
BSD 12.1 Integrated Finisher DC Power and Interlock Switching
BSD 12.2 PWBS Communication IOT - Integrated Finisher
BSD 12.3 Integrated Finisher Transportation
BSD 12.4 Integrated Finisher tamping and Offset
BSD 12.5 Integrated Finisher Staple Control
BSD 12.6 Integrated Finisher Set Eject (1 of 2)
BSD 12.7 Integrated Finisher Set Eject (2 of 2)
BSD 12.8 Integrated Finisher Stacker Tray Control
BSD 12.9 Office Finisher LX Communication (IOT-Finisher)
BSD 12.10 Office Finisher LX DC Power Generation
BSD 12.11 Office Finisher LX DC Power Distribution
BSD 12.12 Office Finisher LX Interlock Switching
BSD 12.13 Office Finisher LX Booklet Interlock Switching
BSD 12.14 Office Finisher LX Horizontal Transportation
BSD 12.15 Office Finisher LX Punch
BSD 12.16 Office Finisher LX Transportation
BSD 12.17 Office Finisher LX Folding
BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)
BSD 12.19 Office Finisher LX Tamping and Offset (2 of 2)
BSD 12.20 Office Finisher LX Staple Positioning
BSD 12.21 Office Finisher LX Staple Control
BSD 12.22 Office Finisher LX Elect Control (1 of 2)

### Table 1 7830/7835/7845/7855 BSDs

BSD 12.23 Office Finisher LX Eject Control (2 of 2)
BSD 12.24 Office Finisher LX Stacker Tray Control
BSD 12.25 Office Finisher LX Booklet Staple Positioning
BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)
BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)
BSD 12.28 Professional Finisher Power Generation
BSD 12.29 Professional Finisher Interlocks
BSD 12.30 Professional Finisher Detection and Communication
BSD 12.31 Professional Finisher PWB Communication
BSD 12.32 H-Transport Drives
BSD 12.33 Horizontal Transportation (1 of 2)
BSD 12.34 Horizontal Transportation (2 of 2)
BSD 12.35 Professional Finisher Decurling
BSD 12.36 Professional Finisher Drives
BSD 12.37 Professional Finisher Booklet/Punch Transport
BSD 12.38 Professional Finisher Transport Top Tray Gating
BSD 12.39 Professional Finisher Buffer Transport
BSD 12.40 Booklet Drive
BSD 12.41 Booklet Transportation
BSD 12.42 Booklet Tamper Control (1 of 2)
BSD 12.43 Booklet Tamper Control (2 of 2)
BSD 12.44 booklet Knife Control
BSD 12.45 Booklet Staple Control
BSD 12.46 Booklet End Guide Control
BSD 12.47 Booklet Tray Control
BSD 12.48 Professional Finisher Top Tray Stacking
BSD 12.49 Professional Finisher Punch Drive
BSD 12.50 Professional Finisher Punch Hole Control
BSD 12.51 Professional Finisher Compiling
BSD 12.52 Professional Finisher Tamper Control
BSD 12.53 Professional Finisher Stapler Control
BSD 12.54 Professional Finisher Staple Positioning
BSD 12.55 Professional Finisher Eject Drive
BSD 12.56 Professional Finisher Set Clamp Control
BSD 12.57 Professional Finisher Stacker Drive
BSD 12.58 Professional Finisher Stack Height Detection
BSD 34.1 FAX

Chain 1 BSDs

## BSD 1.1 Main Power On





BSD 1.3 DC Power Generation (1 of 5)



Figure 3 BSD 1.3 DC Power Generation (1 of 5)



j0kt730104

06/08/12 730104\_SPY.VSD

#### Figure 4 BSD 1.4 DC Power Generation (2 of 5)

J





10/11/12 730106\_SPY.VSD

Figure 6 BSD 1.6 DC Power Generation (4 of 5)



10/11/12 730107\_SPY.VSD





10/12/12 730108\_SPY.VSD

Figure 8 BSD 1.8 IIT DC Power Distribution



**BSD 1.10 DC Power Distribution - HCF Option** 











Figure 13 BSD 1.13 Interlocked Cover Switches

## BSD 1.14 PWB Fuse Status



6

j0kt730112

10/11/12 73000\_SPY.VSD

Figure 14 BSD 1.14 PWB Fuse Status

**BSD 1.15 PWB Location** 



05/14/12 73000\_SPY.VSD

Figure 15 BSD 1.12 PWB Location

Chain 2 BSDs



04/10/12 730201\_SPY.VSD

Figure 1 BSD 2.1 Control Panel Switches (1 of 2)


j0kt730202

73000\_SPY.VSD

Figure 2 BSD 2.2. Control Panel Switches (2 of 2)

5

6

03/02/12

**BSD 2.3 Control Panel LEDS** 



6

j0kt730203

10/12/12 73000\_SPY.VSD

Figure 3 BSD 2.3 Control Panel LEDS



j0kt730204

10/11/12 73000\_SPY.VSD

Figure 4 BSD 2.4 LCD Control



4

5

6

j0kt730205

05/15/12 73000\_SPY.VSD

Figure 5 BSD 2.5 Touch Panel Control











j0kt730305

10/11/12 730305\_SPY.VSD

Figure 5 BSD 3.5 PWB Communication (5 of 9)

5

6



j0kt730306

10/11/12 730306\_SPY.VSD

Figure 6 BSD 3.6 PWB Communication (6 of 9)



j0kt730307

10/11/12 730307\_SPY.VSD

#### Figure 7 BSD 3.7 PWB Communication (7 of 9)





5

6

j0kt730309

10/11/12 730309\_SPY.VSD

Figure 9 BSD 3.9 PWB Communication (9 of 9)

5

6



j0kt730310

10/11/12 730310\_SPY.VSD

Figure 10 BSD 3.10 Poor Cable Connection

## BSD 3.11 PWB Detection



5

6

j0kt730311

10/11/12 730311\_SPY.VSD

Figure 11 BSD 3.11 PWB Detection

## **BSD 4.1 Main Drive Control**





#### ELECTRICAL COMPONENTS





j0kt730402

10/12/12 730402\_SPY.VSD

Figure 2 BSD 4.2 Drive Unit Cooling

6



Initial Issue WorkCentre 7855 Family Service Documentation



730502 SPY.VSD

Figure 2 BSD 5.2 DADF Document Size Sensing (7830/35)













# BSD 5.7 DADF Document Path and Drive (7830/35)



## Figure 7 BSD 5.7 DADF Document Path and Drive (7830/35)



#### Figure 8 BSD 5.8 DADF Interlock & Document Setting (7845/55)





Figure 10 BSD 5.10 DADF Document Feeding (7845/55) (1 of 2)





10/05/12 730512\_SPY.VSD

## Figure 12 BSD 5.12 DADF Pre Registration (7845/55)





10/09/12

#### Figure 14 BSD 5.14 DADF Document Scan (7845/55)



10/05/12 730517\_SPY.VSD

Figure 15 BSD 5.15 DADF Document Exit (7845/55)

# BSD 5.16 Document Path and Drive Transmission (DADF-130 / 1 Pass)



j0kt730517

06/05/12 730517\_SPY.VSD

#### Figure 16 BSD 5.16 Document Path and Drive Transmission (DADF-130 / 1 Pass)





Figure 2 BSD 6.2 Document Illumination




Figure 4 BSD 6.4 Image Input (1 of 2) (SBC to CCD)







Figure 6 BSD 6.6 LPH Control (Y)











Figure 1 BSD 7.1 Tray 1 Paper Size Sensing



Figure 2 BSD 7.2 Tray 2 Paper Size Sensing



730703\_SPY.VSD

#### Figure 3 BSD 7.3 Tray 3 Paper Size Sensing (3TM)





Figure 5 BSD 7.5 Tray 4 Paper Size Sensing (3TM)



### BSD 7.7 MSI (Tray 5) Paper Size Sensing



#### Figure 7 BSD 7.7 MSI (Tray 5) Paper Size Sensing



Figure 8 BSD 7.8 Tray 1 Paper Stacking







Figure 10 BSD 7.10 Tray 3 Paper Stacking





Figure 12 BSD 7.12 MSI (Tray 5) Paper Stacking







10/09/12 730714\_SPY.VSD

Figure 14 BSD 7.14 Standard HCF Option (Tray 6) Paper Stacking









Figure 3 BSD 8.3 Tray Module Paper Transportation (1 of 3)

BSD 8.4 Tray Module Paper Transportation (2 of 2)





BSD 8.7 Paper Path (7845/55 - 3TM)



Figure 6 BSD 8.7 Paper Path (7845/55 - 3TM)



05/16/12 730808\_SPY.VSD

Figure 7 BSD 8.8 Paper Path (7845/55 - TTM)



Figure 8 BSD 8.9 Paper Path (7830/35 - 3TM)



05/16/12 730810\_SPY.VSD

Figure 9 BSD 8.10 Paper Path (7830/35 - TTM)

# BSD 8.11 Standard HCF Option (Tray 6) Paper Feeding



# BSD 8.12 Standard HCF Option (Tray 6) Paper Transportation





## BSD 9.1 Drum/Developer Drive Control (Y,M,C)



Figure 1 BSD 9.1 Drum/Developer Drive Control (Y,M,C)



#### Initial Issue WorkCentre 7855 Family Service Documentation

BSD 9.3 Drum Life Control (Y,M)



BSD 9.4 Drum Life Control (C,K)


BSD 9.5 Toner Cartridge Life Control (Y,M)



5

6

j0kt730905

730905\_SPY.VSD

#### Figure 5 BSD 9.5 Toner Cartridge Life Control (Y,M)

10/12/12

BSD 9.6 Toner Cartridge Life Control (C,K)





730907\_SPY.VSD

#### Figure 7 BSD 9.7 Charging and Exposure (7845/55) (1 of 2)

10/12/12

BSD 9.8 Charging and Exposure (7845/55) (2 of 2)



05/16/12 730908\_SPY.VSD

# Figure 8 BSD 9.8 Charging and Exposure (7845/55) (2 of 2)



10/12/12 730909\_SPY.VSD

## Figure 9 BSD 9.9 Charging and Exposure (7830/35) (1 of 2)

BSD 9.10 Charging and Exposure (7830/35) (2 of 2)



05/16/12 730910\_SPY.VSD

# Figure 10 BSD 9.10 Charging and Exposure (7830/35) (2 of 2)



#### Figure 11 BSD 9.11 Developer Drive Control (Y,M,C) (7845/55)





BSD 9.13 Development (Y)









Initial Issue WorkCentre 7855 Family Service Documentation



10/12/12 730917\_SPY.VSD

Figure 17 BSD 9.17 Toner Dispense Control (Y,M)



Figure 18 BSD 9.18 Toner Dispense Control (C,K)



10/12/12 730919\_

# 730919\_SPY.VSD

### Figure 19 BSD 9.19 Toner Cartridge Cooling (7845/55))

6



Figure 20 BSD 9.20 IBT Belt Drive Control









10/12/12 730923

730923\_SPY.VSD

## Figure 23 BSD 9.23 ADC Patch and Environment Sensing





Figure 25 BSD 9.25 Drum Cleaning

# **BSD 9.26 Second BTR Cleaning**





10/12/12 730927\_SPY.VSD













10/12/12 731001\_SPY.VSD

Figure 1 BSD 10.1 Fuser Drive Control (1 of 2)



Figure 2 BSD 10.2 Fuser Drive Control (2 of 2)















Figure 8 BSD 10.8 Fused Paper Exit 2 (1 of 4)





Figure 10 BSD 10.10 Fused Paper Exit 2 (2 of 2)
# Integrated Office Finisher BSD 12.1 Integrated Finisher DC Power and Interlock Switching







### FAULT CODES

5

6

- 312-917 STACKER TRAY STAPLE SET OVER COUNT

10/10/12 71202-SPY.vsd

### Figure 2 BSD 12.2 PWBS Communication IOT - Integrated Finisher







Figure 4 BSD 12.4 Integrated Finisher tamping and Offset



10/10/12 731205\_SPY.VSD













**Office Finisher LX** 

## BSD 12.9 Office Finisher LX Communication (IOT-Finisher)



4

5

6

10/10/12 731209\_SPY.VSD

Figure 9 BSD 12.9 Office Finisher LX Communication (IOT-Finisher)



05/24/12 731201\_SPY.VSD

Figure 10 BSD 12.10 Office Finisher LX DC Power Generation









### Figure 13 BSD 12.13 Office Finisher LX Booklet Interlock Switching



10/10/12 731214\_SPY.VSD









10/10/12 731216\_SPY.VSD





10/10/12 731217\_SPY.VSD

### Figure 17 BSD 12.17 Office Finisher LX Folding



05/24/12 731218\_SPY.VSD

Figure 18 BSD 12.18 Office Finisher LX Tamping and offset (1 of 2)







10/10/12 731220\_SPY.VSD

#### Figure 20 BSD 12.20 Office Finisher LX Staple Positioning



10/10/12 731221\_SPY.VSD





6

10/10/12 731222\_SPY.VSD

### Figure 22 BSD 12.22 Office Finisher LX Eject Control (1 of 2)



10/10/12 731223\_SPY.VSD

#### Figure 23 BSD 12.23 Office Finisher LX Eject Control (2 of 2)



Figure 24 BSD 12.24 Office Finisher LX Stacker Tray Control



10/10/12 731225\_SPY.VSD

#### Figure 25 BSD 12.25 Office Finisher LX Booklet Staple Positioning



10/10/12 731226\_SPY.VSD

### Figure 26 BSD 12.26 Office Finisher LX Booklet Staple Control (1 of 2 - Front)



# Figure 27 BSD 12.27 Office Finisher LX Booklet Staple Control (2 of 2 -Rear)

**Professional Finisher** 

**BSD 12.28 Professional Finisher Power Generation** 





6

05/24/12 731229\_SPY.VSD

### Figure 29 BSD 12/29 Professional Finisher Interlocks





05/24/12 731231\_SPY

# Figure 31 BSD 12.31 Professional Finisher PWB Communication



Figure 32 BSD 12.32 H-Transport Drives
















10/10/12 731237\_SPY.'





10/10/12 731238\_SPY.'

## Figure 38 BSD 12.38 Professional Finisher Transport Top Tray Gating



05/24/12 731239\_SPY."





05/24/12 731241\_SPY."

Figure 40 BSD 12.40 Booklet Drive



Figure 41 BSD 12.41 Booklet Transportation



Figure 42 BSD 12.42 Booklet Tamper Control (1 of 2)



T712743-OAK

Figure 43 BSD 12.43 Booklet Tamper Control (2 of 2)

6



Figure 44 BSD 12.44 booklet Knife Control



Figure 45 BSD 12.45 Booklet Staple Control



Figure 46 BSD 12.46 Booklet End Guide Control



Figure 47 BSD 12.47 Booklet Tray Control



T712748-OAK

## Figure 48 BSD 12.48 Professional Finisher Top Tray Stacking













05/24/12 731252\_SPY.VSD





T712753-OAK





T712754-OAK













10/10/12 731257\_SPY.'





10/10/12 731258\_SPY.'

## Figure 58 BSD 12.58 Professional Finisher Stack Height Detection

J



**BSD 34.1 FAX** 

Chain 34 BSDs

