



Dell 2155cn **Service Manual**

25 Jun 2010

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Version record

Refer to the portion indicated by change bar in each section.

Also refer to the reasons in table below.

Version	Change bar	Reasons
1.0	Initial	Initial
1.1	Added	Added new content to the document.
1.2	Revised	Revised the content to improve clarity and accuracy.
1.3	Revised	Revised the content to reflect the latest information.

Cautions

Operation contents of this document may be subject to modification without notice.

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1. About this manual

This manual is a standard service manual of Dell Inc. containing information required for maintenance of this laser printer (standard specifications).

2. Marks giving caution

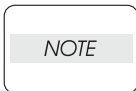
Maintenance operations requiring special cautions or additional information regarding descriptions in this manual are presented as "Warning," "Caution," or "Note," depending on their nature.



If instructions are not observed, death or serious injury may result.



If instructions are not observed, injuries to workers or physical damage to assets (including this laser printer) may result.



Essentials for procedures, steps, rules, and others.

Reference *Incidental information to descriptions.*

3. Related documents

- Instruction manuals (standard manuals)

Describe the operation and handling of this laser printer.

- Performance specifications

Describe in detail various specifications of this laser printer.

(In the event of a discrepancy between this manual and the performance specifications, the performance specifications take precedence.)

- Spare parts list

Information on maintenance parts (spare parts) for this laser printer.

4. Safety

To prevent possible accidents during maintenance operation, you should observe strictly the "Warning" and "Caution" information in this manual.

Avoid dangerous operations and operations out of the scope of this manual.

Various processes not covered by this manual may be required in actual operations, and should be performed carefully, always giving attention to safety.

4.1 Power source

Keep the power plug disconnected during the maintenance operation to prevent electric shock, burns and other damages.

If the power supply should be kept connected to measure voltage or for other similar reasons, take sufficient care to prevent electric shock, by following the procedures in this manual.



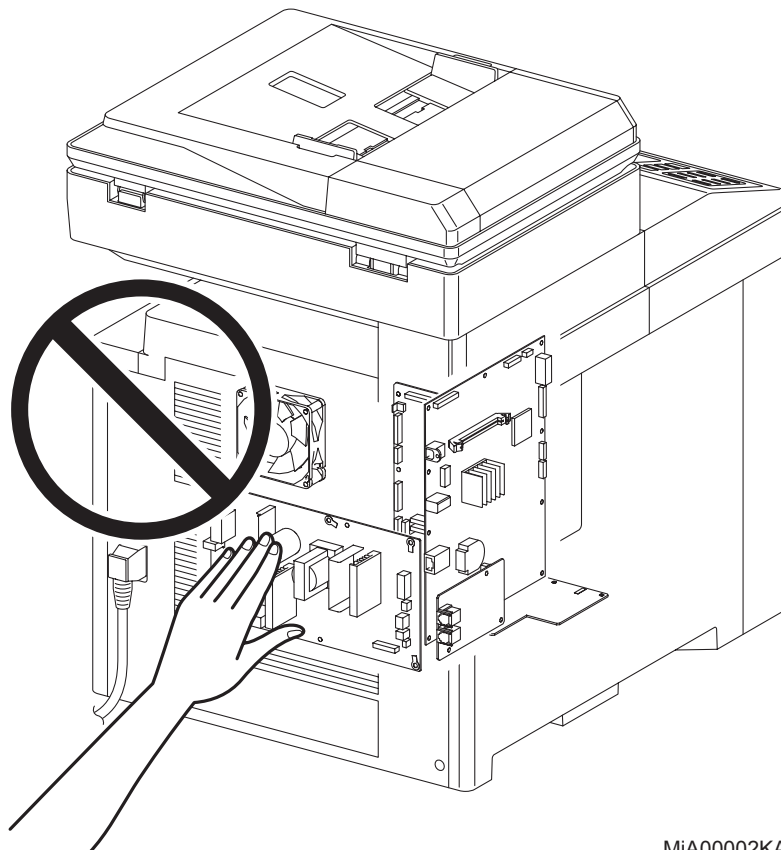
While the printer is on, never touch live parts if not required.



Power is supplied to the power switch / inlet even while the printer is off. Never touch its live components.



Do not touch live parts unless otherwise specified.



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4.2 Driving units

When servicing gears or other driving units, be sure to turn off the power switch and unplug the power cord. Drive them manually when required.



Do not do the print work removing the cover of the printer to confirm the operation of driving part.

4.3 High-temperature units

When servicing high-temperature units (securing unit, etc.), be sure to turn them off to prevent burns, injuries and other troubles. Remove the power plug and start service processes after they have cooled down sufficiently.



Because high-temperature units are still hot after they complete an operation, wait at least 40 minutes before starting maintenance service.

4.4 Battery

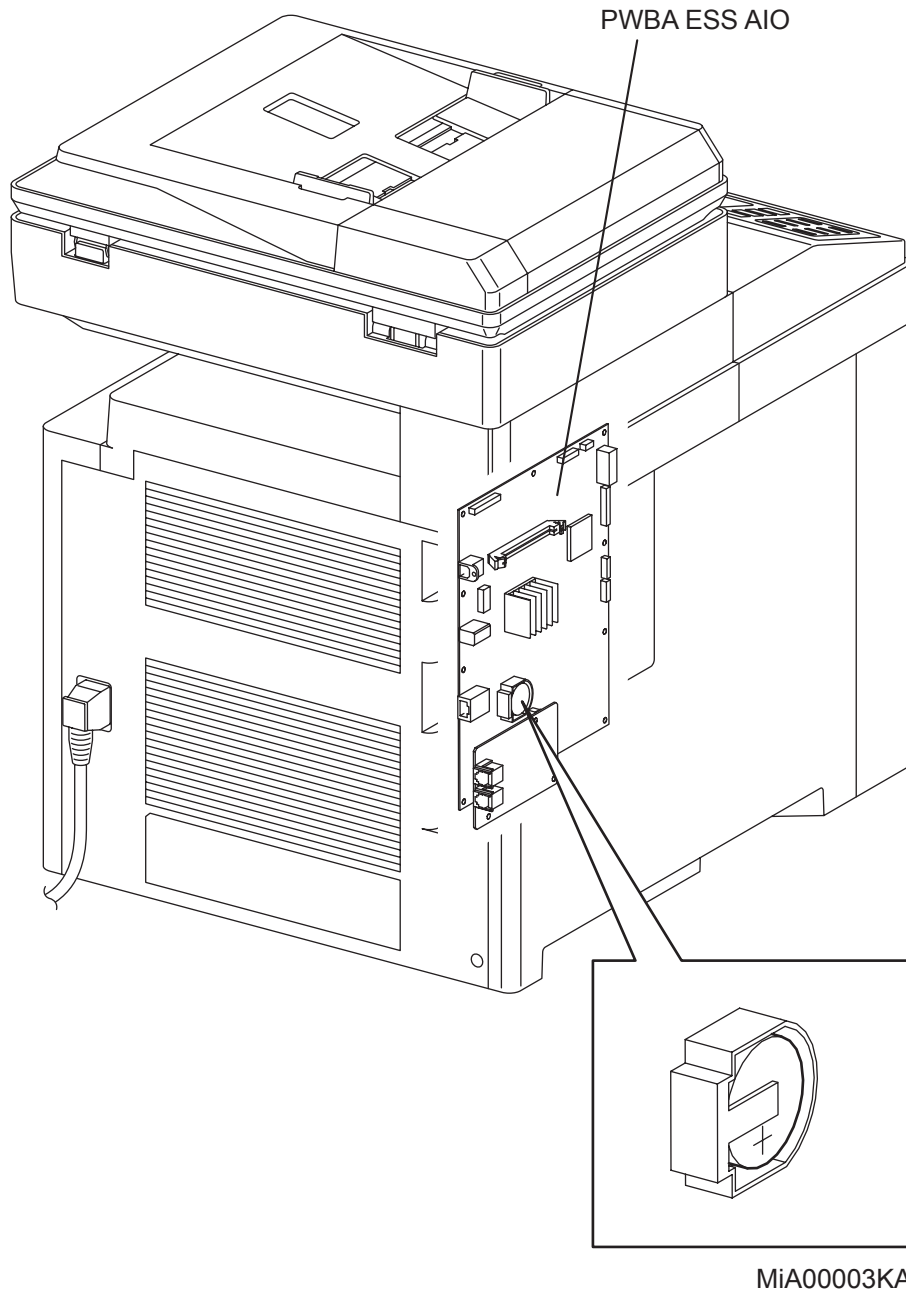
Lithium Battery is used in the following component.

- PWBA HYUI



***There is a danger of a new battery exploding if it is incorrectly installed.
Replace the battery only with the same or equivalent type recommended by the
manufacturer.***

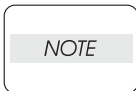
Dispose the battery according to the manufacturer's instruction.



4.5 Laser beams



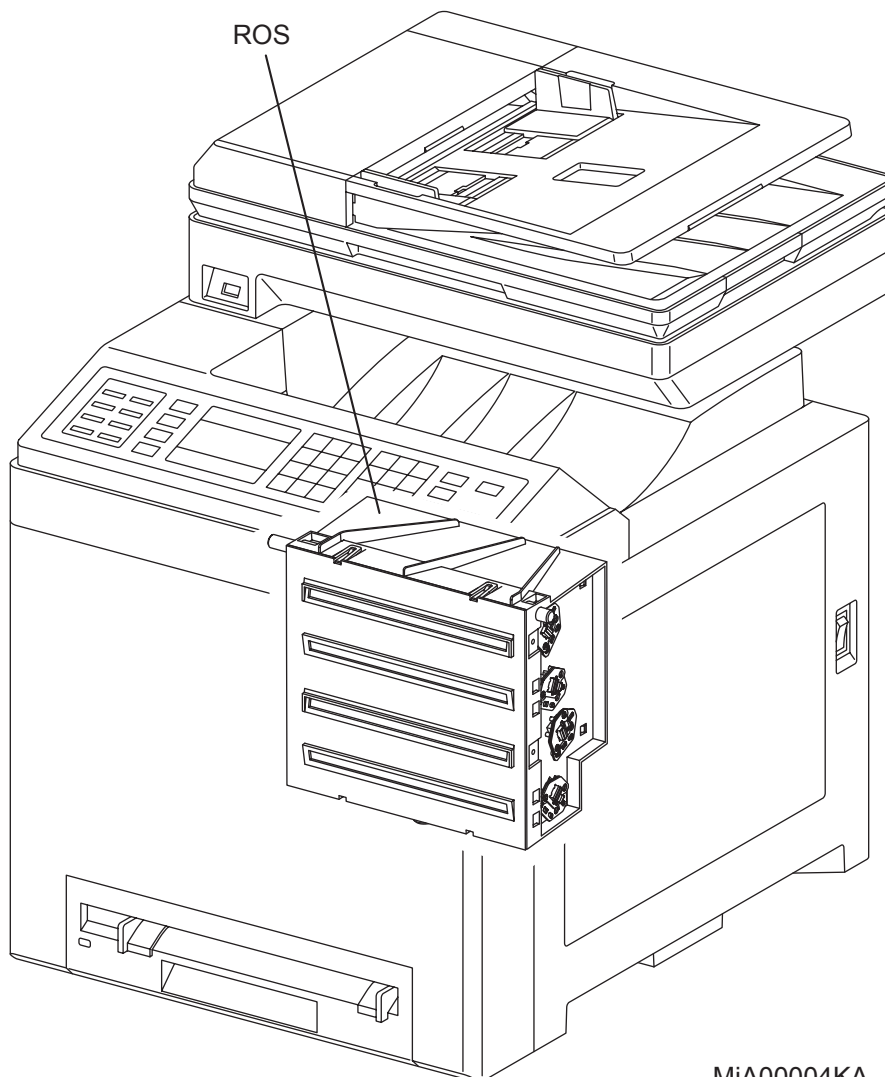
- *If your eyes are exposed to laser beams, you may lose your eyesight.*
- *Never open the cover if the warning label for laser beams is attached there.*
- *Before disassembling and reassembling this laser printer, be sure to turn it OFF.*
- *When servicing this laser printer while it is running, be sure to follow the procedures specified in this manual.*
- *You should be well aware that the laser beams are capable of injuring you and other people near the printer.*



Laser beams have features as follows:

- **Frequencies are smaller in width than other beams (sun and electric bulbs) and phases are uniform so that high monochromatic and convergence performance can be obtained and thin beams of light can reach places at a long distance.**
- **Being highly converged, the laser beams exert a heating action that may be harmful to human body.**

Reference: *The laser beams of this laser printer are invisible rays.*

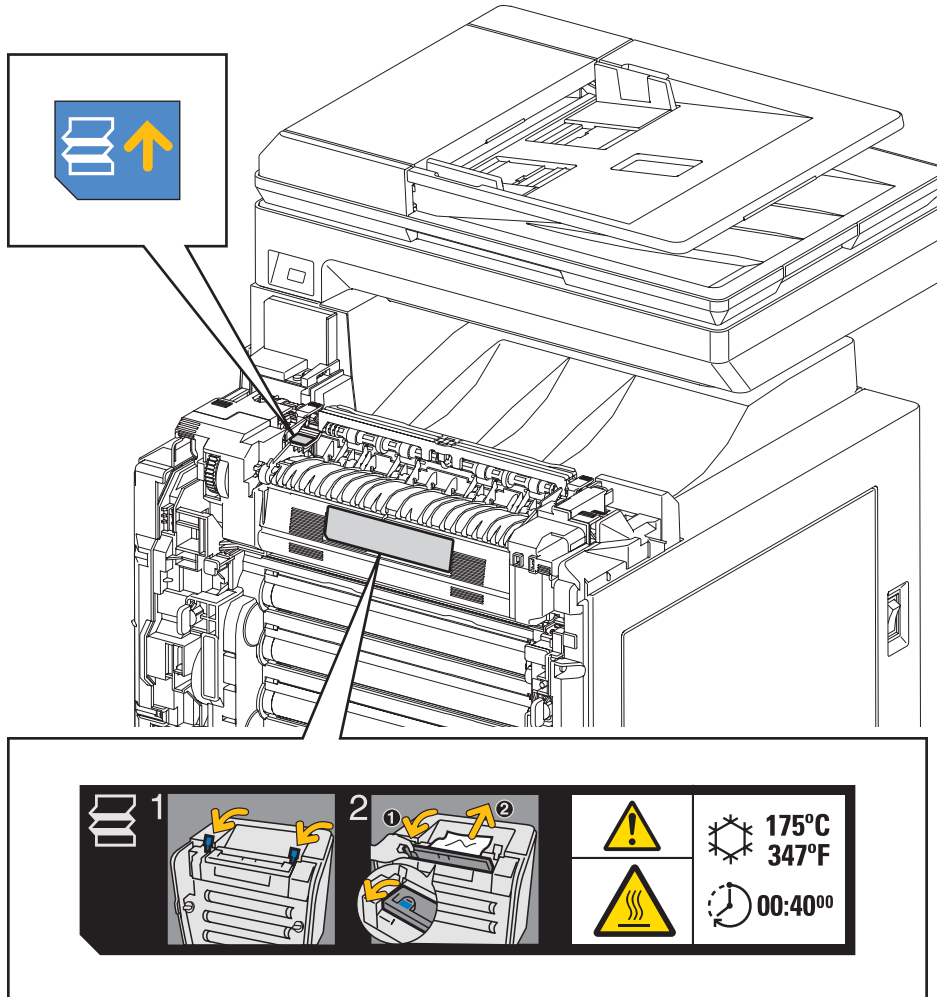


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4.6 Warning/caution labels

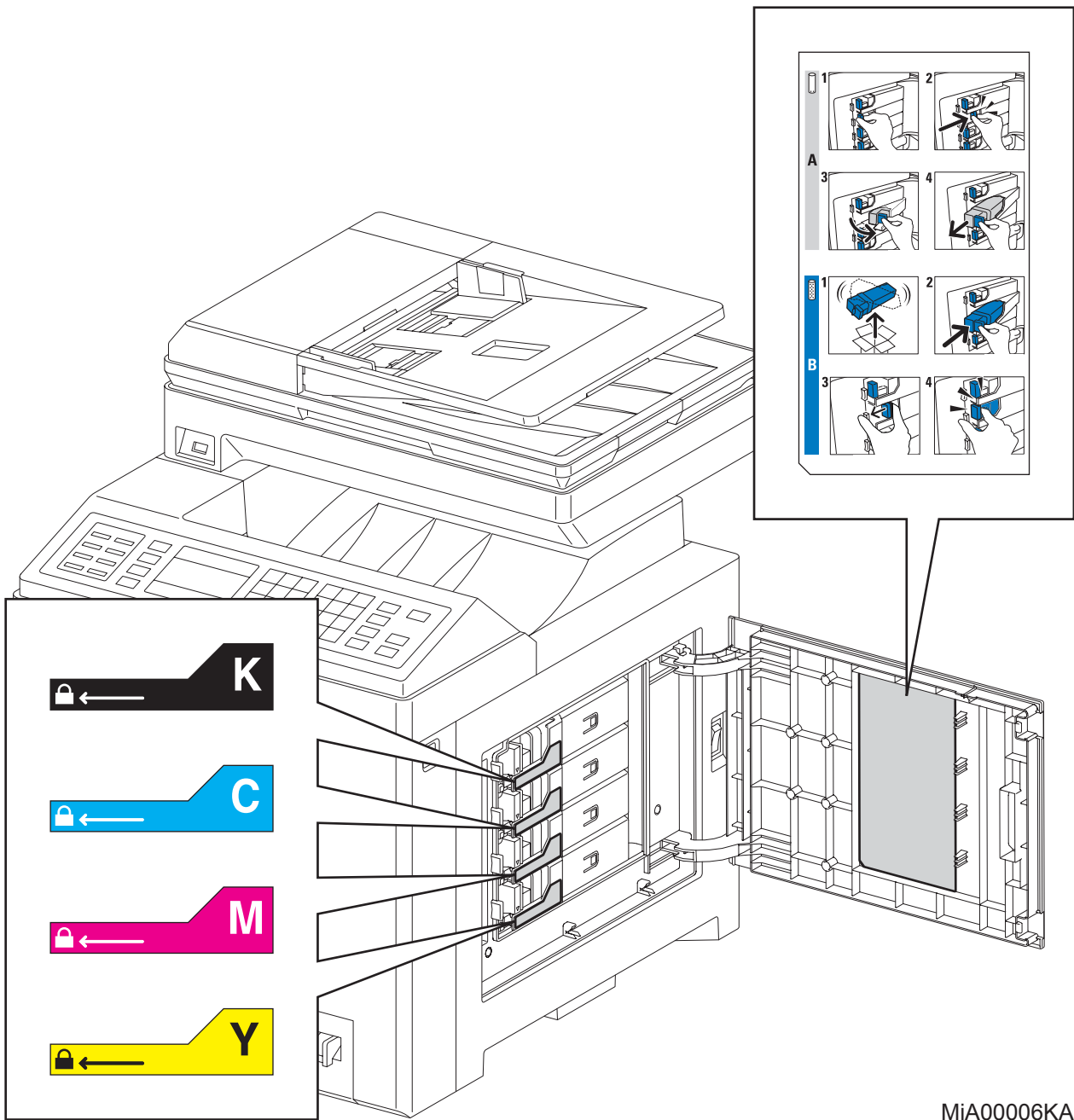
Warning labels and caution labels are attached to this laser printer to prevent accidents. Check those labels for peeling or stains when servicing the printer.

4.6.1 Caution label for high-temperature units



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4.6.2 Caution label for toner cartridges



K   




Dell™ 2150 Series/ 2155 Series Standard Capacity Black Toner Cartridge 2FV35 →
 Cartouche de Toner Noir / Tonerkartusche Schwarz / Cartuccia Toner Nero
 / Cartucho de Toner Negro / Zwarte Toner cartridge

Order Supplies at : www.dell.com/supplies

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 For warranty questions, see the limited warranty statements included with your printer documentation.




* 1 5 2 3 *

C   

Dell™ 2150 Series/ 2155 Series Standard Capacity Cyan Toner Cartridge WHPFG →
 Cartouche de Toner Cyan / Tonerkartusche Zyan / Cartuccia Toner Ciano
 / Cartucho de Toner Cian / Cyaan Toner cartridge

Order Supplies at : www.dell.com/supplies

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* 1 5 2 4 *

M   

Dell™ 2150 Series/ 2155 Series Standard Capacity Magenta Toner Cartridge 9M2WC →
 Cartouche de Toner Magenta / Tonerkartusche Magenta / Cartuccia Toner Magenta
 / Cartucho de Toner Magenta / Magenta Toner cartridge

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* 1 5 2 5 *

Y   

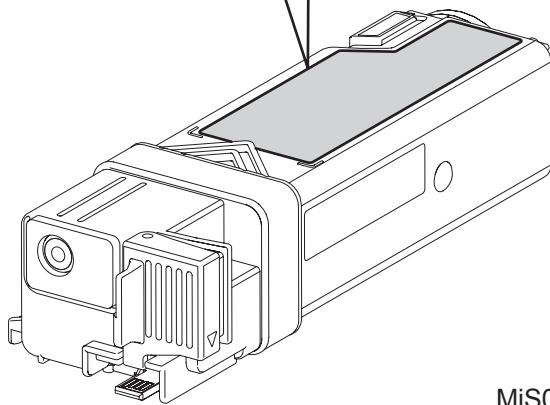
Dell™ 2150 Series/ 2155 Series Standard Capacity Yellow Toner Cartridge NT6X2 →
 Cartouche de Toner Jaune / Tonerkartusche Gelb / Cartuccia Toner Giallo
 / Cartucho de Toner Amarillo / Gelo Toner cartridge

Order Supplies at : www.dell.com/supplies

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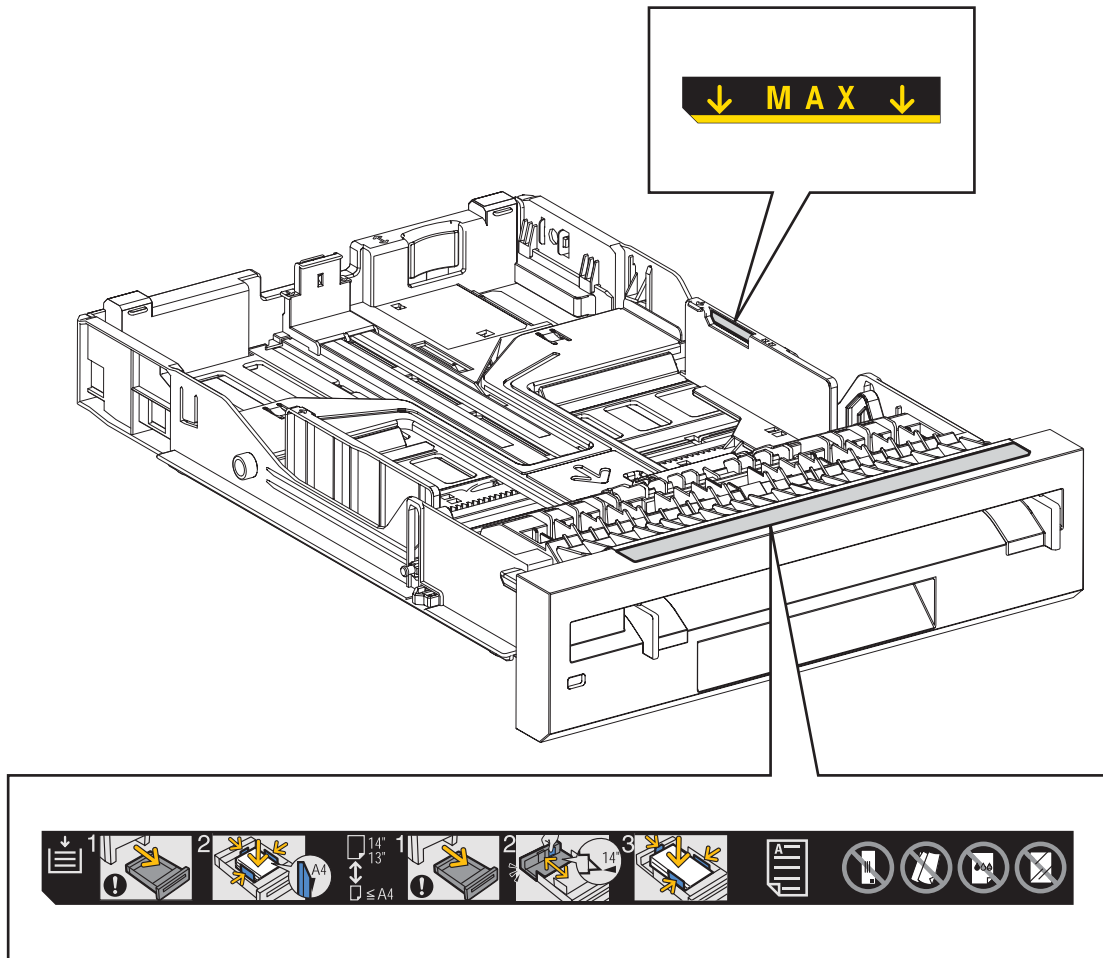


* 1 5 2 6 *



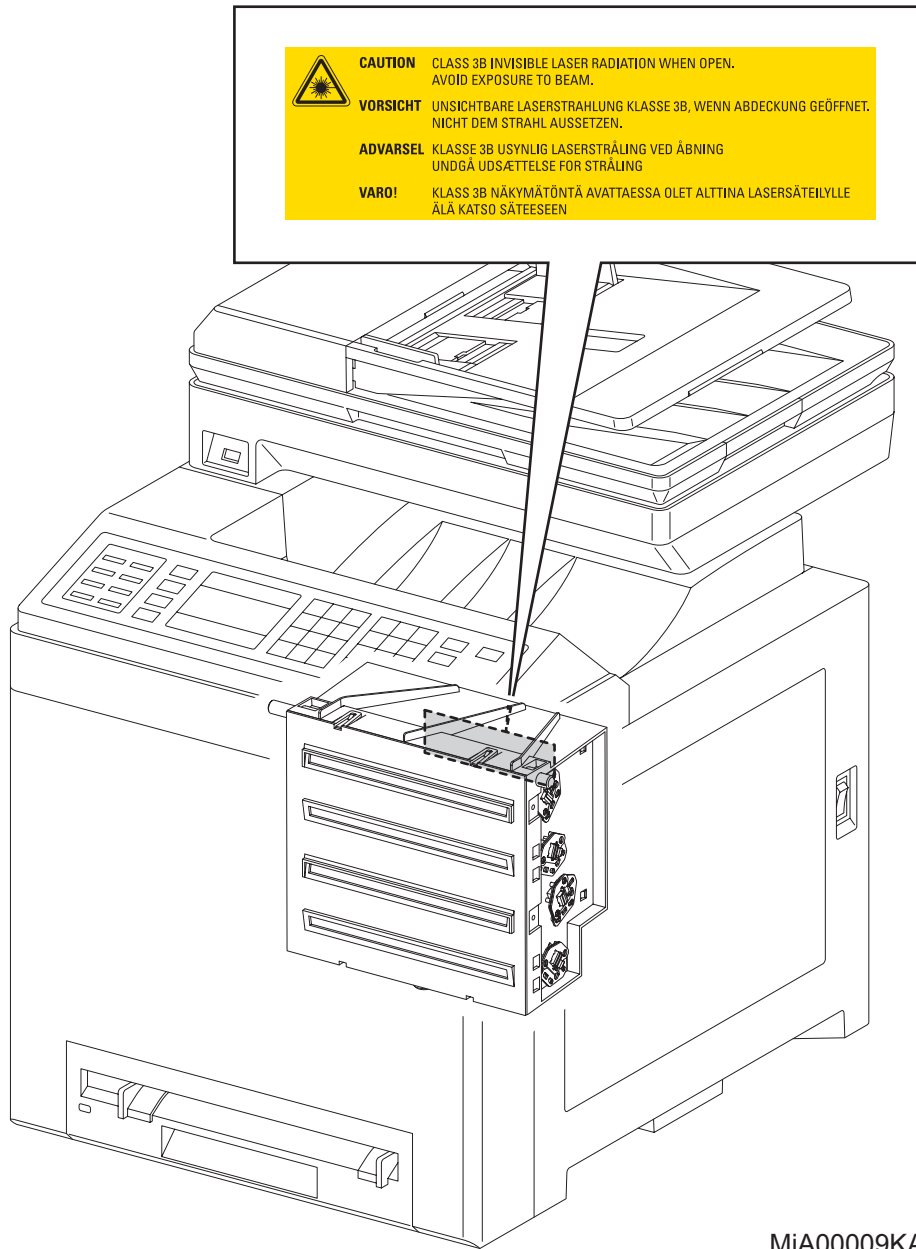
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4.6.3 Caution label for SSI and tray

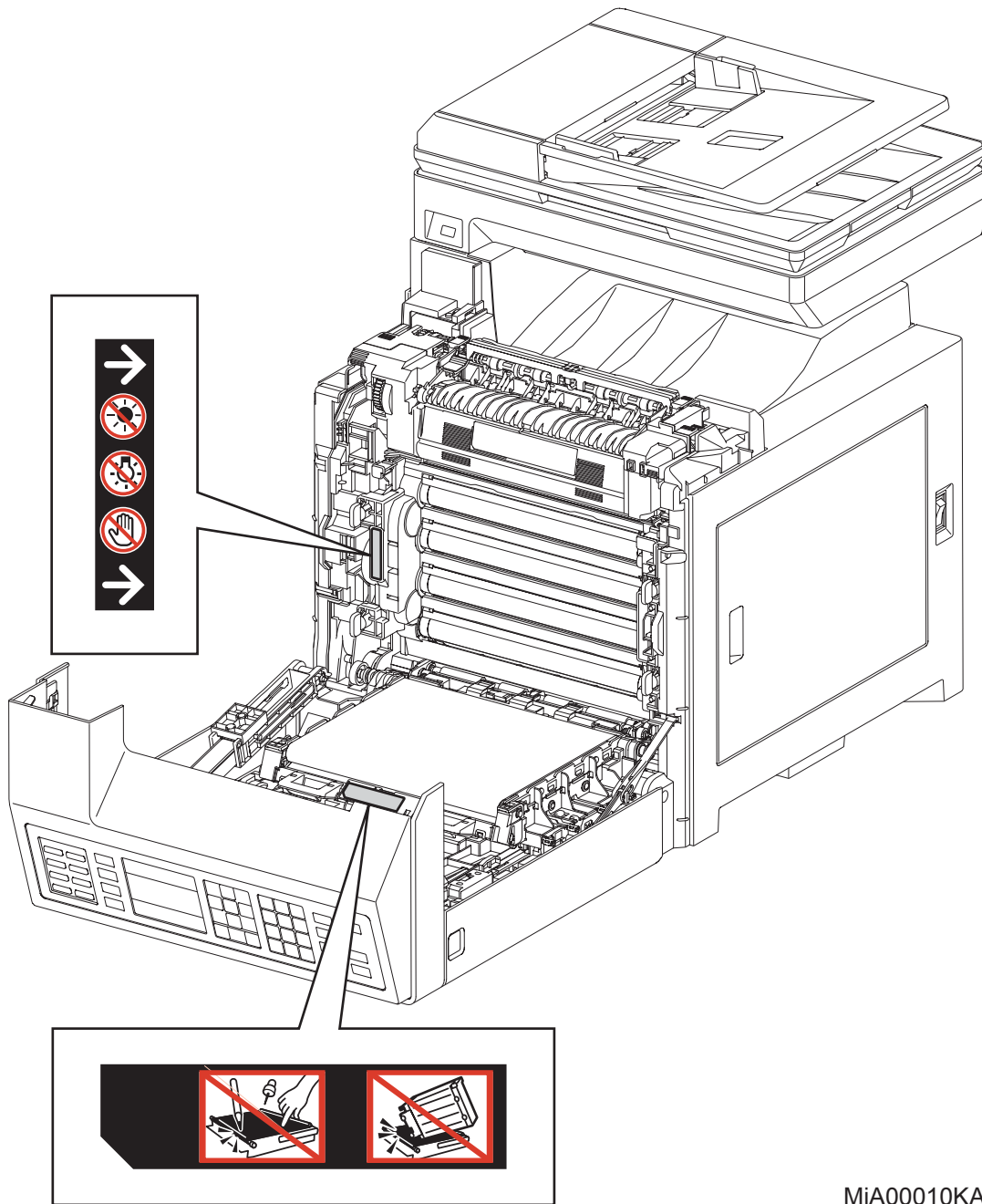


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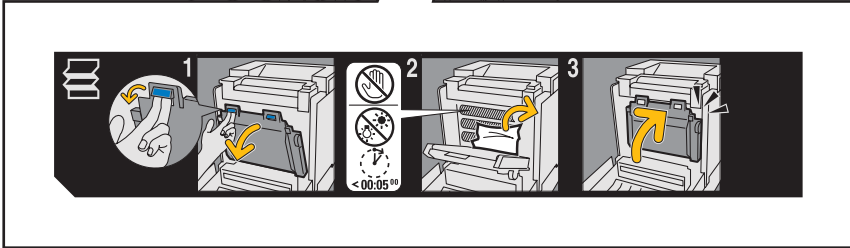
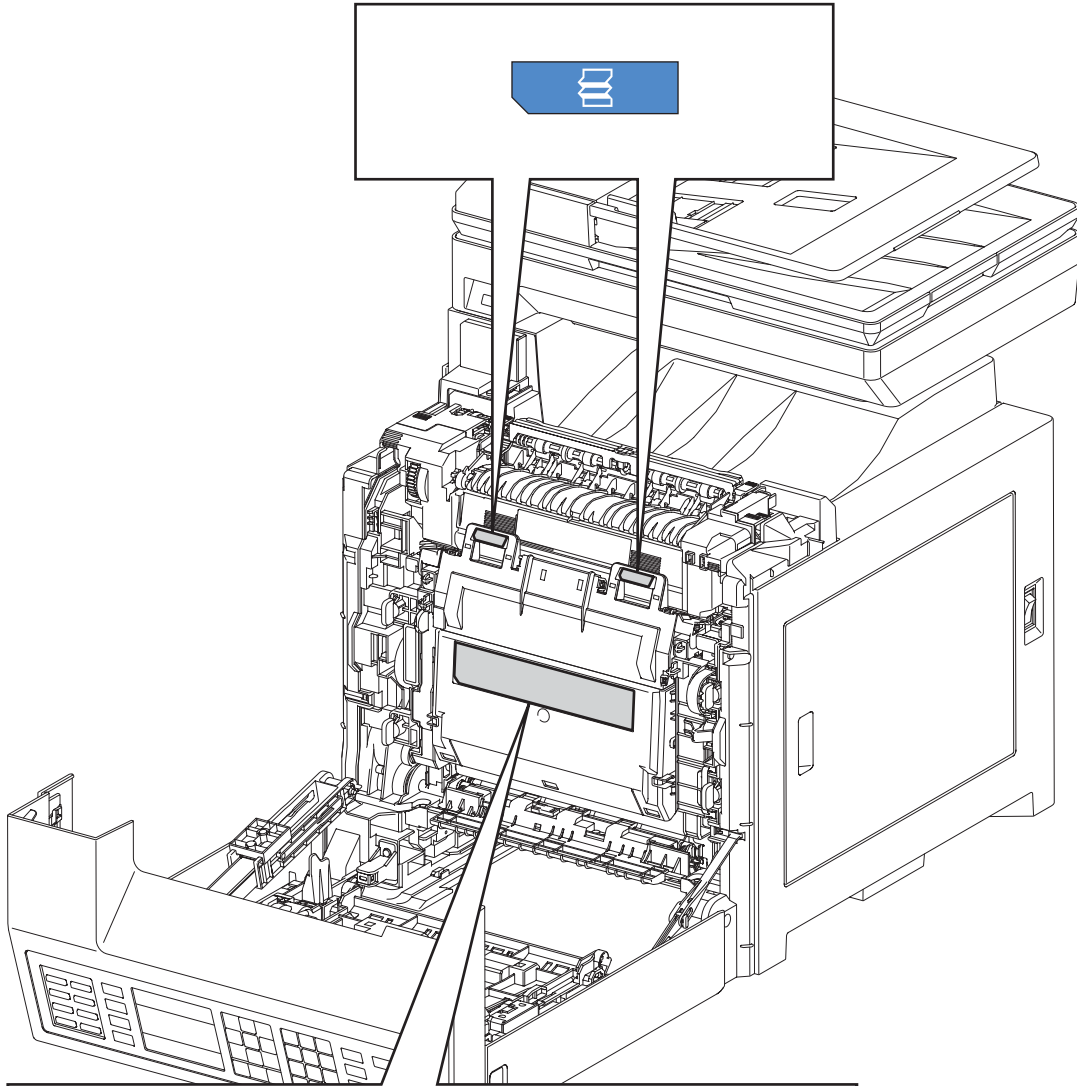
4.6.4 Caution label for ROS



4.6.5 Caution label for transfer belt and PHD unit

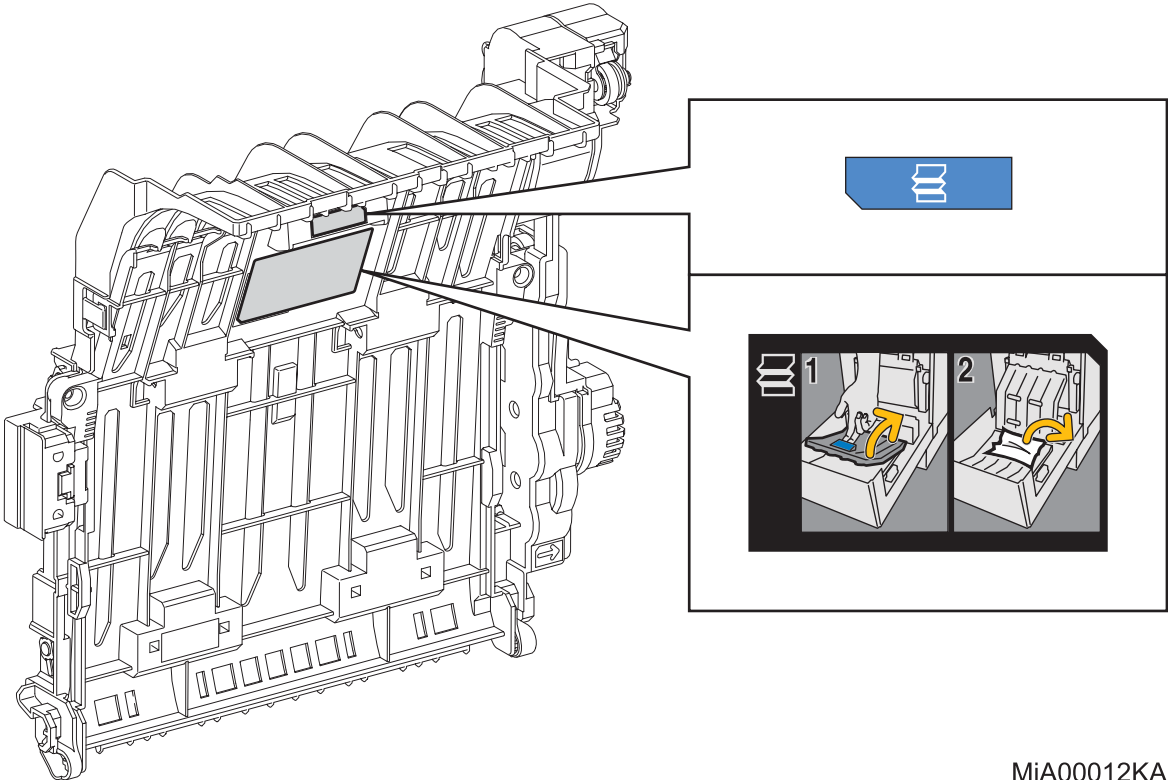


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4.6.6 Caution label for duplex



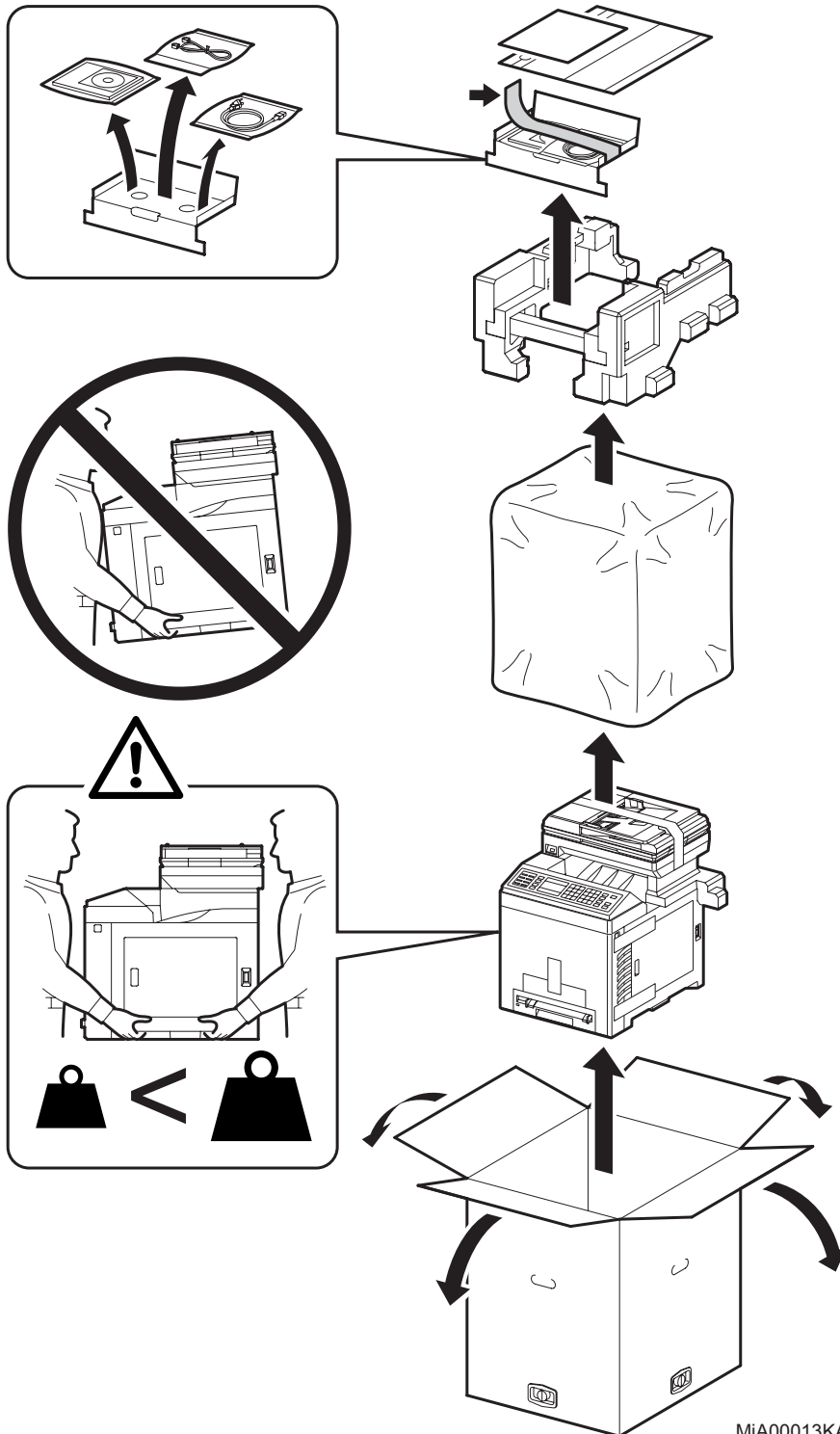
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Unpacking the Printer

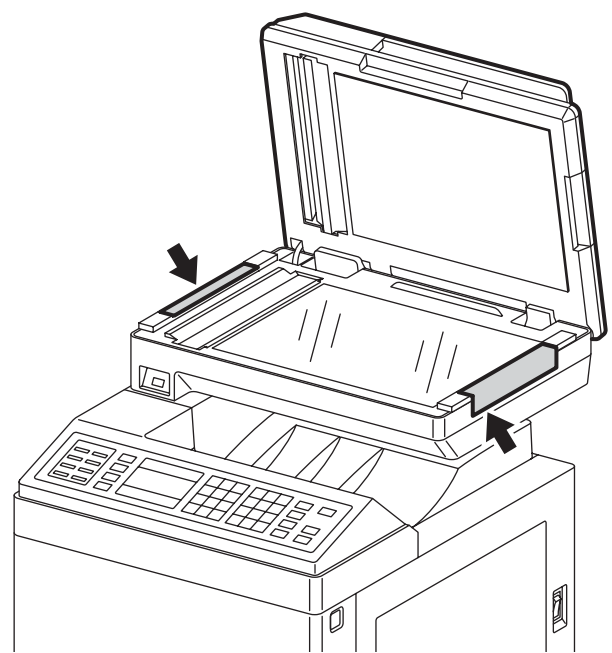
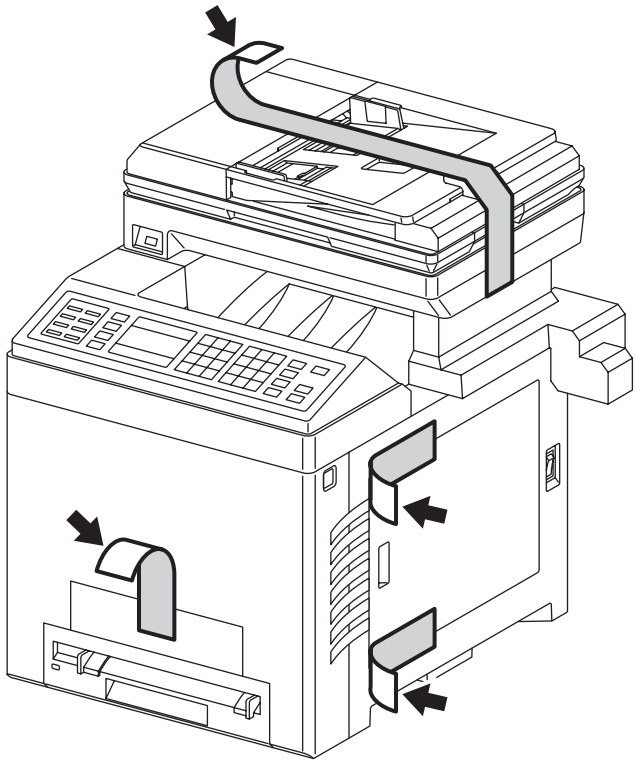


Take extreme care to avoid personal injuries.

Check the printer for evidence of any damages.
Peel all tapes off the printer.



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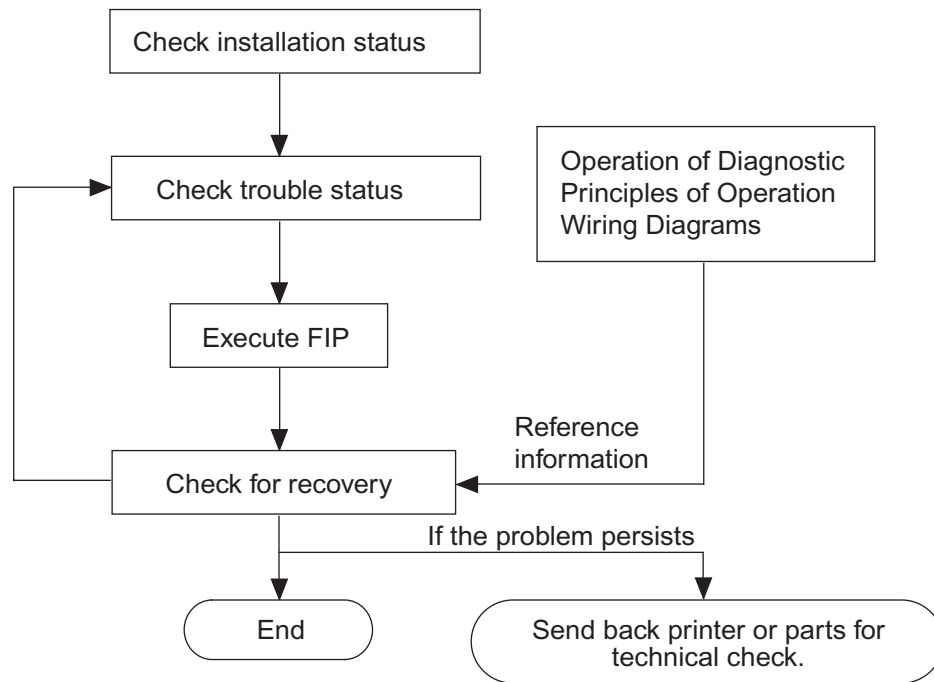
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1. Troubleshooting Overview

To increase the efficiency of troubleshooting, ensure that preliminary checks should be made to confirm the trouble status before proceeding to the Fault Isolation Procedure (FIP), Operation of Diagnostic (Chapter 2), Wiring Diagrams (Chapter 7), and Principles of Operation (Chapter 6).

1.1 Flow of Troubleshooting

Flow of the troubleshooting is as follows:



1.2 Check Installation Status

Be sure to check the following items before starting the troubleshooting procedures

- 1) The power supply voltage is within the specifications (measure the voltage at the wall outlet).
- 2) Power cord is free from breakage, short-circuit, disconnected wire, or incorrect connection in the power cord.
- 3) The printer is properly grounded.
- 4) The printer is not installed at a place subjected to high/low temperature, humidity, and sudden temperature changes.
- 5) The printer is not installed at or near water facilities, humidifier, heating appliance, fire, dust, or in airflow from air conditioner.
- 6) The printer is not installed in a place subjected to volatile or inflammable gas.
- 7) The printer is not installed under direct sunlight.
- 8) The printer is installed in a well-ventilated place.
- 9) The printer is installed on a firm and stable surface.
- 10) The paper meets the specifications (standard paper is recommended).
- 11) The printer is handled properly.
- 12) The high frequency service items are replaced at the recommended print count intervals.

1.3 Cautions on Service Operations

- 1) Be sure to remove the power cord unless otherwise required.



While the printer is powered ON, never touch the conductive parts unless otherwise required.

Never touch the conductive parts of the power switch and inlet of the LVPS, because they are live even while the printer is powered off.

- 2) When checking some parts with covers removed and with the interlock, safety, and power switches ON, disconnect the connectors (P/J411 and P/J412) on the ROS ASSY except unless otherwise required.



When checking some parts with covers removed and with the interlock, safety, and power switches ON, laser beams may be irradiated from the ROS ASSY. For your safety, be sure to disconnect the connectors (P/J411 and P/J 412) unless otherwise required.

- 3) When checking some parts with the Front Cover removed and the printer powered ON, be sure to remove the connector (P/J16) on the PWBA MCU unless otherwise required.



When checking some parts with the Front Cover removed and the printer powered ON, be sure to remove the connector (P/J16) on the MCU. Otherwise, a high voltage may be output from the HVPS.

When connecting the connector (P/J16) on the MCU according to the instructions in the FIP, never touch the HVPS and high voltage parts.

- 4) When outputting a high voltage using the Diag Tool, etc., keep all the covers on unless otherwise required.



When outputting a high voltage using the Diag Tool, etc., ensure that:

- The high voltage carrying parts must never be touched.***
- The instructions in this manual must be followed.***

- 5) When operating the drive unit using the Diag Tool, etc., keep all the covers on unless otherwise required.



When operating the drive unit using the Diag Tool, etc., ensure that:

- The drive unit must never be touched.***
- The instructions in this manual must be followed.***

- 6) When touching hot parts, be careful not to get burnt.

- 7) While working, be sure to wear a wrist band or the like to dissipate static charges from your body.

1.4 Cautions on Using FIP

- 1) When troubleshooting according to the FIP, have on hand a normal MCU, LVPS, HVPS, FUSER ASSY, TRANSFER ASSY, etc., for possible fault isolation.
- 2) In the initial check according to the FIP, check only items which can be simply checked.
- 3) In the initial check according to the FIP, check the constitutive parts of the major check parts and related parts, as well as major check parts.
- 4) When working with the printer, be sure to remove the power cord unless otherwise required. Never touch live parts if not required, while the power cord is connected.
- 5) Connector condition is denoted as follows:
 - [P/J12] → Connector (P/J12) is connected.
 - [P12] → Plug side with the connector (P/J12) removed (except when attached directly to the board).
 - [J12] → Jack side with the connector (P/J12) removed (except when attached directly to the board).
- 6) [P/J1-2PIN <=> P/J3-4PIN] in the FIP means measurement with the positive side of the measuring instrument connected to [2PIN] of [P/J1] and the negative side to [4PIN] of [P/J3].
- 7) [P/J1<=> P/J2] in the FIP means measurement for all terminals corresponding between [P/J1] and [P/J2] based on "Wiring Diagrams".
- 8) In [P/J1-2PIN <=> P/J3-4PIN] in the FIP where voltage is measured, [P/J3-4PIN] on the rear negative side is always at the AG (analog ground), SG (signal ground), or RTN (return). Therefore, after checking of proper conductivity between AGs, SGs, or RTNs respectively, the rear negative side can be connected to the PIN of AG, SG or RTN instead of [P/J3-4PIN]. However, care should be taken not to confuse [AG], [SG], and [RTN] because they are not on the same level.
- 9) When measuring the voltage at small connectors, use the dedicated tool. Handle the tool with care because its business end is pointed.
- 10) When measuring the voltage, set the TRANSFER ASSY, toner cartridge and sheet feeder, close the COVERS and power ON unless otherwise required.
- 11) Numerical values in the FIP are only for guideline. Approximate values are acceptable.
- 12) In each step of the FIP, parts removal and other procedures implicitly required for the step are omitted.
- 13) In the FIP, "Replacement" means the replacement of the parts that are considered to be the cause of the trouble. Replacement of those parts means the replacement of the assembly part (HIGH ASSY) that contain them.

- 14) In the FIP, the sheet feeder immediately below the printer main body is called "Tray 1", and the cassette below it is called "Tray 2".
- 15) Some of the instructions in the FIP are branched off depending on the specifications. Follow the applicable instruction.
- 16) For some optional components, you may have to refer to the manual of the relevant component for troubleshooting. Have the relevant manual at hand as needed.

1.5 Items To Be Confirmed Before Going To FIP Troubleshooting

Basic Printer Problems

Some printer problems can be easy to resolve. If a problem occurs with your printer, check each the following:

- 1) If a message is displayed on the LCD of operator panel, see "2.3 Status Code List".
- 2) The printer power cable is plugged into the printer and a properly grounded electrical outlet.
- 3) The printer power is powered ON.
- 4) The electrical outlet is not turned off by any switch or breaker.
- 5) Other electrical equipment plugged into the outlet is working.
- 6) All options are properly installed.
- 7) If you have checked all of the above and still have a problem, turn off the printer, wait for 10 seconds, and then turn on the printer. This often solves the problem.

Display Problems

- 1) If the operator panel displays only diamonds or is blank, check and try the action below. If the problem persists even after checking and executing the items below, execute "Flow 27 Operator Panel-ESS Communication Fail", "Flow 112 AC Power" or "Flow 113 DC Power".
 - a) Turn off the printer, wait for 10 seconds, and turn on the printer.
 - b) Self Test Message appears on the operator panel. When the test is completed, "Ready to Print" is displayed.
- 2) If menu settings changed from the operator panel have no effect, check and try the actions below.

Settings in the software program, the printer driver, or the printer utilities are overriding the settings made on the operator panel.

 - a) Change the menu settings from the printer driver, the printer utilities, or the software program instead of the operator panel.
 - b) Disable the settings in the printer driver, the printer utilities, or the software program so you can change settings on the operator panel.

Printing Problems

- 1) If a job did not print correct or incorrect characters were printed, check and try the actions below.
 - a) Make sure "Ready to Print" appears on the operator panel before sending a job to print. Press **Menu** to return to "Ready to Print".
 - b) Make sure print media is loaded in the printer. Press **Menu** to return to "Ready to Print".
 - c) Verify that you are using the correct printer driver.
 - d) Make sure you are using the correct Ethernet or USB cables and it securely connected at the back of the printer.
 - e) Verify that the correct print media size is selected.
 - f) If using a print spooler, verify that the spooler has not stalled.
 - g) Check the printer interface from the "Configure" menu. Determine the host interface you are using. Print a Panel Setting page to verify that the current interfaces settings are correct.
 - h) Output fonts will not print correctly using the PCL driver in its default mode. To correct this problem, use PostScript driver when using the PCL driver.

- 2) If secure print is not available or not printing, refer to the requirements below.
 - a) Minimum 256 MB is required.
 - b) RAM Disk must be enabled using the operation panel.
 - c) The number of secure print jobs your printer can store is dependent on the job size including number of pages, graphics, color attributes, and the amount of memory installed. To increase this number, add additional memory.
- 3) If print media misfeeds or multiple feeds occur, check and try the actions below.
 - a) Make sure the print media you are using meets the specifications for your printer. Refer to **Print Media Guidelines** of this section.
 - b) Flex print media before loading it in any of the sources.
 - c) Make sure the print media is loaded correctly.
 - d) Make sure the width and length guides on the print media sources are adjusted correctly.
 - e) If the print media are overfilled in sources, reduce the amount of media.
 - f) Load the recommended print side correctly for the type of print media you are using.
 - g) Turn the print media over or around and try printing again to see if feeding improves.
 - h) Check the print media type loaded in the source, and refill only one type of print media, if print media types are mixed.
 - i) Refill a new ream of print media, if some reams are mixed.
 - j) Remove the top and bottom sheets of a ream before loading the print media.
 - k) Do not reload print media until the print media source is empty.
- 4) If envelope misfeeds or multiple feeds occur, check and try the action below.
 - a) Remove the stack of envelopes from the Single Sheet Feeder (SSF).
- 5) If page breaks in unexpected places, check and try the action below.
 - a) Check the "Job Time-out" in the Basic Settings menu and increase the value.
- 6) If a job prints from the wrong source or on the wrong print media, check and try the action below.
 - a) Check the "Paper Size" and "Paper Type" in the Tray Settings menu on the printer operator panel and in the printer driver.
- 7) If print media does not stack neatly in the output tray, check and try the action below.
 - a) Turn the print media stack over in the tray or multipurpose feeder.

Print Media Guidelines

Print media refers to paper, labels, envelopes, and coated paper among others. Your printer provides high-quality printing on a variety of print media. Selecting the appropriate print media for your printer helps avoid printing troubles. This section describes selecting print media, caring for print media, and loading the print media in the standard 250-sheet tray.

Paper

For the best print quality in color, use 75 g/m² (20 lb) xerographic, grain long paper. For the best print quality in black and white, use 90 g/m² (24 lb) xerographic, grain long paper. It is recommended that you perform trial print before purchasing large quantities of print media.

When loading paper, identify the recommended print side on the paper package, and load the paper accordingly. See "Loading Print Media in the Standard 250-Sheet Tray and the Optional 250-Sheet Feeder" and "Loading Print Media in the SSF" for detailed loading instructions.

Paper Characteristics

The following paper characteristics affect print quality and reliability. It is recommended that you follow these guidelines when evaluating new paper stock.

Weight

The tray automatically feeds paper weights from 60 g/m² to 216 g/m² (16 lb to 80 lb bond) grain long. The single sheet feeder automatically feeds paper weights from 60 g/m² to 216 g/m² (16 lb to 80 lb bond) grain long. Paper lighter than 60 g/m² (16 lb) may not feed properly, and could cause paper jams. For best performance, use 75 g/m² (20 lb bond) grain long paper.

Curl

Curl is the tendency of print media to curve at its edges. Excessive curl can cause paper feeding problems. Curl usually occurs after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped, even in the paper tray, can contribute to paper curling prior to printing and cause feeding problems regardless of humidity. When printing on curled paper, straighten the paper and then insert it into the single sheet feeder.

Smoothness

The degree of paper smoothness directly affects the print quality. If the paper is too rough, the toner does not fuse on to the paper properly, resulting in poor print quality. If the paper is too smooth, it can cause paper feeding problems. Smoothness between 150 and 250 Sheffield points produces the best print quality.

Moisture Content

The amount of moisture in the paper affects both the print quality and the ability of the printer to feed the paper properly. Leave the paper in its original packaging until you are ready to use it. This limits the exposure of the paper to moisture changes that can degrade its performance.

Grain Direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either grain long, running the length of the paper, or grain short, running the width of the paper. For 60 g/m² to 135 g/m² (16 lb to 36 lb bond) paper, grain long fibers are recommended. For paper heavier than 135 g/m² (36 lb bond), grain short is preferred.

Fiber Content

Most high-quality xerographic paper is made from 100% chemically pulped wood. Paper containing fibers such as cotton may lead to degraded paper handling.

Recommended Paper

To ensure the best print quality and feed reliability, use 75 g/m² (20 lb) xerographic paper. Business paper designed for general business use also provides acceptable print quality. Only use paper able to withstand high temperatures without discoloring, bleeding, or releasing hazardous emissions. The laser printing process heats paper to high temperatures. Check with the manufacturer or vendor to determine whether the paper you have chosen is acceptable for laser printers.

It is recommended that you perform trial print before purchasing large quantities of print media. When choosing any print media, you should consider the weight, fiber content, and color.

Unacceptable Paper

The following paper types are not recommended for use with the printer:

- Chemically treated paper used to make copies without carbon paper, also known as carbonless paper, carbonless copy paper (CCP), or no carbon required (NCR) paper.
- Preprinted paper with chemicals that may contaminate the printer.
- Preprinted paper that can be affected by the temperature in the fuser.
- Preprinted paper that requires a registration (the precise print location on the page) greater than ±0.09 inches, such as optical character recognition (OCR) forms.

In some cases, you can adjust registration with your software program to successfully print on these forms.

- Coated paper (erasable bond), synthetic paper, and thermal paper.
- Rough-edged, rough or heavily textured surface paper, or curled paper.
- Recycled paper containing more than 25% post-consumer waste that does not meet DIN 19 309.
- Multiple-part forms or documents.
- Print quality may deteriorate (blank spaces or blotches may appear in the text) when printing on talc or acid paper.

Selecting Paper

Proper paper selection helps prevent jams and ensures trouble-free printing.

To help avoid jams or poor print quality:

- Always use new, undamaged paper.
- Before loading the paper, identify the recommended print side of the paper.
This information is usually indicated on the paper package.
- Do not use paper that you have cut or trimmed.
- Do not mix print media sizes, weights, or types in the same source. This may result in a paper jam.
- Do not remove the tray while printing is in progress.
- Ensure that the paper is properly loaded in the tray.
- Flex the paper back and forth, and then fan them. Straighten the edges of the stack on a level surface.

Identifying Print Media Sources and Specifications

The following tables provide information on standard and optional print media sources.

Supported Paper Sizes

Paper size	Single sheet feeder		Standard 250-sheet tray		Optional 250-sheet feeder		Duplexer
	Side	1 id	2 id	1 Side	2 id	1 id	
A4 (210 97 mm) m	Y	Y	Y	Y	Y	Y	Y
B5 (182 57 mm) m	Y	Y	Y	Y	Y	Y	N
A5 (148 10 mm) m	Y	Y	Y	Y	Y	Y	N
Letter (8.5 x 11 in)	Y	Y	Y	Y	Y	Y	Y
Folio 8.5 (3 n) x 1 i	Y	Y	Y	Y	Y	Y	Y
Legal (8.5 x 14 in)	Y	Y	Y	Y	Y	Y	Y
Executive (7.25 x 10.5 in)	Y	Y	Y	Y	Y	Y	N
Envelope #10 (4.125 x 9.5 in)	Y	N	Y	N	N	N	N
Monarch (3.875 x 7.5 in)	Y ^{*2}	N	Y	N	N	N	N
DL(110 x 220mm)	Y ^{*2}	N	Y	N	N	N	N
C5 (162 x 229mm)	Y	N	Y	N	N	N	N
Custom ^{*1}	Y	Y	Y	N	N	N	N

*1: Custom: width: 76.2 mm (3.0 inch) to 215.9 mm (8.5 inch)

length: 127.0 mm (5.0 inch) to 355.6 mm (14.00 inch)

*2: Monarch LEF and DL LEF are not available.

Supported Paper Types

Paper type		Single sheet feeder		Standard 250-sheet tray		Optional 250-sheet feeder		Duplexer	
		Side 1	Side 2	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2
Plain	Light	Y	Y	Y	Y	Y	Y	Y	N
	Normal	Y	Y	Y	Y	Y	Y	Y	N
	Thick	Y	Y	Y	Y	Y	Y	Y	N
Covers	Normal	Y	-	Y	-	N	-	N	-
	Thick	Y	-	Y	-	N	-	N	-
Coated	Normal	Y	-	N	-	N	-	N	-
	Thick	Y	-	N	-	N	-	N	-
Label	Normal	N	-	Y	-	N	-	N	-
	Thick	N	-	Y	-	N	-	N	-
Envelope		Y	-	Y	-	N	-	N	-
Recycled		Y	Y	Y	Y	Y	Y	Y	N
Letterhead		Y	-	Y	-	Y	-	Y	-
Preprinted		Y	-	Y	-	Y	-	Y	-
Prepunched		Y	-	Y	-	Y	-	Y	-
Color		Y	Y	Y	Y	Y	Y	Y	N

Paper Type Specifications

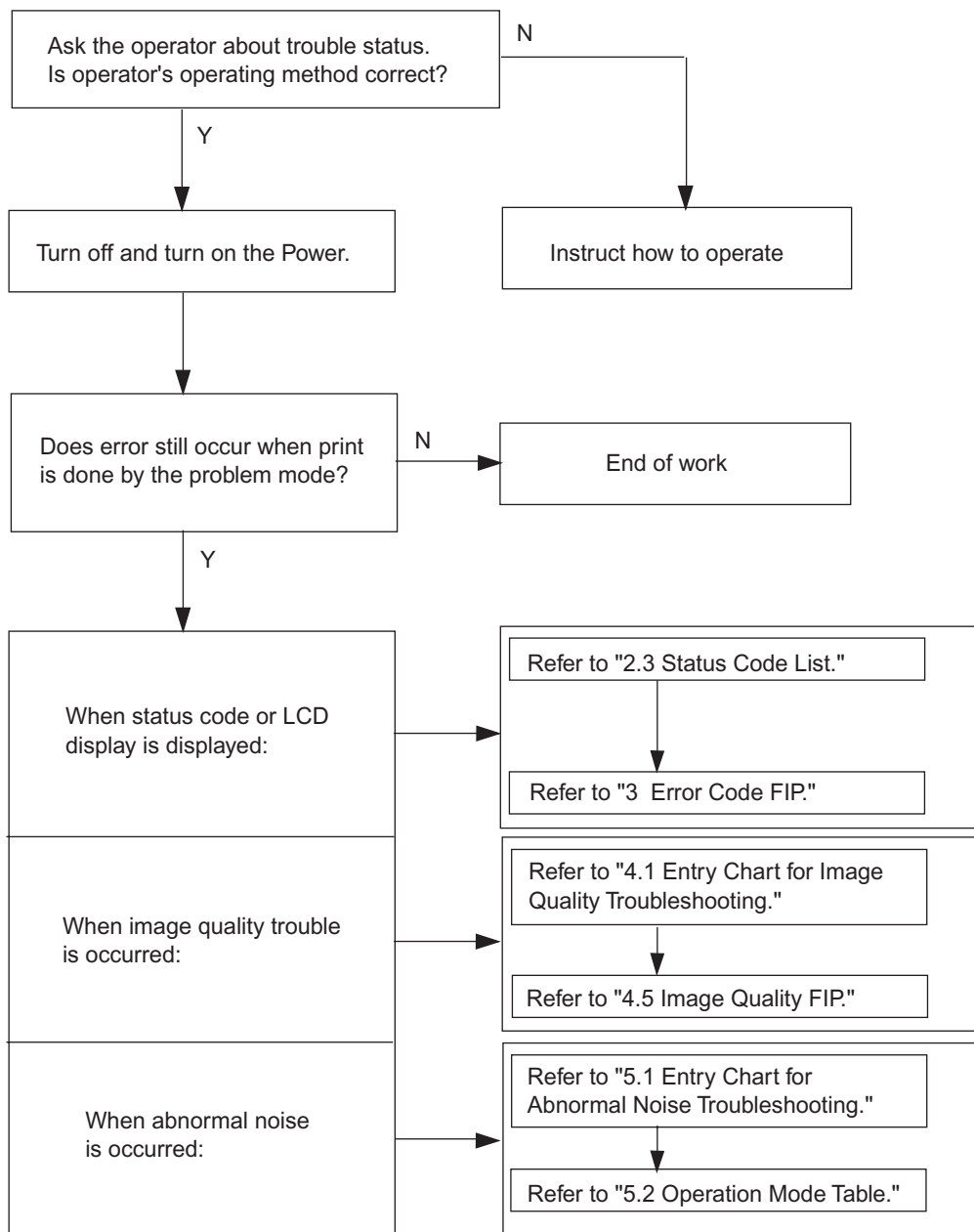
Paper type	Weight (g/m ²)	Remarks
Plain	60-90	-
Plain Thick	80/90-105	-
Recycled	60-105	-
Labels	-	Inkjet printer paper cannot be used.
Covers	106-163	-
Covers Thick	164-216	-
Envelope	-	-
Coated	106-163	Inkjet printer paper cannot be used.
Coated Thick	164-216	Inkjet printer paper cannot be used.
Letterhead	-	-
Preprinted	64	-
Prepunched	64	-
Color	64	-

2. FIP

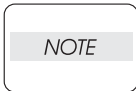
2.1 FIP

The FIP is the first step for trouble diagnosis. The FIP isolates the presence of various troubles including error codes, and guides the troubleshooting procedure.

2.2 Flow of FIP



2.3 Status Code List



Errors that occur when optional components are installed are gray-shaded.

Status Code		Error Message		Status Contents	FIP to be referred
		LCD	Status Window		
001	360	Restart Printer Contact Support ↕ Flip If Message Returns 001-360	Printer error. 001-360 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< IOT Fan Motor Failure > MCU detects an error upon receiving error signal from the Fan.	Flows 1 FIP-1.1
		Restart Printer Contact Support ↕ Flip If Message Returns 003-340	Printer error. 003-340 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.		
003	356	Restart Printer Contact Support ↕ Flip If Message Returns 003-356	Printer error. 003-356 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT NVRAM Error> The operation error of NVM (read/write check error etc.) is detected.	Flows 3 FIP-1.3
		Restart Printer Reseat Duplexer ↕ Flip Contact Support 004-311	Printer Error 004-311 Turn off the printer. Confirm Duplex is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.		
004	This code is given when the Optional 250-Sheet Feeder is installed.				
	312	Restart Printer Reseat Feeder ↕ Flip Contact Support 004-312	Printer error. 004-312 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT Feeder Configuration Failure> Option Sheet Feeder Configuration error is detected.	Flows 5 FIP-1.5

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
005	110	Paper Jam Open ADF Cover ↕ Flip and Clear Jam 005-110	Paper Jam has occurred at the ADF. 005-110 Remove the remaining documents from the ADF. Please click the Show Me How Button for details.	<PICKUP Jam> The Pick Up Jam occurred.	Flows 6 FIP-1.6
	121	Paper Jam Open ADF Cover ↕ Flip and Clear Jam 005-121	Paper Jam has occurred at the ADF. 005-121 Remove the remaining documents from the ADF. Please click the Show Me How Button for details.	<ADF Jam> The ADF Jam occurred.	Flows 6 FIP-1.6
	124	Job was Finished Open ADF Cover and ↕ Flip Remove Document 005-124	Job was Finished. The documents is remaining at the ADF. 005-124 Remove the remaining documents from the ADF. Please click the Show Me How Button for details.	<Virtual JAM> The ADF Jam occurred when the job is cancelled.	Flows 6 FIP-1.6
	301	Cover Open Close ADF Cover ↕ Flip 005-301 Scan	The ADF Cover is open. 005-301 Close the ADF Cover.	<ADF Cover Open> The ADF Cover is opened.	Flows 7 FIP-1.7
006	370	Restart Printer Contact Support ↕ Flip If Message Returns 006-370	Printer error. 006-370 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT ROS Failure> The operation error of ROS (rotational error etc.) is detected.	Flows 8 FIP-1.8
007	340	Restart Printer Contact Support ↕ Flip If Message Returns 007-340	Printer error. 007-340 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT Main Motor Failure> Main Motor failure is detected.	Flows 9 FIP-1.9

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
007	341	Restart Printer Contact Support ↕ Flip If Message Returns 007-341	Printer error. 007-341 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT Sub Motor Failure> Sub Motor failure is detected.	Flows 10 FIP-1.10
	344	Restart Printer Contact Support ↕ Flip If Message Returns 007-344	Printer error. 007-344 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Option Feeder Motor Failure> Option Feeder Motor failure is detected.	Flows 11 FIP-1.11
	371	Restart Printer Contact Support ↕ Flip If Message Returns 007-371	Printer error. 007-371 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT K Mode Solenoid Error 1> The error is generated when K Mode Solenoid (Color Mode Switching Solenoid) does not operate in specified time.	Flows 12 FIP-1.12
	372	Restart Printer Contact Support ↕ Flip If Message Returns 007-372	Printer Error 007-372 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT K Mode Solenoid Error 2> The error is generated when the gear which operates by K Mode Solenoid (Color Mode Switching Solenoid) rotates two times.	Flows 12 FIP-1.12
009	340	Restart Printer Contact Support ↕ Flip If Message Returns 009-340	Printer error. 009-340 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT CTD(ACD) Sensor Error> CTD(ACD) sensor error (analog-to-digital conversion etc.) is detected.	Flows 13 FIP-1.13
	360	Cartridge Error Reseat ↕ Flip Yellow Cartridge 009-360	Printer error. 009-360 Turn off the printer. Confirm Yellow Cartridge is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.	<IOT Yellow Toner CRUM Comm Fail> The Yellow Toner Cartridge CRUM communication failure is detected.	Flows 14 FIP-1.14

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
009	361	Cartridge Error Reset ↕ Flip Magenta Cartridge 009-361	Printer error. 009-361 Turn off the printer. Confirm Magenta Cartridge is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.	<IOT Magenta Toner CRUM Comm Fail > The Magenta Toner Cartridge CRUM communication failure is detected.	Flows 14 FIP-1.14
	362	Cartridge Error Reset ↕ Flip Cyan Cartridge 009-362	Printer error. 009-361 Turn off the printer. Confirm Cyan Cartridge is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.	<IOT Cyan Toner CRUM Comm Fail> The Cyan Toner Cartridge CRUM communication failure is detected.	Flows 14 FIP-1.14
	363	Cartridge Error Reset ↕ Flip Black Cartridge 009-363	Printer error. 009-361 Turn off the printer. Confirm Black Cartridge is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.	<IOT Black Toner CRUM Comm Fail> The Black Toner Cartridge CRUM communication failure is detected.	Flows 14 FIP-1.14
010	317	Restart Printer Reseat Fuser ↕ Flip Contact Support 010-317	The Fuser is either missing or not fully inserted into the printer. 010-317 CAUTION: Turn off the printer and wait for 30 minutes. Open the Front Cover and make sure that the Fuser have been fully installed. Please click the Show Me How Button for details.	<IOT Fuser Detached> Fuser detached is detected.	Flows 15 FIP-1.15
	351	Replace Fuser Now ↕ Flip Contact Support 010-351	Fuser Life Over 010-351 Contact customer support. Please click the Show Me How Button to show details.	<IOT Fuser Life Over> The value of Fuser counter has reached the replacement time.	Flows 16 FIP-1.16

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
010	354	Restart Printer Contact Support ↕ Flip If Message Returns 010-354	Printer Error 010-354 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT Environment Sensor Error> The Temperature sensor detected the temperature anomaly.	Flows 17 FIP-1.17
	377	Restart Printer Reseat Fuser ↕ Flip Contact Support 010-377	Printer error. 010-377 Turn off the printer. Confirm Fuser is correctly installed. Turn on the printer. Contact customer support if this failure is repeated.	<IOT Fuser Failure> The operation error of Fuser (Temperature anomaly error etc.) is detected.	Flows 18 FIP-1.18
	421	Ready to Print Replace Fuser ↕ Flip Now Contact Support ↕ Flip 010-421	Replace Fuser Now Contact customer support 010-421	< IOT Fuser Near Life> The Fuser is approaching the replacement time.	Flows 19 FIP-1.19
016	300	Restart Printer Contact Support ↕ Flip If Message Returns 016-300	Printer error. 016-300 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS Data Cache Error> The CPU cache error occurred.	Flows 20 FIP-1.20
	301	Restart Printer Contact Support ↕ Flip If Message Returns 016-301	Printer error. 016-301 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS Instruction Cache Error> The CPU instruction cache error occurred.	Flows 20 FIP-1.20
	302	Restart Printer Contact Support ↕ Flip If Message Returns 016-302	Printer error. 016-302 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS Illegal Exception> The Exception error occurred.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	310	Restart Printer Contact Support ↕ Flip If Message Returns 016-310	Printer Error 016-310 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS Font ROM Error (Main)> Built-in Font ROM checksum error.	Flows 20 FIP-1.20
	313	016-313 Restart Printer ↕ Flip Contact Support If Message Returns	Printer error. Turn off the printer, and turn it on again. Contact customer support if this failure is repeated. 016-313	<ESS ASIC Fail> The ASIC error occurred.	Flows 20 FIP-1.20
	315	Restart Printer Contact Support ↕ Flip If Message Returns 016-315	Printer error. 016-315 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS On Board RAM R/W Check Fail> An error occurred during the on-board RAM read/write check at the time of initialization.	Flows 20 FIP-1.20
	This code is given when the Option 512MB Memory is installed.				
	316	Restart Printer Reseat Memory ↕ Flip Contact Support 016-316	Printer error. 016-316 Turn off the printer. Remove the additional memory module from the slot, and then reattach it firmly. Turn on the printer. Contact customer support if this failure is repeated.	<ESS DIMM Slot RAM R/W Check Fail> Unsupported additional memory module is detected in the memory slot.	Flows 21 FIP-1.21
	317	Restart Printer Contact Support ↕ Flip If Message Returns 016-317	Printer error. 016-317 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS ROM Check (Main) Fail> Checksum error occurred in the main program ROM.	Flows 20 FIP-1.20
	This code is given when the Option 512MB Memory is installed.				
318	Restart Printer Reseat Memory ↕ Flip Contact Support 016-318	Printer error. 016-318 Remove the unsupported additional memory module. Contact customer support if this failure is repeated.	<ESS DIMM Slot RAM Error> Additional memory module is not completely inserted in the slot.	Flows 21 FIP-1.21	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	323	Restart Printer Contact Support ↕ Flip If Message Returns 016-323	Printer error. 016-323 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS NVRAM 1 R/W Check Fail> An error occurred during the master NVRAM 1 read/write check at the time of initialization.	Flows 20 FIP-1.20
	324	Restart Printer Contact Support ↕ Flip If Message Returns 016-324	Printer Error 016-324 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS NVRAM 2 R/W Check Fail> An error occurred during the slave NVRAM 2 read/write check at the time of initialization. (Reserved)	Flows 20 FIP-1.20
	327	Restart Printer Contact Support ↕ Flip If Message Returns 016-327	Printer error. 016-327 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS NVRAM 1 SIZE And ID Check Fail> Upon turning the power ON, an error occurred during checks on consistency of the NVRAM size between the system-required one and actual one and on consistency of the recorded IDs.	Flows 20 FIP-1.20
	This code is given when the Option Wireless Adapter is installed.				
	338	Restart Printer Reseat Wireless ↕ Flip Contact Support 016-338	Printer Error 016-338 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Option Wireless Adapter Error> The error is detected by Wireless option check.	Flows 22 FIP-1.22
340	Restart Printer Contact Support ↕ Flip If Message Returns 016-340	Printer error. 016-340 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<ESS Network Communication Fail> A communication error occurred between the On Board Network and ESS firmware.	Flows 20 FIP-1.20	
347	Restart Printer Contact Support ↕ Flip If Message Returns 016-347	Printer Error 016-347 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<On Board Network Fatal Error> An error occurred during the on-board network check.	Flows 23 FIP-1.23	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	362	Restart Printer Contact Support ↕ Flip If Message Returns 016-362	Printer error. 016-362 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Bus#0 Host Bridge Controller Error > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24
	363	Restart Printer Contact Support ↕ Flip If Message Returns 016-363	Printer error. 016-363 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Bus#1 Host Bridge Controller Error > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24
	364	Restart Printer Contact Support ↕ Flip If Message Returns 016-364	Printer error. 016-364 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Bus#0 Error Detected > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24
	366	Restart Printer Contact Support ↕ Flip If Message Returns 016-366	Printer error. 016-366 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Bus#1 Error Detected > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24
	367	Restart Printer Contact Support ↕ Flip If Message Returns 016-367	Printer error. 016-367 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Error Messages received from Bus#0-Device#0 > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24
	368	Restart Printer Contact Support ↕ Flip If Message Returns 016-368	Printer error. 016-368 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<PCI Error Messages received from Bus#0-Device#1 > Connection error occurred between the PCI BUS port and the port of peripheral devices.	Flows 24 FIP-1.24

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	370	Restart Printer Contact Support ↕ Flip If Message Returns 016-370	Printer error. 016-370 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<MCU-ESS Communication Fail> Communication fail between MCU and ESS.	Flows 25 FIP-1.25
	383	Invalid ID Data Violation ↕ Flip Press ✓ 016-383	Firmware download ID error has occurred 016-383 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download ID Error> Download file ID is invalid.	Flows 26 FIP-1.26
	384	Range Chk Error Data Violation ↕ Flip Press ✓ 016-384	Firmware download range error has occurred 016-384 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Range Error> At download, write-in destination address is invalid.Range check error.	Flows 26 FIP-1.26
	385	Header Error Data Violation ↕ Flip Press ✓ 016-385	Firmware download header checksum error has occurred 016-385 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download header Error> Download file header is invalid.	Flows 26 FIP-1.26
	386	Check Sum Error Data Violation ↕ Flip Press ✓ 016-386	Firmware download checksum error has occurred 016-386 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Check Sum Error> Download file checksum is invalid.	Flows 26 FIP-1.26
	387	Format Error Data Violation ↕ Flip Press ✓ 016-387	Firmware download format error has occurred 016-387 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Format Error> Download file format is invalid.	Flows 26 FIP-1.26

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	388	MPC Error Reset MPC ↕ Flip Press ✓ 016-388	Firmware download format error has occurred 016-388 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Initial Error> When downloading, failed in starting download mode.	Flows 26 FIP-1.26
	391	Protection Error Data Violation ↕ Flip Press ✓ 016-391	Firmware download protect error has occurred 016-391 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Protect Error> Performed FW download although FW update is prohibited by panel settings.	Flows 26 FIP-1.26
	392	Erase Flash Err. Contact Support ↕ Flip If Message Returns 016-392	Firmware download delete error has occurred 016-392 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Delete Error> Flash memory erase error occurred.	Flows 20 FIP-1.20
	393	Write Flash Err. Contact Support ↕ Flip If Message Returns 016-393	Firmware download write error has occurred 016-393 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Write Error> Flash memory write error occurred.	Flows 20 FIP-1.20
	394	Verify Error Contact Support ↕ Flip If Message Returns 016-394	Firmware download verify error has occurred 016-394 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Download Verify Error> Flash memory verify error occurred.	Flows 20 FIP-1.20
	503	SMTP Error Press %E ↕ Flip 016-503 Scan	-	<SMTP Server Address Resolution Fail for Maillib> SMTP server name resolution for email send failed.	Flows 27 FIP-1.27
	504	POP Error Press %E ↕ Flip 016-504 Scan	-	<POP Server Address Resolution Fail for Maillib> POP3 server name resolution for email send failed.	Flows 27 FIP-1.27

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	505	POP Login Error Press %E ↕ Flip 016-505 Scan	-	<POP Authentication Fail for Maillib> Cannot login to POP3 server to send email.	Flows 27 FIP-1.27
	506	SMTP Login Error Press %E ↕ Flip 016-506 Scan	-	<Required user entry item is empty> Some item is not set.	Flows 27 FIP-1.27
	507	SMTP Login Error Press %E ↕ Flip 016-507 Scan	-	<SMTP Authentication Fail for Maillib> Cannot login to SMTP server to send email.	Flows 27 FIP-1.27
	520	Restart Printer Certificate Fail ↕ Flip Contact Admin. 016-520	Certification error has occurred 016-520 Please inquire of the system administrator.	<Ipssec Certificate Error> A certification error occurred.	Flows 28 FIP-1.28
	530	Restart Printer Contact Support ↕ Flip If Message Returns 016-530 System	Printer error. 016-530 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<LDAP Address Book - Access Error> LDAP Address Book Other Access Errors.	Flows 29 FIP-1.29
	700	Out of Memory Job Failed ↕ Flip Press ✓ 016-700	The printer memory is full and cannot continue processing the current print job 016-700 Press Set Button to clear the message and cancel the current print job. Please click the Show Me How Button for details.	<Memory Over flow> The current printing job process cannot be continued because the memory capacity is exceeded.	Flows 30 FIP-1.30
	720	PDL Request Data Violation ↕ Flip Press ✓ 016-720	Error relating to PDL emulation problems occurs 016-720 Press Set Button to clear the message and cancel the current print job. Please click the Show Me How Button for details.	<PDL Error> The print data cannot be processed by PDL.	Flows 31 FIP-1.31
	753	Wrong Password Press ✓ ↕ Flip 016-753	-	<PDF password error> PDF password error.	Flows 32 FIP-1.32

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	755	PDF Print Disabled ↕ Flip Press ✓ 016-755	-	<PDF print disabled error> PDF print is not allowed.	Flows 32 FIP-1.32
	756	Job Failed Prohibited Time ↕ Flip Press ✓ 016-756	Now printer is in Prohibited Time 016-756 Please inquire of the system administrator.	<Auditron - Print prohibited time> Printing was executed at the print-prohibited time or the day of the week.	Flows 33 FIP-1.33
	757	User Account Not Registered ↕ Flip Press ✓ 016-757	Authentication error has occurred 016-757 The account is not registered. Please inquire of the system administrator.	<Auditron - Invalid User> An error occurred because the user's account settings did not match those of the Administrator.	Flows 34 FIP-1.34
	758	Function Disabled Denied Col print ↕ Flip Press ✓ 016-758	Function unavailable 016-758 It is a function that cannot be used. Please inquire of the system administrator.	<Auditron - Disabled Function> An error occurred because a user authorized only for B&W print attempted to execute color printing.	Flows 35 FIP-1.35
	759	Page Limit Reached Over your limits ↕ Flip Press ✓ 016-759	Printable page limit reached 016-759 Printable page limit reached, cannot print. Please inquire of the system administrator.	<Auditron - Reached Limit> An attempt was made to print more copies than the print count limit.	Flows 36 FIP-1.36
	764	SMTP Error Press %E ↕ Flip 016-764 Scan	-	<SMTP Server Connection Error> Error occurs when connecting to SMTP server.	Flows 27 FIP-1.27
	765	SMTP Server Full Press %E ↕ Flip 016-765 Scan	-	<SMTP Server HD Full> Capacity of SMTP server is not enough.	Check the server side.
	766	SMTP Error Press %E ↕ Flip 016-766 Scan	-	<SMTP Server File System Error> Error in SMTP server.	Check the server side.
	767	Address Error Press %E ↕ Flip 016-767 Scan	-	<Invalid Recipient Email Address> Recipient email address is incorrect.	Check the [Address Book] E-mail Address.

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	768	From Address Error Press %E ↕ Flip 016-768 Scan	-	<Invalid Sender Address (Login Error)> Sender email address is incorrect.	Check the [E-mail Alert] Reply Address.
	770	Network Error Press %E ↕ Flip 016-770 Scan	-	<MPC Firmware Version Mismatch> Error occurred when connecting to server during file transfer.	Check the network settings and Scan to Net settings.
	786	Network Error Press %E ↕ Flip 016-786 Scan	-	<Data Send/Receive Timeout Error> Timeout error occurs in scan data send/receive.	Flows 27 FIP-1.27
	790	Network Not Ready Press %E ↕ Flip 016-790 Scan	-	<F2N Module Starting-up> F2N module task is starting up, or IP address is not determined.	Checking the IP address.
	791	USB Memory Error USB Memory was removed. ↕ Flip Press %E 016-791 System	-	<USB Memory Removal Error (During Read)> USB memory is removed while memory reading job is being executed.	Flows 37 FIP-1.37
	799	Invalid Job Data Violation ↕ Flip Press ✓ 016-799	The configuration of the printer on the printer driver does not conform to the printer 016-799 Press the Set Button to clear the message and cancel the current print job. Make sure that the configuration of the printer on the printer driver conforms to the printer.	<Job Environment Violation> Detects violation data for the print condition. The print data specifies paper type/ size not available for the printer.	Flows 38 FIP-1.38
	This code is given when the Option Wireless Adapter is installed.				
920	Wireless Time-out Error ↕ Flip Press ✓ 016-920	Time-out Error has occurred thith Wireless 016-920 Press set and try again.	<Wireless Setting Error Time-out Error> The time-out was done to the connection with Register.	Flows 39 FIP-1.39	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
016	921	Wireless Download Error ↕ Flip Press ✓ 016-921	Download Error has occurred thith Wireless 016-921 Press set and try again.	<Wireless Setting Error Download Error> The error occurred while connecting it with Register.	Flows 40 FIP-1.40
	922	Wireless Session Overlap Error ↕ Flip Press ✓ 016-922	Session Overlap Error has occurred thith Wireless 016-922 Press set and try again.	<Wireless Setting Error Session Overlap Error> Two or more Register that operated by WPS-PBC was found.	Flows 41 FIP-1.41
	930	USB Host Error Unsupported ↕ Flip Device 016-930	USB host error 016-930 The device is not supported. Remove it from USB Font Port.	< USB HOST Error > Devices not supported have been detected.	Flows 42 FIP-1.42
	931	USB Host Error Hub is not supported ↕ Flip 016-931	USB host error 016-931 USB hub is not supported. Remove it from USB Font Port.	< USB HOST Error > It has been found that more stages of hubs than supported are connected.	Flows 42 FIP-1.42
	This code is given when the optional 512 MB memory module is installed.				
	980	Disk Full Job too Large ↕ Flip Press ✓ 016-980	Disk space is insufficient and cannot continue processing the current print job 016-980 Press Set Button to clear the message and cancel the current print job. Please click the Show Me How Button for details.	<Disk Full> The current printing job process cannot be continued because the RAM disk is full.	Flows 43 FIP-1.43
	981	Collate Full Job too Large ↕ Flip Press ✓ 016-981	Disk space is insufficient and cannot continue processing the current print job 016-981 Press Set Button to clear the message and cancel the current print job. Please click the Show Me How Button for details.	< Collate Full> Unable to collate due to insufficient memory.	Flows 44 FIP-1.44
	985	Mail Size Limits Press %E ↕ Flip 016-985 Scan	-	<Mail Size Error> Exceed the max mail size specified on the menu.	Flows 45 FIP-1.45
986	File Size Limits Press %E ↕ Flip 016-986 Scan	-	<File Size Error> As a result of conversion to the specified format, exceed the max file size specified for each format.	Flows 45 FIP-1.45	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
017	970	Memory Full Job Failure ↕ Flip Press %E 017-970 System	-	<Out of Memory> AIOC memory run out.	Flows 46 FIP-1.46
	971	H/W Error Job Failure ↕ Flip Press %E 017-971 System	-	<Flash ROM Error> Write error of image data storage Flash ROM.	Flows 47 FIP-1.47
	972	H/W Error Job Failure ↕ Flip Press %E 017-972 System	-	<Flash ROM Error> Erase error of image data storage Flash ROM.	Flows 47 FIP-1.47
	973	H/W Error Job Failure ↕ Flip Press %E 017-973 System	-	<Flash ROM Error> Suspend error of image data stor- age Flash ROM.	Flows 47 FIP-1.47
	974	H/W Error Job Failure ↕ Flip Press %E 017-974 System	-	<Flash ROM Error> Resume error of image data stor- age Flash ROM.	Flows 47 FIP-1.47
	975	File Error Job Failure ↕ Flip Press %E 017-975 System	-	<File Error> Exceed the maximum number of file handles.	Flows 46 FIP-1.46
	976	File Error Job Failure ↕ Flip Press %E 017-976 System	-	<File Error> Exceed the maximum number of controlled files.	Flows 46 FIP-1.46
	977	File Error Job Failure ↕ Flip Press %E 017-977 System	-	<File Error> Exceed the maximum number of controlled documents.	Flows 46 FIP-1.46
	978	File Error Job Failure ↕ Flip Press %E 017-978 System	-	<File Error> Exceed the maximum number of pages in document.	Flows 46 FIP-1.46
	979	File Error Job Failure ↕ Flip Press %E 017-979 System	-	<File Error> File multi-open.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
017	980	Report error Job Failure ↕ Flip Press %E 017-980 System	-	<Report File Open/Close Error> Report job fails to open/close report file.	Flows 20 FIP-1.20
	986	File Error Job Failure ↕ Flip Press %E 017-986 System	-	<File Error> Create empty file (0Byte).	Flows 20 FIP-1.20
	987	File Error Job Failure ↕ Flip Press %E 017-987 System	-	<File Error> Cannot read file because it is bigger than read destination buffer.	Flows 46 FIP-1.46
	988	PCScan Time Out Job Failure ↕ Flip Press %E 017-988 Scan	-	<PC Scan Time Out> Timeout at start of ScanToApplication.	Flows 48 FIP-1.48
	989	File Error Job Failure ↕ Flip Press %E 017-989 System	-	<File Size Over> Stop writing because size of file to be written is bigger than read destination buffer (even if file writing is continued, it is impossible to read the file).	Flows 46 FIP-1.46
024	360	MCU Flash Error Contact Support ↕ Flip If Message Returns 024-360	MCU DownLoad Error 024-360 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<MCU Down Load Error> Download failure of MCU firmware.	Flows 49 FIP-1.49
	362	Restart Printer Contact Support ↕ Flip If Message Returns 024-362	Printer Error 024-362 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IOT Start Image Marking Timeout> "Start Image Making" has not been issued within the time allowed.	Flows 50 FIP-1.50
	985	Pause Feed SSF Press ✓ ↕ Flip to Feed 024-985	-	<Waiting for "Continue" key to be pressed after reloading paper to the SSF> Printer starts printing automatically after a certain period of time even if the key is not pressed.	Flows 51 FIP-1.51
026	720	Memory Full USB Memory full ↕ Flip Press %E 026-720 Scan	-	<USB Memory Full> USB memory is full.	Flows 37 FIP-1.37

Status Code		Error Message		Status Contents	FIP to be referred
		LCD	Status Window		
026	721	File Write Error Press %E ↕ Flip 026-721 Scan	-	<USB Memory Write Error> Writing to USB memory failed.	Flows 37 FIP-1.37
027	446	Restart Printer IPv6 Duplicate ↕ Flip 027-446	-	<IPv6 duplicate> Duplicate IPv6 addresses detected upon startup.	Flows 52 FIP-1.52
	452	Restart Printer IPv4 Duplicate ↕ Flip 027-452	-	<IPv4 duplicate> Duplicate IPv4 addresses detected upon startup.	Flows 52 FIP-1.52
031	521	SMB Login Error Press %E ↕ Flip 031-521 Scan	-	<In SMB scan, login-able workstation is restricted> In SMB scan, login-able workstation is restricted.	Flows 53 FIP-1.53
	522	SMB Login Error Press %E ↕ Flip 031-522 Scan	-	<SMB user authentication fail or SMBScanener login fail> In SMB scan, login access is rejected. Request is not allowed.	Flows 53 FIP-1.53
	523	SMB Error Share Name Error ↕ Flip Press %E 031-523 Scan	-	<SMB Server Error> Problem with share name in SMB scan server.	Flows 54 FIP-1.54
	524	SMB Login Error Press %E ↕ Flip 031-524 Scan	-	<SMB Scan User Overlimit> Exceed the upper limit of the number of SMB scan users.	Flows 55 FIP-1.55
	525	SMB Error File Access Error ↕ Flip Press %E 031-525 Scan	-	<SMB scan client has no access right (Win9x)> SMB scan client has no access right.	Flows 56 FIP-1.56
	526	DNS Error Name Resolve Error ↕ Flip Press %E 031-526 Scan	-	<DNS Error> SMB server name resolution failed.	Flows 54 FIP-1.54
	527	DNS Error Server Address Error ↕ Flip Press %E 031-527 Scan	-	<SMB Scan DNS Server Not Set> DNS server is not set.	Set DNS address, or set forwarding destination server address as IP address.

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
031	528	SMB Error Server Not Found ↕ Flip Press %E 031-528 Scan	-	<In SMB scan, server connection error> Cannot find SMB server.	Flows 54 FIP-1.54
	529	SMB Login Error Press %E ↕ Flip 031-529 Scan	-	<Problem with SMB scan login name or password> Invalid password.(Win9x)	Flows 57 FIP-1.57
	530	SMB Path Error Press %E ↕ Flip 031-530 Scan	-	<Problem with storage location of scanned image in SMB scan server> Problem with storage location.	Flows 57 FIP-1.57
	531	SMB List Error Press %E ↕ Flip 031-531 Scan	-	<Couldn't get file/folder name of SMB scan server> Couldn't get file/folder name of server.	Flows 57 FIP-1.57
	532	SMB Error File Name Error ↕ Flip Press %E 031-532 Scan	-	<Suffix of SMB scan file name/ folder name is overlimit> Suffix of file name/folder name is overlimit.	Flows 57 FIP-1.57
	533	SMB Error File Make Error ↕ Flip Press %E 031-533 Scan	-	<SMB Scan File Creation Fail> Fail to create file.	Flows 57 FIP-1.57
	534	SMB Error Folder Make Error ↕ Flip Press %E 031-534 Scan	-	<SMB Scan Folder Creation Fail> Fail to create folder.	Flows 57 FIP-1.57
	535	SMB Error File Delete Error ↕ Flip Press %E 031-535 Scan	-	<SMB Scan File Deletion Fail> Fail to delete file.	Flows 57 FIP-1.57
	536	SMB Error Folder Delete Error ↕ Flip Press %E 031-536 Scan	-	<SMB Scan Folder Deletion Fail> Fail to delete folder.	Flows 57 FIP-1.57
	537	SMB Error Disk Full Error ↕ Flip Press %E 031-537 Scan	-	<No free space in storage location on SMB scan data server> Storage location has no free space.	Check the server side.
539	SMB Error Server Name Error ↕ Flip Press %E 031-539 Scan	-	<Invalid SMB server (NetBIOS) name is specified> Invalid SMB server (NetBIOS) name is specified.	Ask to the system administrator.	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
031	540	SMB Login Error Press %E ↕ Flip 031-540 Scan	-	<SMB protocol error(4-007)Invalid scan domain name is specified>	Ask to the system administrator.
	541	SMB Login Error Press %E ↕ Flip 031-541 Scan	-	<SMB protocol error (4-008)Invalid scan user name is specified> Invalid scan user name is specified.	Flows 57 FIP-1.57
	542	SMB initializing Press %E ↕ Flip 031-542 Scan	-	<SMB(TCP/IP) is not active> SMB(TCP/IP) is not active.	Ask to the system administrator.
	543	SMB Login Error Press %E ↕ Flip 031-543 Scan	-	<SMB protocol error(4-045)Scan login prohibited time> Login prohibited time.	Ask to the system administrator.
	544	SMB Login Error Press %E ↕ Flip 031-544 Scan	-	<SMB protocol error(4-046) Password expired> Password expired.	Change the password.
	545	SMB Login Error Press %E ↕ Flip 031-545 Scan	-	<SMB protocol error(4-047) Password change is required> Password change is required.	Change the password.
	546	SMB Login Error Press %E ↕ Flip 031-546 Scan	-	<SMB protocol error(4-048)User is invalid> User is invalid.	Flows 57 FIP-1.57
	547	SMB Login Error Press %E ↕ Flip 031-547 Scan	-	<SMB protocol error(4-049)Lock-out> User is locked out.	Flows 57 FIP-1.57
	548	SMB Login Error Press %E ↕ Flip 031-548 Scan	-	<SMB protocol error(4-050)User is expired> User is expired.	Ask to the system administrator.
	549	SMB Login Error Press %E ↕ Flip 031-549 Scan	-	<SMB protocol error(4-051)User is restricted> User is restricted. Null password is prohibited.	Ask to the system administrator.
	550	SMB Error File Append Error ↕ Flip Press %E 031-550 Scan	-	<SMB Scan Append Command Fail> Have no append access right to the file. Server does not support SMB append command.	Ask to the system administrator.
551	SMB Error Rename Error ↕ Flip Press %E 031-551 Scan	-	<SMB Scan Rename Command Fail> Have no rename access right to the file. Server does not support SMB rename command.	Ask to the system administrator.	

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
031	552	SMB Error File Duplication ↕ Flip Press %E 031-552 Scan	-	<SMB Error> "Cancel" is selected for processing in the case of file name duplication, and job is canceled because of file name duplication.	Ask to the system administrator.
	574	DNS Error Name Resolve Error ↕ Flip Press %E 031-574 Scan	-	<FTP Scan Host Name Resolution Fail> DNS library call error.	Ask to the system administrator and check the network setting.
	575	DNS Error Server Address Error ↕ Flip Press %E 031-575 Scan	-	<FTP Scan DNS Server Not Set> DNS library call error.	Check the network settings.
	576	FTP Error Server Not Found ↕ Flip Press %E 031-576 Scan	-	<Server Connection Error in FTP Scan> Network connection failed.	Flows 58 FIP-1.58
	578	FTP Login Error Press %E ↕ Flip 031-578 Scan	-	<FTP Scan Login Name or Password Error> USER./PASS command failed.	Flows 59 FIP-1.59
	579	FTP Path Error Press %E ↕ Flip 031-579 Scan	-	<Problem with Location FTP-scanned Image is Saved in> Fail to move data to Repository-Path.	Flows 58 FIP-1.58
	580	FTP Error NLST Command Error ↕ Flip Press %E 031-580 Scan	-	<Fail to get file name/folder name of FTP scan server> NLST command failed.	Flows 59 FIP-1.59
	581	FTP Error File Name Error ↕ Flip Press %E 031-581 Scan	-	<Suffix of FTP scan file name/folder name is overlimit> Same as left.	Flows 58 FIP-1.58
	582	FTP Error STOR Command Error ↕ Flip Press %E 031-582 Scan	-	<FTP Scan File Creation Fail> STOR command failed.	Flows 59 FIP-1.59

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
031	584	FTP Error MKD Command Error ↕ Flip Press %E 031-584 Scan	-	<FTP Scan Folder Creation Fail> MKD command failed.	Flows 58 FIP-1.58
	585	FTP Error DEL Command Error ↕ Flip Press %E 031-585 Scan	-	<FTP Scan File Deletion Fail> DEL command failed.	Flows 59 FIP-1.59
	587	FTP Error RMD Command Error ↕ Flip Press %E 031-587 Scan	-	<FTP Scan Folder Deletion Fail> RMD command failed.	Flows 58 FIP-1.58
	588	FTP Error Write Error ↕ Flip Press %E 031-588 Scan	-	<FTP Scan Server Data Write Fail> Data writing to FTP scan server has failed.	Flows 59 FIP-1.59
	590	FTP Error File Duplication ↕ Flip Press %E 031-590 Scan	-	<FTP Error> "Cancel" is selected for processing in the case of file name duplication, and job is canceled because of file name duplication.	Turning off and on the printer power. If the error occurred again, replace the printer.
	594	FTP Error TYPE Command Error ↕ Flip Press %E 031-594 Scan	-	<FTP Scan TYPE Command Fail (Network Error)> TYPE command failed.	Flows 58 FIP-1.58.
	595	FTP Error PORT Command Error ↕ Flip Press %E 031-595 Scan	-	<FTP Scan PORT Command Fail (Network Error)> PORT command failed.	Flows 59 FIP-1.59
	598	FTP Error APPE Command Error ↕ Flip Press %E 031-598 Scan	-	<FTP Scan Append Command Fail> APPE command failed.	Flows 58 FIP-1.58

Status Code		Error Message		Status Contents	FIP to be referred
		LCD	Status Window		
031	599	FTP Error Rename Error ↕ Flip Press %E 031-599 Scan	-	<FTP Scan Rename Command Fail> RNFR command or RNTD command failed.	Ask to the system administrator.
	501	Codec Error Job Failure ↕ Flip Press %E 033-501 Fax	-	<CODEC Error> Cancel Codec processing due to error of read part during manual send.	Flows 60 FIP-1.60
033	502	File Error Job Failure ↕ Flip Press %E 033-502 Fax	-	<File Open Error> The File Open error occurred.	Flows 20 FIP-1.20
	503	Memory Full Job Failure ↕ Flip Press %E 033-503 Fax	-	<Memory Full> In receive, memory full.	Flows 46 FIP-1.46
	510	Codec Error Job Failure ↕ Flip Press %E 033-510 Fax	-	<CODEC Error> In JBIG data decode, error in the number of decode line in one stripe.	Flows 47 FIP-1.47
	511	Communication Job Failure ↕ Flip Press %E 033-511 Fax	-	<Communication Error> Result of MH,HR,MMR receive decode is 0 Line.	Flows 61 FIP-1.61
	512	Communication Job Failure ↕ Flip Press %E 033-512 Fax	-	<Modem Parameter Exchange Error> Modem Parameter Exchange Error.	Flows 62 FIP-1.62
	513	Communication Job Failure ↕ Flip Press %E 033-513 Fax	-	<Communication Error> Communication shutdown due to memory full.	Flows 46 FIP-1.46
	517	Password Error Job Failure ↕ Flip Press %E 033-517 Fax	-	<DFAX Password Error> The password for D-Fax does not match the password for "FAX Function Lock".	Flows 63 FIP-1.63

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
033	518	Country is not Set Job Failure ↕ Flip Press %E 033-518 Fax	-	<DFAX Fax Country is not set correctly> When DFAX job is executed, Fax Country code is "Unknown".	Set the [Country] of the [Fax Setting] on the [Admin Menu] correctly
	519	Function is Disabled Job Failure ↕ Flip Press %E 033-519 Fax	-	<DFAX Fax Function is not available> When DFAX job is executed, Fax function is not Enabled. When this error occurs at the same time as 033-518, 033-519 is displayed preferentially.	Set the [Fax] of the [Function Enable] on the [secure Settings] of the [Admin Menu] correctly.
	520	Codec Error Job Failure ↕ Flip Press %E 033-520 Fax	-	<JBF_ERROR_CALLBACK> Callback function returns error.	Flows 20 FIP-1.20
	521	Codec Error Job Failure ↕ Flip Press %E 033-521 Fax	-	<JBF_ERROR_MARKER_ABORT > Detect ABORT marker.	Flows 20 FIP-1.20
	522	Codec Error Job Failure ↕ Flip Press %E 033-522 Fax	-	<JBF_ERROR_MARKER_UNKN OWN> Detect invalid marker.	Flows 20 FIP-1.20
	523	Codec Error Job Failure ↕ Flip Press %E 033-523 Fax	-	<JBF_ERROR_MARKER_NOT_FOUND> Predetermined marker cannot be found.	Flows 20 FIP-1.20
	524	Codec Error Job Failure ↕ Flip Press %E 033-524 Fax	-	<JBF_ERROR_MARKER_BAD_A TMOVE> Adaptive template is moved incorrectly.	Flows 20 FIP-1.20
	525	Codec Error Job Failure ↕ Flip Press %E 033-525 Fax	-	<JBF_ERROR_MARKER_BAD_N EWLEN> Image height is changed incorrectly.	Flows 20 FIP-1.20
	526	Codec Error Job Failure ↕ Flip Press %E 033-526 Fax	-	<JBF_ERROR_BIH> BIH data error.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
033	528	Prohibited Time Job Failure ↕ Flip Press %E 033-528 Fax	-	<DFAX FaxCom TimeOver> Communication for DFAX job starts outside permitted period.	Ask to the system administrator.
	751	Communication Job Failure ↕ Flip Press %E 033-751 Fax	-	<Over Run> Modem receive data overrun.	Flows 47 FIP-1.47
	752	Busy Job Failure ↕ Flip Press %E 033-752 Fax	-	<During Call Busy Tone> In Tel/Fax mode, detect busy tone while calling external phone.	Flows 64 FIP-1.64
	753	Communication Job Failure ↕ Flip Press %E 033-753 Fax	-	<CJ Not Detection> The CJ can not be detected.	Flows 47 FIP-1.47
	754	Communication Job Failure ↕ Flip Press %E 033-754 Fax	-	<V8 Error> The V8 error occurred.	Flows 47 FIP-1.47
	755	Communication Job Failure ↕ Flip Press %E 033-755 Fax	-	<Phase2 Error> The Phase 2 (Line Probing) error occurred.	Flows 47 FIP-1.47
	756	Communication Job Failure ↕ Flip Press %E 033-756 Fax	-	<Phase 3 Error> The Phase 3 (Primary Channel Equalizer Training) error occurred.	Flows 47 FIP-1.47
	757	Communication Job Failure ↕ Flip Press %E 033-757 Fax	-	<Primary Channel Synchronization Error> The Primary Channel Synchronization Error occurred.	Flows 47 FIP-1.47
	758	Communication Job Failure ↕ Flip Press %E 033-758 Fax	-	<Control Channel Synchronization Error> The Control Channel Synchronization Error occurred.	Flows 47 FIP-1.47
	759	Communication Job Failure ↕ Flip Press %E 033-759 Fax	-	<Control Channel Retrain Error> The Control Channel Retrain Error occurred.	Flows 47 FIP-1.47

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
033	760	Communication Job Failure ↕ Flip Press %E 033-760 Fax	-	< Control Channel OFF Time Out> The Control Channel OFF Time Out occurred.	Flows 47 FIP-1.47
	761	Communication Job Failure ↕ Flip Press %E 033-761 Fax	-	< Primary Channel OFF Time Out> The Primary Channel OFF Time Out occurred.	Flows 47 FIP-1.47
	762	Communication Job Failure ↕ Flip Press %E 033-762 Fax	-	< DM Prevention Function Receive Refuse> The incoming data was rejected by the DM prevention function.	Flows 65 FIP-1.65
	763	Communication Job Failure ↕ Flip Press %E 033-763 Fax	-	<Manual Transmission Read Manuscript Not Do> In manual send, cannot make document read on time.	Flows 47 FIP-1.47
	764	Communication Job Failure ↕ Flip Press %E 033-764 Fax	-	<Draw Data Create Not Do> When sending, cannot make image data creation on time.	Flows 47 FIP-1.47
	765	Codec Error Job Failure ↕ Flip Press %E 033-765 Fax	-	<File Pointer Error> In encode/decode, Read/Write file pointer error.	Flows 47 FIP-1.47
	766	Codec Error Job Failure ↕ Flip Press %E 033-766 Fax	-	<Target File Opening> In decode, encoding target file open.	Flows 47 FIP-1.47
	767	Codec Error Job Failure ↕ Flip Press %E 033-767 Fax	-	<MMR MN86064 Decode Error> In MMR decode, MN86064 decode error.	Flows 47 FIP-1.47
	769	Codec Error Job Failure ↕ Flip Press %E 033-769 Fax	-	<JBIG NEWLEN Marker Error> NEWLEN marker undetected.	Flows 47 FIP-1.47
	770	Codec Error Job Failure ↕ Flip Press %E 033-770 Fax	-	<YD Error> Detect YD error in JBIG data decode.	Flows 47 FIP-1.47

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
033	771	Codec Error Job Failure ↕ Flip Press %E 033-771 Fax	-	<Abort Marker Error> Detect abort marker error in JBIG data decode.	Flows 47 FIP-1.47
	772	Codec Error Job Failure ↕ Flip Press %E 033-772 Fax	-	<Undefined Marker Error> Detect undefined marker.	Flows 47 FIP-1.47
	773	Codec Error Job Failure ↕ Flip Press %E 033-773 Fax	-	<BIH Error> BIH error in JBIG data decode.	Flows 47 FIP-1.47
	774	Buffer Job Failure ↕ Flip Press %E 033-774 Fax	-	<FAX TX Encode Output Buffer Over> In FAX send, JBIG encode output buffer overflow.	Flows 66 FIP-1.66
	775	Buffer Job Failure ↕ Flip Press %E 033-775 Fax	-	<FAX RX Encode Output Buffer Over> In FAX receive, JBIG encode output buffer overflow.	Flows 67 FIP-1.67
	776	Buffer Job Failure ↕ Flip Press %E 033-776 Scan	-	<SCAN Encode Output Buffer Over> In FAX scan and D-FAX scan, JBIG encode output buffer overflow.	Flows 66 FIP-1.66
	777	Buffer Job Failure ↕ Flip Press %E 033-777 Fax	-	<FAX RX Decode Input Buffer Over> In FAX receive, when copying from ECM buffer to JBIG decode input buffer, input buffer overflow.	Flows 67 FIP-1.67
	779	Report Error Press %E ↕ Flip 033-779 Fax	-	<Log File Create Fail> Cannot create log file of communication result.	Flows 67 FIP-1.67
	782	Communication Job Failure ↕ Flip Press %E 033-782 Fax	-	<NSS/DCS Function disagreement> Received NSS/DCS function disagrees with capability of own terminal.	Flows 68 FIP-1.68
	784	Buffer Job Failure ↕ Flip Press %E 033-784 Fax	-	<Buffer Job Failure> In FAX receive, JBIG decode output buffer overflow.	Flows 67 FIP-1.67

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
033	786	Codec Error Job Failure ↕ Flip Press %E 033-786 Fax	-	<Codec Error Job Failure> In JBIG data decode, discrepancy between the number of decode line and the number of BIH line.	Flows 47 FIP-1.47
	787	Memory Full Job Failure ↕ Flip Press %E 033-787 Fax	-	<Memory Full Job Failure> Calling table full.	Flows 47 FIP-1.47
	788	Memory Full Job Failure ↕ Flip Press %E 033-788 Fax	-	<Memory Full Job Failure> Flash full. (for DFAX)	Flows 46 FIP-1.46
	795	Accumulation Limit Press %E ↕ Flip 033-795 Fax	-	<FAX Send Count Limit> Reach the upper limit of Fax send accumulation pages. The [033-795] error occurs when the sheet count of a single fax transmission exceeds 75.	To send more than 75 sheets at a time, divide the documents in blocks.
	799	Communication Job Failure ↕ Flip Press %E 033-799 Fax	-	<Communication Job Failure> In MH,HR,MMR receive, exceed the maximum number of received lines for 1 page.	Flows 69 FIP-1.69
034	515	Communication Job Failure ↕ Flip Press %E 034-515 Fax	-	<DIS DCS Illegal Command Receive> Receive illegal command such as DIS, DCS receive from calling terminal in spite of having no ability to receive.	Flows 62 FIP-1.62
	791	Line Connection Error Job Failure ↕ Flip Press %E 034-791 Fax	-	<Check Line Connection> The Telephone Line Connection Error.	Flows 70 FIP-1.70
	799	Invalid Data Job Failure ↕ Flip Press %E 034-799 Fax	-	<No Dial Data> Auto dial is activated but no dial data exist.	Flows 62 FIP-1.62
035	701	No Answer Job Failure ↕ Flip Press %E 035-701 Fax	-	<Send T1 Time Out> In send, T1 timeout.	Flows 62 FIP-1.62

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
035	702	Communication Job Failure ↕ Flip Press %E 035-702 Fax	-	<Receive DCN> DCN receive.	Flows 62 FIP-1.62
	704	Communication Job Failure ↕ Flip Press %E 035-704 Fax	-	<Not Send Ability> Remote device has no ability to send.	Flows 62 FIP-1.62
	705	Communication Job Failure ↕ Flip Press %E 035-705 Fax	-	<DCS/NSS Resend Over> DCS/NSS resend over.	Flows 62 FIP-1.62
	706	Communication Job Failure ↕ Flip Press %E 035-706 Fax	-	<Fall Back Error> Fall back error.	Flows 62 FIP-1.62
	708	Communication Job Failure ↕ Flip Press %E 035-708 Fax	-	<Post Message Resend Over> Post message resend over.	Flows 62 FIP-1.62
	709	Communication Job Failure ↕ Flip Press %E 035-709 Fax	-	<G3 Send RTN/PIN Receive> In G3 send, receive RTN/PIN.	Flows 62 FIP-1.62
	710	Communication Job Failure ↕ Flip Press %E 035-710 Fax	-	<Receive PIN> PIN receive (excl. EOR)	Flows 62 FIP-1.62
	716	Communication Job Failure ↕ Flip Press %E 035-716 Fax	-	<T2 Time Out> T2 timeout.	Flows 62 FIP-1.62
	717	Communication Job Failure ↕ Flip Press %E 035-717 Fax	-	<G3 Receive RTN Send> In G3 receive, send RTN.	Flows 62 FIP-1.62
	718	No Answer Job Failure ↕ Flip Press %E 035-718 Fax	-	<Receive T1 Time Out> In receive, TÇP timeout.	Flows 62 FIP-1.62

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
035	720	Communication Job Failure ↕ Flip Press %E 035-720 Fax	-	<Not Receive Ability> Remote device has no ability to receive.	Flows 62 FIP-1.62
	728	Communication Job Failure ↕ Flip Press %E 035-728 Fax	-	<G3 EOL Not Receive> In G3 image data receive, cannot receive EOL for 13 sec(default).	Flows 62 FIP-1.62
	729	Communication Job Failure ↕ Flip Press %E 035-729 Fax	-	<Career Cut> Career cut.	Flows 62 FIP-1.62
	730	Communication Job Failure ↕ Flip Press %E 035-730 Fax	-	<RS Request CS NOT ON> In high-speed training, modem CS does not become ON against RS request.	Flows 62 FIP-1.62
	737	Communication Job Failure ↕ Flip Press %E 035-737 Fax	-	<CTC/EOR Resend Over> CTC/EOR resend over.	Flows 62 FIP-1.62
	739	Communication Job Failure ↕ Flip Press %E 035-739 Fax	-	<T5 Time Out> T5 timeout.	Flows 62 FIP-1.62
	740	Communication Job Failure ↕ Flip Press %E 035-740 Fax	-	<ECM Send EOR-Q Send> IN ECM send, send EOR-Q.	Flows 62 FIP-1.62
	742	Communication Job Failure ↕ Flip Press %E 035-742 Fax	-	<ECM Receive EOR-Q Receive> IN ECM receive, receive EOR-Q.	Flows 62 FIP-1.62
	779	File Error Job Failure ↕ Flip Press %E 035-779 Fax	-	<FAX FWD document change error> FAX forward document change error.	Flows 71 FIP-1.71
	781	Busy Job Failure ↕ Flip Press %E 035-781 Fax	-	<Busy Job Failure> Detect busy tone after dialing.	Flows 72 FIP-1.72

Status Code		Error Message		Status Contents	FIP to be referred
		LCD	Status Window		
035	792	Communication Job Failure ↕ Flip Press %E 035-792 Fax	-	<JM Not Detection> JM undetected.	Flows 47 FIP-1.47
	793	Communication Job Failure ↕ Flip Press %E 035-793 Fax	-	<Digital Line Detection> Connected to digital line and cannot connect. (Detect when connecting to line)	Flows 73 FIP-1.73
042	700	Overheated Wait for printer ↕ Flip to cool down 042-700	An internal temperature of the printer became a high temperature. 042-700 Please wait for a while until falling in temperature.	<IOT Over Heat Stop> The temp. Sensor sensed high temperature.	Flows 74 FIP-1.74
062	311	Restart Printer Contact Support ↕ Flip If Message Returns 062-311 System	Printer error. 062-311 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IIT Initializing Error> The IIT initializing error occurred.	Flows 75 FIP-1.75
	320	Restart Printer Contact Support ↕ Flip If Message Returns 062-320 System	Printer error. 062-320 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Scanner Error> The image acquisition error occurred.	Flows 76 FIP-1.76
	321	Restart Printer Contact Support ↕ Flip If Message Returns 062-321 System	Printer error. 062-321 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Unexecutable error> Unexecutable error.(carriage is at the locked position, etc.)	Flows 75 FIP-1.75
	322	Restart Printer Contact Support ↕ Flip If Message Returns 062-322 System	Printer error. 062-322 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Parameter Error> Abnormality of the parameter.	Flows 75 FIP-1.75

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
062	360	Restart Printer Contact Support ↕ Flip If Message Returns 062-360 System	Printer error. 062-360 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<HPSensor Error> Carriage home position error.	Flows 75 FIP-1.75
	371	Restart Printer Contact Support ↕ Flip If Message Returns 062-371 System	Printer error. 062-371 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<IIT Lamp Error> The IIT Lamp error occurred.	Flows 75 FIP-1.75
	393	Restart Printer Contact Support ↕ Flip If Message Returns 062-393 System	Printer error. 062-393 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<CCD ASIC Error> The CCD ASIC communication error occurred.	Flows 75 FIP-1.75
	790	Confirm Deleted by Limit ↕ Flip Press %E 062-790 System	-	<Copy Limit> Unable to continue due to copy limitation.	Flows 77 FIP-1.77
071	100	Paper Jam Open Tray1 ↕ Flip Remove Paper Open and Close ↕ Flip Front Cover 071-100	Paper Jam has occurred at the Tray 1 071-100 Remove the Tray 1 and remove the jammed paper. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT Tray1 Misfeed JAM> The Regi Sensor is not turned ON within the specified time after feeding a paper from Tray1	Flows 78 FIP-1.78
This code is given when the Option 250 Sheet Feeder is installed.					
072	100	Paper Jam Open Tray2 ↕ Flip Remove Paper Open and Close ↕ Flip Front Cover 072-100	Paper Jam has occurred at the Tray 2 072-100 Remove the Tray 2 and remove the jammed paper. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT Tray2 Misfeed JAM> The Paper Path Sensor of Tray 2 is not turned ON within the specified time after feeding a paper from Tray 2..	Flows 79 FIP-1.79

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
072	101	Paper Jam Open Tray1 or 2 ⇕ Flip Remove Paper Open and Close ⇕ Flip Front Cover 072-101	Paper Jam has occurred at the Tray 1 or 2. 072-101 Remove the Tray 1 or 2, and remove the jammed paper. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT Feeder 2 JAM> A jam has been detected between the Regi Sensor and the Paper Sensor of Tray 2.	Flows 80 FIP-1.80
	908	Paper Jam Open Tray1 or 2 ⇕ Flip Remove Paper Open and Close ⇕ Flip Front Cover 072-908	Paper Jam has occurred at the Tray 1 or 2. 072-908 Remove the Tray 1 or 2, and remove the jammed paper. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT Remain Option Feeder JAM> The paper remains at the Paper Path Sensor of Tray 2.	Flows 81 FIP-1.81
075	101	Paper Jam Open Front Cover ⇕ Flip Remove Paper 075-101	Paper Jam has occurred at the SSF 075-101 Open the Front Cover and remove the jammed paper. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT SSF Insert JAM> SSF No Paper Sensor detect when a paper is inserted from SSF.	Flows 82 FIP-1.82
	102	Paper Jam Open Front Cover ⇕ Flip Remove Paper 075-102	Paper Jam has occurred at the SSF 075-102 Pull the jammed paper out of the SSF. Open and close the Front Cover. Please click the Show Me How Button for details.	<IOT SSF Paper Pullout JAM> Though it tried to feed a paper from SSF, the paper was not loaded or it was pulled out forcibly from SSF.	Flows 82 FIP-1.82
	923	Check SSF Reseat Paper SSF ⇕ Flip 075-923	SSF is not holding the paper correctly 075-923 Pull the paper out of the SSF. Reload the paper of the SSF.	<Waiting for reseal paper of SSF> Wait for the paper on SSF to be resealed.	Flows 82 FIP-1.82

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
077	100	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-100	-	<IOT Regi On early JAM> The paper remains at the paper transfer path between the Tray 1 and the Regi Sensor.	Flows 83 FIP-1.83
	101	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-101	-	<IOT Regi OFF Jam> The paper does not pass through the Regi Sensor within the specified time.	Flows 84 FIP-1.84
	102	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-102	-	<IOT Exit On JAM> The paper does not reach the Exit Sensor within the specified time.	Flows 85 FIP-1.85
	103	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-103	-	<IOT Exit On early JAM> The paper remains at the paper transfer path between the Exit Sensor and the Regi Sensor.	Flows 85 FIP-1.85
	104	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-104	-	<IOT Exit Off JAM> The paper does not pass through the Exit Sensor within the specified time.	Flows 86 FIP-1.86
	105	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-105	-	<IOT Exit Off early JAM> The paper passed through the Exit Sensor earlier than the specified time.	Flows 86 FIP-1.86
	106	Paper Jam Open Front Cover ↕ Flip Remove Paper 077-106	-	<IOT Stop Reservation JAM> Detect jam when stopped before Fuser in forced stop mode.	Flows 85 FIP-1.85
	107	Paper Jam Open Front Cover ↕ Flip and Duplexer Remove Paper ↕ Flip 077-107	Paper Jam has occurred at the Duplexer. 077-107 Open the Front Cover and the Duplexer. Then remove the jammed paper. Close the Front Cover. Please click the Show Me How Button for details.	<IOT Duplex Misfeed JAM> (2155cdn only) In the duplex printing mode, the lead edge does not reach the Regi Sensor when the sheet changes the direction in the Duplexer after the standby.	Flows 87 FIP-1.87

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
077	108	Paper Jam Open Front Cover ⇕ Flip and Duplexer Remove Paper ⇕ Flip 077-108	Paper Jam has occurred at the Duplexer. 077-108 Open the Front Cover and the Duplexer. Then remove the jammed paper. Close the Front Cover. Please click the Show Me How Button for details.	<IOT Duplex JAM>(2155cdn only) In the duplex printing mode, the lead edge does not reach the SSF No Paper Sensor when the sheet changes the direction in the Duplexer after the standby.	Flows 87 FIP-1.87
	300	Front Cover Is Open ⇕ Flip Close Front Cover 077-300	Front Cover is open 077-300 Close the Front Cover.	<IOT Cover Front Open> The Front Cover is open.	Flows 88 FIP-1.88
	301	Side Cover Is Open ⇕ Flip Close Side Cover 077-301	Side Cover is open 077-301 Close the Side Cover.	<IOT Side Cover Open> The Toner Access Cover is open.	Flows 89 FIP-1.89
	900	Paper Jam Open Front Cover ⇕ Flip Remove Paper 077-900	Paper Jam has occurred at the Output Tray 077-900 CAUTION: The Fuser is hot. Open the Front Cover and remove the jammed paper. If the jammed paper is in the Fuser, lift the levers at both ends of the Fuser and remove the jammed paper. Please click the Show Me How Button for details.	<IOT Exit JAM> The paper remains at the Exit Sensor.	Flows 90 FIP-1.90
	901	Paper Jam Open Front Cover ⇕ Flip Remove Paper 077-901	Paper Jam has occurred at the Belt Unit 077-901 Open the Front Cover and remove the jammed paper. Close the Front Cover. If the jammed paper is not easily removed, work after pulling out the tray. Please click the Show Me How Button for details.	<IOT Remain Registration JAM> The paper remains at the Regi Sensor.	Flows 91 FIP-1.91

Status Code		Error Message		Status Contents	FIP to be referred
		LCD	Status Window		
077	907	Paper Jam Open Front Cover ↕ Flip and Duplexer Remove Paper ↕ Flip 077-907	Paper Jam has occurred at the Duplexer. 077-907 Open the Front Cover and the Duplexer. Then remove the jammed paper. Close the Front Cover. Please click the Show Me How Button for details.	<IOT Remain Duplex JAM> (2155cdn only) The paper remains at the Duplex area.	Flows 92 FIP-1.92
		Ready to Print Replace PHD ↕ Flip Now Contact Support ↕ Flip 091-402	Replace PHD unit Now Contact customer support 091-402	<IOT PHD Life Pre Warning> The PHD Unit is approaching the replacement time.	Flows 93 FIP-1.93
091	912	PHD Reseat PHD ↕ Flip 091-912	PHD Tape Staying 091-912 Remove the Tape from the PHD unit. Contact customer support if this failure is repeated.	<PHD Tape Staying> Detected the ribbons staying on the PHD Unit.	Flows 94 FIP-1.94
	935	Replace PHD Now ↕ Flip Contact Support 091-935	Replace PHD unit 091-935 Contact customer support. Please click the Show Me How Button for details.	<IOT PHD Life Over> The PHD Unit has reached the replacement time.	Flows 95 FIP-1.95
	972	Insert PHD 091-972	PHD Unit is either missing or not fully inserted into the printer 091-972 Open the Front Cover and make sure that the PHD unit have been fully installed. Please click the Show Me How Button for details.	<IOT PHD Detached> The PHD Unit is not installed in the printer.	Flows 96 FIP-1.96
092	310	CTD Sensor Dirty Clean ↕ Flip CTD Sensor 092-310	CTD Sensor Dirty 092-310 Clean the CTD sensor.	<IOT CTD (ADC) Sensor Dustiness> The CTD (ADC) Sensor has reached the Cleaning time.	Flows 97 FIP-1.97
	910	Ready to Print Clean ↕ Flip CTD Sensor 092-910	-	<CTD (ADC) Sensor Dustiness Warning> The CTD (ADC) Sensor is approaching the Cleaning time.	Flows 97 FIP-1.97

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
093	423	Ready to Print Yellow Cartridge ↕ Flip Is close to life 093-423	Yellow Cartridge needs to be replaced soon 093-423	<IOT Toner Cartridge (Y) Near Life> The Toner Cartridge (Y) is approaching the replacement time. When all the toner cartridges are simultaneously approaching the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 98 FIP-1.98
	424	Ready to Print Magenta Cartridge ↕ Flip Is close to life 093-424	Magenta Cartridge needs to be replaced soon 093-424	<IOT Toner Cartridge (M) Near Life> The Toner Cartridge (M) is approaching the replacement time. When all the toner cartridges are simultaneously approaching the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 98 FIP-1.98
	425	Ready to Print Cyan Cartridge ↕ Flip Is close to life 093-425	Cyan Cartridge needs to be replaced soon 093-425	<IOT Toner Cartridge (C) Near Life> The Toner Cartridge (C) is approaching the replacement time. When all the toner cartridges are simultaneously approaching the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 98 FIP-1.98
	426	Ready to Print Black Cartridge ↕ Flip Is close to life 093-426	Black Cartridge needs to be replaced soon 093-426	<IOT Toner Cartridge (K) Near Life> The Toner Cartridge (K) is approaching the replacement time. When all the toner cartridges are simultaneously approaching the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 98 FIP-1.98
	919	Shake Cartridge Remove and Shake ↕ Flip Yellow Cartridge 093-919	Yellow Toner Low Density 093-919 Remove and shake the Yellow Cartridge. Contact customer support if this failure is repeated.	<IOT Y Toner Low Density> Detects low density of yellow.	Flows 99 FIP-1.99

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
093	920	Shake Cartridge Remove and Shake ↕ Flip Magenta Cartridge 093-920	Magenta Toner Low Density 093-920 Remove and shake the Magenta Cartridge. Contact customer support if this failure is repeated.	<IOT M Toner Low Density> Detects low density of magenta.	Flows 99 FIP-1.99
	921	Shake Cartridge Remove and Shake ↕ Flip Cyan Cartridge 093-921	Cyan Toner Low Density 093-921 Remove and shake the Cyan Cartridge. Contact customer support if this failure is repeated.	<IOT C Toner Low Density> Detects low density of cyan.	Flows 99 FIP-1.99
	922	Shake Cartridge Remove and Shake ↕ Flip Black Cartridge 093-922	Black Toner Low Density 093-922 Remove and shake the Black Cartridge. Contact customer support if this failure is repeated.	<IOT K Toner Low Density> Detects low density of black.	Flows 99 FIP-1.99
	930	Crtrdg Life Over Replace ↕ Flip Yellow Cartridge 093-930	The Yellow Cartridge need to be replaced now. 093-930 Open the Toner Access Cover. Then remove the used Yellow Cartridge and install a new one. Please click the Show Me How Button for details.	<IOT Toner Cartridge (Y) Life Over> The Toner Cartridge (Y) has reached the replacement time. When all the toner cartridges have simultaneously reached the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 100 FIP-1.100
	931	Crtrdg Life Over Replace ↕ Flip Magenta Cartridge 093-931	The Magenta Cartridge need to be replaced now. 093-931 Open the Toner Access Cover. Then remove the used Magenta Cartridge and install a new one. Please click the Show Me How Button for details.	<IOT Toner Cartridge (M) Life Over> The Toner Cartridge (M) has reached the replacement time. When all the toner cartridges have simultaneously reached the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 100 FIP-1.100
	932	Crtrdg Life Over Replace ↕ Flip Cyan Cartridge 093-932	The Cyan Cartridge need to be replaced now 093-932 Open the Toner Access Cover. Then remove the used Cyan Cartridge and install a new one. Please click the Show Me How Button for details.	<IOT Toner Cartridge (C) Life Over> The Toner Cartridge (C) has reached the replacement time. When all the toner cartridges have simultaneously reached the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 100 FIP-1.100

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
093	933	<p>Crtrdg Life Over Replace ⇕ Flip Black Cartridge 093-933</p>	<p>The Black Cartridge need to be replaced now. 093-933</p> <p>Open the Toner Access Cover. Then remove the used Black Cartridge and install a new one. Please click the Show Me How Button for details.</p>	<p><IOT Toner Cartridge (K) Life Over> The Toner Cartridge (K) has reached the replacement time. When all the toner cartridges have simultaneously reached the replacement time, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow</p>	Flows 100 FIP-1.100
	934	<p>Crtrdg Life Over Replace ⇕ Flip Yellow Cartridge 093-934</p>	<p>The Yellow Cartridge need to be replaced now. 093-934</p> <p>Open the Toner Access Cover. Then remove the used Yellow Cartridge and install a new one. Please click the Show Me How Button for details.</p>	<p><IOT CRU Waste (Y) Full> Waste Toner (Y) Counter value has reached replacement time.</p>	Flows 101 FIP-1.101
	935	<p>Crtrdg Life Over Replace ⇕ Flip Magenta Cartridge 093-935</p>	<p>The Magenta Cartridge need to be replaced now. 093-935</p> <p>Open the Toner Access Cover. Then remove the used Magenta Cartridge and install a new one. Please click the Show Me How Button for details.</p>	<p><IOT CRU Waste (M) Full> Waste Toner (M) Counter value has reached replacement time.</p>	Flows 101 FIP-1.101
	936	<p>Crtrdg Life Over Replace ⇕ Flip Cyan Cartridge 093-936</p>	<p>The Cyan Cartridge need to be replaced now. 093-936</p> <p>Open the Toner Access Cover. Then remove the used Cyan Cartridge and install a new one. Please click the Show Me How Button for details.</p>	<p><IOT CRU Waste (C) Full> Waste Toner (C) Counter value has reached replacement time.</p>	Flows 101 FIP-1.101
	937	<p>Crtrdg Life Over Replace ⇕ Flip Black Cartridge 093-937</p>	<p>The Black Cartridge need to be replaced now. 093-937</p> <p>Open the Toner Access Cover. Then remove the used Black Cartridge and install a new one. Please click the Show Me How Button for details.</p>	<p><IOT CRU Waste (K) Full> Waste Toner (K) Counter value has reached replacement time.</p>	Flows 101 FIP-1.101

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
093	960	CRUM ID Reseat Yellow ↕ Flip Cartridge 093-960	An unsupported Yellow Cartridge is installed 093-960 Open the Toner Access Cover. Remove the unsupported Yellow Cartridge and install a supported one. Please click the Show Me How Button for details.	<IOT (Y) CRUM ID Error> An unsupported Toner Cartridge (Y) is detected.	Flows 102 FIP-1.102
	961	CRUM ID Reseat Magenta ↕ Flip Cartridge 093-961	An unsupported Magenta Cartridge is installed 093-961 Open the Toner Access Cover. Remove the unsupported Magenta Cartridge and install a supported one. Please click the Show Me How Button for details.	<IOT (M) CRUM ID Error> An unsupported Toner Cartridge (M) is detected.	Flows 102 FIP-1.102
	962	CRUM ID Reseat Cyan ↕ Flip Cartridge 093-962	An unsupported Magenta Cartridge is installed 093-961 Open the Toner Access Cover. Remove the unsupported Magenta Cartridge and install a supported one. Please click the Show Me How Button for details.	<IOT (C) CRUM ID Error> An unsupported Toner Cartridge (C) is detected.	Flows 102 FIP-1.102
	963	CRUM ID Reseat Black ↕ Flip Cartridge 093-963	An unsupported Black Cartridge is installed 093-963 Open the Toner Access Cover. Remove the unsupported Black Cartridge and install a supported one. Please click the Show Me How Button for details.	<IOT (K) CRUM ID Error> An unsupported Toner Cartridge (K) is detected.	Flows 102 FIP-1.102
	965	CRUM ID Reseat PHD ↕ Flip 093-965	An unsupported PHD unit is installed 093-965 Open the Front Cover. Remove the unsupported PHD unit and install a supported one. Please click the Show Me How Button for details.	<IOT PHD CRUM ID Error> An unsupported PHD Unit is detected.	Flows 103 FIP-1.103

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
093	970	Crtrdg Detached Insert ↓ Flip Yellow Cartridge 093-970	Yellow Cartridge is either missing or not fully inserted into the printer 093-970 Open the Toner Access Cover and make sure that the Yellow Cartridge have been fully installed. Please click the Show Me How Button for details.	<IOT Toner Cartridge (Y) Detached> The Toner Cartridge (Y) is not installed in the printer. If no toner cartridge has been installed in the printer, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 104 FIP-1.104
	971	Crtrdg Detached Insert ↓ Flip Magenta Cartridge 093-971	Magenta Cartridge is either missing or not fully inserted into the printer 093-971 Open the Toner Access Cover and make sure that the Magenta Cartridge have been fully installed. Please click the Show Me How Button for details.	<IOT Toner Cartridge (M) Detached> The Toner Cartridge (M) is not installed in the printer. If no toner cartridge has been installed in the printer, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 104 FIP-1.104
	972	Crtrdg Detached Insert ↓ Flip Cyan Cartridge 093-972	Cyan Cartridge is either missing or not fully inserted into the printer 093-972 Open the Toner Access Cover and make sure that the Cyan Cartridge have been fully installed. Please click the Show Me How Button for details.	<IOT Toner Cartridge (C) Detached> The Toner Cartridge (C) is not installed in the printer. If no toner cartridge has been installed in the printer, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 104 FIP-1.104
	973	Crtrdg Detached Insert ↓ Flip Black Cartridge 093-973	Black Cartridge is either missing or not fully inserted into the printer 093-973 Open the Toner Access Cover and make sure that the Black Cartridge have been fully installed. Please click the Show Me How Button for details.	<IOT Toner Cartridge (K) Detached> The Toner Cartridge (K) is not installed in the printer. If no toner cartridge has been installed in the printer, a warning is indicated on the LCD panel in the following order: 1)Black → 2)Cyan → 3)Magenta → 4)Yellow	Flows 104 FIP-1.104
094	422	Ready to Print Contact Support ↓ Flip If Message Returns 094-422	Contact customer support if this failure is repeated 094-422	<IOT Belt Unit Near Life> The Belt Unit has reached the replacement time.	Flows 105 FIP-1.105
	911	Contact Support If Message Returns ↓ Flip 094-911	Belt Unit Life Over 094-911 Contact customer support if this failure is repeated.	<IOT Belt Unit Life Over> The Belt Unit has reached the replacement time.	Flows 106 FIP-1.106

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
116	210	Restart Printer Contact Support ↕ Flip If Message Returns 116-210	Printer Error 116-210 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<USB Host Error> Fatal error of USB Host driver	Flows 20 FIP-1.20
	364	Restart Printer Contact Support ↕ Flip If Message Returns 116-364	Printer Error 116-364 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Timer Fail> The timer fault is detected.	Flows 20 FIP-1.20
	396	Restart Printer Contact Support ↕ Flip If Message Returns 116-396 Scan	Printer error. 116-396 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Software Bag> -Fatal Maillib Related Error. -Other File2Net Lib Error.	Flows 20 FIP-1.20
	987	Restart Printer Contact Support ↕ Flip If Message Returns 116-987 Scan	Printer error. 116-987 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Software Bag> A fatal error related to the format library.	Flows 20 FIP-1.20
117	315	Restart Printer Contact Support ↕ Flip If Message Returns 117-315 System	Printer error. 117-315 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<EEPROM Driver Error> The EEPROM Driver program error occurred.	Flows 20 FIP-1.20
	331	Restart Printer Contact Support ↕ Flip If Message Returns 117-331 System	Printer error. 117-331 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<DSP-related Program Internal Error> In relation to DSP, the following internal error has occurred. EOS function return value error. EDSP program load fail.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
117	344	Restart Printer Contact Support ↕ Flip If Message Returns 117-344 System	Printer error. 117-344 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<FLASHFILE Task Error> The FLASHFILE Task error occurred.	Flows 20 FIP-1.20
	362	Restart Printer Contact Support ↕ Flip If Message Returns 117-362 System	Printer error. 117-362 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<EEPROM Sum Check Error> EEPROM sumcheck value error.	Flows 20 FIP-1.20
	363	Restart Printer Contact Support ↕ Flip If Message Returns 117-363 System	Printer error. 117-363 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<NVM Sum Check Error> NVM sumcheck value error.	Flows 20 FIP-1.20
	365	Restart Printer Contact Support ↕ Flip If Message Returns 117-365 System	Printer error. 117-365 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Low Voltage> RTC detected Low Voltage. RTC clock setting and content of SRAM are invalid. Initialize them.	Flows 20 FIP-1.20
123	314	Restart Printer Contact Support ↕ Flip If Message Returns 123-314 System	Printer error. 123-314 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Panel Power On Error> Communication error at panel power on. Startup sequence does not start from AIOC within 1 minute after panel power on.	Flows 20 FIP-1.20
131	398	Restart Printer Contact Support ↕ Flip If Message Returns 131-398 Scan	Printer error. 131-398 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<SMB Error> A fatal error occurred in SMB client.	Flows 20 FIP-1.20

Status Code		Error Message		Status Contents	FIP to be referred			
		LCD	Status Window					
131	399	Restart Printer Contact Support ↕ Flip If Message Returns 131-399 Scan	Printer error. 131-399 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<FTP Error> A fatal error occurred in FTP client.	Flows 20 FIP-1.20			
		133	231	Restart Printer Contact Support ↕ Flip If Message Returns 133-231 System	Printer error. 133-231 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<TFAXCOM Data Receive I/F Error> The data processing interface error on TFAXCOM.	Flows 47 FIP-1.47	
234	Restart Printer Contact Support ↕ Flip If Message Returns 133-234 System			Printer error. 133-234 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<JBIG Parameter Error> The JBIG parameter setting error occurred.	Flows 47 FIP-1.47		
	235			Restart Printer Contact Support ↕ Flip If Message Returns 133-235 System	Printer error. 133-235 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<MHR Parameter Error> The MHR parameter setting error occurred.	Flows 47 FIP-1.47	
				236	Restart Printer Contact Support ↕ Flip If Message Returns 133-236 Fax	Printer error. 133-236 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< MHR Encode Error> The cording error at the MHR.	Flows 47 FIP-1.47
					237	Restart Printer Contact Support ↕ Flip If Message Returns 133-237 Fax	Printer error. 133-237 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< MHR Input Buffer Error> The Data error at MHR Input Buffer.

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	238	Restart Printer Contact Support ↕ Flip If Message Returns 133-238 Fax	Printer error. 133-238 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< MHR Output Buffer Error> The Data error at MHR Output Buffer.	Flows 47 FIP-1.47
	239	Restart Printer Contact Support ↕ Flip If Message Returns 133-239 Fax	Printer error. 133-239 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<FAX ECM Buffer Address Error> The Fax ECM Buffer Read/Write Address error occurred.	Flows 47 FIP-1.47
	240	Restart Printer Contact Support ↕ Flip If Message Returns 133-240 Fax	Printer error. 133-240 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Resolution Change Error> The Fax Resolution Conversion error at Sending/Receiving.	Flows 47 FIP-1.47
	241	Restart Printer Contact Support ↕ Flip If Message Returns 133-241 Fax	Printer error. 133-241 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Memory Pool Get Error> The Memory Pool acquisition error occurred. (OS Error)	Flows 47 FIP-1.47
	242	Restart Printer Contact Support ↕ Flip If Message Returns 133-242 Fax	Printer error. 133-242 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Memory Pool Release Error> The Memory Pool release error occurred.(OS error)	Flows 47 FIP-1.47
	243	Restart Printer Contact Support ↕ Flip If Message Returns 133-243 Fax	Printer error. 133-243 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Message Send Error> The Message communication error occurred. (OS error)	Flows 47 FIP-1.47

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	244	Restart Printer Contact Support ↕ Flip If Message Returns 133-244 Fax	Printer error. 133-244 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Message Receive Error> The message reception error occurred.(OS error)	Flows 47 FIP-1.47
	246	Restart Printer Contact Support ↕ Flip If Message Returns 133-246 Fax	Printer error. 133-246 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Memory Pool Get Error> The Memory Pool acquisition error occurred. (OS error)	Flows 47 FIP-1.47
	247	Restart Printer Contact Support ↕ Flip If Message Returns 133-247 Fax	Printer error. 133-247 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Message Send Error> The communication error occurred. (OS error)	Flows 47 FIP-1.47
	248	Restart Printer Contact Support ↕ Flip If Message Returns 133-248 Fax	Printer error. 133-248 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Memory Pool Release Error> The Memory Pool release error occurred.(OS error)	Flows 47 FIP-1.47
	249	Restart Printer Contact Support ↕ Flip If Message Returns 133-249 Fax	Printer error. 133-249 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< Message Receive Error> The message receive error occurred.(OS error)	Flows 47 FIP-1.47
	251	Restart Printer Contact Support ↕ Flip If Message Returns 133-251 Fax	Printer error. 133-251 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< File Open Error> The File Open error occurred.	Flows 47 FIP-1.47

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	252	Restart Printer Contact Support ↕ Flip If Message Returns 133-252 Fax	Printer error. 133-252 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< File Close Error> The File Close error occurred.	Flows 47 FIP-1.47
	253	Restart Printer Contact Support ↕ Flip If Message Returns 133-253 Fax	Printer error. 133-253 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Erase Error> The File Erasing error occurred.	Flows 47 FIP-1.47
	254	Restart Printer Contact Support ↕ Flip If Message Returns 133-254 Fax	Printer error. 133-254 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Memory Full> Cannot secure memory necessary to print.	Flows 47 FIP-1.47
	259	Restart Printer Contact Support ↕ Flip If Message Returns 133-259 Fax	Printer error. 133-259 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<OS Call Error> The OS Call error occurred.	Flows 20 FIP-1.20
	260	Restart Printer Contact Support ↕ Flip If Message Returns 133-260 Fax	Printer error. 133-260 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Open Error> The File Open error occurred.	Flows 20 FIP-1.20
	261	Restart Printer Contact Support ↕ Flip If Message Returns 133-261 Fax	Printer error. 133-261 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Close Error> The File Close error occurred.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	269	Restart Printer Contact Support ↕ Flip If Message Returns 133-269 Fax	Printer error. 133-269 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Close Error> The File Close error occurred.	Flows 20 FIP-1.20
	271	Restart Printer Contact Support ↕ Flip If Message Returns 133-271 Fax	Printer error. 133-271 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Memory Pool Get Error> The Memory Pool acquisition error occurred. (OS error)	Flows 20 FIP-1.20
	272	Restart Printer Contact Support ↕ Flip If Message Returns 133-272 Fax	Printer error. 133-272 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Message Send Error> The Message Send error occurred. (OS error)	Flows 20 FIP-1.20
	273	Restart Printer Contact Support ↕ Flip If Message Returns 133-273 Fax	Printer error. 133-273 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Memory Pool Release Error> The Memory Pool release error occurred.	Flows 20 FIP-1.20
	274	Restart Printer Contact Support ↕ Flip If Message Returns 133-274 Fax	Printer error. 133-274 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Message Receive Error> The Message Receive error occurred.	Flows 20 FIP-1.20
	276	Restart Printer Contact Support ↕ Flip If Message Returns 133-276 Fax	Printer error. 133-276 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Open Error> The File Open error occurred.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	277	Restart Printer Contact Support ↕ Flip If Message Returns 133-277 Fax	Printer error. 133-277 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Close Error> The File Close error occurred.	Flows 20 FIP-1.20
	279	Restart Printer Contact Support ↕ Flip If Message Returns 133-279 Fax	Printer error. 133-279 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< FAX CODEC I/F Error> The FAX CODEC I/F error occurred.	Flows 62 FIP-1.62
	280	Restart Printer Contact Support ↕ Flip If Message Returns 133-280 Fax	Printer error. 133-280 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Error Fax Time> The Fax Timer error occurred.	Flows 47 FIP-1.47
	281	Restart Printer Contact Support ↕ Flip If Message Returns 133-281 Fax	Printer error. 133-281 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Power Off Report Create Fail> Failed to Create Power Off report.	Flows 20 FIP-1.20
	282	Restart Printer Contact Support ↕ Flip If Message Returns 133-282 Fax	Printer error. 133-282 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Memory Pool Get Error> The Memory Pool acquisition error occurred. (OS Error)	Flows 20 FIP-1.20
	283	Restart Printer Contact Support ↕ Flip If Message Returns 133-283 Fax	Printer error. 133-283 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Message Send Error> The Message send error occurred.	Flows 20 FIP-1.20

Status Code	Error Message		Status Contents	FIP to be referred	
	LCD	Status Window			
133	286	Restart Printer Contact Support ↕ Flip If Message Returns 133-286 Fax	Printer error. 133-286 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	< OS Call Error> The OS call error occurred.	Flows 20 FIP-1.20
	287	Restart Printer Contact Support ↕ Flip If Message Returns 133-287 Fax	Printer error. 133-287 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Open Error> The File Open error occurred.	Flows 20 FIP-1.20
	288	Restart Printer Contact Support ↕ Flip If Message Returns 133-288 Fax	Printer error. 133-288 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Close Error> The File Close error occurred.	Flows 20 FIP-1.20
	289	Restart Printer Contact Support ↕ Flip If Message Returns 133-289 Fax	Printer error. 133-289 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<File Erase Error> The File Erase error occurred.	Flows 20 FIP-1.20
	290	Restart Printer Contact Support ↕ Flip If Message Returns 133-290 Fax	Printer error. 133-290 Turn off the Printer, and turn it on again. Contact customer support if this failure is repeated.	<Print Decode Error> A decoding error occurred three times consecutively during the decoding of JBIG data.	Flows 62 FIP-1.62
134	211	Restart Printer Contact Support ↕ Flip If Message Returns 134-211 Fax	Printer error. 134-211 Turn off the printer, and turn it on again. Contact customer support if this failure is repeated.	<Fax Card Modem Error> Fax Card parts error (MODEM error).	Flows 107 FIP-1.107
193	700	Ready to Print Non-Dell Toner ↕ Flip Installed 193-700	Ready to print	<Custom Toner Mode> The printer is in custom toner mode.	Flows 108 FIP-1.108

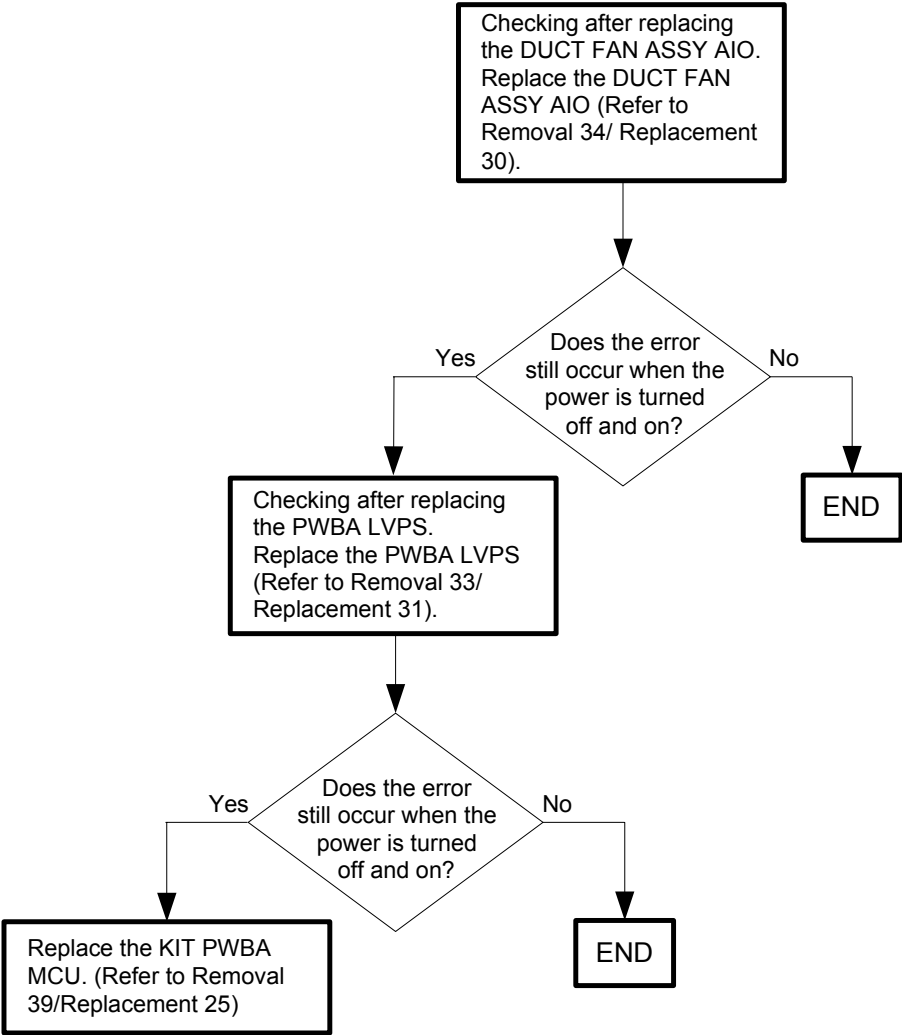
3. Error Code FIP

3.1 Troubleshooting for the call center

Flows 1 001-360: IOT Fan Motor Failure

Cause: MCU detects an error upon receiving error signal from the Fan.

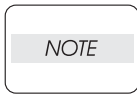
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



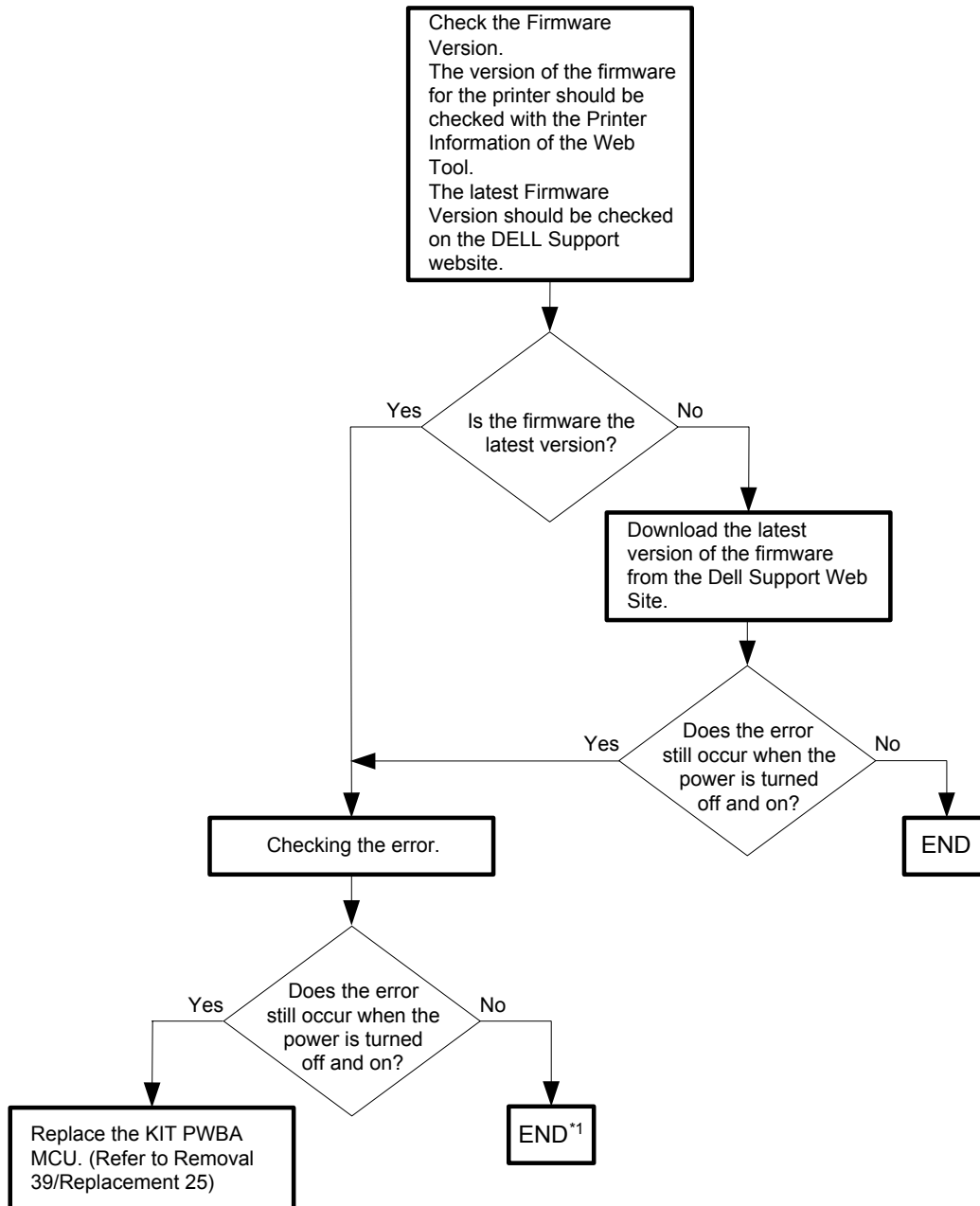
Flows 2 003-340: IOT Firmware Error

Cause: MCU firmware error occurs.

Solution: Proceed to the troubleshooting following the flowchart given below.



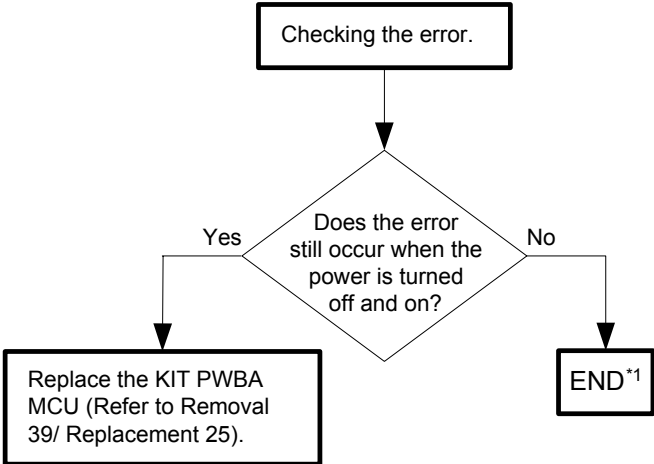
Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



*1: Though some kind of external noise would be possible cause, go to [Flows 134 Electrical Noise] and check, to make sure.

Flows 3 003-356: IOT NVRAM Error

Cause: The operation error of NVM (read/write check error etc.) is detected.
Solution: Proceed to the troubleshooting following the flowchart given below.

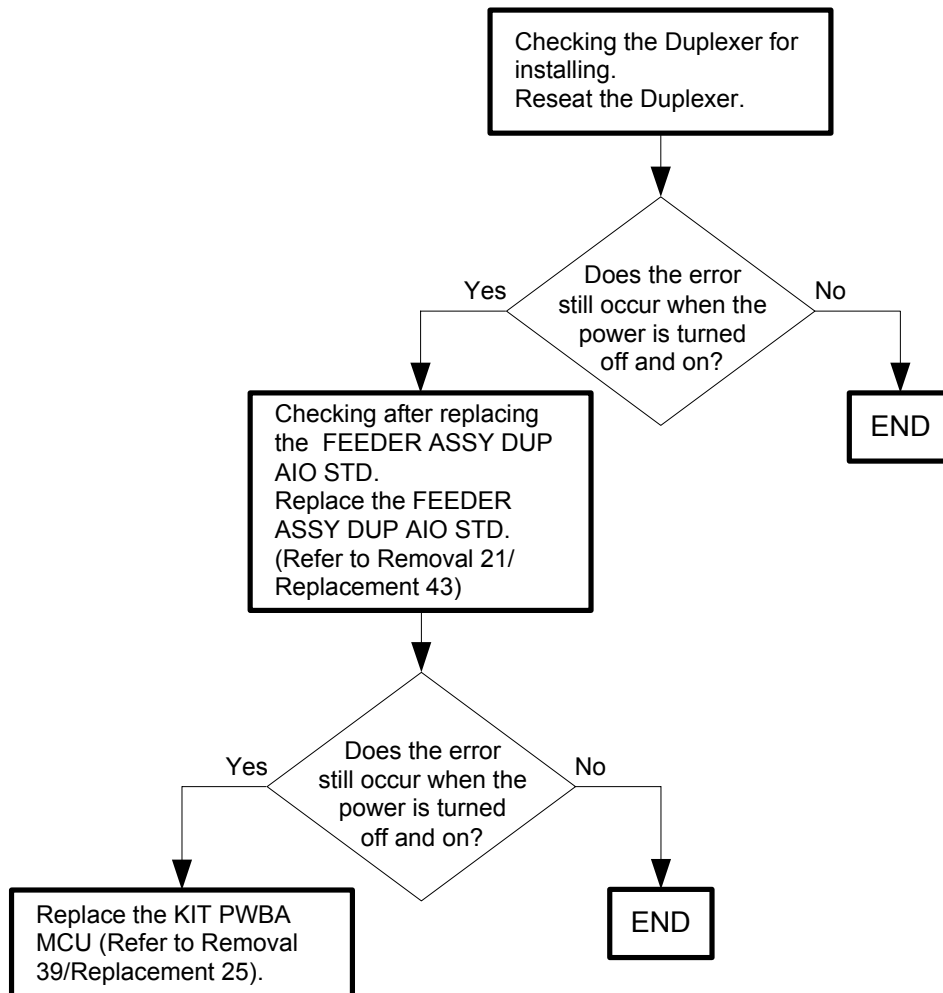


*1: Though some kind of external noise would be possible cause, go to [Flows 134 Electrical Noise] and check, to make sure.

Flows 4 004-311: IOT Duplexer Failure (2155cdn only)

Cause: The error is detected by Duplexer communication check.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



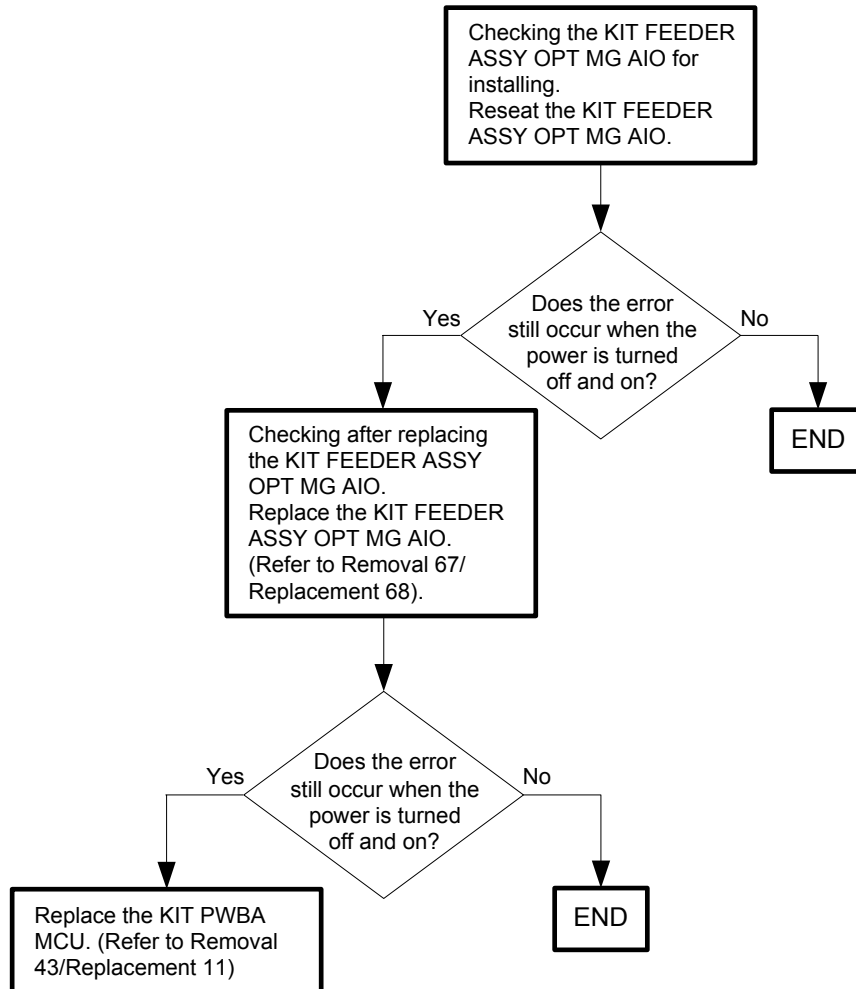
Flows 5 004-312: IOT Feeder Configuration Failure

Cause: Option Sheet Feeder Configuration error is detected.

Solution: The combinations of the Optional Feeder for 2155cn/cdn is not correct. Change the combinations to the correct one.

NOTE

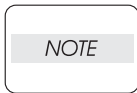
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



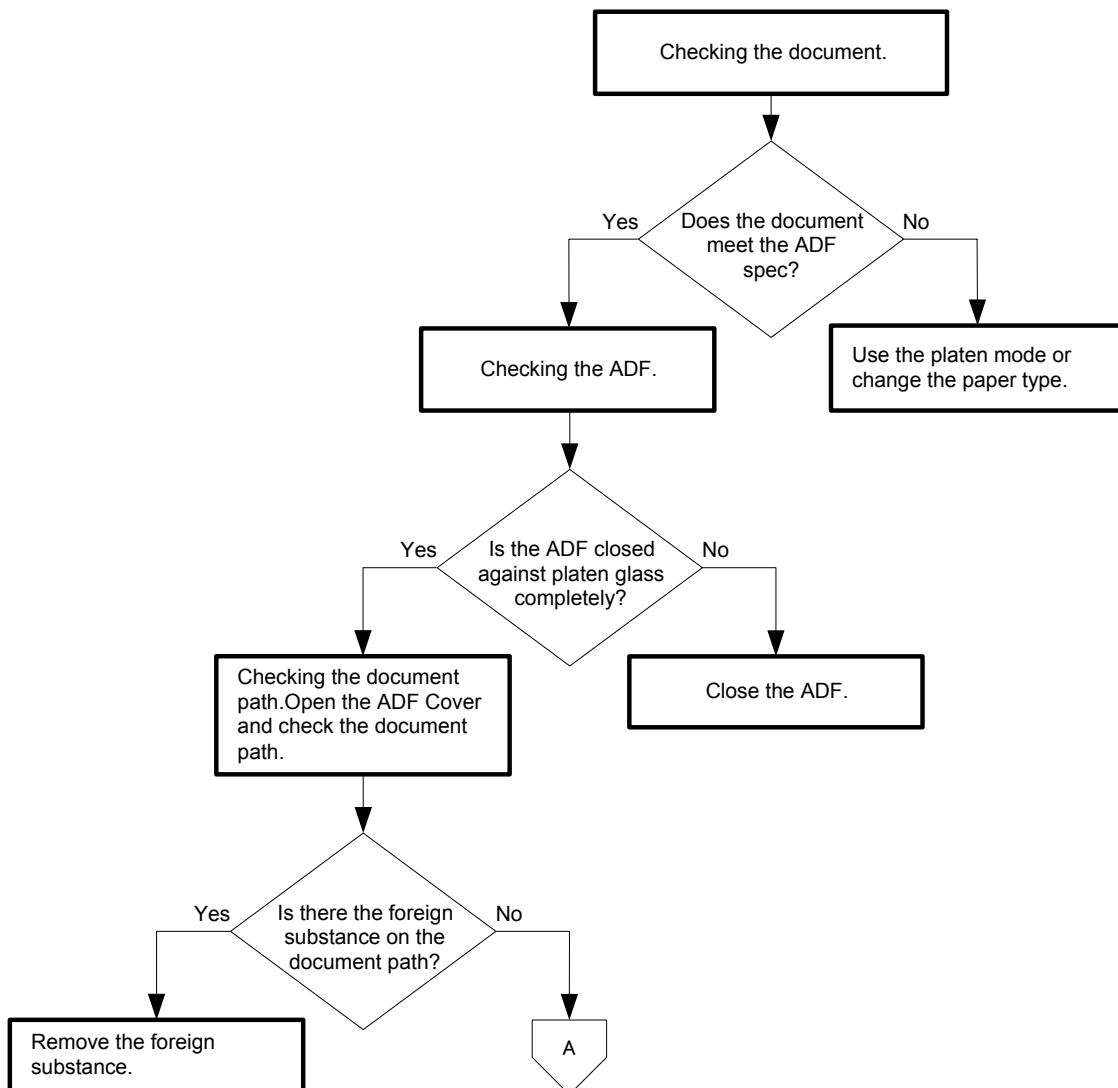
Flows 6 005-110 / 005-121 / 005-124: PICKUP Jam / ADF Jam / Virtual Jam

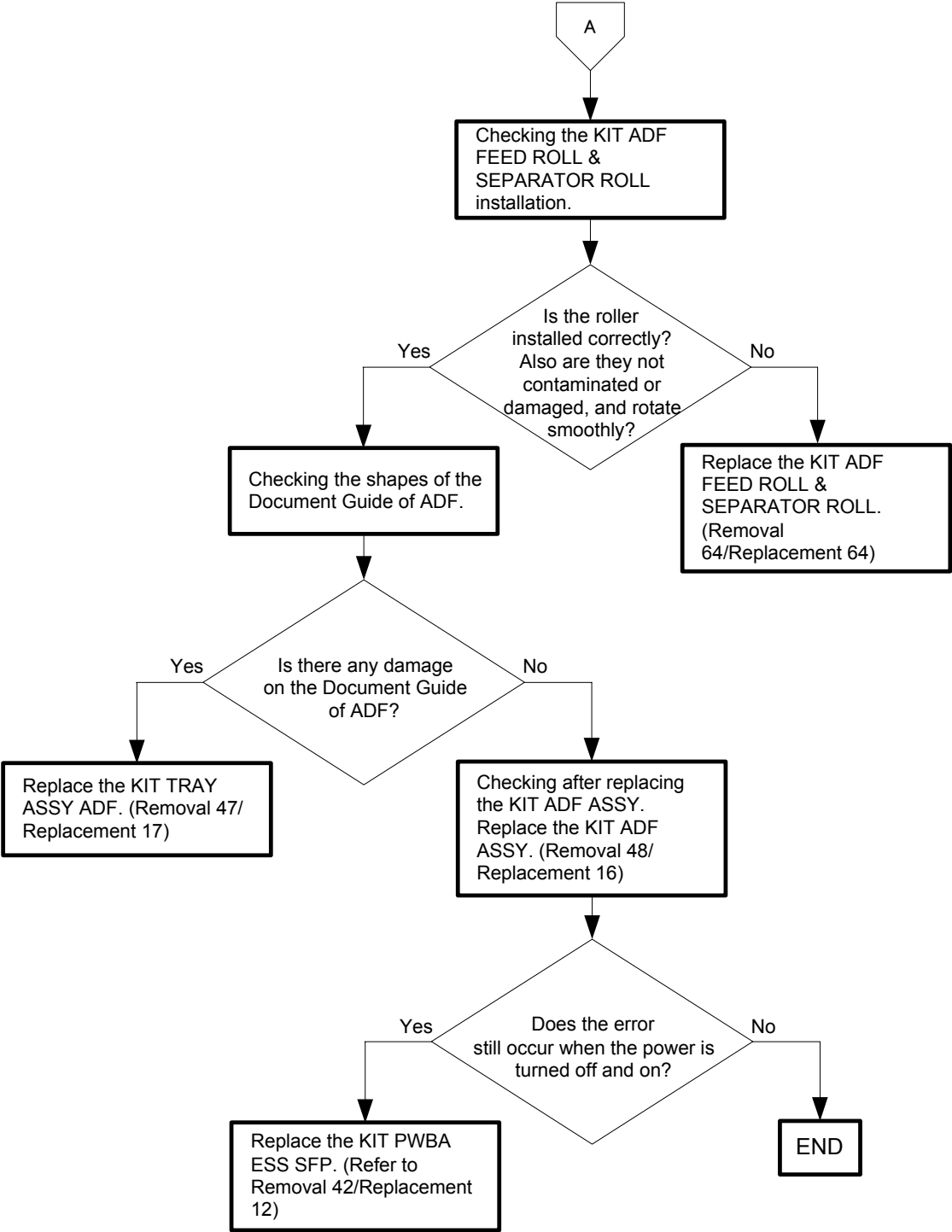
Cause: 005-110:The Pick Up Jam occurred.
 005-121:The ADF Jam occurred.
 005-124:The ADF Jam occurred when the job is cancelled.

Solution: Document jam has occurred. Remove the jammed document.And then open and close the front cover.Refer to "Appendix_1.1 Clearing Paper Jams From the ADF" for how to remove the jammed document.



If there is no jammed document, or the error still occurs after having removed the jammed document, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



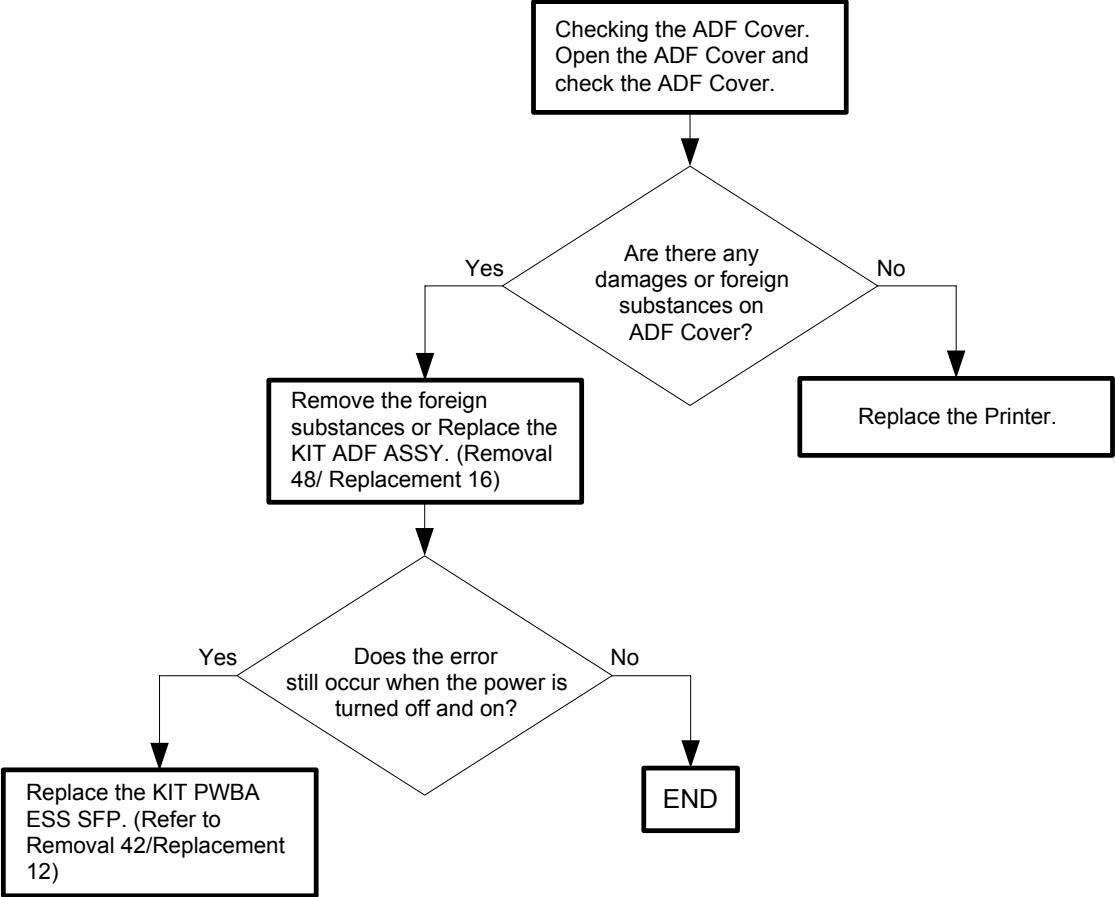


Flows 7 005-301: ADF Cover Open

Cause: The ADF Cover is opened.
Solution: Close the ADF Cover.

NOTE

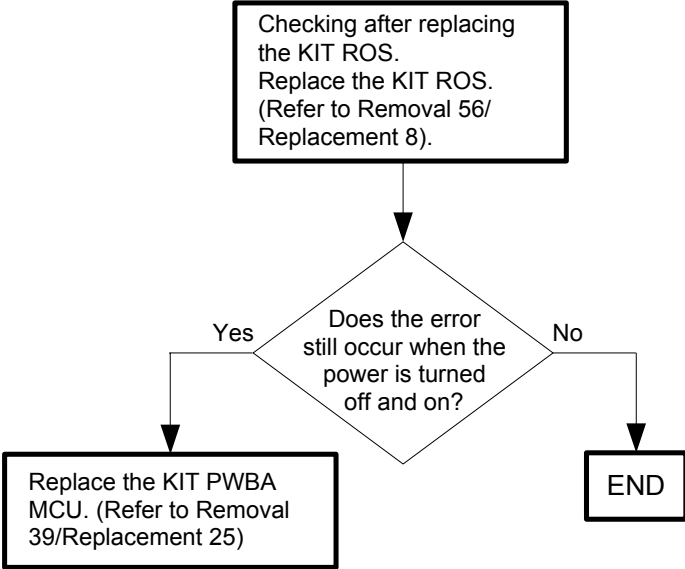
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 8 006-370: IOT ROS Failure

Cause: The operation error of ROS (rotational error etc.) is detected.

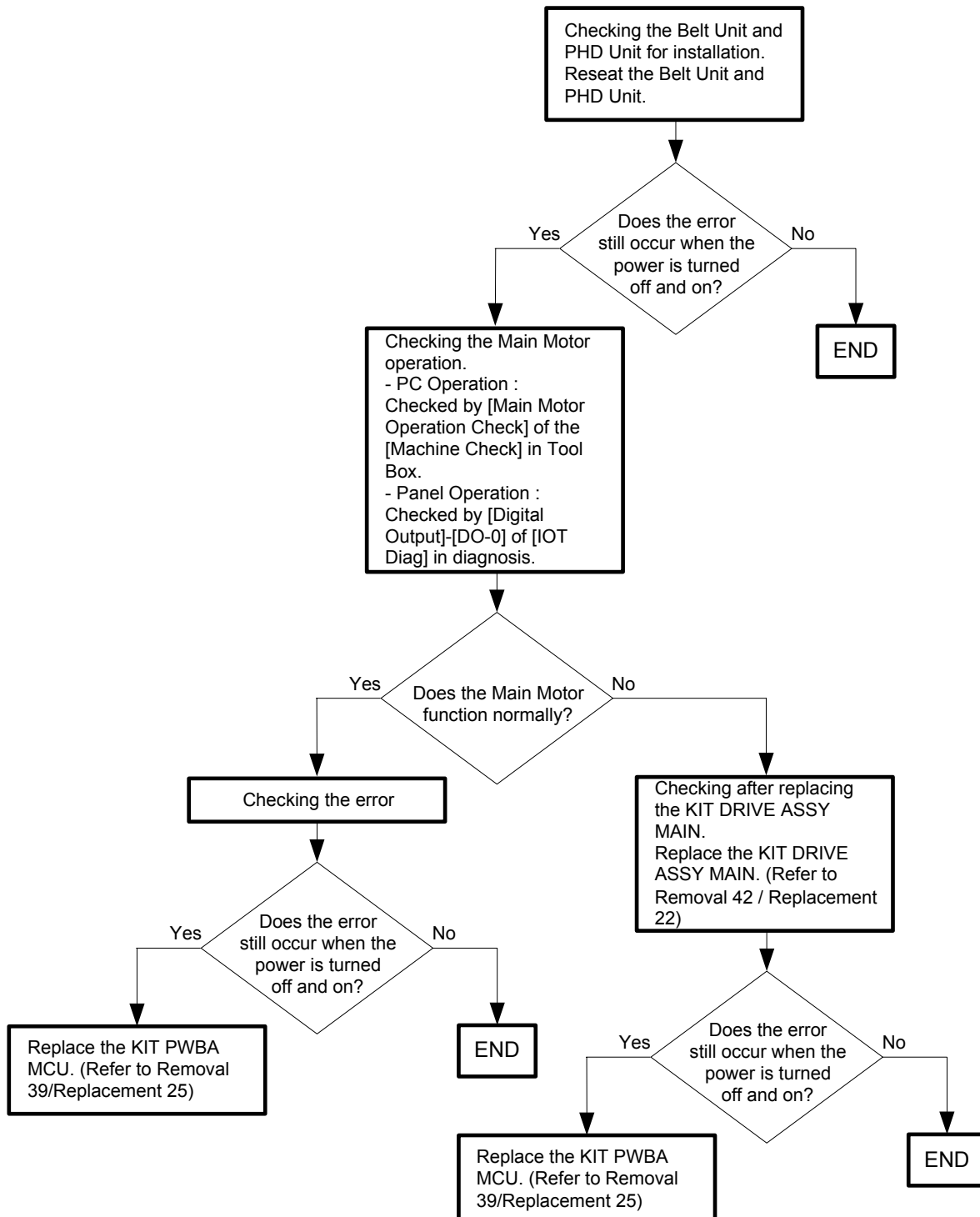
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 9 007-340: IOT Main Motor Failure

Cause: Main Motor failure is detected.

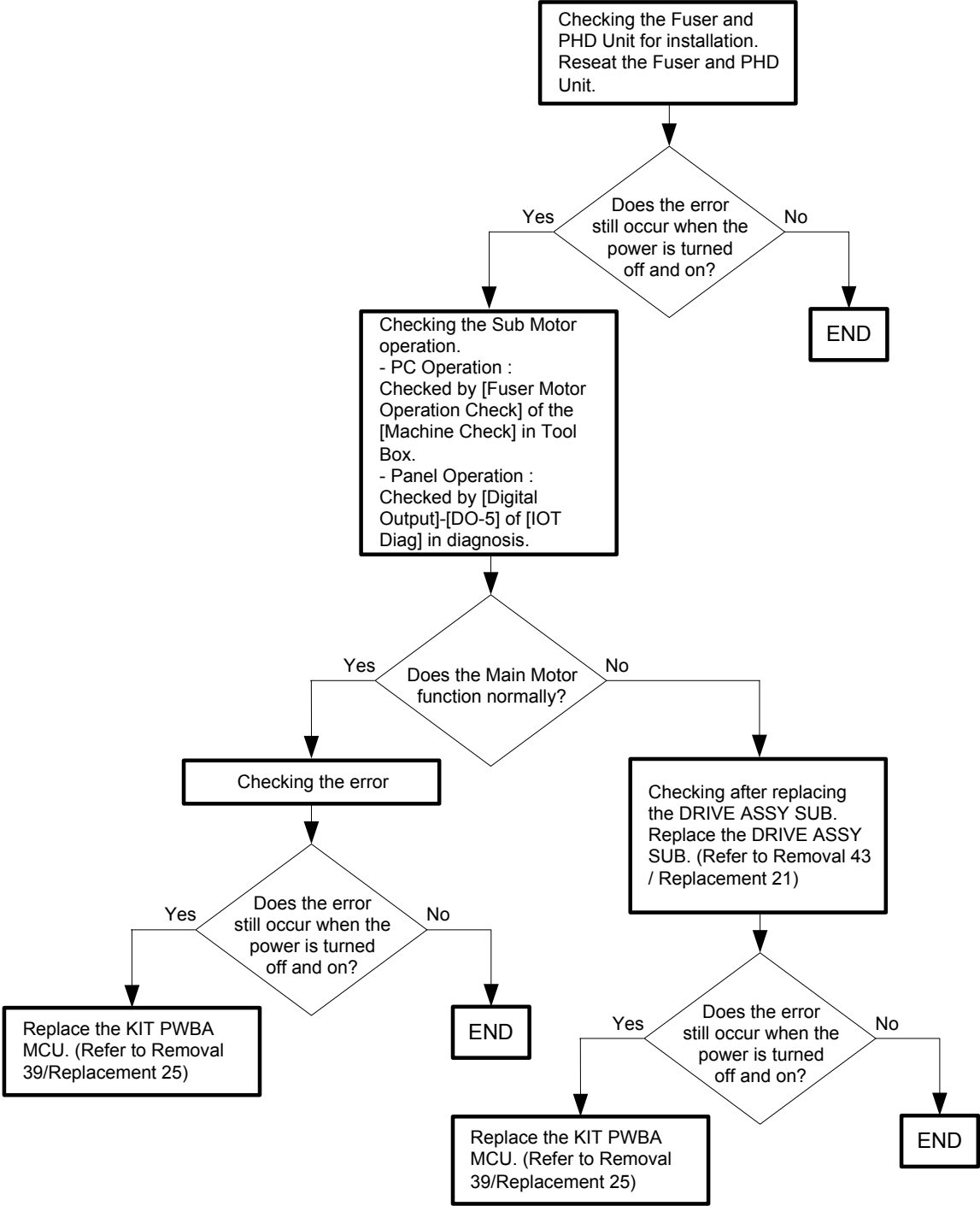
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 10 007-341: IOT Sub Motor Failure

Cause: Sub Motor failure is detected.

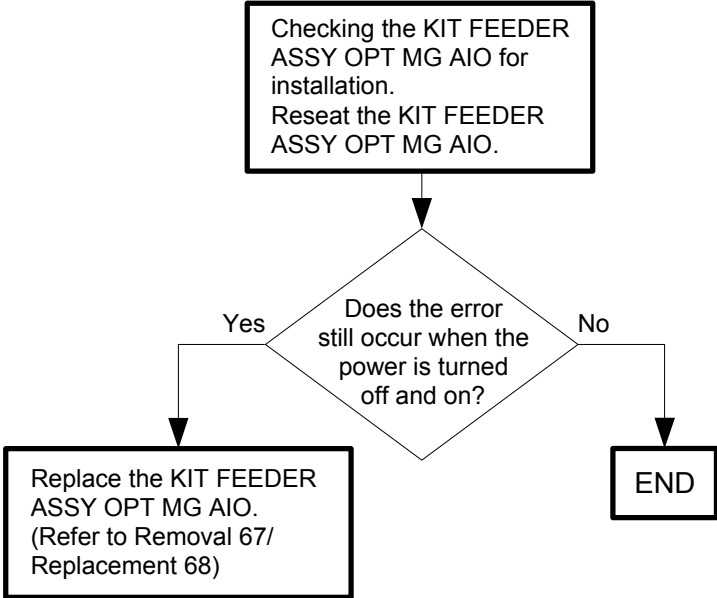
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 11 007-344: Option Feeder Motor Failure

Cause: Option Feeder Motor failure is detected.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

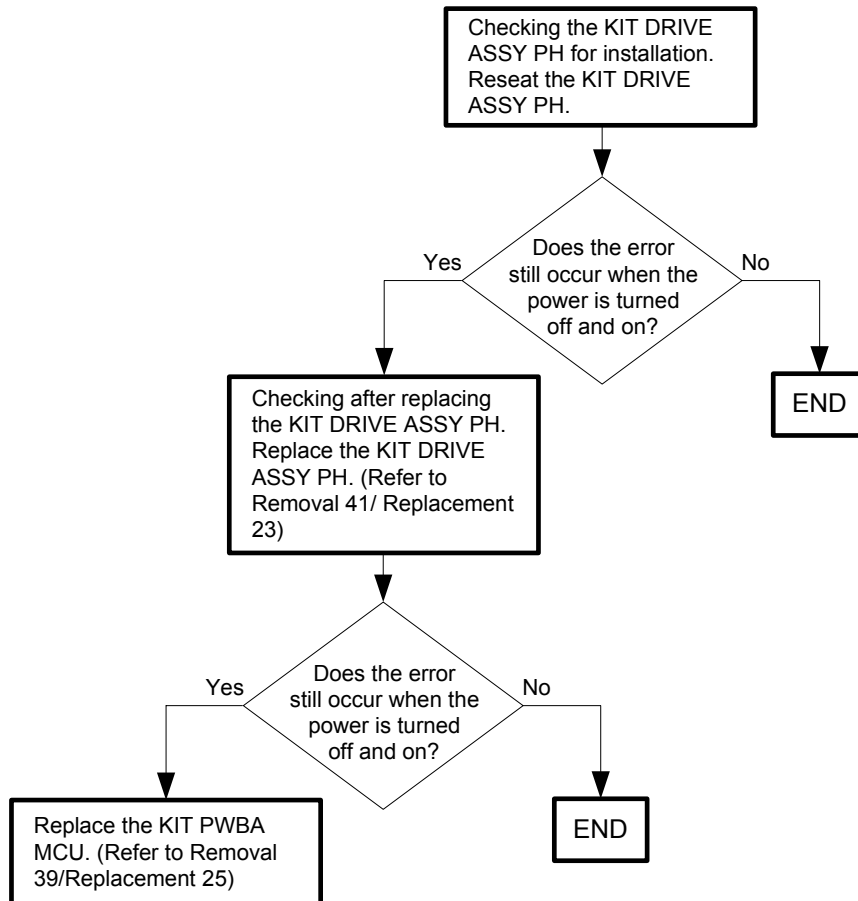


Flows 12 007-371 / 077-372: IOT K Mode Solenoid Error 1/2

Cause: 007-371: The error is generated when K Mode Solenoid (Color Mode Switching Solenoid) does not operate in specified time.

007-372: The error is generated when the gear which operates by K Mode Solenoid (Color Mode Switching Solenoid) rotates two times.

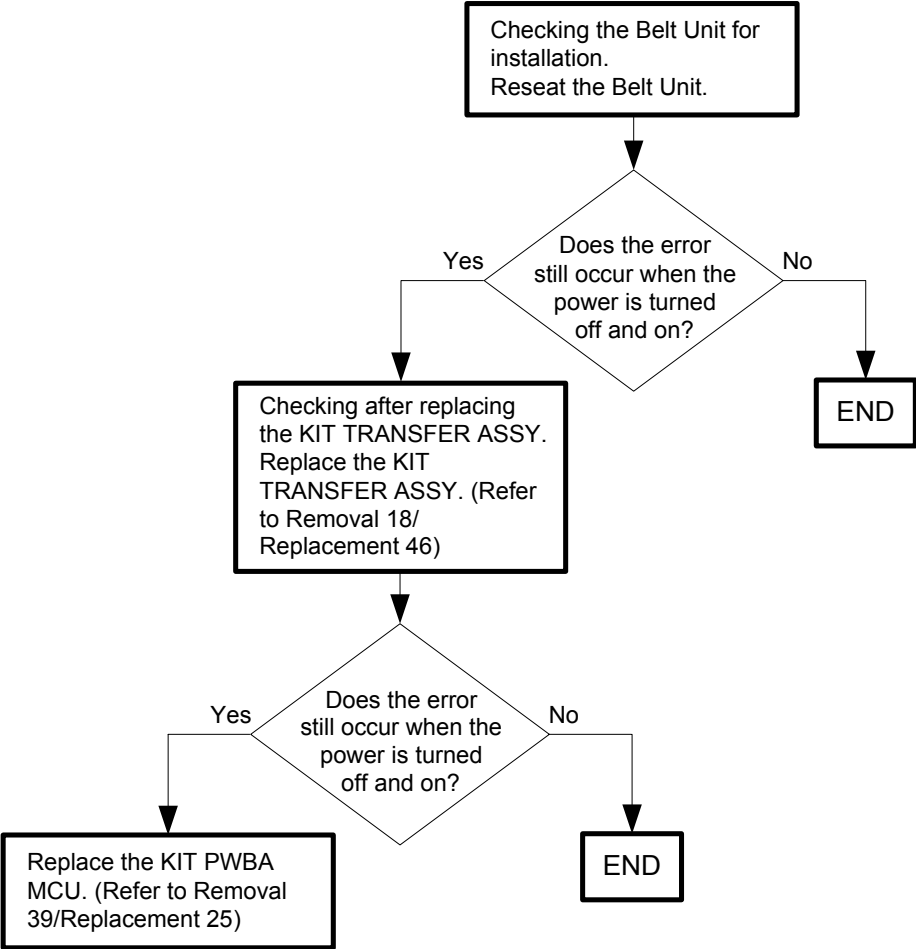
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 13 009-340: IOT CTD (ACD) Sensor Error

Cause: CTD (ACD) sensor error (analog-to-digital conversion etc.) is detected.

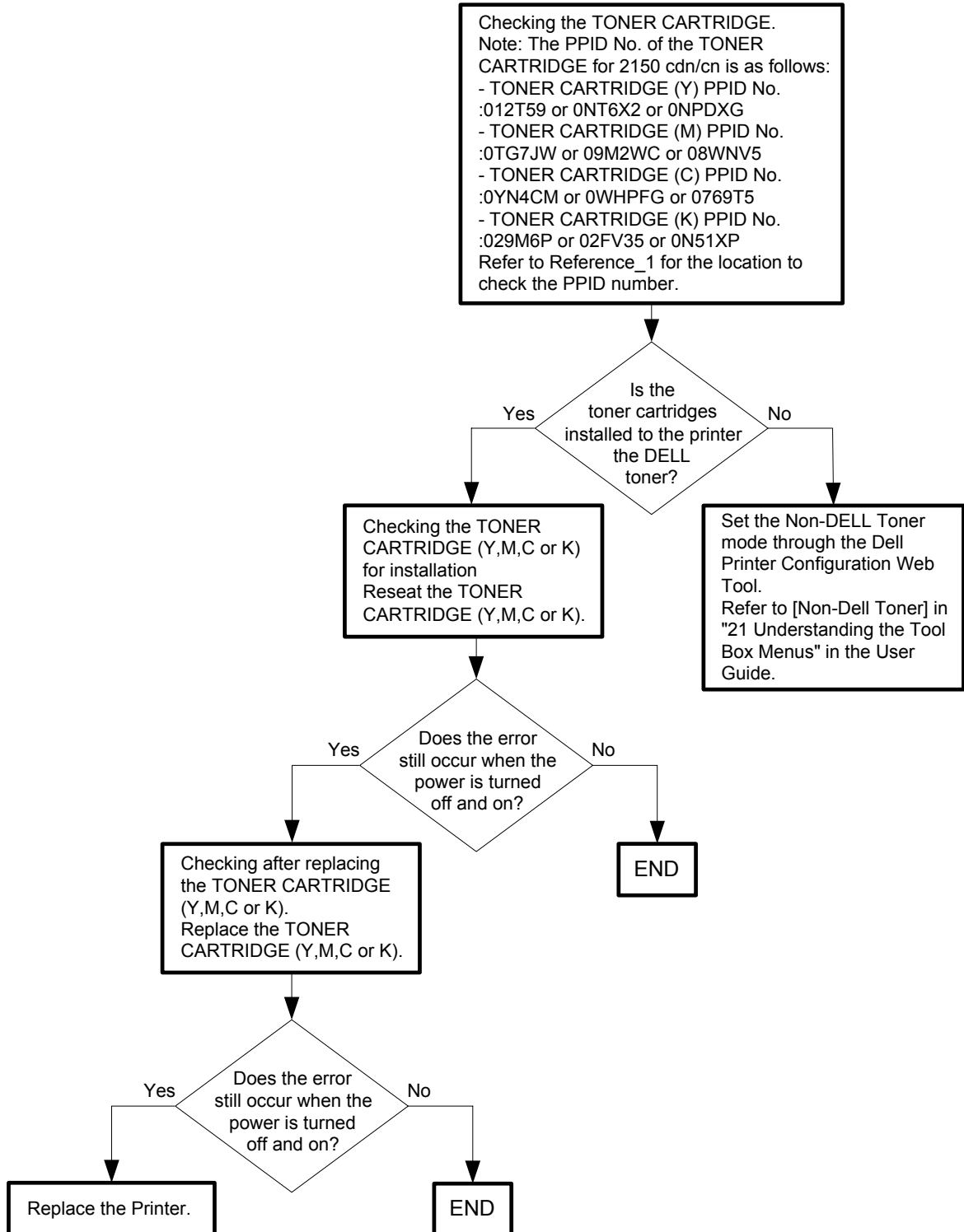
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



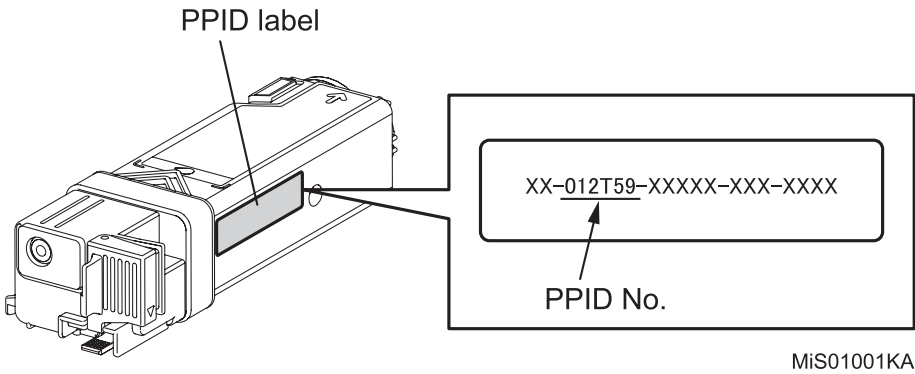
Flows 14 009-360 / 009-361 / 009-362 / 009-363: IOT Toner (YMCK) CRUM Comm Fail

- Cause: 009-360: The Yellow Toner Cartridge CRUM communication failure is detected.
 009-361: The Magenta Toner Cartridge CRUM communication failure is detected.
 009-362: The Cyan Toner Cartridge CRUM communication failure is detected.
 009-363: The Black Toner Cartridge CRUM communication failure is detected.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



- Reference_1: Position of PPID label.



Flows 15 010-317: IOT Fuser Detached

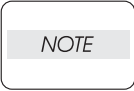
Cause: Fuser detached is detected.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

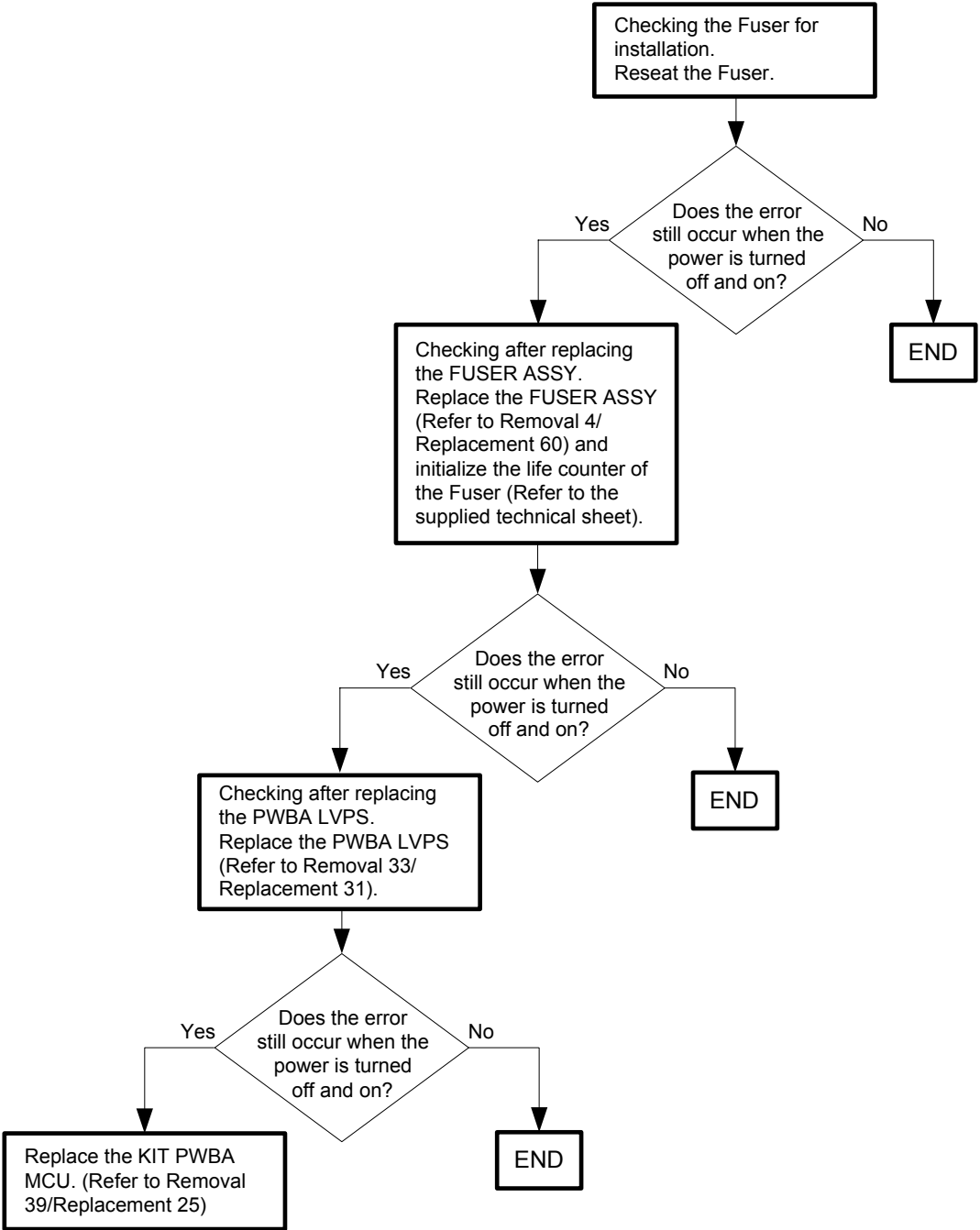


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

Turn off the printer and wait for 30 minutes before removing the fuser.



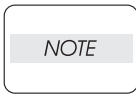
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.



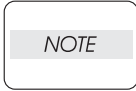
Flows 16 010-351: IOT Fuser Life Over

Cause: The value of Fuser counter has reached the replacement time.

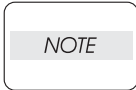
Solution: The Fuser has reached the end of its life. Replace the Fuser with a new one.



Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the message "Life Over" is indicated.



This error code is not related to any hardware fault.

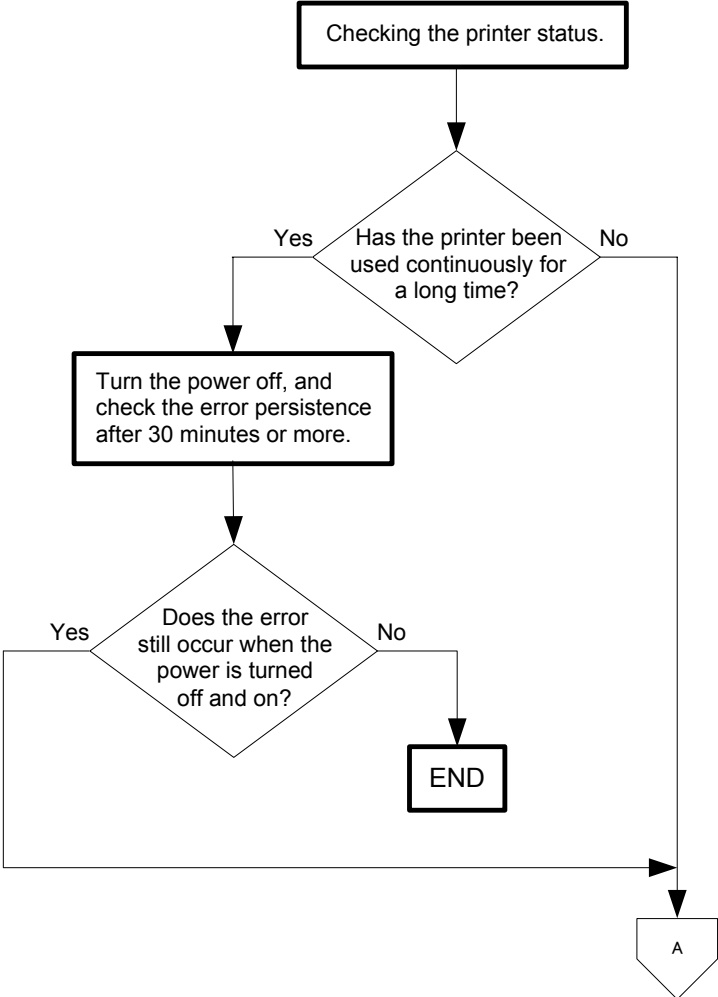


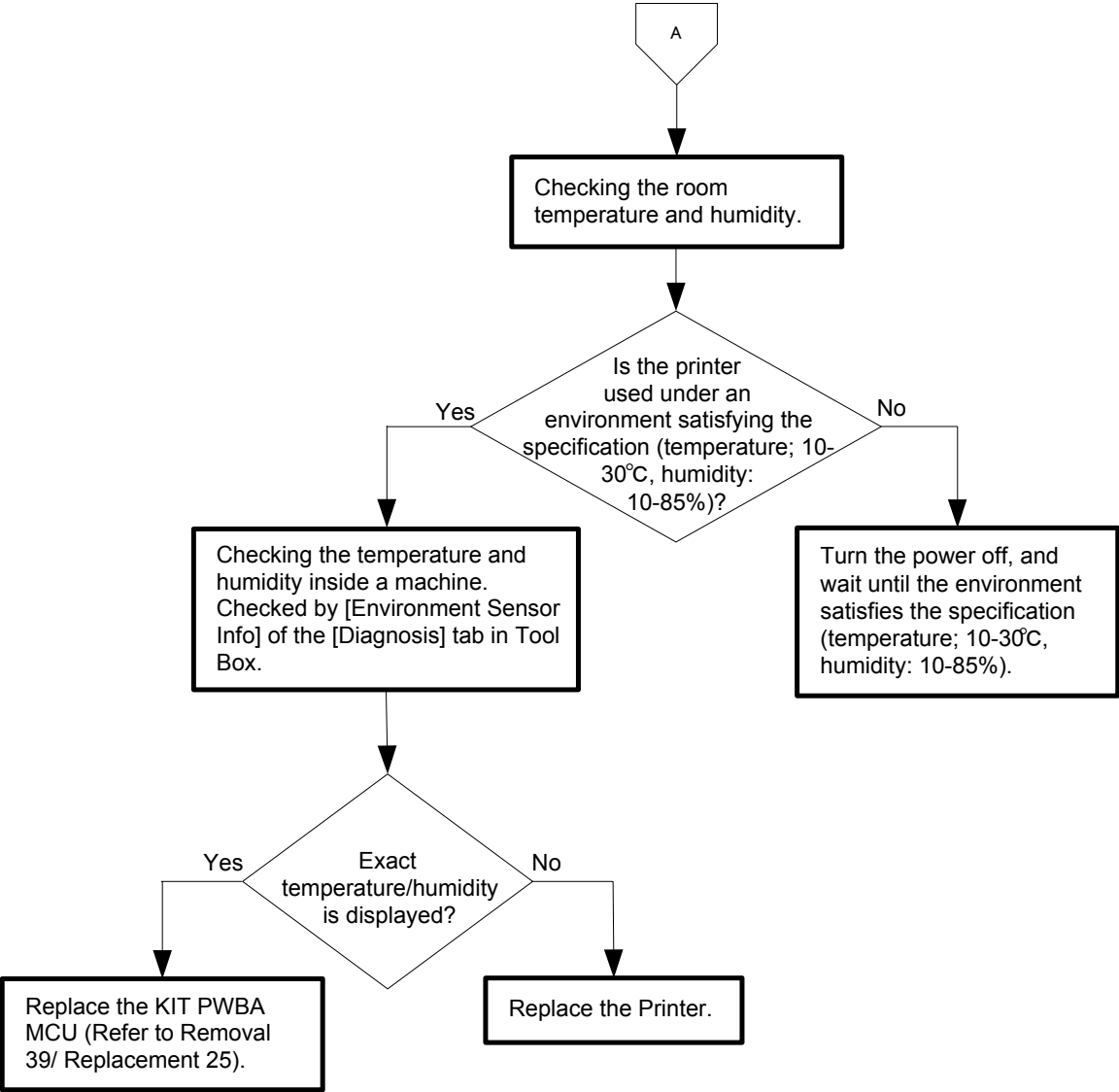
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

Flows 17 010-354: IOT Environment Sensor Error

Cause: The Temperature sensor detected the temperature anomaly.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





Flows 18 010-377: IOT Fuser Failure

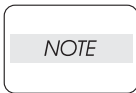
Cause: The operation error of Fuser (Temperature anomaly error etc.) is detected.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

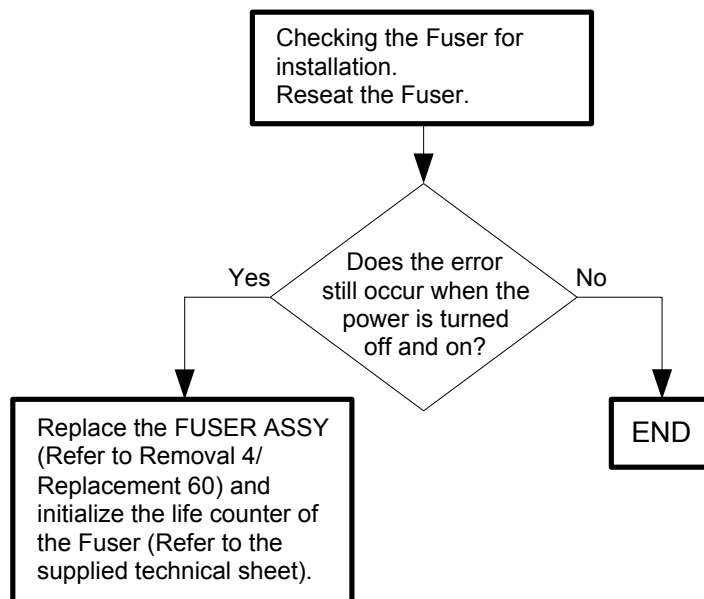


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

Turn off the printer and wait for 30 minutes before removing the fuser.



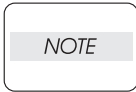
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.



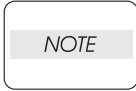
Flows 19 010-421: IOT Fuser Near Life

Cause: The Fuser is approaching the replacement time.

Solution: The Fuser is approaching the replacement time. Prepare a new Fuser.



Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the message "Near Life" is indicated.

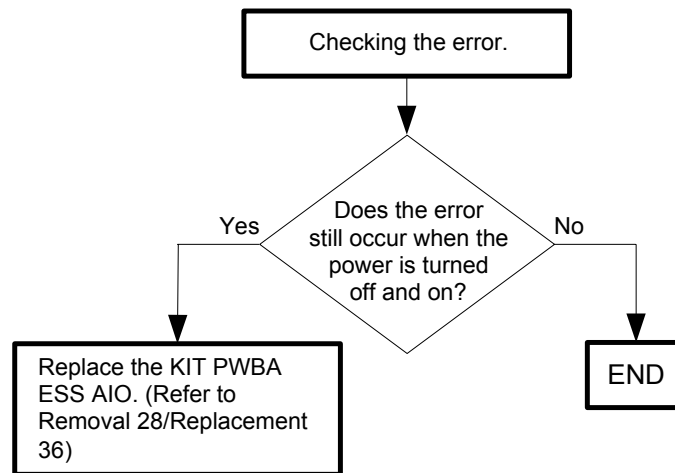


This error code is not related to any hardware fault.

Flows 20 016-300 / 016-301 / 016-302 / 016-310 / 016-313 / 016-315 / 016-317 / 016-323 / 016-324 / 016-327 / 016-340 / 016-392 / 016-393 / 016-394/017-979/017-980/ 017-986/033-502/033-520/033-521/033-522/033-523/033-524/033-525/033-526/116-210/116-364/116-396/116-987/117-315/117-331/117-344/117-326/ 117-363/117-365/123-314/131-398/131-399/133-259/133-260/133-261/133-269/133-271/133-272/133-273/133-274/133-276/133-277/133-281/133-282/ 133-283/133-286/133-287/133-288/133-289: ESS Error

Cause: ESS-related error occurred.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 21 016-316 / 016-318:ESS DIMM Slot RAM R/W Check Fail / ESS DIMM Slot RAM Error

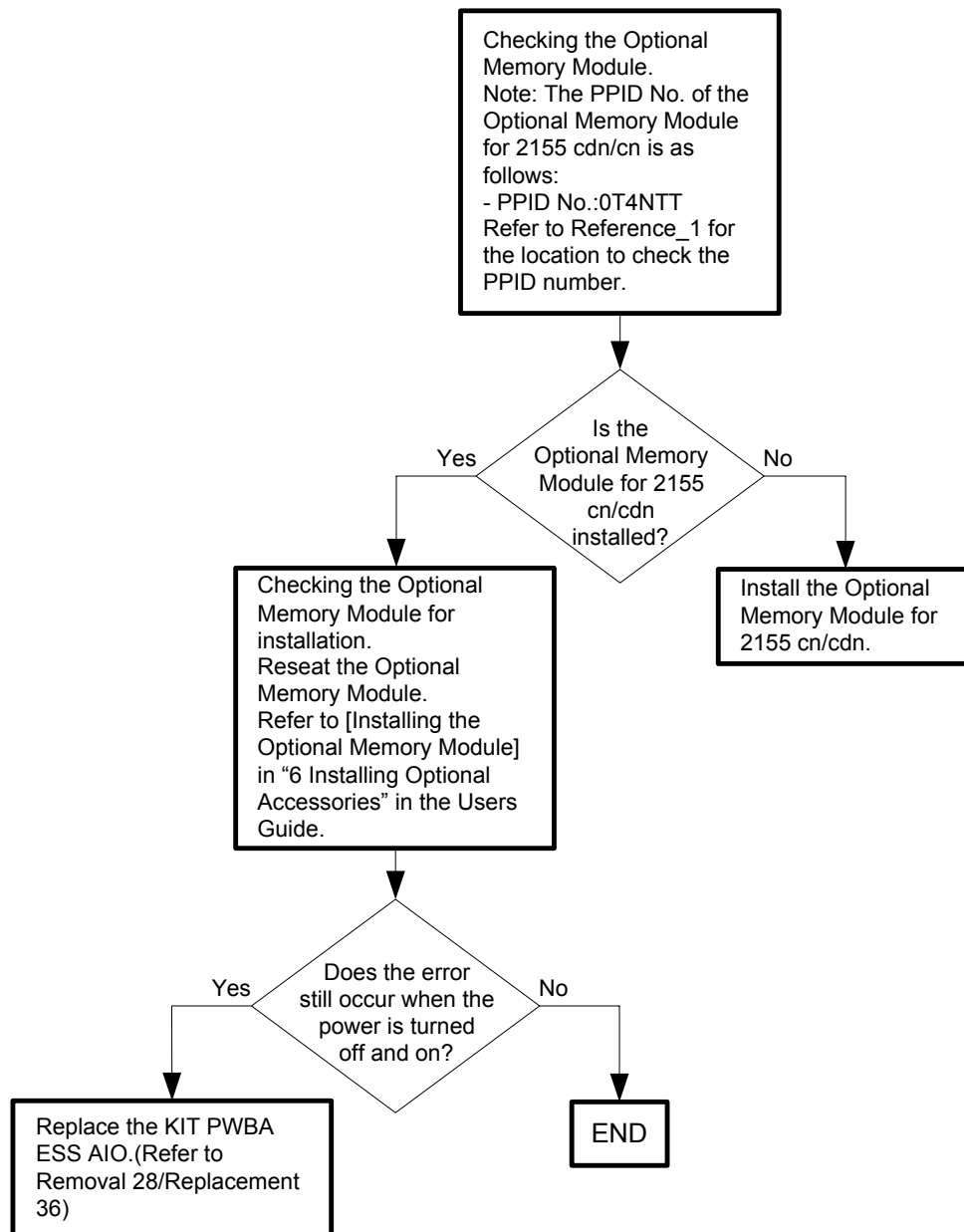
Cause: 016-316:Unsupported additional memory module is detected in the memory slot.
016-318:Additional memory module is not completely inserted in the slot.

Solution: 016-316:Remove the added memory module. To add a memory, use the optional 512 MB memory module.

016-318:Remove the Memory Module and re-install it.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



- Reference_1: The PPID number is on the packing box.

XX-0T4NTT-XXXXX-XXX-XXXX

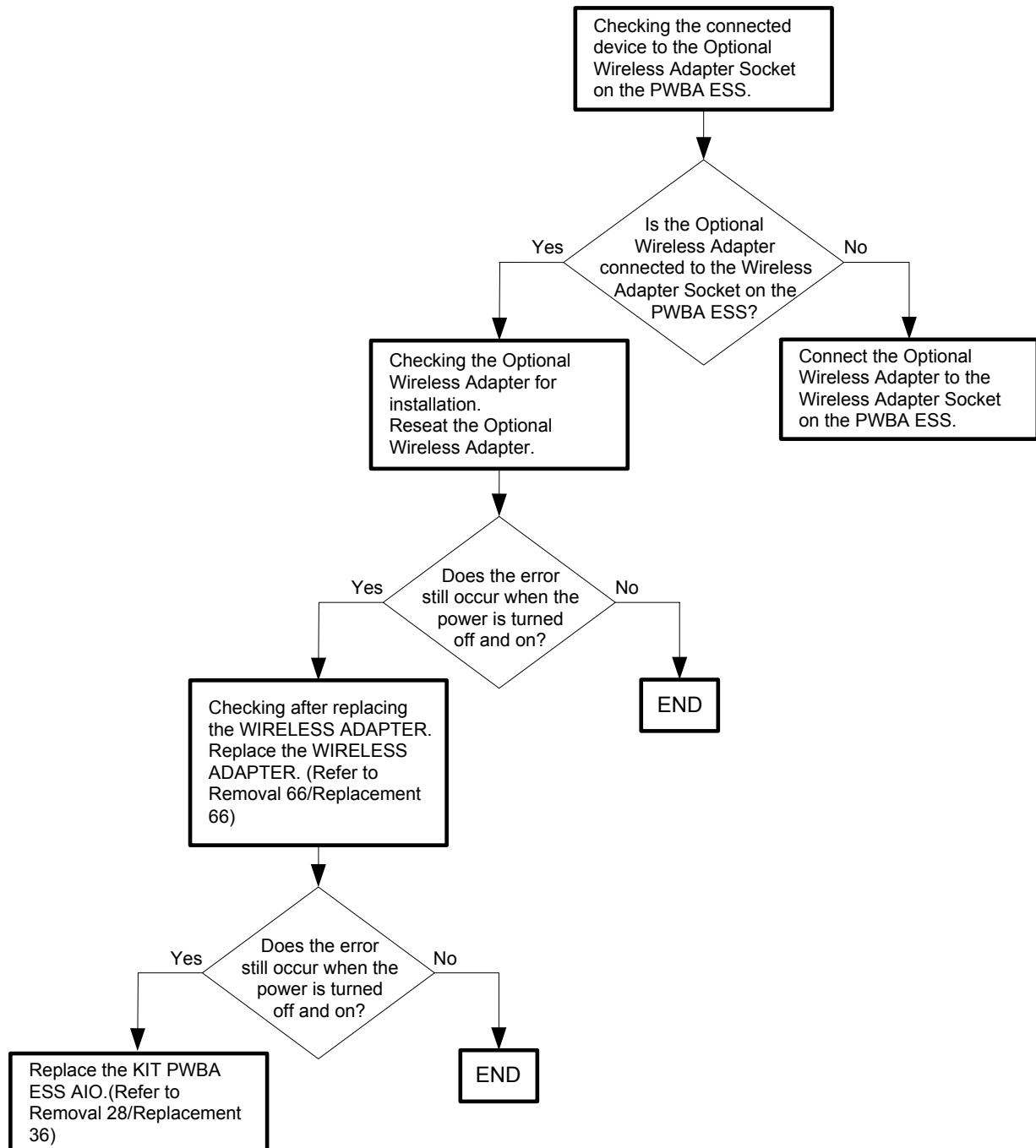


PPID No.

Flows 22 016-338: Option Wireless Adapter Error

Cause: The error is detected by Wireless Adapter option check.

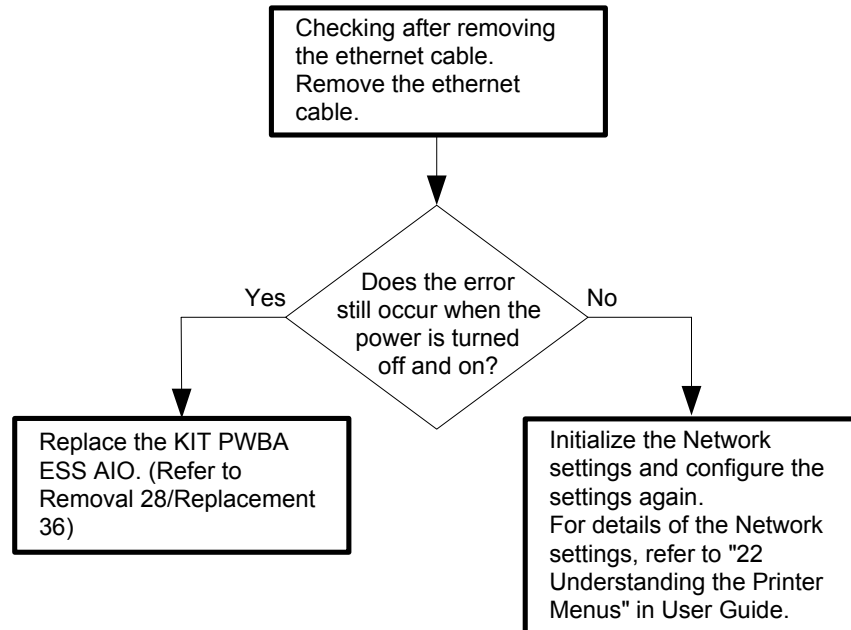
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 23 016-347: On Board Network Fatal Error

Cause: A fatal error occurred the on board network communication.

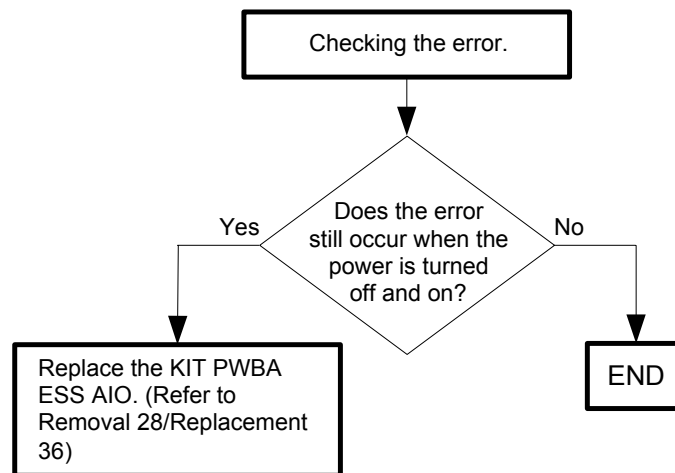
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 24 016-362 / 016-363 / 016-364 / 016-366 / 016-367 / 016-368: PCI Bus# (0 / 1)
Host Bridge Controller Error / PCI Bus# (0 / 1) Error Detected / PCI Error Mes-
sages received from Bus#0-Device# (0 / 1)

Cause: Connection error occurred between the PCI BUS port and the port of peripheral devices.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshoot-
ing following the flowchart given below.



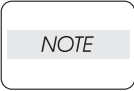
Flows 25 016-370: MCU-ESS Communication Fail

Cause: Communication fail between MCU and ESS.

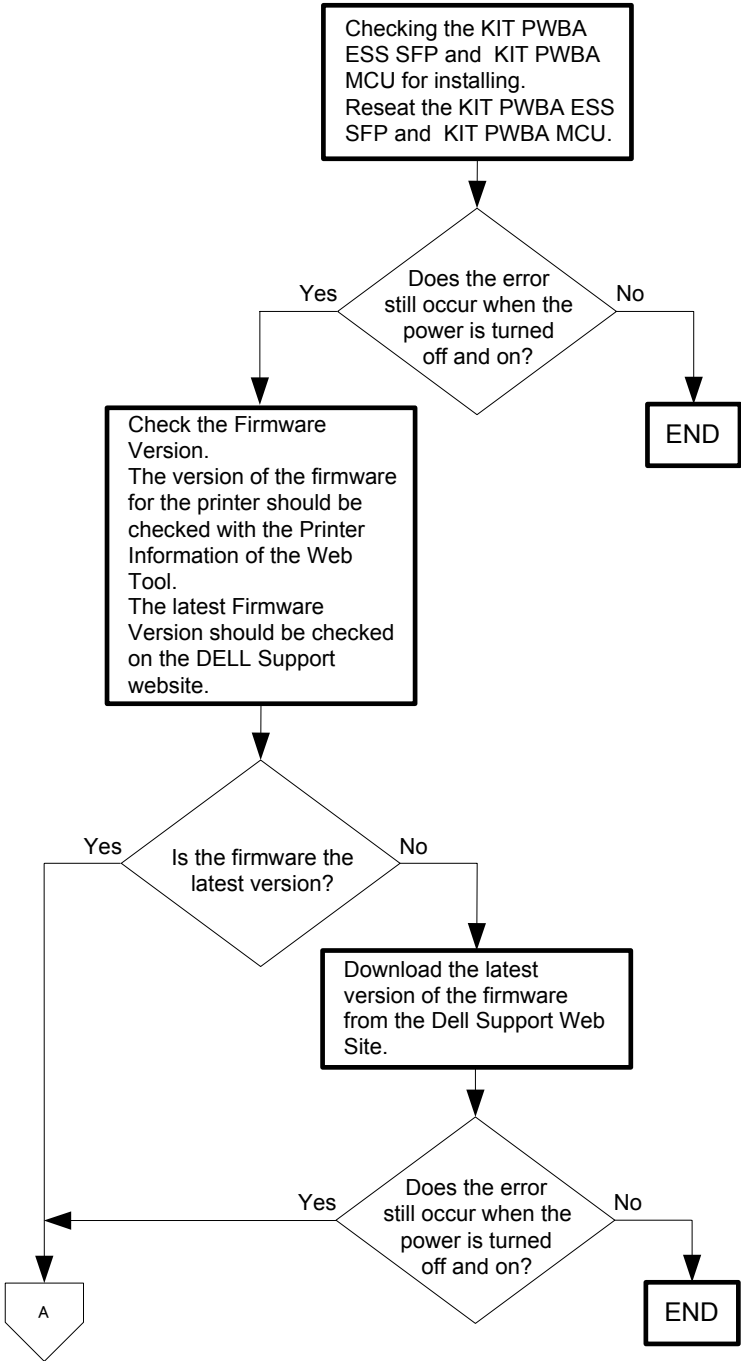
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

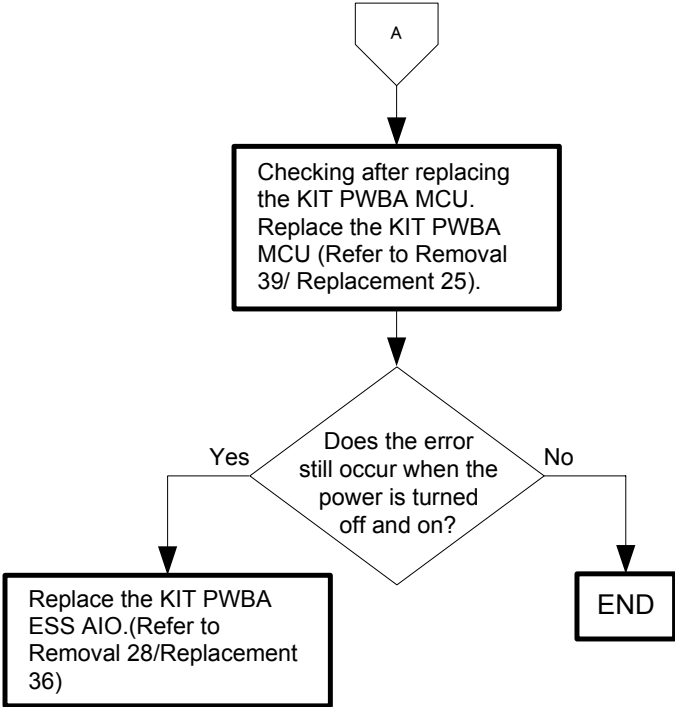


When replacing the PWBA ESS and PWBA MCU concurrently, ensure that the ROM chip of the ESS is replaced and that the NVM data of the MCU is saved and reloaded. For details, refer to the supplied technical sheet.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

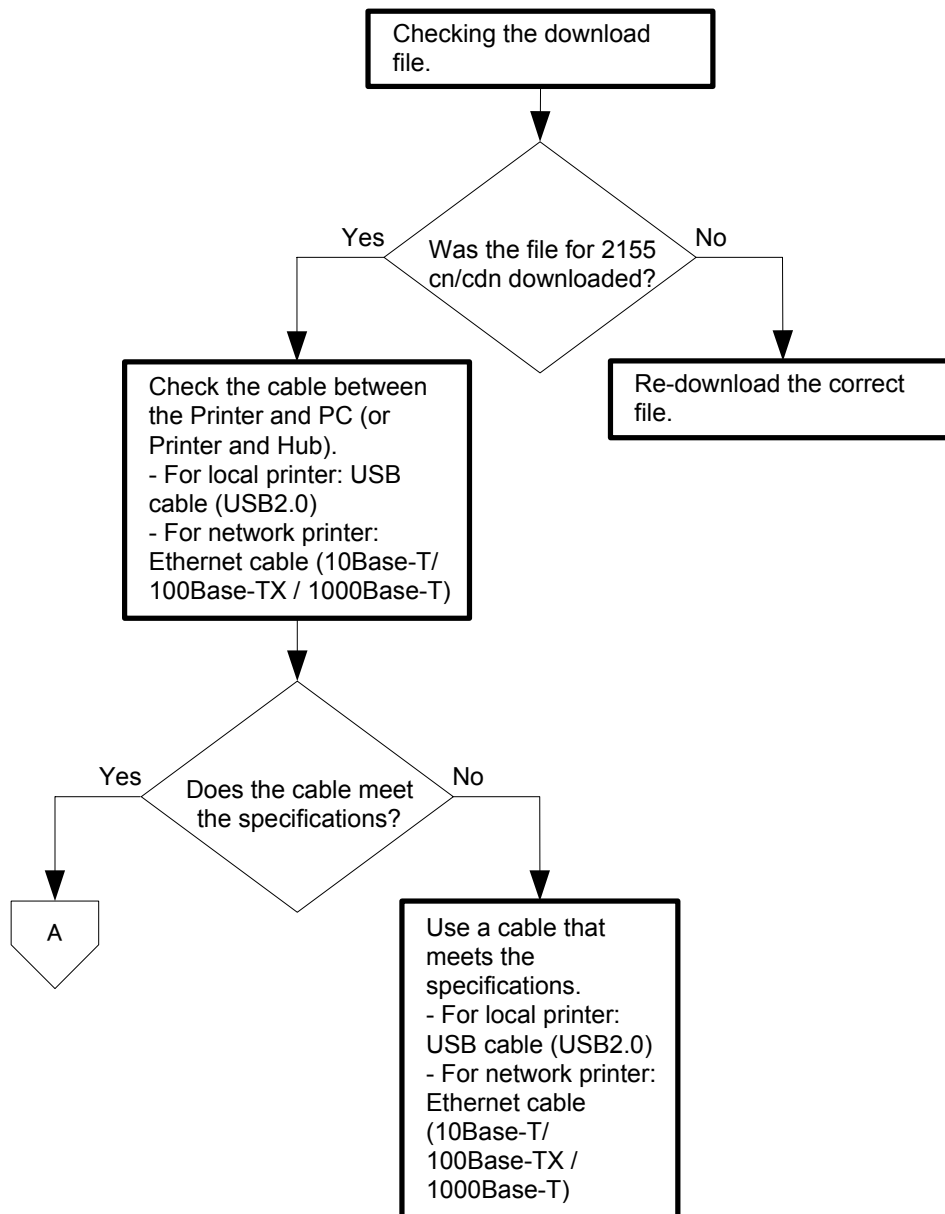


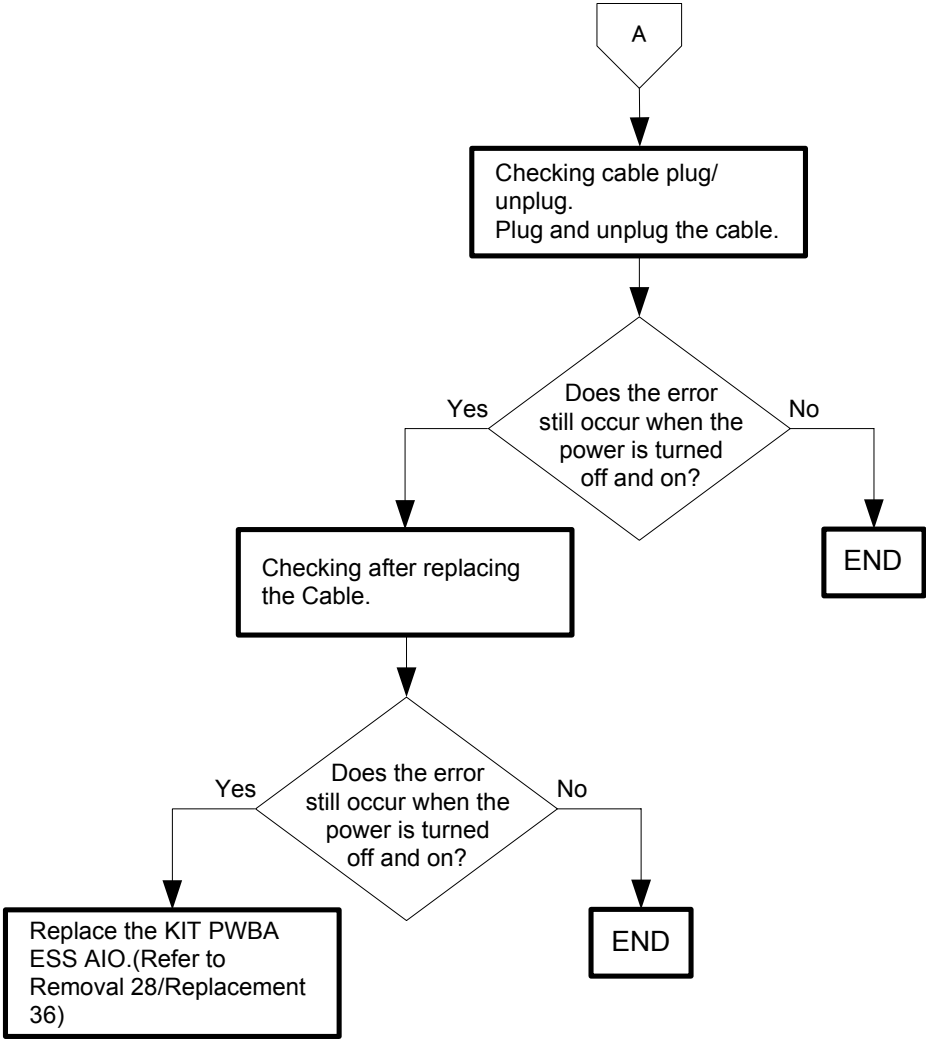


Flows 26 016-383 / 016-384 / 016-385 / 016-386 / 016-387/ 016-388 / 016-391: Download ID Error / Download Range Error / Download header Error / Download Check Sum Error / Download Format Error / Download Initial Error / Download Protect Error

Cause: 016-383:Download file ID is invalid.
 016-384:At download, write-in destination address is invalid.Range check error.
 016-385:Download file header is invalid.
 016-386:Download file checksum is invalid.
 016-387:Download file format is invalid.
 016-388:When downloading, failed in starting download mode.
 016-391:Performed FW download although FW update is prohibited by panel settings.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

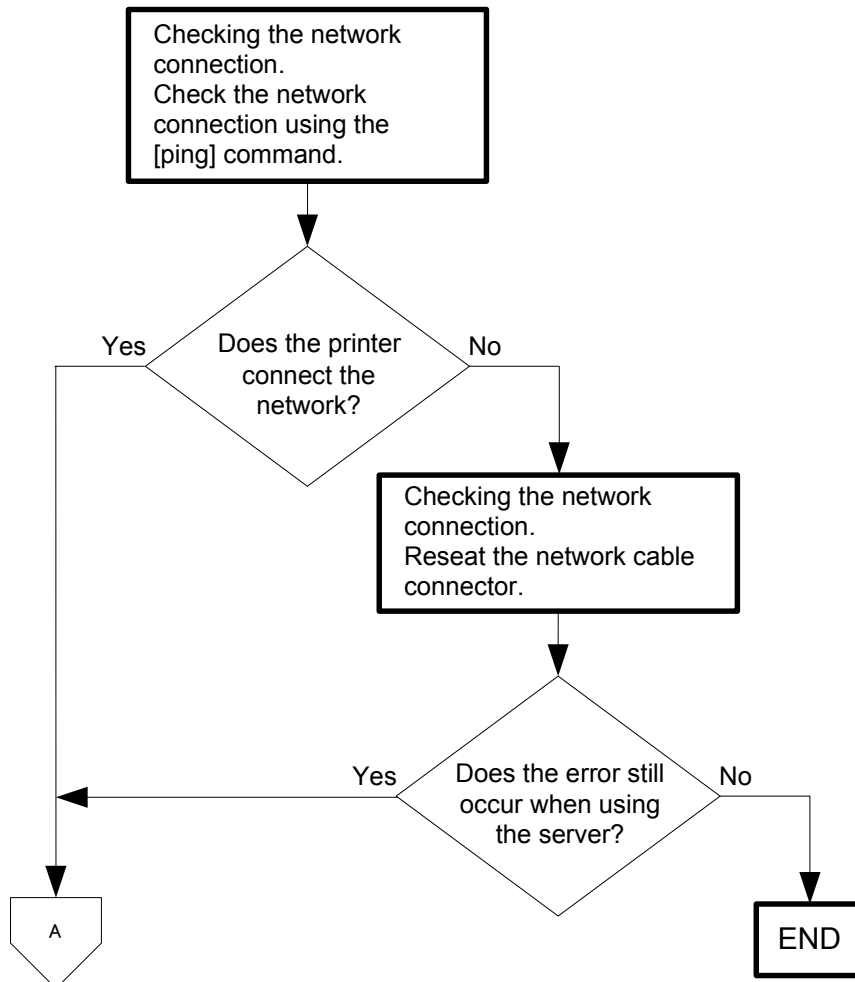


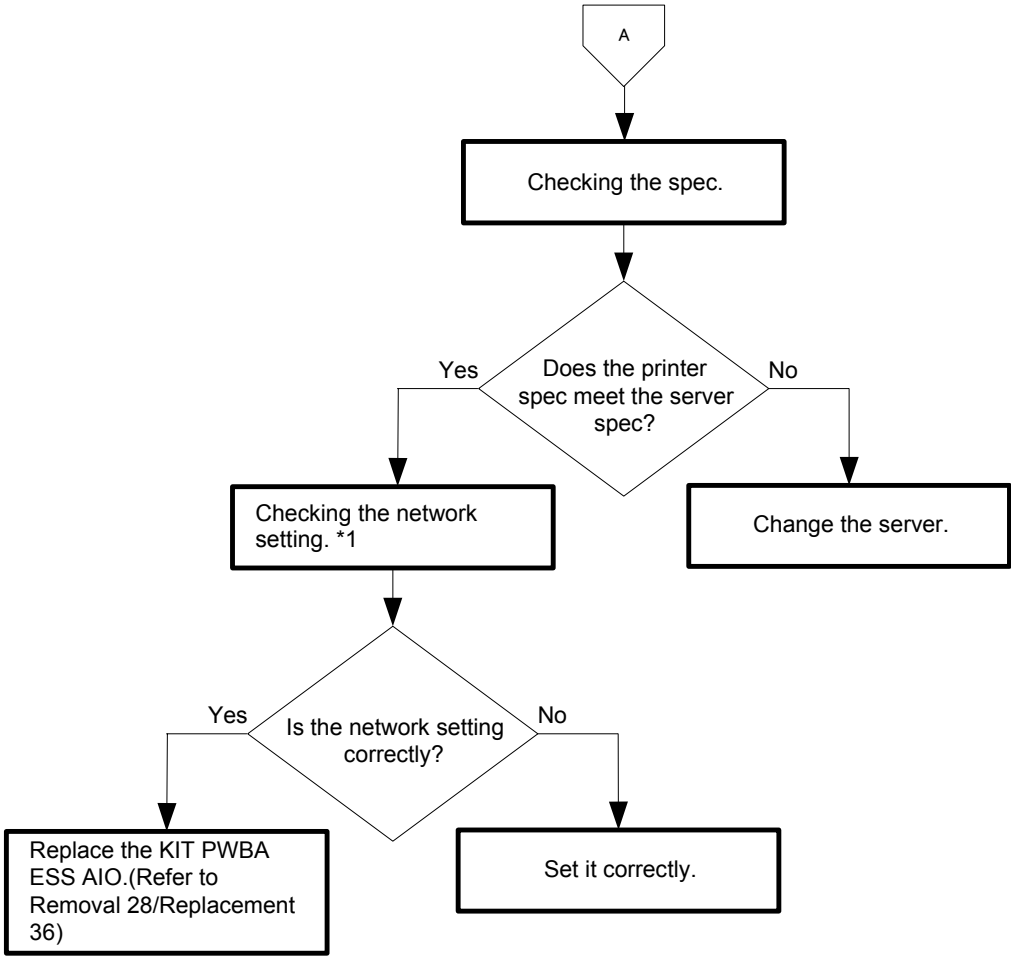


Flows 27 016-503 / 016-504 / 016-505/016-506/016-507/016-764/016-786: Server Setting Error

Cause: 016-503:SMTP server name resolution for email send failed.
 016-504:POP3 server name resolution for email send failed.
 016-505:Cannot login to POP3 server to send email.
 016-506:Some item is not set.
 016-507:Cannot login to SMTP server to send email.
 016-764:Error occurs when connecting to SMTP server.
 016-786:Timeout error occurs in scan data send/receive.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.
 Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





*1:Checking the network setting.

016-503:Checking the “Primary SMTP Gateway” in the E-Mail Alert Page / “DNS” in the TCP/IP Page.

016-504:Checking the “POP 3 Server Address” in the E-Mail Alert Page / “DNS” in the TCP/IP Page.

016-505:Checking the “POP User Name” / “POP User Password” in the E-Mail Alert Page.

016-506:Checking the “E-Mail Server Settings” in the E-Mail Alert Page / “DNS” in the TCP/IP Page.

016-507:Checking the “SMTP Login User” / “SMTP Login Password” in the E-Mail Alert Page.

016-764:Checking the “E-Mail Server Settings” in the E-Mail Alert Page / “DNS” in the TCP/IP Page.

016-786:Checking the “E-Mail Server Settings” in the E-Mail Alert Page / “DNS” in the TCP/IP Page.

Flows 28 016-520: Ipsec Certificate Error

Cause: A certification error occurred.

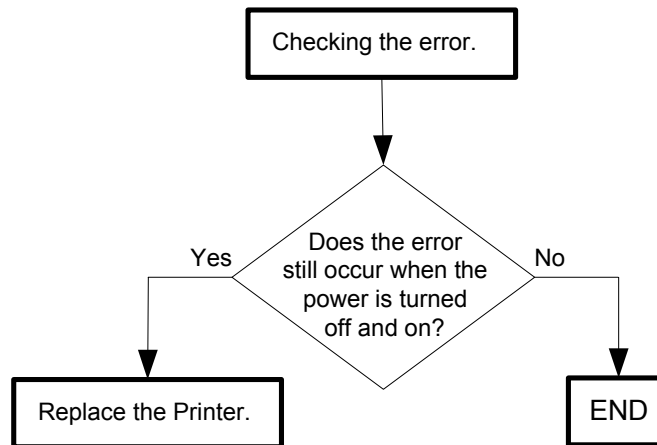
Solution: Contact the system administrator.

Reset certificate from other connectable client with EWS.

If no device can be connected, disconnect cable, turn off IPsec, and then reset certificate with EWS.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



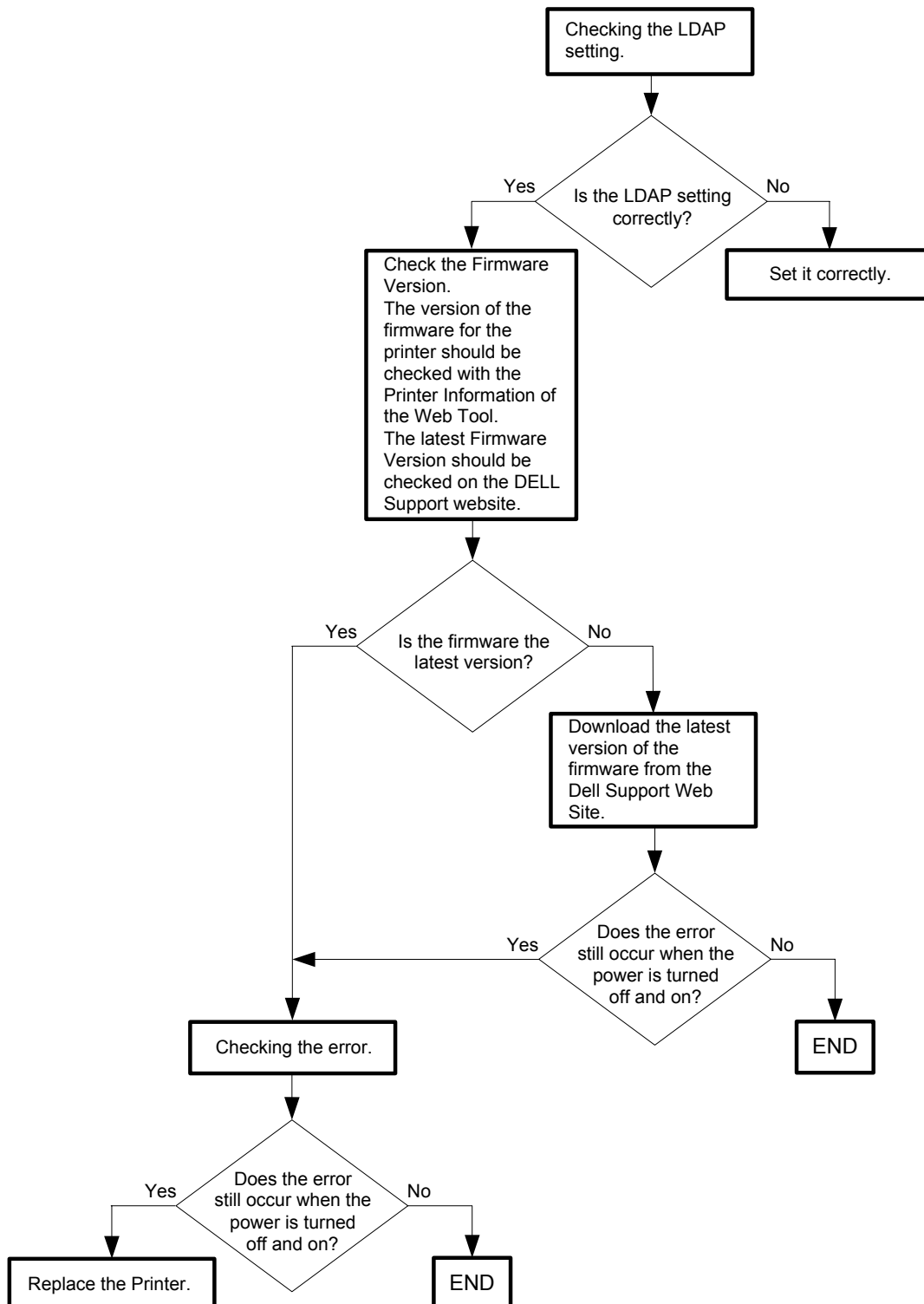
Flows 29 016-530: LDAP Address Book - Access Error

Cause: LDAP Address Book Other Access Errors.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE

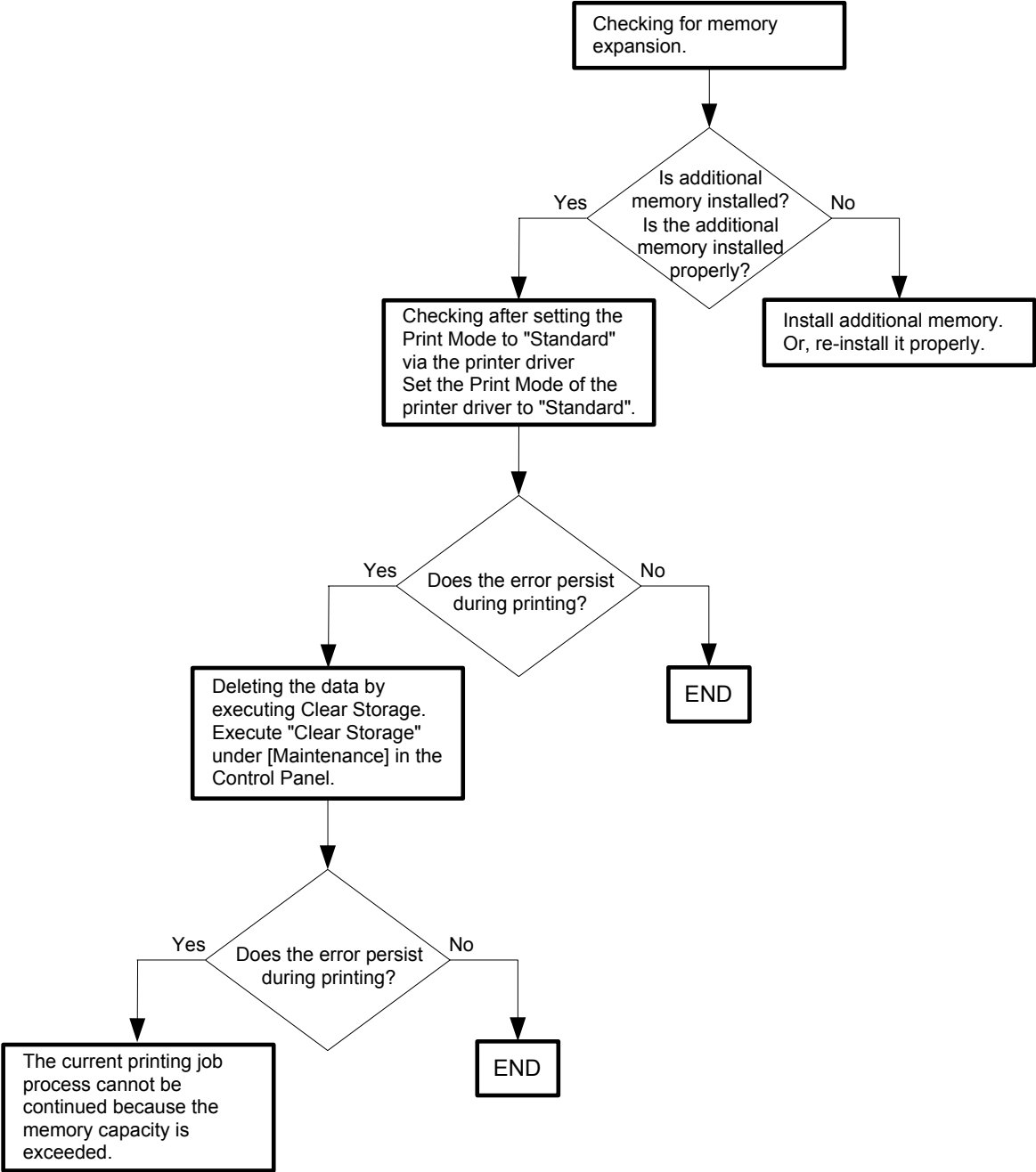
Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



Flows 30 016-700: Memory Over flow

Cause: The current printing job process cannot be continued because the memory capacity is exceeded.

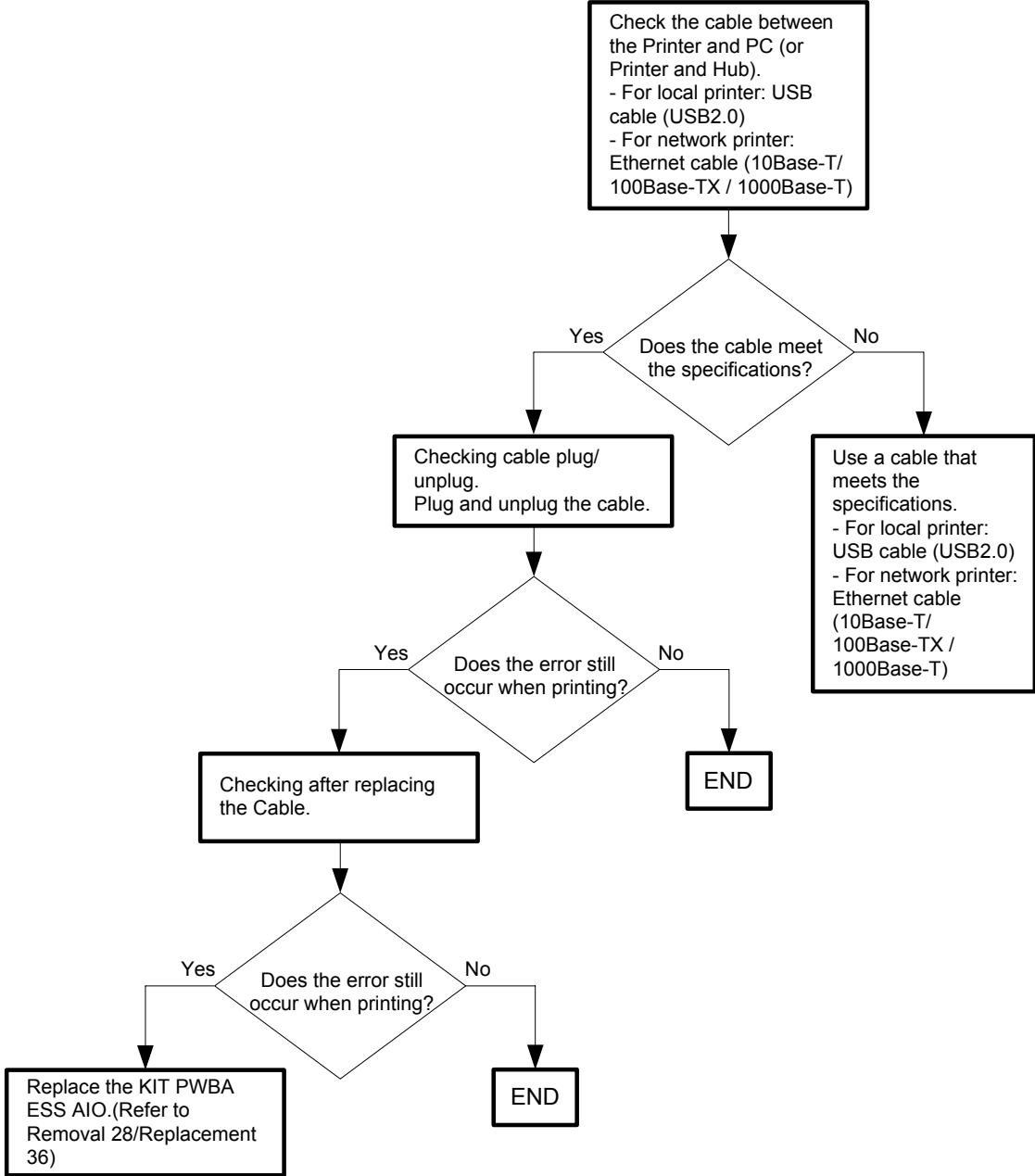
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 31 016-720: PDL Error

Cause: The print data cannot be processed by PDL.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 32 016-753 / 016-755:PDF password error / PDF print disabled error

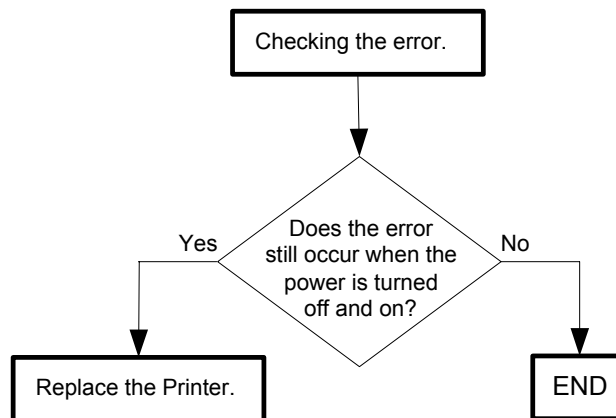
Cause: 016-753:PDF password error.
016-755:PDF print is not allowed.

Solution: 016-753:The PDF document password is incorrect. Enter the correct PDF document password again.

016-755:This document cannot be printed because printing is set to "Not Allowed" in the PDF document security settings. Change the security settings.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 33 016-756: Auditron - Print prohibited time

Cause: Printing was executed at the print-prohibited time or the day of the week.

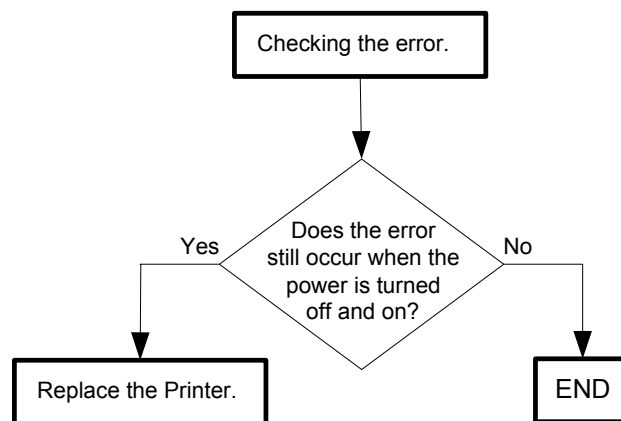
Solution: Printing cannot be executed because the printing is set in the print-prohibited day of the week or the time zone.

To execute printing, consult the system administrator.

This error is automatically reset after a lapse of the specified time.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 34 016-757: Auditron - Invalid User

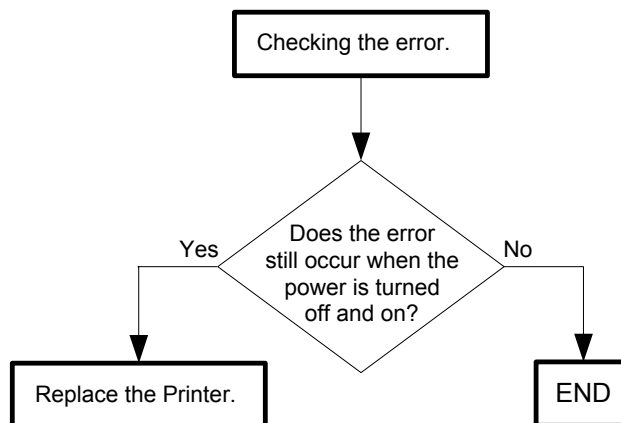
Cause: An error occurred because the user's account settings did not match those of the Administrator.

Solution: Printing cannot be executed because your account (user name and password) has not been registered. To execute printing, consult the system administrator.

This error is automatically reset after a lapse of the specified time.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 35 016-758: Auditron - Disabled Function

Cause: An error occurred because a user authorized only for B&W print attempted to execute color printing.

Solution: Color printing cannot be executed because the printer has been set only to enable B&W printing. To use color printing, consult the system administrator.

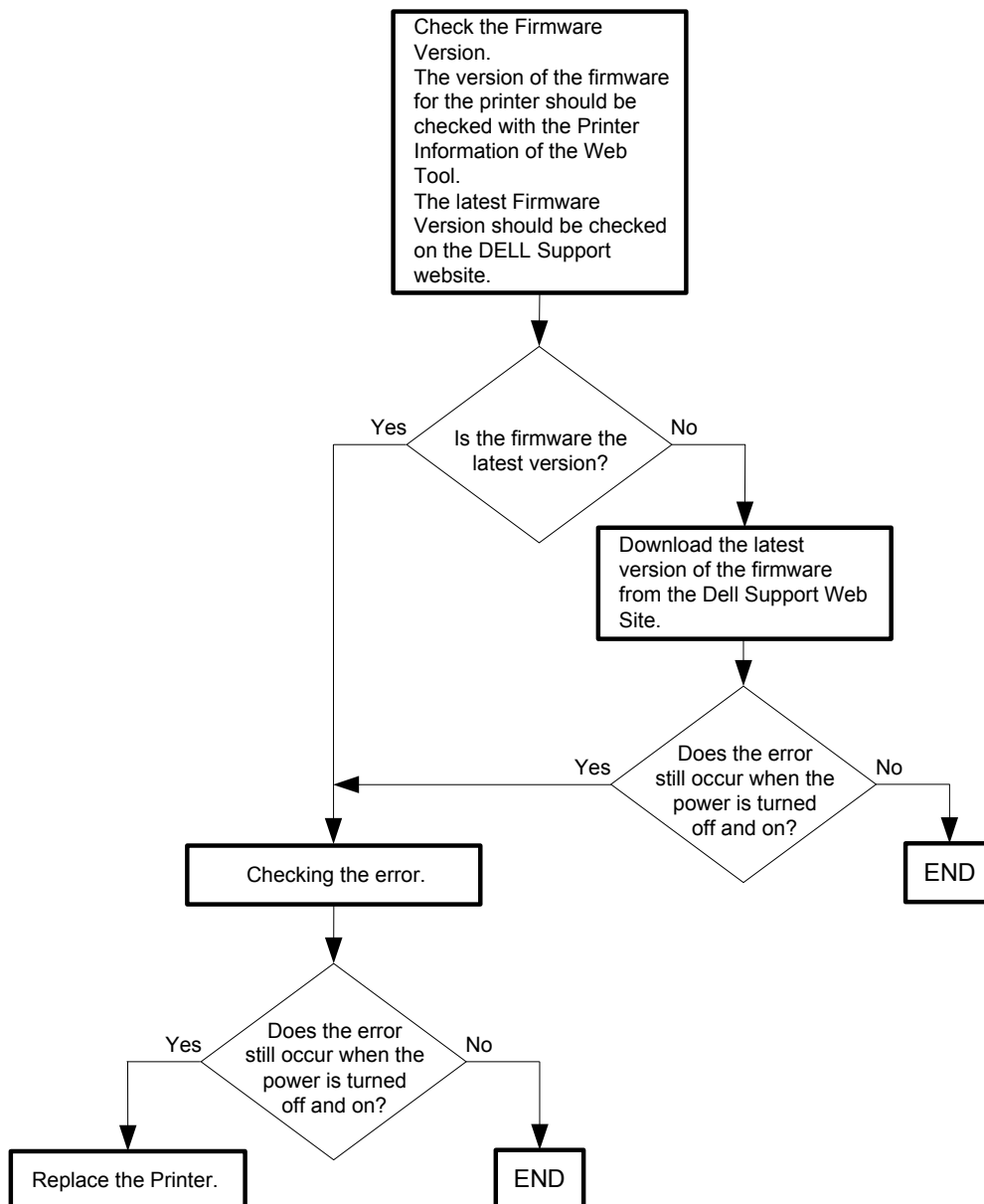
This error is automatically reset after a lapse of the specified time.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

NOTE

Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



Flows 36 016-759: Auditron - Reached Limit

Cause: An attempt was made to print more copies than the print count limit.

Solution: The printer has been set so that it does not continue printing when the specified number is reached. To continue printing, consult the system administrator.

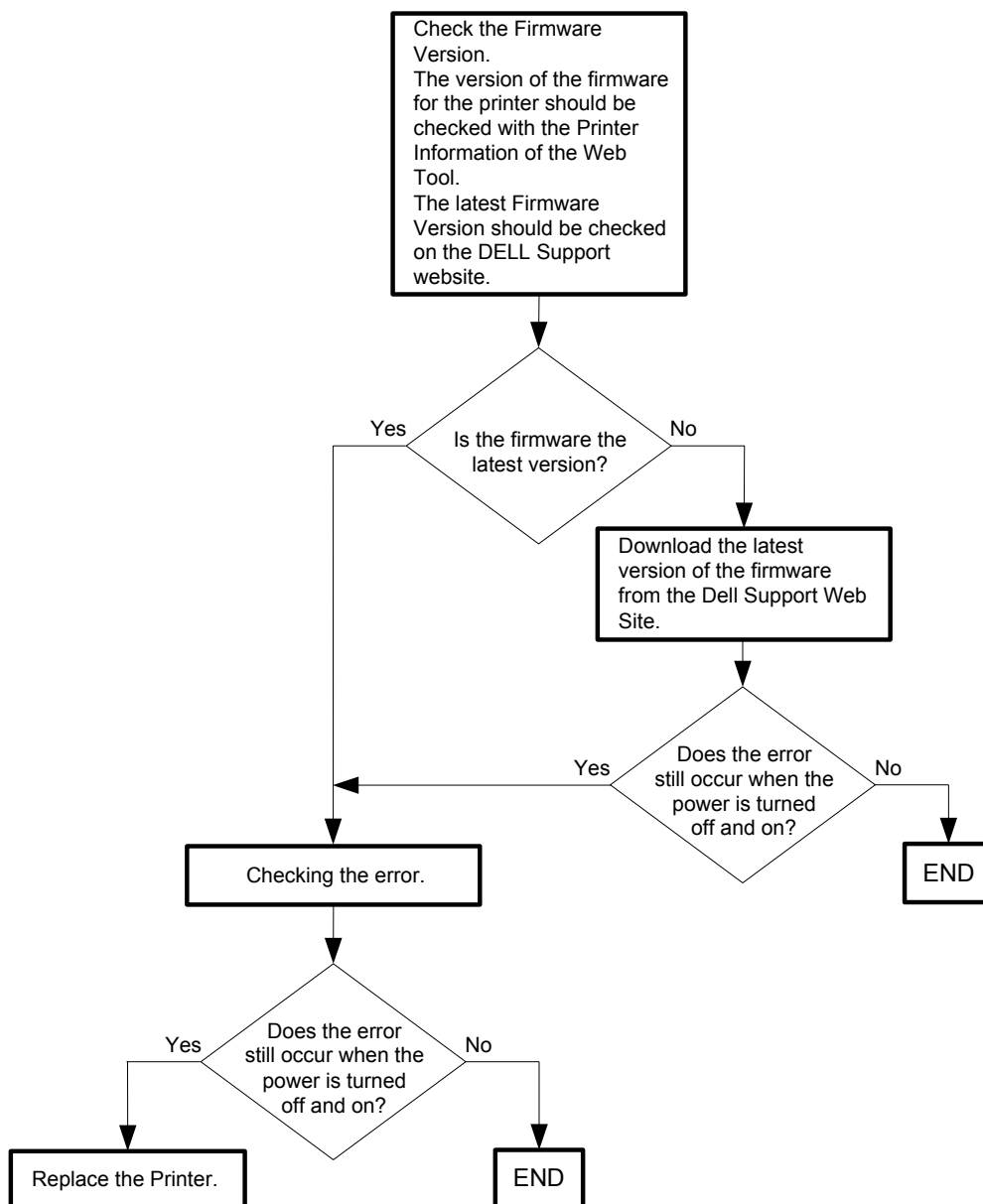
This error is automatically reset after a lapse of the specified time.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

NOTE

Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



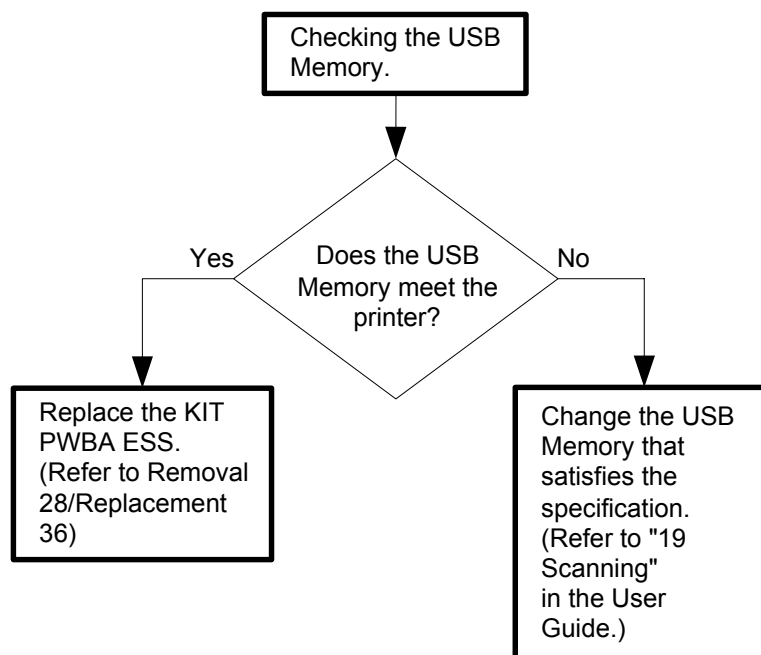
Flows 37 016-791/026-720/026-721: USB Memory Error

Cause: 016-791:USB memory is removed while memory reading job is being executed.
 026-720:USB memory is full.
 026-721:Writing to USB memory failed.

Solution: 016-791:Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.
 026-720:It is necessary to delete unnecessary data.
 026-721:Change the USB Memory.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 38 016-799: Job Environment Violation

Cause: Detects violation data for the print condition. The print data specifies paper type/ size not available for the printer.

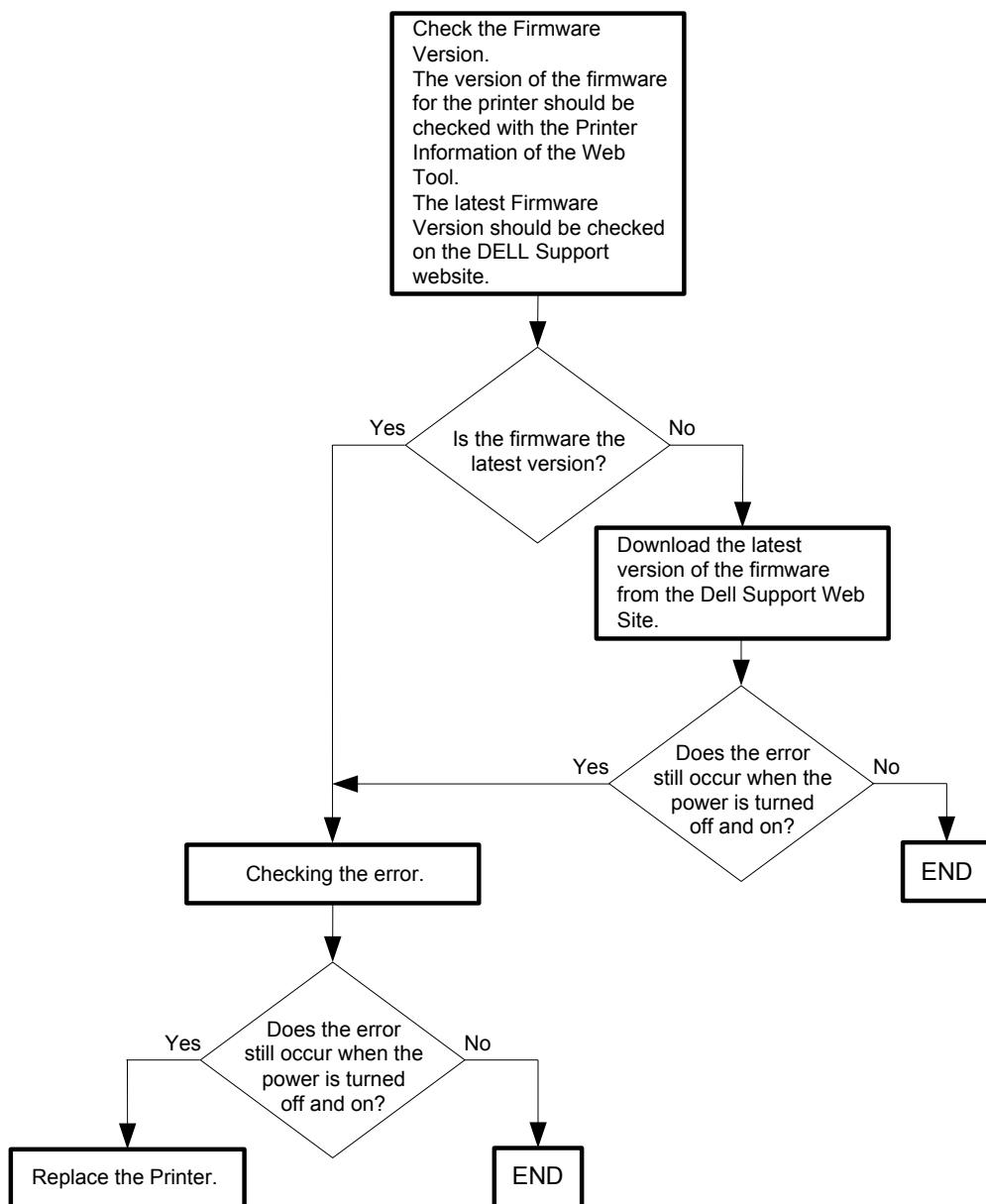
Solution: Ensure that the printer configuration on the printer driver conforms to the printer you are using.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

NOTE

Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

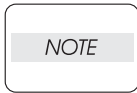


Flows 39 016-920: Wireless Setting Error Time-out Error

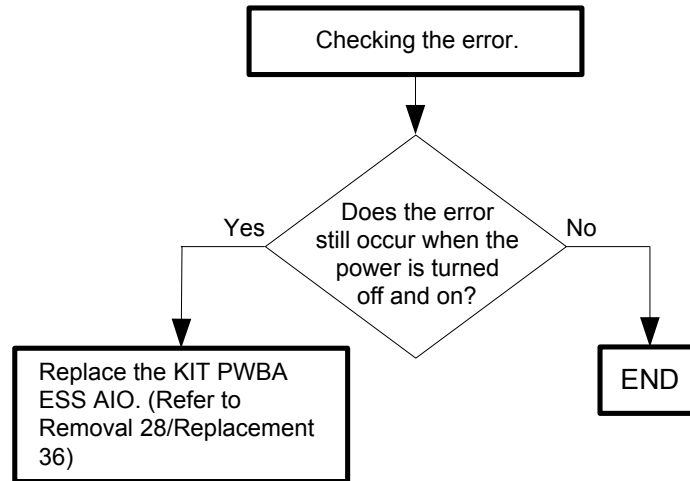
Cause: The time-out was done to the connection with Register.

Solution: A time-out error occurred. Contact the system administrator.

The WPS procedure between the wireless LAN access point (Registrar) timed out. Try connecting again.



If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

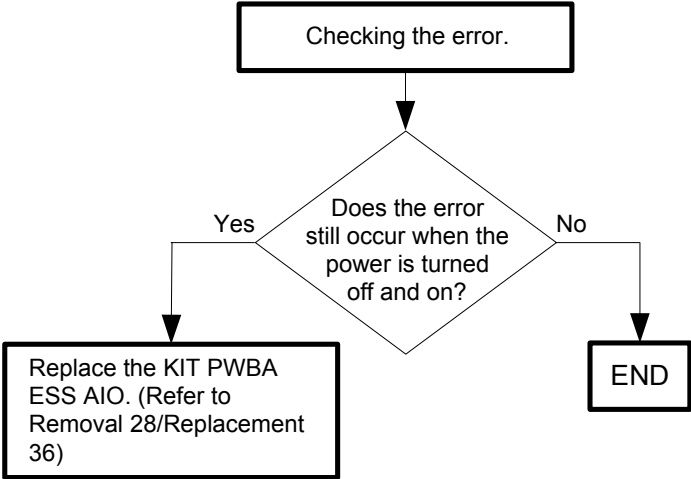


Flows 40 016-921: Wireless Setting Error Download Error

Cause: The error occurred while connecting it with Register.
Solution: An error occurred while connecting. Contact the system administrator.
An error occurred while connecting to the wireless LAN access point (Registrar) in WPS mode. Try connecting again.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 41 016-922: Wireless Setting Error Session Overlap Error

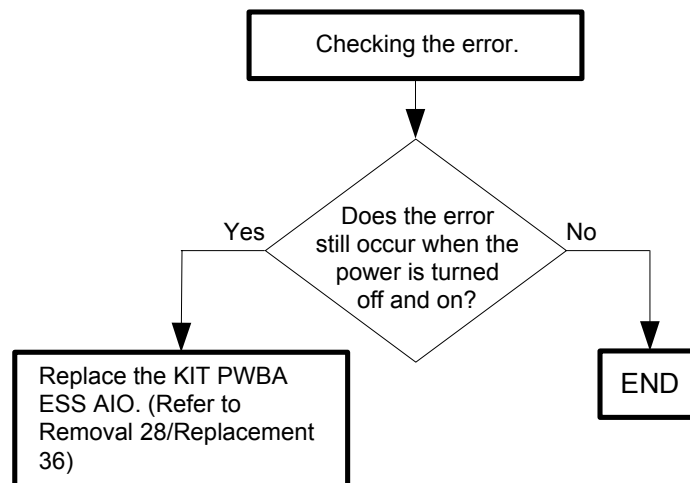
Cause: Two or more Register that operated by WPS-PBC was found.

Solution: Two or more wireless LAN access points (Registrars) have been found to operate in the WPS-PBC mode.

Set only one wireless access point (Registrar) to operate in the WPS-PBC mode, and execute the process again according to the procedure.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 42 016-930 / 016-931: USB HOST Error

Cause: 016-930: Devices not supported have been detected.

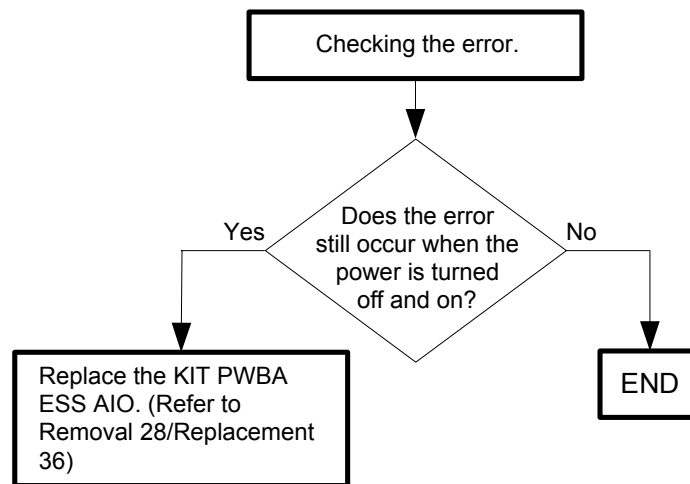
016-931: It has been found that more stages of hubs than supported are connected.

Solution: 016-930: Devices not available are connected to the USB port. Remove the devices from the USB port.

016-931: The number of hub stages exceeds the specified value. Reduce the number of the hub stages.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 43 016-980: Disc Full

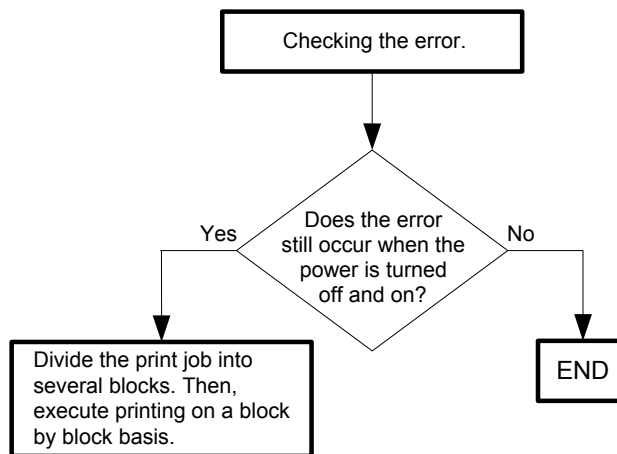
Cause: The current printing job process cannot be continued because the RAM disk is full.

Solution: It is necessary to delete unnecessary data or System Settings increase the RAM Disk capacity in System Settings.

After increasing the RAM Disk capacity, turn the printer off and then on.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



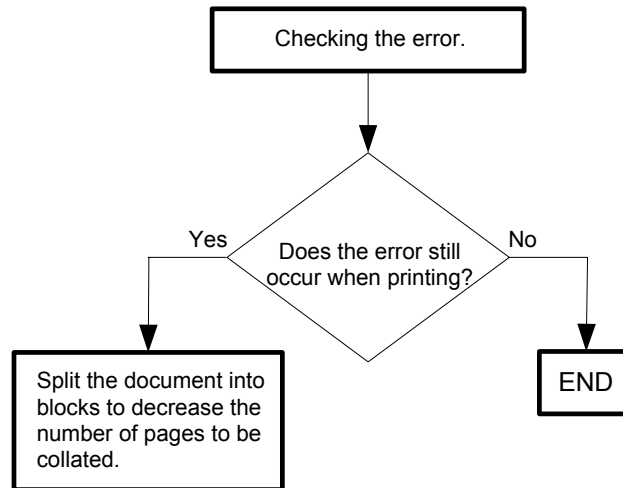
Flows 44 016-981: Collate Full

Cause: Unable to collate due to insufficient memory.

Solution: Collating cannot be performed due to insufficient memory. Decrease the RAM Disk capacity in System Settings. After decreasing the RAM Disk capacity, turn the printer off and then on.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



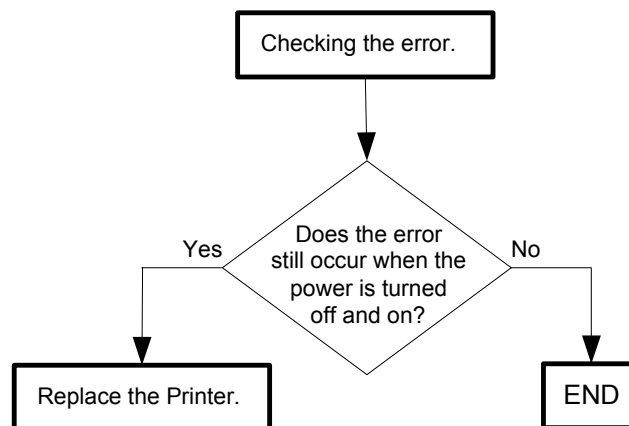
Flows 45 016-985 / 016-986 :Mail Size Error / File Size Error

Cause: 016-985: Exceed the max mail size specified on the menu.
016-986: As a result of conversion to the specified format, exceed the max file size specified for each format.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.
Degrade image quality. (Change scan resolution, etc.) Change file format.
Divide the document into blocks and retry scanning block by block.

NOTE

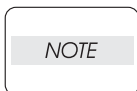
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



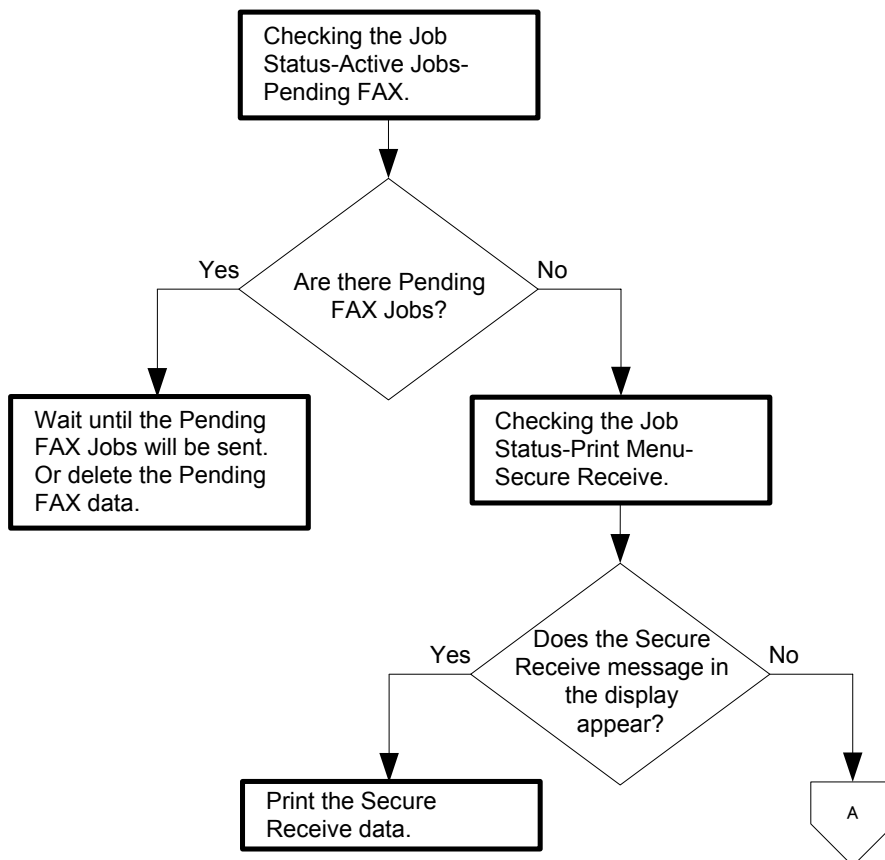
Flows 46 017-970/017-975/017-976/017-977/017-978/017-987/017-989/033-503/033-513/033-788:Out of Memory

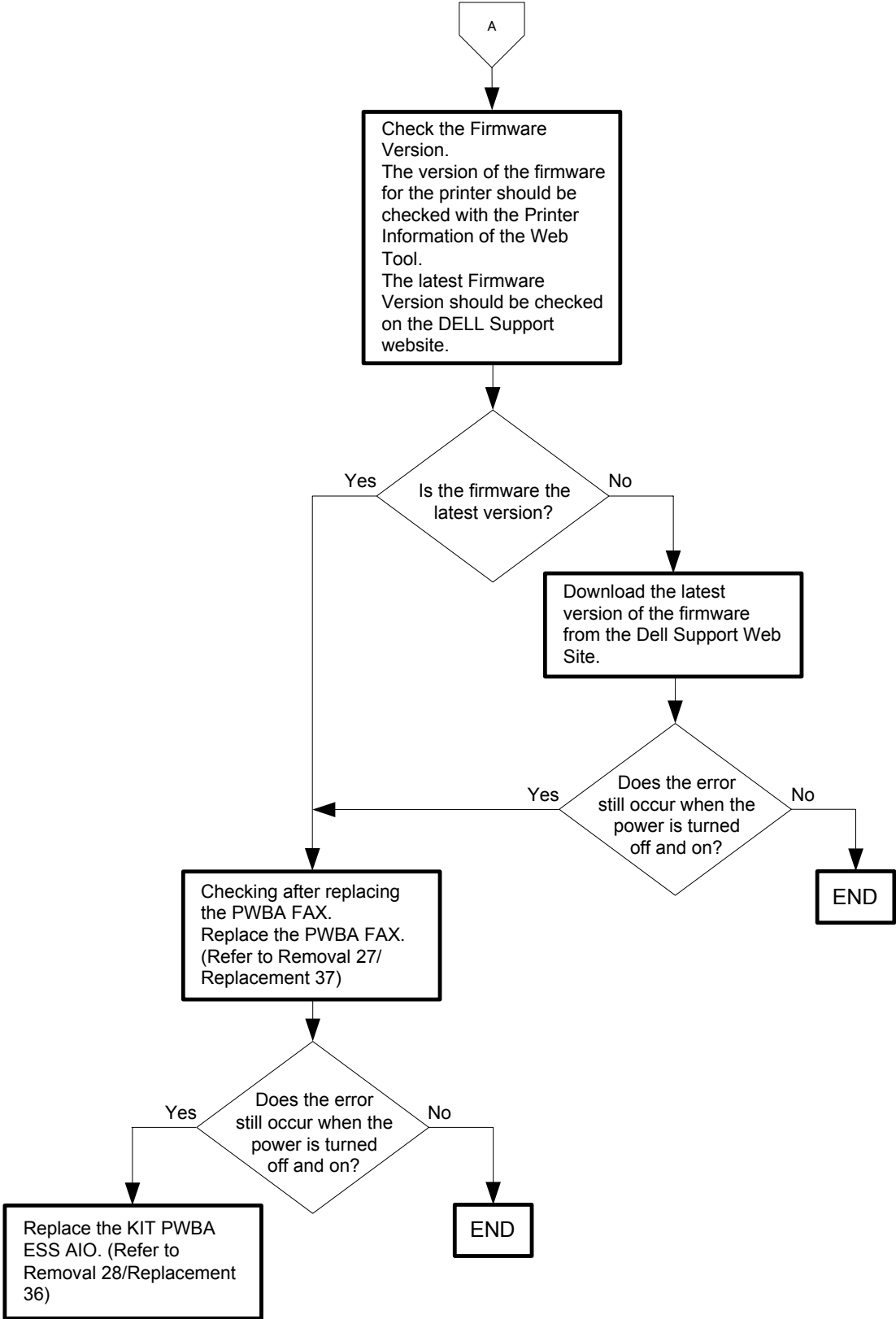
Cause: 017-970:AIOC memory run out.
 017-975:Exceed the maximum number of file handles.
 017-976:Exceed the maximum number of controlled files.
 017-977:Exceed the maximum number of controlled documents.
 017-978:Exceed the maximum number of pages in document.
 017-987:Cannot read file because it is bigger than read destination buffer.
 017-989:Stop writing because size of file to be written is bigger than read destination buffer (even if file writing is continued, it is impossible to read the file).
 033-503:In receive, memory full.
 033-513:Communication shutdown due to memory full.
 033-788:Flash full. (for DFAX)

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.





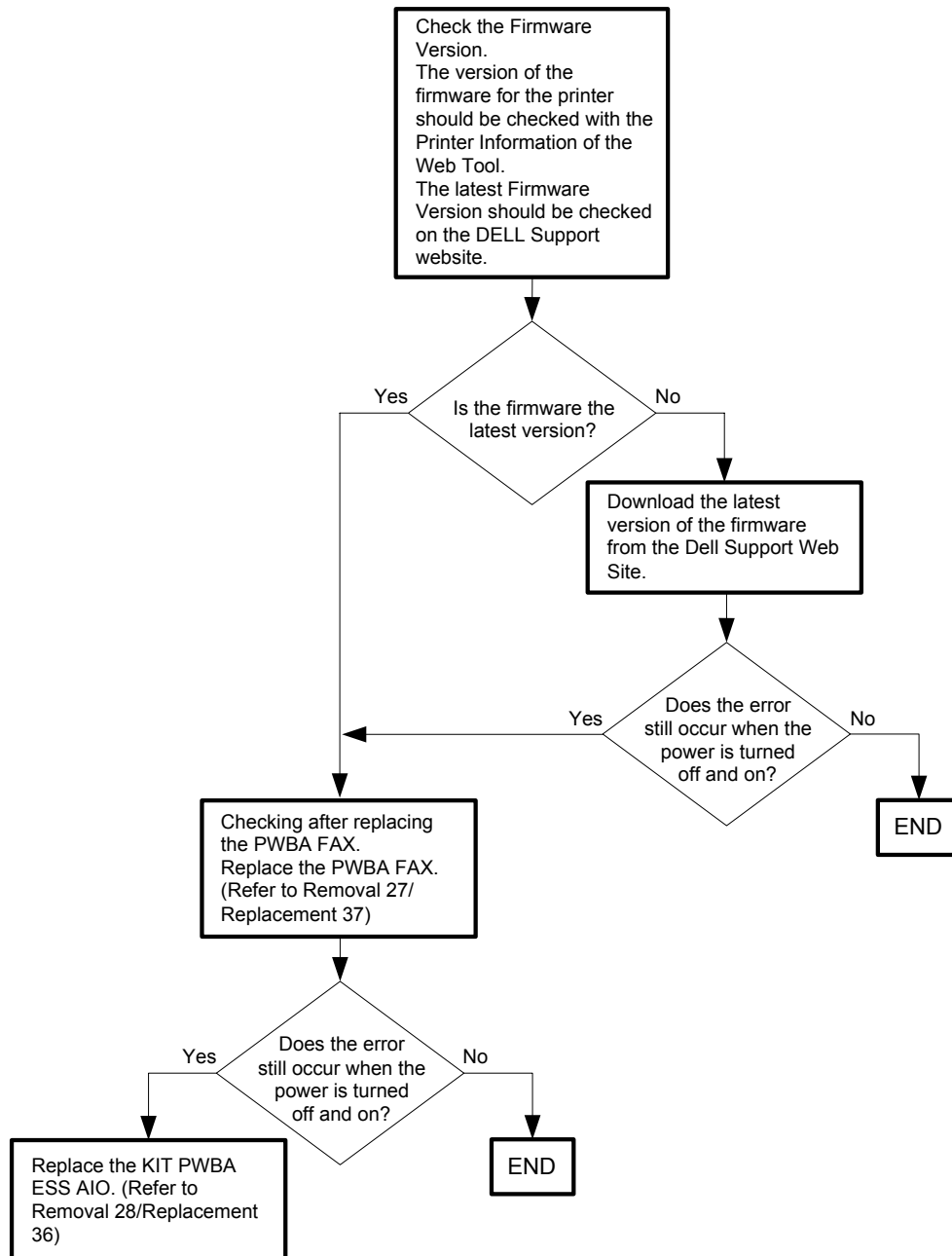
Flows 47 017-971/017-972/017-973/017-974 /033-510/033-751/033-753/033-754/033-755/033-756/033-757/033-758/033-759/033-760/033-761/033-763/033-764/033-765/033-766/033-767/033-769/033-770/033-771/033-772/033-773/033-786/033-787/035-792/133-231/133-234/133-235/133-236/133-237/133-238/133-239/133-240/133-241/133-242/133-243/133-244/133-246/133-247/133-248/133-249/133-251/133-252/133-253/133-254/133-280:PWBA FAX Error

Cause: PWBA FAX error occurred.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

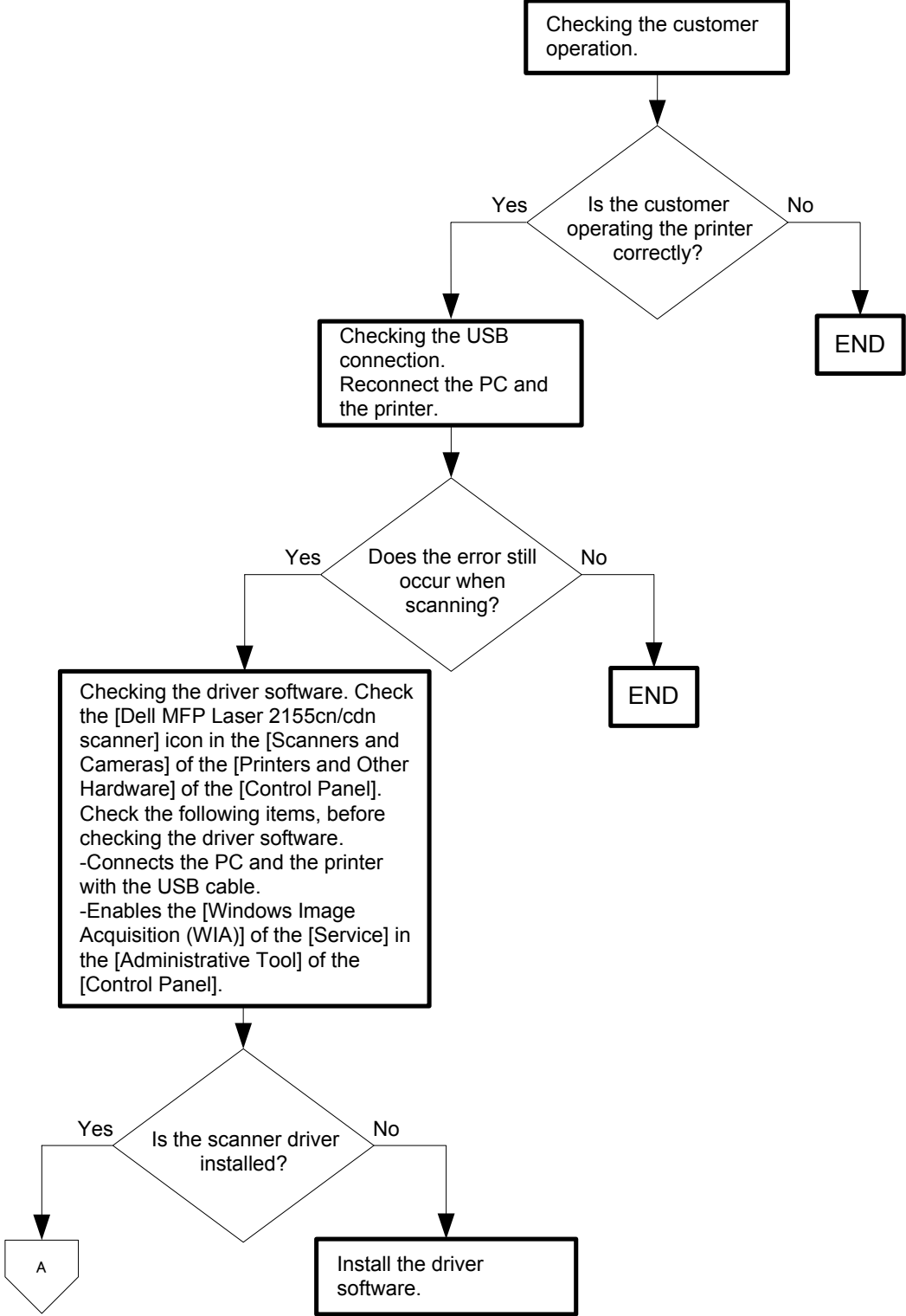
NOTE

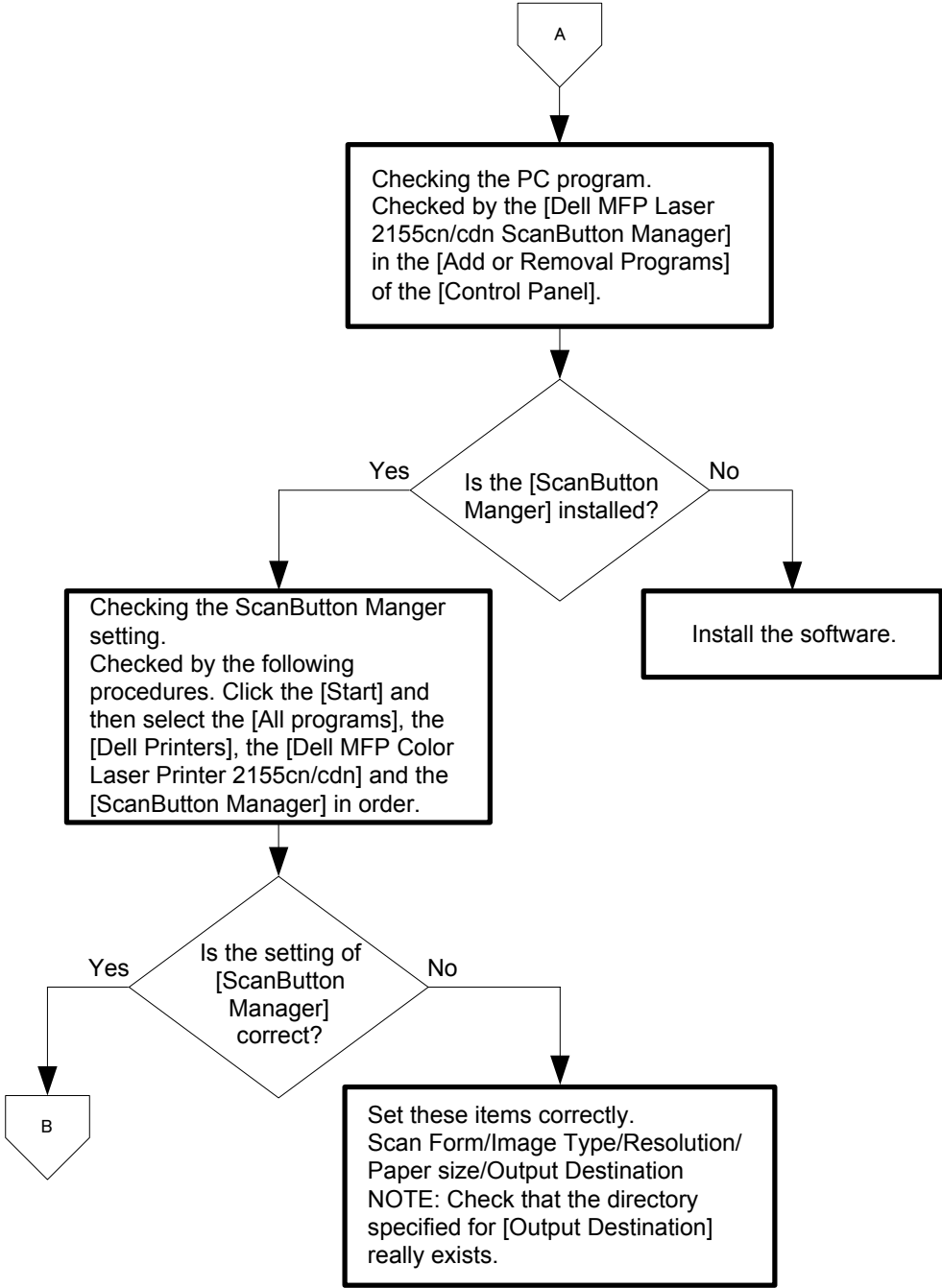
Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

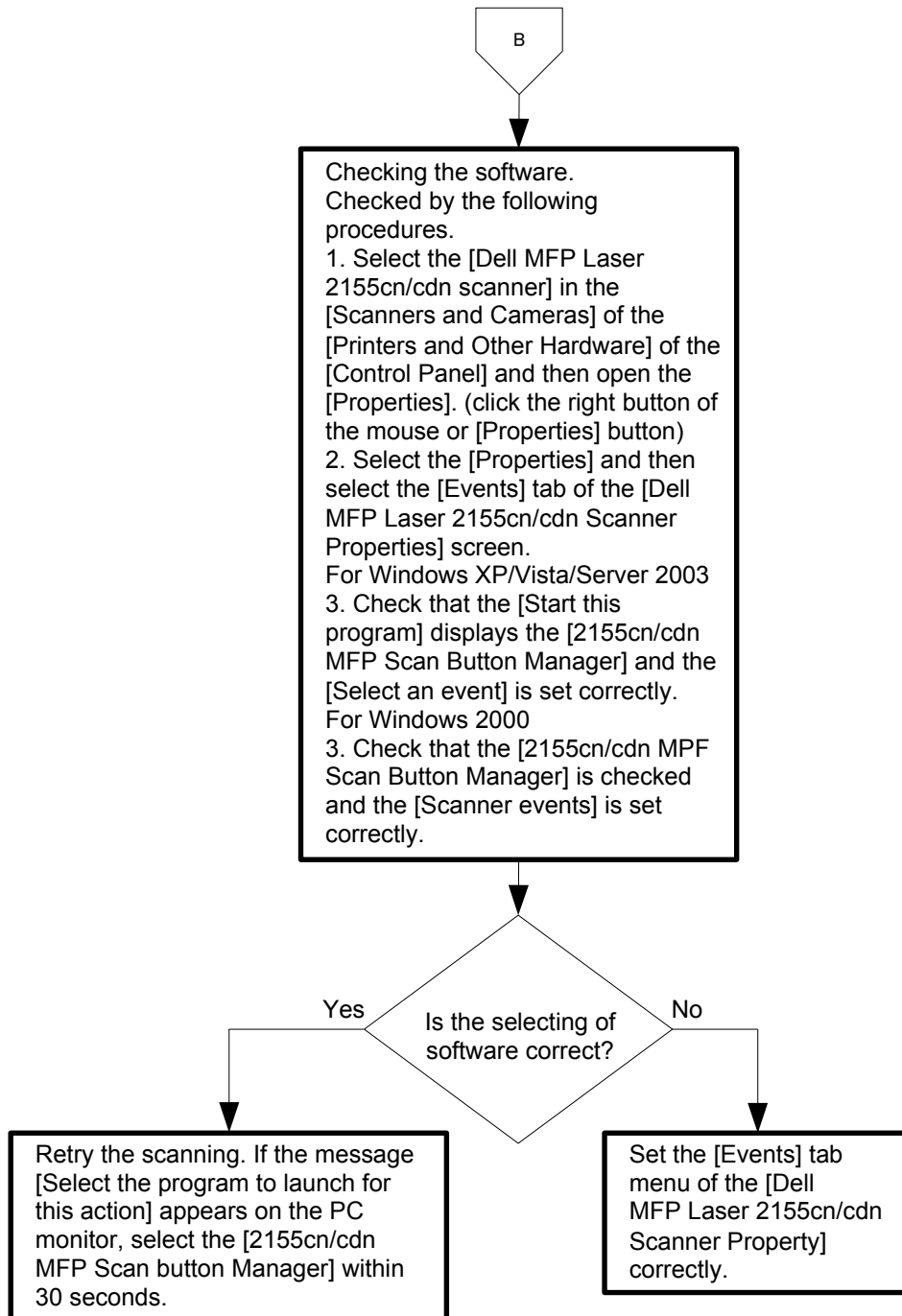


Flows 48 017-988:PC Scan Time Out

Cause: Timeout at start of Scan To Application.
Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.







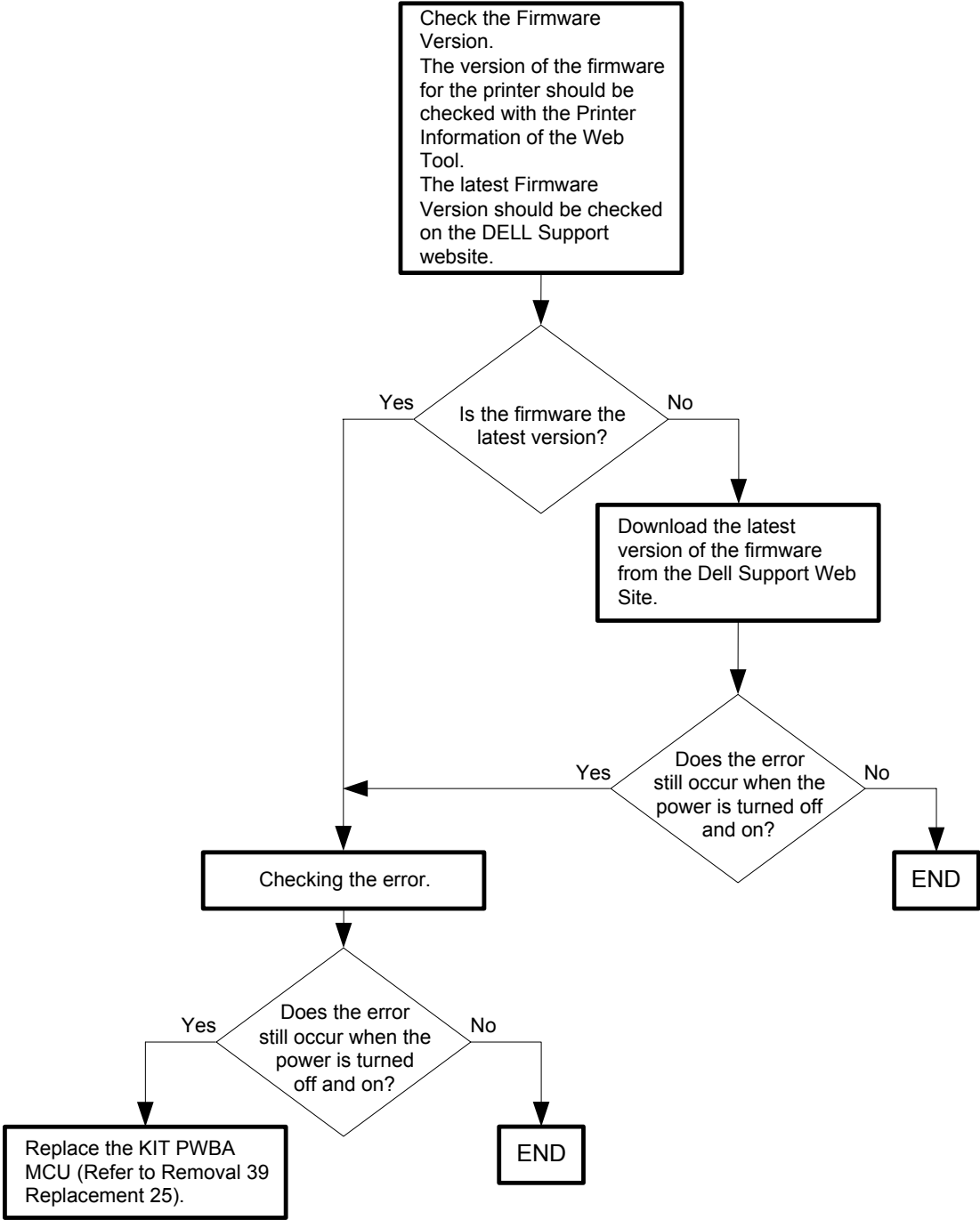
Flows 49 024-360: MCU Down Load Error

Cause: Download failure of MCU firmware.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE

Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

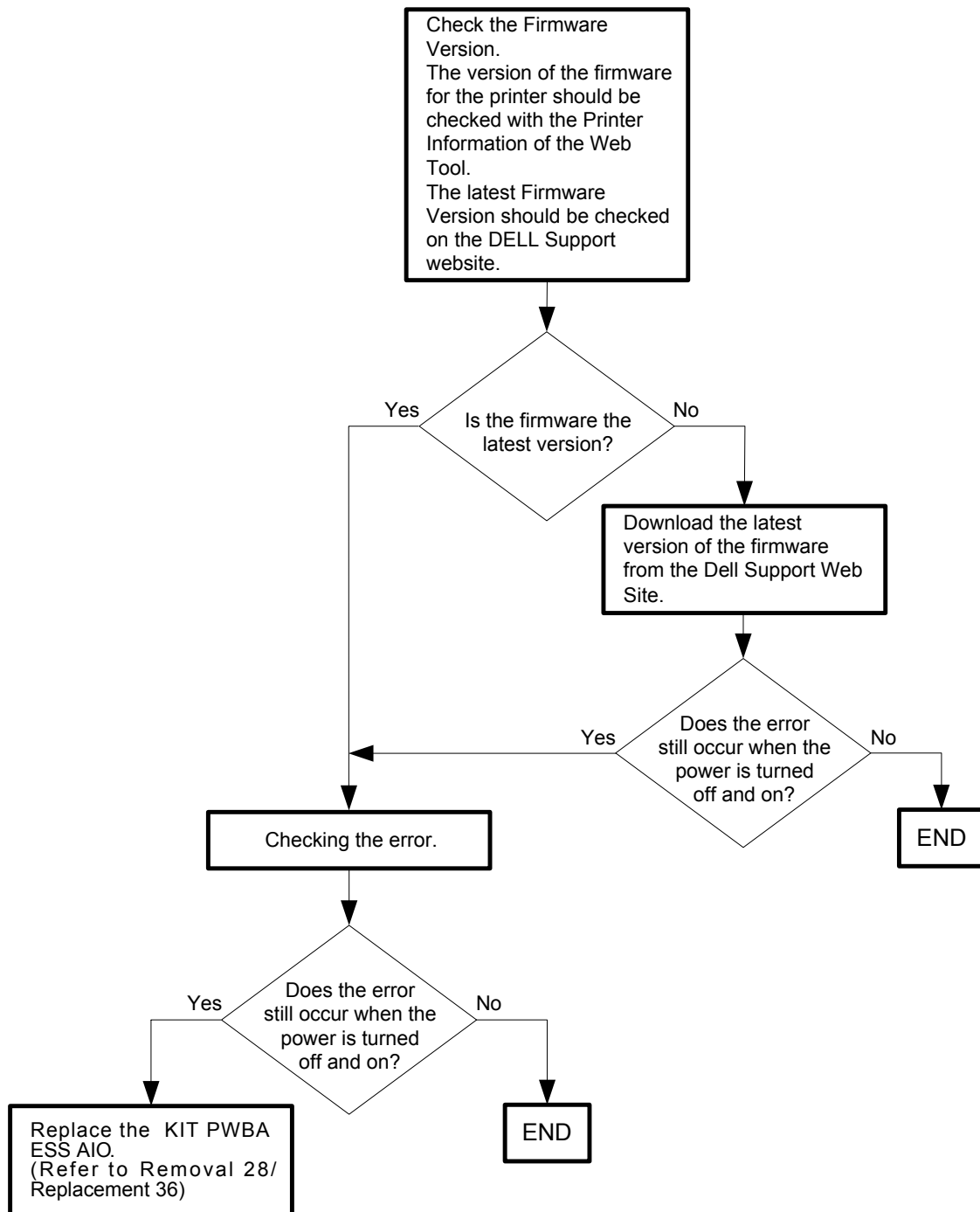


Flows 50 024-362: IOT Start Image Marking Time-out

Cause: "Start Image Making" has not been issued within the time allowed.

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



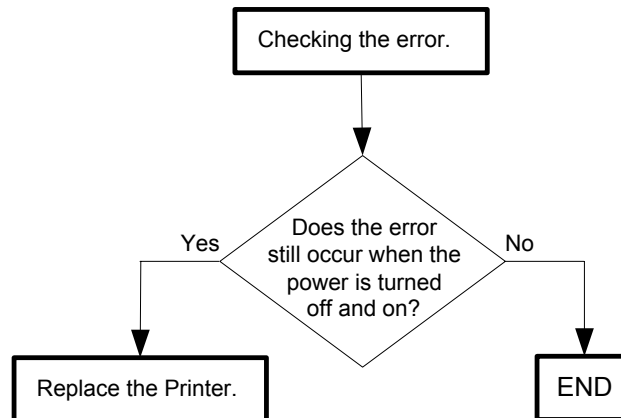
Flows 51 024-985: Waiting for "Continue" key to be pressed after reloading paper to the SSF

Cause: Printer starts printing automatically after a certain period of time even if the key is not pressed.

Solution: The printer is waiting for the user to press the <✓> (Set) button. Press the <✓> (Set) button. After the predetermined time elapses, this error is cleared, and the printer starts feeding automatically.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 52 027-446 / 027-452: IPv6 duplicate/IPv4 duplicate

Cause: 027-446: Duplicate IPv6 addresses detected upon startup.

027-452: Duplicate IPv4 addresses detected upon startup.

Solution: 027-446: Duplicate IPv6 addresses have been detected. Contact the system administrator.

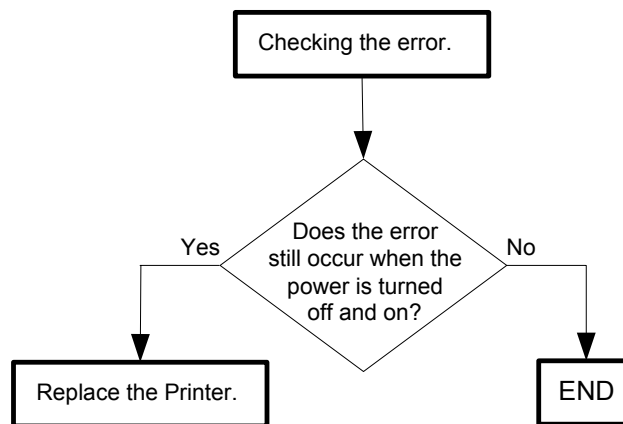
Remove duplicates and then power off the printer and then on. For details of the IP address settings, refer to "13 Dell Printer Configuration Web Tool" in User Guide.

027-452: Duplicate IPv4 addresses have been detected. Contact the system administrator.

Remove duplicates and then power off the printer and then on. For details of the IP address settings, refer to "13 Dell Printer Configuration Web Tool" in User Guide.

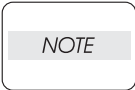
NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

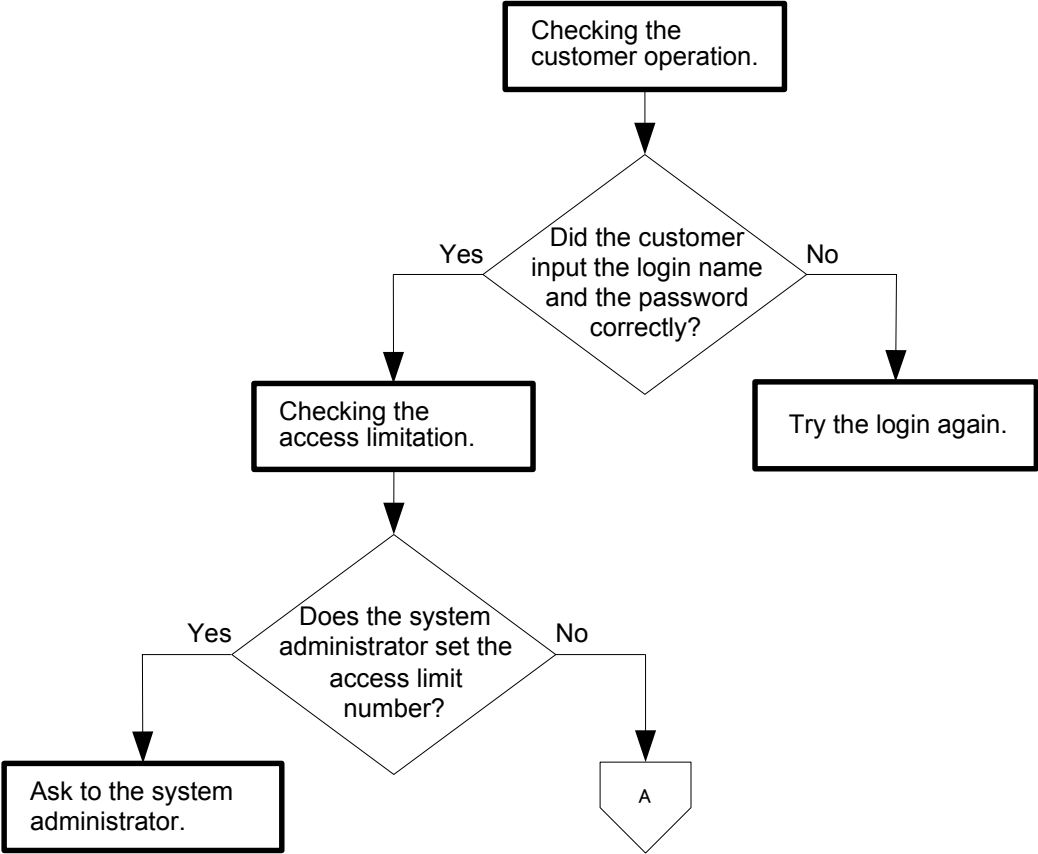


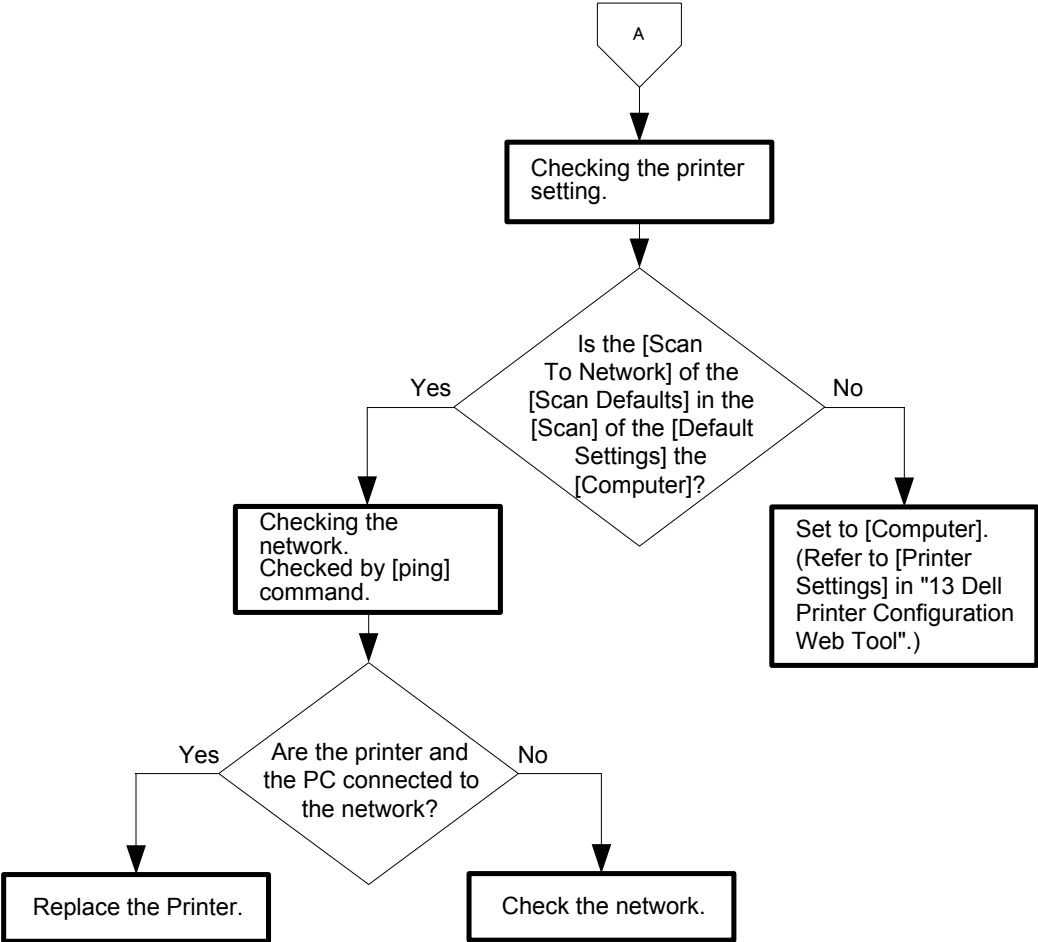
Flows 53 031-521/031-522: SMB Logging Error

- Cause: 031-521:In SMB scan, login-able workstation is restricted.
031-522:In SMB scan, login access is rejected. Request is not allowed.
- Solution: 031-521:Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.About user settings, confirm the following with system administrator.Restriction on login-able workstation.
031-522:Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.Check if login name (domain name and user name) and password are correct.



If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.





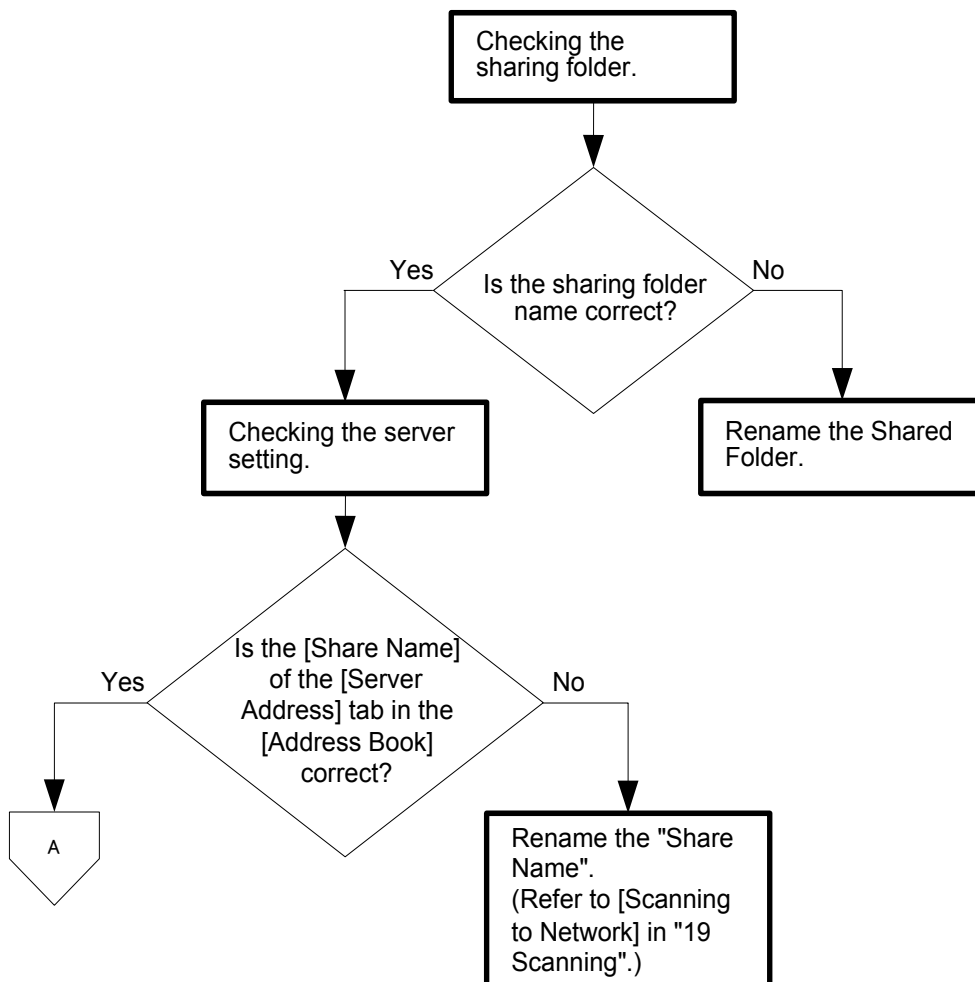
Flows 54 031-523/031-526/031-528: SMB Server Error/DNS Error/In SMB scan, server connection error

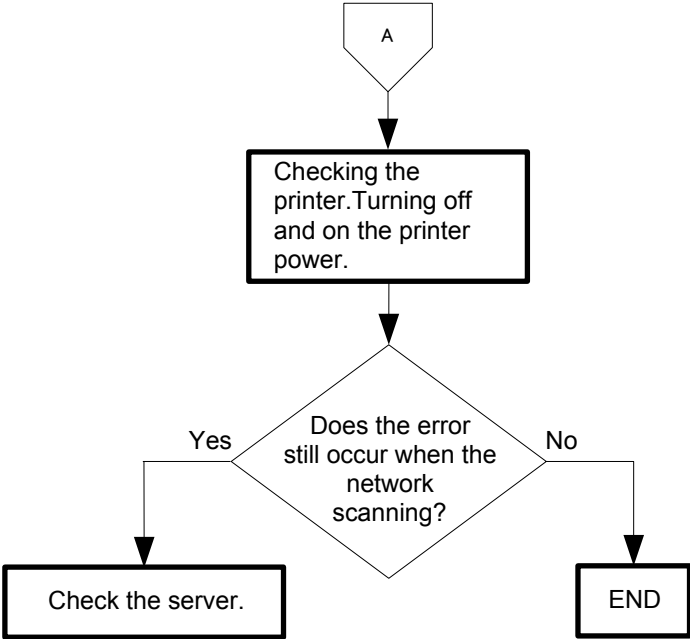
Cause: 031-523: Problem with share name in SMB scan server.
 031-526: SMB server name resolution failed.
 031-528: Cannot find SMB server.

Solution: 031-523: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Check SMB Server connection, or check share name you specified.
 031-526: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Check DNS connection, or check if name of forwarding destination server is registered with DNS.
 031-528: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Check if this device can communicate by network with the forwarding destination SMB server. For example, Check connection of network cable.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



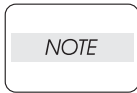


Flows 55 031-524: SMB Scan User Overlimit

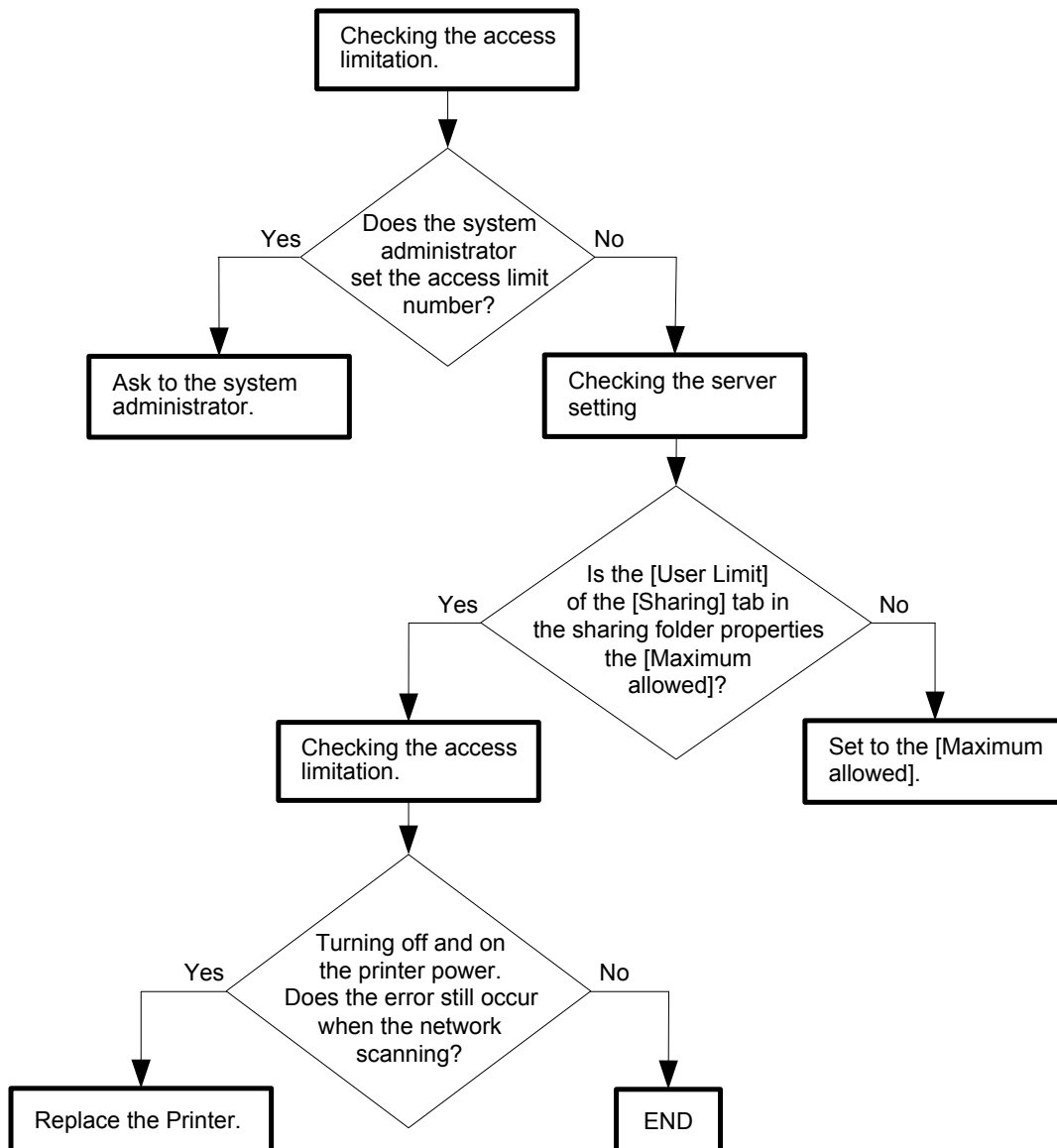
Cause: Exceed the upper limit of the number of SMB scan users.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.

Check the number of users who use the server at the same time is not exceeding the upper limit.

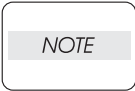


If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

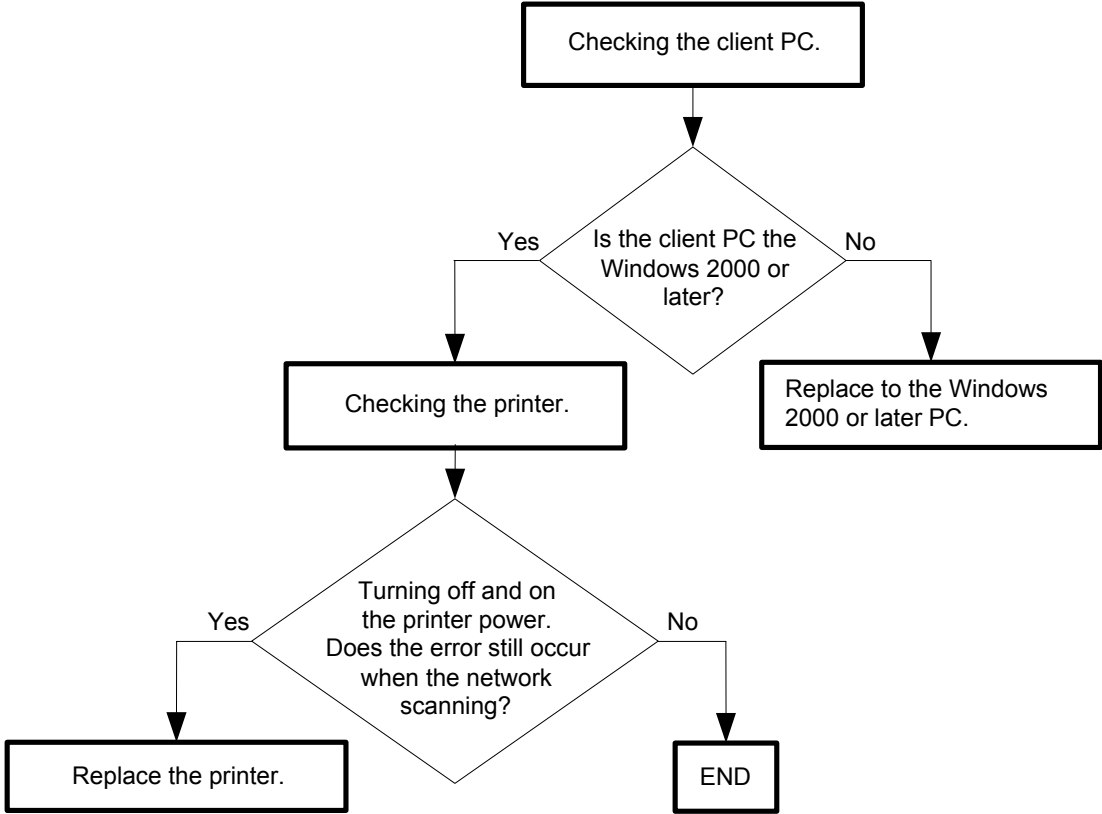


Flows 56 031-525: SMB scan client has no access right (Win9x)

Cause: SMB scan client has no access right.
Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Check if the specified user can read and write file at the storage location.



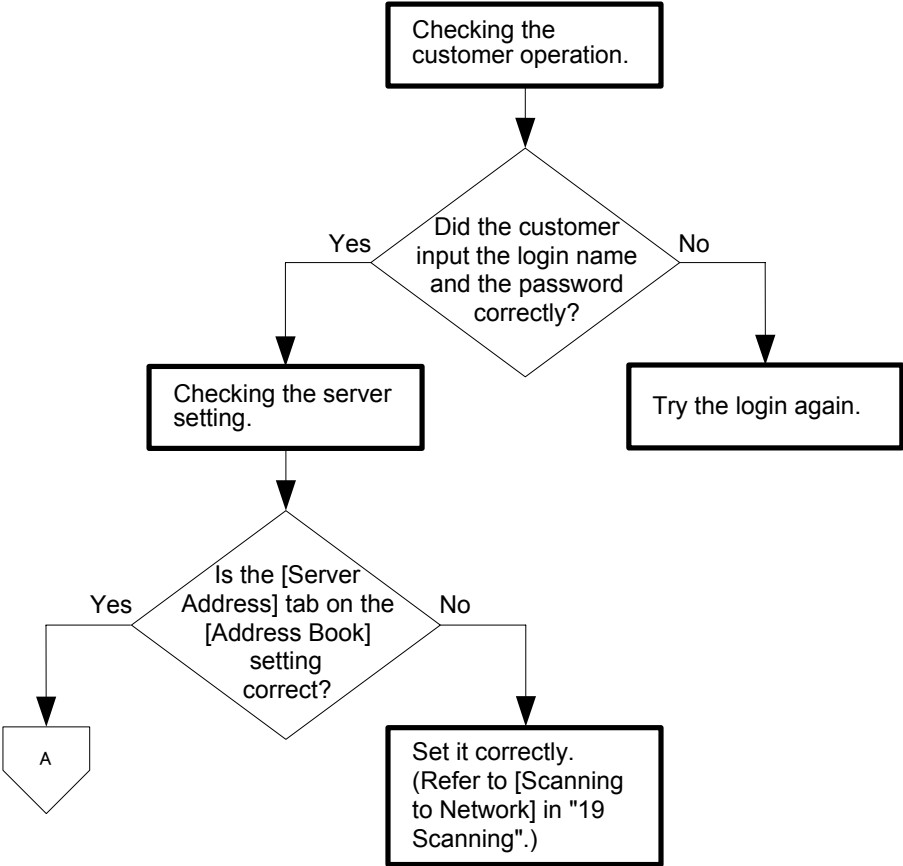
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

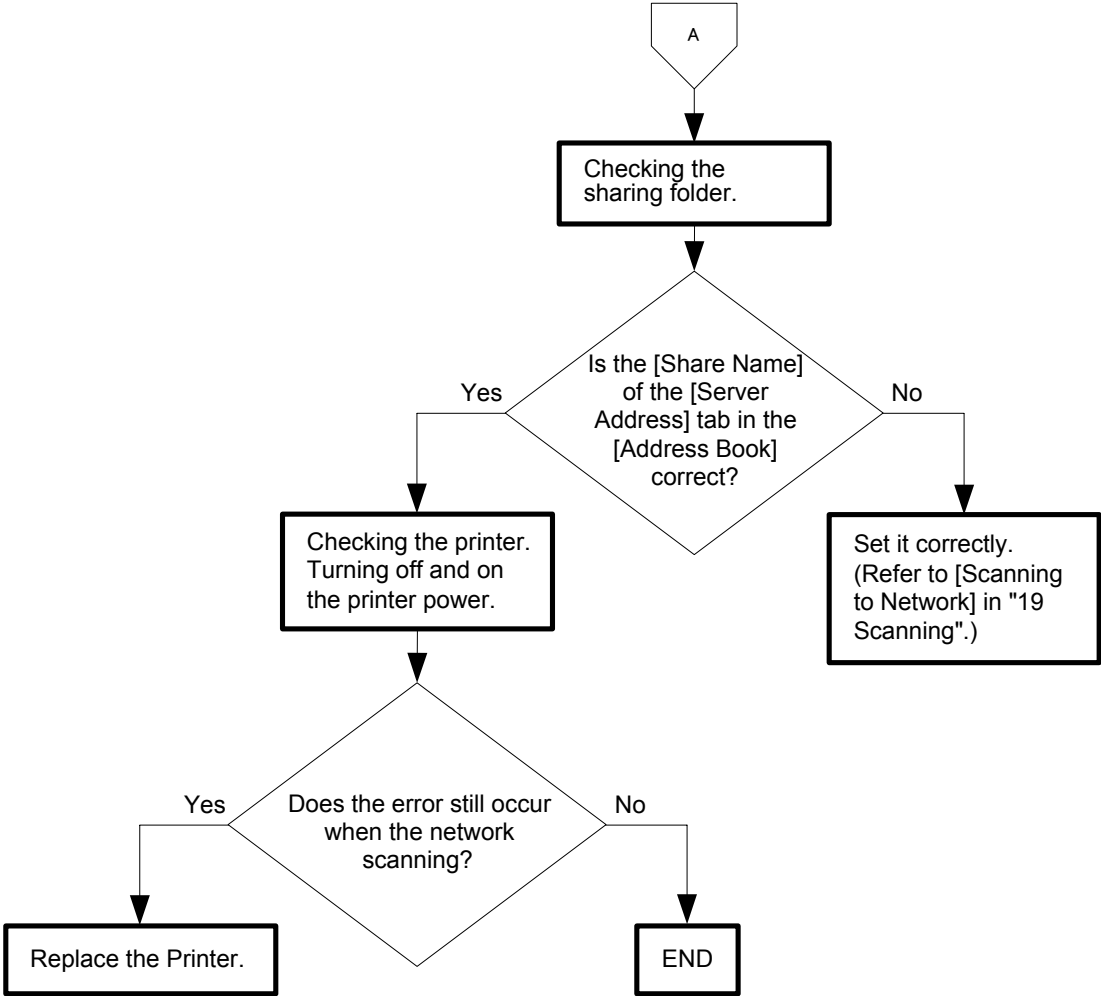


Flows 57 031-529/031-530/031-531/031-532/031-533/031-534/031-535/031-536/031-541/031-546/031-547:SMB Error

Cause: SMB error occurred.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





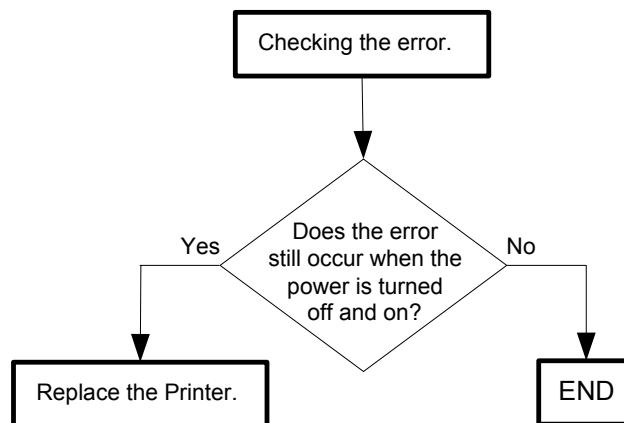
Flows 58 031-576/031-579/031-581/031-584/031-587/031-594/031-598:FTP File
Appended Error

Cause: The file could not be appended at the FTP transmission.

Solution: Contact the system administrator. Check whether you have the access permission for appending files, or whether the server supports the append command of FTP.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



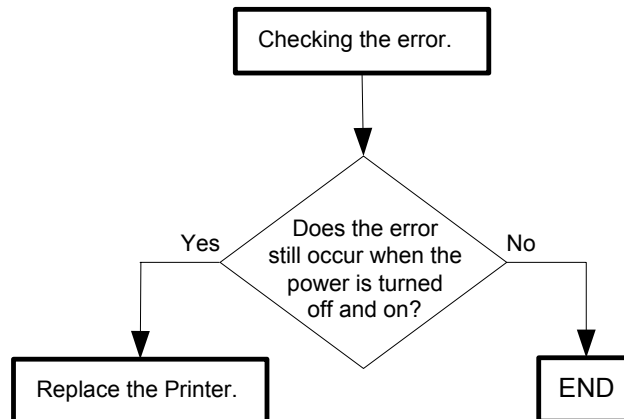
Flows 59 031-578/031-580/031-582/031-585/031-588/031-595:FTP File Changed Error

Cause: The file name could not be changed at FTP transmission.

Solution: Contact the system administrator. Check whether you have the access permission for renaming files, or whether the server supports the rename command of FTP.

NOTE

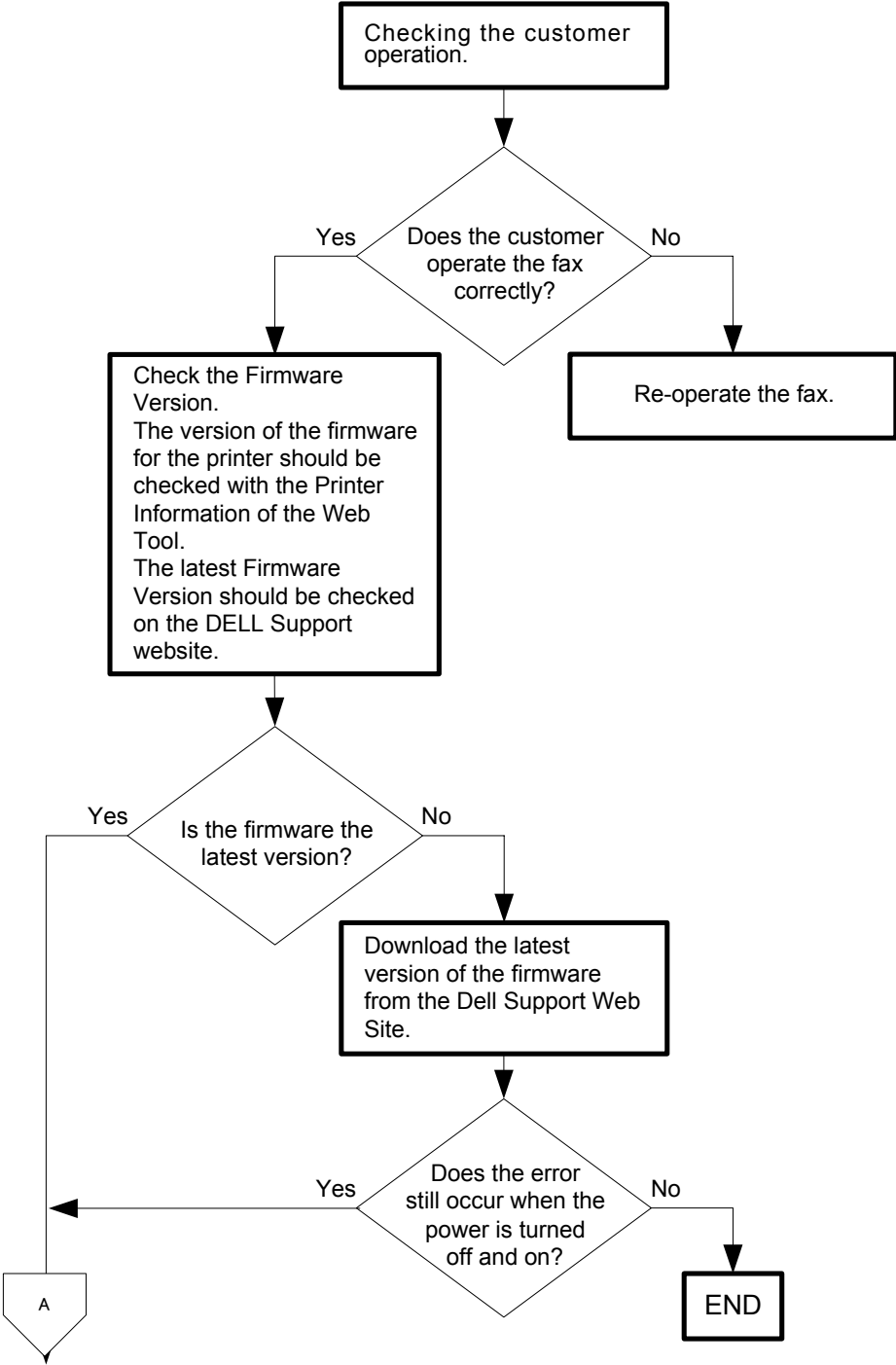
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.

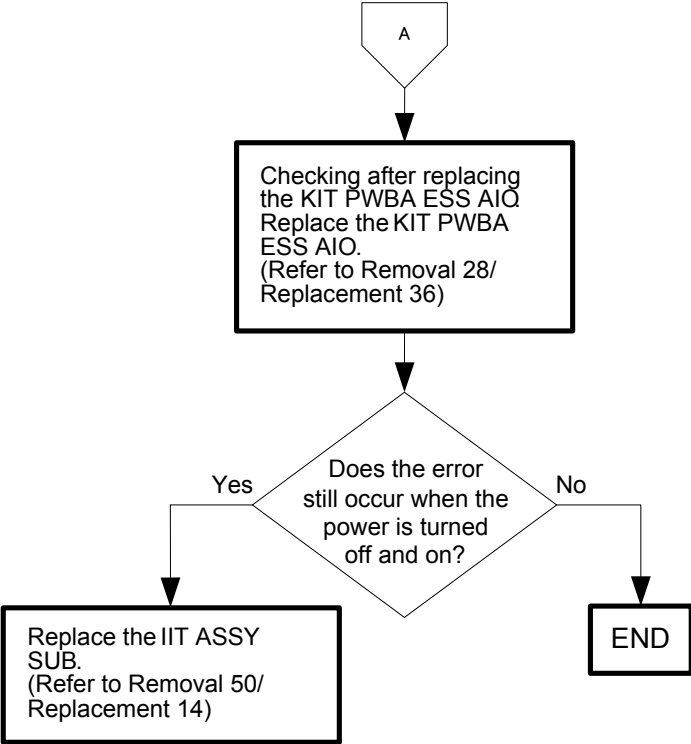


Flows 60 033-501:CODEC Error

Cause: Cancel Codec processing due to error of read part during manual send.
Solution: Remove the Document. Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



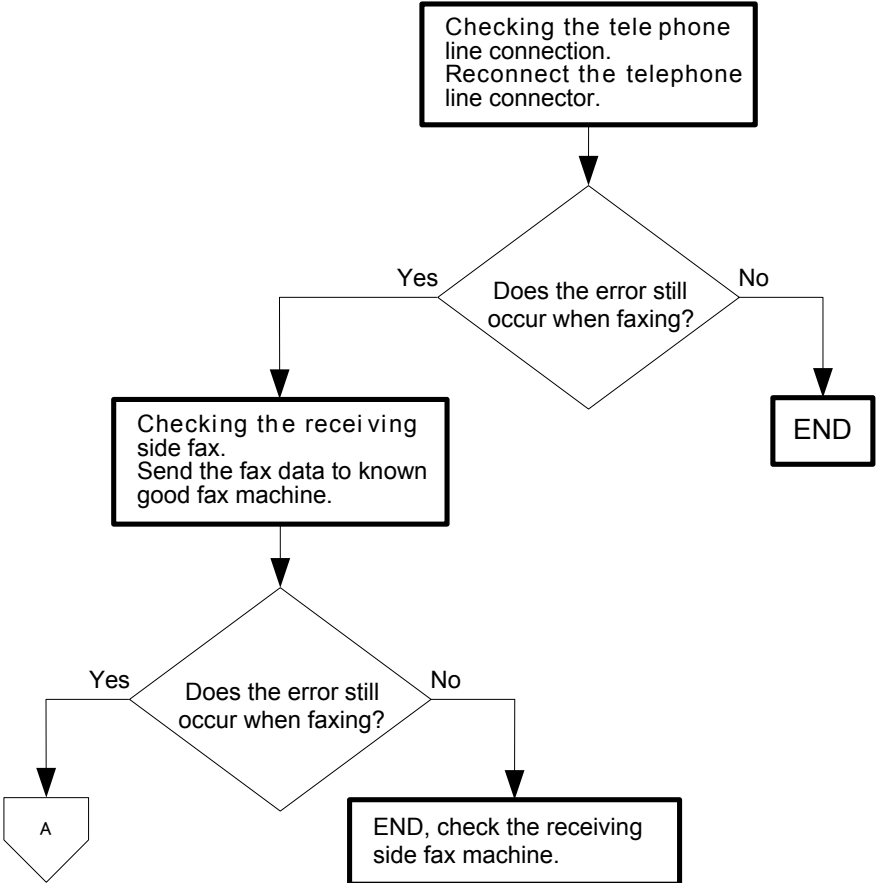


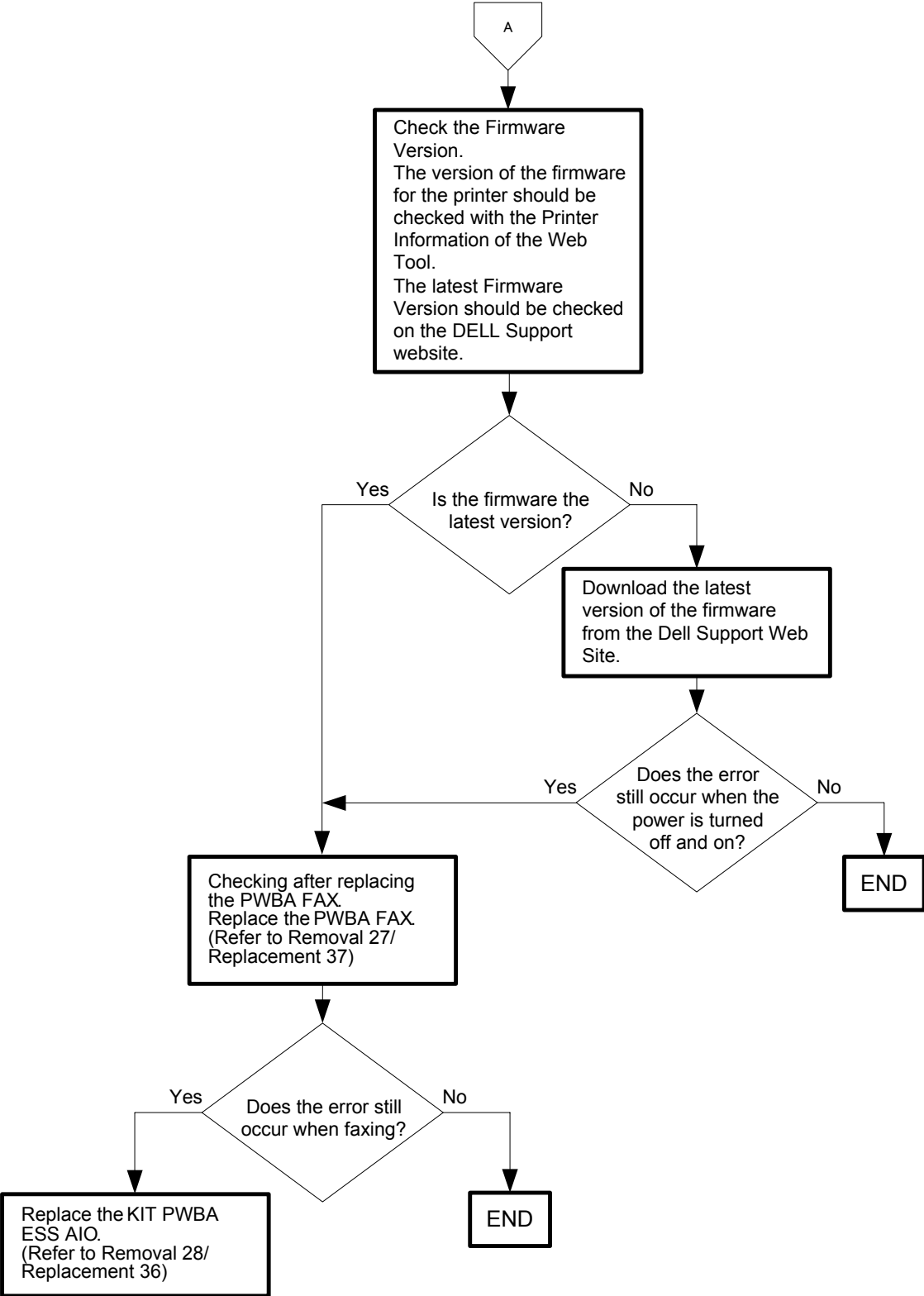
Flows 61 033-511:Communication Error

Cause: Result of MH,HR,MMR receive decode is 0 Line.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

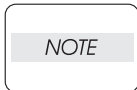




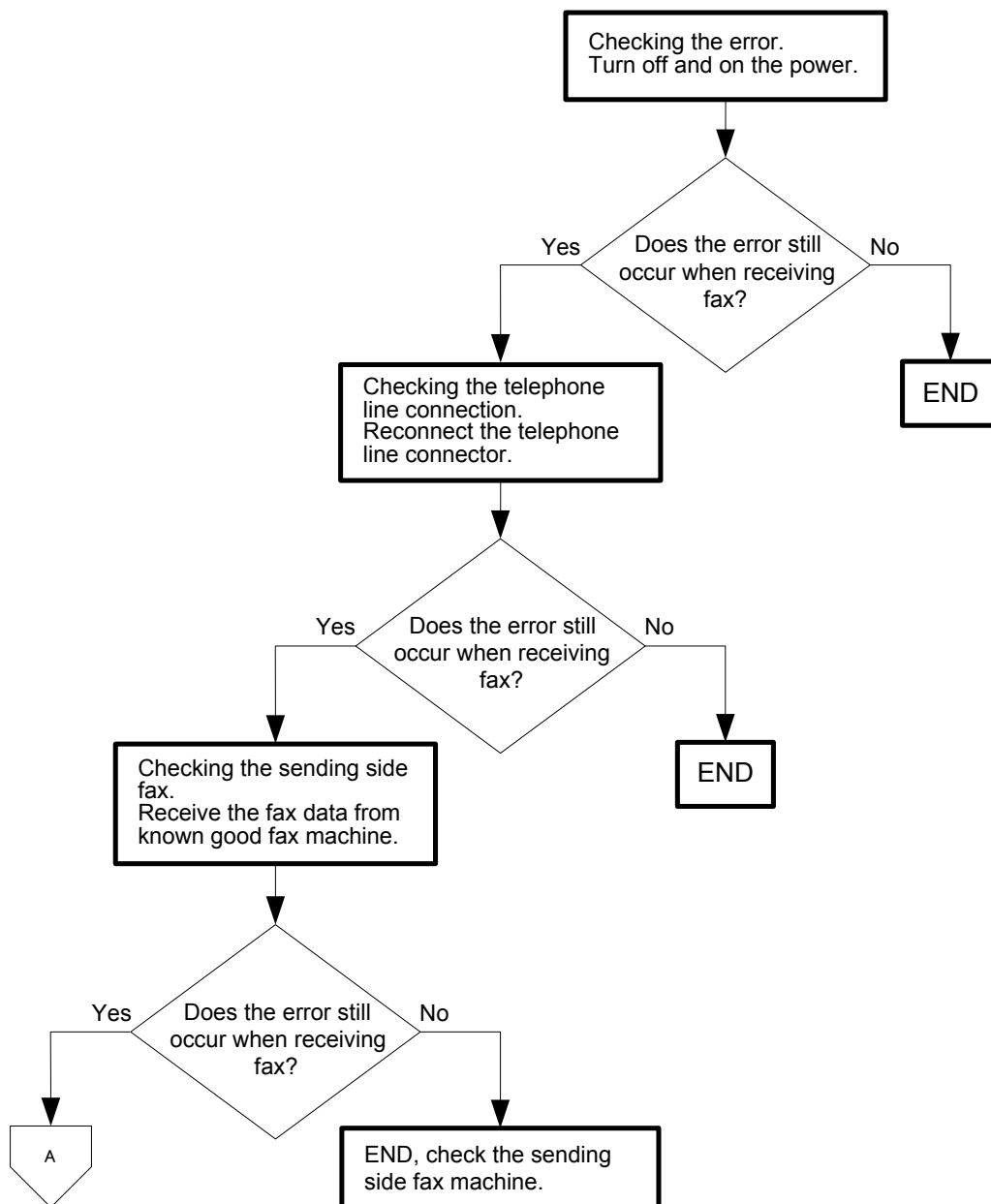
Flows 62 033-512/034-515/034-799/035-701/035-702/035-704/035-705/035-706/035-708/035-709/035-710/035-716/035-717/035-718/035-720/035-728/035-729/035-730/035-737/035-739/035-740/035-742/133-279/133-290:Communication Job Failure

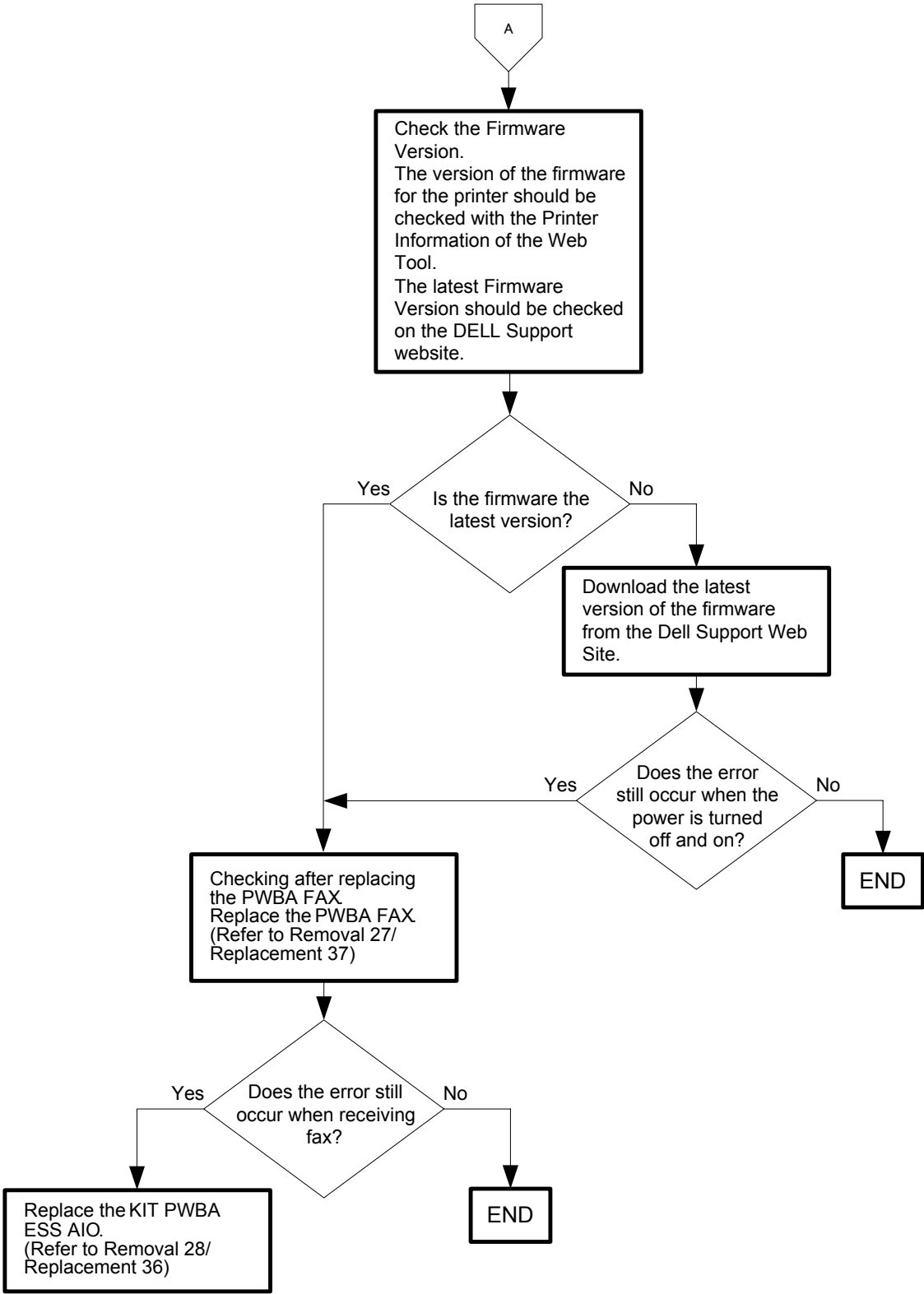
Cause: Communication Job failed.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.





Flows 63 033-517:DFAX Password Error

Cause: The password for D-Fax does not match the password for "FAX Function Lock".

Solution: The password is incorrect. Enter the correct password. If you have forgotten your password, contact the system administrator. For details of how to set the password, refer to "13 Dell Printer Configuration Web Tool" in User Guide.

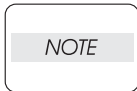


This error code is not related to any hardware fault.

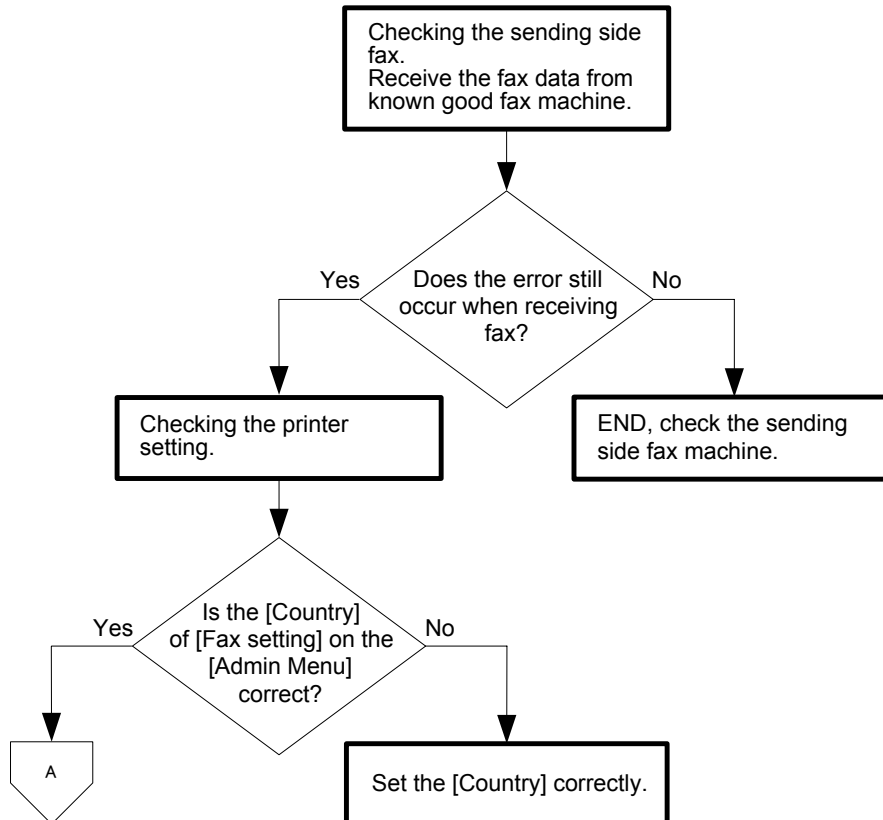
Flows 64 033-752:During Call Busy Tone

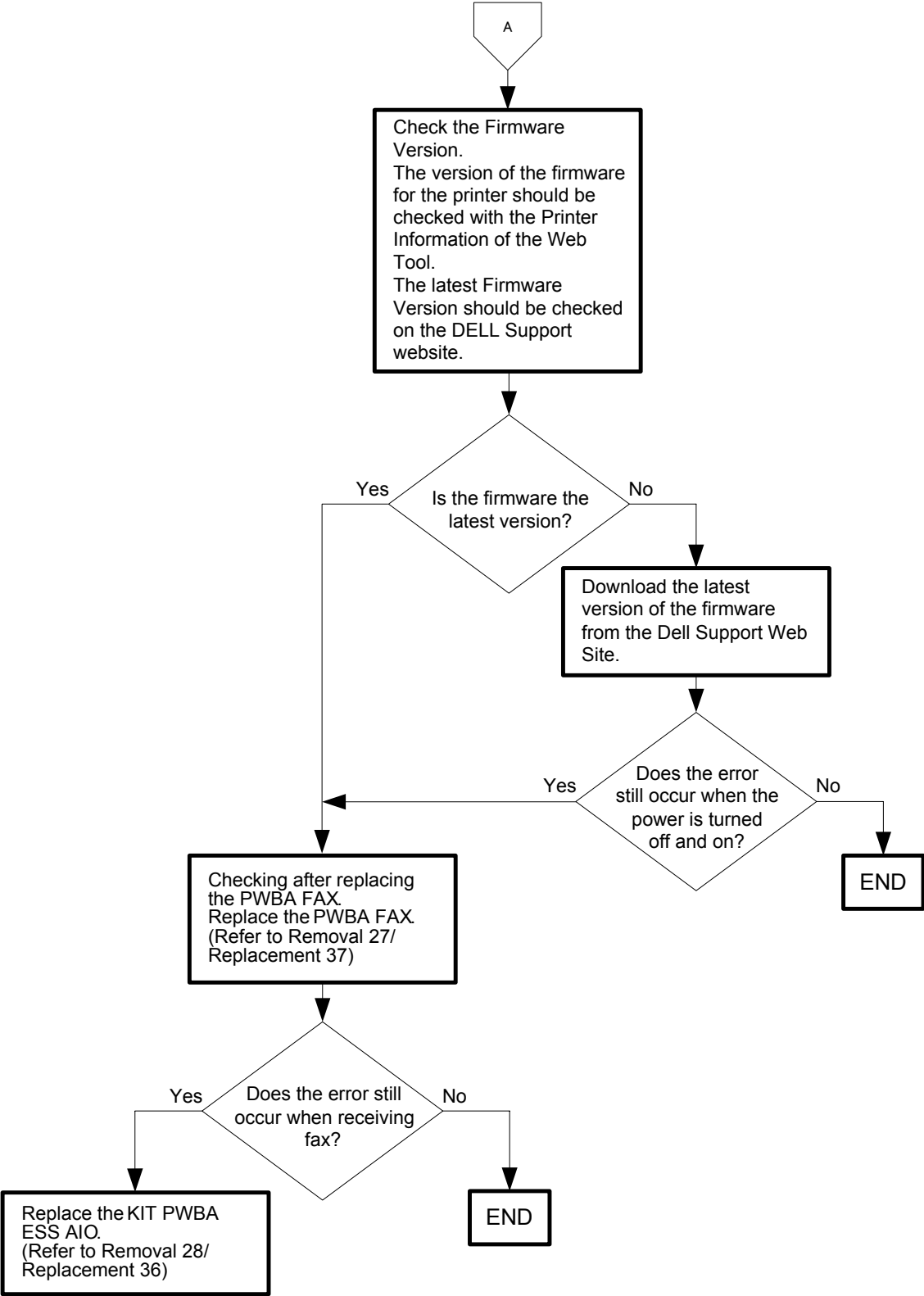
Cause: In Tel/Fax mode, detect busy tone while calling external phone.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

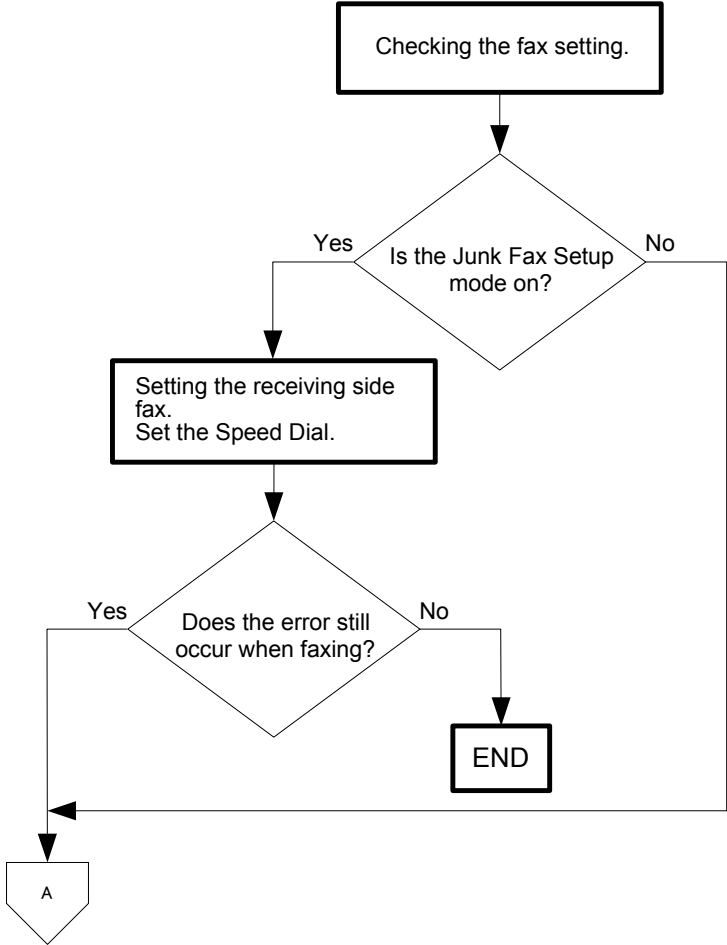


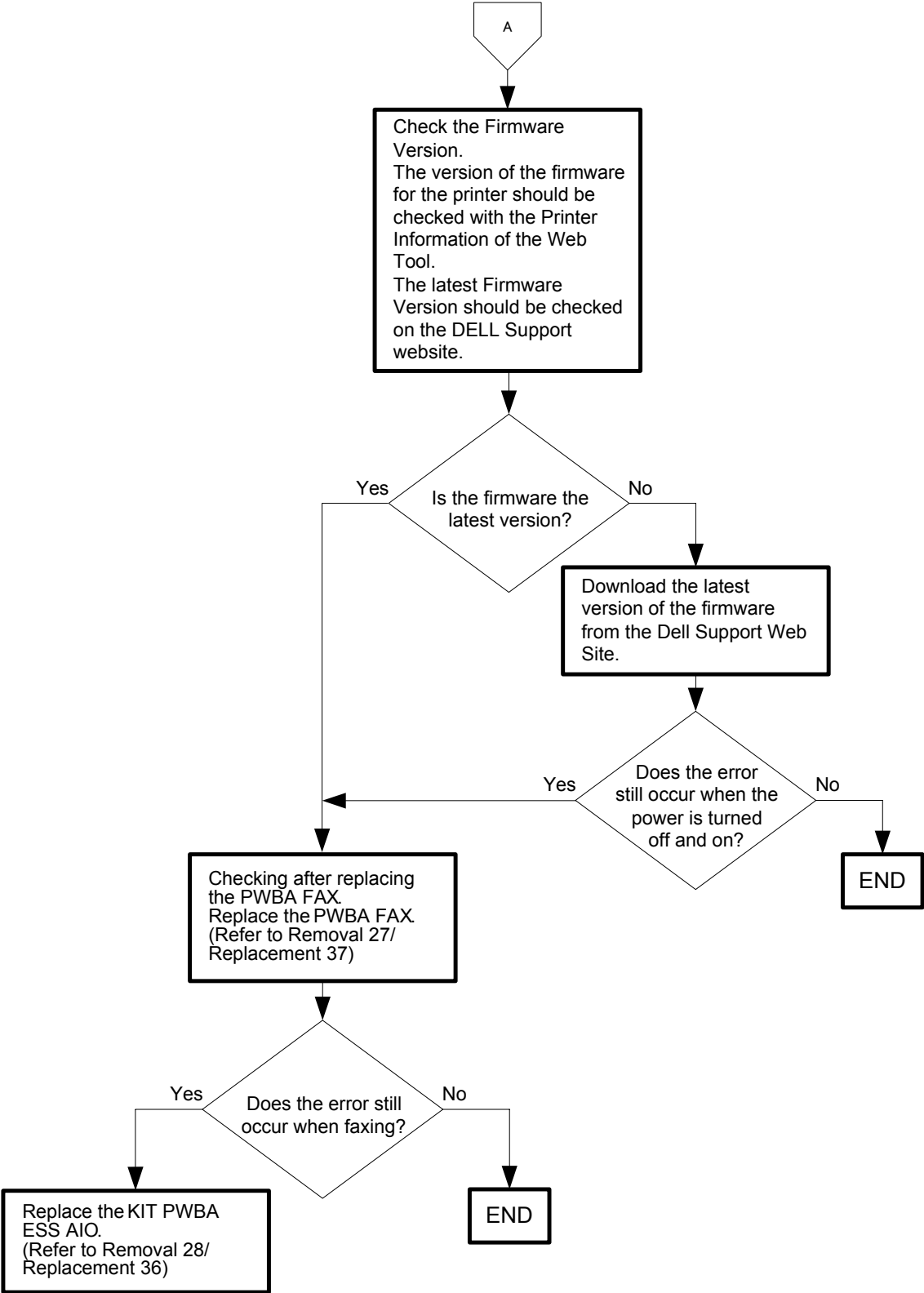


Flows 65 033-762:DM Prevention Function Receive Refuse

Cause: The incoming data was rejected by the DM prevention function.
Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.





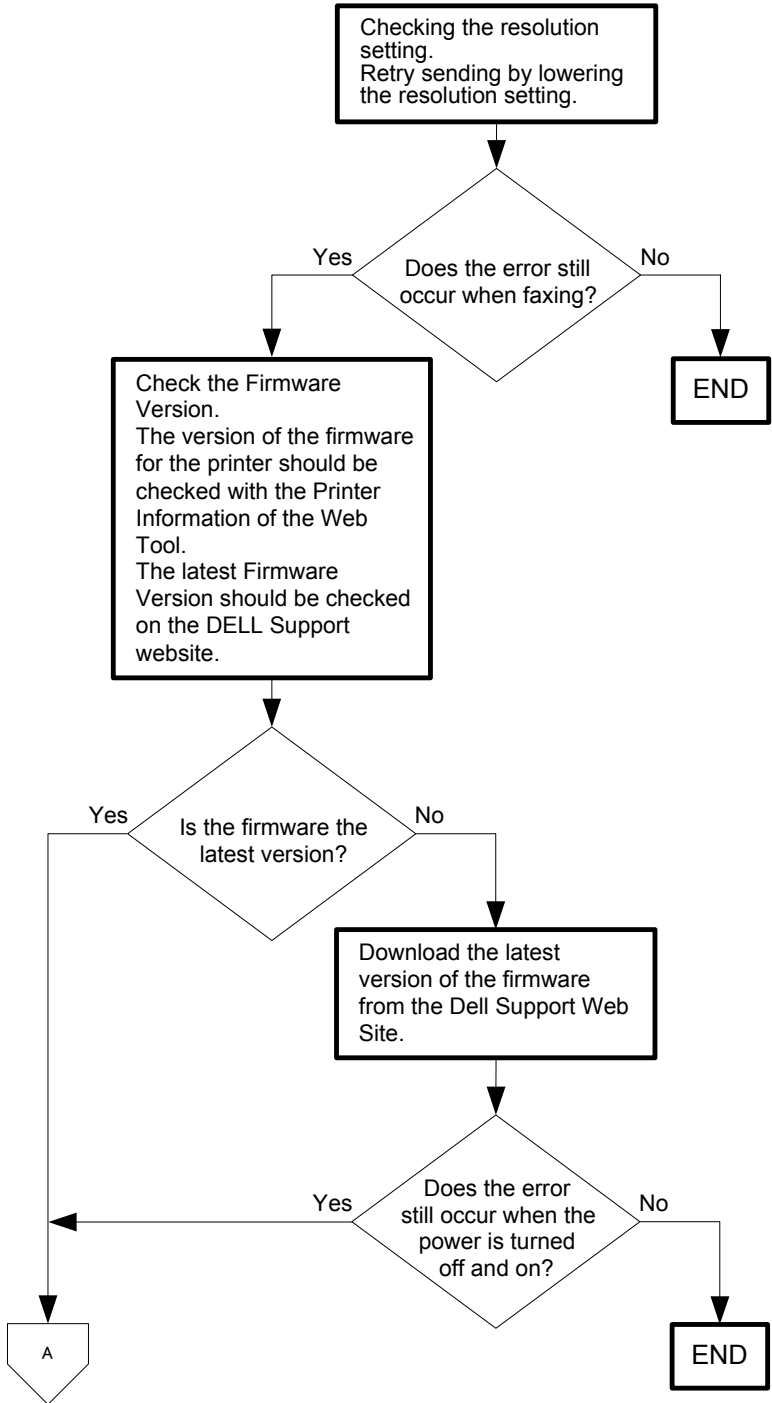
Flows 66 033-774/033-776:Buffer Over

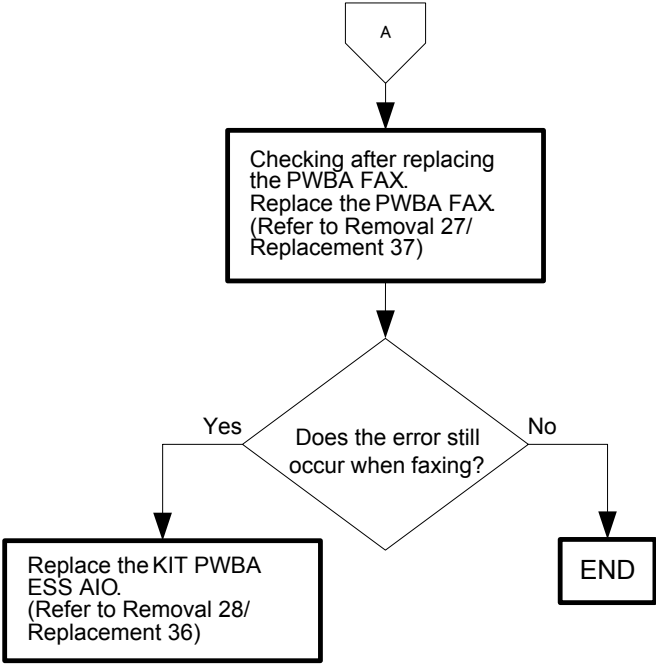
Cause: 033-774:In FAX send, JBIG encode output buffer overflow.
033-776:In FAX scan and D-FAX scan, JBIG encode output buffer overflow.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE

Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.





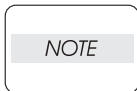
Flows 67 033-775/033-777/033-779/033-784:Buffer Job Failure

Cause: 033-775:In FAX receive, JBIG encode output buffer overflow.
033-777:In FAX receive, when copying from ECM buffer to JBIG decode input buffer, input buffer overflow.

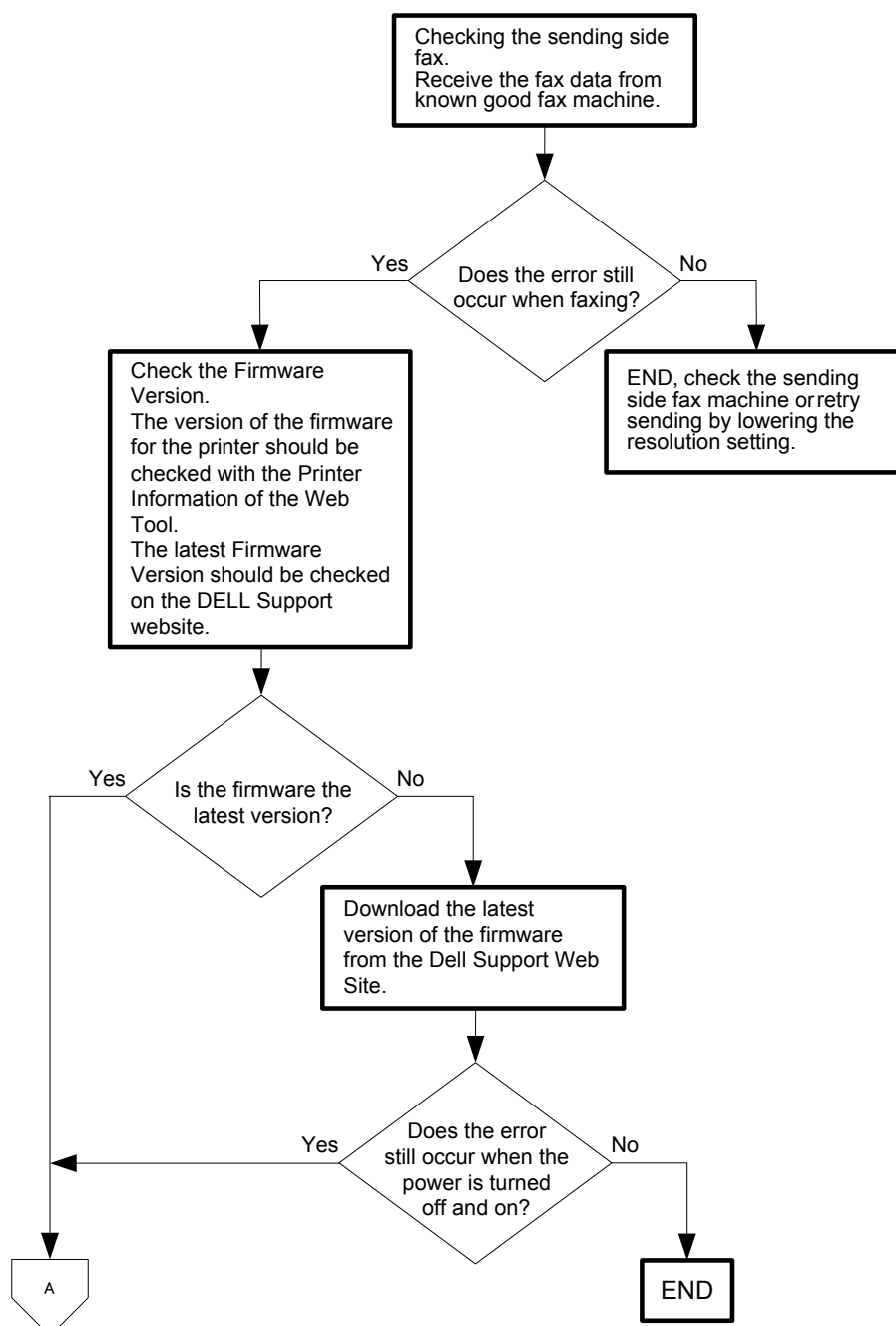
033-779:Cannot create log file of communication result.

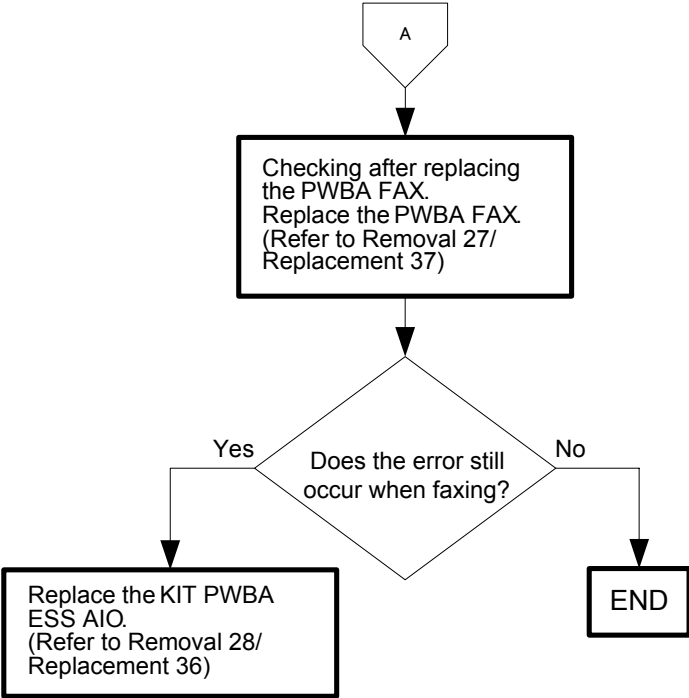
033-784:In FAX receive, JBIG decode output buffer overflow.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

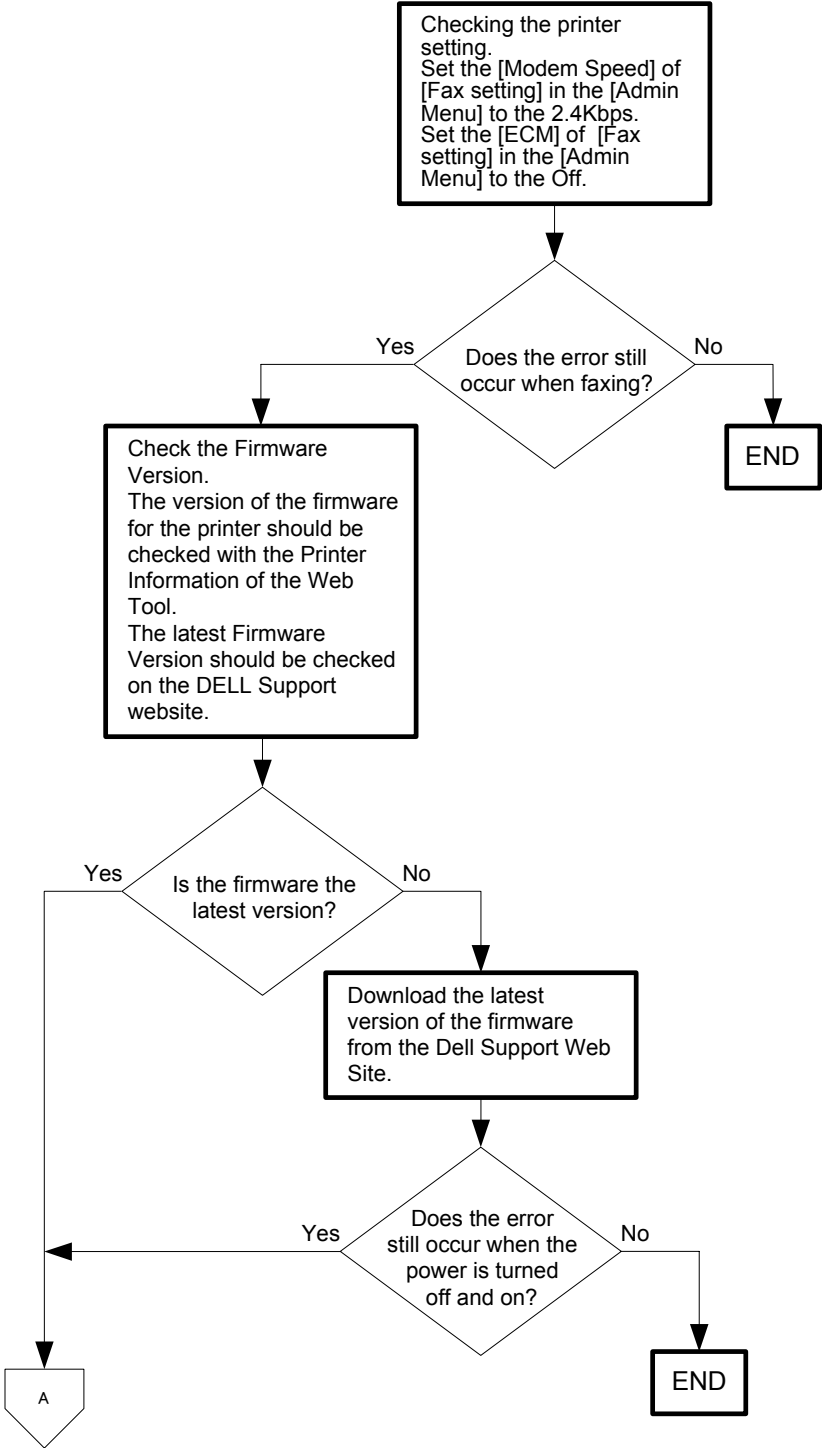


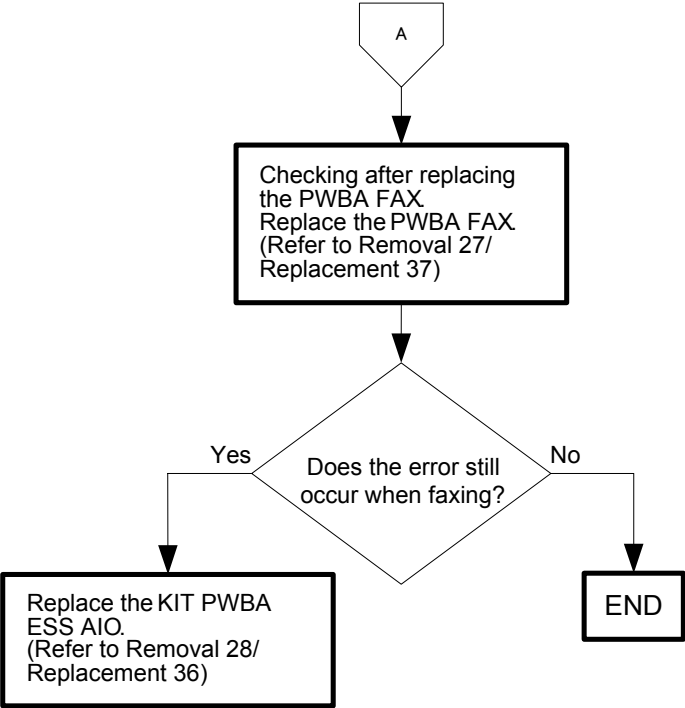


Flows 68 033-782:NSS/DCS Function disagreement

Cause: Received NSS/DCS function disagrees with capability of own terminal.
Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.

NOTE Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

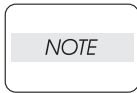




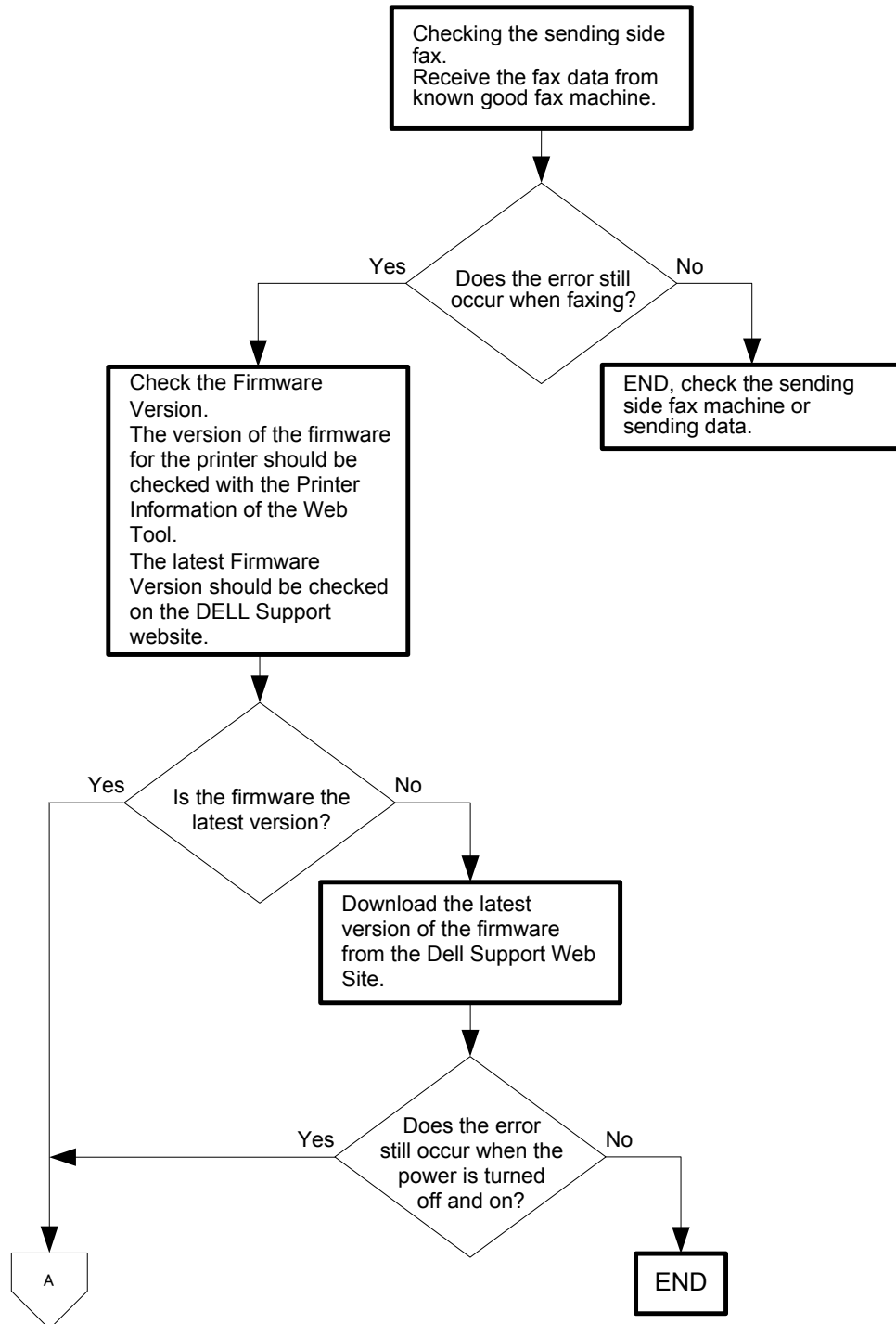
Flows 69 033-799:Communication Job Failure

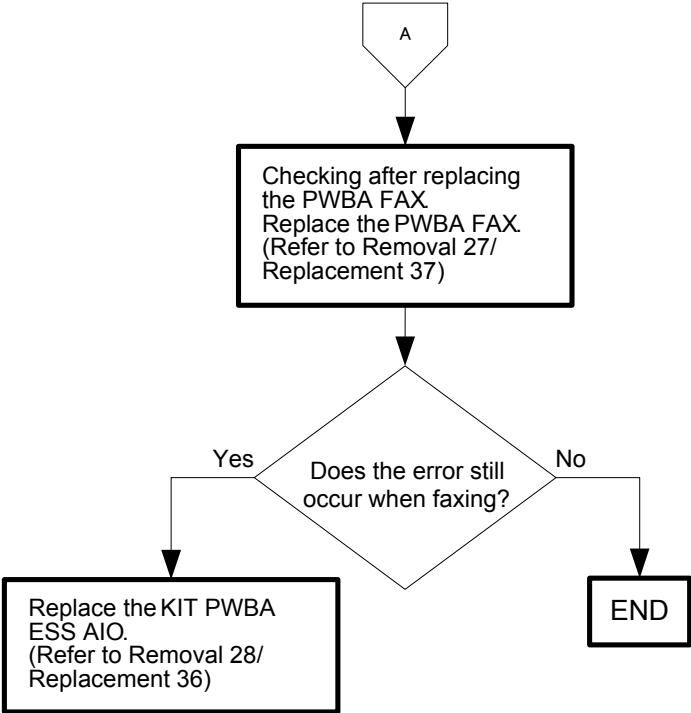
Cause: In MH,HR,MMR receive, exceed the maximum number of received lines for 1 page.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

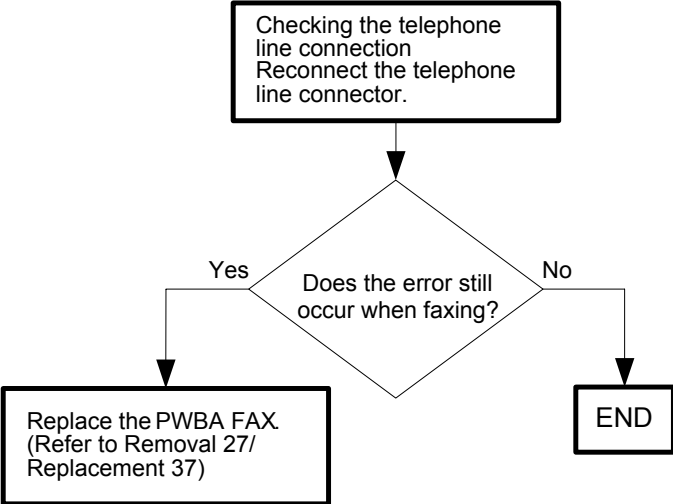




Flows 70 034-791:Check Line Connection

Cause: The Telephone Line Connection Error.

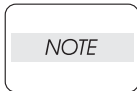
Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



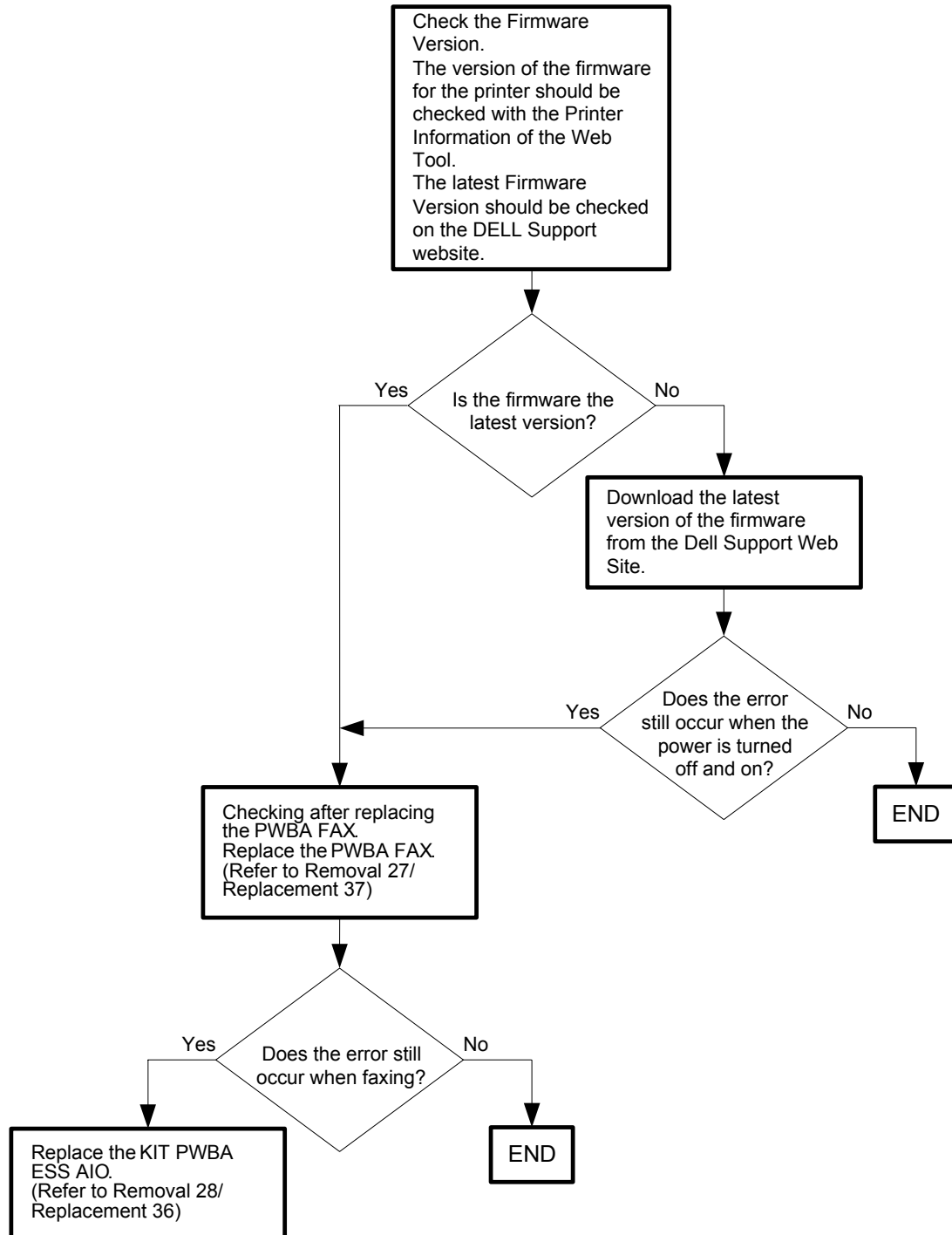
Flows 71 035-779:FAX FWD document change Error

Cause: FAX forward document change Error.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



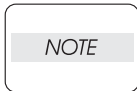
Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.



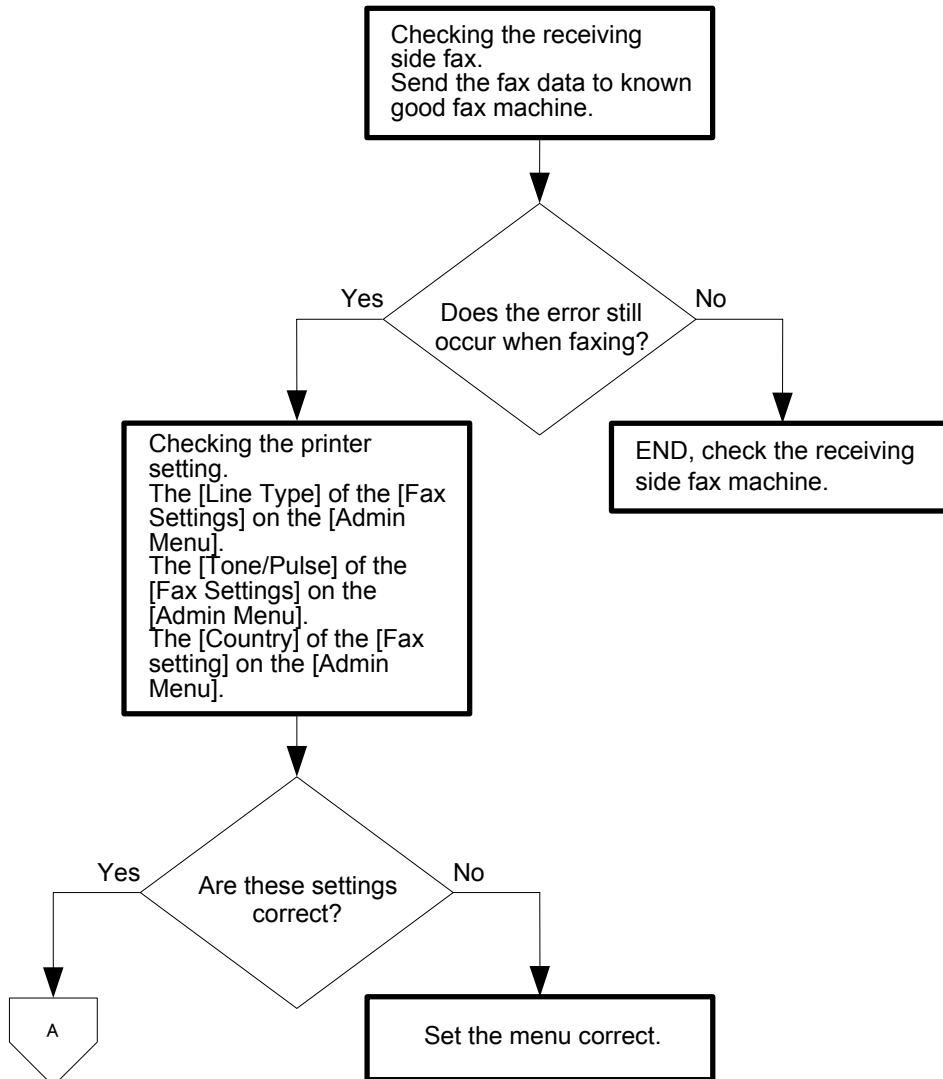
Flows 72 035-781:Busy Job Failure

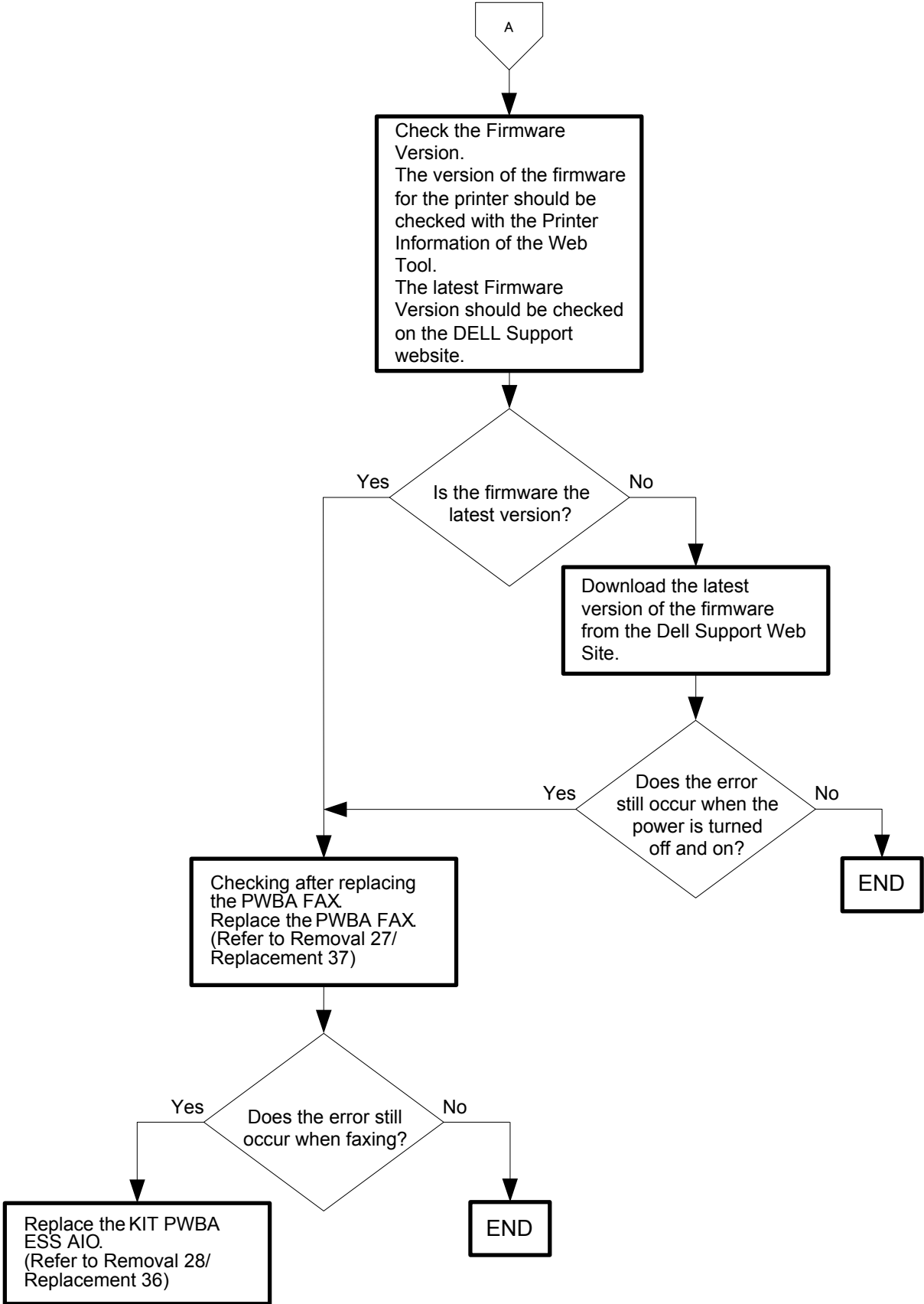
Cause: Detect busy tone after dialing.

Solution: Check if the remote machine is busy.Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds.Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Never turn off the power to the printer while the firmware is being downloaded. Turning the power off may cause a failure in the printer.

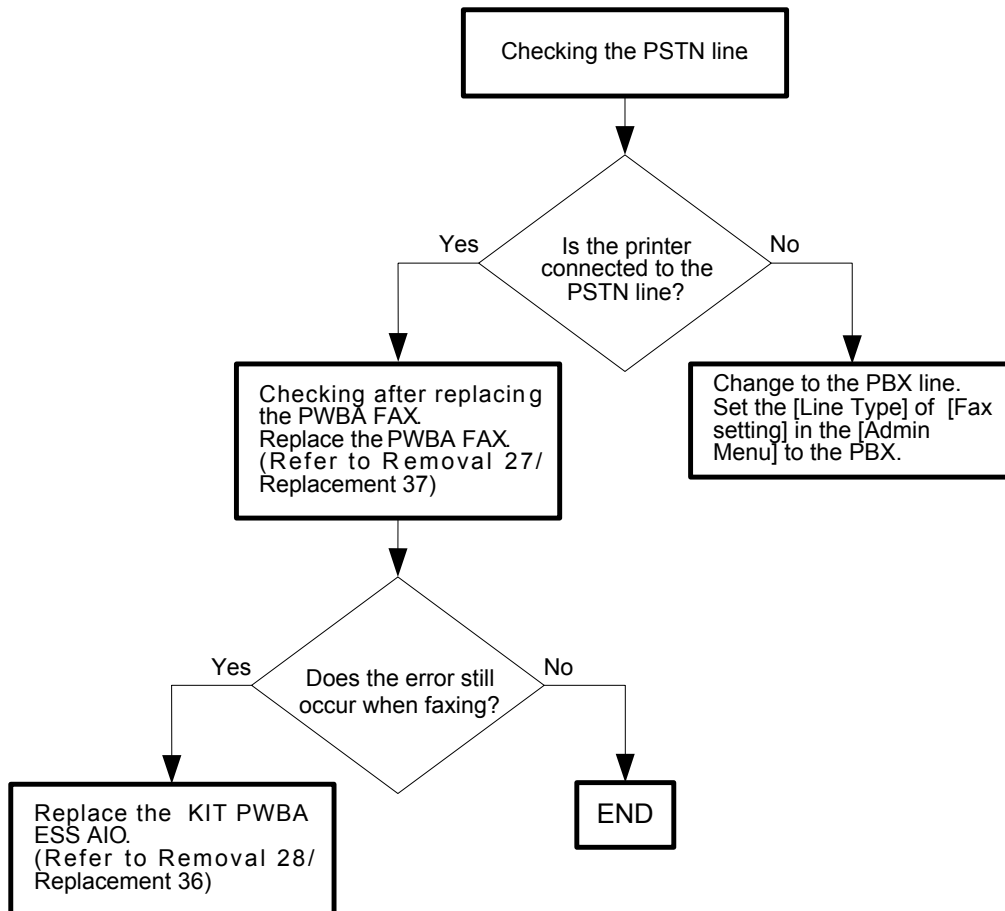




Flows 73 035-793:Digital Line Detection

Cause: Connected to digital line and cannot connect. (Detect when connecting to line)

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 74 042-700: IOT over Heat Stop

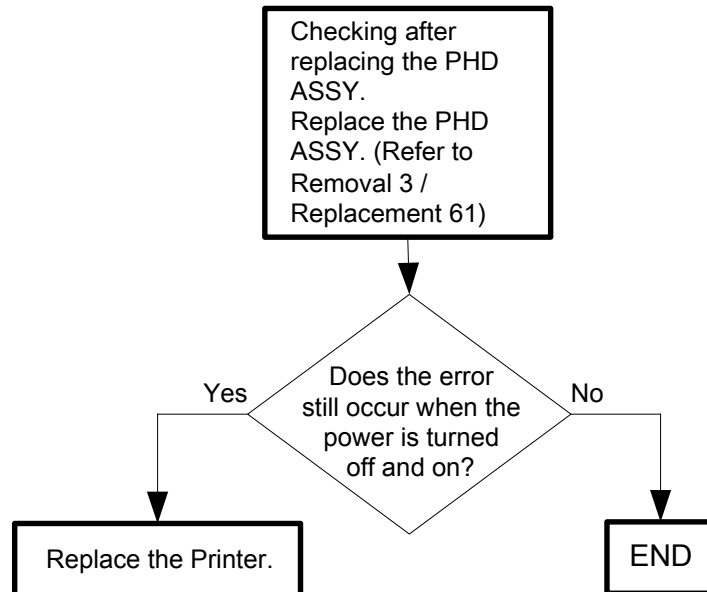
Cause: The temp. Sensor sensed high temperature.

Solution: Printing has been suspended because inside of the printer is extraordinarily hot. Turn off the printer. Open the Front Cover and remove the PHD Unit.

Start the operation after the Printer has cooled down.

NOTE

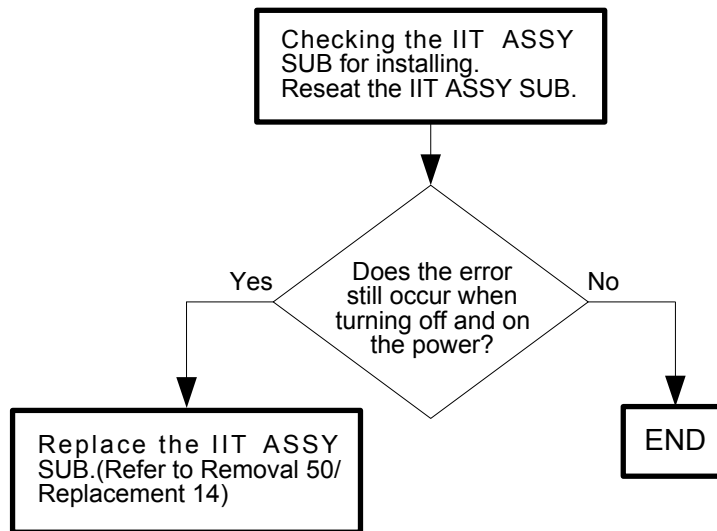
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 75 062-311/062-321/062-322/062-360/062-371/062-393:IIT Error

Cause: 062-311: The IIT initializing error occurred.
062-321: Unexecutable error. (carriage is at the locked position, etc.)
062-322: Abnormality of the parameter.
062-360: Carriage home position error.
062-371: The IIT Lamp error occurred.
062-393: The CCD ASIC communication error occurred.

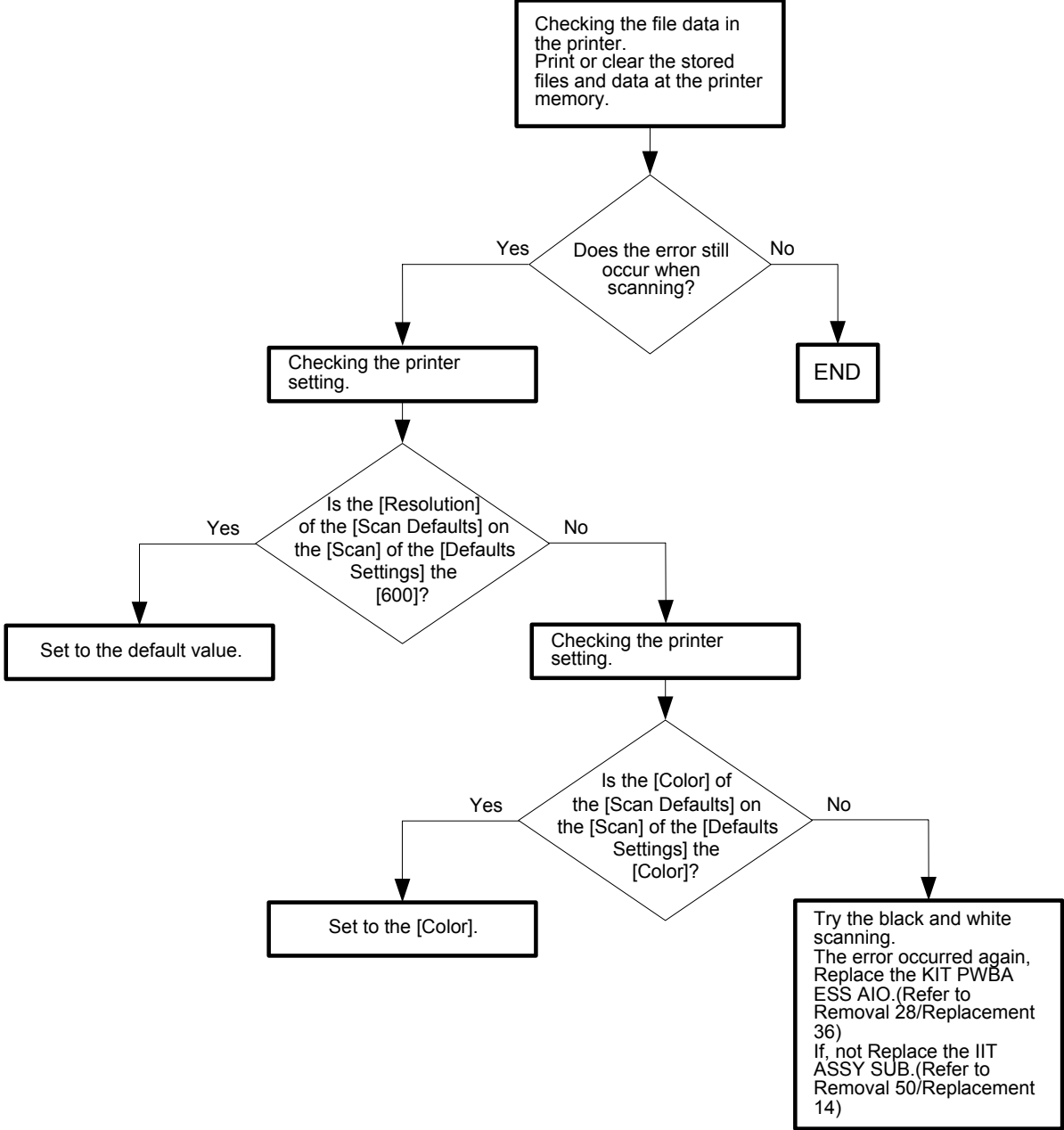
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 76 062-320:Scanner Error

Cause: The image acquisition error occurred.

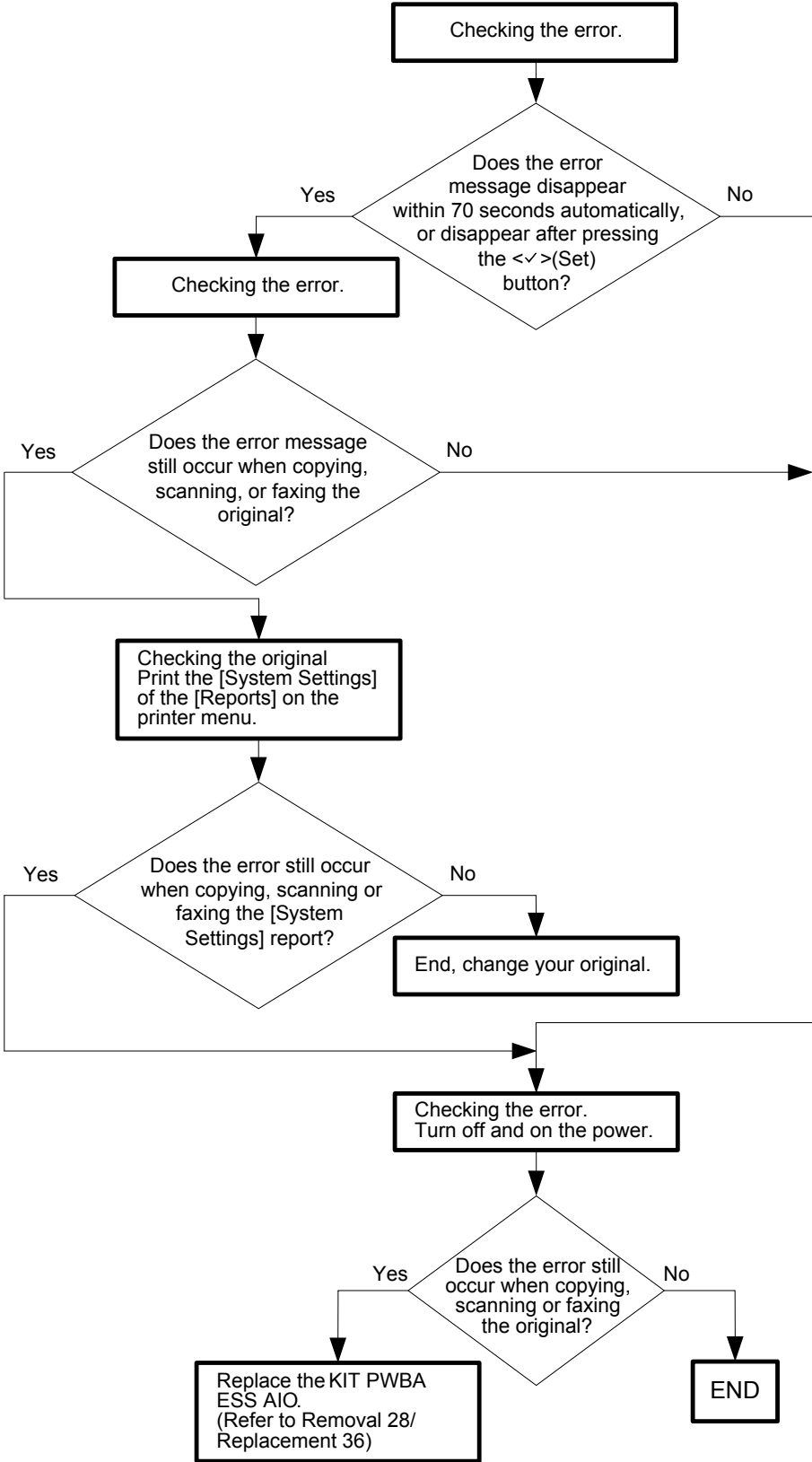
Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 77 062-790:Copy Limit

Cause: Unable to continue due to copy limitation.

Solution: Recover after the <✓> (Set) button is pressed or message is displayed for 30 seconds. Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 78 071-100: IOT Tray1 Misfeed JAM

Cause: The Regi Sensor is not turned ON within the specified time after feeding a paper from Tray 1.

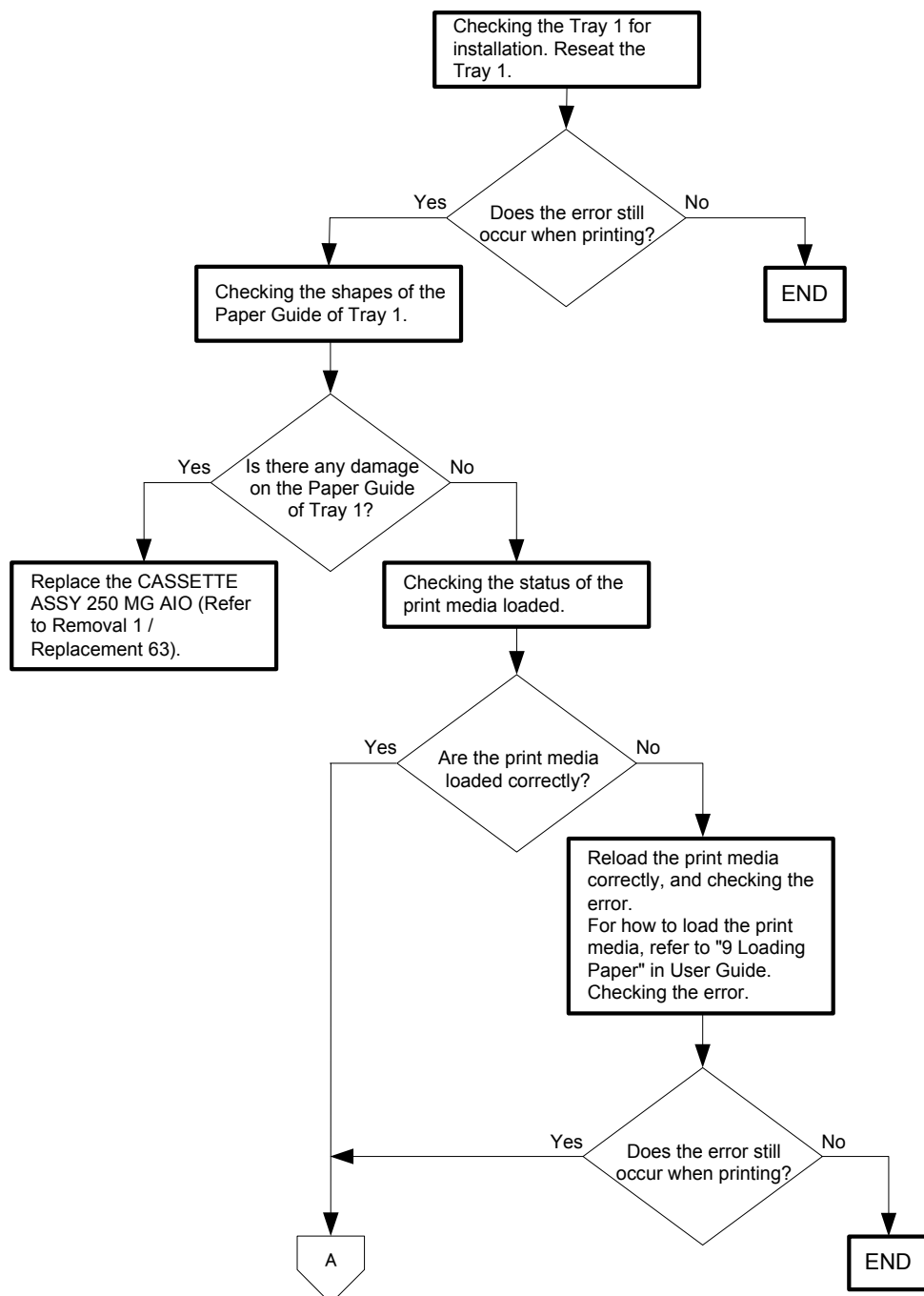
Solution: Paper jam has occurred. Remove the jammed paper. And then open and close the front cover. Refer to "Appendix_1.3 Clearing Paper Jams From the Standard 250-Sheet Tray" for how to remove the jammed paper.

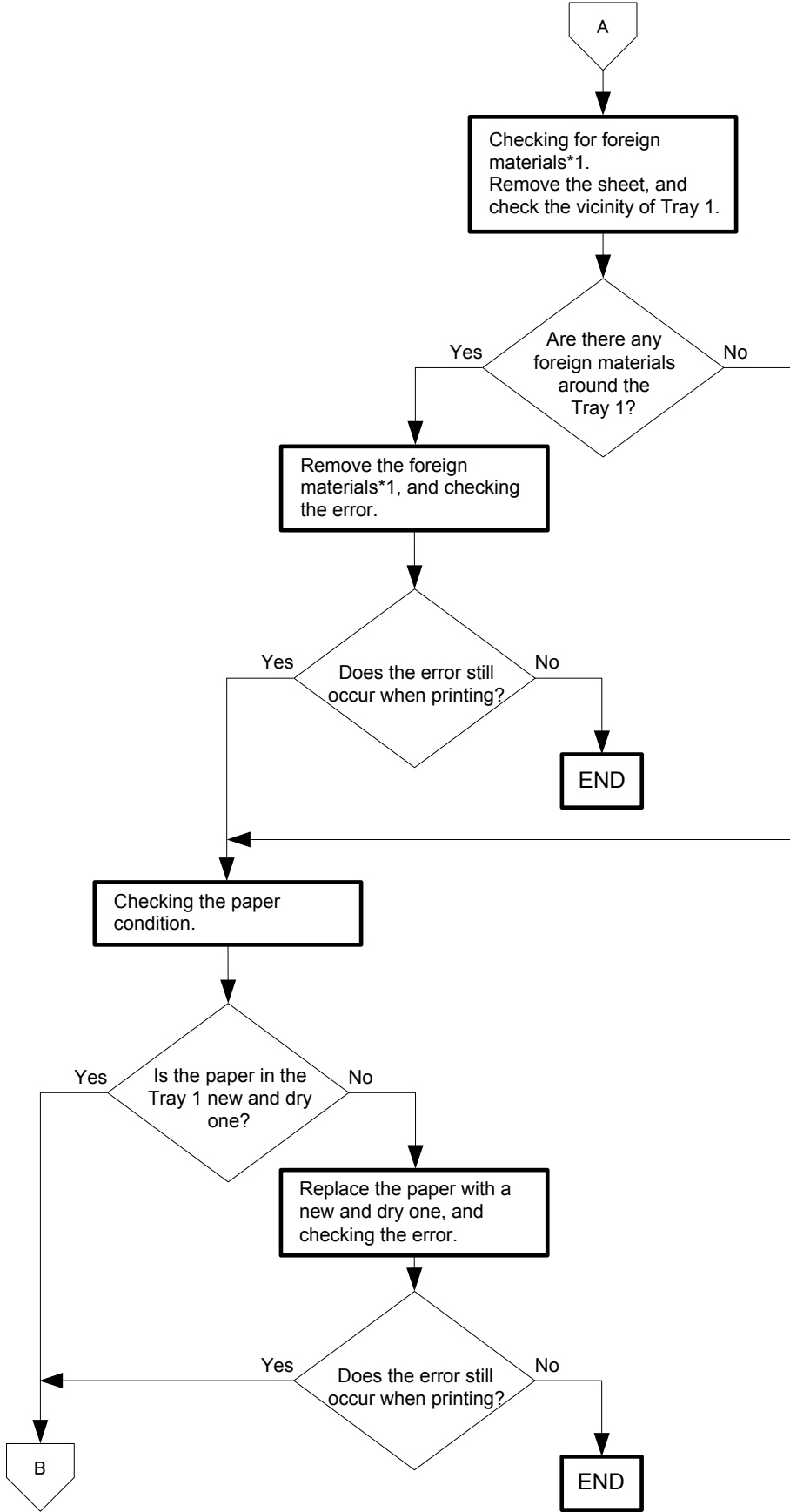
NOTE

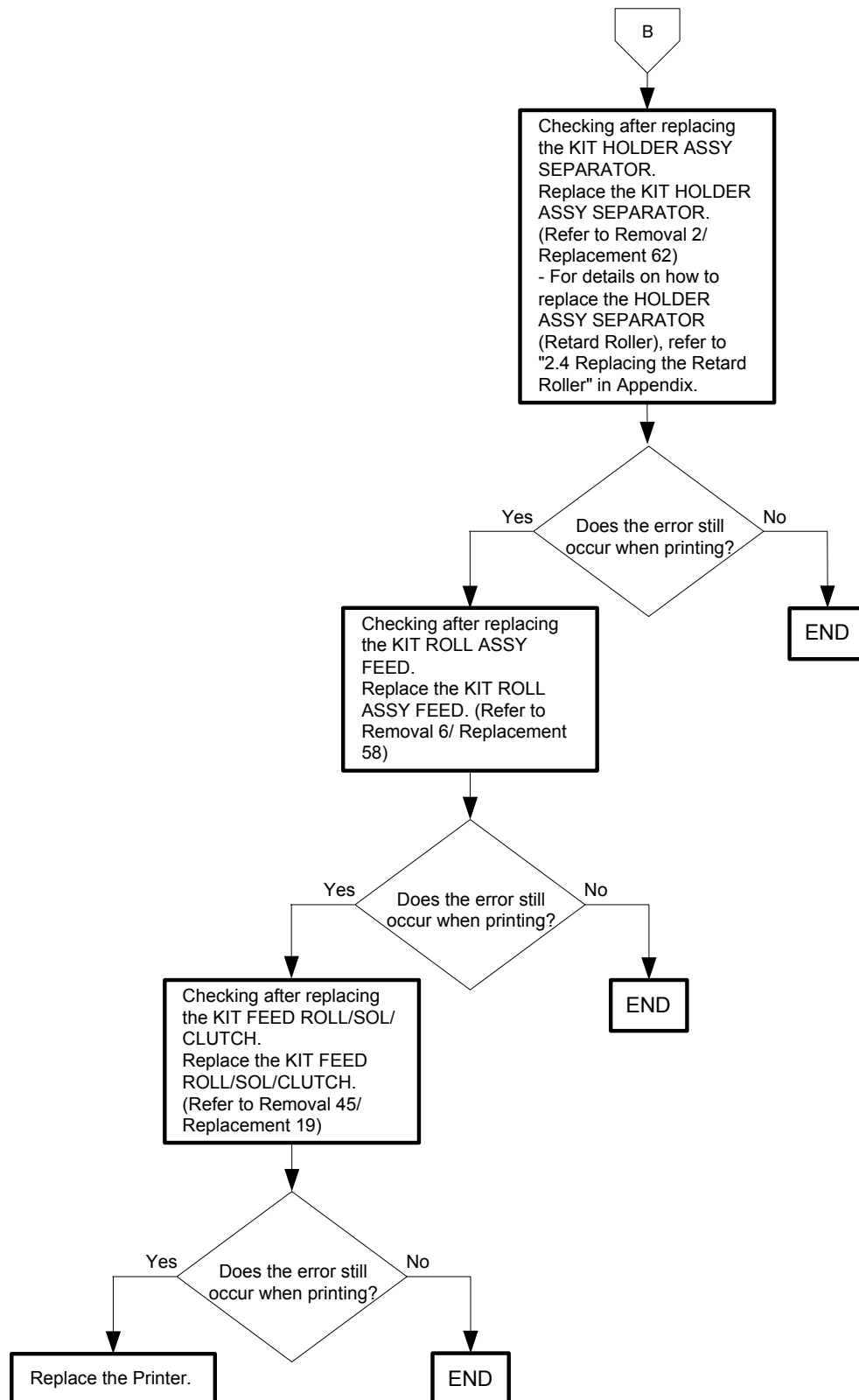
Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.







*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

Flows 79 072-100: IOT Tray2 Misfeed JAM

Cause: The Paper Path Sensor of Tray 2 is not turned ON within the specified time after feeding a paper from Tray 2.

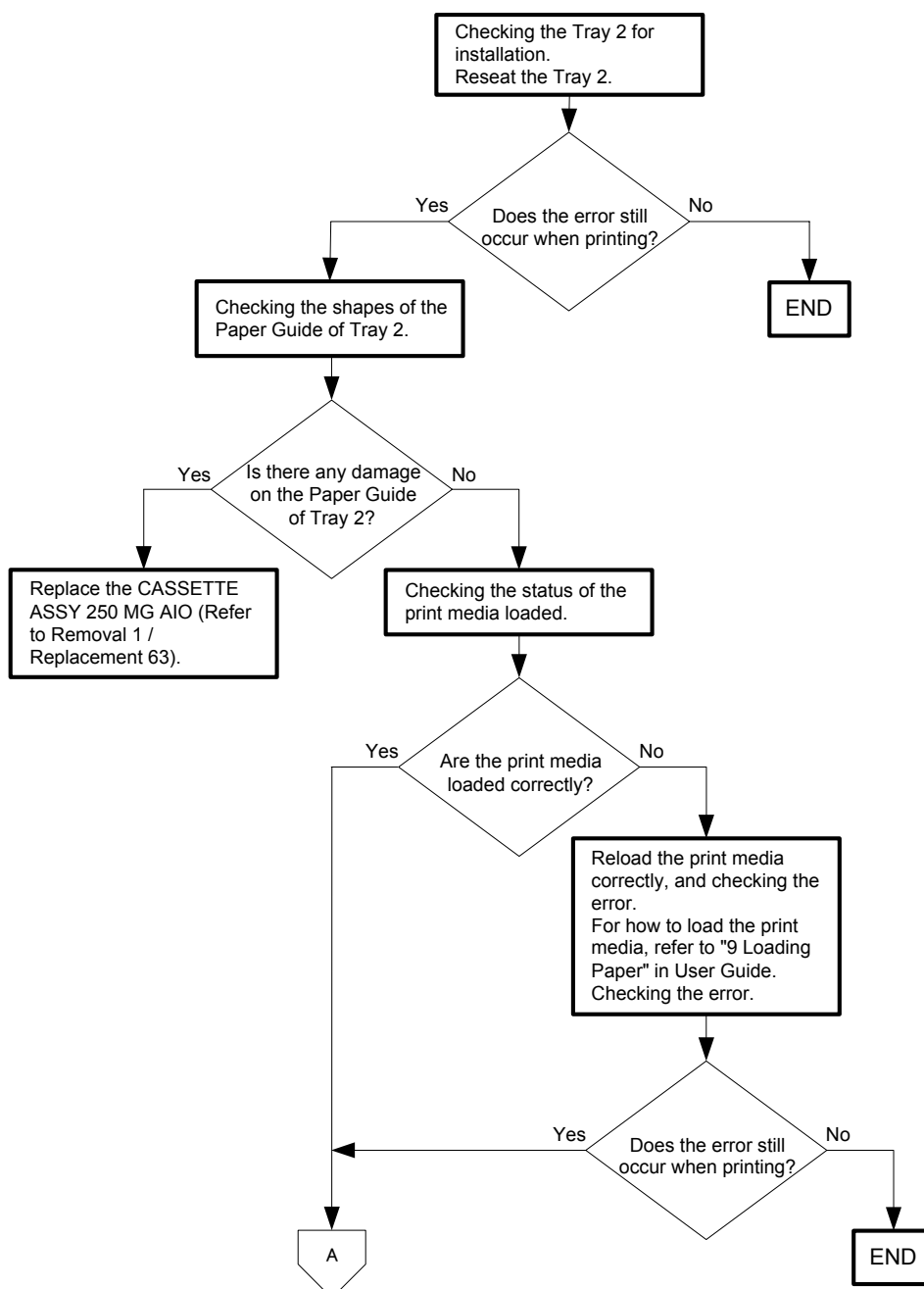
Solution: Paper jam has occurred. Remove the jammed paper. And then open and close the front cover. Refer to "Appendix_1.6 Clearing Paper Jams From the Optional 250-Sheet Feeder" for how to remove the jammed paper.

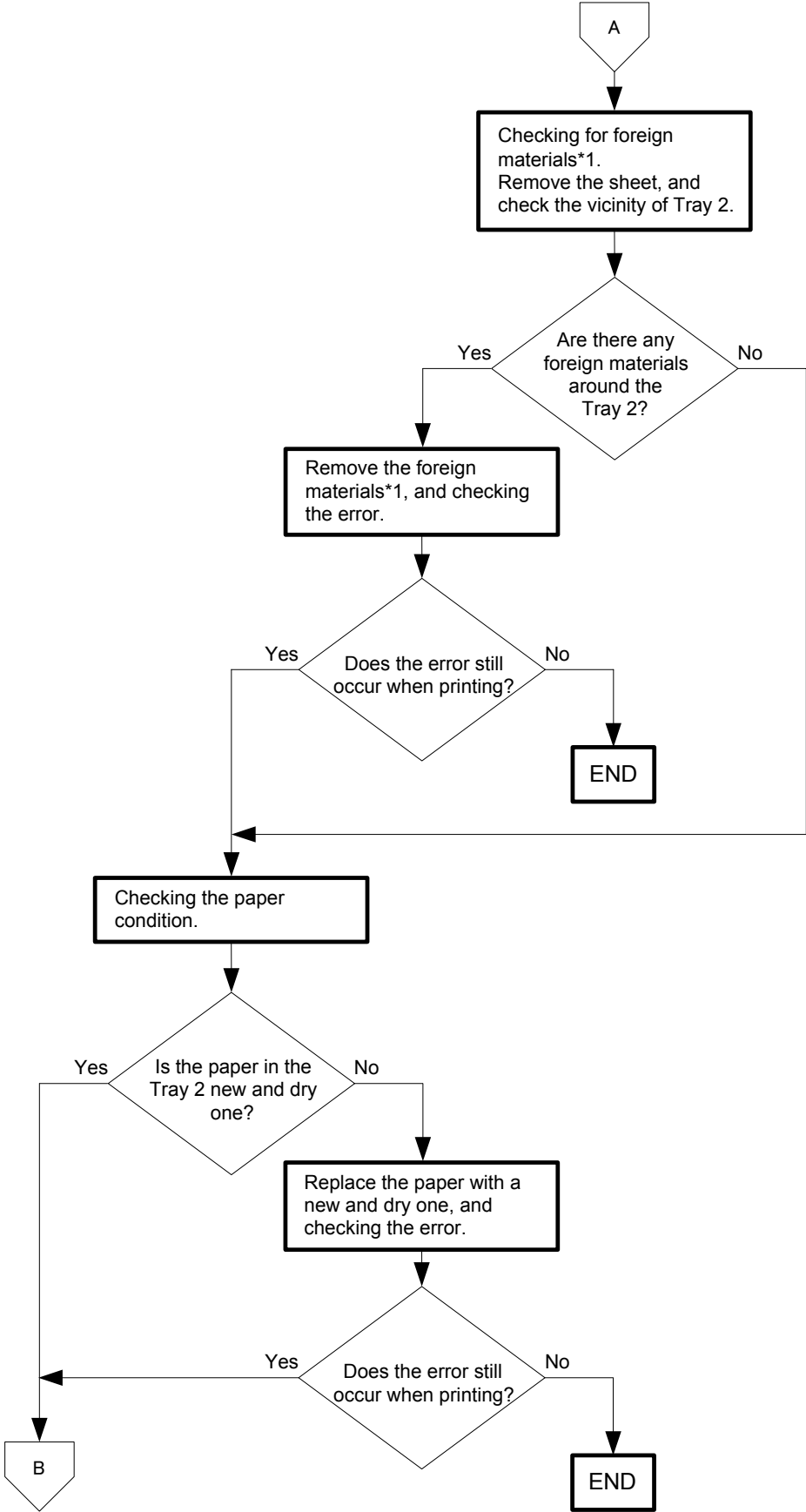
NOTE

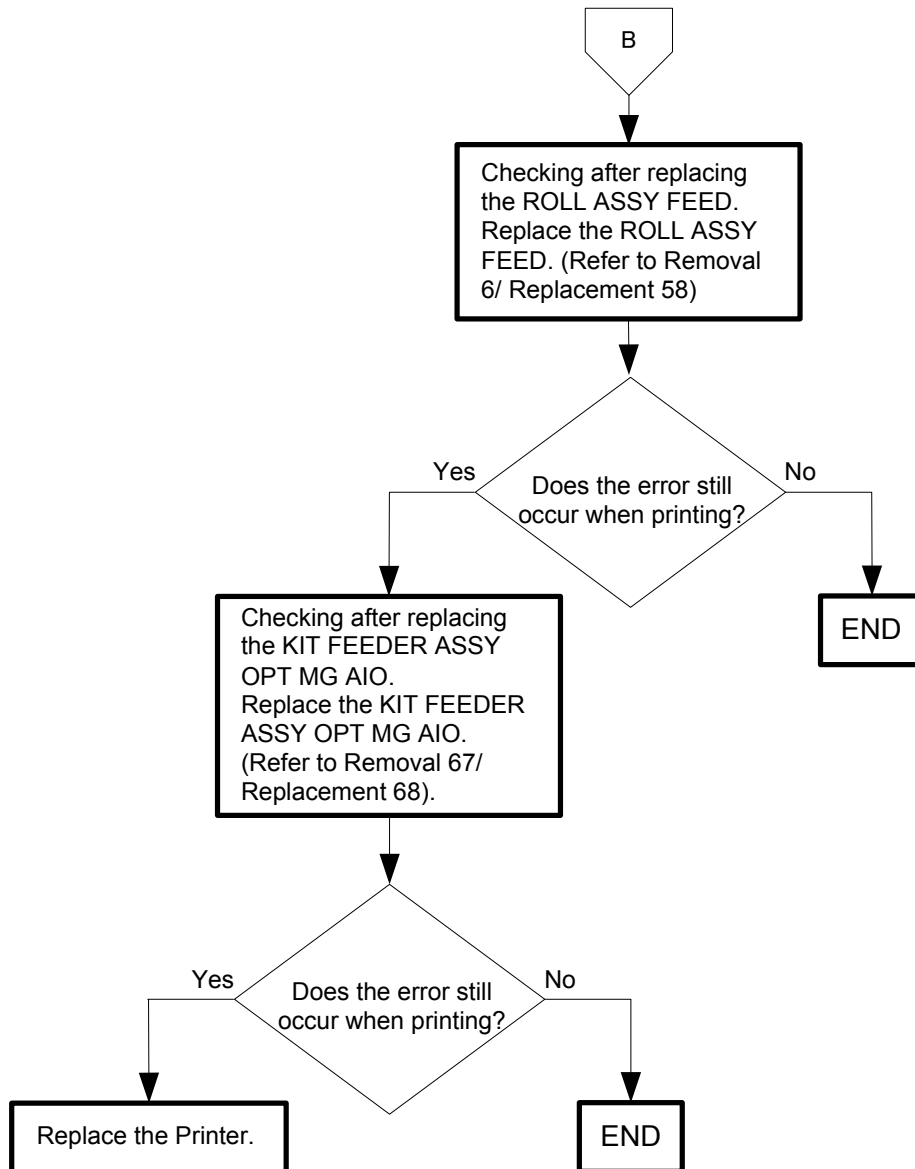
Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.







*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

Flows 80 072-101: IOT Feeder 2 JAM

Cause: A jam has been detected between the Regi Sensor and the Paper Sensor of Tray 2.

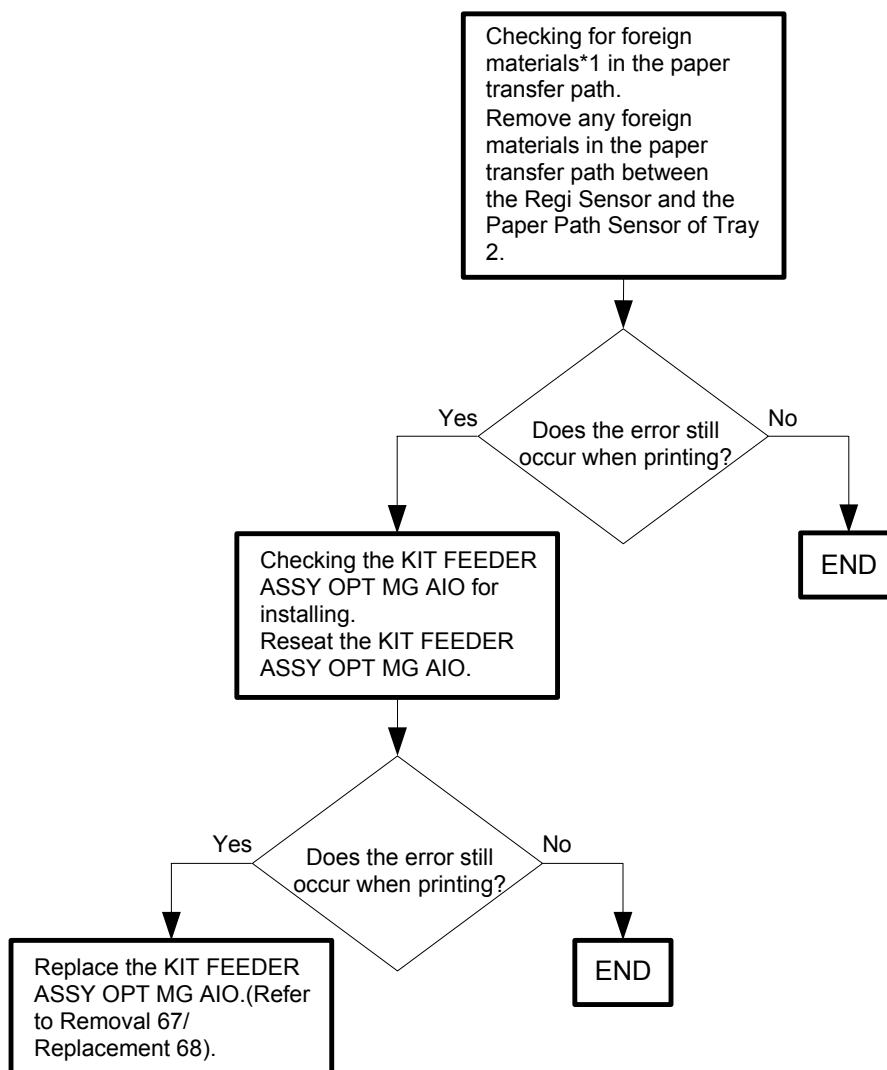
Solution: Paper jam has occurred. Remove the jammed paper. And then open and close the front cover. Refer to "Appendix_1.3 Clearing Paper Jams From the Standard 250-Sheet Tray" (or "Appendix_1.6 Clearing Paper Jams From the Optional 250-Sheet Feeder") for how to remove the jammed paper.

NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

Flows 81 072-908: IOT Remain Option Feeder JAM

Cause: The paper remains at the Paper Path Sensor of Tray 2.

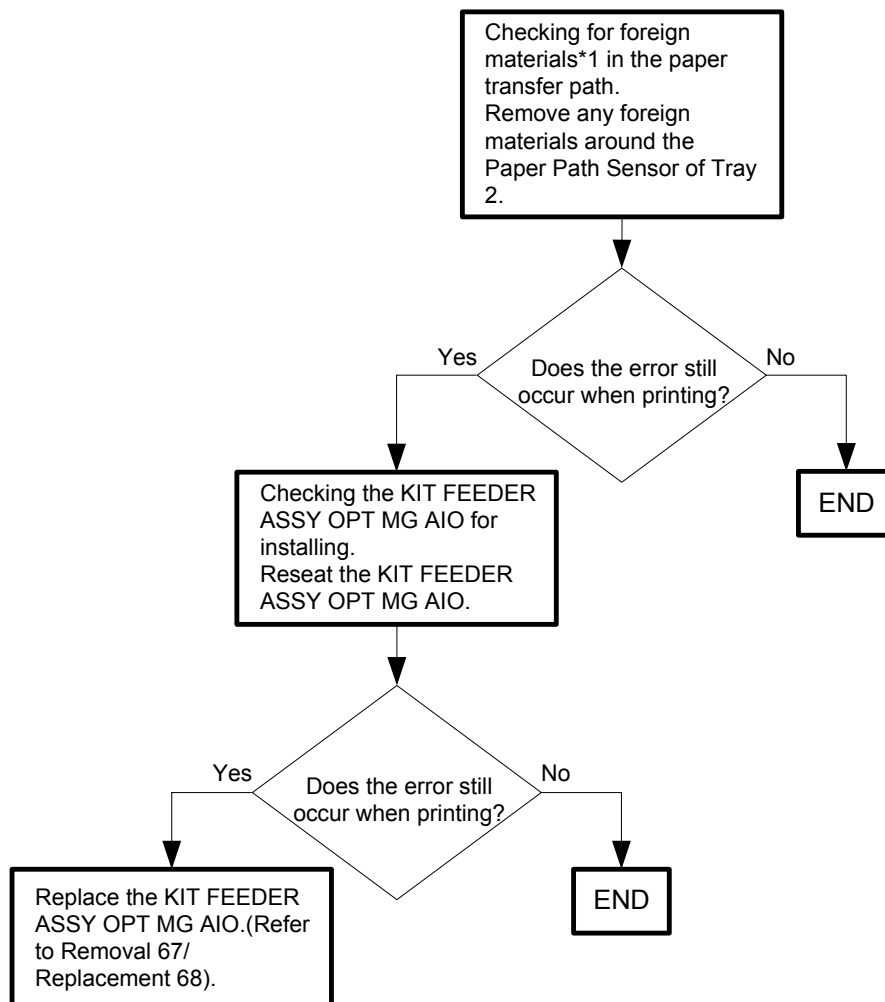
Solution: Paper jam has occurred. Remove the jammed paper. And then open and close the front cover. Refer to "Appendix_1.3 Clearing Paper Jams From the Standard 250-Sheet Tray" (or "Appendix_1.6 Clearing Paper Jams From the Optional 250-Sheet Feeder") for how to remove the jammed paper.

NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

Flows 82 075-101 / 075-102 / 075-923: IOT SSF Insert JAM / IOT SSF Paper Pullout JAM / Waiting for reseal paper of SSF

Cause: 075-101:SSF No Paper Sensor detect when a paper is inserted from SSF.
 075-102:Though it tried to feed a paper from SSF, the paper was not loaded or it was pulled out forcibly from SSF.
 075-923:Wait for the paper on SSF to be reseated

Solution: 075-101:Remove the paper from the SSF.
 075-102:Pull the jammed paper out of the SSF. Open and close the front cover.
 075-923:Pull the paper out of the SSF. Reload the paper in the SSF.

NOTE

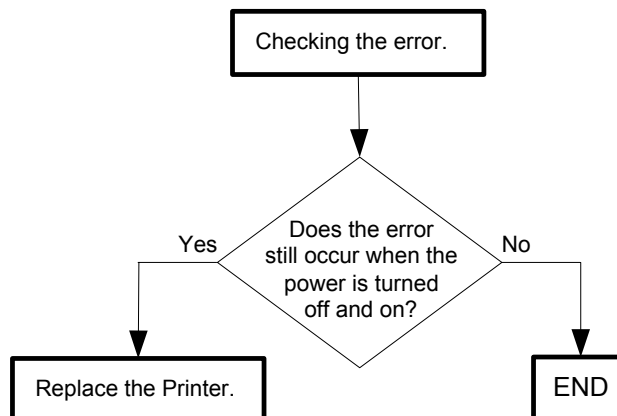
Do not load a sheet to the SSF while printing source. Otherwise, a Jam error occurs.

NOTE

Refer to "Appendix_1.2 Clearing Paper Jams From the SSF" for how to remove the jammed paper.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 83 077-100: IOT Regi On early JAM

Cause: The paper remains at the paper transfer path between the Tray 1 and the Regi Sensor.

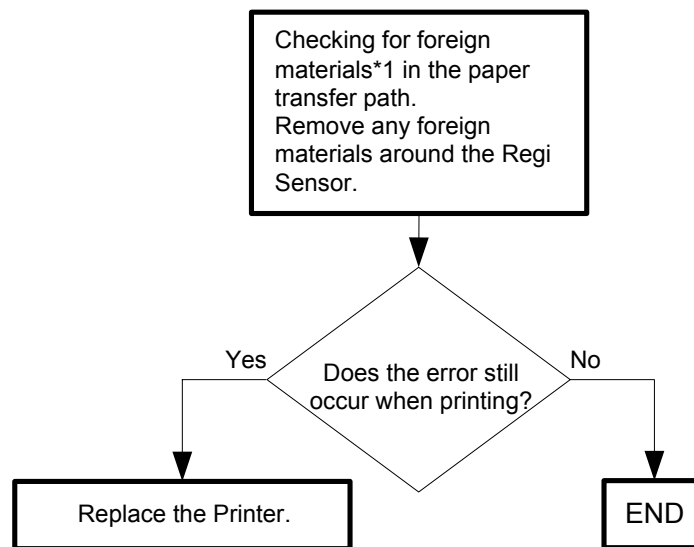
Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.2 Clearing Paper Jams From the SSF" for how to remove the jammed paper.

NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



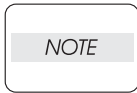
*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

Flows 84 077-101: IOT Regi OFF Jam

Cause: The paper does not pass through the Regi Sensor within the specified time.

Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.2 Clearing Paper Jams From the SSF" for how to remove the jammed paper.

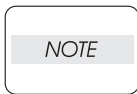


Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

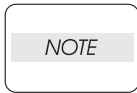


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

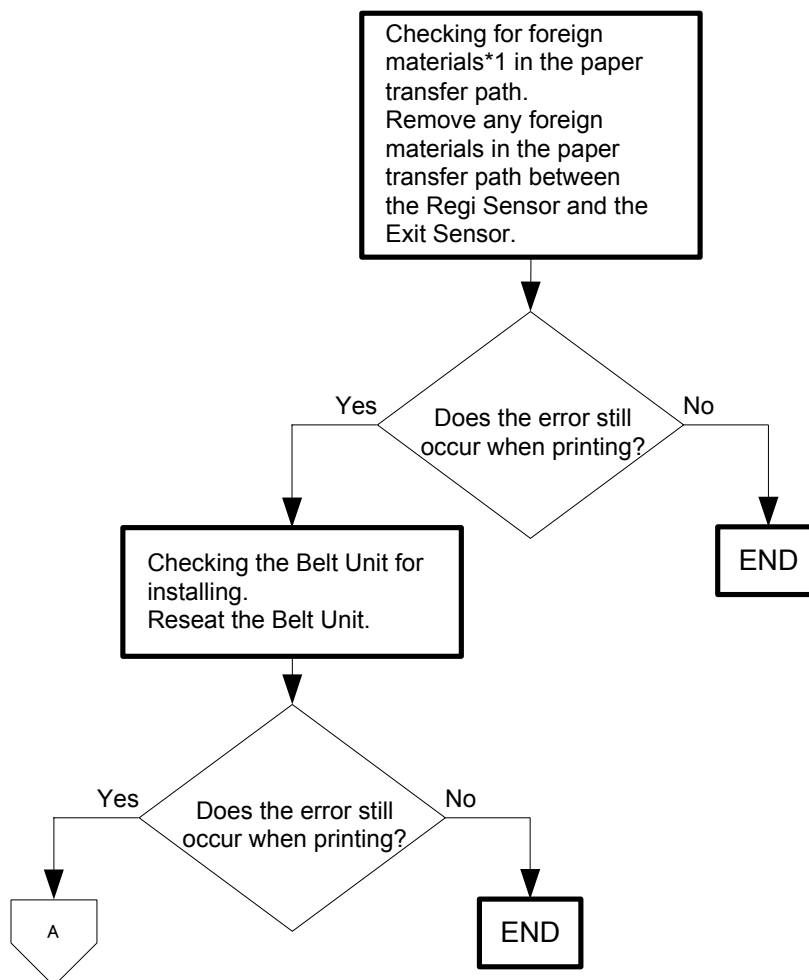
Turn off the printer and wait for 30 minutes before removing the fuser.

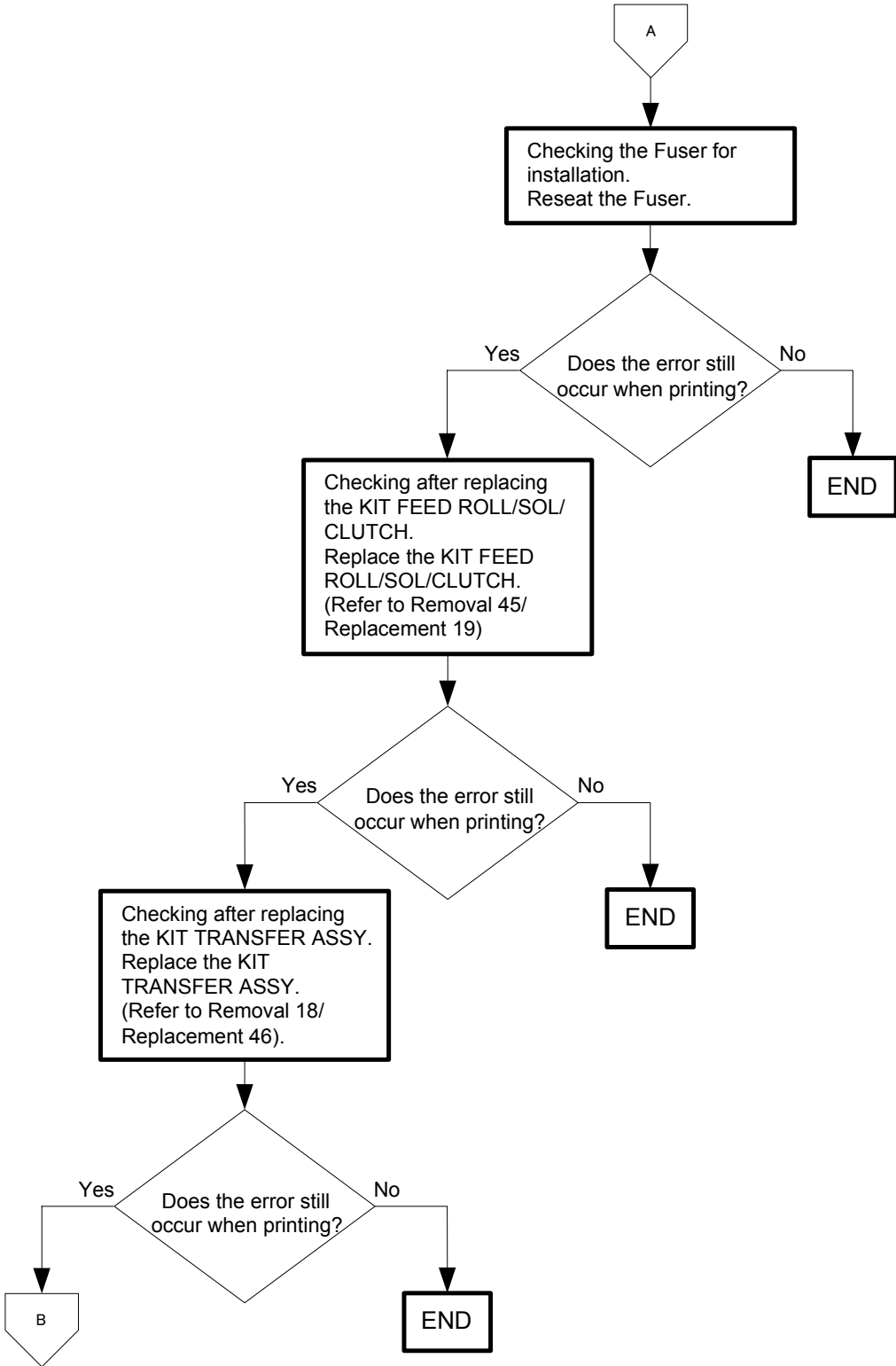


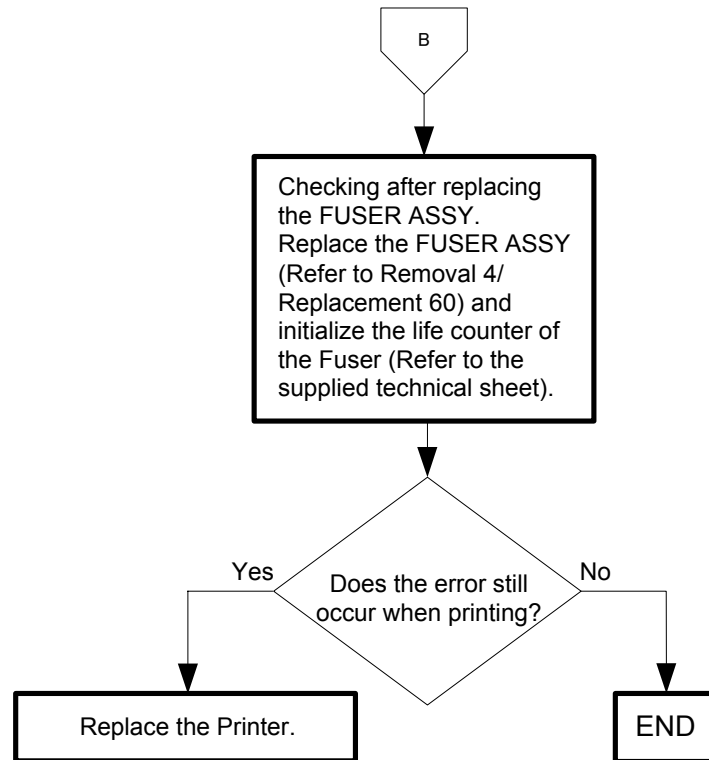
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.



If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.







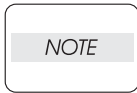
*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

Flows 85 077-102 / 077-103 / 077-106: IOT Exit On JAM / IOT Exit On early JAM / IOT Stop Reservation JAM

Cause: 077-102: The paper does not reach the Exit Sensor within the specified time.
077-103: The paper remains at the paper transfer path between the Exit Sensor and the Regi Sensor.

077-106: Detect jam when stopped before Fuser in forced stop mode.

Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.2 Clearing Paper Jams From the SSF" for how to remove the jammed paper.

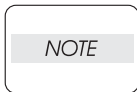


Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

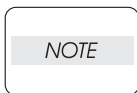


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

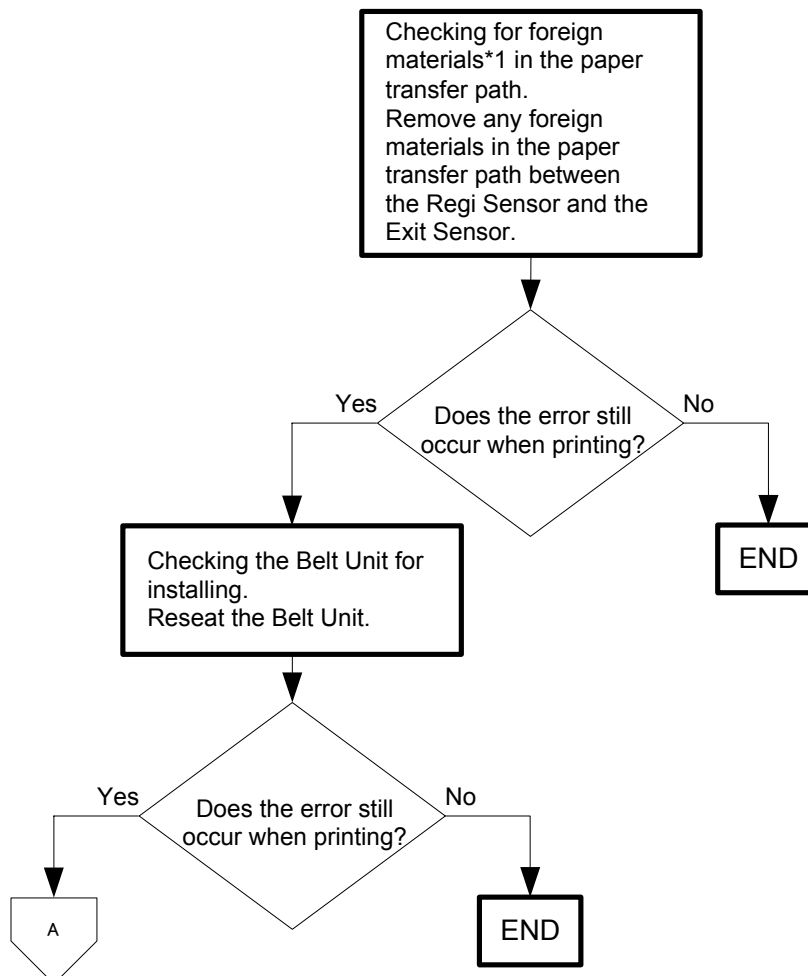
Turn off the printer and wait for 30 minutes before removing the fuser.



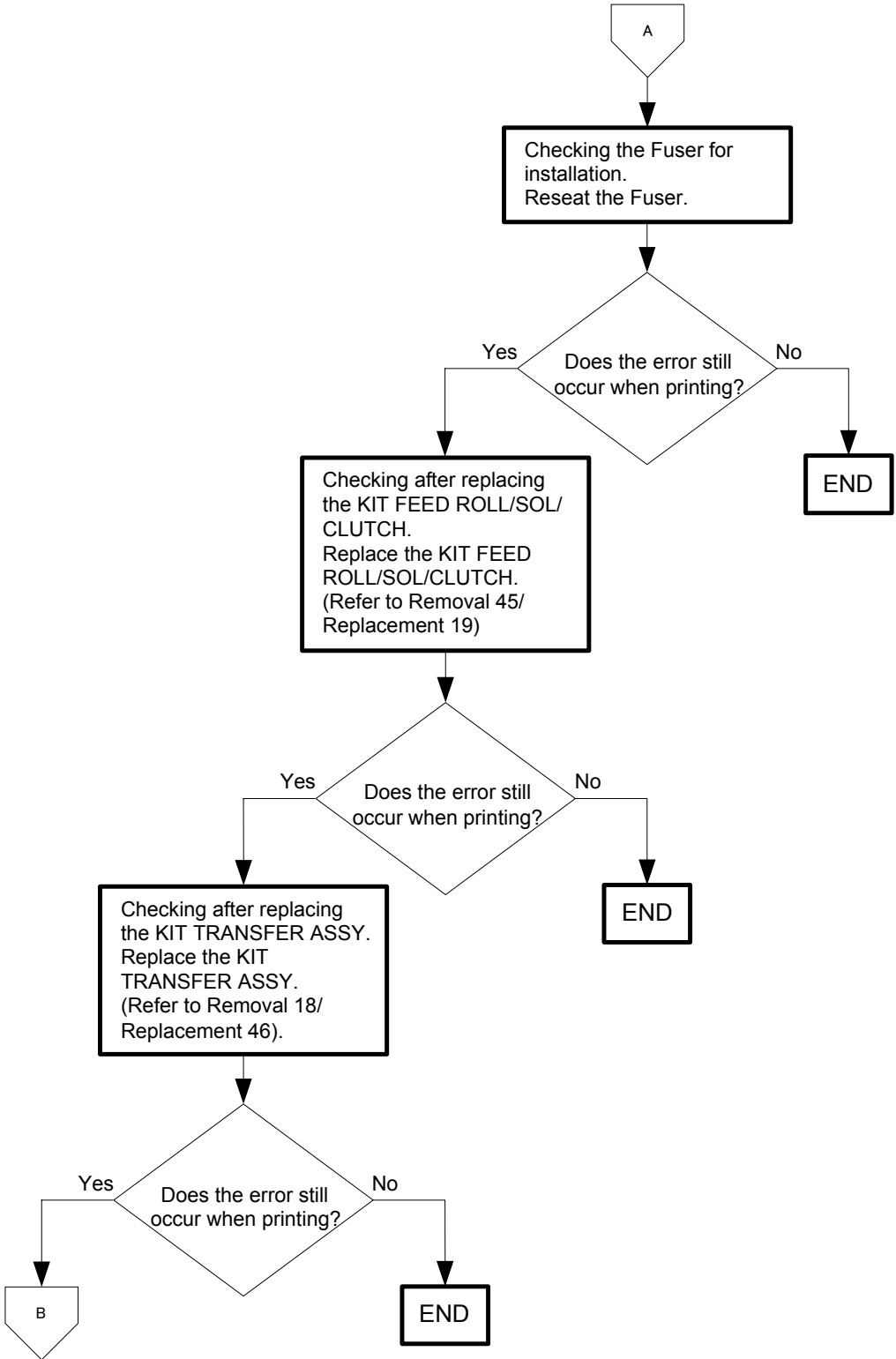
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

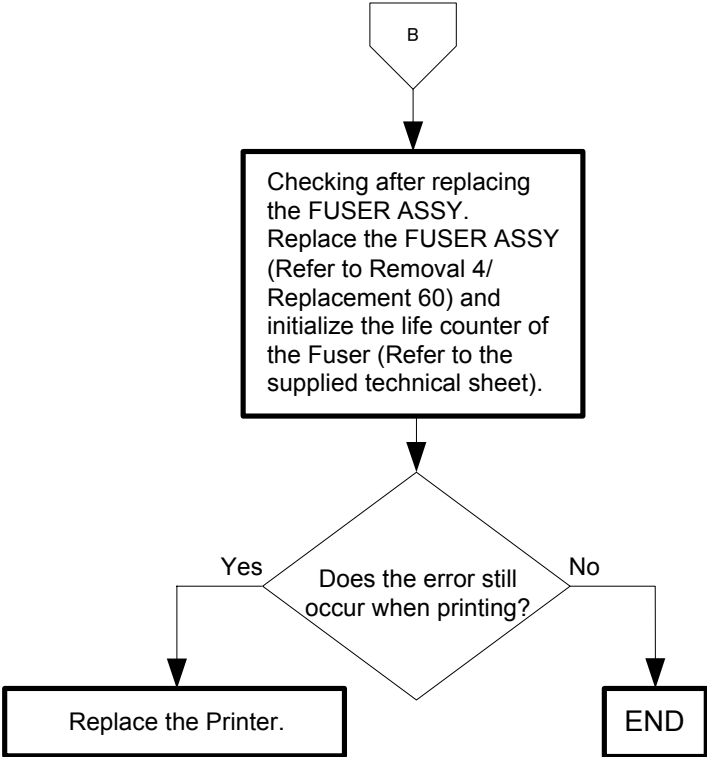


If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



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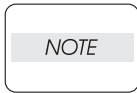
*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

Flows 86 077-104 / 077-105: IOT Exit Off JAM / IOT Exit Off early JAM

Cause: 077-104: The paper does not pass through the Exit Sensor within the specified time.

077-105: The paper passed through the Exit Sensor earlier than the specified time.

Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.4 Clearing Paper Jams From the Fuser" for how to remove the jammed paper.

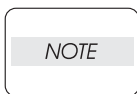


Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

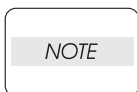


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

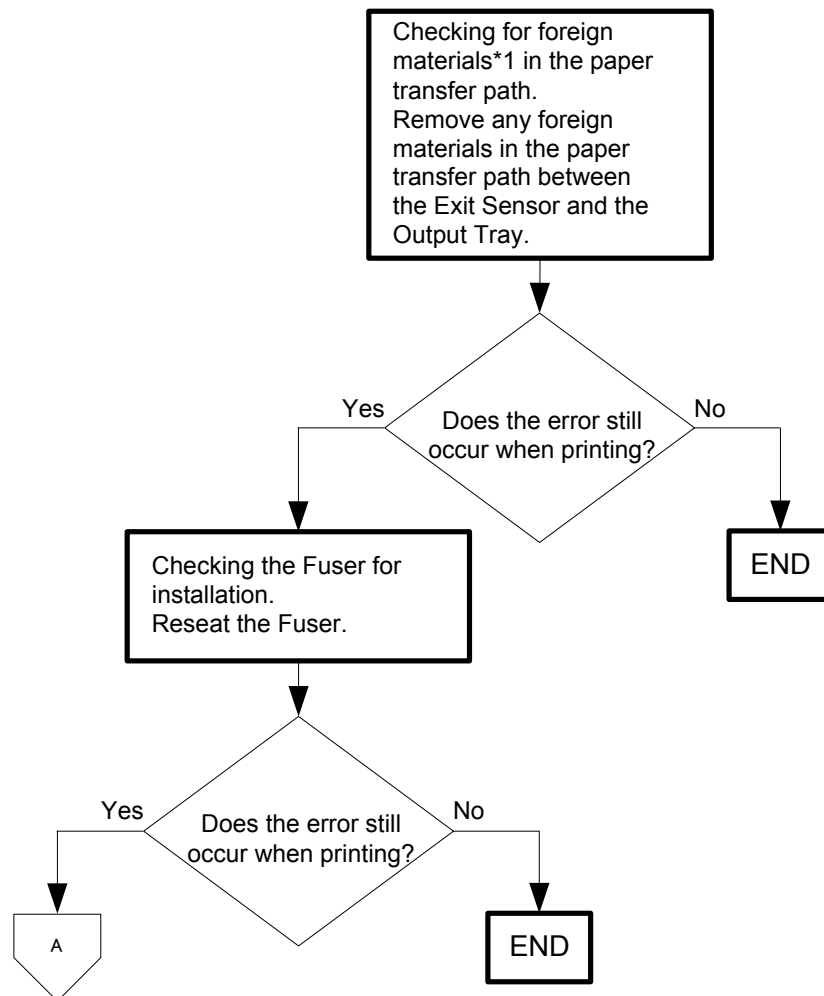
Turn off the printer and wait for 30 minutes before removing the fuser.

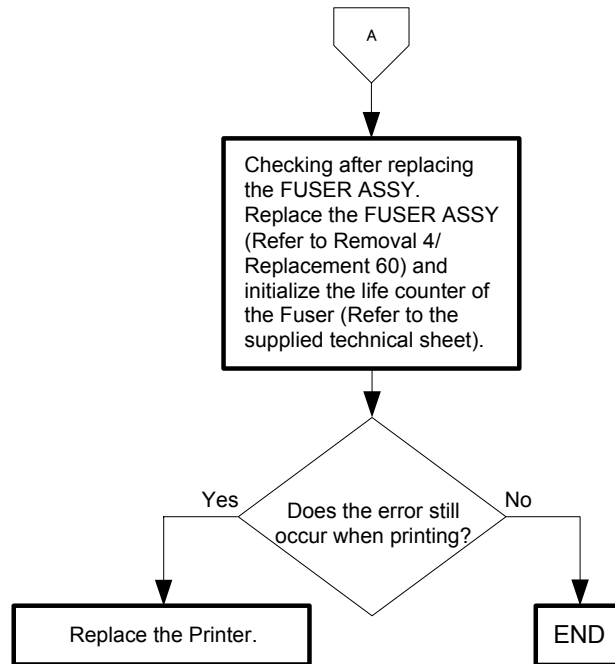


When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.



If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

Flows 87 077-107 / 077-108: IOT Duplex Misfeed JAM / IOT Duplex JAM (2155cdn only)

Cause: 077-107: In the duplex printing mode, the lead edge does not reach the Regi Sensor when the sheet changes the direction in the Duplexer after the standby.
 077-108: In the duplex printing mode, the lead edge does not reach the SSF No Paper Sensor when the sheet changes the direction in the Duplexer after the standby.

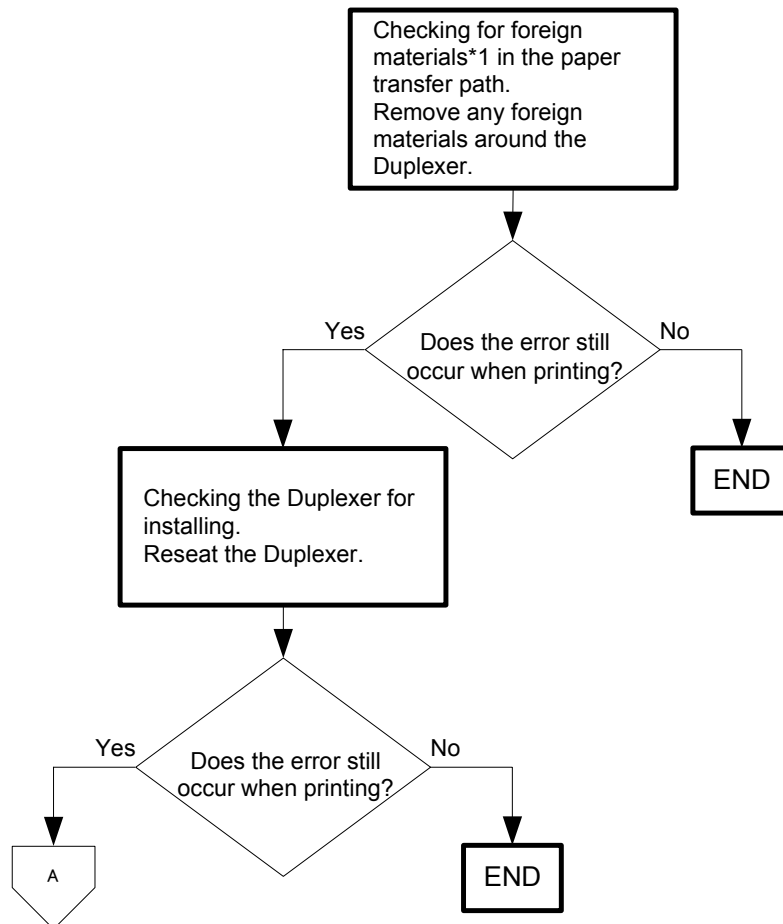
Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.5 Clearing Paper Jams From the Duplexer" for how to remove the jammed paper.

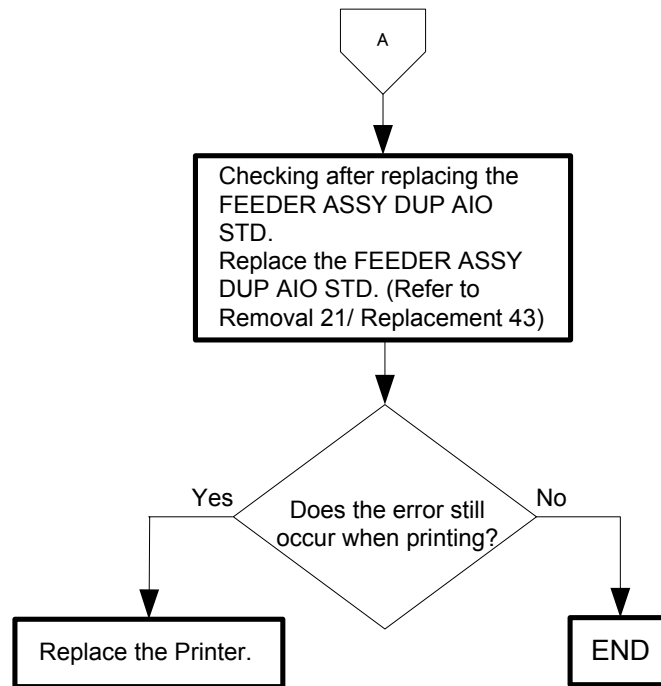
NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

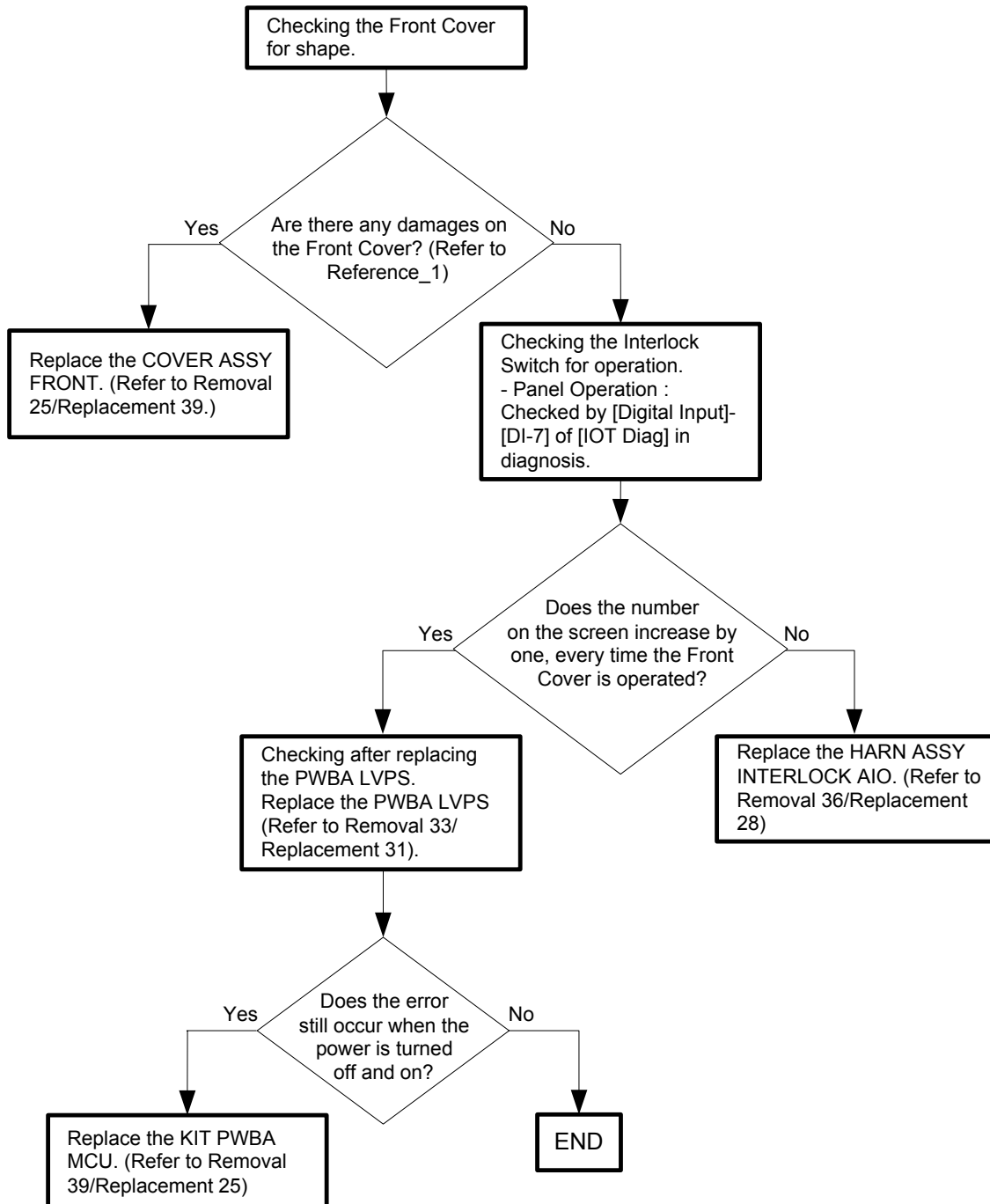
Flows 88 077-300: IOT Cover Front Open

Cause: The Front Cover is open.

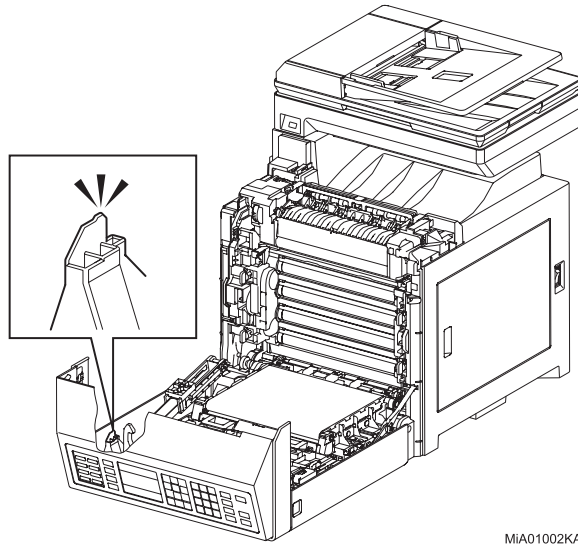
Solution: Close the Front cover.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



- Reference_1: Section to be checked for damage.



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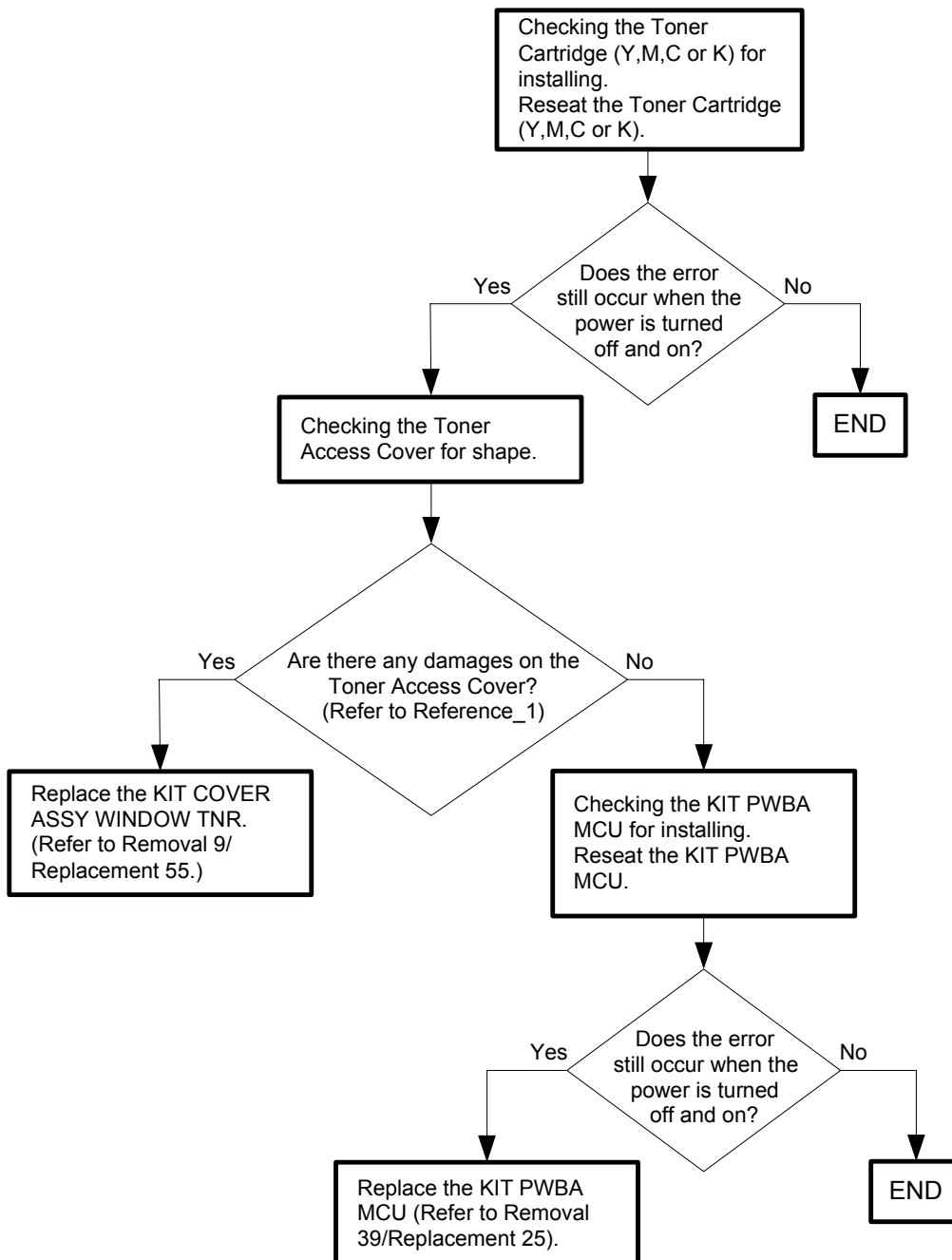
Flows 89 077-301: IOT Side Cover Open

Cause: The Toner Access Cover is open.

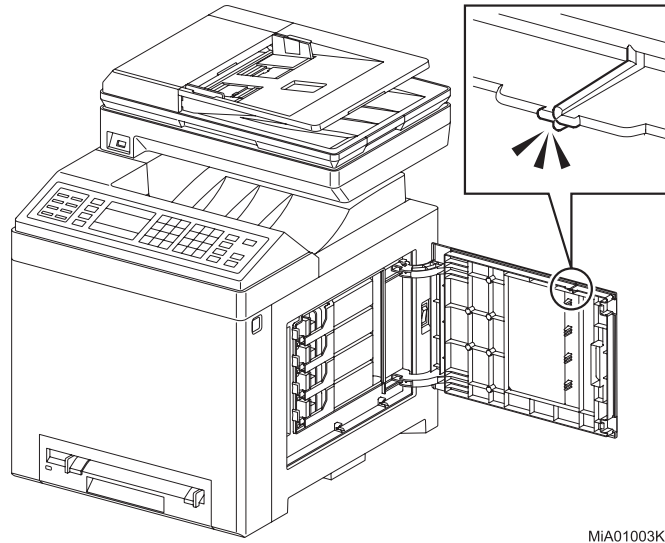
Solution: Close the Toner Access Cover.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



- Reference_1: Section to be checked for damage.

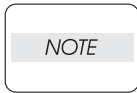


MiA01003KA

Flows 90 077-900: IOT Exit JAM

Cause: The paper remains at the Exit Sensor.

Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.4 Clearing Paper Jams From the Fuser" for how to remove the jammed paper.

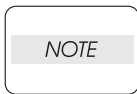


Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

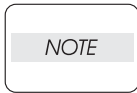


To avoid burns, do not replace the fuser immediately after printing. The fuser becomes extremely hot during use.

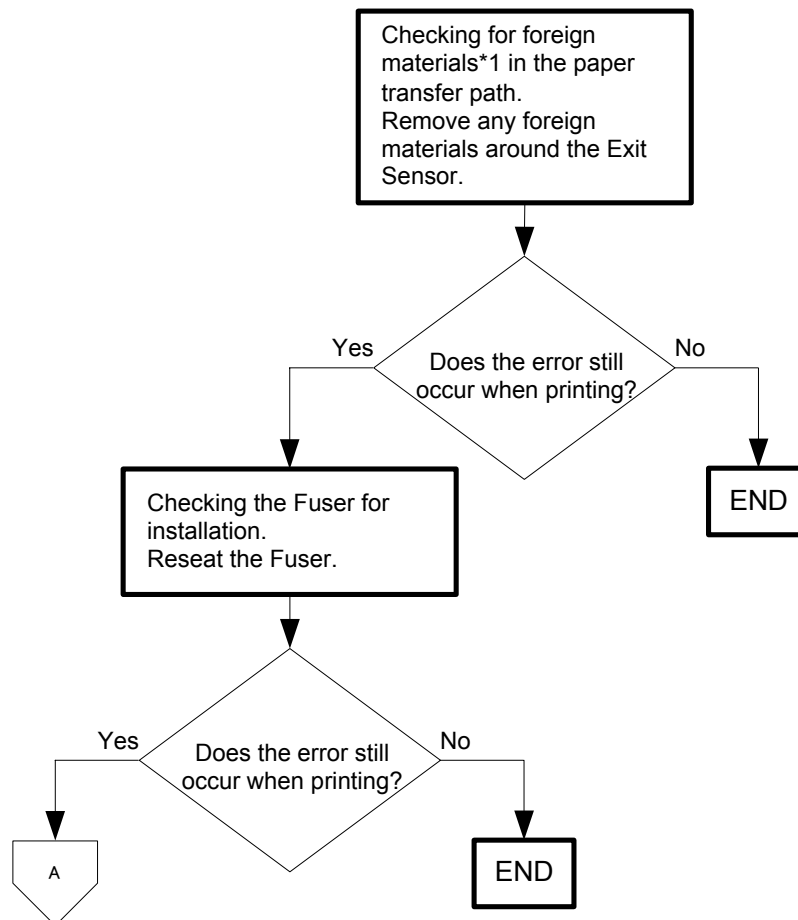
Turn off the printer and wait for 30 minutes before removing the fuser.

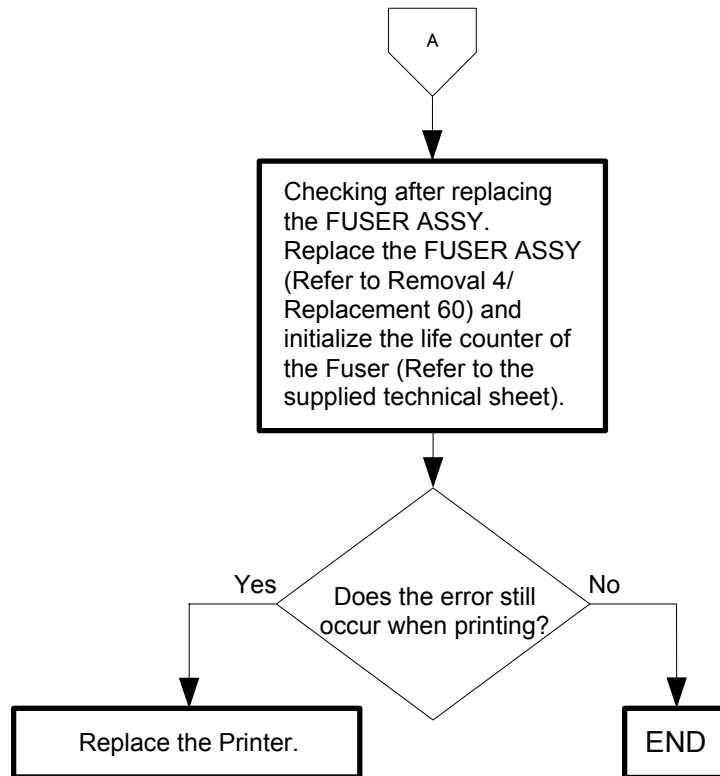


When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.



If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.





*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.
Never use any self-adhesive labels that have already been peeled off.

Flows 91 077-901: IOT Remain Registration JAM

Cause: The paper remains at the Regi Sensor.

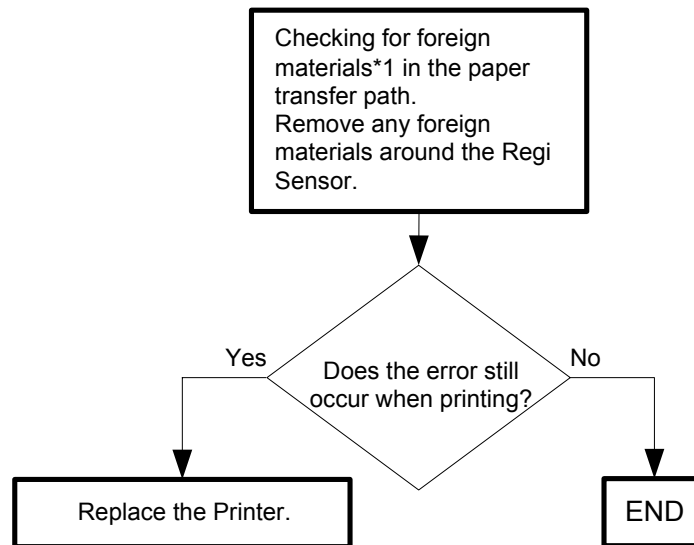
Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.2 Clearing Paper Jams From the SSF" for how to remove the jammed paper.

NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

Flows 92 077-907: IOT Remain Duplex JAM (2155cdn only)

Cause: The paper remains at the Duplex area.

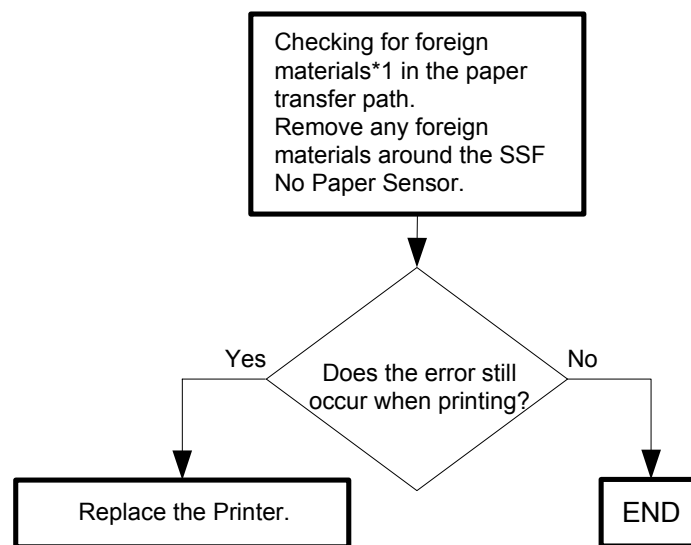
Solution: Paper jam has occurred. Remove the jammed paper. Refer to "Appendix_1.5 Clearing Paper Jams From the Duplexer" for how to remove the jammed paper.

NOTE

Do not load a sheet to the SSF while printing with the Paper Cassette as the media source. Otherwise, a Jam error occurs.

NOTE

If there is no jammed paper, or the error still occurs after having removed the jammed paper, turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



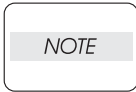
*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer.

Never use any self-adhesive labels that have already been peeled off.

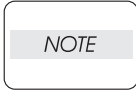
Flows 93 091-402: IOT PHD Life Pre Warning

Cause: The PHD Unit is approaching the replacement time.

Solution: The PHD Unit is approaching the replacement time. Prepare a new PHD Unit.



Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the messages "Near Life" is indicated.



This error code is not related to any hardware fault.

Flows 94 091-912: PHD Tape Staying

Cause: Detected the ribbons staying on the PHD Unit.

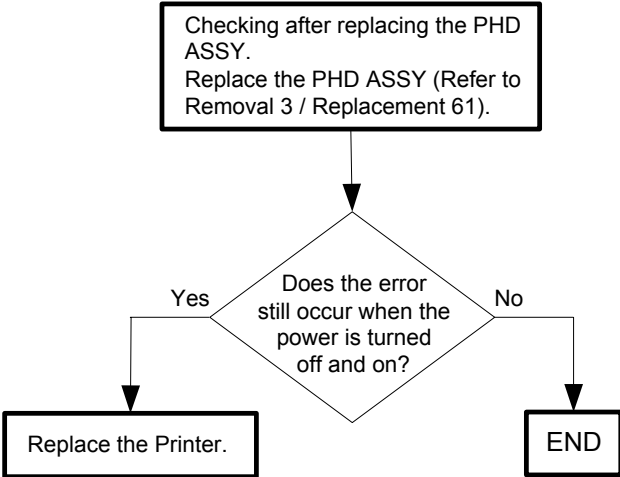
Solution: Completely pull out the eight yellow ribbons from the PHD unit. For how to pull out the ribbons, refer to "28 Maintaining Your Printer" in User Guide.

NOTE

If the ribbon is found, it takes a long time until the density is recovered. To use the printer immediately, change the PHD ASSY to another one.

NOTE

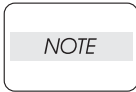
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



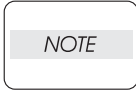
Flows 95 091-935: IOT PHD Life Over

Cause: The PHD Unit has reached the replacement time.

Solution: The PHD Unit has reached the end of its life. Replace the PHD Unit with a new one.



Refer to "Appendix_2.3 Replacing the Print Head Device (PHD) Unit" for the timing when the message "Life Over" is indicated.



This error code is not related to any hardware fault.

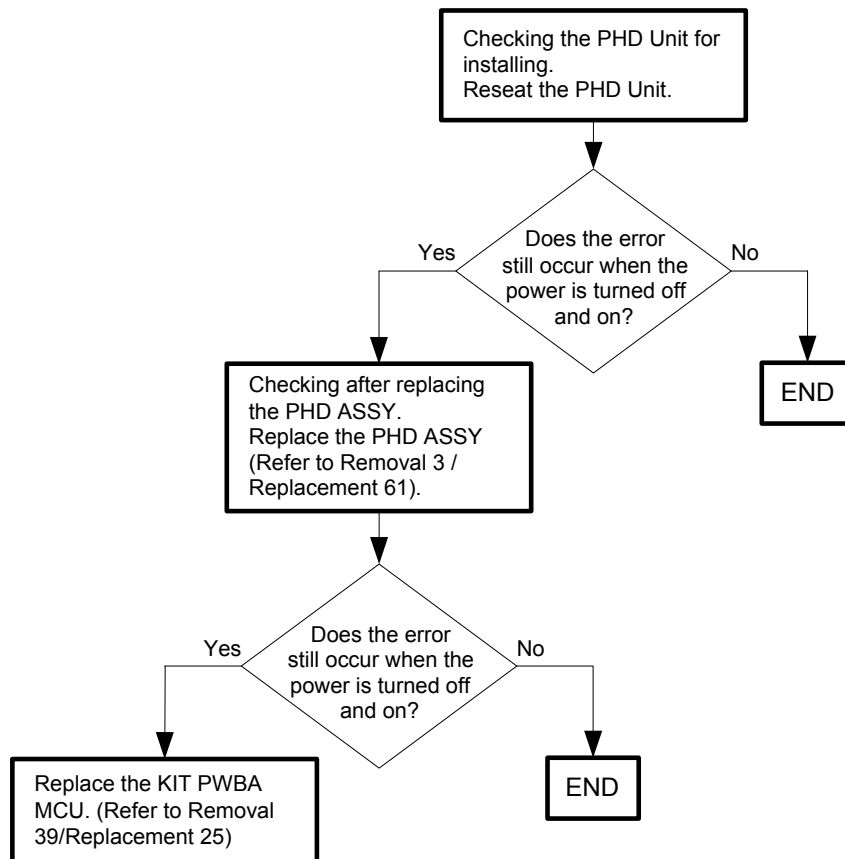
Flows 96 091-972: IOT PHD Detached

Cause: The PHD Unit is not installed in the printer.

Solution: The PHD Unit is not installed in the printer. Install the PHD Unit in the printer.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 97 092-310 / 092-910: IOT CTD (ADC) Sensor Dustiness / IOT CTD (ADC) Sensor Dustiness Warning

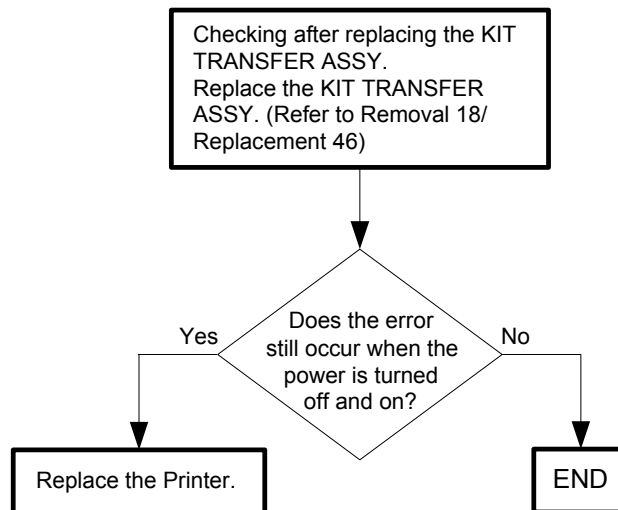
Cause: 092-310: The CTD (ADC) Sensor has reached the Cleaning time.

092-910: The CTD (ADC) Sensor is approaching the Cleaning time.

Solution: The CTD (ADC) sensor has reached the cleaning time. Clean up the CTD (ADC) sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 98 093-423 / 093-424 / 093-425 / 093-426: IOT Toner Cartridge Near Life

Cause: 093-423:The Toner Cartridge (Y) is approaching the replacement time.
093-424:The Toner Cartridge (M) is approaching the replacement time.
093-425:The Toner Cartridge (C) is approaching the replacement time.
093-426:The Toner Cartridge (K) is approaching the replacement time.

Solution: The Toner Cartridge (Y,M,C or K) is approaching the replacement time. Prepare a new Toner Cartridge of the relevant one.

NOTE

Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the message "Near Life" is indicated.

NOTE

This error code is not related to any hardware fault.

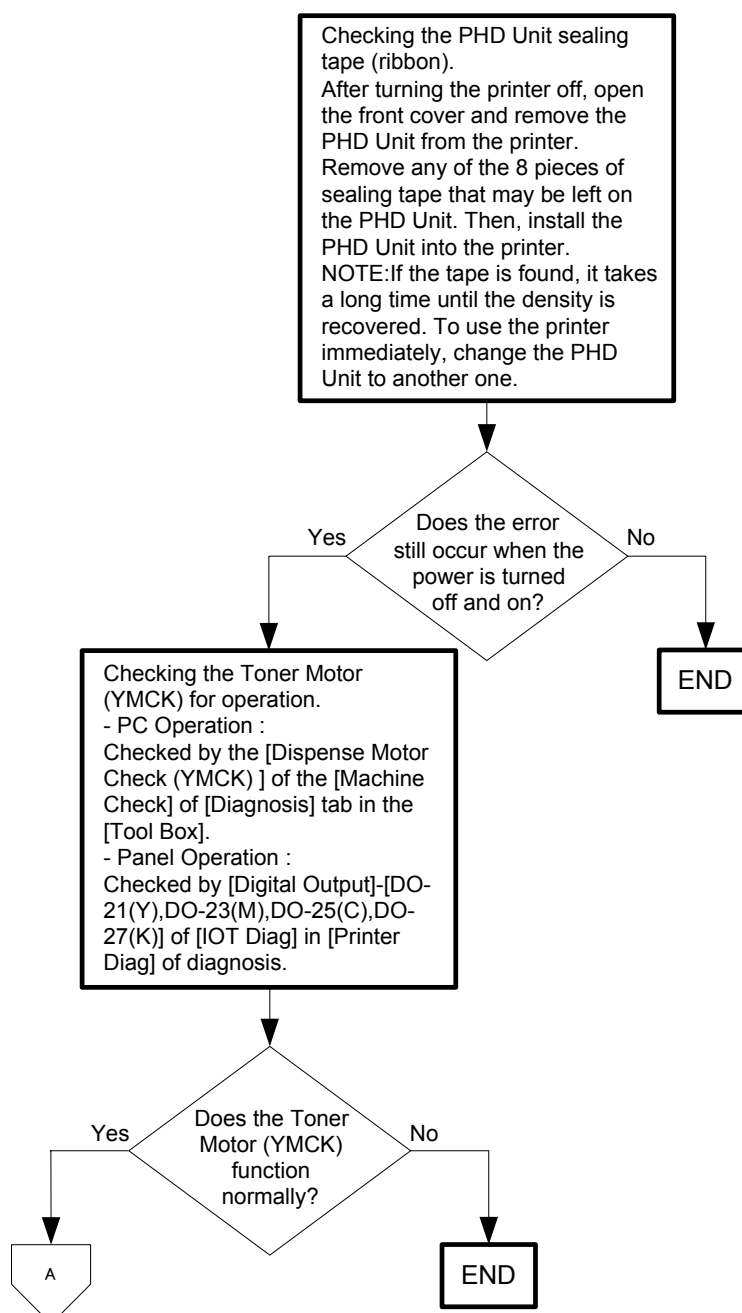
Flows 99 093-919 / 093-920 / 093-921 / 093-922: IOT YMCK Toner Low Density

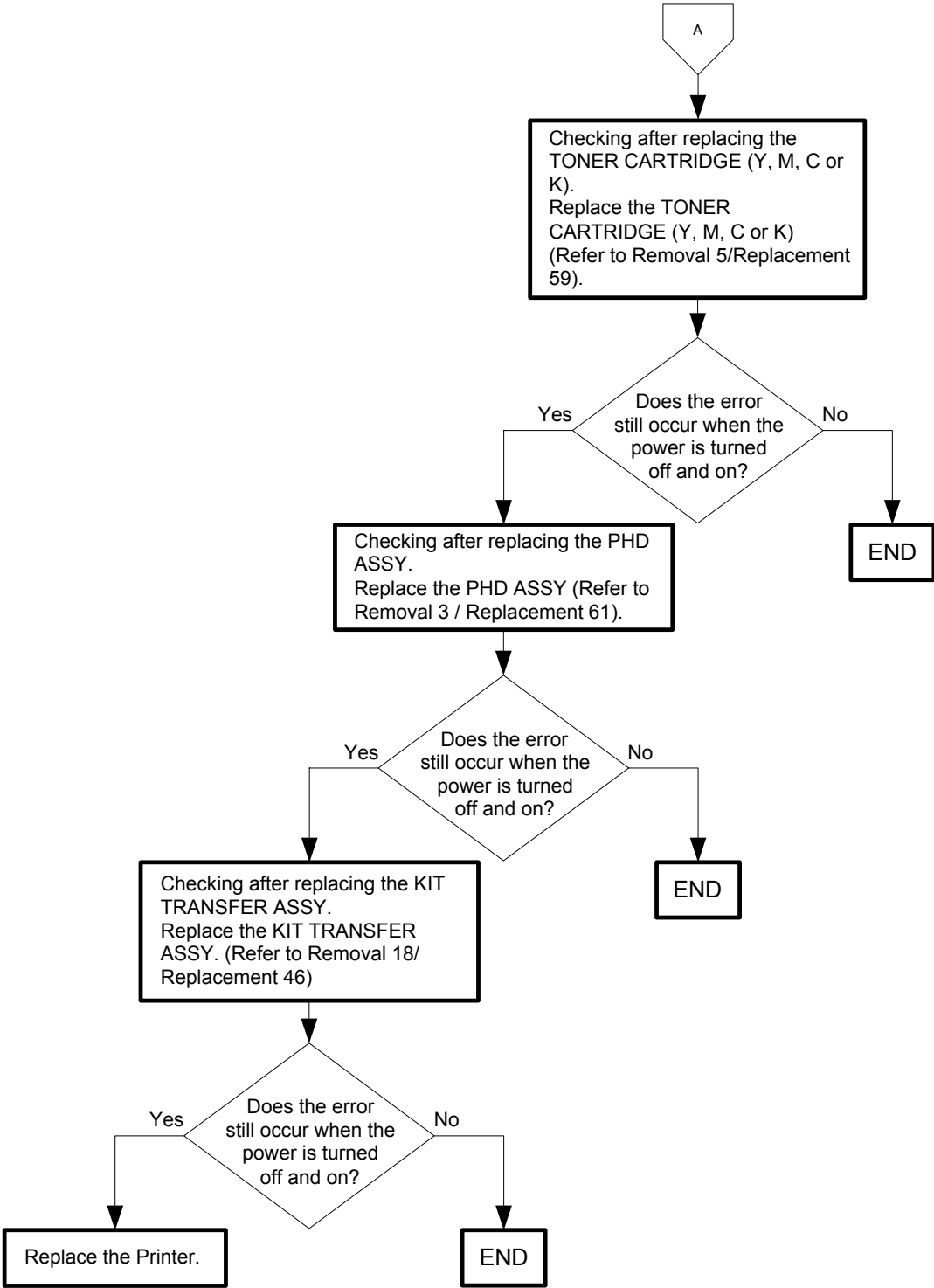
Cause: 093-919: Detects low density of yellow.
 093-920: Detects low density of magenta.
 093-921: Detects low density of cyan.
 093-922: Detects low density of black.

Solution: The toner may be compacted in the Y, M, C, or K cartridge. Remove the toner relevant cartridge and shake it to free any compacted toner. If the problem persists, clean the CTD (ADC) Sensor. For details on the CTD (ADC) Sensor, refer to "Appendix_3.2 Cleaning the CTD Sensor".

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.





Flows 100 093-930 / 093-931 / 093-932 / 093-933: IOT Toner Cartridge Life Over

Cause: 093-930:The Toner Cartridge (Y) has reached the replacement time.
093-931:The Toner Cartridge (M) has reached the replacement time.
093-932:The Toner Cartridge (C) has reached the replacement time.
093-933:The Toner Cartridge (K) has reached the replacement time.

Solution: The Toner Cartridge (Y,M,C or K) has reached the end of its life. Replace the Toner Cartridge (Y,M,C or K) with a new one. Refer to "Appendix_2.2 Replacing the Toner Cartridges" for how to replace the Toner Cartridge.

NOTE

Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the message "Life Over" is indicated.

NOTE

This error code is not related to any hardware fault.

Flows 101 093-934 / 093-935 / 093-936 / 093-937: IOT CRU Waste (YMCK) Full

Cause: 093-934:Waste Toner (Y) Counter value has reached replacement time.
093-935:Waste Toner (M) Counter value has reached replacement time.
093-936:Waste Toner (C) Counter value has reached replacement time.
093-937:Waste Toner (K) Counter value has reached replacement time.

Solution: The Waste Toner Box in Toner Cartridge (Y, M, C or K) is full. Replace the Toner Cartridge (Y, M, C or K) with a new one. Refer to "Appendix_2.2 Replacing the Toner Cartridges" for how to replace the Toner Cartridge.

NOTE

Refer to "Appendix_2.1 Consumables and Periodic Replacement Parts Life" for the timing when the message "Life Over" is indicated.

NOTE

This error code is not related to any hardware fault.

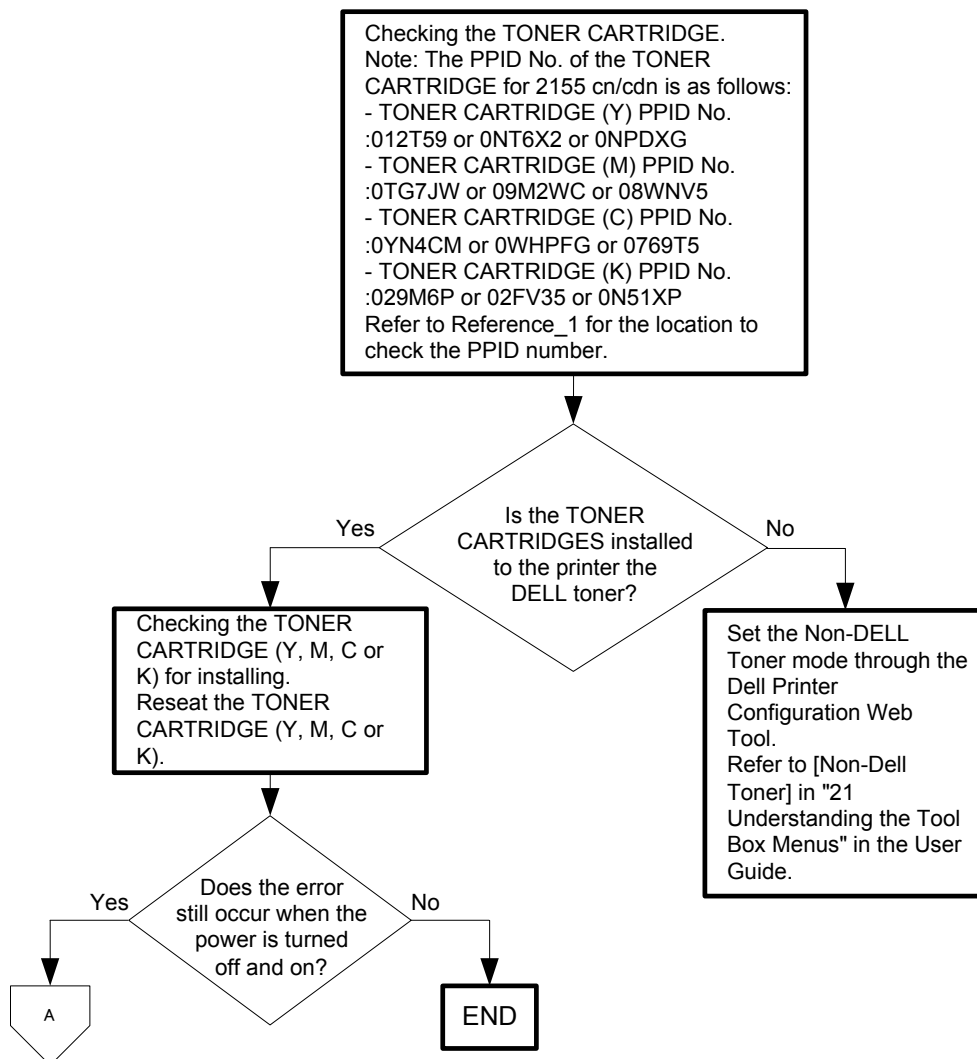
Flows 102 093-960 / 093-961 / 093-962 / 093-963: IOT (YMCK) CRUM ID Error

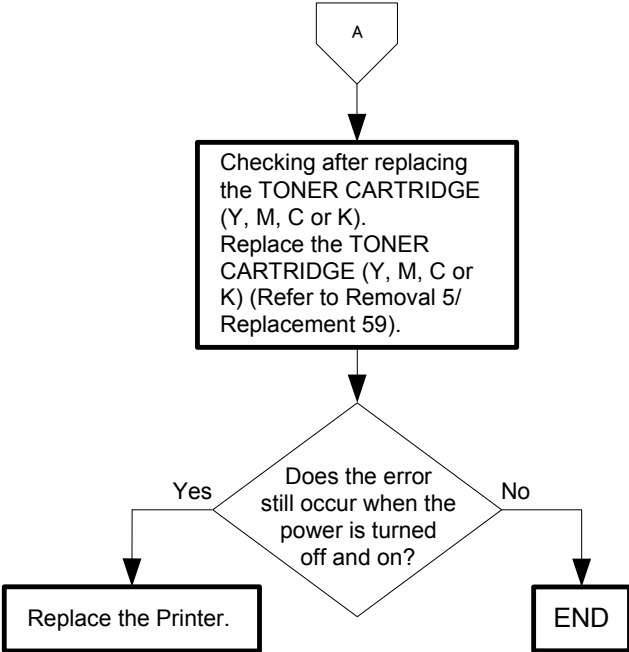
Cause: 093-960:An unsupported Toner Cartridge (Y) is detected.
 093-961:An unsupported Toner Cartridge (M) is detected.
 093-962:An unsupported Toner Cartridge (C) is detected.
 093-963:An unsupported Toner Cartridge (K) is detected.

Solution: The Dell-genuine Toner Cartridge (Y, M, C or K) for the 2155cn/cdn is not installed. Install the Dell-genuine Toner Cartridge (Y, M, C or K).

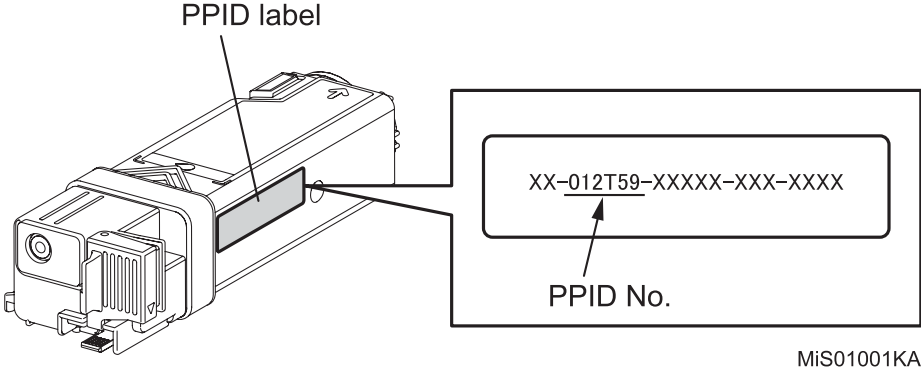
NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.





- Reference_1: Position of PPID label.



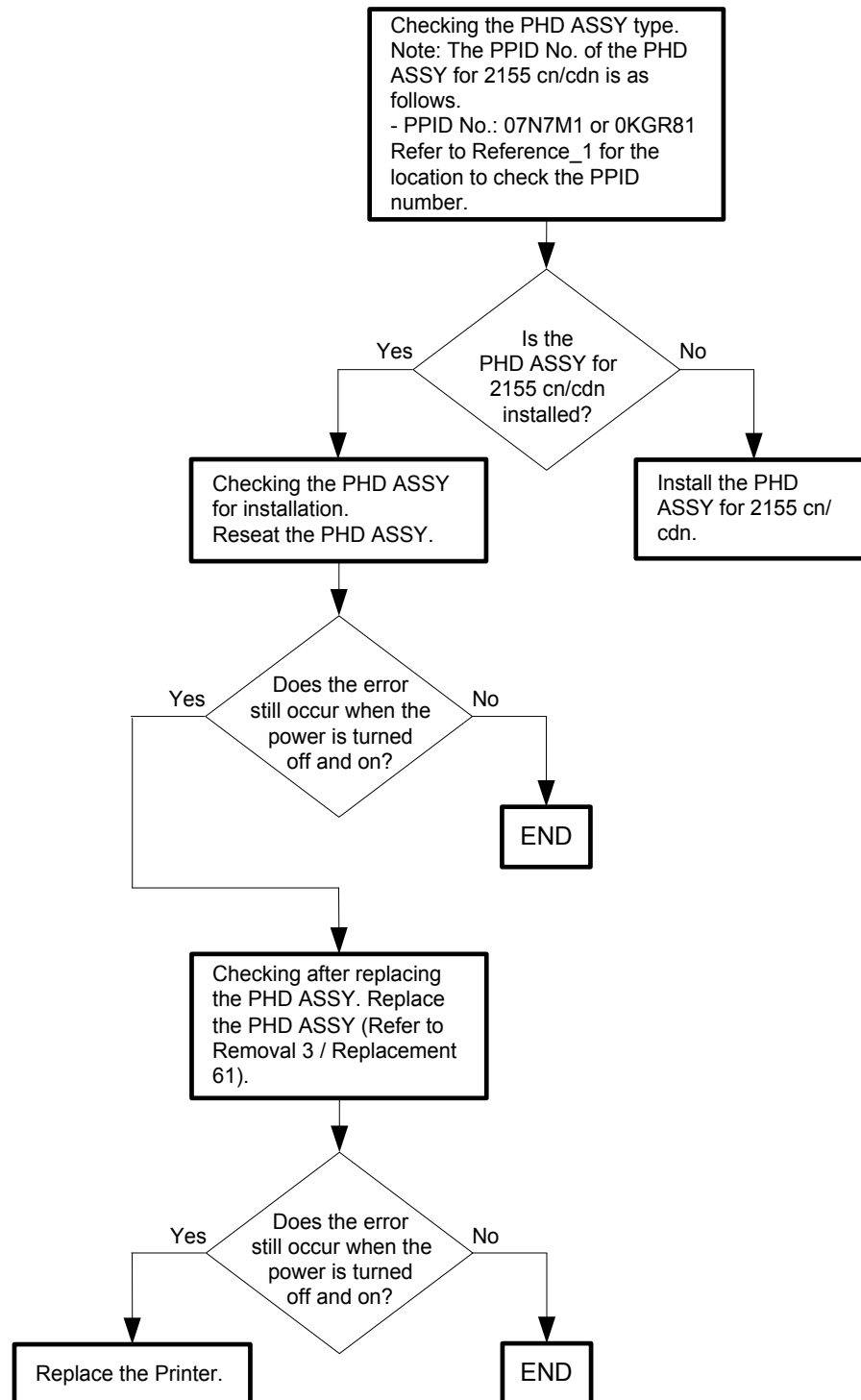
Flows 103 093-965: IOT PHD CRUM ID Error

Cause: An unsupported PHD Unit is detected.

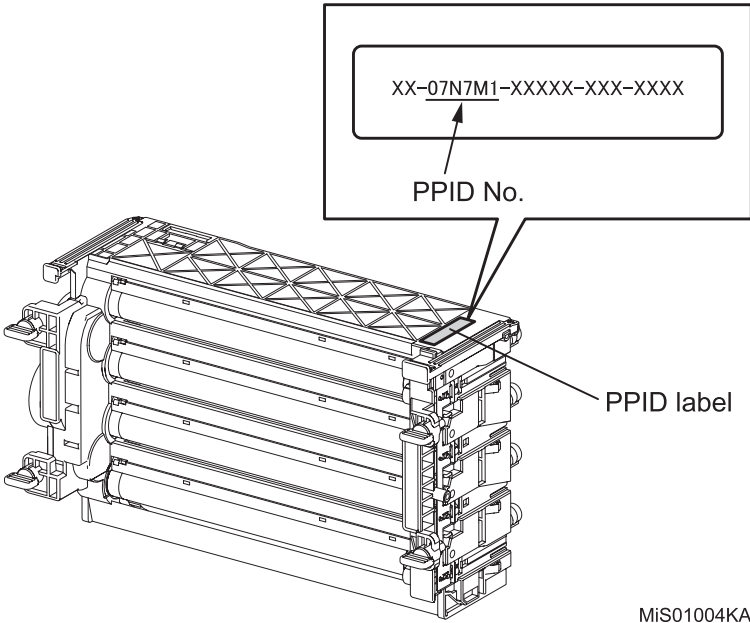
Solution: The Dell-genuine PHD Unit for the 2155cn/cdn is not installed. Install the Dell-genuine PHD Unit.

NOTE

If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



- Reference_1: Position of PPID label.



MiS01004KA

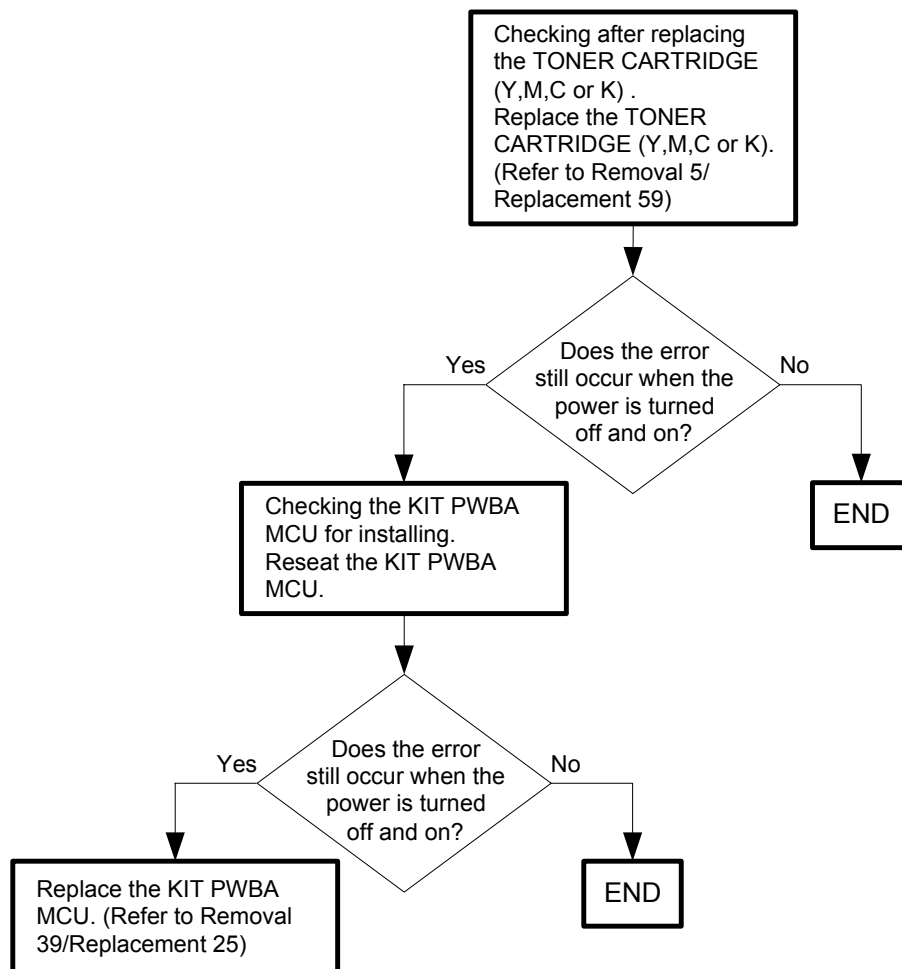
Flows 104 093-970 / 093-971 / 093-972 / 093-973: IOT Toner Cartridge Detached

Cause: 093-970:The Toner Cartridge (Y) is not installed in the printer.
 093-971:The Toner Cartridge (M) is not installed in the printer.
 093-972:The Toner Cartridge (C) is not installed in the printer.
 093-973:The Toner Cartridge (K) is not installed in the printer.

Solution: Install the Toner Cartridge (Y,M,C or K) properly.

NOTE

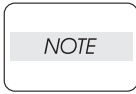
If the error persists after the action above is taken, ensure that the error replicates after the printer is powered off and then on, and then go to the following steps to continue further fault isolation.



Flows 105 094-422: IOT Belt Unit Near Life

Cause: The Belt Unit has reached the replacement time.

Solution: The Belt Unit is approaching the replacement time. Prepare a new Belt Unit.

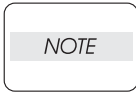


This error code is not related to any hardware fault.

Flows 106 094-911: IOT Belt Unit Life Over

Cause: The Belt Unit has reached the replacement time.

Solution: The Belt Unit has reached the end of its life. Replace the Belt Unit with a new one.

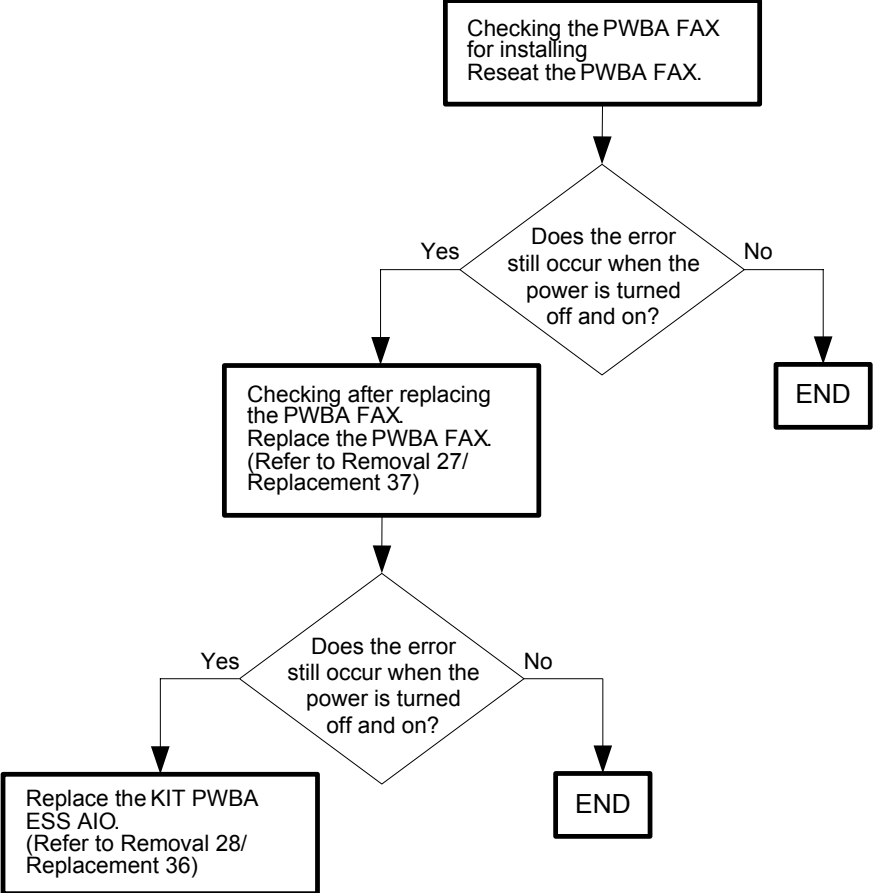


This error code is not related to any hardware fault.

Flows 107 134-211: Fax Card Modem Error

Cause: Fax Card parts error (MODEM error).

Solution: Turn the power off and on to check that the error recurs. Then, proceed to the troubleshooting following the flowchart given below.



Flows 108 193-700: Custom Toner Mode

Cause: The printer is in custom toner mode.

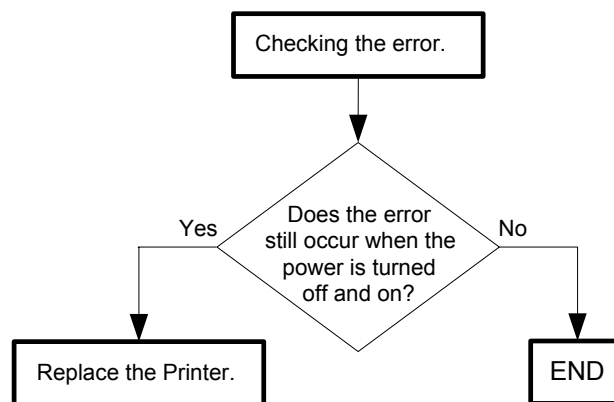
Solution: The printer has been set to use the toner cartridge made by other manufacturer than DELL (Non DELL Toner Mode). When the DELL-specified toner cartridge is used, set the Non DELL Toner Mode in "Off." Refer to [Non-Dell Toner] in "13. Dell Printer Configuration Web Tool" in the User Guide for how to set the Non DELL Toner Mode.

NOTE

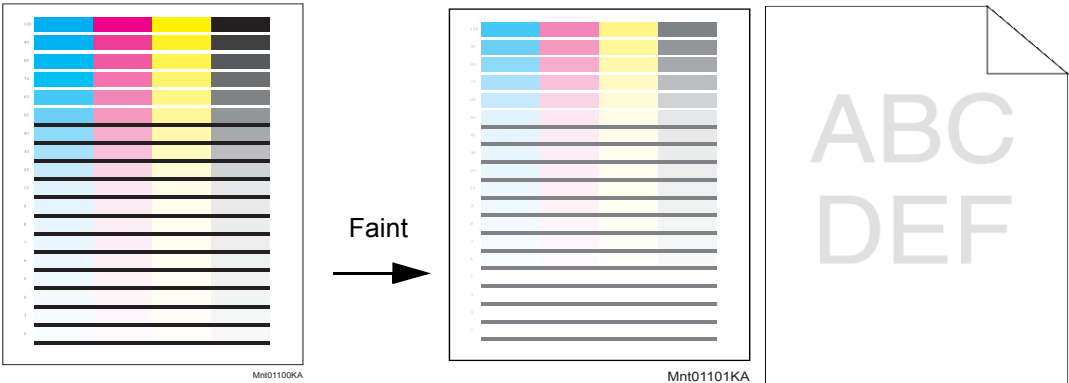
When the toner cartridge made by other manufacturer than DELL is used, the warranty may not apply to your printer even if it is severely damaged.

NOTE

If the error still occurs when the DELL-specified toner cartridge is installed and the Non DELL Toner Mode is set in "Off," turn the power off and on to check that the error recurs. Then, proceed to troubleshooting following the flowchart given below.

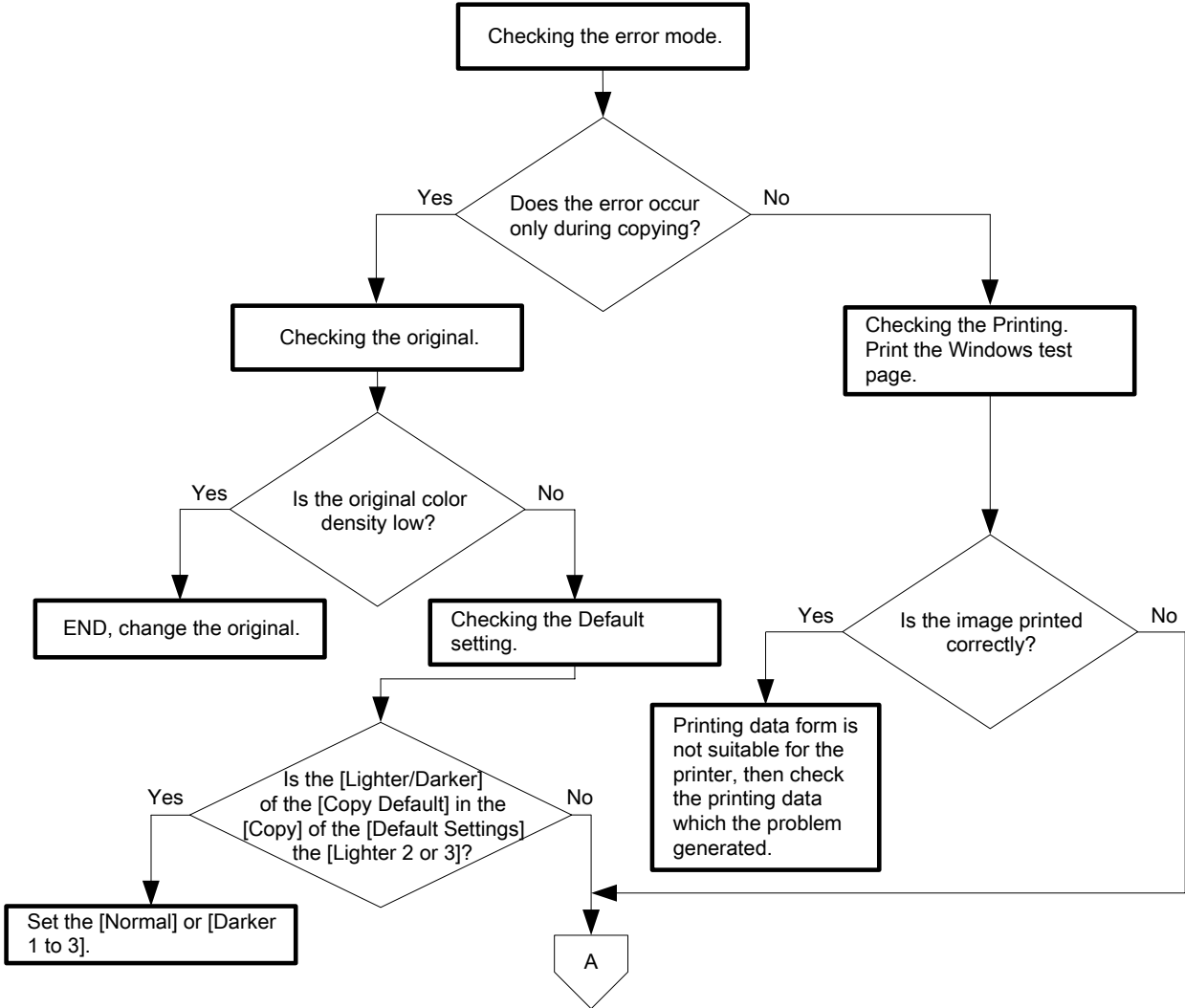


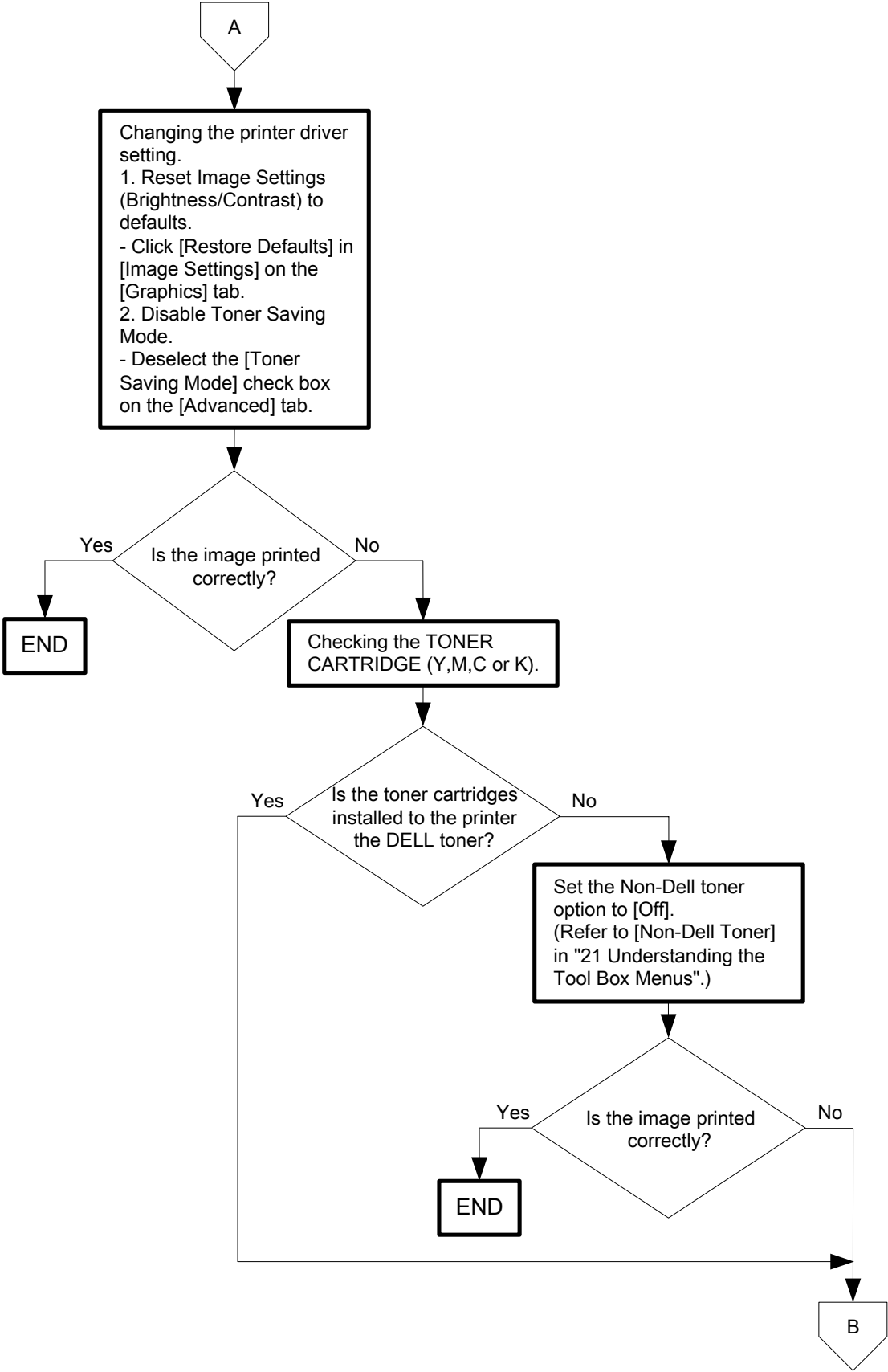
Flows 109 The output is too light

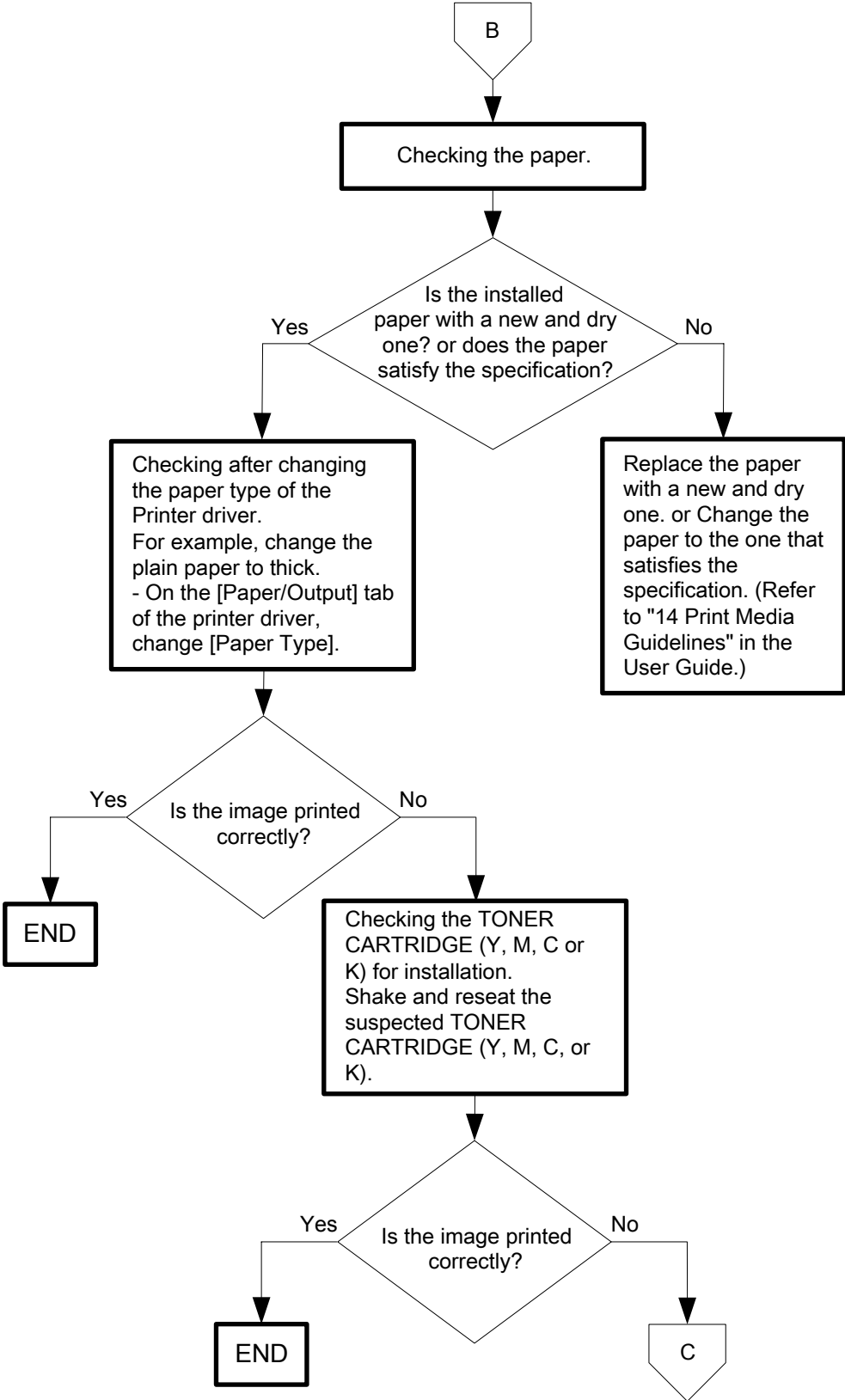


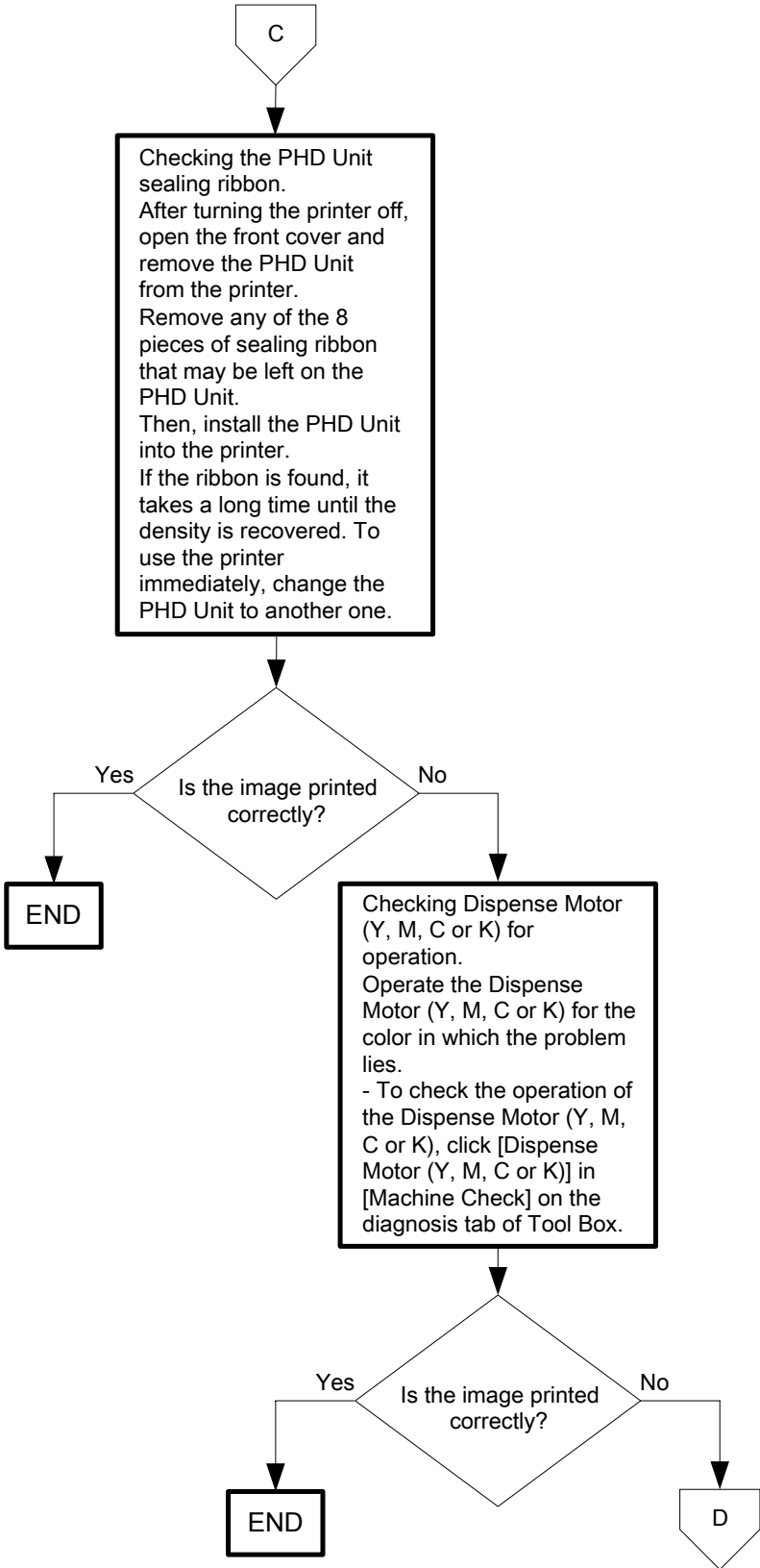
NOTE

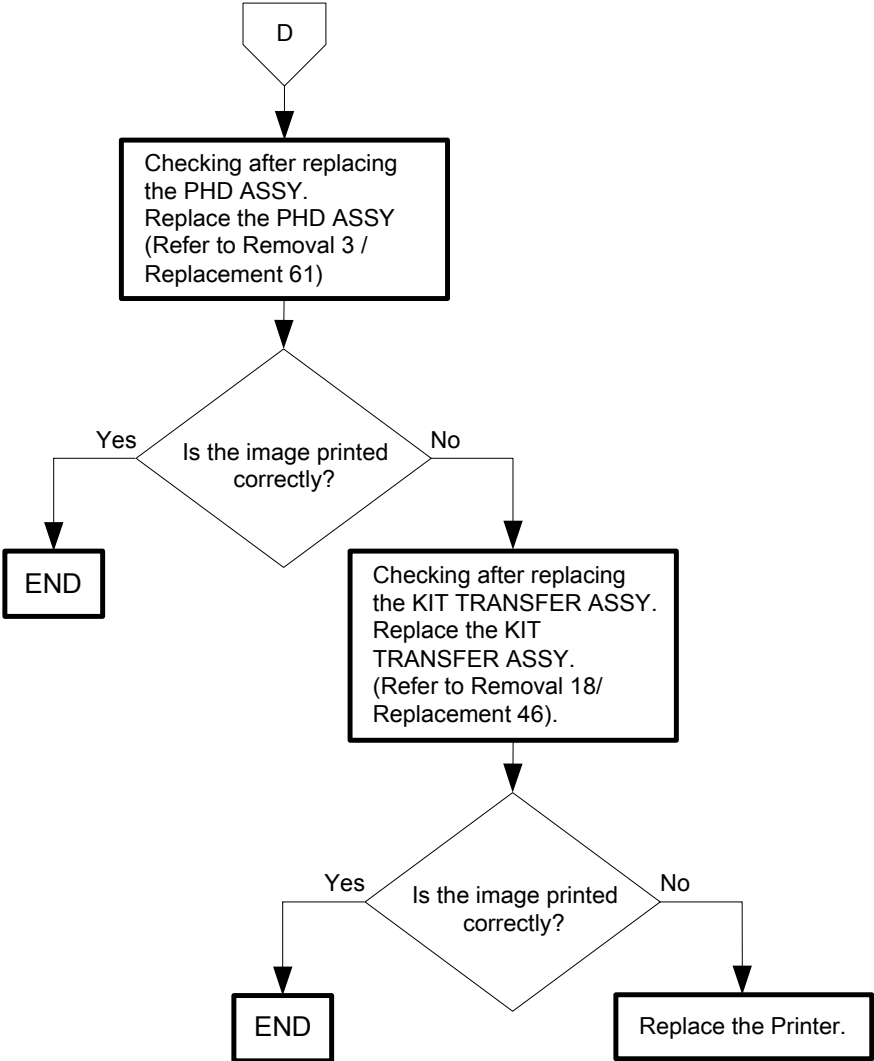
When the PHD Unit has been replaced, be sure to clean up the CTD (ADC) Sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.



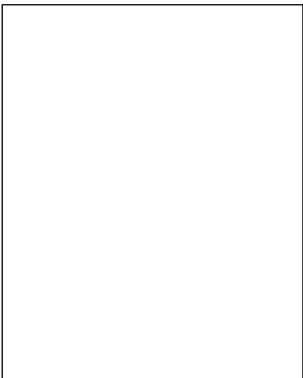






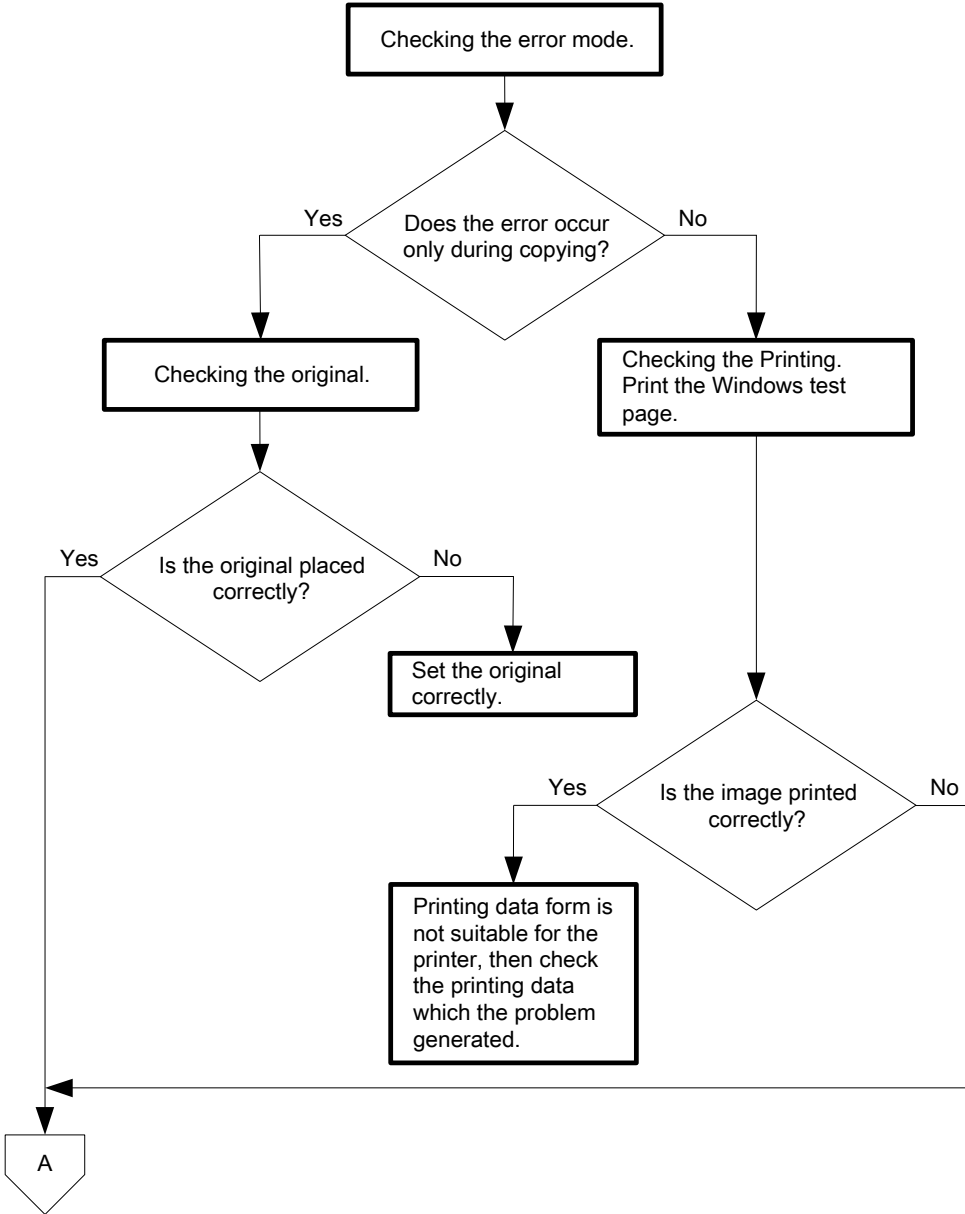


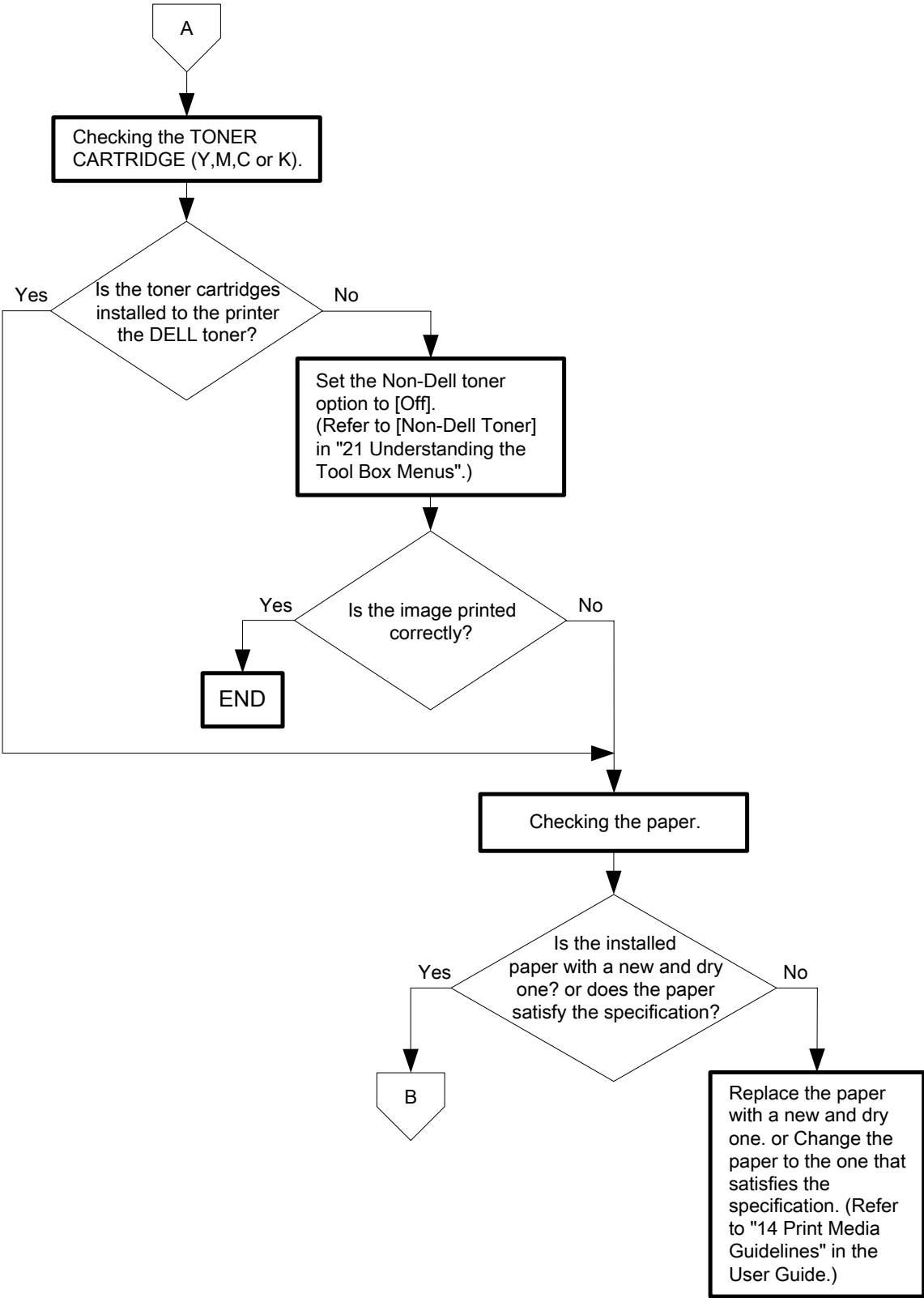
Flows 110 The entire output is blank

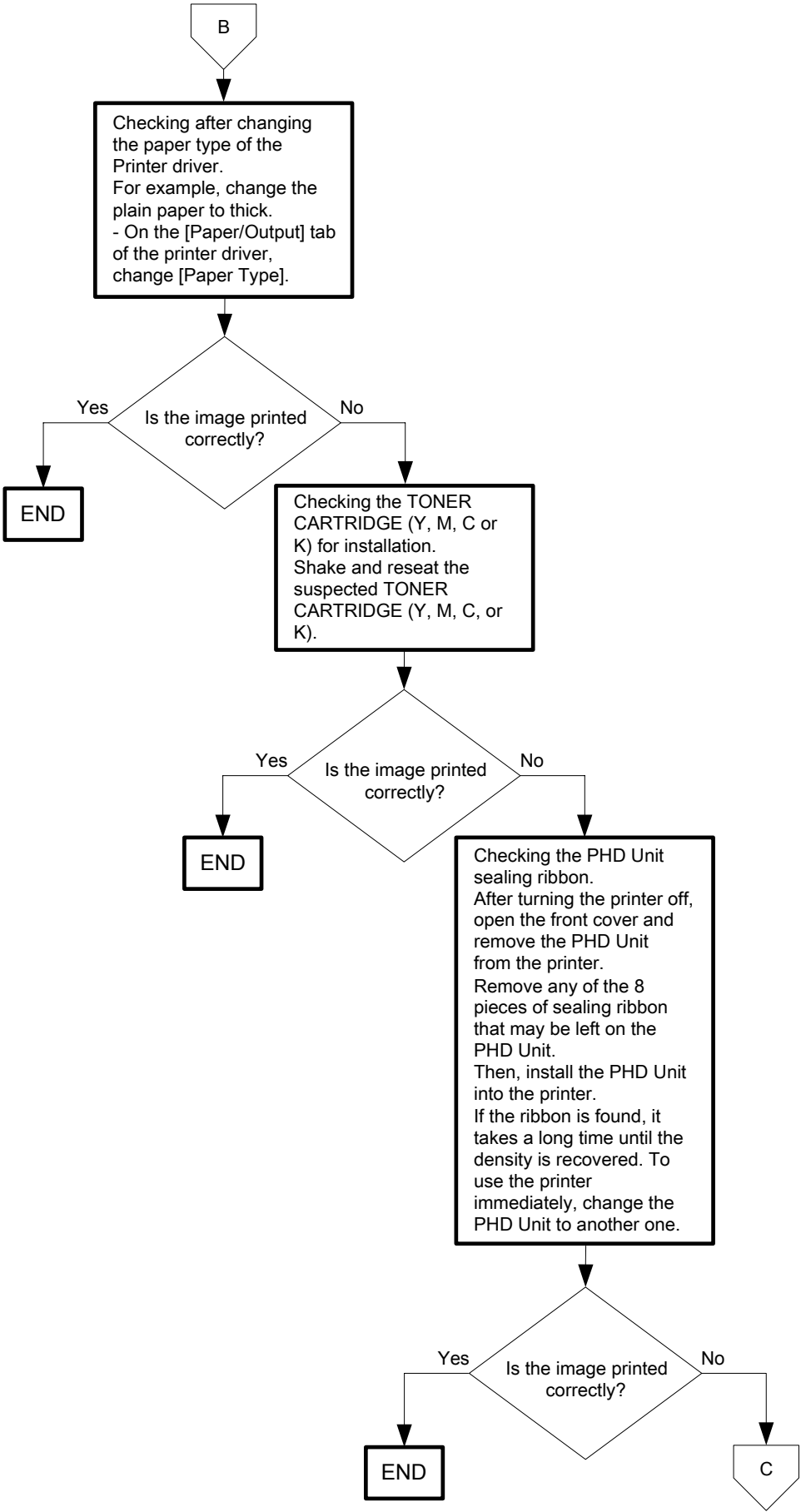


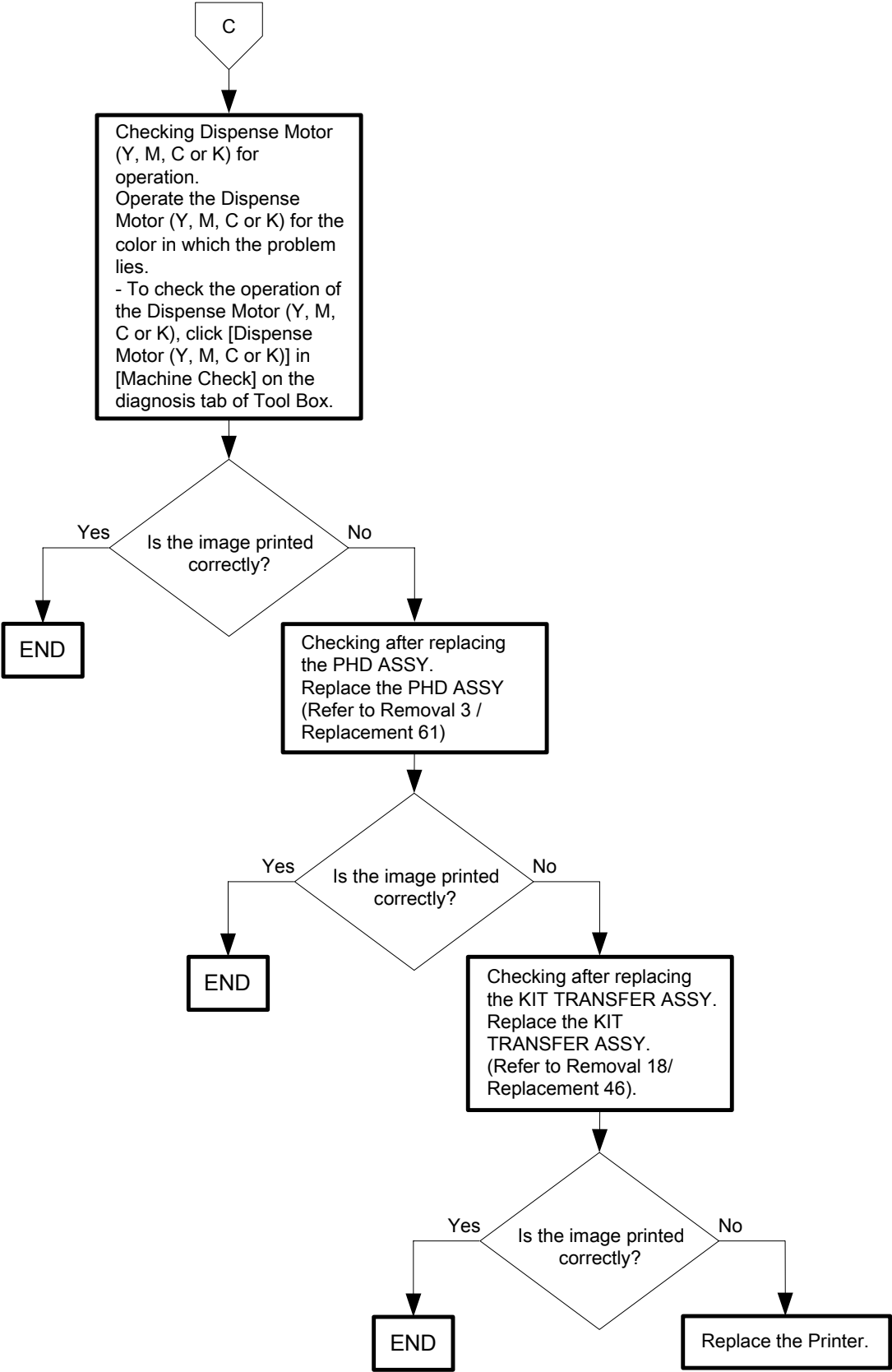
NOTE

When the PHD Unit has been replaced, be sure to clean up the CTD (ADC) Sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.

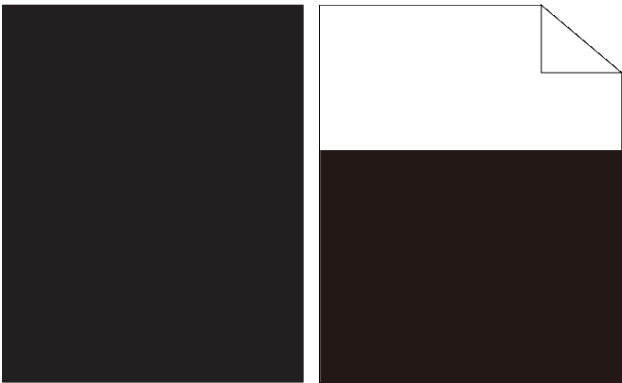






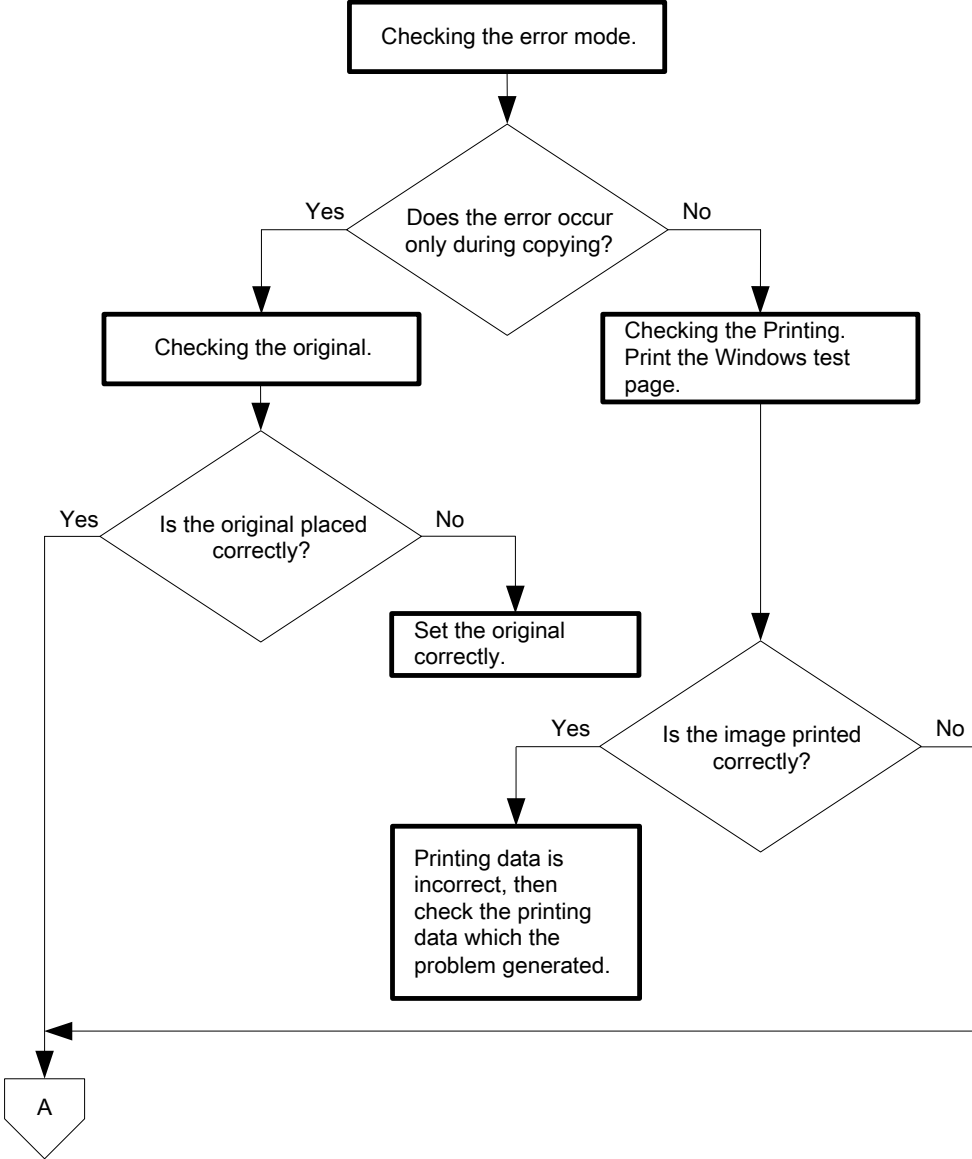


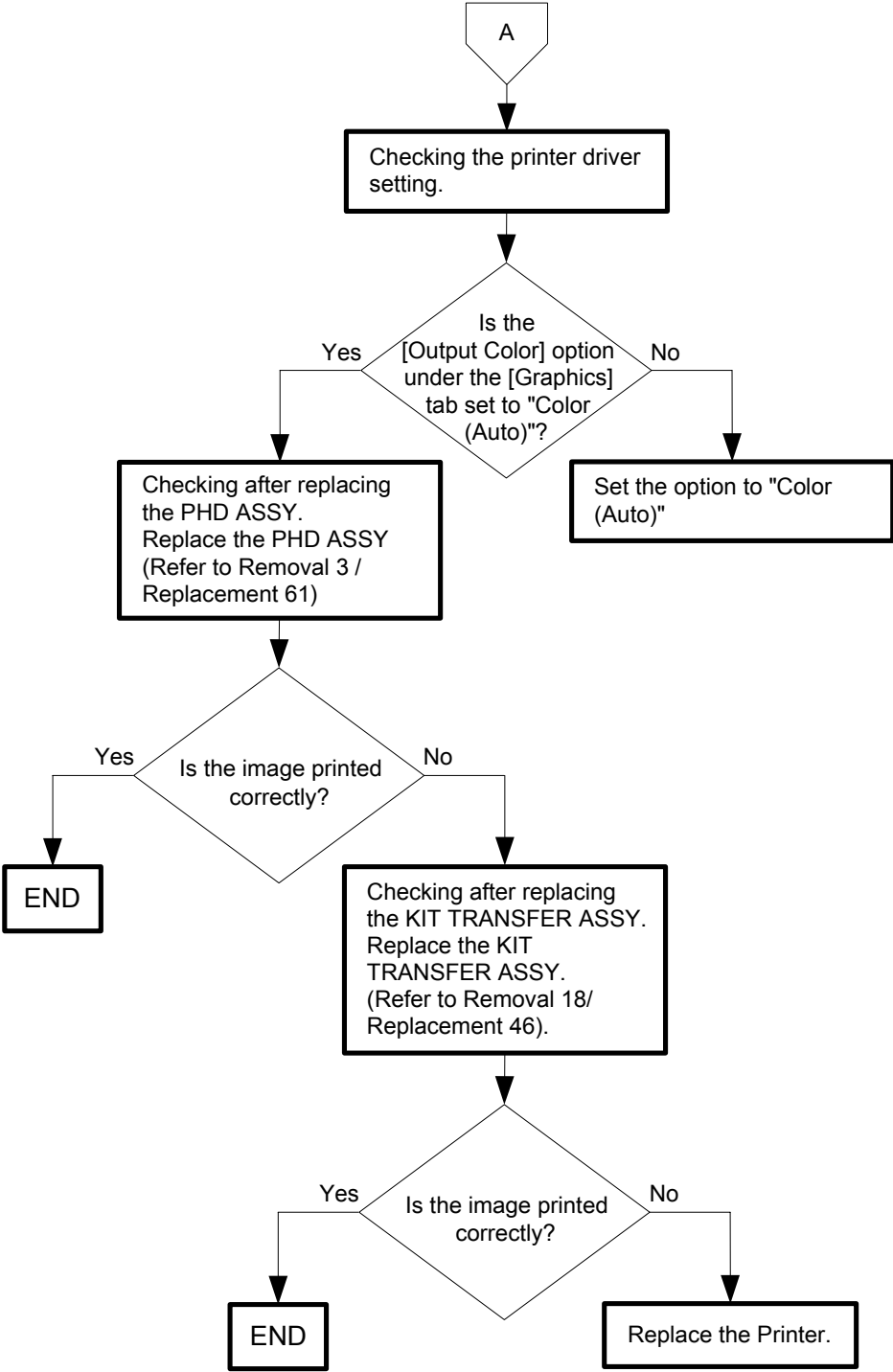
Flows 111 Part or the entire output is black



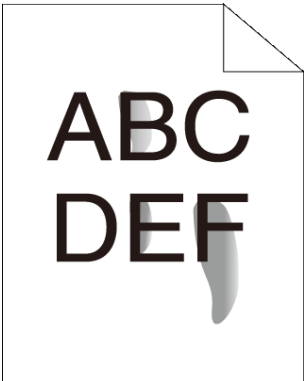
NOTE

When the PHD Unit has been replaced, be sure to clean up the CTD (ADC) Sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.



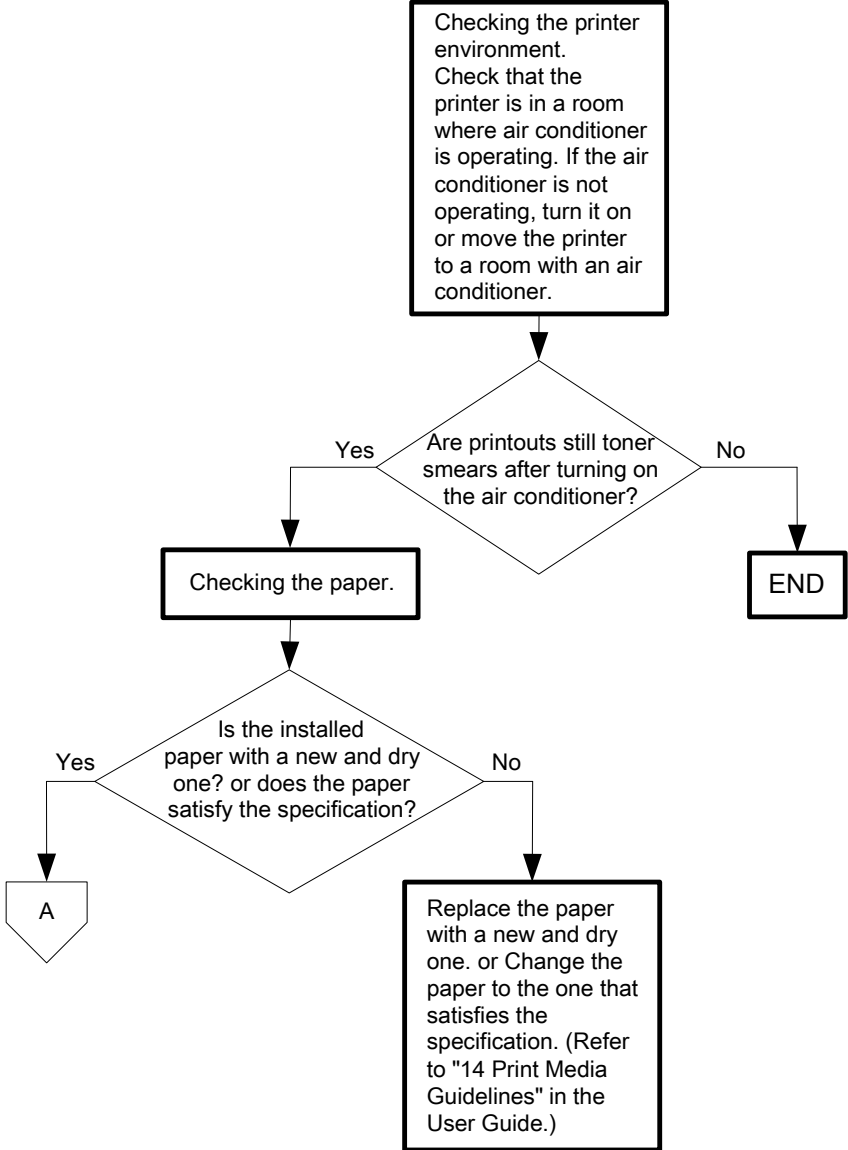


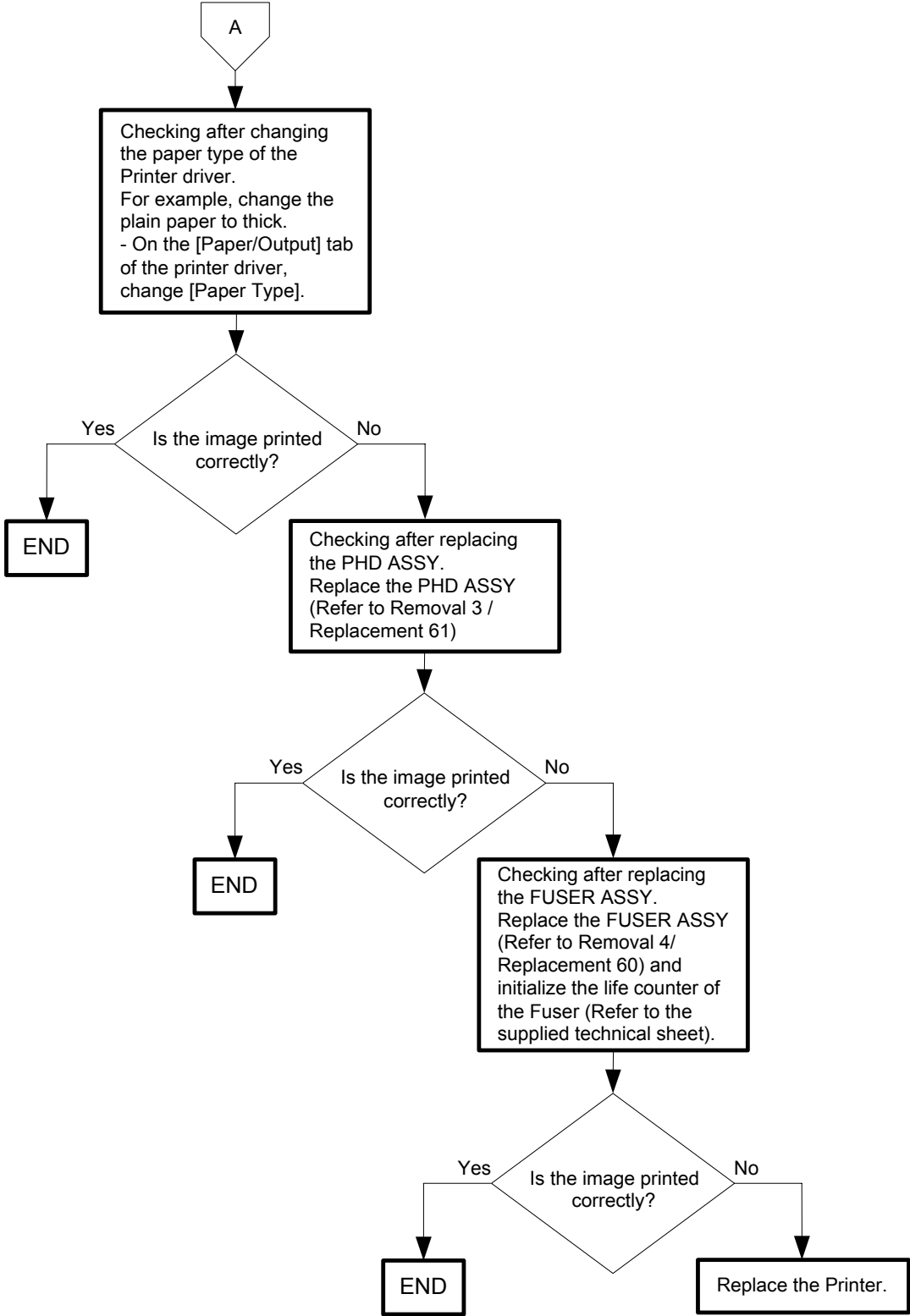
Flows 112 Toner smears



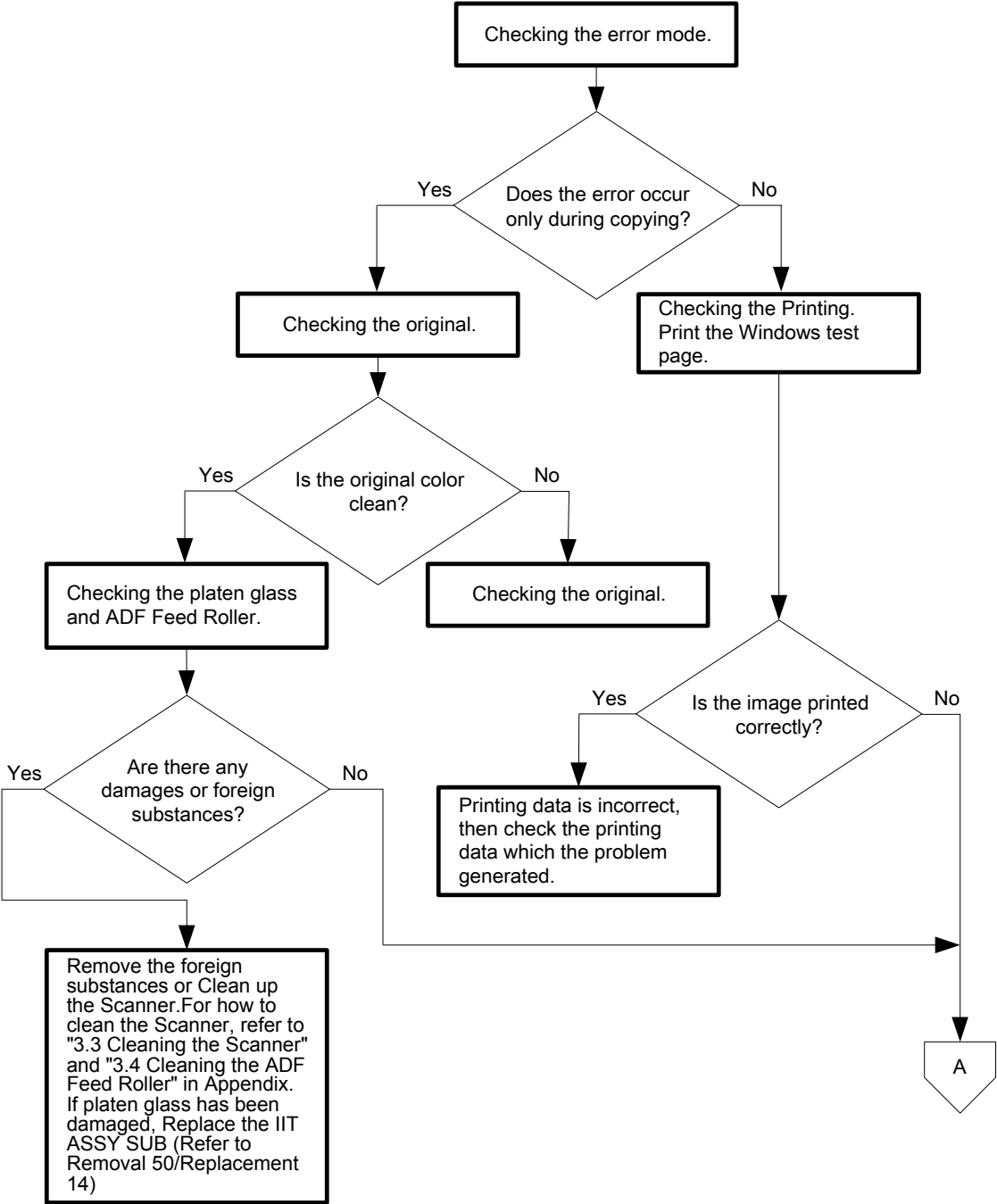
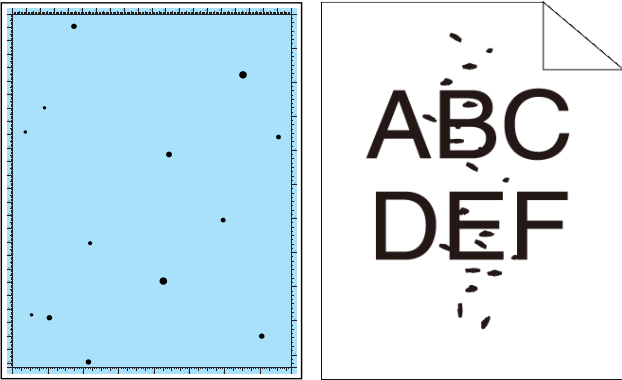
NOTE

When you have replaced the Fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

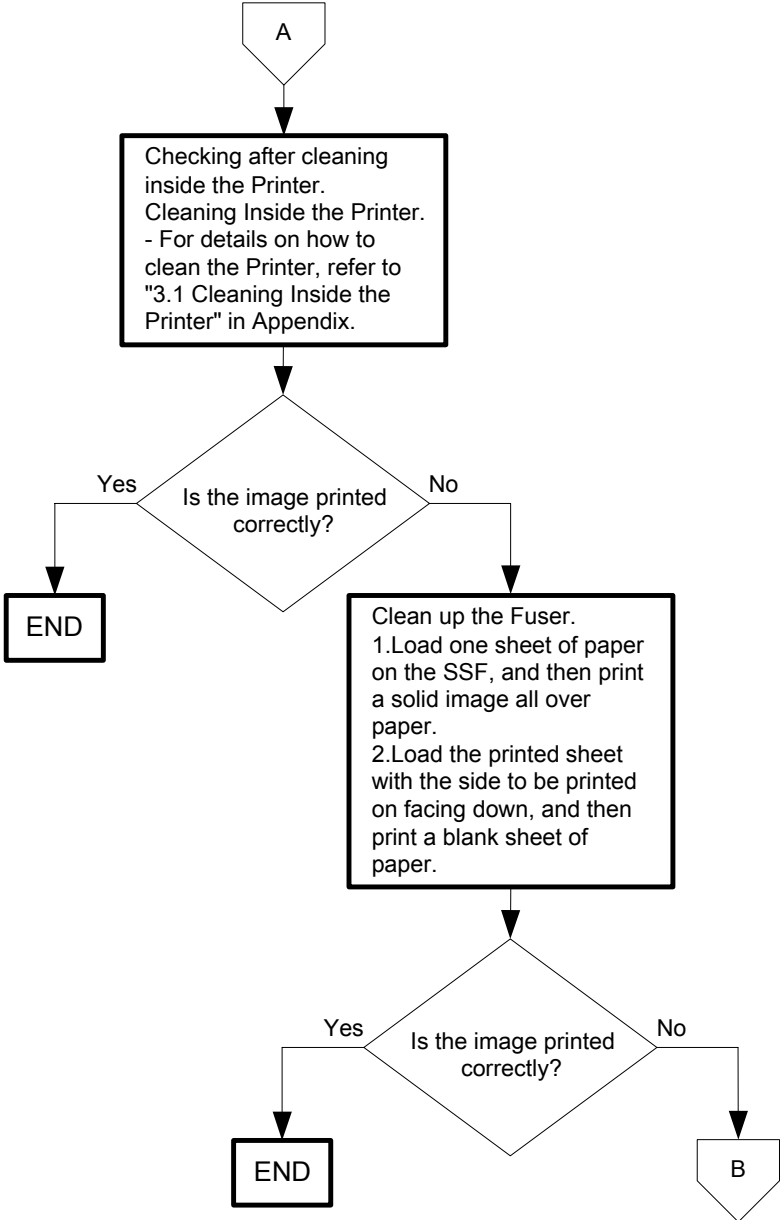


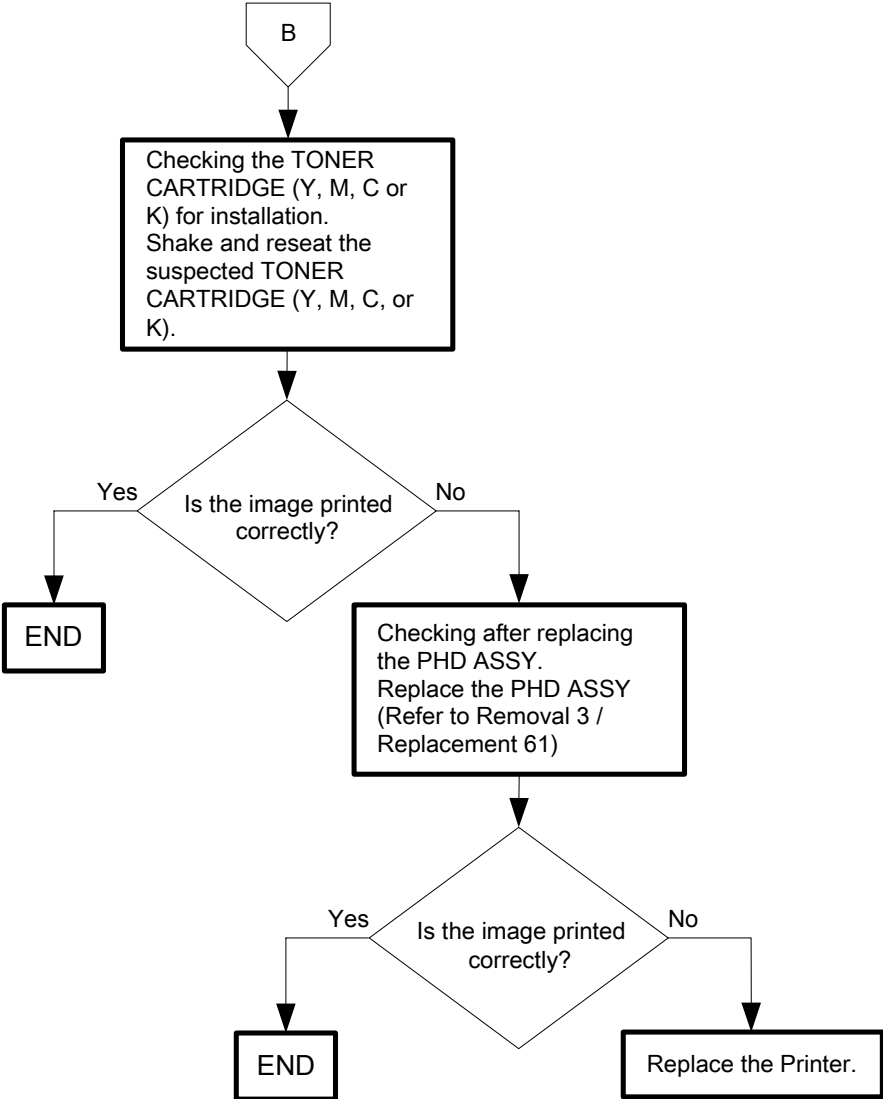


Flows 113 Random spots

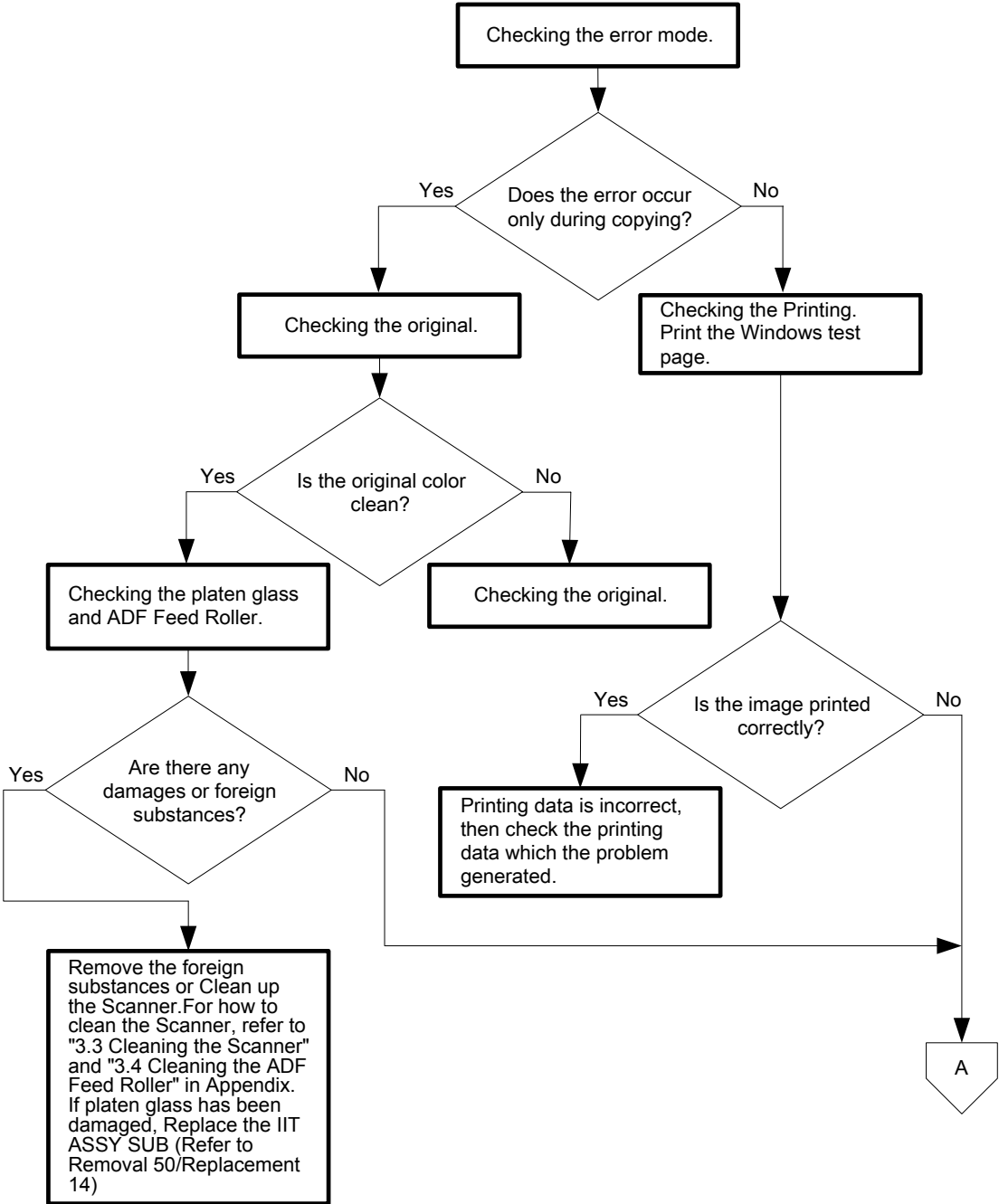
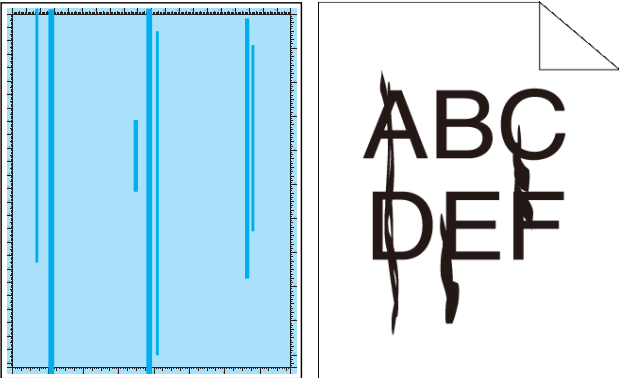


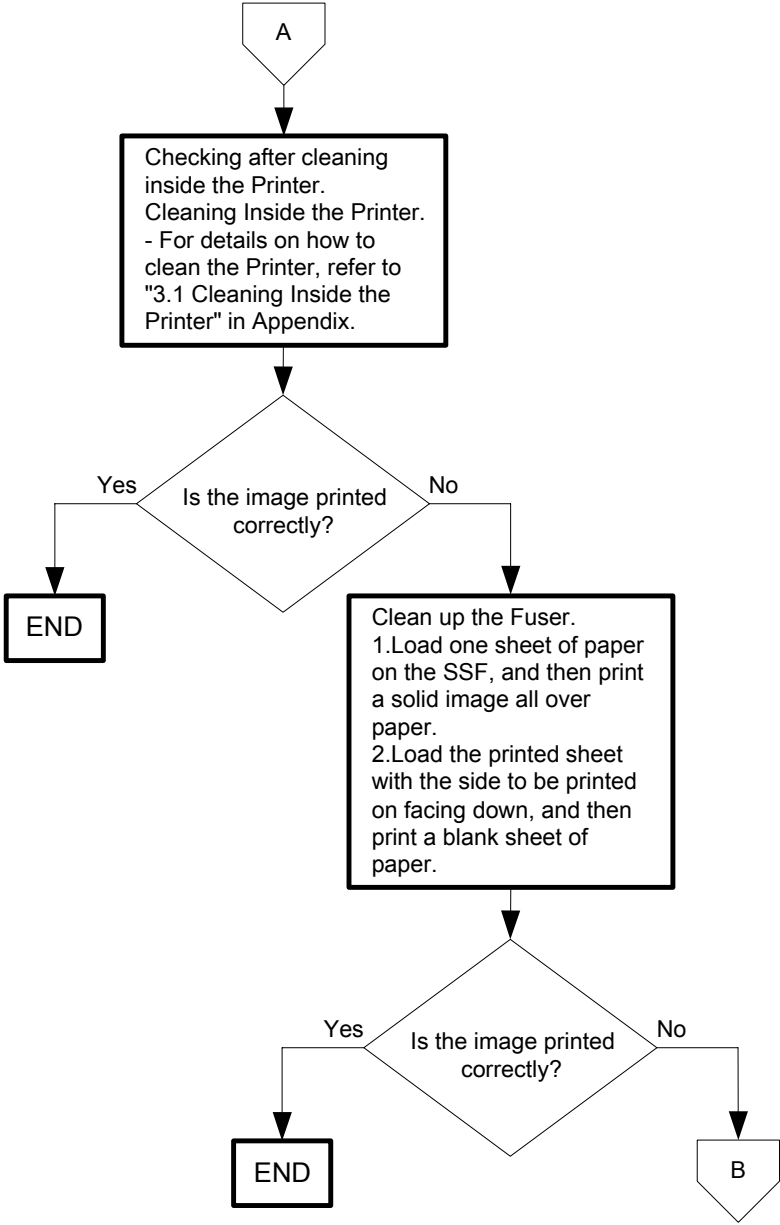
I



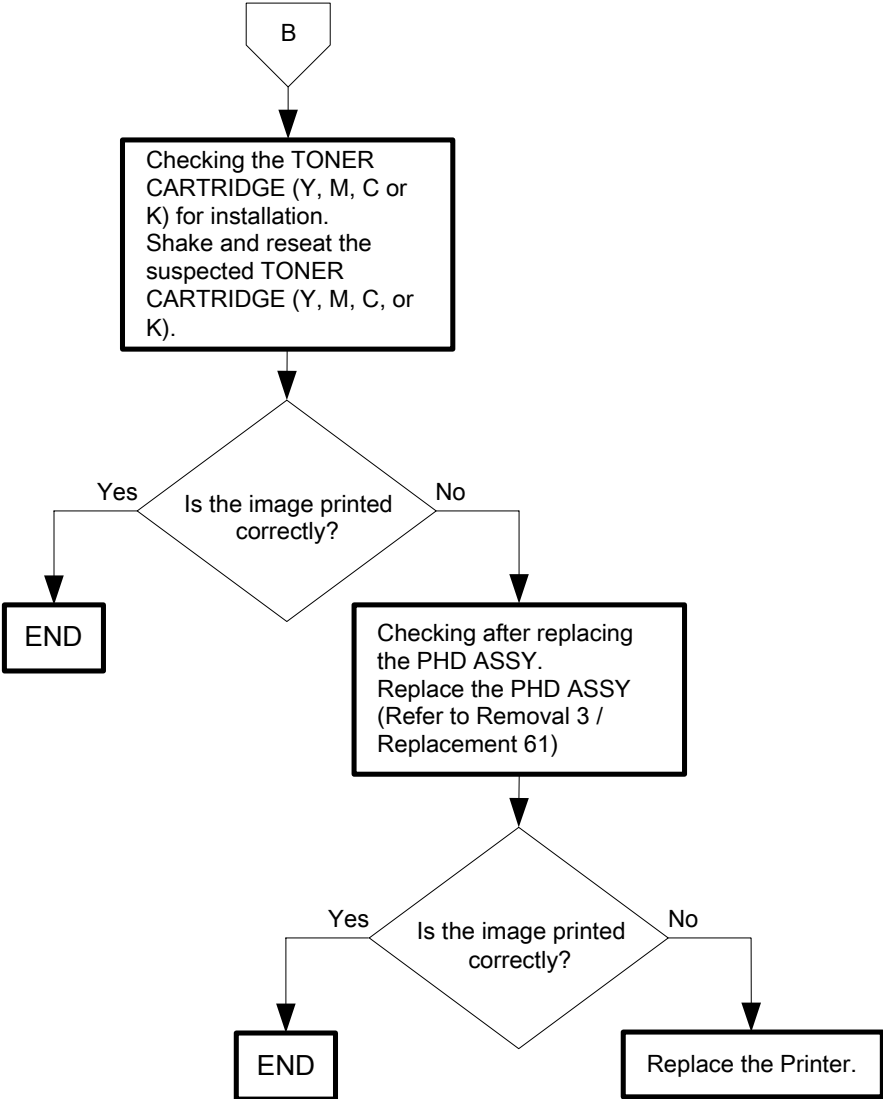


Flows 114 Streaks appear on the output

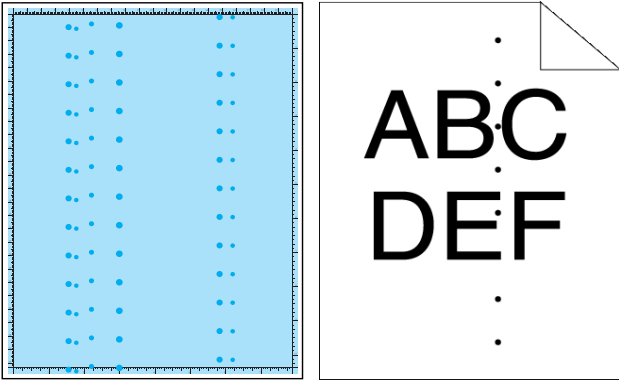




I

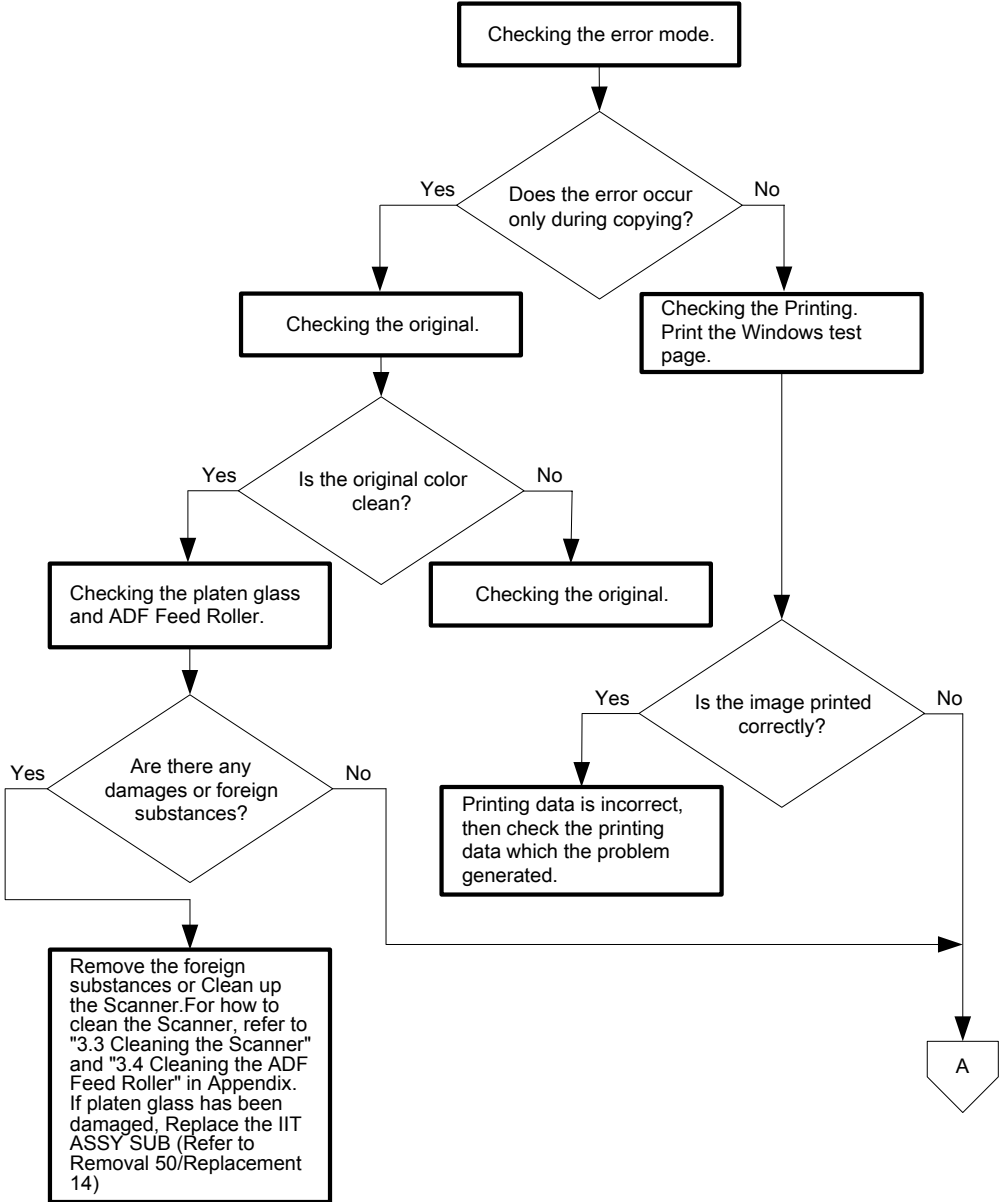


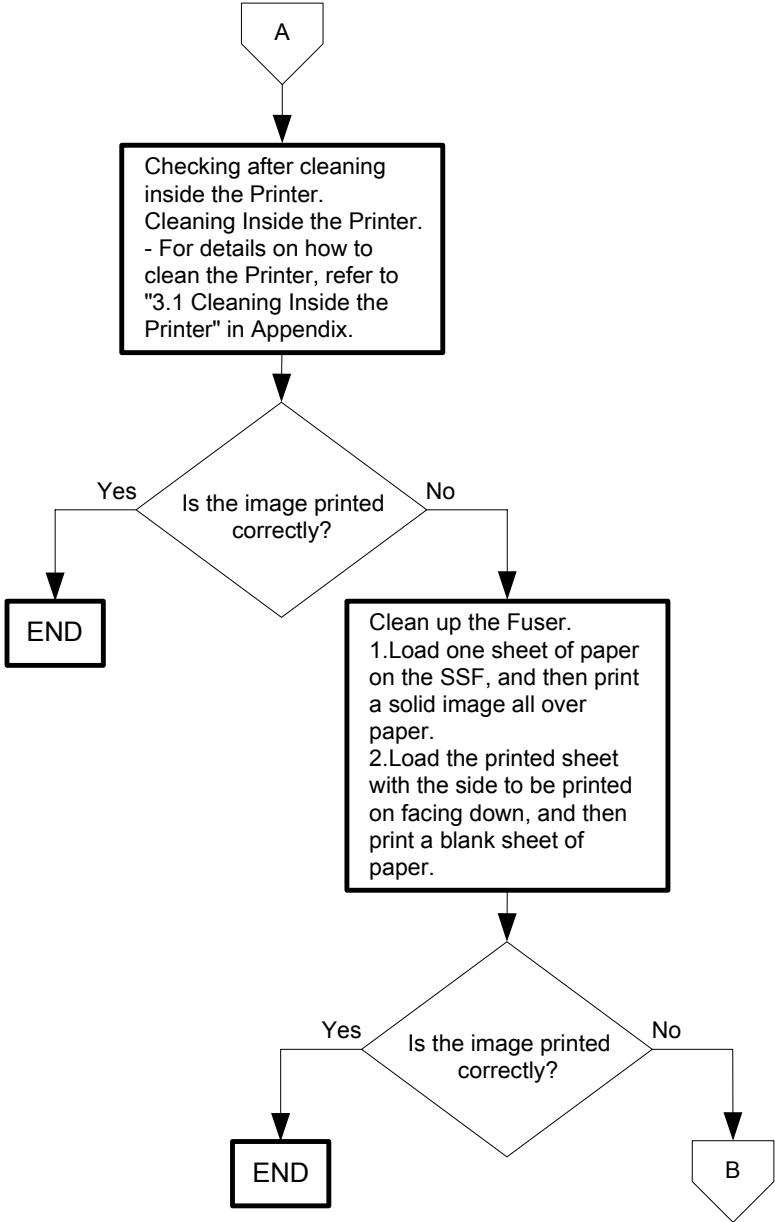
Flows 115 Pitched color dots

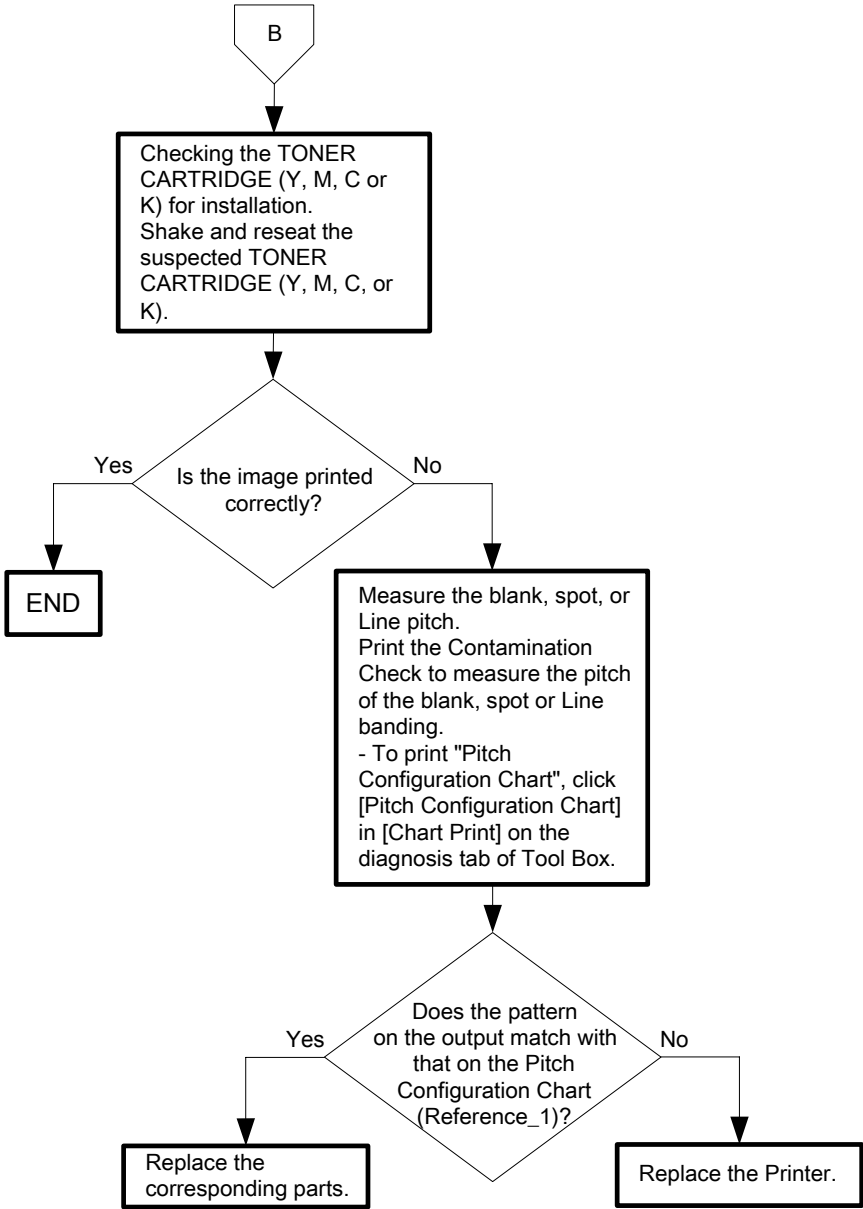


NOTE

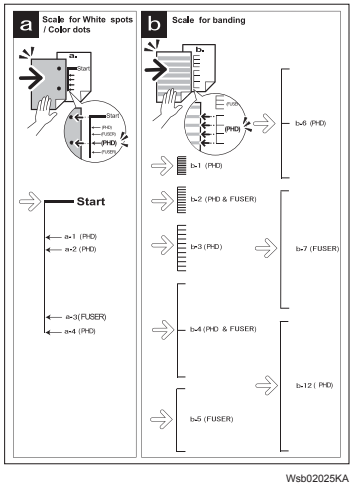
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.





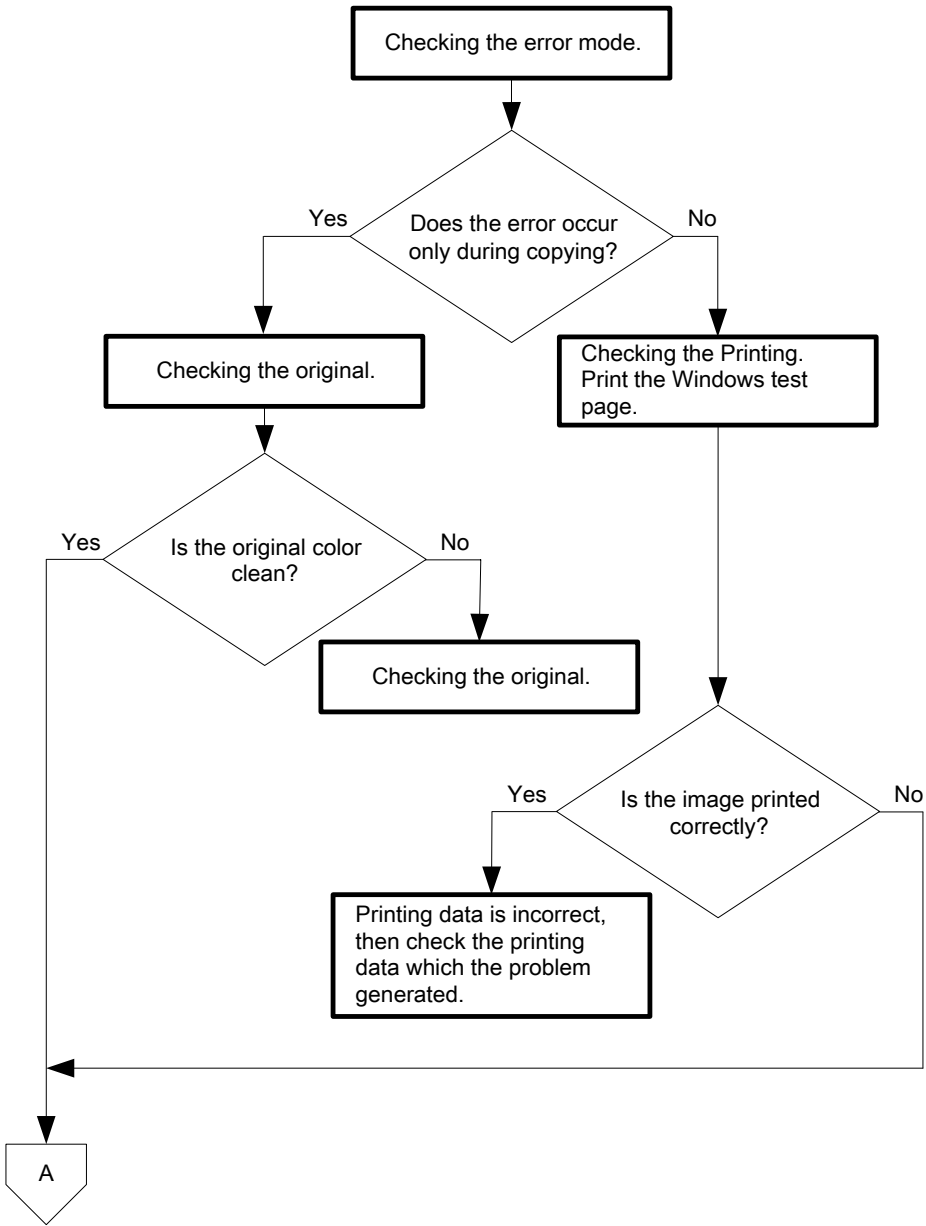
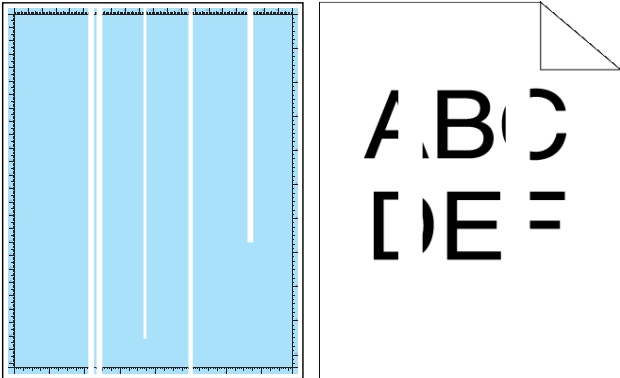


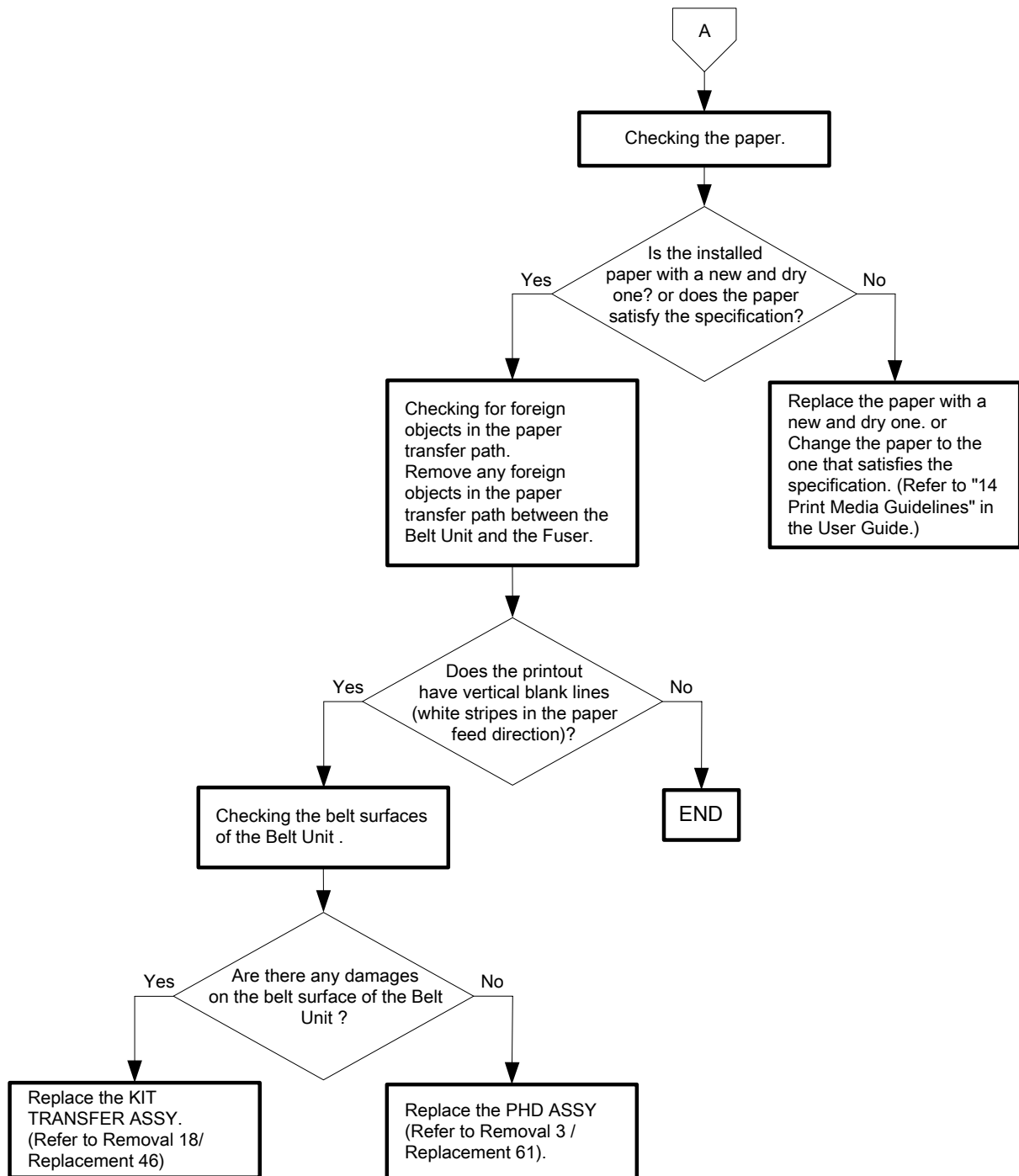
- Reference_1: Pitch Configuration Chart



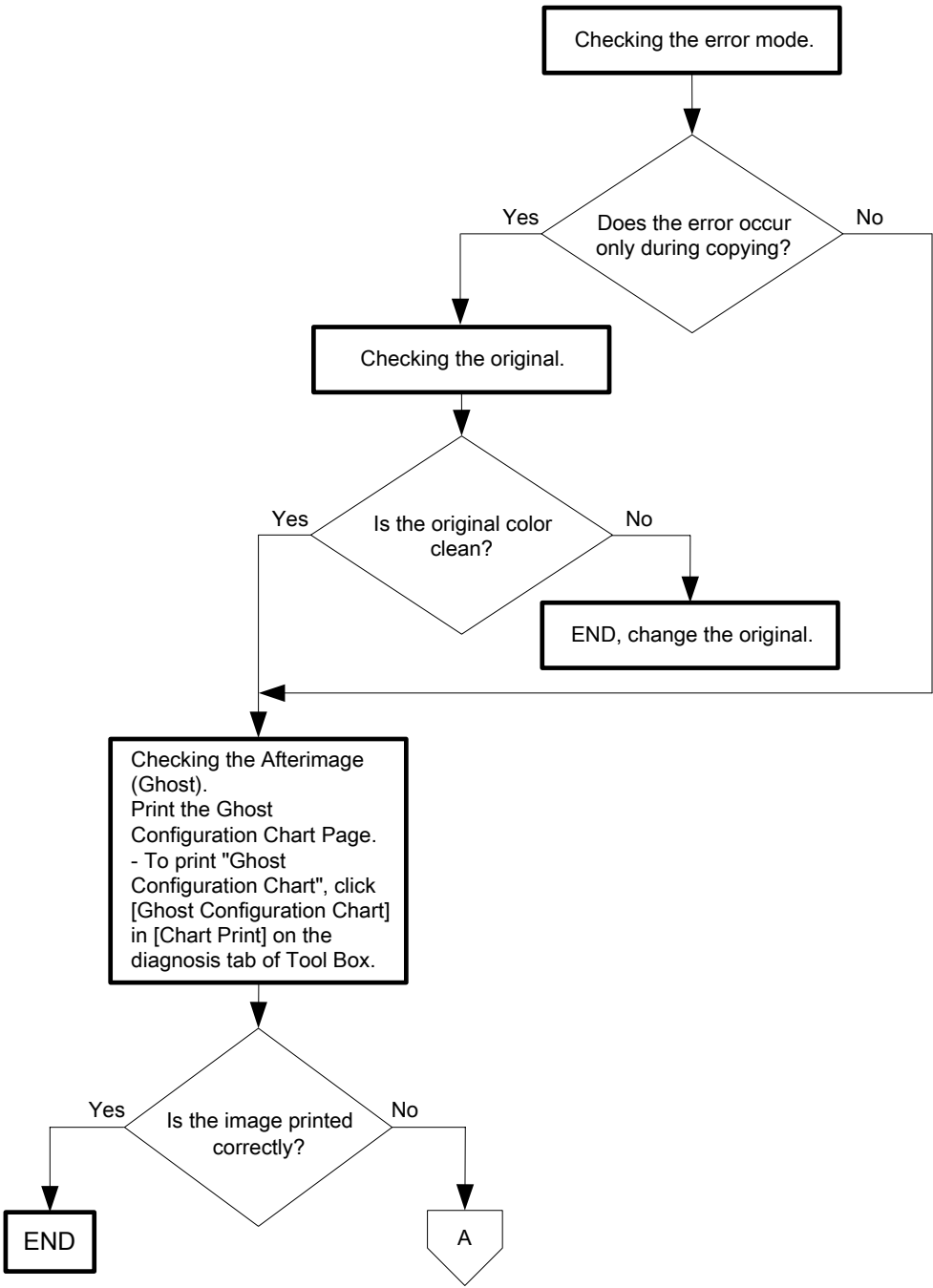
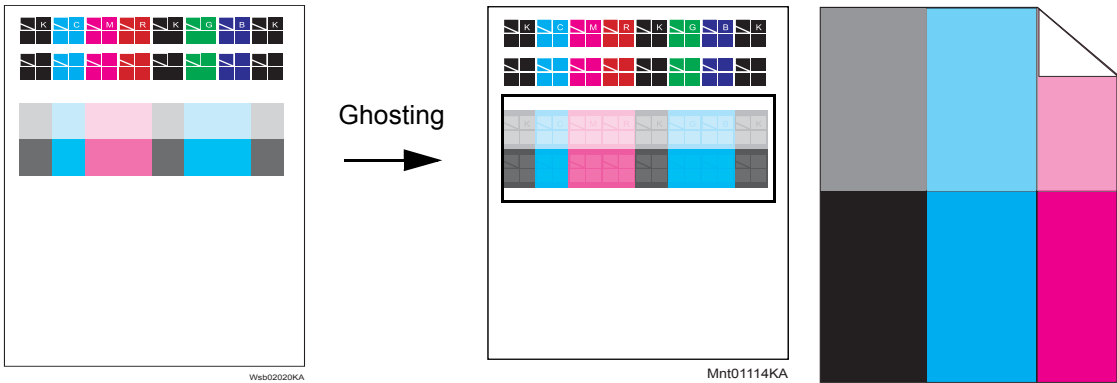
← If the pitch of the blank banding matches any of the three pitches (PHD and FUSER) shown in the Pitch Configuration Chart, replace the relevant component:
 (PHD): PHD Unit
 (FUSER): Fuser

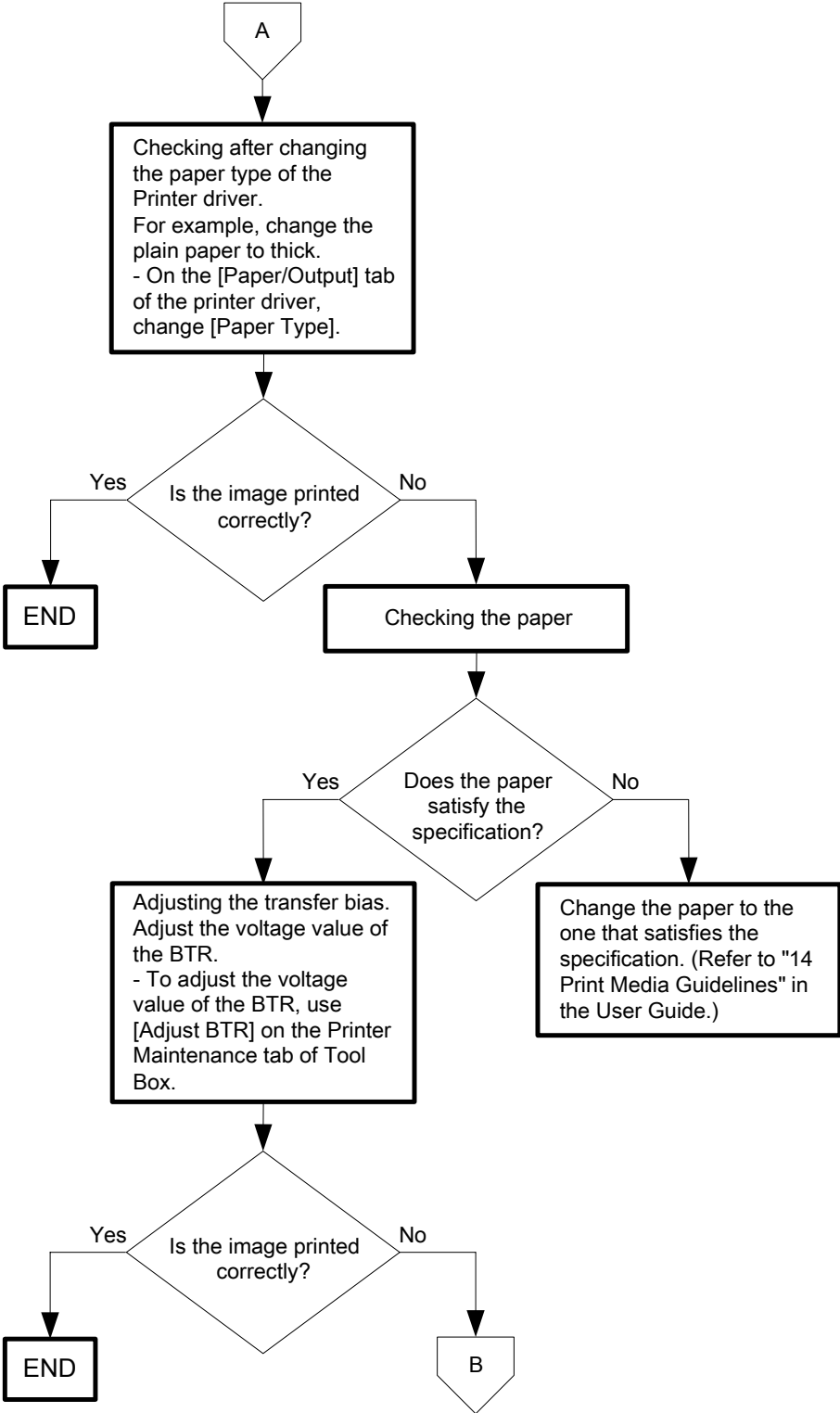
Flows 116 Vertical blanks

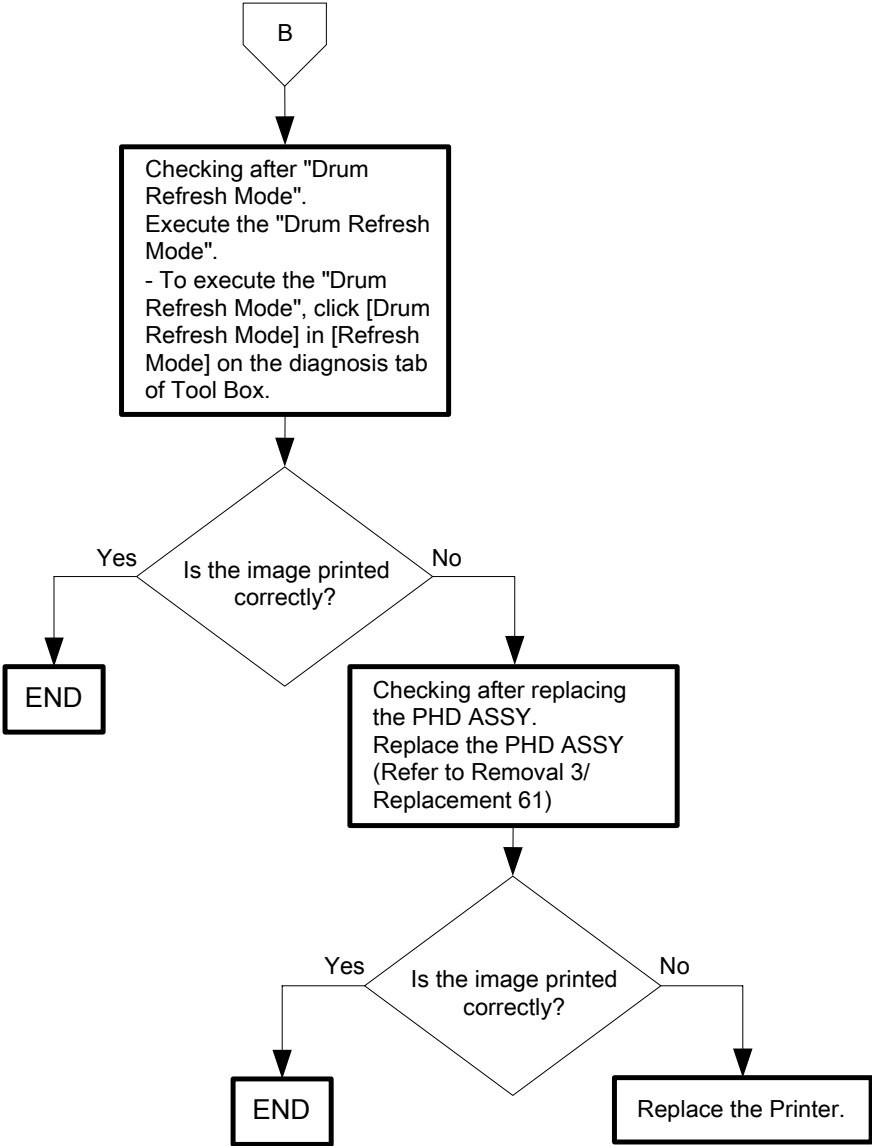




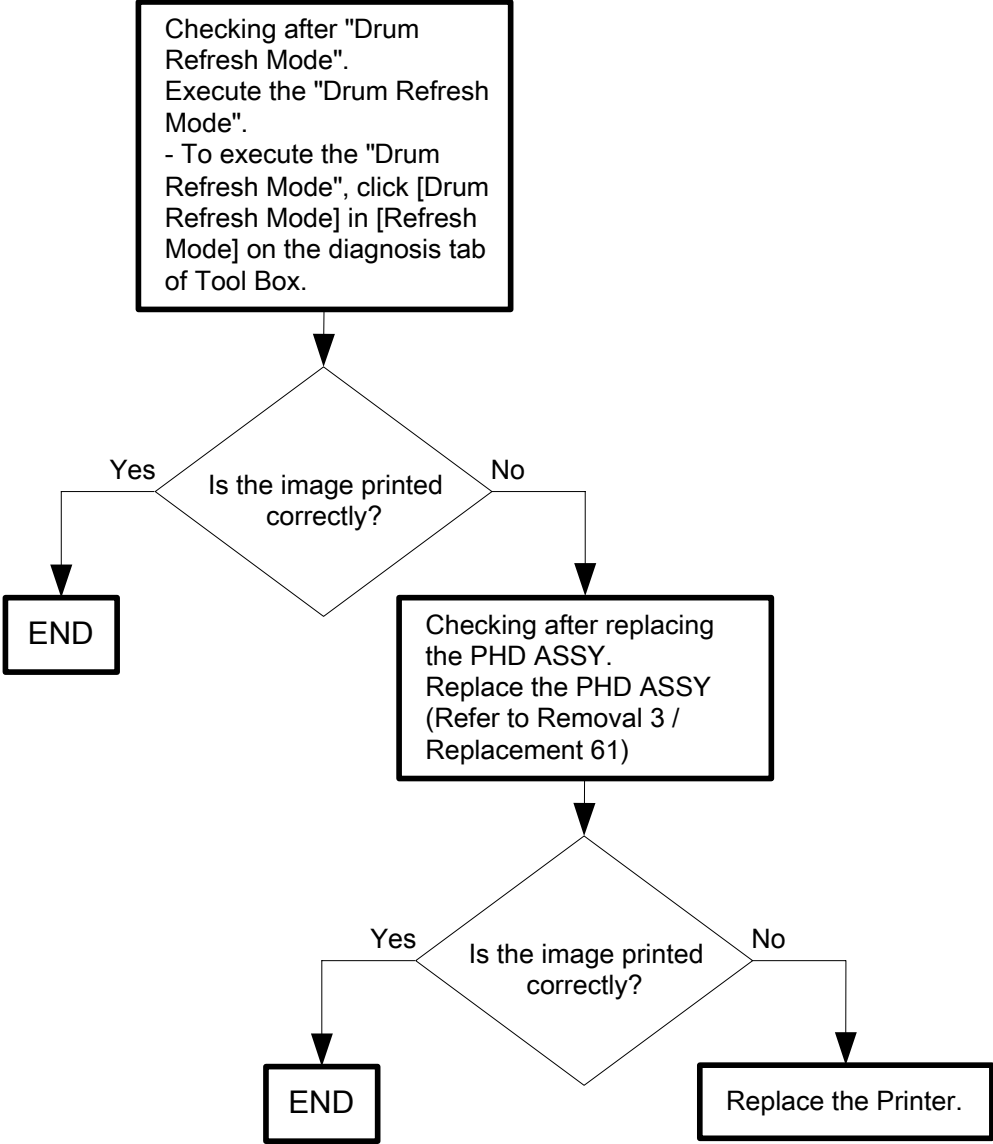
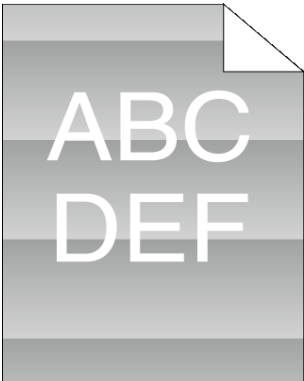
Flows 117 Ghosting



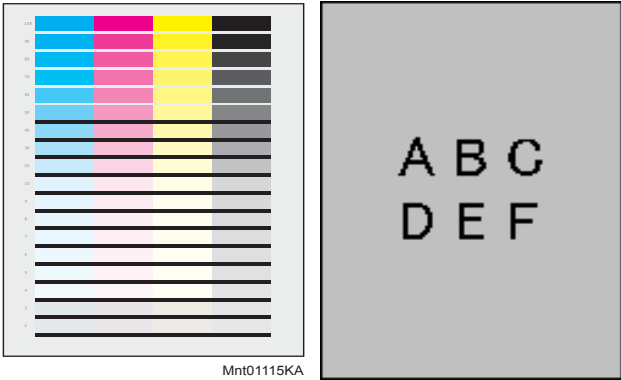




Flows 118 Light-Induced Fatigue

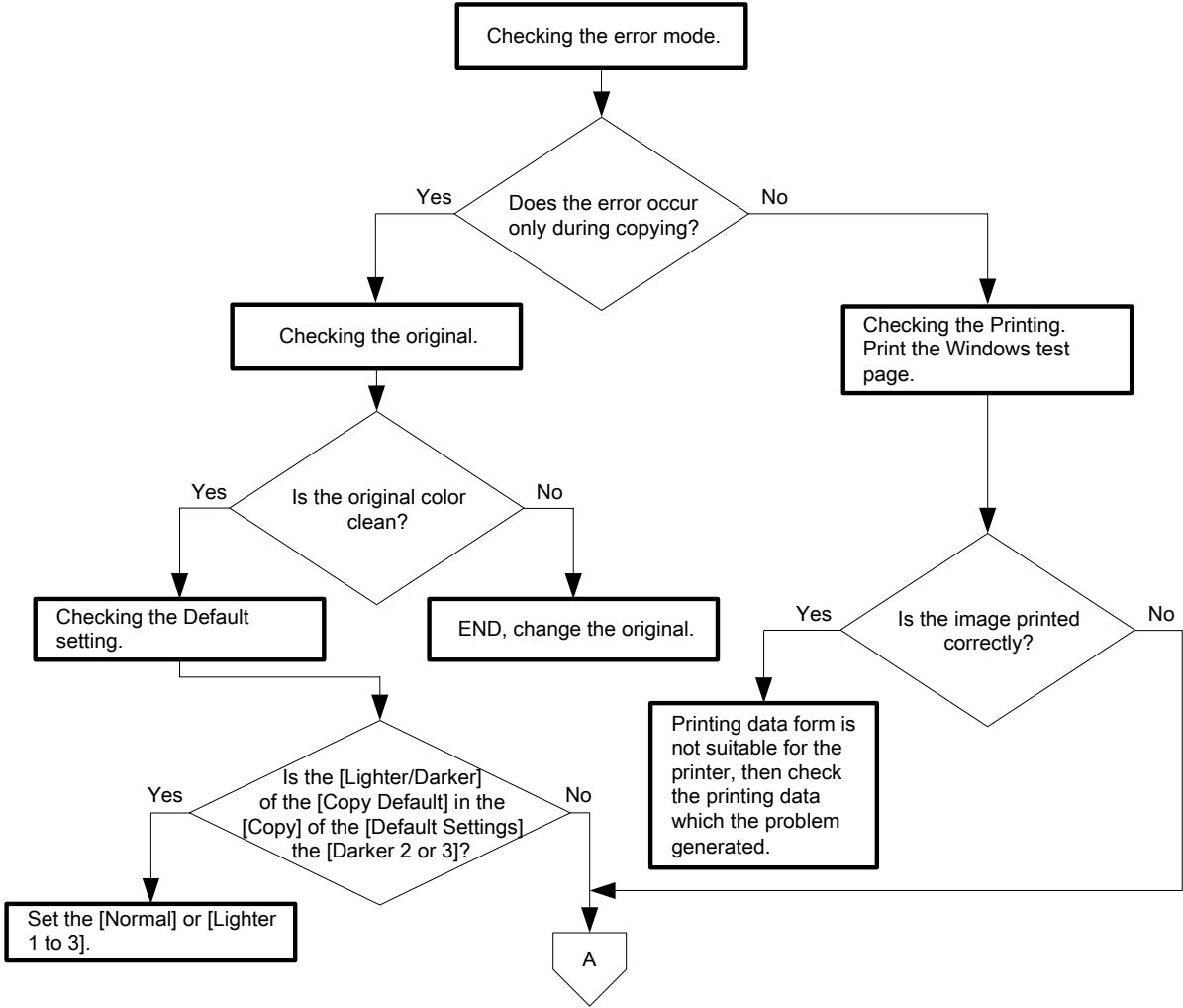


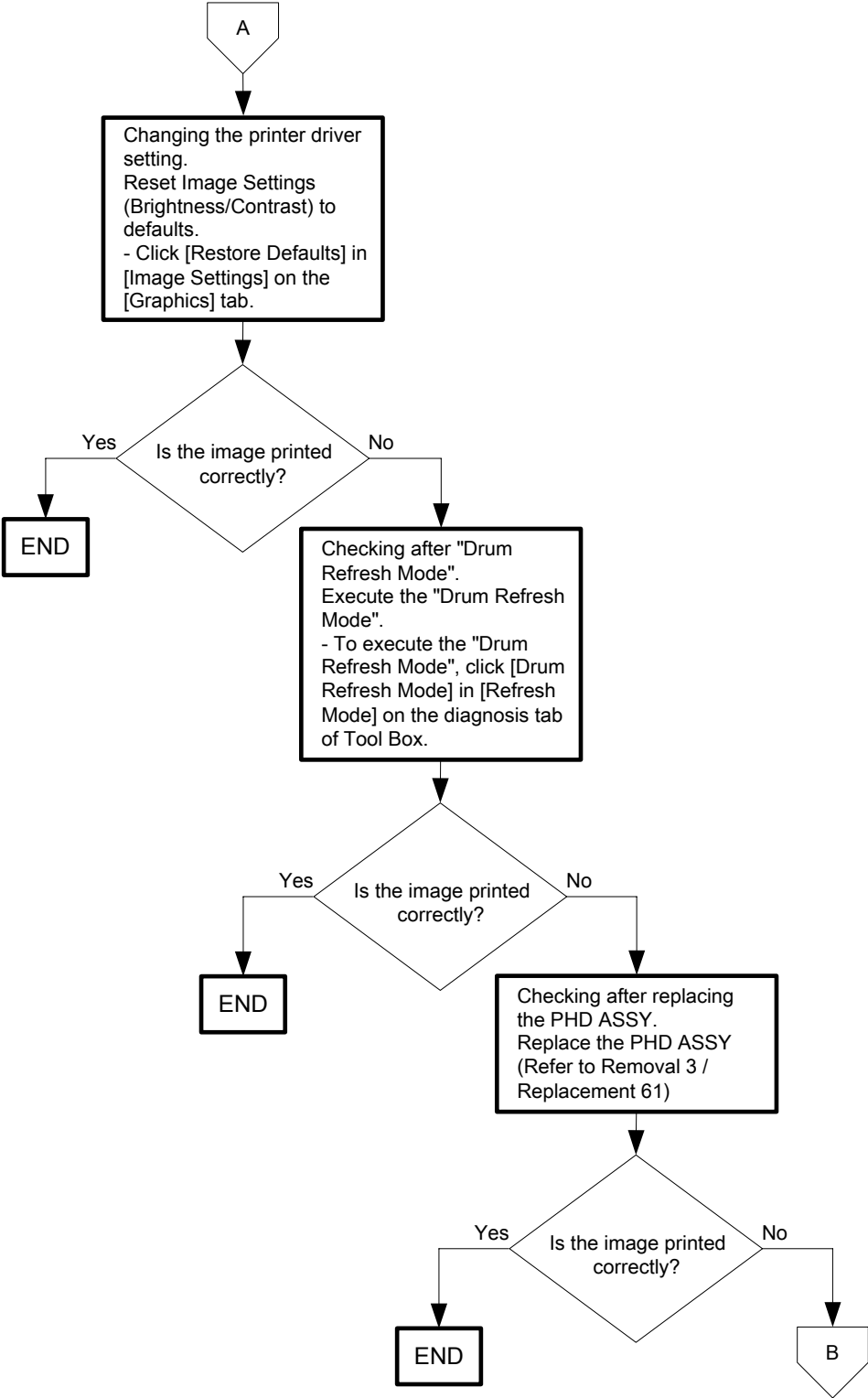
Flows 119 Fog

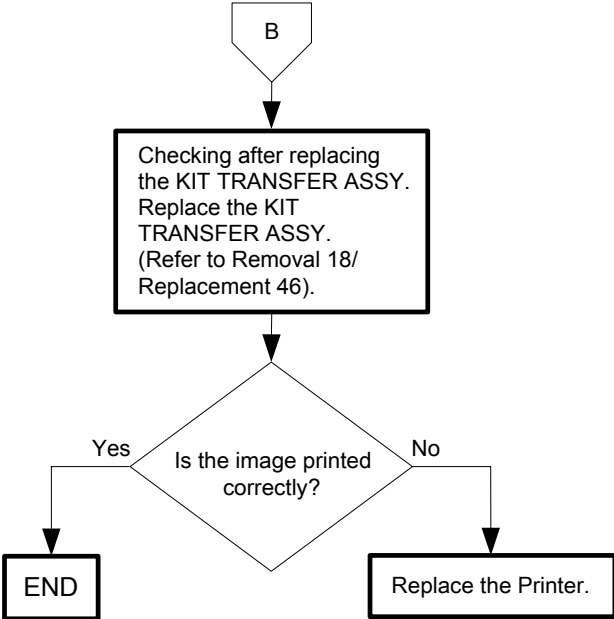


NOTE

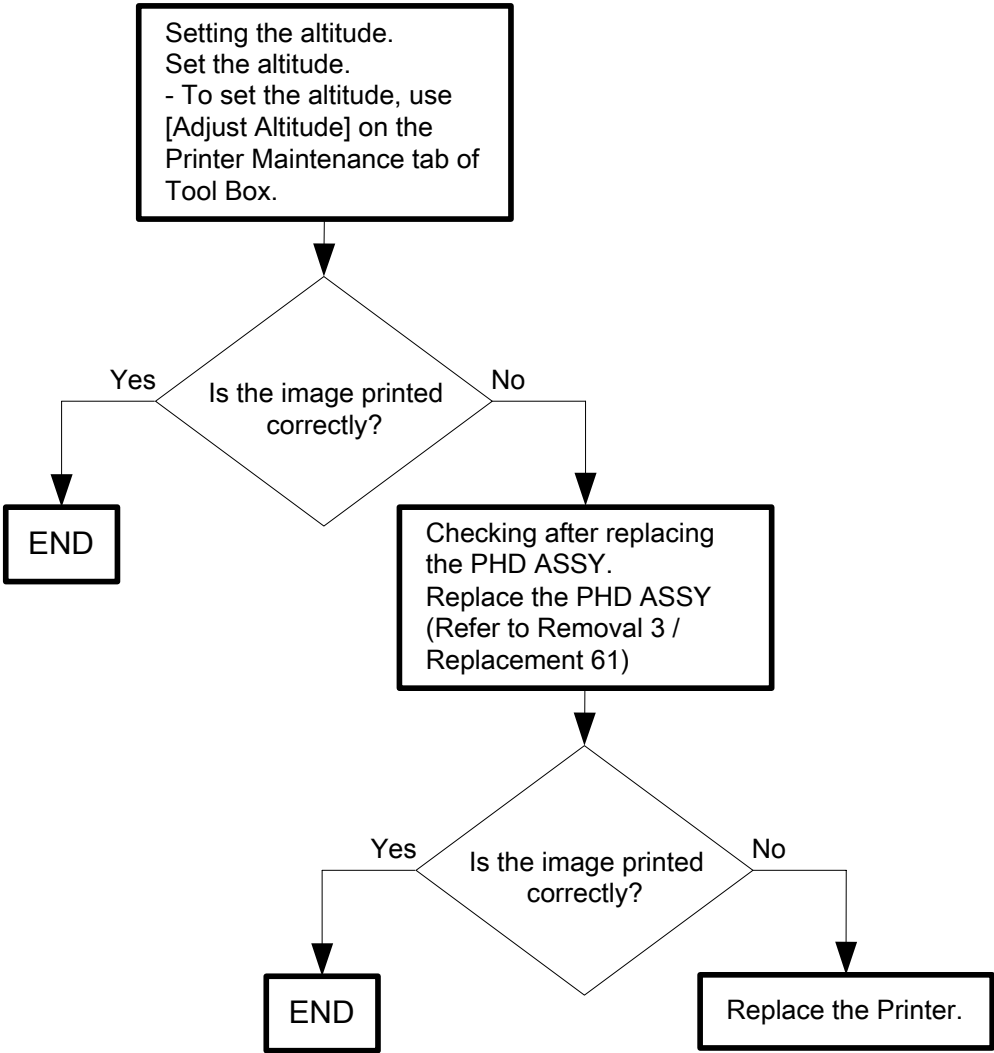
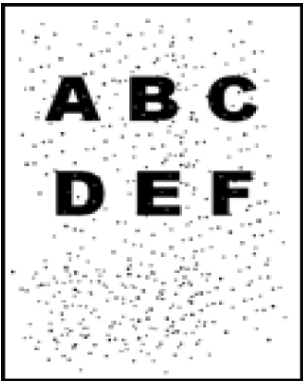
When the PHD Unit has been replaced, be sure to clean up the CTD (ADC) Sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.



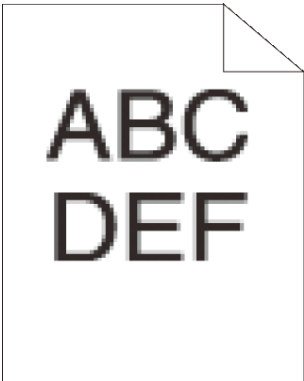




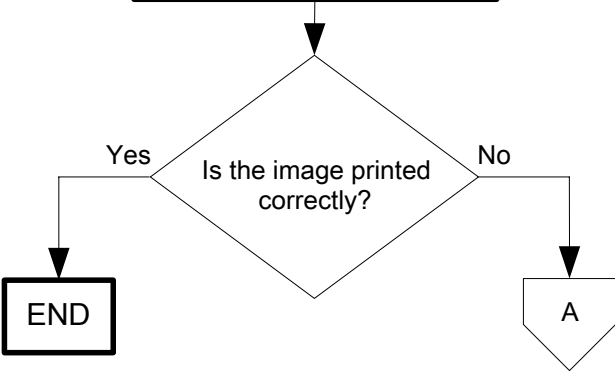
Flows 120 Bead-Carry-Out (BCO)

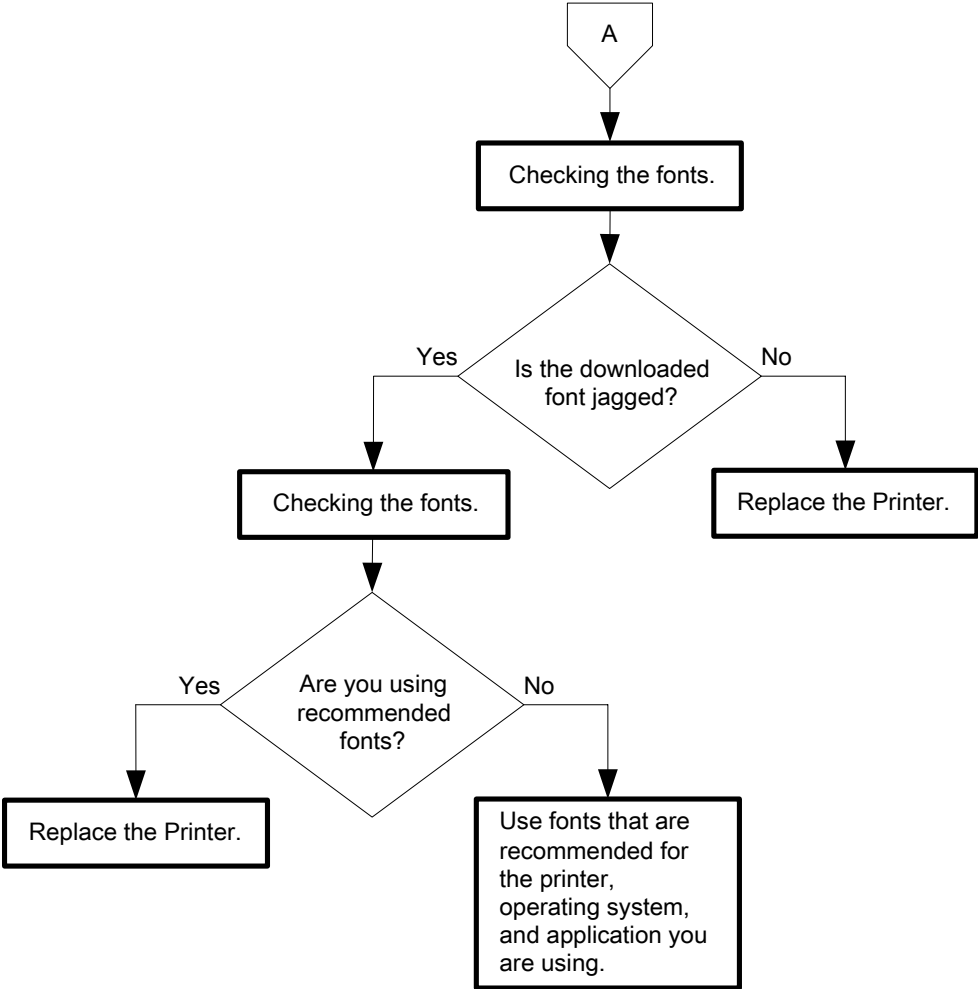


Flows 121 Jagged characters

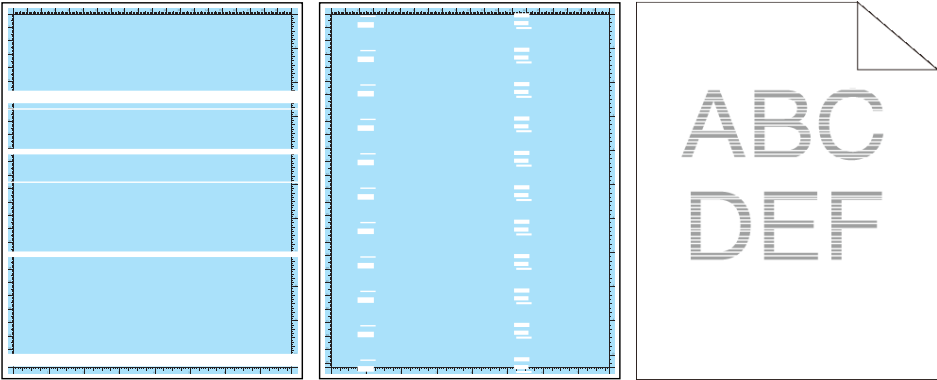


Changing the printer driver setting.
1.Set Screen to Fineness in the printer driver.
- In [Other Settings] of the [Advanced] tab, click [Screen] and select [Fineness].
2.Enable Bitmap Smoothing in the printer driver.
- In [Other Settings] of the [Advanced] tab, click [Bitmap Smoothing] and select [OK].



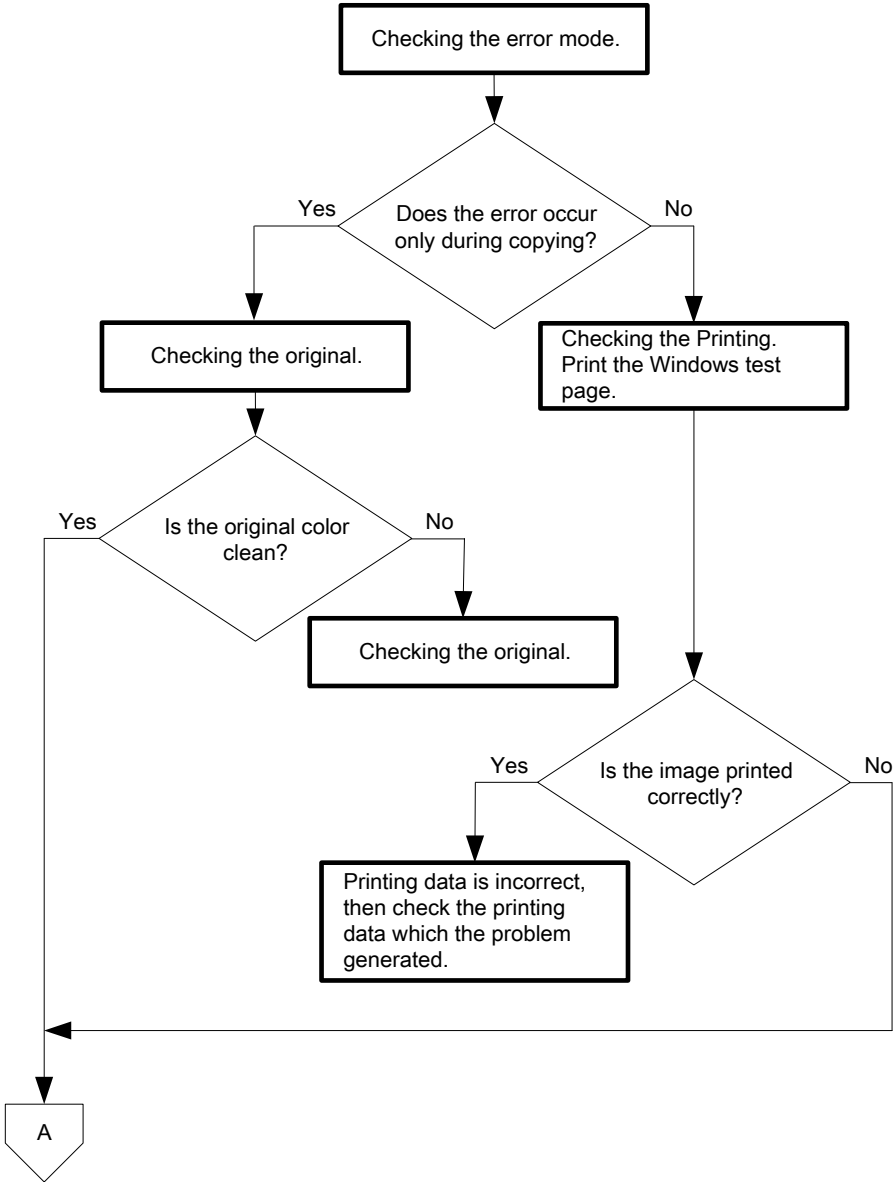


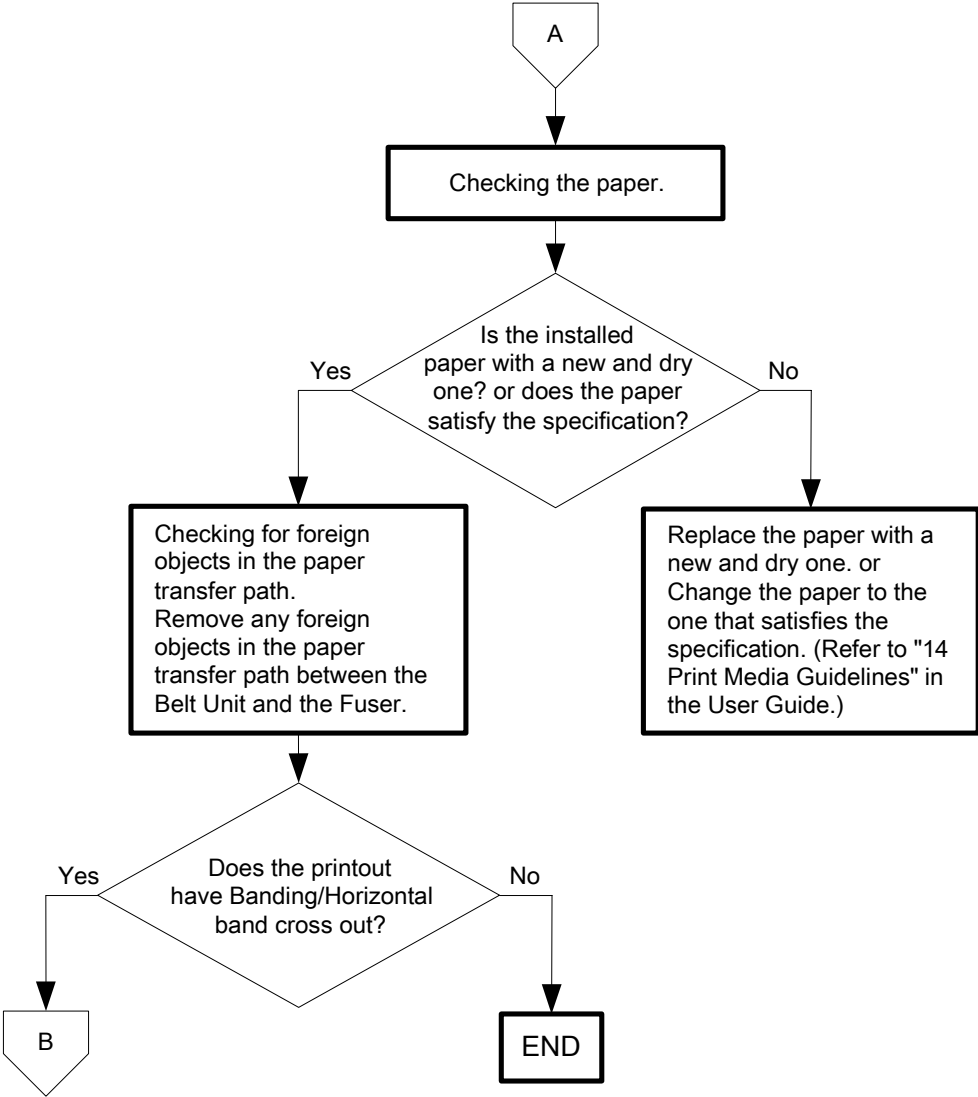
Flows 122 Banding/Horizontal band cross out

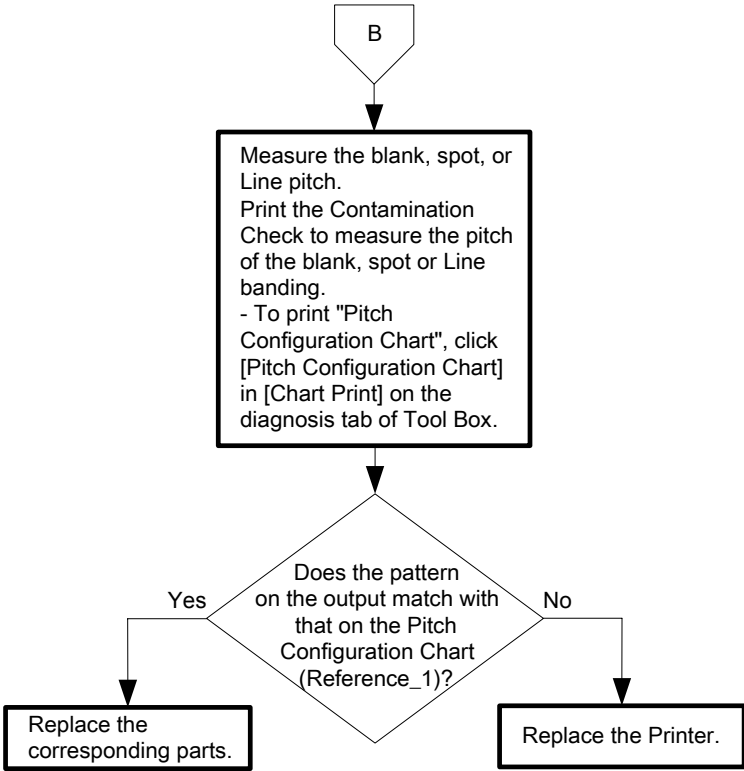


NOTE

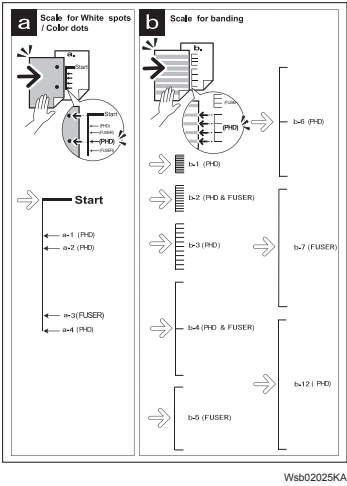
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.





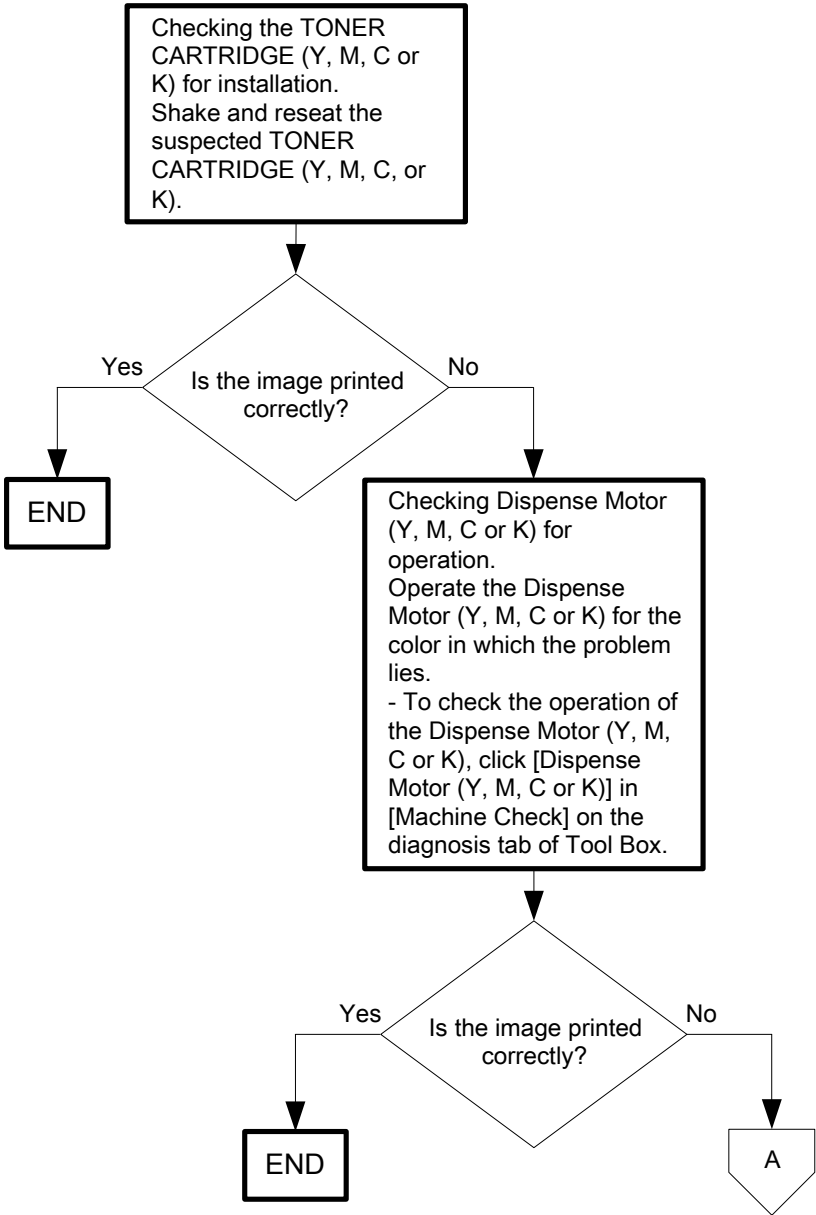
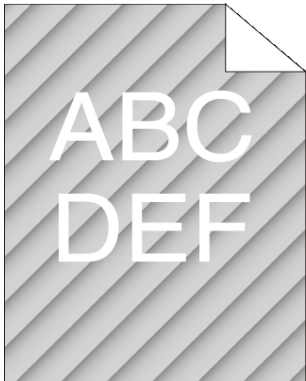


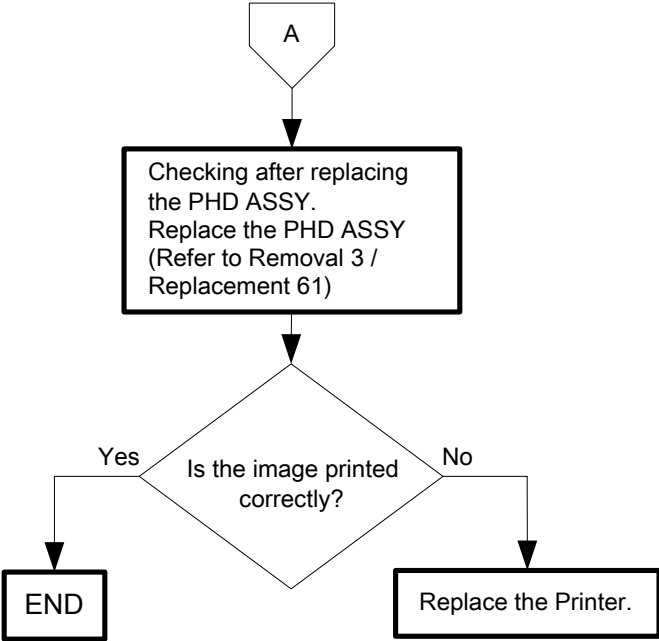
- Reference_1: Pitch Configuration Chart



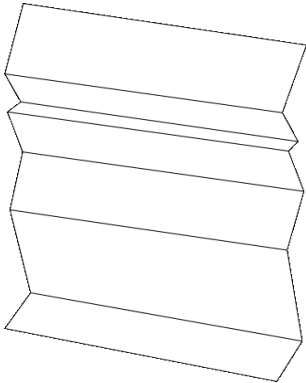
If the pitch of the blank banding matches any of the three pitches (PHD and FUSER) shown in the Pitch Configuration Chart, replace the relevant component:
(PHD): PHD Unit
(FUSER): Fuser

Flows 123 Auger mark



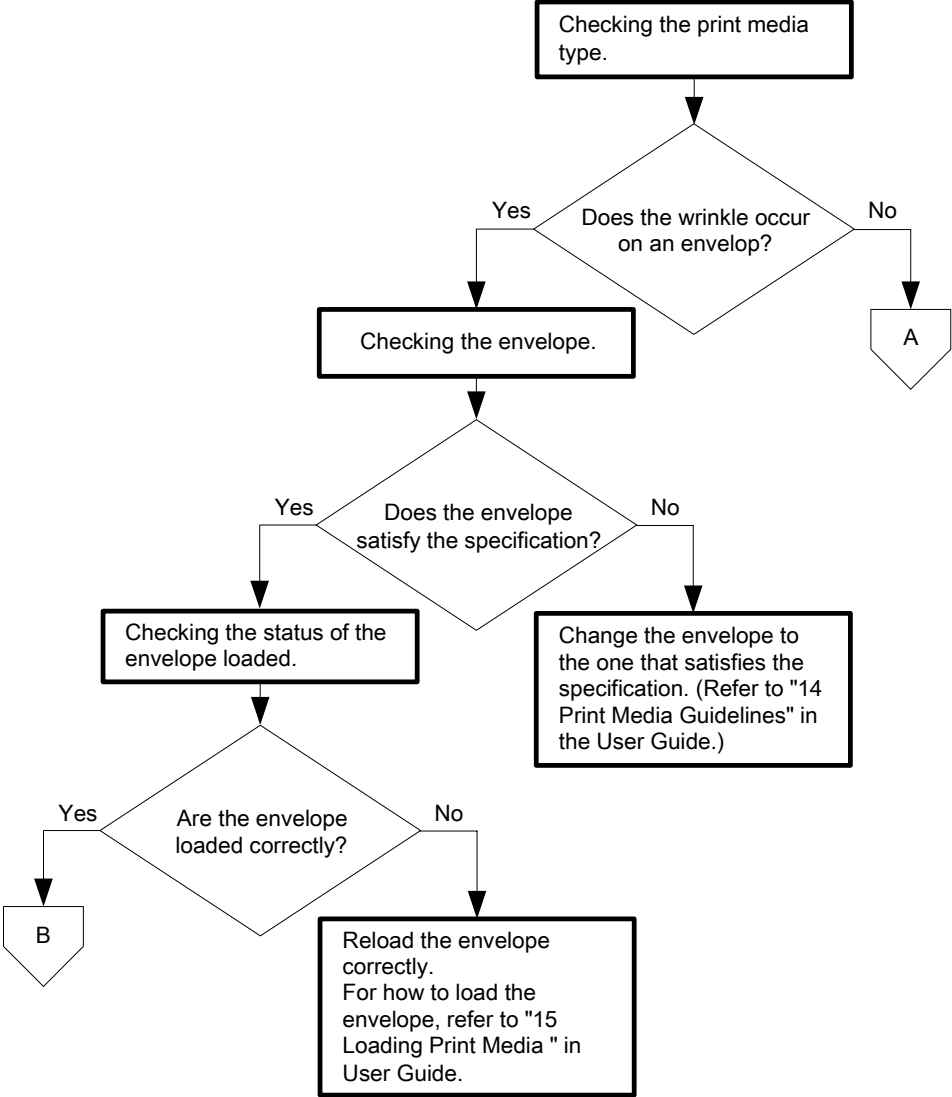


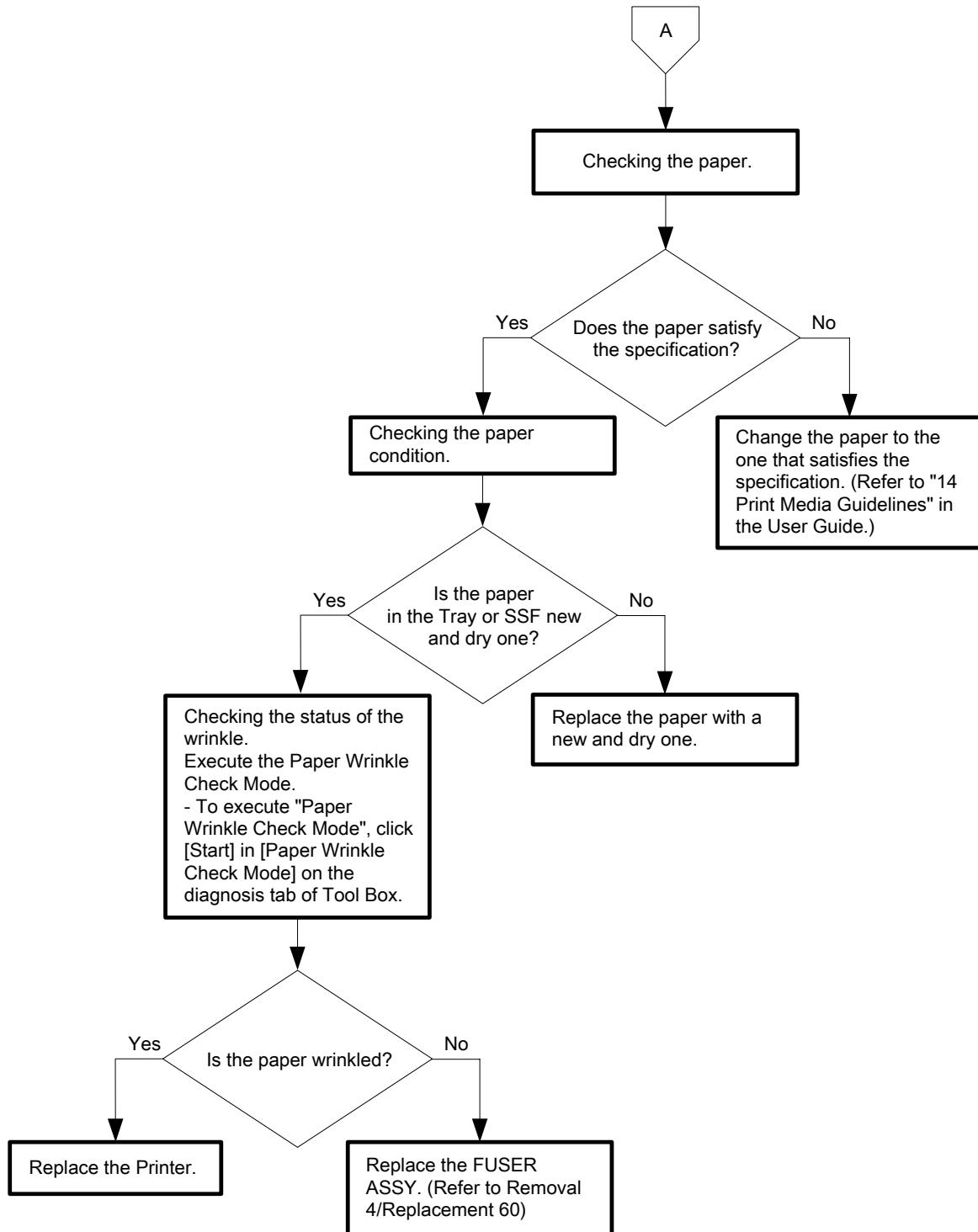
Flows 124 Wrinkled/Stained paper

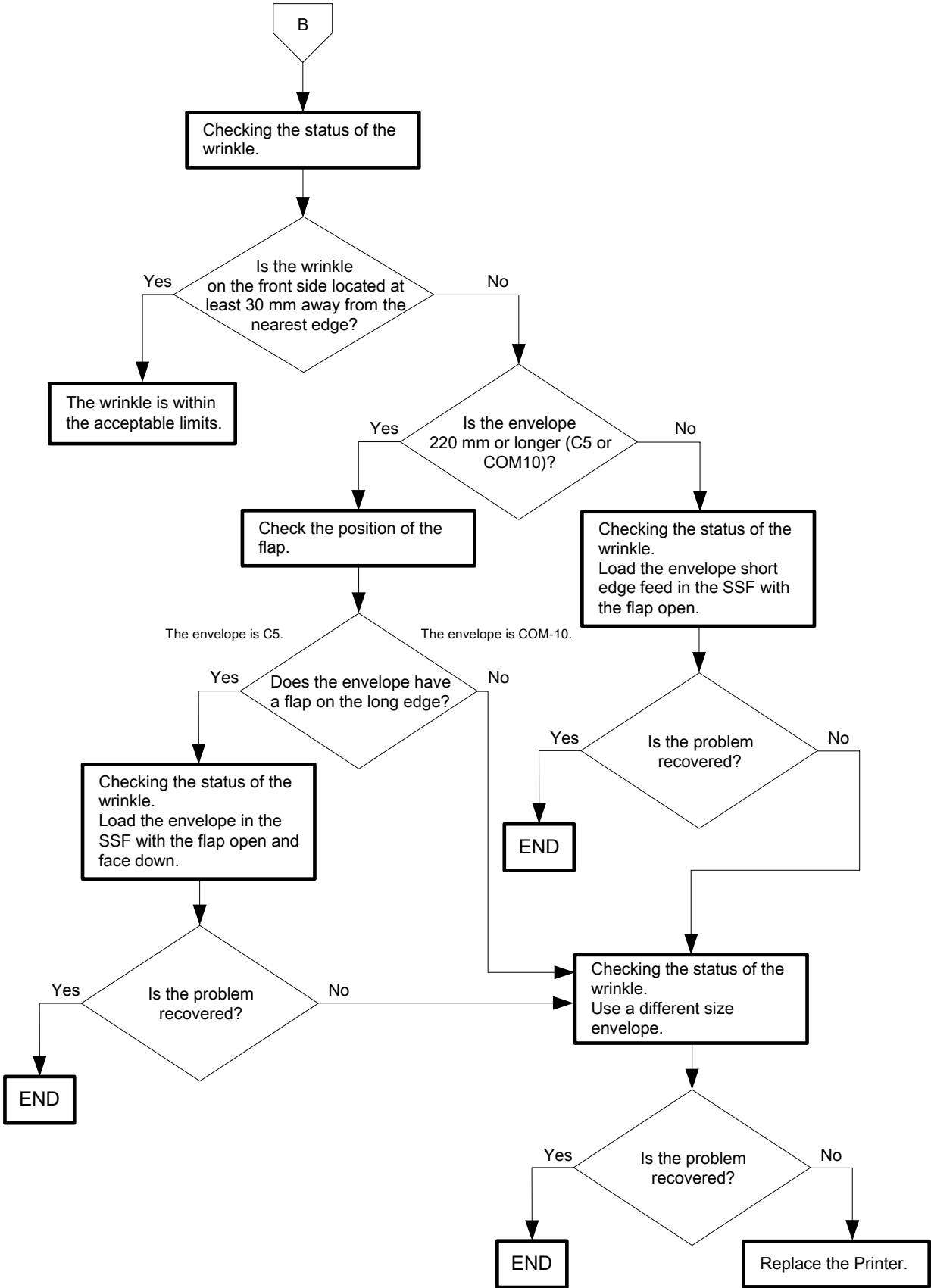


NOTE

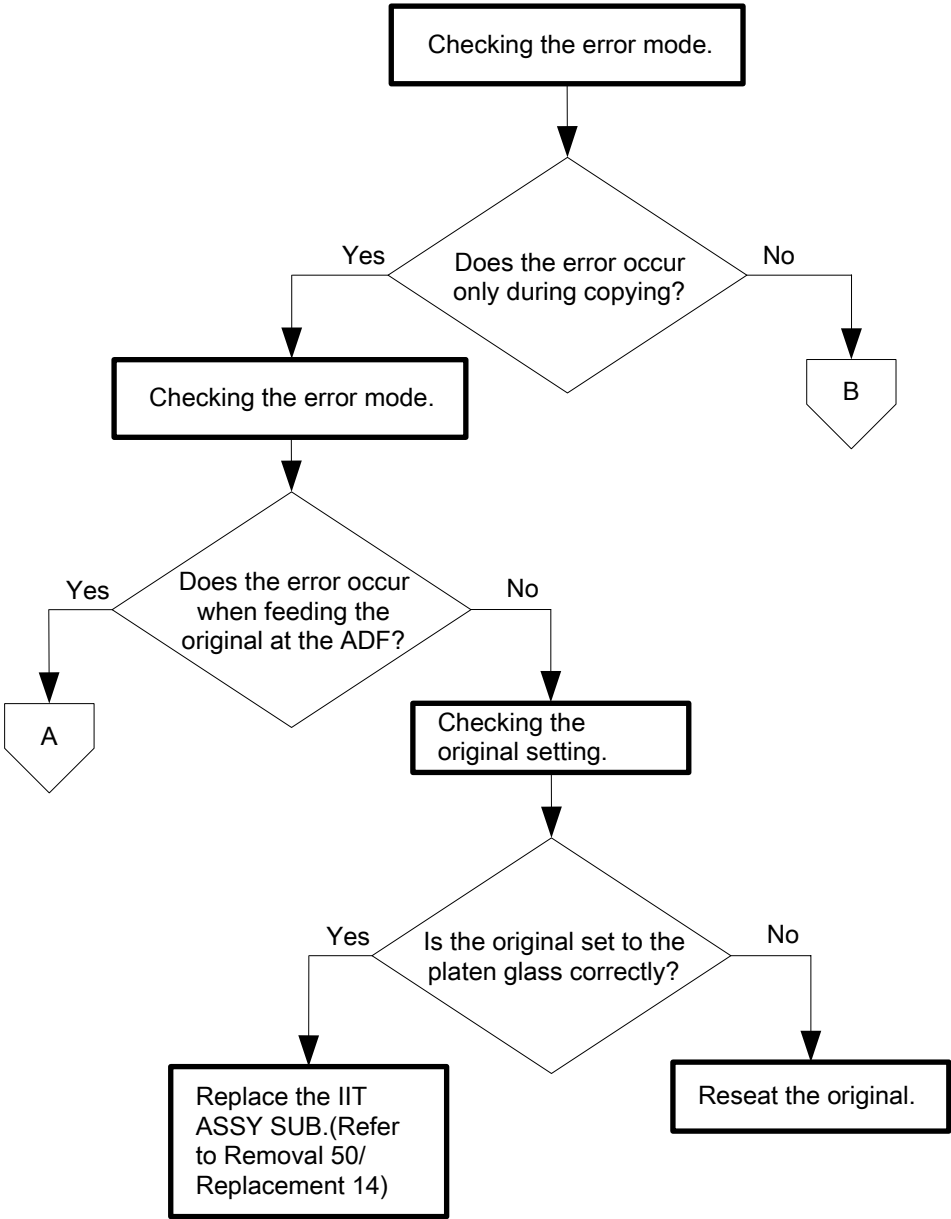
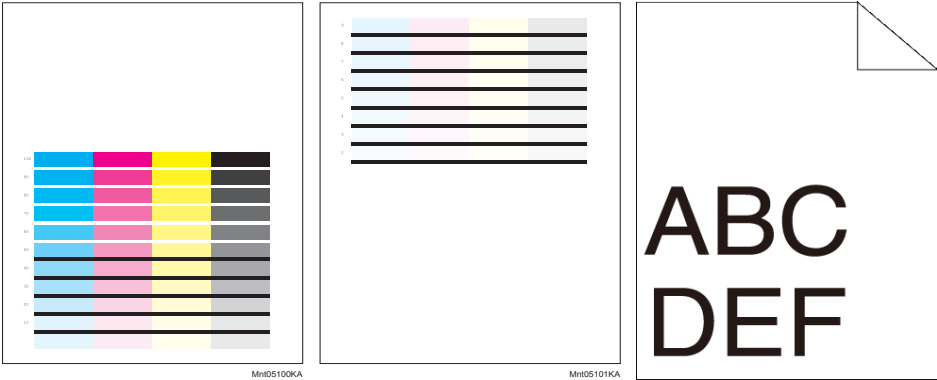
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

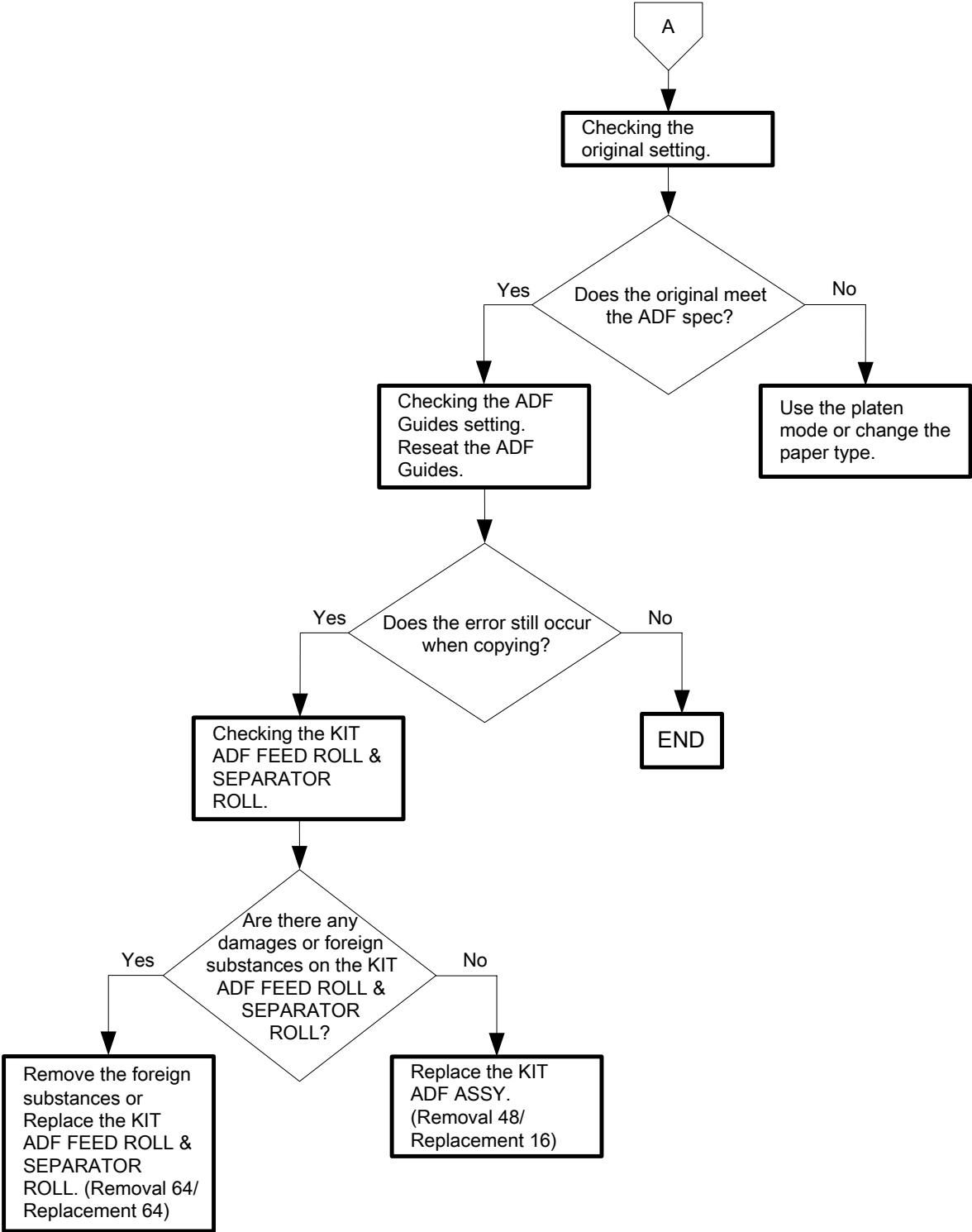


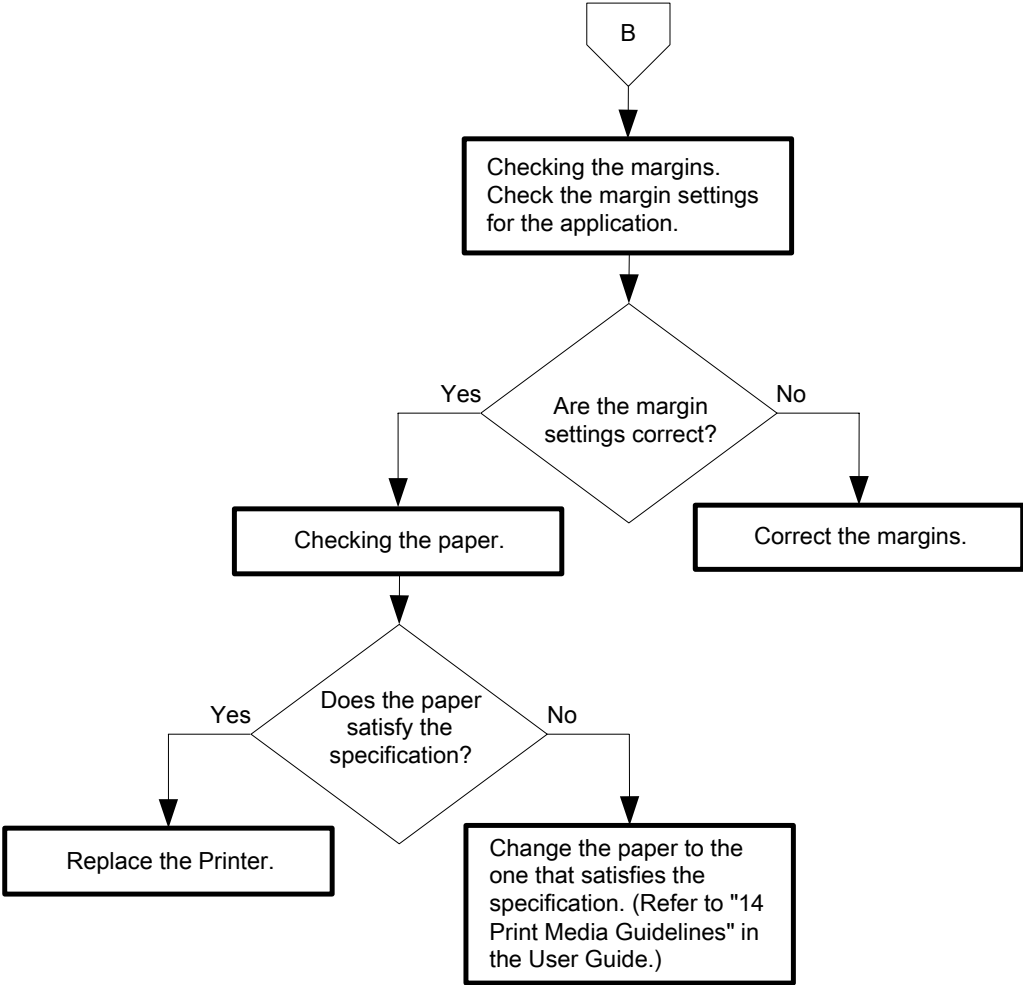




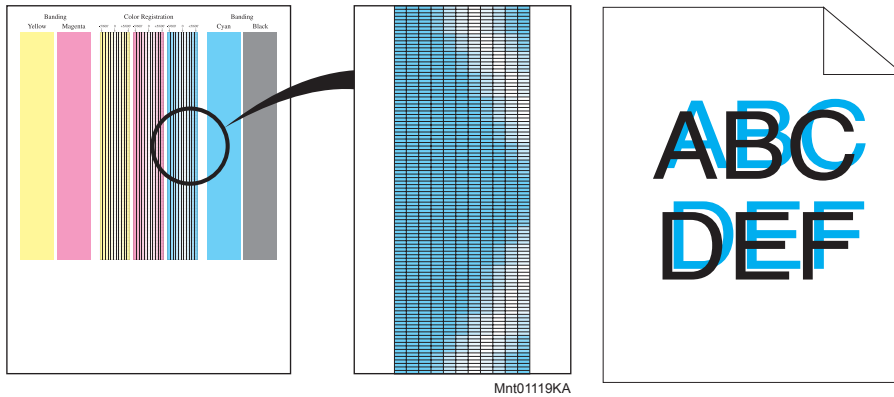
Flows 125 The top margin is incorrect / The side margin is incorrect





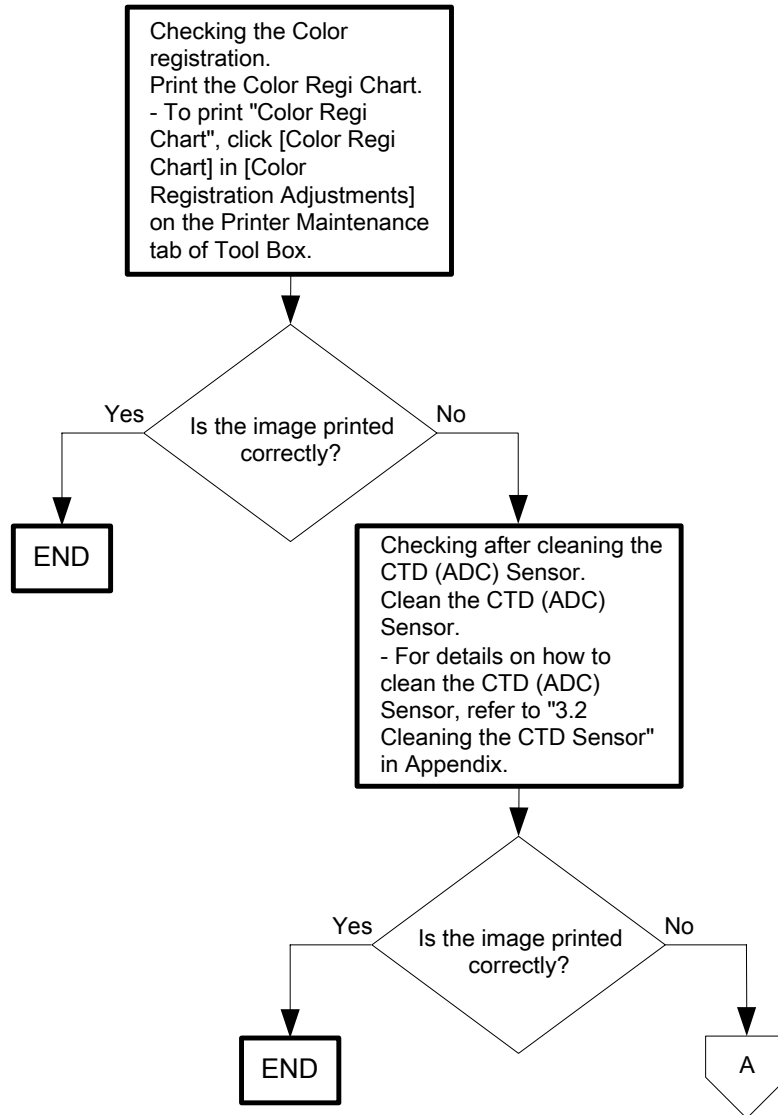


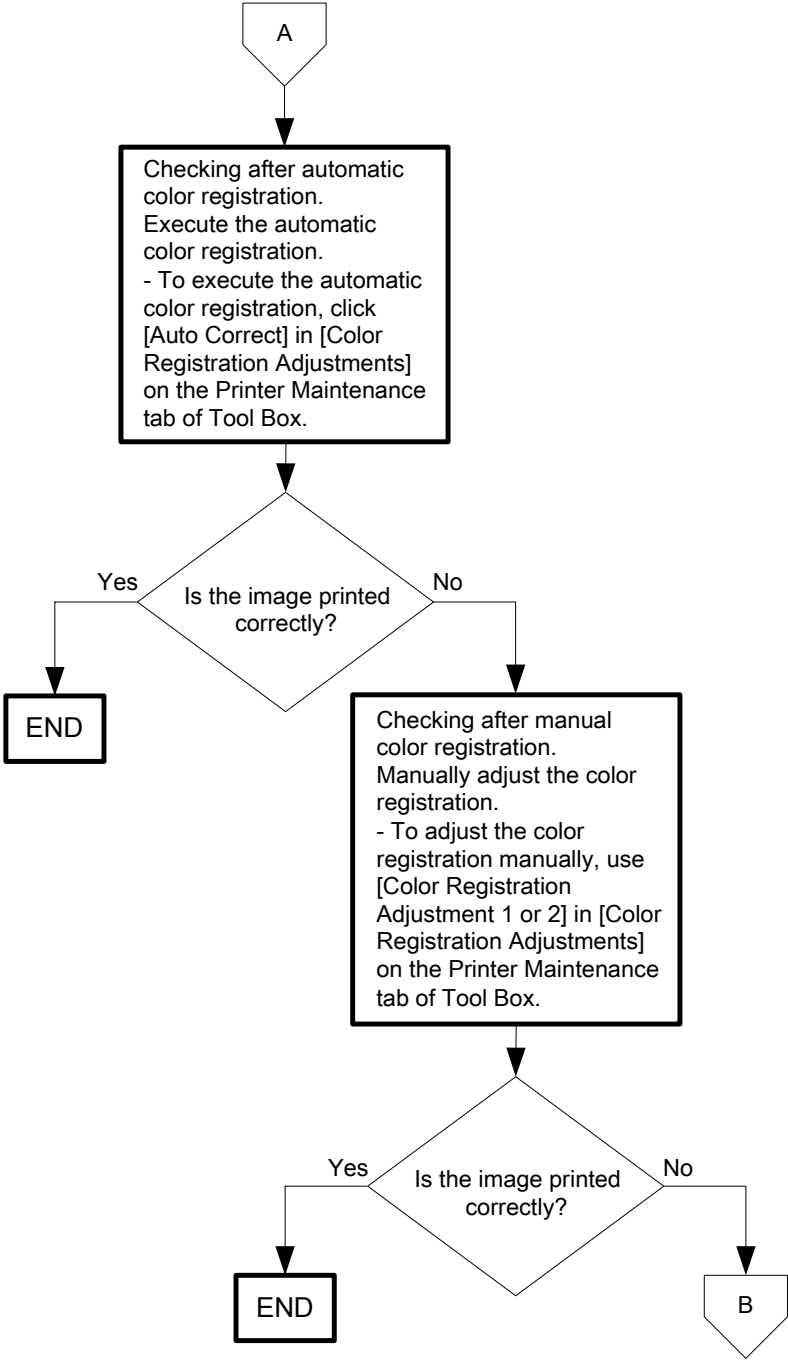
Flows 126 Color registration is out of alignment

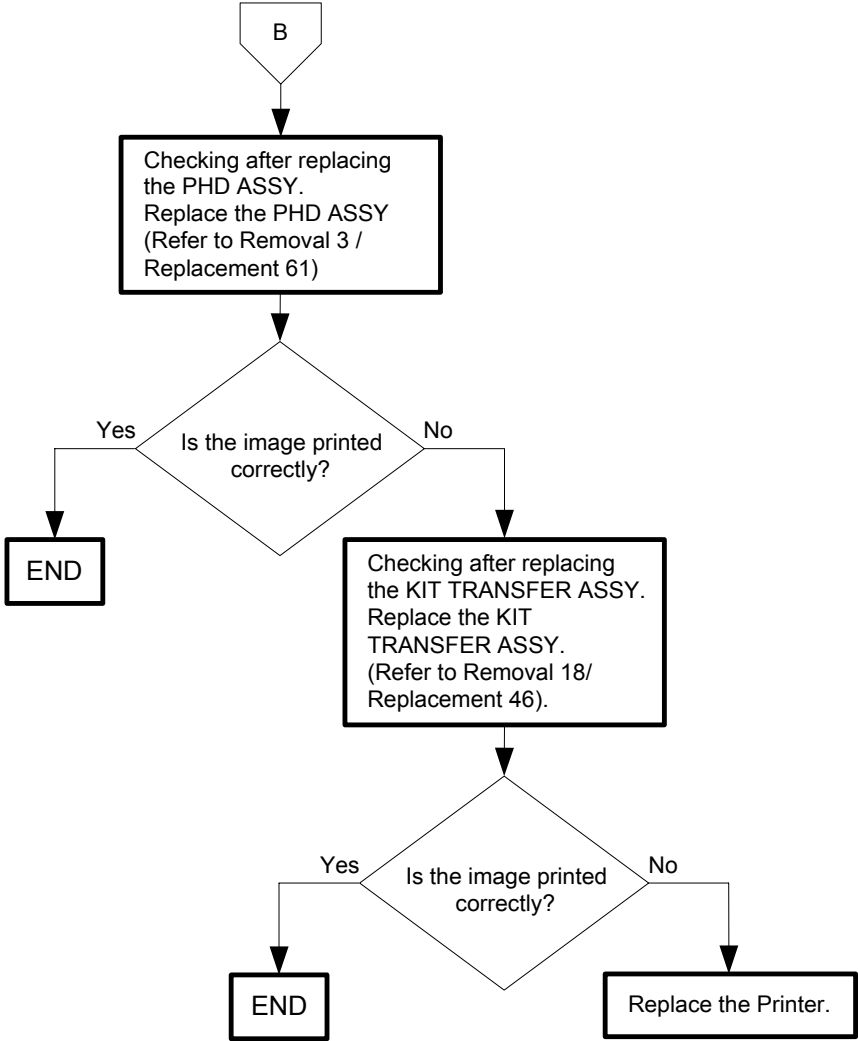


NOTE

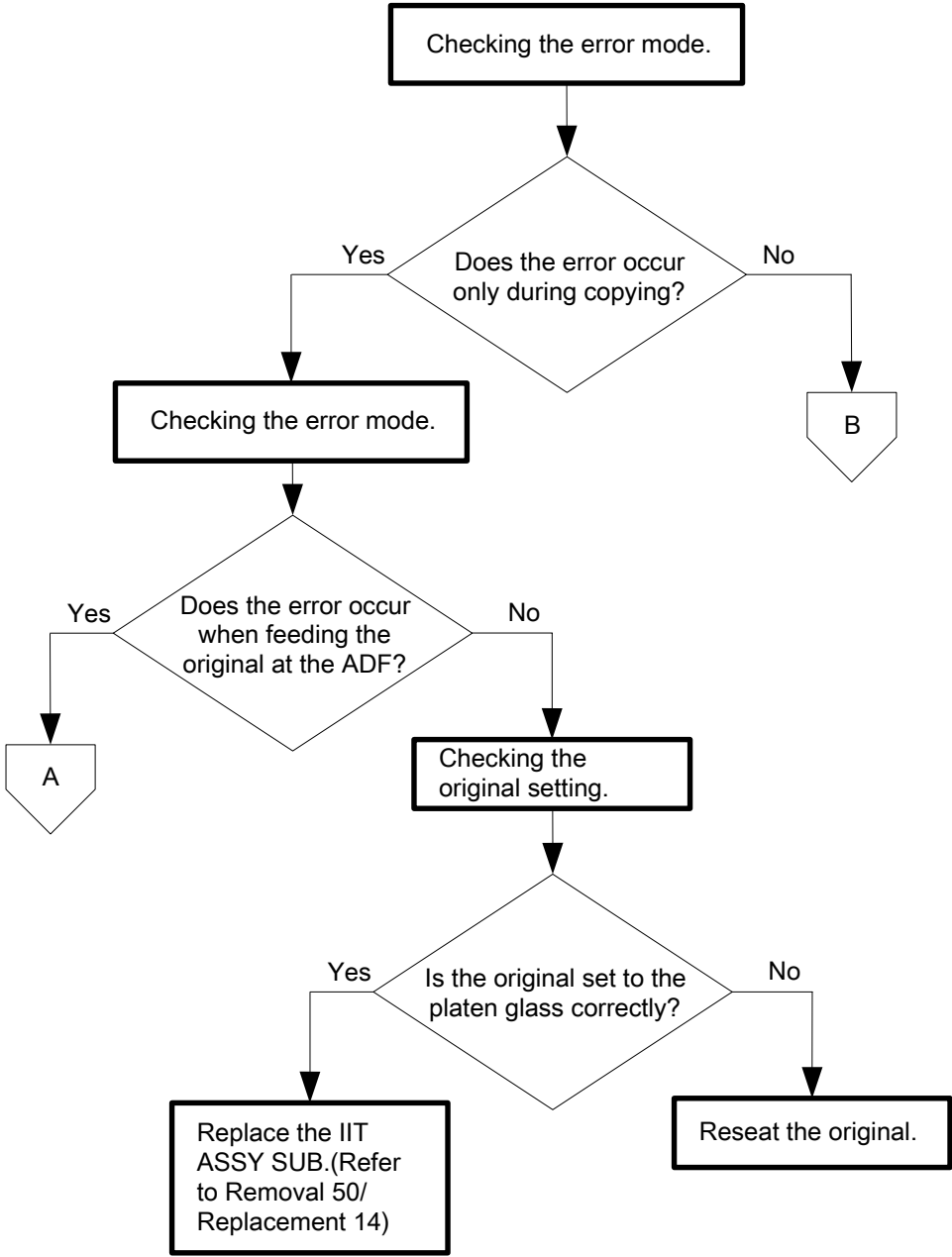
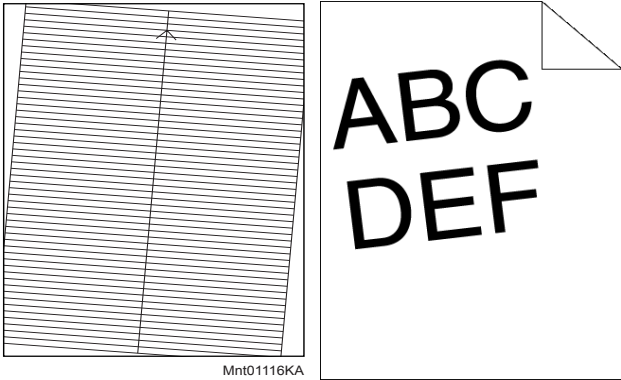
When the PHD Unit has been replaced, be sure to clean up the CTD (ADC) Sensor. Refer to "Appendix_3.2 Cleaning the CTD Sensor" for how to clean up the CTD (ADC) Sensor.

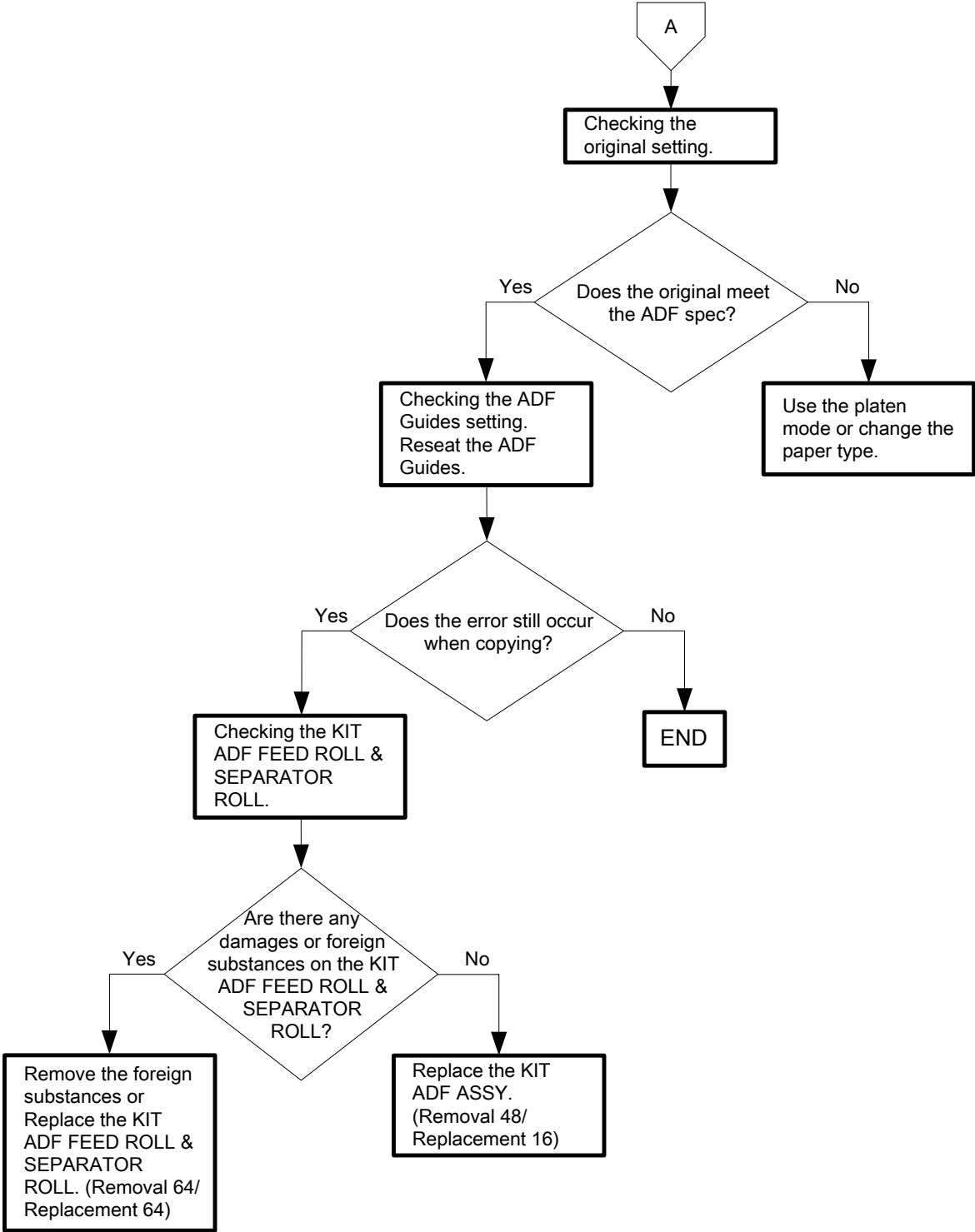


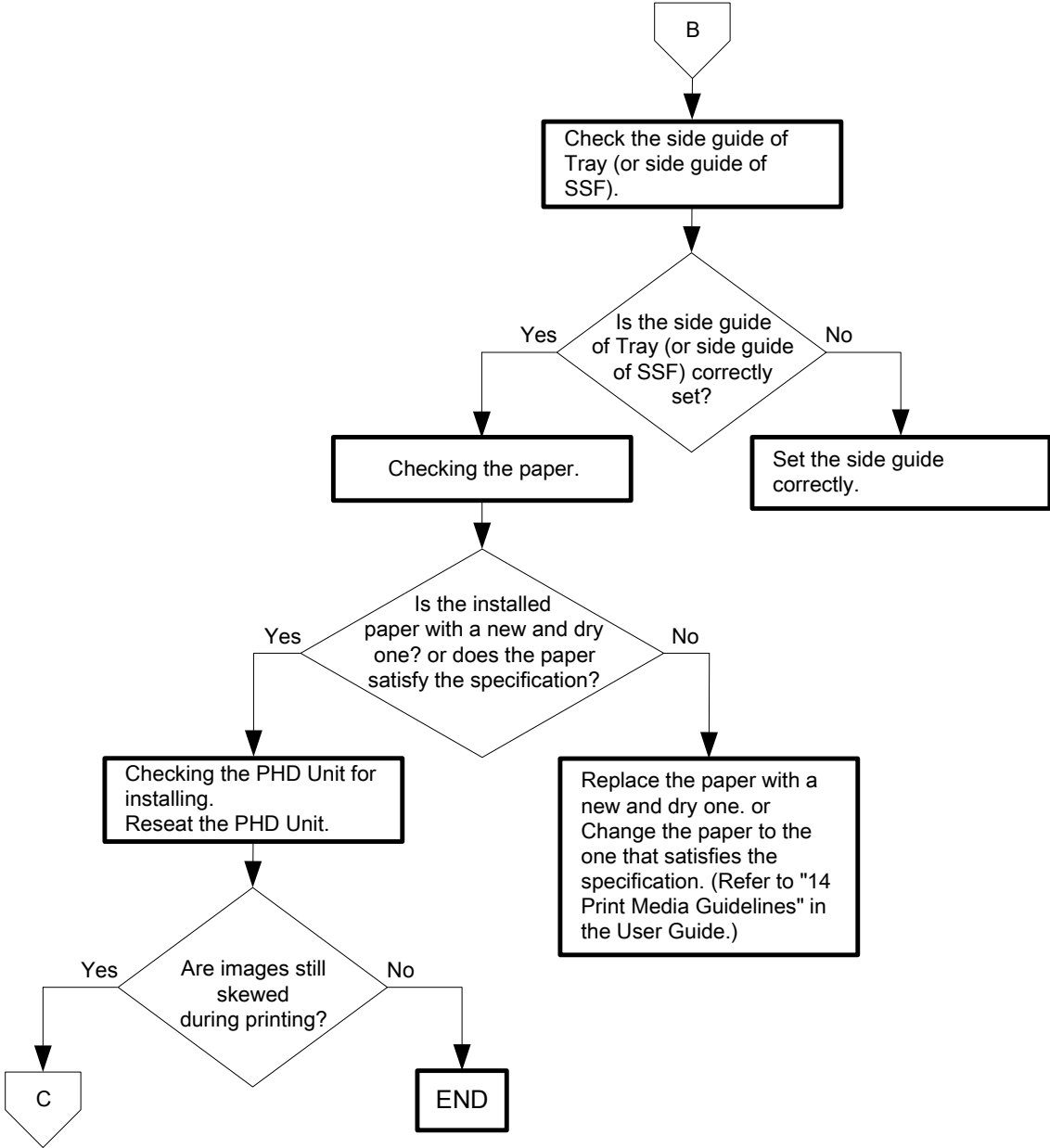


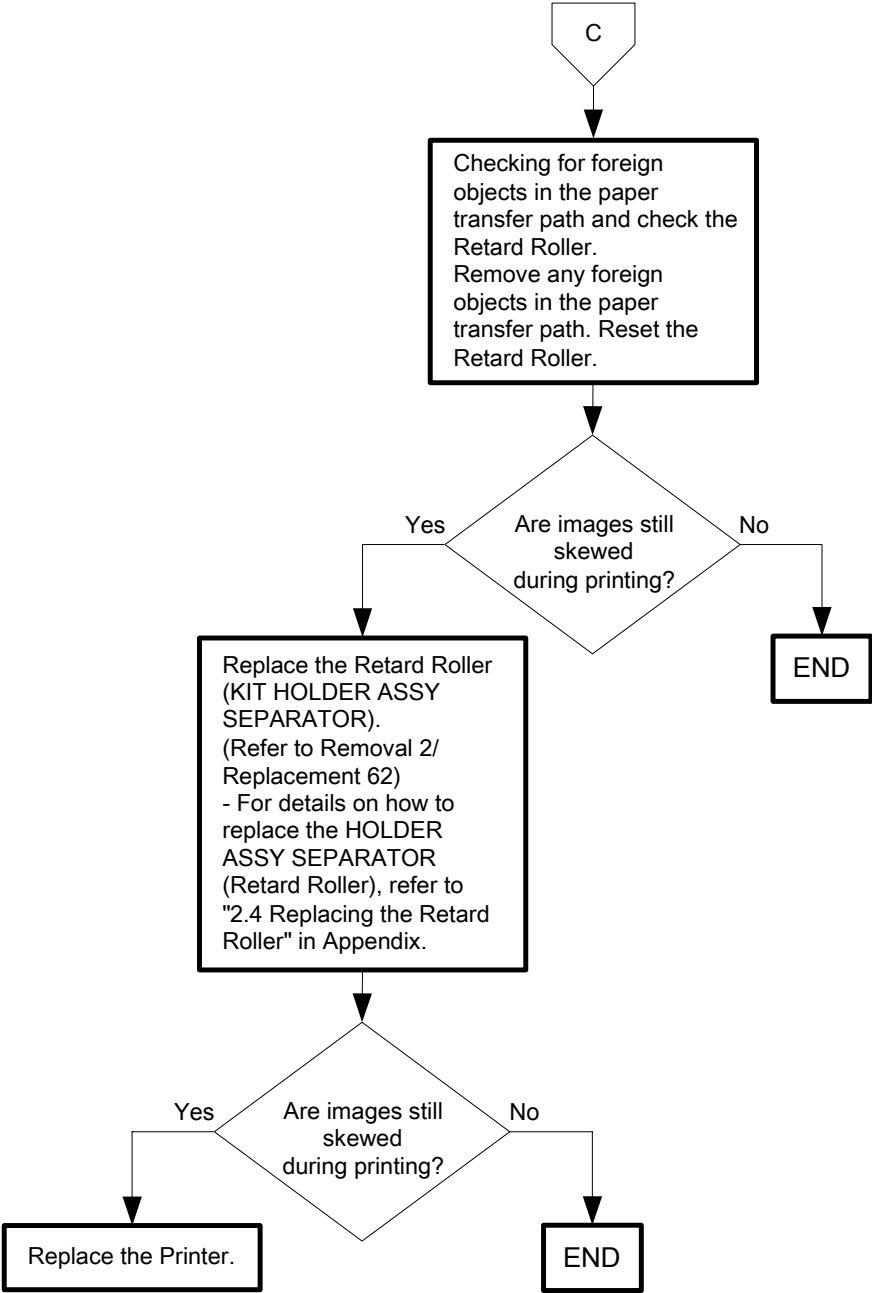


Flows 127 Images are skewed

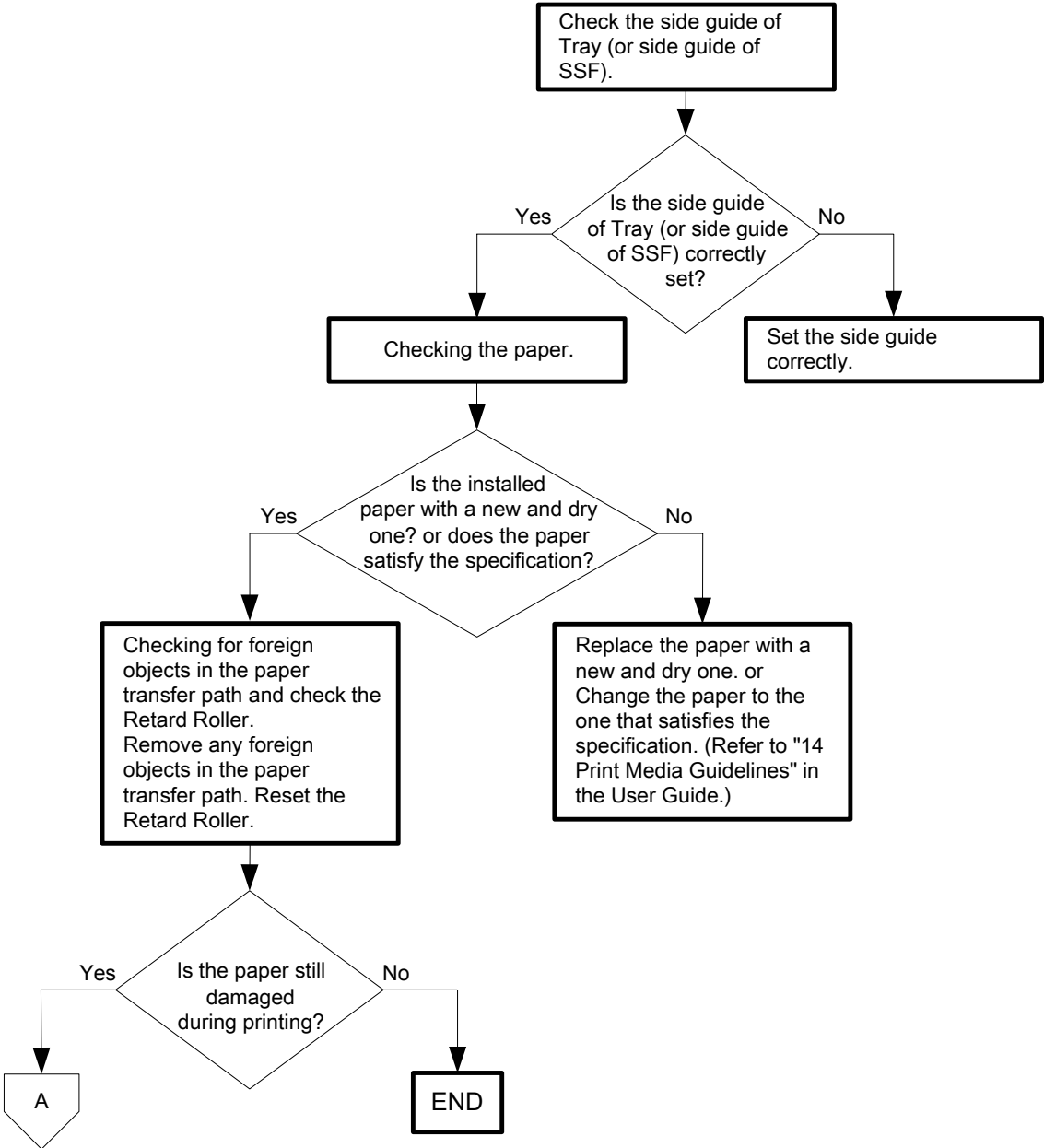
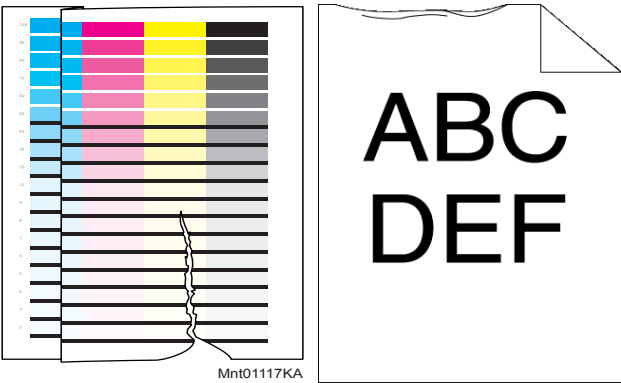


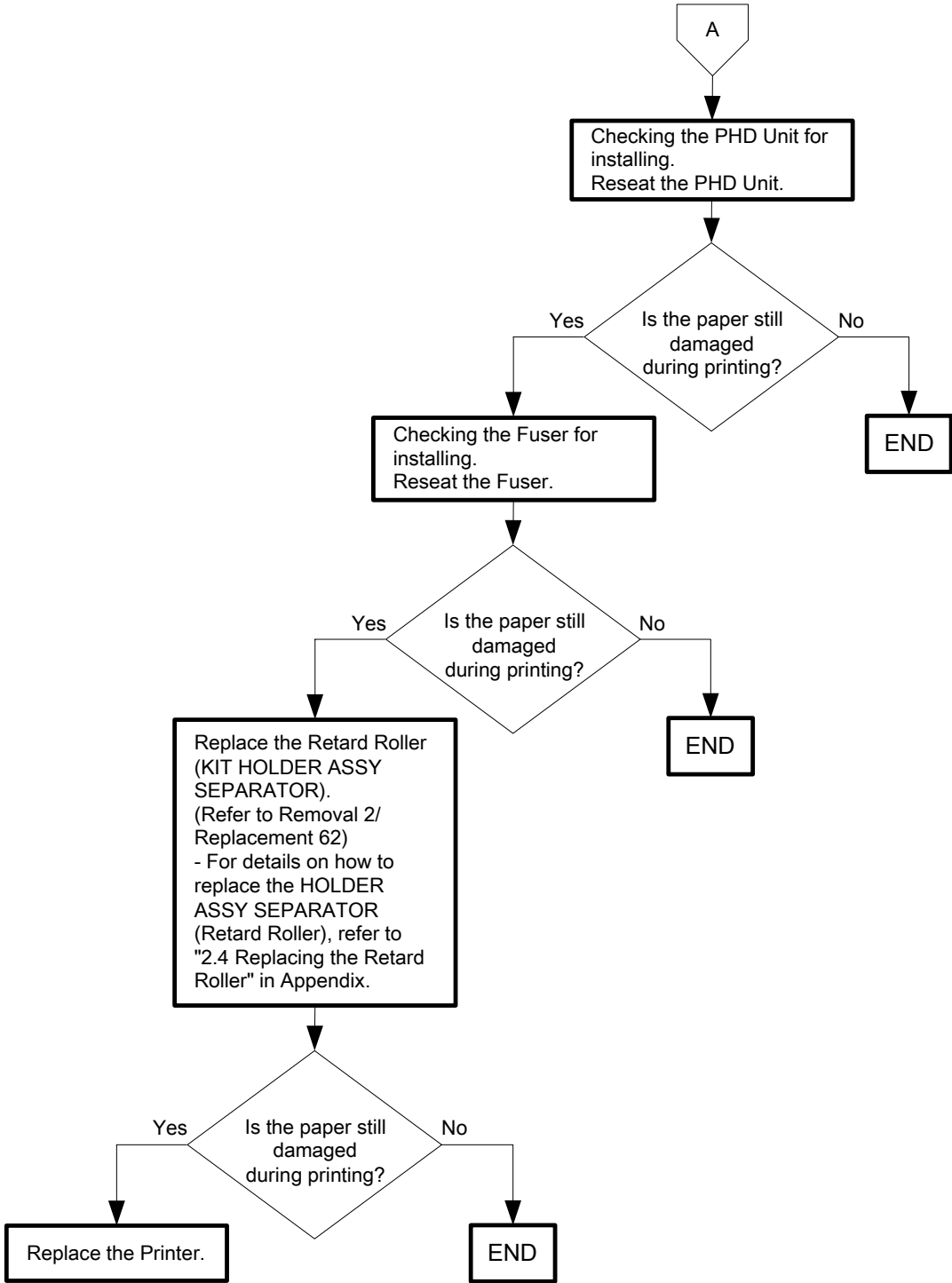




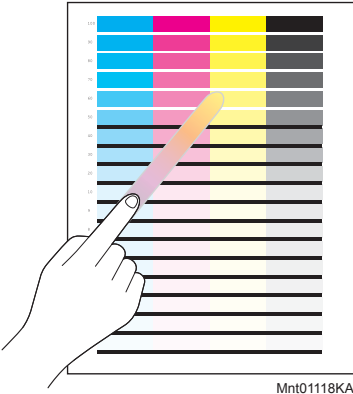


Flows 128 Page Damage



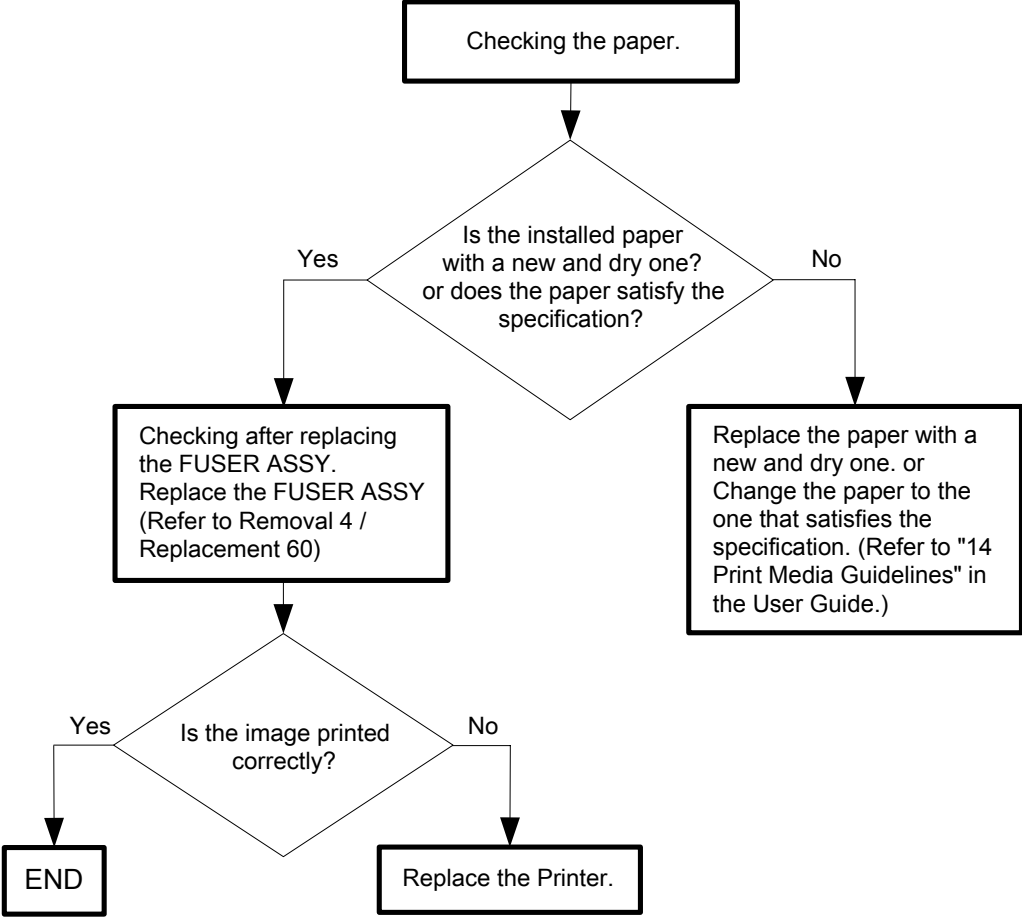


Flows 129 Unfusing

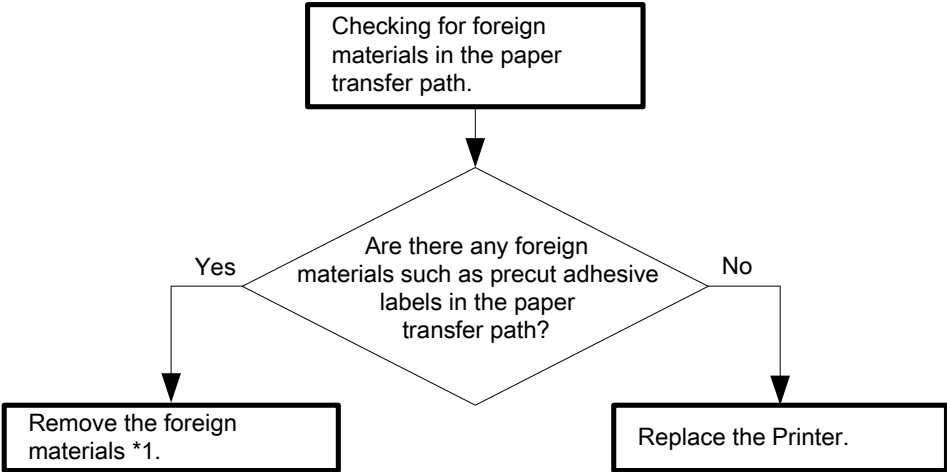
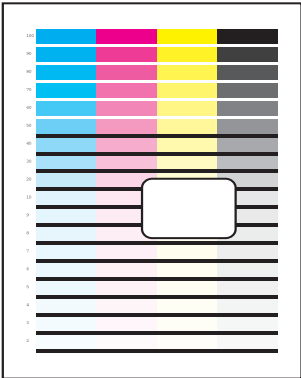


NOTE

When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

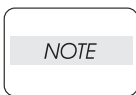


Flows 130 Label Stuck

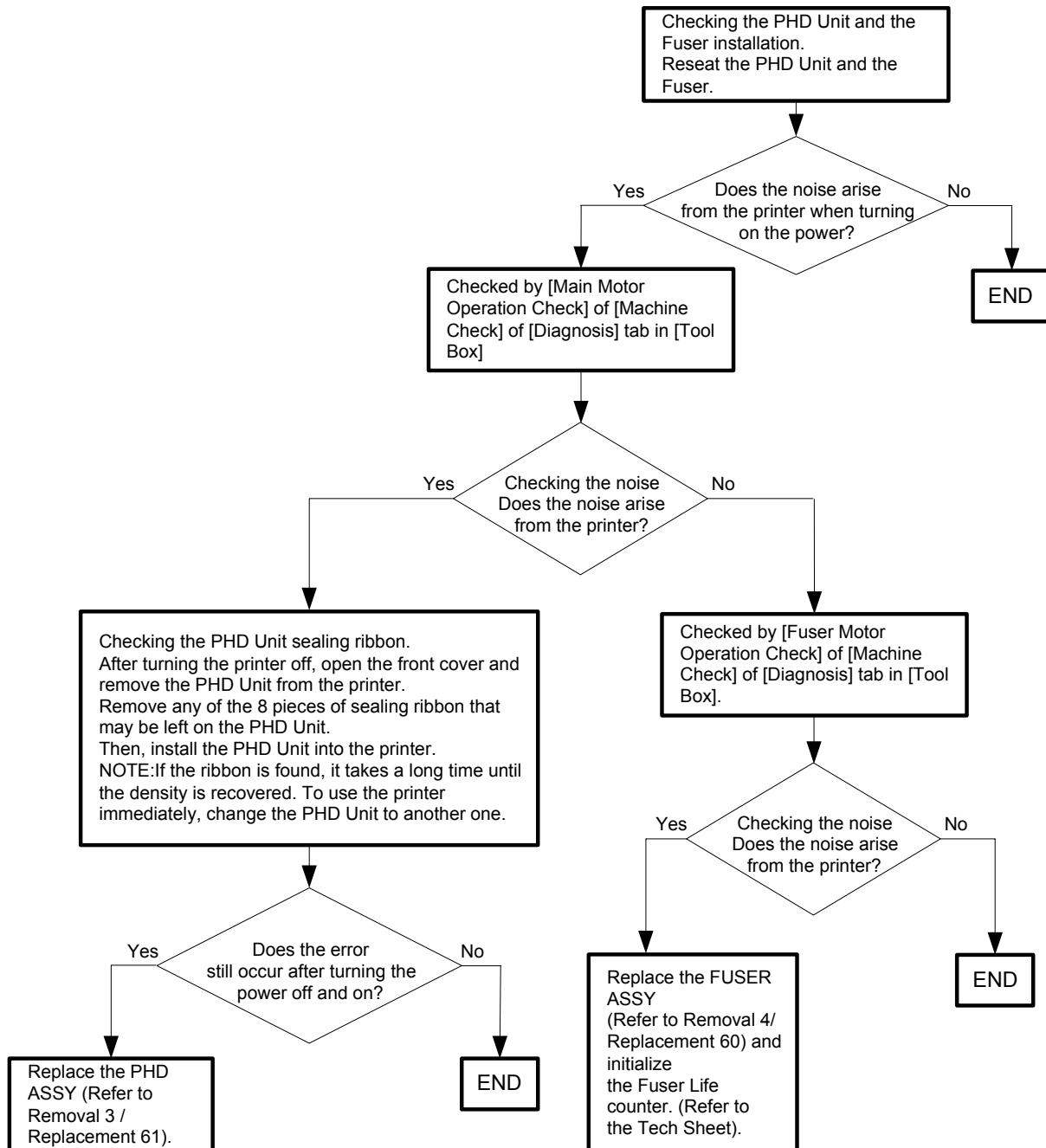


*1: If precut self-adhesive sheet labels are found, they may have been peeled off during printing. Since these self-adhesive labels remaining inside the printer may cause damages to the printer, check the label sheet for any portion that has peeled off or seems easy to peel off before loading it in the printer. Never use any self-adhesive labels that have already been peeled off.

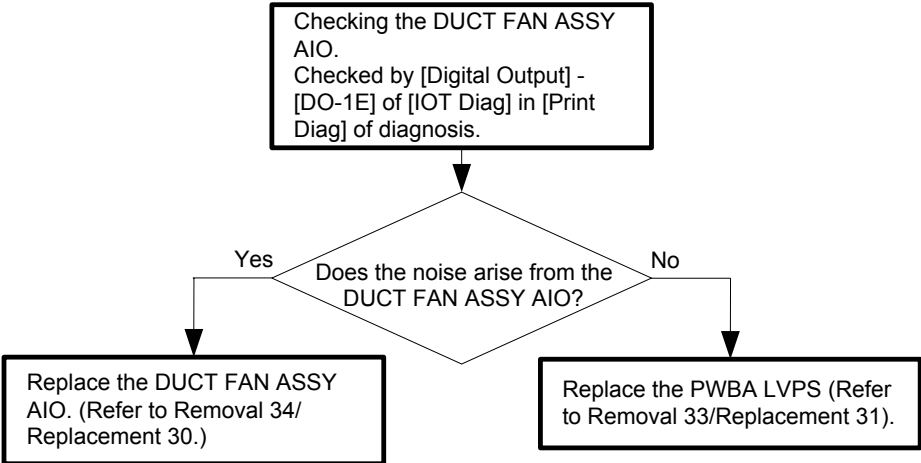
Flows 131 Noise: When Power is Turned On



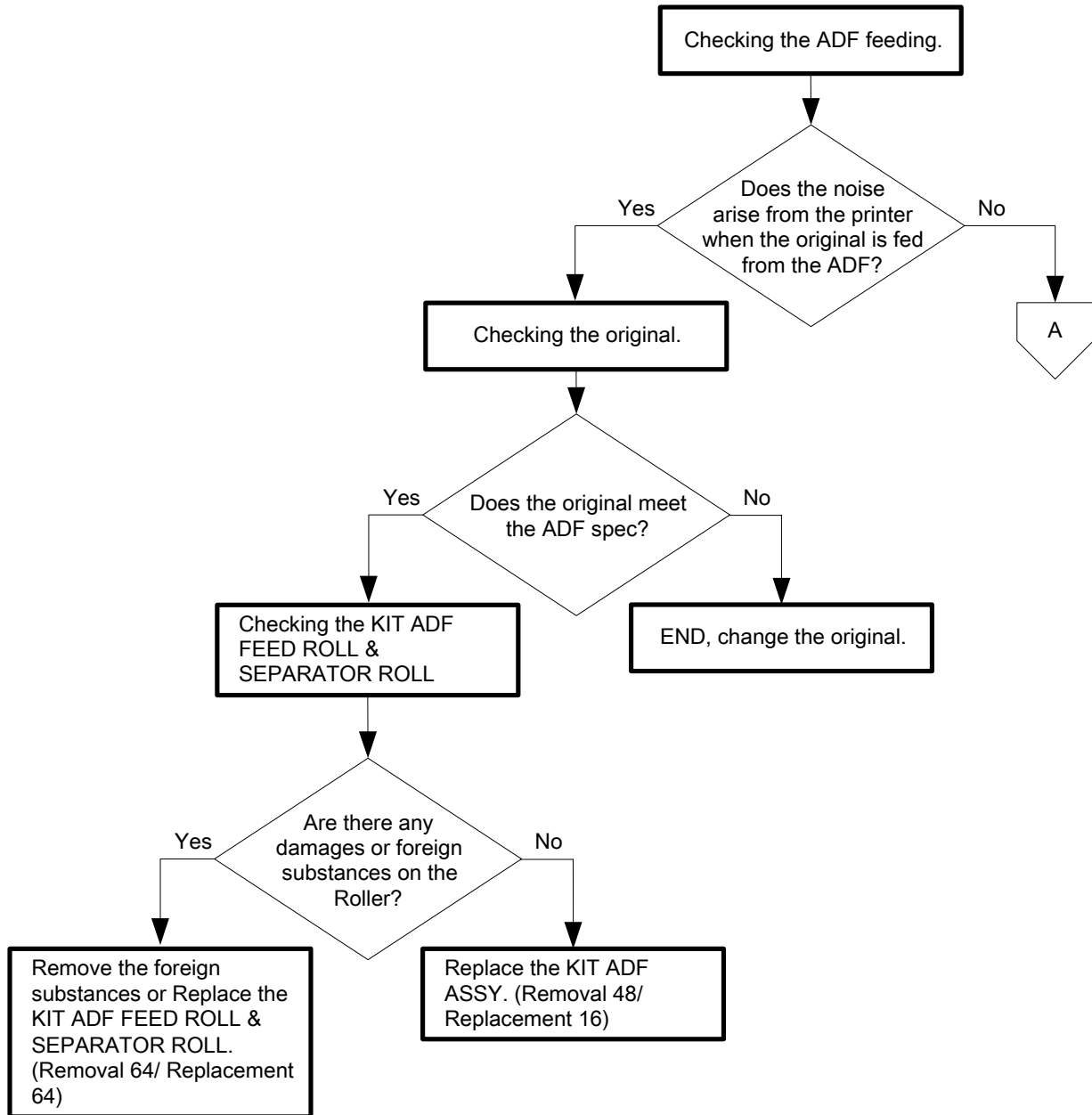
When you have replaced the fuser, initialize the life counter of the Fuser. For details, refer to the supplied technical sheet.

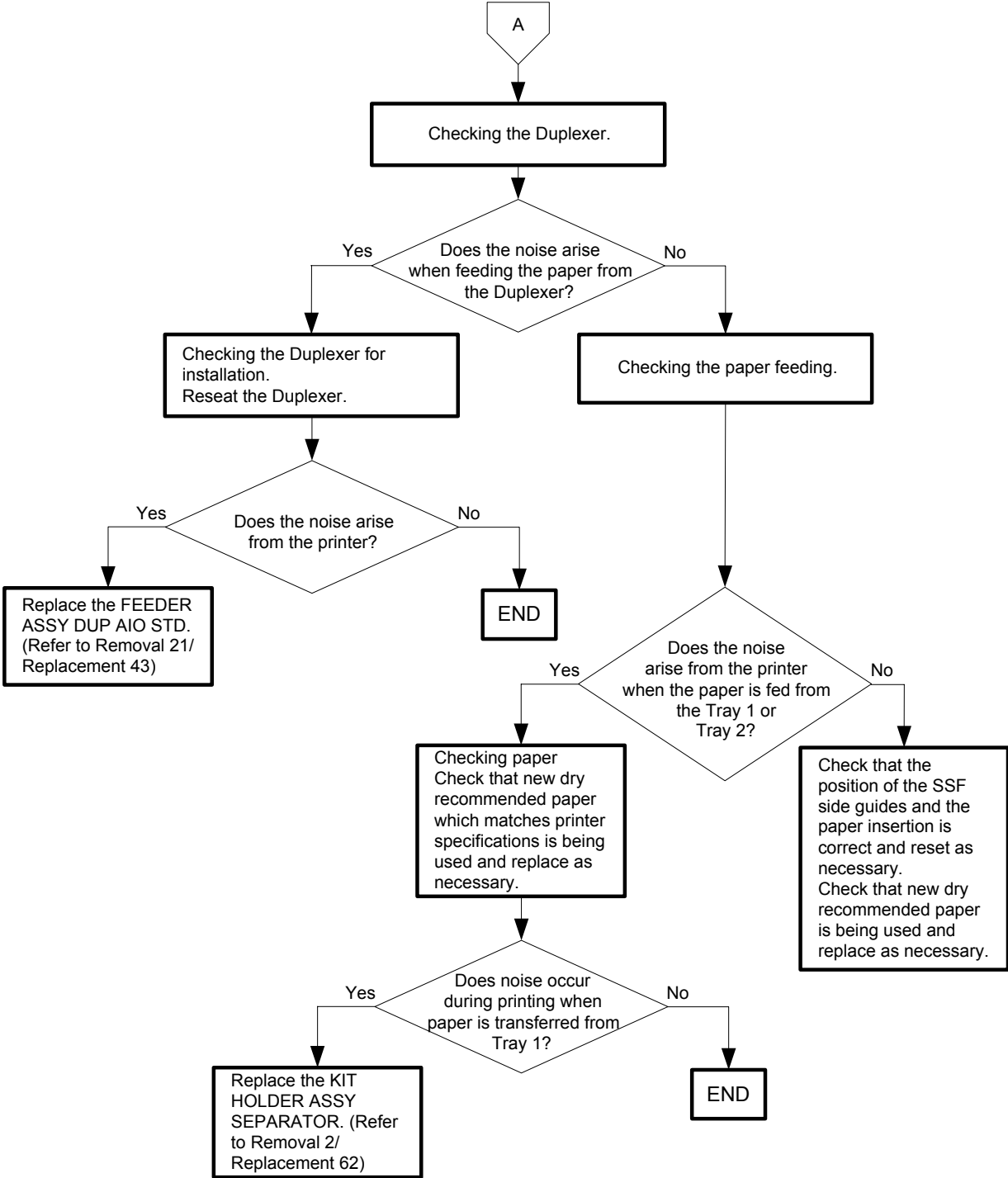


Flows 132 Noise: During Standby

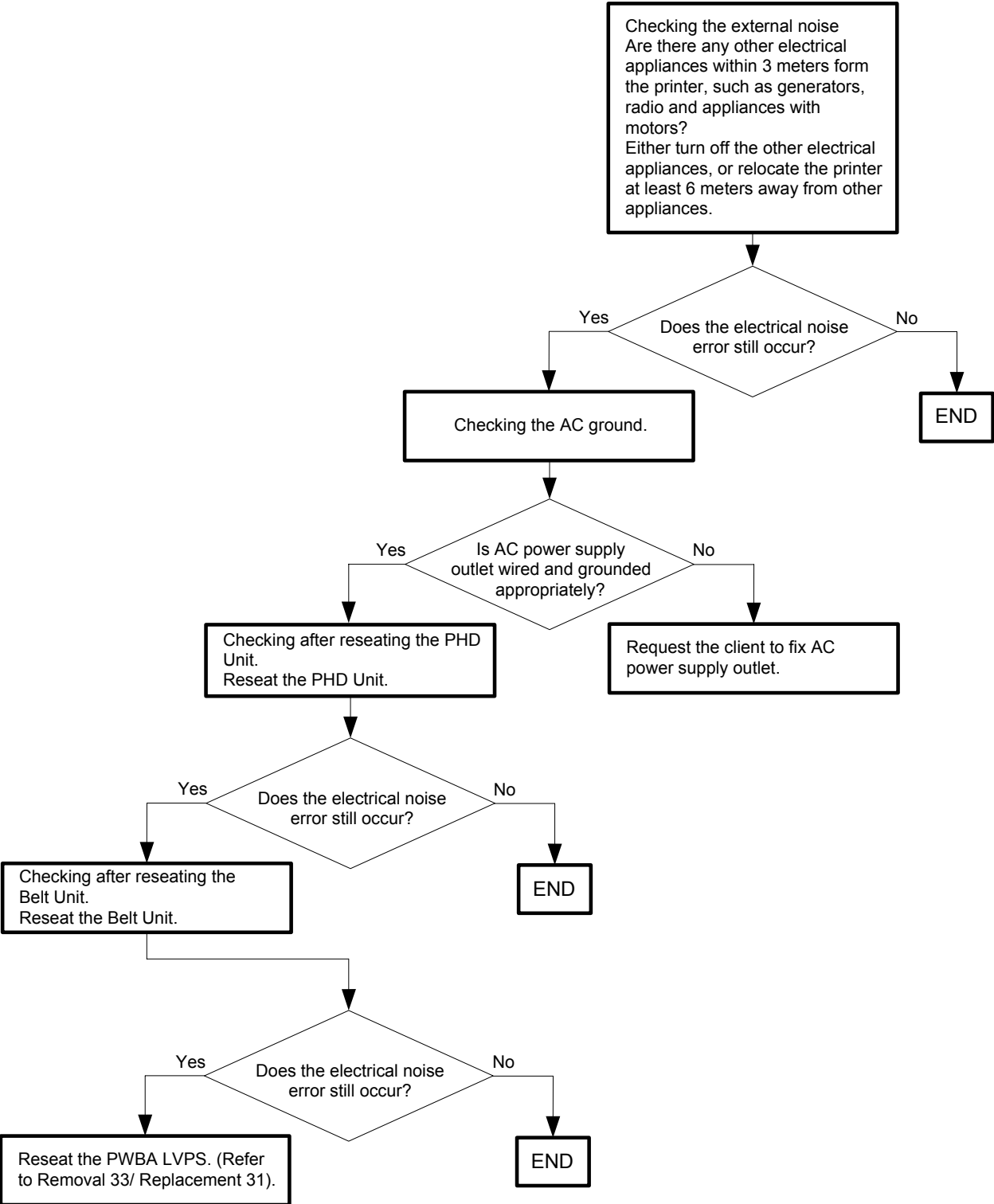


Flows 133 Noise: During Printing (Checking for other items than "power on mechanical noise")

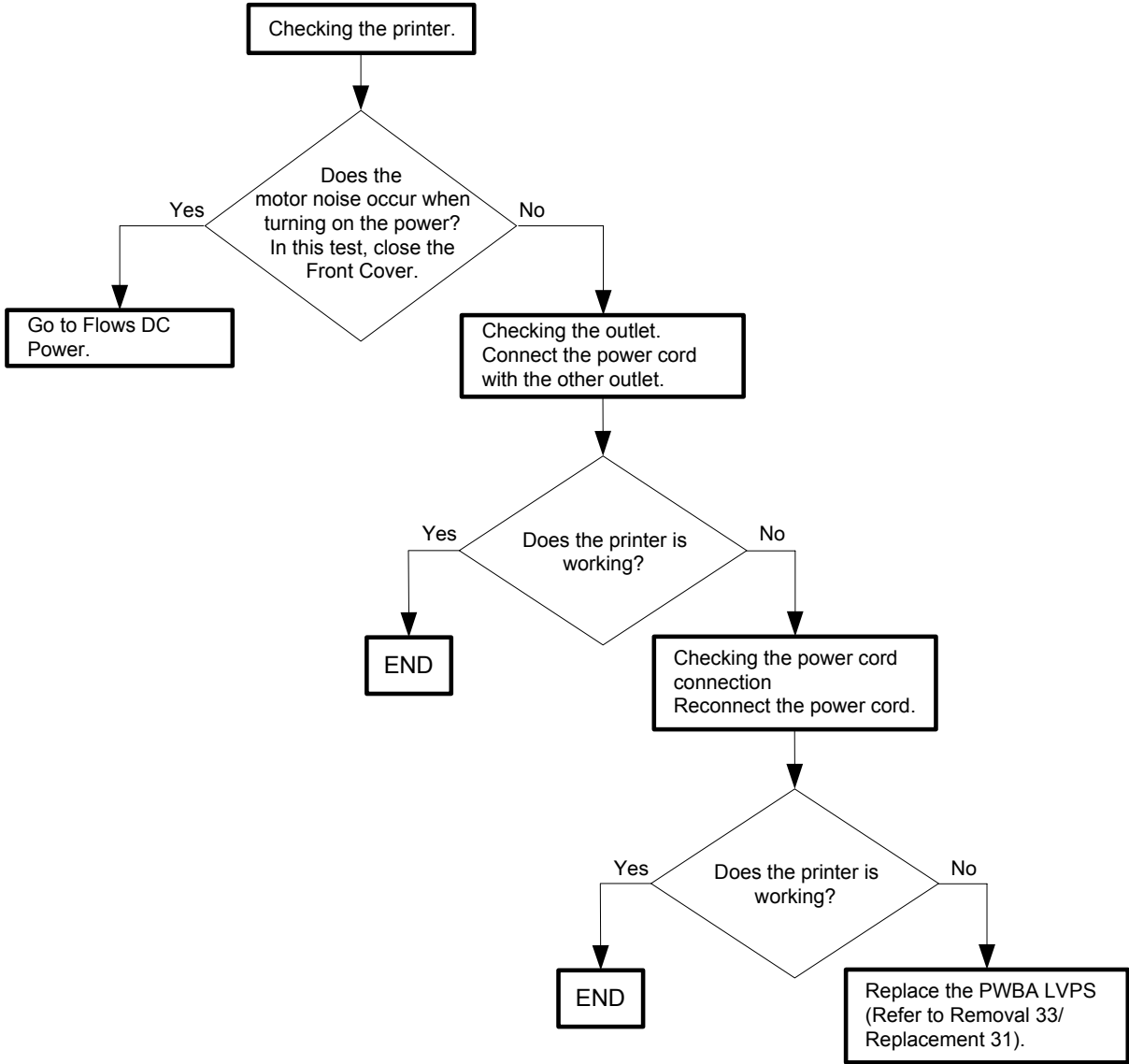




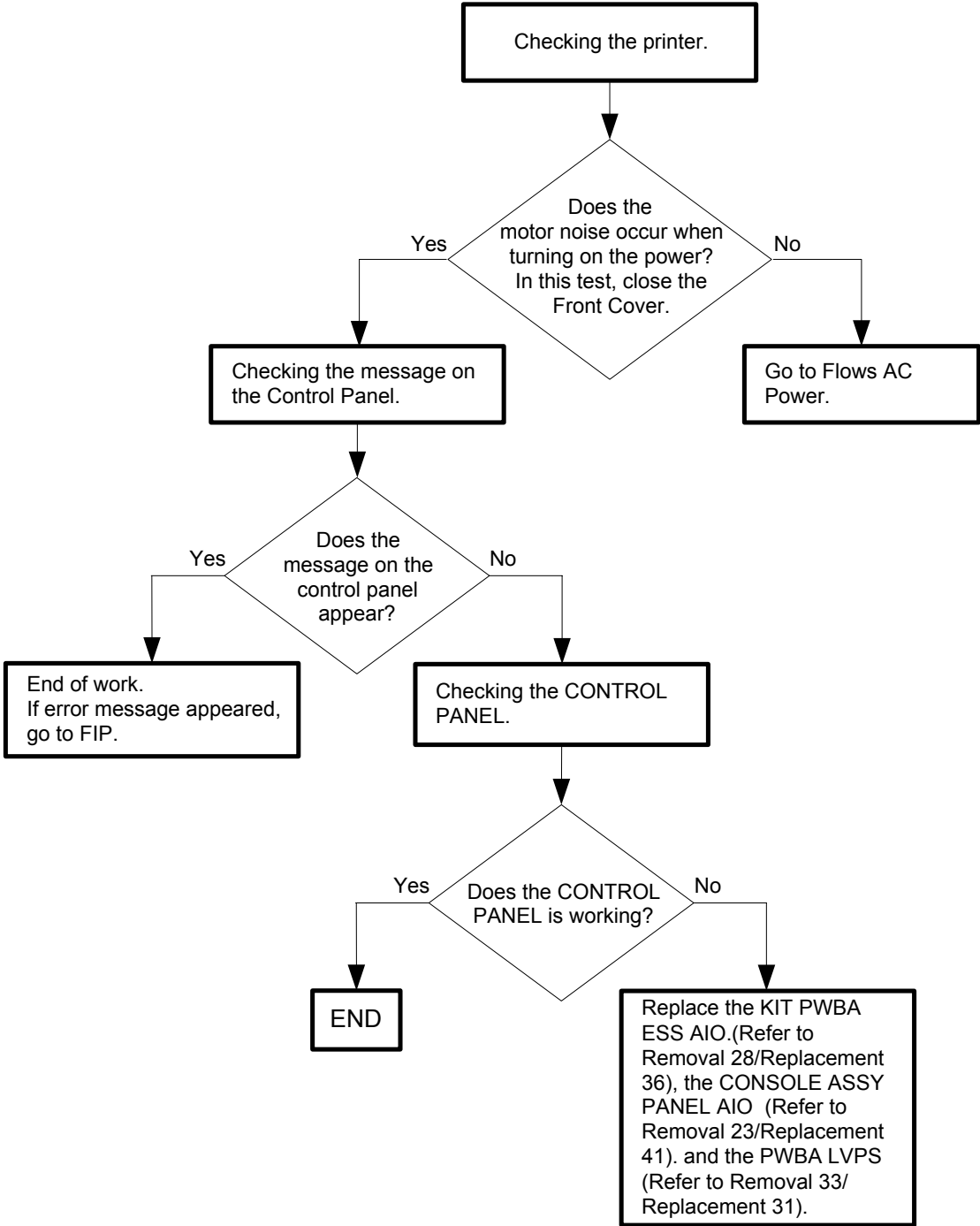
Flows 134 Electrical Noise



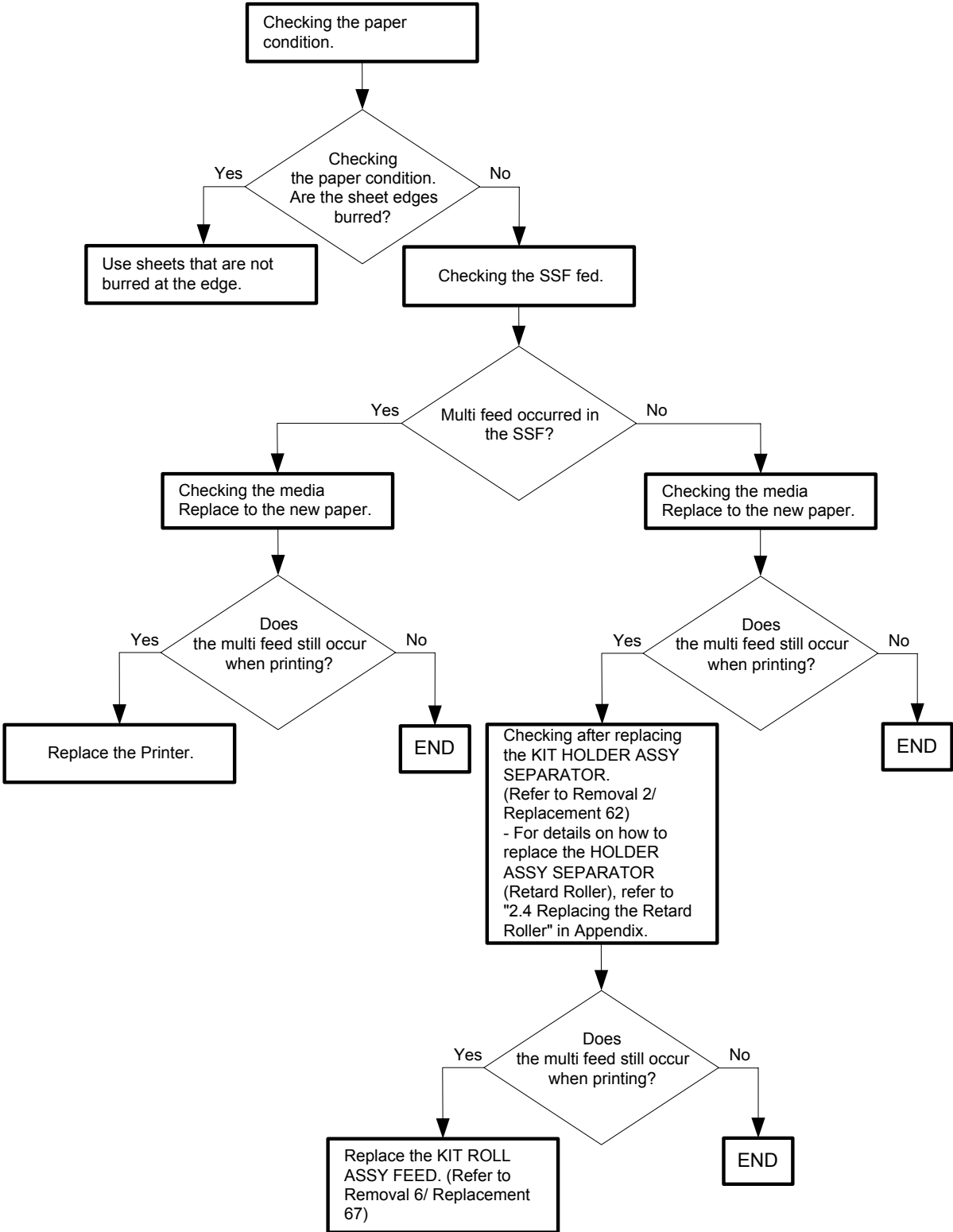
Flows 135 AC Power



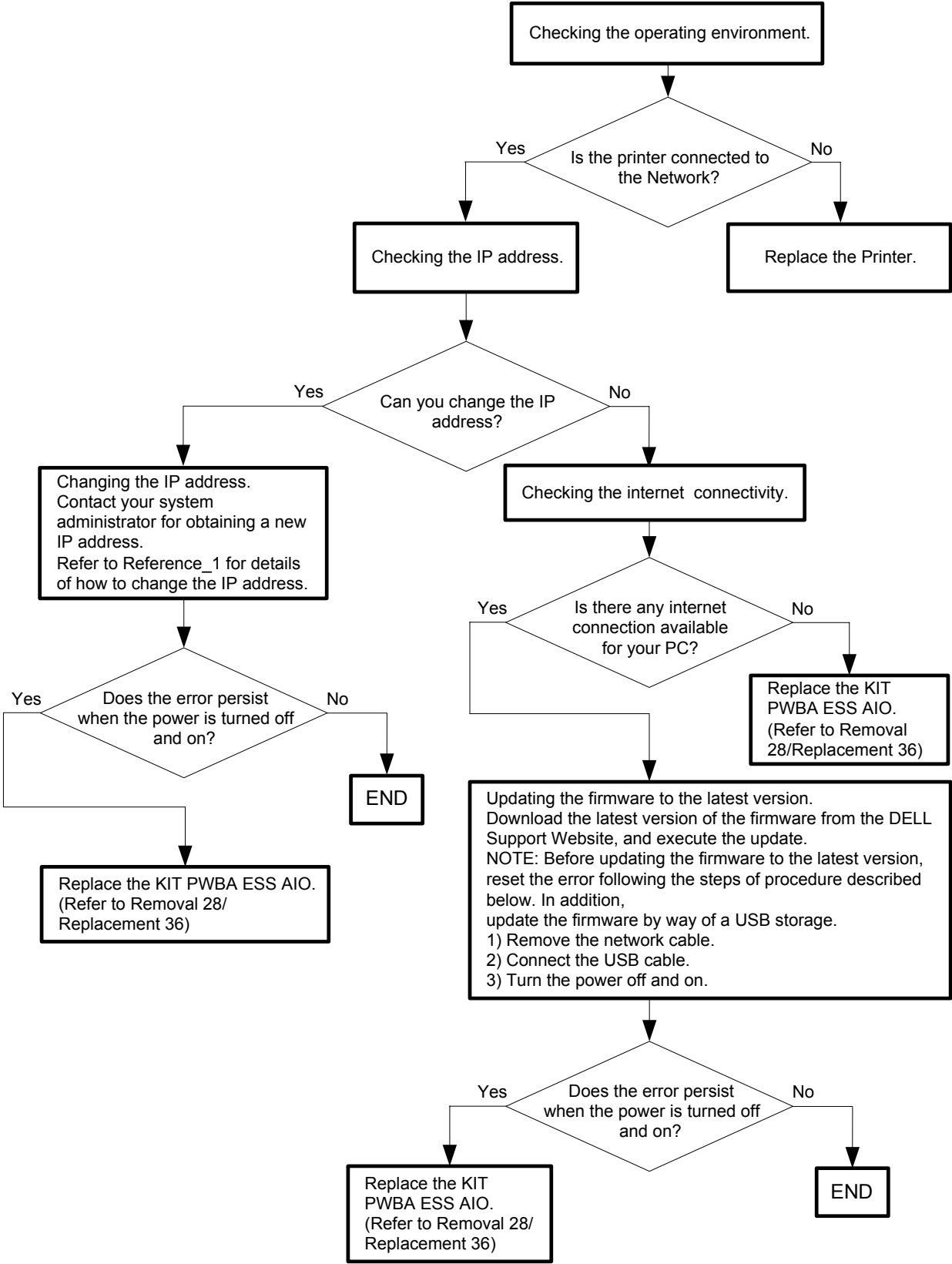
Flows 136 DC Power



Flows 137 Multiple feed



Flows 138 Control Panel Freezes

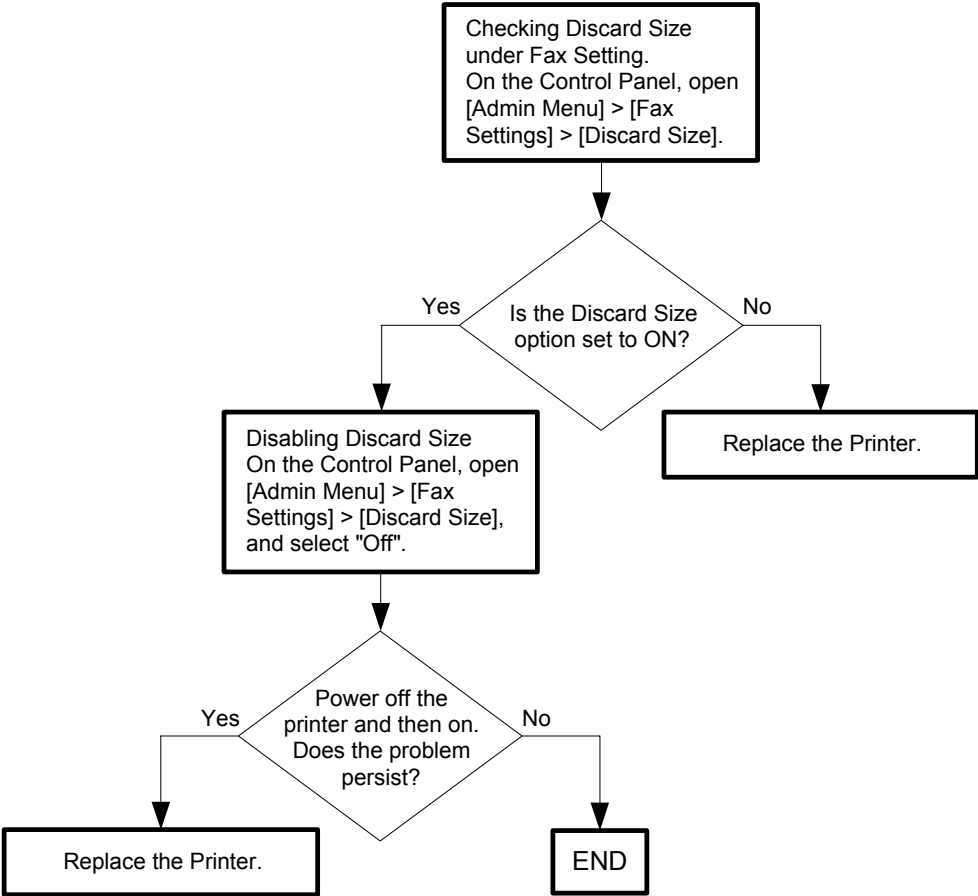


- Reference_1: Changing the IP address

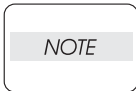
- 1) Remove the network cable, and power off the printer and then on.
- 2) Change the IP address on the Control Panel.
- 3) Plug the network cable back into the printer, and then turn the power on.
- 4) On the Control Panel, open [Admin] > [Network] > [TCP/IP], and confirm that the IP address has been changed.

Flows 139 Freezes with "Printing..." during Fax Reception

Problem: The message "Printing..." appears on the Control Panel and the printer freezes during fax reception. Also occurs when the printer is powered off and then on.

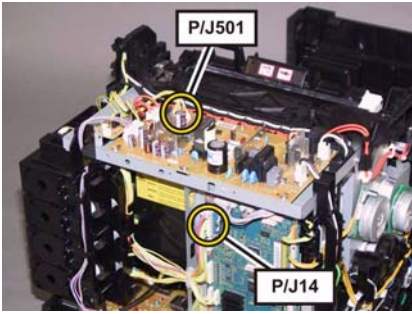


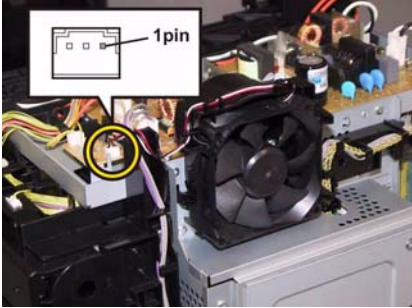
3.2 Troubleshooting for the repair center



Refer to "3.1 Troubleshooting for the call center" for details of the error.

FIP-1.1 001-360: IOT Fan Motor Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FAN (PL8.2.8) PWBA LVPS (PL8.2.12) PWBA MCU (PL8.3.6) HARNESS ASSY LVPS MAIN MG AIO (PL9.1.3)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the FAN for rotation. Does the FAN function normally? Checked by [Digital Output] - [DO-1E or DO-1F] in [IOT Diag] of diagnosis. During this check, close the COVER ASSY FRONT.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 3.
3	Check the connection between the FAN and the PWBA LVPS. Is P/J503 on the PWBA LVPS connected correctly?	Go to step 5.	Reconnect the connector P/J 503 correctly, then go to step 4.
4	Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Check the connections between the PWBA LVPS and PWBA MCU. Are P/J501 and P/J14 connected correctly? 	Go to step 7.	Reconnect the connector(s) P/J501 and P/J14 correctly, then go to step 6.
6	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
7	Checking the HARNESS ASSY LVPS MAIN MG AIO for continuity. Disconnect J501 from the PWBA LVPS. Disconnect J14 from the PWBA MCU. Is each cable of J501 <=> J14 continuous?	Go to step 8.	Replace the HARNESS ASSY LVPS MAIN MG AIO.

Step	Check	Remedy	
		Yes	No
8	<p>Checking the power to the FAN. Disconnect J503 from the PWBA LVPS. Is the voltage across P503-1pin \leftrightarrow ground on the PWBA LVPS, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?</p> 	Replace the DUCT FAN ASSY AIO. (Refer to Removal 34/ Replacement 30.)	Go to step 9.
9	<p>Checking after replacing the PWBA LVPS. Replace the PWBA LVPS. (Refer to Removal 33/ Replacement 31) Does the error still occur when the power is turned OFF and ON?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.2 003-340: IOT Firmware Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA MCU (PL8.3.6)		
1	Does the error still occur after several ON/OFF procedures of the power?	Go to step 2.	End of work. *1
2	Checking the firmware version. Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work. *1
4	Checking after replacing the PWBA MCU. Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25) Does the error still occur when the power is turned OFF and ON?	Go to Electrical Noise.	End of work.

*1: Though some kind of foreign noise would be possible cause, go to FIP Electrical Noise in Other FIP and check, to make sure.

FIP-1.3 003-356: IOT NVRAM Error

NOTE

If the error occurred after replacing the PWBA MCU, transfer the internal data of the old PWBA MCU to a new one.

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6) PWBA EEPROM (XPRO) (PL8.3.4) HARN ASSY PHD XPRO (PL9.1.11)		
1	Does the error still occur after several ON/OFF procedures of the power?	Go to step 2.	End of work. *1
2	Checking after resetting the PHD ASSY and TONER CARTRIDGES. Reseat the PHD ASSY and four TONER CARTRIDGES. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work. *1
3	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work. *1
4	Checking the connectors for connection. Check the connections between the PWBA EEPROM and PWBA MCU. Are P/J 144, and P/J 42 connected surely?	Go to step 6.	Reconnect the connector(s) P/ J42 and P/J144 surely, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the HARN ASSY PHD XPRO for continuity. Disconnect J42 from the PWBA MCU. Disconnect J144 from the PWBA EEPROM (XPRO). Is each cable of J42 <=> J144 continuous?	Go to step 7.	Replace the HARN ASSY PHD XPRO.
7	Checking the power to the PWBA EEPROM (XPRO). Disconnect J42 from the PWBA MCU. Is the voltage across P42-3pin <=> ground on the PWBA MCU, about +3.3 VDC?	Replace the PWBA EEPROM (XPRO).	Go to step 8.
8	Checking after replacing the PWBA MCU. Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25) Does the error still occur when the power is turned OFF and ON?	Go to Electrical Noise.	End of work.

*1: Though some kind of foreign noise would be possible cause, go to FIP Electrical Noise in Other FIP and check, to make sure.

FIP-1.4 004-311: IOT Duplexer Failure (2155cdn only)

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY OPTION MG AIO (PL3.1.20) PWBA MCU (PL8.3.6) HARNESS ASSY DUP STD MG AIO (PL11.1.14) FEEDER ASSY DUP AIO STD (PL11.1.1)		
1	Checking the Option Duplex for installation. Is the Option Duplex installed correctly?	Go to step 3.	Reseat the Option Duplex, then go to step 2.
2	Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the connectors for connection. Check the connections between the PWBA DUP and PWBA MCU. Are P/J27, P/J272 and P/J 601 connected surely?	Go to step 5.	Reconnect the connector(s) P/J27, P/J272 and/or P/J 601 surely, then go to step 4.
4	Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work
5	Checking the HARNESS ASSY DUP STD MG AIO for continuity. Disconnect P/J601 from the PWBA DUP. Disconnect P/J271 from the HARNESS ASSY OPTION MG AIO. Is each cable of P/J601 <=> P/J271 continuous?	Go to step 6.	Replace the HARNESS ASSY DUP STD MG AIO.
6	Checking the HARNESS ASSY OPTION MG AIO for continuity. Disconnect P/J27 from the PWBA MCU. Disconnect P/J 271 from the HARNESS ASSY DUP. Is each cable of P/J27 <=> P/J271 continuous?	Go to step 7.	Replace the HARNESS ASSY OPTION MG AIO.
7	Checking after replacing the FEEDER ASSY DUP AIO STD. Replace the FEEDER ASSY DUP AIO STD. (Refer to Removal 21/ Replacement 43) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.5 004-312: IOT Feeder Configuration Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY OPTION MG AIO (PL3.1.20) PWBA MCU (PL8.3.6) KIT FEEDER ASSY OPT MG AIO (PL12.1.99) HARNESS ASSY TRAY (PL12.3.23)		
1	Checking the Optional Feeder for installation. Is the Optional Feeder installed correctly?	Go to step 3.	Reseat the Optional Feeder, then go to step 2.
2	Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the connectors for connection. Check the connections between the PWB ASSY FEED MG AIO and PWBA MCU. Are P/J27, P/J273, and P/J419 connected surely?	Go to step 5.	Reconnect the connector(s) P/J27, P/J273 and/or P/J419 surely, then go to step 4.
4	Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Checking the HARNESS ASSY TRAY for continuity. Disconnect P/J419 from the PWB ASSY FEED MG AIO. Disconnect P/J273 from the HARNESS ASSY OPTION MG AIO. Is each cable of P/J419 <=> P/J273 continuous?	Go to step 6.	Replace the HARNESS ASSY TRAY.
6	Checking the HARNESS ASSY OPTION MG AIO for continuity. Disconnect P/J27 from the PWBA MCU. Disconnect P/J273 from the HARNESS ASSY TRAY. Is each cable of P/J27 <=> P/J273 continuous?	Go to step 7.	Replace the HARNESS ASSY OPTION MG AIO.
7	Checking after replacing the KIT FEEDER ASSY OPT MG AIO. Replace the Replace the KIT FEEDER ASSY OPT MG AIO.(Refer to Removal 67/ Replacement 68) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

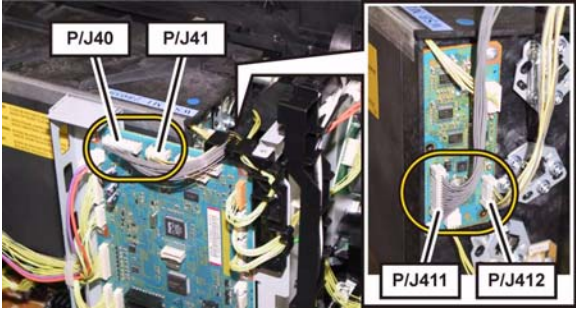
FIP-1.6 005-110 / 005-121 / 005-124: PICKUP Jam / ADF Jam / Virtual Jam

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) KIT ADF ASSY (PL10.1.97) KIT ADF FEED ROLL & SEPARATOR ROLL (PL10.1.98)		
1	Checking the document Does the document meet the ADF SPEC?	Go to step 2.	Use the platen mode or change the paper type.
2	Checking the connector connection Reseat the connector (P/J1003) on the PWBA ESS AIO. Does the error still occur when copying?	Go to step 3.	End of work.
3	Checking the ADF Is the ADF closed against platen glass completely?	Go to step 4.	Close the ADF completely.
4	Checking the paper feeding Does the ADF feed the document?	Go to step 5.	Go to step 7.
5	Checking the document path Open the ADF Cover and check the document path. Is there the foreign substance on the document path?	Remove the foreign substance.	Go to step 6.
6	Checking after replacing the KIT ADF ASSY Replace the KIT ADF ASSY.(Removal 48/Replacement 16) Does the error still occur when copying?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/Replacement 36)	End of work.
7	Checking the ADF Feed Roller installation Is the roller installed correctly? Also are they not contaminated or damaged, and rotate smoothly?	Replace the ADF ASSY. (Removal 48/Replacement 16)	Replace the KIT ADF FEED ROLL & SEPARATOR ROLL. (Removal 64/Replacement 64)

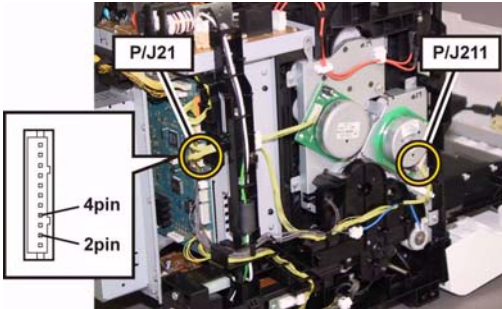
FIP-1.7 005-301: ADF Cover Open

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) KIT ADF ASSY (PL10.1.97) COVER TOP ADF (PL10.1.4)		
1	Checking the ADF Cover. Is the ADF Cover completely closed?	Go to step 2.	Close the ADF Cover.
2	Checking the COVER TOP ADF Are there any damages on the COVER TOP ADF?	Replace the COVER TOP ADF.	Go to step 3.
3	Checking the connector connection Reseat the connector (P/J1003) on the PWBA ESS AIO. Does the error still occur when copying?	Go to step 4.	End of work.
4	Checking after replacing the ADF ASSY Replace the KIT ADF ASSY.(Removal 48/Replacement 16) Does the error still occur when copying?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/Replacement 36)	End of work.

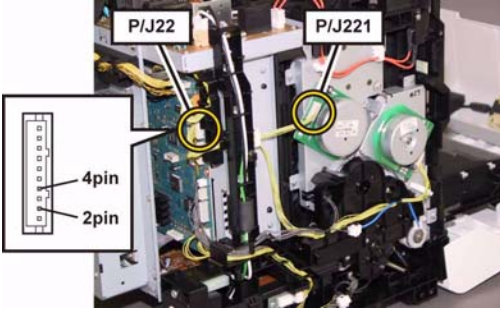
FIP-1.8 006-370: IOT ROS Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: ROS ASSY (PL4.1.1) HARN ASSY ROS RE (PL4.1.22) HARN ASSY ROS VIDEO (PL4.1.23) PWBA MCU (PL8.3.6)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after resetting the ROS ASSY. Reseat the ROS ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Check the connections between the ROS ASSY and PWBA MCU. Are P/J40, P/J41, P/J411 and P/J412 connected correctly? 	Go to step 6.	Reconnect the connector(s) P/J40, P/J41, P/J411 and/or P/J412 correctly, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the HARN ASSY ROS RE for continuity. Disconnect P/J40 from the PWBA MCU. Disconnect P/J411 from the ROS ASSY. Is each cable of J40 <=> J411 continuous?	Go to step 7.	Replace the HARN ASSY ROS RE.
7	Checking the HARN ASSY ROS VIDEO for continuity. Disconnect J41 from the PWBA MCU. Disconnect J412 from the ROS ASSY. Is each cable of J41 <=> J412 continuous?	Go to step 8.	Replace the HARN ASSY ROS VIDEO.
8	Checking after replacing the KIT ROS. Replace the KIT ROS. (Refer to Removal 56/Replacement 8.) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.9 007-340: IOT Main Motor Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: DRIVE ASSY MAIN (PL7.1.2) PWBA MCU (PL8.3.6) HARNESS ASSY MAIN MOT MG AIO (PL9.1.7)		
1	Does the error occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the Main Motor for rotation. Does the Main Motor function normally? - PC Operation : Checked by [Main Motor Operation Check] of the [Machine Check] in Tool Box. - Panel Operation : Checked by [Digital Output]-[DO-0] of [IOT Diag] in diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 4.
4	Checking the connectors of the MAIN MOTOR for connection. Check the connections between the PWBA MCU and DRIVE ASSY MAIN. Are P/J21 and P/J211 connected correctly? 	Go to step 6.	Reconnect the connector(s) P/J21 and/or P/J211 correctly, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the HARNESS ASSY MAIN MOT MG AIO for continuity. Disconnect J21 from the PWBA MCU. Disconnect J211 from the DRIVE ASSY MAIN. Is each cable of J21 <=> J211 continuous?	Go to step 7.	Replace the HARNESS ASSY MAIN MOT MG AIO.
7	Checking after resetting the DRIVE ASSY MAIN. Reseat the DRIVE ASSY MAIN. Does the error still occur when the power is turned OFF and ON?	Go to step 8.	End of work.
8	Checking the power to the DRIVE ASSY MAIN. Disconnect J21 from the PWBA MCU. Are the voltages across J21-2pin/J21-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?	Replace the KIT DRIVE ASSY MAIN. (Refer to Removal 42/ Replacement 22.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

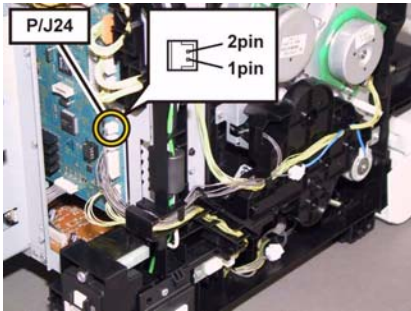
FIP-1.10 007-341: IOT Sub Motor Failure

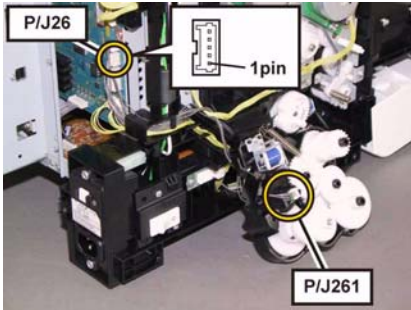
Step	Check	Remedy	
		Yes	No
	Possible causative parts: DRIVE ASSY SUB (PL7.1.1) PWBA MCU (PL8.3.6) HARNESS ASSY SUB MOT MG AIO (PL9.1.8)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after resetting the FUSER ASSY and PHD ASSY Reseat the FUSER ASSY and PHD ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the Sub Motor for rotation. Does the Sub Motor function normally? - PC Operation : Checked by [Fuser Motor Operation Check] of the [Machine Check] in Tool Box. - Panel Operation : Checked by [Digital Output]-[DO-5] of [IOT Diag] in diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 4.
4	Checking the connectors of the SUB MOTOR for connection. Check the connections between the PWBA MCU and DRIVE ASSY SUB. Are P/J22 and P/J221 connected correctly? 	Go to step 6.	Reconnect the connector(s) P/J22 and/or P/J221 correctly, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the HARNESS ASSY SUB MOT MG AIO for continuity. Disconnect J22 from the PWBA MCU. Disconnect J221 from the DRIVE ASSY SUB. Is each cable of J22 <=> J221 continuous?	Go to step 7.	Replace the HARNESS ASSY SUB MOT MG AIO.
7	Checking after resetting the DRIVE ASSY SUB. Reseat the DRIVE ASSY SUB. Does the error still occur when the power is turned OFF and ON?	Go to step 8.	End of work.
8	Checking the power to the DRIVE ASSY SUB. Disconnect J22 from the PWBA MCU. Are the voltages across J22-2pin/J22-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?	Replace the DRIVE ASSY SUB. (Refer to Removal 43/ Replacement 21.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.11 007-344: Option Feeder Motor Failure

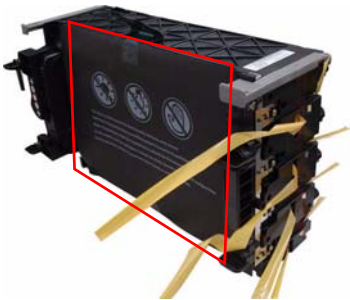
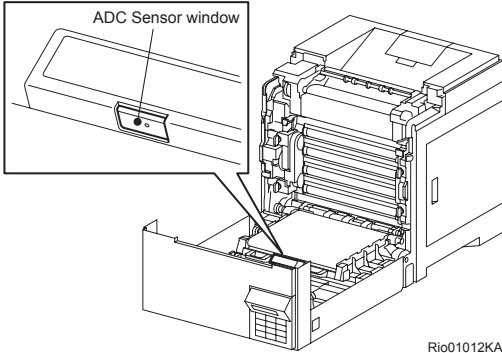
Step	Check	Remedy	
		Yes	No
	Possible causative parts: MOTOR ASSY SUB (PL12.2.16) PWB ASSY FEED MG AIO (PL12.2.1) HARNESS ASSY TRAY MOT (PL12.2.2) KIT FEEDER ASSY OPT MG AIO (PL12.1.99)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the connectors of the MOTOR ASSY SUB for connection. Check the connections between the PWB ASSY FEED MG AIO and MOTOR ASSY SUB. Are P/J422 and P/J4221 connected correctly?	Go to step 4.	Reconnect the connector(s) P/J422 and/or P/J4221 correctly, then go to step 3.
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking the HARNESS ASSY TRAY MOT for continuity. Disconnect J422 from the PWB ASSY FEED MG AIO. Disconnect J4221 from the MOTOR ASSY SUB. Is each cable of J422 <=> J4221 continuous?	Go to step 5.	Replace the HARNESS ASSY TRAY MOT.
5	Checking after resetting the MOTOR ASSY SUB. Reseat the MOTOR ASSY SUB. Does the error still occur when the power is turned OFF and ON?	Replace the KIT FEEDER ASSY OPT MG AIO. (Refer to Removal 67/ Replacement 68)	End of work.

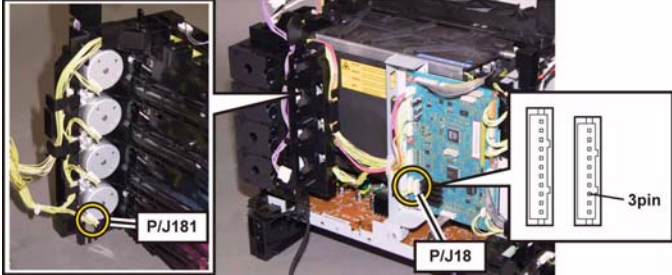
FIP-1.12 007-371 / 007-372: IOT K Mode Solenoid Error 1/2

Step	Check	Remedy	
		Yes	No
	Possible causative parts: DRIVE ASSY PH (PL7.1.4) PWBA MCU (PL8.3.6) HARNESS ASSY KSNR REGCL MG AIO (PL9.1.9)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the K Mode Solenoid (Color Mode Switching Solenoid) for operation. Does the K Mode Solenoid function normally? Checked by [Digital Output] - [DO-a] in [IOT Diag] of diagnosis. During this check, close the COVER ASSY FRONT. Does the K Mode Solenoid click sound arise from the DRIVE ASSY PH, when the K Mode Solenoid check is performed?	Go to step 3.	Go to step 4.
3	Checking after resetting the DRIVE ASSY PH. Reseat the DRIVE ASSY PH. Does the error still occur when the power is turned OFF and ON?	Go to step 8.	End of work.
4	Checking the connector of the K Mode Solenoid in the DRIVE ASSY PH for connection. Check the connection between the PWBA MCU and K Mode Solenoid. Is P/J24 connected correctly? 	Go to step 6.	Reconnect the connector P/J24 correctly, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the power to the K Mode Solenoid. Disconnect J24 from the PWBA MCU. Is the voltage across P24-1pin \leftrightarrow ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?	Go to step 7.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
7	Checking the K Mode Solenoid for resistance. Disconnect P/J24 from the PWBA MCU. Is the resistance across J24-1 and J24-2 about 80 to 110-ohm?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)

Step	Check	Remedy	
		Yes	No
8	<p>Checking the connectors of the K Mode Sensor in the DRIVE ASSY PH for connection Check the connections between the PWBA MCU and K Mode Sensor. Are P/J26 and P/J261 connected correctly?</p> 	Go to step 10.	Reconnect the connector(s) P/J26 and/or P/J261 correctly, then go to step 9.
9	Does the error still occur when the power is turned OFF and ON?	Go to step 10.	End of work.
10	<p>Checking the HARNESS ASSY KSNR REGCL MG AIO for continuity. Disconnect J26 from the PWBA MCU. Disconnect J261 from the K Mode Sensor. Is each cable of J26 <=> J261 continuous?</p>	Go to step 11.	Replace the HARNESS ASSY KSNR REGCL MG AIO.
11	<p>Checking the power to the K Mode Sensor. Disconnect J26 from the PWBA MCU. Is the voltage across P26-1pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 12.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
12	<p>Checking the K Mode Sensor for operation. Remove the DRIVE ASSY PH from the printer once, but P/J261 and P/J24 should be connected. Checked by [Digital Input]-[DI-04] in [IOT Diag] of diagnosis. During this check, close the COVER ASSY FRONT MG. Does the status (L or H) change, when a piece of paper is inserted into the gap of the K Mode Sensor?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)

FIP-1.13 009-340: IOT CTD (ACD) Sensor Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) DISPENSER ASSY (PL5.1.1) FRAME ASSY MOT (PL5.1.2) MOTOR ASSY DISP (PL5.1.3) TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) HARN ASSY TNR MOT (PL5.1.25) TRANSFER ASSY (PL6.1.7) PWBA MCU (PL8.3.6)		
1	Checking the protection sheet staying. Is there the protection sheet on the PHD ASSY? 	Remove the protection sheet.	Go to step 2.
2	Checking the CTD (ADC) Sensor Window. Open the COVER ASSY FRONT. Is the CTD (ADC) Sensor window dirty?  <small>Rio01012KA</small>	Go to step 3.	Go to step 4.
3	Turn off the power, and gently wipe the CTD (ADC) Sensor window with a clean dry cloth or cotton swab. After wiping the window, close the COVER ASSY FRONT. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after resetting the TONER CARTRIDGE (Y, M, C and K). Reseat the TONER CARTRIDGE (Y, M, C and K), and check that the lock key is in the lock position. Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.

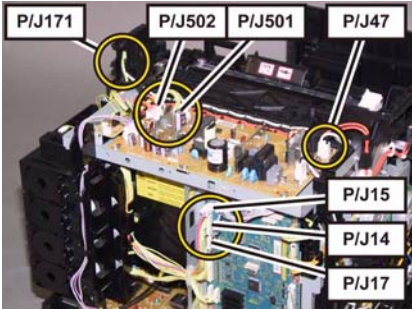
Step	Check	Remedy	
		Yes	No
5	<p>Checking the DISPENSE MOTOR (Y, M, C and K) for rotation.</p> <p>Does the DISPENSE MOTOR (Y, M, C and K) function normally?</p> <p>Checked by [Digital Output] - [DO-21(Y),DO-23(M),DO-25(C),DO-27(K)] in [IOT Diag] of diagnosis.</p> <p>During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).</p>	Go to step 6.	Go to step 7.
6	<p>Checking the gears of the DISPENSER ASSY for shape and operation.</p> <p>Are the shape and operation of the gears of the DISPENSER ASSY normal?</p>	Go to step 11.	Replace the defective gear(s) or DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.)
7	<p>Checking the connector for connection.</p> <p>Check the connectors between the PWBA MCU and DISPENSE MOTOR (Y, M, C and K).</p> <p>Are P/J18 and P/J181(Y)/P/J182(M) connected correctly?</p> <p>Are P/J19 and P/J191(C)/P/J192(K) connected correctly?</p> <p>Example: For Yellow</p> 	Go to step 9.	Reconnect the connector(s) P/J18 and P/J181 surly, then go to step 8. or reconnect the connector(s) P/J19 and P/J191 surly, then go to step 8.
8	Does the error still occur when the power is turned OFF and ON?	Go to step 9.	End of work.
9	<p>Checking the HARN ASSY TNR MOT for continuity.</p> <p>Disconnect J18 from the PWBA MCU.</p> <p>Disconnect J181(Y)/J182(M)/J191(C)/J192(K) from the DISPENSE MOTOR (YMCK) MOT.</p> <p>Is each cable of J18 <=> J181/182 continuous? or Is each cable of J19 <=> J191/192 continuous?</p>	Go to step 10.	Replace the HARN ASSY TNR MOT.
10	<p>Checking the power to TNR (Y) MOT (MOTOR ASSY DISP).</p> <p>Disconnect J18 from the PWBA MCU.</p> <p>Is the voltage across P18-3pin <=> ground on PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed.</p>	Replace the MOTOR ASSY DISP or FRAME ASSY MOT.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
11	<p>Checking after resetting the PHD ASSY.</p> <p>Reseat the PHD ASSY.</p> <p>Does the error still occur when the power is turned OFF and ON?</p>	Go to step 12.	End of work.
12	<p>Checking after replacing the TONER CARTRIDGE (Y, M, C or K).</p> <p>Replace the TONER CARTRIDGE (Y, M, C orK), and check that the lock key is in the lock position. (Refer to Removal 5/ Replacement 59.)</p> <p>Does the error still occur when the power is turned OFF and ON?</p>	Go to step 13.	End of work.

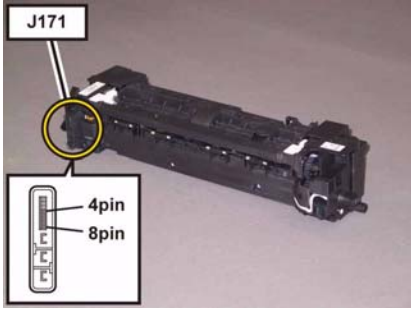
Step	Check	Remedy	
		Yes	No
13	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Does the error still occur when the power is turned OFF and ON?	Go to step 14.	End of work.
14	Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Does the error still occur when the power is turned OFF and ON?	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	End of work.

FIP-1.14 009-360 / 009-361 / 009-362 / 009-363: IOT Toner (YMCK) CRUM Comm Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) CONNECTOR CRUM (PL5.1.14) PWBA MCU (PL8.3.6) HARN ASSY TONER CRUM (PL5.1.26)		
1	Checking the TONER CARTRIDGE (Y, M, C or K) for installing. Reseat the TONER CARTRIDGE (Y, M, C or K). Does the error still occur when the power is turned off and on?	Go to step 2.	End of work.
2	Checking the connectors for connection. Check the connections between the PWBA MCU and CONNECTOR CRUM (Y, M, C or K). Are P/J31 and P/J311(Y) / P/J312 (M) / P/J313(C) / P/J314 (K) connected surely?	Go to step 4.	Reconnect the connector(s) surely, then go to step 3.
3	Does the error still occur when the power is turned off and on?	Go to step 4.	End of work.
4	Checking the HARN ASSY TONER CRUM for continuity. Disconnect P/J11 from the PWBA MCU. Disconnect P/J311(Y) / P/J312 (M) / P/J313(C) / P/J314 (K) from the CONNECTOR CRUM (YMCK). Is each cable of P/J31 <=> P/J311(Y) / P/J312 (M) / P/J313(C) / P/J314 (K) continuous?	Go to step 5.	Replace the HARN ASSY TONER CRUM.
5	Checking the output power of CONNECTOR CRUM (Y, M, C or K). Disconnect P/J31 on the PWBA MCU. Is the voltage across ground <=> J31-3(Y)/7(M)/11(C)/ 15(K) pin on the PWBA MCU, about +3.3VDC?	Replace the DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.)	Go to step 6.
6	Checking after the TONER CARTRIDGE (Y, M, C or K). Replace the TONER CARTRIDGE (Y, M, C or K). Does the error still occur when the power is turned off and on?	Replace the KIT PWBA MCU (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.15 010-317: IOT Fuser Detached

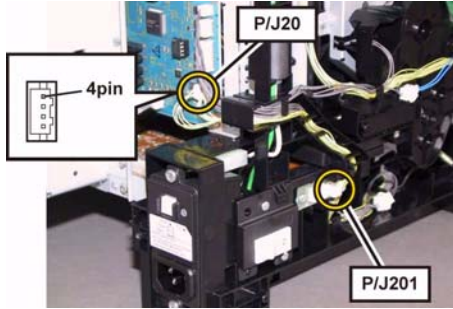
Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) HARNESS ASSY FUSER MG AIO (PL6.1.2) PWBA MCU (PL8.3.6)		
1	Checking after resetting the FUSER ASSY. Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the connectors for connection. Remove the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Check the connections between the PWBA MCU (P/J17) and FUSER ASSY (P/J171). Check the connections between the FUSER ASSY (P/J171) and PWBA LVPS (P/J47). Check the connections between the PWBA LVPS (P/J501 and P/J502) and PWBA MCU (P/J14 and P/J15). Are these connectors connected correctly? 	Go to step 4.	"Reconnect the connector(s) P/J17, P/J47, P/J171, P/J501, P/J502, P/J14 and/or P/J15 correctly, then go to step 3."
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking the HARNESS ASSY FUSER MG AIO for continuity. Disconnect J17 from the PWBA MCU. Disconnect J47 from the PWBA LVPS. Is each cable of J17 and J47 <=> P171 continuous? NOTE: P171 is attached to the frame.	Go to step 5.	Replace the HARNESS ASSY FUSER MG AIO.

Step	Check	Remedy	
		Yes	No
5	<p>Checking the resistances of Temp. Sensor in the FUSER ASSY. Remove the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Check the resistances across the following pins of the removed FUSER ASSY. J171-5pin <=> J171-4pin J171-6pin <=> J171-8pin J171-6pin <=> J171-7pin Can the resistances be measured? (The resistances are 7 k-ohm at 180 degrees C).</p> 	Go to step 6.	<p>Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/Replacement 60) After replacement, be sure to clear the life counter value.</p>
6	<p>Checking after the PWBA LVPS. Replace the PWBA LVPS.(Refer to Removal 33/ Replacement 31) Does the error still occur when the power is turned off and on?</p>	Replace the KIT PWBA MCU (Refer to Removal 39/ Replacement 25)	End of work.

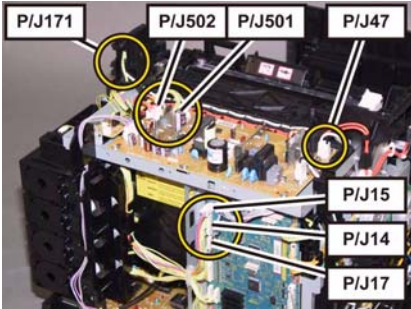
FIP-1.16 010-351: IOT Fuser Life Over

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) PWBA MCU (PL8.3.6)		
1	Checking the life counter value of the FUSER ASSY. Does the life counter value show the near of the end?	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/Replacement 60) After replacement, be sure to clear the life counter value.	Go to step 2.
2	Checking after resetting the FUSER ASSY. Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the FUSER ASSY. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60) Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON? NOTE: After replacement, be sure to clear the life counter value.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.17 010-354: IOT Environment Sensor Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: SENSOR HUM (PL8.1.10) PWBA MCU (PL8.3.6) HARNESS ASSY L SIDE MG AIO (PL3.1.18)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after resetting the SENSOR HUM. Reseat the SENSOR HUM. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J20 from the PWBA MCU. Disconnect J201 from the SENSOR HUM. Is each cable of J20 <=> J201 continuous? 	Go to step 4.	Replace the HARNESS ASSY L SIDE MG AIO.
4	Checking the power to SENSOR HUM. Disconnect the connector of J20 from the PWBA MCU. Is the voltage across P20-4pin <=> ground on the PWBA MCU, about +5 VDC?	Replace the SENSOR HUM. (Refer to Removal 16/ Replacement 48.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.18 010-377: IOT Fuser Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) HARNESS ASSY FUSER MG AIO (PL6.1.2) PWBA LVPS (PL8.2.12) PWBA MCU (PL8.3.6) HARNESS ASSY LVPS MAIN MG AIO (PL9.1.3)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after resetting the FUSER ASSY. Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the connectors for connection. Remove the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Check the connections between the PWBA MCU (P/J17) and FUSER ASSY (P/J171). Check the connections between the FUSER ASSY (P/J171) and PWBA LVPS (P/J47). Check the connections between the PWBA LVPS (P/J501 and P/J502) and PWBA MCU (P/J14 and P/J15). Are these connectors connected correctly? 	Go to step 5.	"Reconnect the connector(s) P/J17, P/J47, P/J171, P/J501, P/J502, P/J14 and/or P/J15 correctly, then go to step 4."
4	Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Checking the HARNESS ASSY FUSER MG AIO for continuity. Disconnect J17 from the PWBA MCU. Disconnect J47 from the PWBA LVPS. Is each cable of J17 and J47 \Leftrightarrow P171 continuous? NOTE: P171 is attached to the frame.	Go to step 6.	Replace the HARNESS ASSY FUSER MG AIO.
6	Checking the HARNESS ASSY LVPS MAIN MG AIO for continuity. Disconnect J14 from the PWBA MCU. Disconnect J501 from the PWBA LVPS. Is each cable of J14 \Leftrightarrow J501 continuous?	Go to step 7.	Replace the HARNESS ASSY LVPS MAIN MG AIO.

Step	Check	Remedy	
		Yes	No
7	Checking after replacing the FUSER ASSY Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60) Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON? NOTE: After replacement, be sure to clear the life counter value.	Go to step 8.	End of work.
8	Checking after the PWBA LVPS. Replace the PWBA LVPS.(Refer to Removal 33/ Replacement 31) Does the error still occur when the power is turned off and on?	Replace the KIT PWBA MCU (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.19 010-421: IOT Fuser Near Life

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) PWBA MCU (PL8.3.6)		
1	Checking the FUSER ASSY for installation. Is the FUSER ASSY installed correctly? Warning: Start the operation after the FUSER ASSY has cooled down.	Go to step 3.	Reseat the FUSER ASSY, then go step 2.
2	Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the FUSER ASSY. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60) Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when the power is turned OFF and ON? NOTE: After replacement, be sure to clear the life counter value.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work

FIP-1.20 016-300 / 016-301 / 016-302 / 016-310 / 016-313 / 016-315 / 016-317 / 016-323 /
 016-324 / 016-327 / 016-340 / 016-392 / 016-393 / 016-394/017-979/017-980/
 017-986/033-502/033-520/033-521/033-522/033-523/033-524/033-525/033-526/
 116-210/116-364/116-396/116-987/117-315/117-331/117-344/117-326/ 117-363/
 117-365/123-314/131-398/131-399/133-259/133-260/133-261/133-269/133-271/
 133-272/133-273/133-274/133-276/133-277/133-281/133-282/133-283/133-286/
 133-287/133-288/133-289: ESS Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.21 016-316 / 016-318: ESS DIMM Slot RAM R/W Check Fail / ESS DIMM Slot RAM Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) MEMORY CARD (OPTION) (PL8.1.4)		
1	Is the customer using the recommended memory card?	Go to step 3.	Replace to the recommended memory card, then go step 2.
2	Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking the MEMORY CARD (OPTION) installation. Reseat the MEMORY CARD (OPTION). Does the error still occur when turning on the power?	Go to step 4.	End of work.
4	Checking after resetting the MEMORY CARD (OPTION). Replace the MEMORY CARD.(Refer to Removal 65/ Replacement 65.) Does the error still occur when turning on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.22 016-338: Option Wireless Adapter Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) WIRELESS ADAPTER (OPTION) (PL8.1.11)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the WIRELESS ADAPTER (OPTION) installation. Reseat the WIRELESS ADAPTER (OPTION). Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the WIRELESS ADAPTER (OPTION). Replace the WIRELESS ADAPTER (OPTION).(Refer to Removal 66/ Replacement 66) Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after resetting the PWBA ESS AIO. Reseat the PWBA ESS AIO. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

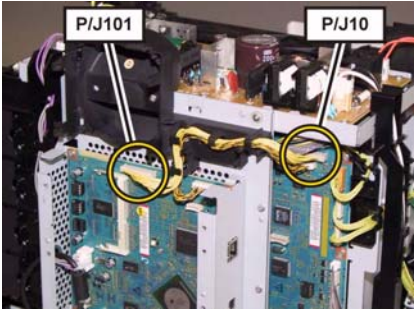
FIP-1.23 016-347: On Board Network Fatal Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking after removing the ethernet cable. Remove the ethernet cable. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	Initialize the Network settings and configure the settings again. For details of the Network settings, refer to "22 Understanding the Printer Menus" in User Guide.

FIP-1.24 016-362 / 016-363 / 016-364 / 016-366 / 016-367 / 016-368: PQ Bus# (0 / 1) Host Bridge Controller Error / PCI Bus# (0 / 1) Error Detected / PCI Error Messages received from Bus#0-Device# (0 / 1)

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the error. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.25 016-370: MCU-ESS Communication Fail

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) PWBA MCU (PL8.3.6) HARNESS ASSY ESS MG AIO (PL9.1.1)		
1	Checking after resetting the PWBA ESS AIO and PWBA MCU. Reseat the PWBA ESS AIO and PWBA MCU. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the connectors for connection. Check the connections between the PWBA MCU and PWBA ESS AIO. Are P/J10 and P/J101 connected correctly? 	Go to step 4.	Reconnect the connector(s) P/J10 and/or P/J101 correctly, then go to step 3.
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking the HARNESS ASSY ESS MG AIO for continuity. Disconnect J10 from the PWBA MCU. Disconnect J101 from the PWBA ESS AIO. Is each cable of J10 <=> J101 continuous?	Go to step 5.	Replace the HARNESS ASSY ESS MG AIO.
5	Checking the firmware version Is the firmware the latest version?	Go to step 6.	Upgrade the firmware.
6	Checking after replacing the PWBA MCU. Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA ESS AIO. (Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.26 016-383 / 016-384 / 016-385 / 016-386 / 016-387/ 016-388 / 016-391: Download ID Error / Download Range Error / Download header Error / Download Check Sum Error / Download Format Error / Download Initial Error / Download Protect Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the download file. Was the file for 2155cn/cdn downloaded?	Go to step 2.	Re-download the correct file.
2	Check the cable between the Printer and PC (or Printer and Hub). - For local printer: USB cable (USB2.0) - For network printer: Ethernet cable (10Base-T/ 100Base-TX / 1000Base-T) Does the cable meet the specifications?	Go to step 3.	Use a cable that meets the specifications. - For local printer: USB cable (USB2.0) - For network printer: Ethernet cable (10Base-T/ 100Base-TX / 1000Base-T)
3	Checking cable plug/ unplug. Plug and unplug the cable. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after replacing the Cable. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.27 016-503 / 016-504 / 016-505/016-506/016-507/016-764/016-786: Server Setting
Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the network connection Check the network connection using the [ping] command. Does the printer connect the network?	Go to step 6.	Go to step 2.
2	Checking the network connection Reseat the network cable connector. Does the error still occur when using the server?	Go to step 3.	End of work.
3	Checking the network setting Is the printer network setting correctly?	Go to step 4.	Set the [Wired] in the [Admin Menu].
4	Checking the server setting Is the [Address Book] setting correctly?	Go to step 5.	Set the [Address Book] in the [Admin Menu].
5	Checking the spec. Does the printer spec. meet the server spec?	Go to step 6.	Change the server.
6	Checking the PWBA ESS AIO installation Reseat the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36) Does the error still occur when using the server?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.28 016-520: Ipsec Certificate Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) PWBA MCU (PL8.3.6)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking after replacing the PWBA ESS AIO. Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36) Does the error still occur when the power is turned off and on?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.29 016-530: LDAP Address Book - Access Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the LDAP setting Is the LDAP setting correctly?	Go to step 4.	Set the LDAP.
2	Checking the firmware version Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking the PWBA ESS AIO installation Reseat the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36) Does the error still occur when turning off and on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.30 016-700: Memory Over flow

Step	Check	Remedy	
		Yes	No
	Possible causative parts: MEMORY CARD (OPTION) (PL8.1.4)		
1	Checking for memory expansion. Is additional memory installed? Is the additional memory installed properly?	Go to step 2.	Install additional memory.Or, re-install it properly.
2	Checking after setting the Print Mode to "Standard" via the printer driver Set the Print Mode of the printer driver to "Standard". Does the error persist during printing?	Go to step 3.	End of work.
3	Deleting the data by executing Clear Storage.Execute "Clear Storage"under [Maintenance] in the Control Panel. Does the error persist during printing?	The current printing job process cannot be continued because the memory capacity is exceeded.	End of work.

FIP-1.31 016-720: PDL Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Check the cable between the Printer and PC (or Printer and Hub). - For local printer: USB cable (USB2.0) - For network printer: Ethernet cable (10Base-T/100Base-TX / 1000Base-T) Does the cable meet the specifications?	Go to step 2.	Use a cable that meets the specifications. - For local printer: USB cable (USB2.0) - For network printer: Ethernet cable(10Base-T/ 100Base-TX / 1000Base-T)
2	Checking cable plug/unplug. Plug and unplug the cable. (USB cable or I/F cable) Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after replacing the Cable. Replace the the cable. (USB cable or I/F cable) Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.32 016-753 / 016-755: PDF password error / PDF print disabled error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the PDF data. -Enter the correct PDF document password again. -Change the PDF document security setting. Does the error still occur when printing?	End of work.	Upgrade the firmware.

FIP-1.33 016-756: Auditron -Print Prohibited time

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the "Available Time" setting. Set the correct "Available Time" again. Does the error still occur when printing?	End of work.	Upgrade the firmware.

FIP-1.34 016-757: Auditron - Invalid User

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the user's account setting. Set the correct user's account (user name and password). Does the error still occur when printing?	End of work.	Upgrade the firmware.

FIP-1.35 016-758: Auditron - Disabled Function

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the "Black&White" setting. Set the [Color Mode] to the [Color]. Does the error still occur when printing?	End of work.	Upgrade the firmware.

FIP-1.36 016-759: Auditron - Reached Limit

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the "Dell Color Track" setting. Set the correct value of [User Registration] exceed the limitation. Does the error still occur when printing?	End of work.	Upgrade the firmware.

FIP-1.37 016-791/026-720/026-721: USB Memory Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the USB Memory. Does the USB Memory meet the printer?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	Change the USB Memory that satisfies the specification.(Refe r to "19 Scanning" in the UserGuide.)

FIP-1.38 016-799: Job Environment Violation

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the paper size. Does the paper size in use meet the specifications?	Go to step 3.	Use the paper that meets the specifications, then go to step 2.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking the paper size setup. Does the using paper size match the printer setup value?	Go to step 5.	Go to step 4.
4	Setup the paper size through your PC. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the printing job. Does the error still occur when printing the Windows test print?	Go to step 6.	End of work.
6	Checking the firmware version. Is the firmware the latest version?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	Upgrade the firmware.

FIP-1.39 016-920: Wireless Setting Error Time-out Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the wireless LAN access point (Registrar). Try connecting again. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.40 016-921: Wireless Setting Error Download Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the wireless LAN access point (Registrar) in WPS mode. Try connecting again. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.41 016-922: Wireless Setting Error Session Overlap Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the wireless LAN access point (Registrar) in the WPS-PBC mode. Set only one wireless access point (Registrar) to operate in the WPS-PBC mode, and execute the process again according to the procedure. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.42 016-930 / 016-931: USB HOST Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking after remove the devices from the USB port. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.43 016-980: Disc Full

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) MEMORY CARD (OPTION) (PL8.1.4)		
1	Checking the file data in the printer. Print or clear the stored files and data at the printer memory. Does the error still occur when printing?	Go to step 2.	End of work.
2	Checking the memory capacity for print. Print the small size file (like a Windows test page). Does the error still occur when printing?	Go to step 3.	Add the MEMORY CARD or divide the printing job.
3	Is the customer using the recommended memory card?	Go to step 4.	Replace to the recommended memory card.
4	Checking the MEMORY CARD (OPTION) installation. Reseat the MEMORY CARD (OPTION). Does the error still occur when turning on the power?	Go to step 5.	End of work.
5	Checking after resetting the MEMORY CARD (OPTION). Replace the MEMORY CARD.(Refer to Removal 65/ Replacement 65.) Does the error still occur when turning on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.44 016-981: Collate Full

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the error. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking RAM Disk size settings. Does the error occur when printing after reducing the size setting of the RAM Disk?	Split the document into blocks to decrease the number of pages to be collated.	End of work.

FIP-1.45 016-985 / 016-986 :Mail Size Error / File Size Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the PWBA ESS AIO Turn off and on the power. Does the error still occur when turning on the power?	Go to step 2.	End of work.
2	Checking the file data in the printer Print out the stored files at the printer memory. Does the error still occur when turning on the power?	Go to step 3.	End of work.
3	Checking the PWBA ESS AIO installation Reseat the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36) Does the error still occur when turning on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.46 017-970/017-975/017-976/017-977/017-978/017-987/017-989/033-503/033-513/
033-788:Out of Memory

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) MEMORY CARD (PL10.6.8)		
1	Checking the Job Status-Active Jobs-Pending FAX. Are there Pending FAX Jobs?	Wait until the Pending FAX Jobs will be sent. Or delete the Pending FAX data.	Go to step 2.
2	Checking the Job Status-Print Menu-Secure Receive. Does the Secure Receive message in the display appear?	Print the Secure Receive data.	Go to step 3.
3	Checking the firmware version Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX. Replace the PWBA FAX.(Refer to Removal 27/Replacement 37) Does the error still occur when turning off and on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/Replacement 36)	End of work.

FIP-1.47 017-971/017-972/017-973/017-974/033-510/033-751/033-753/033-754/033-755/
 033-756/033-757/033-758/033-759/033-760/033-761/033-763/033-764/033-765/
 033-766/033-767/033-769/033-770/033-771/033-772/033-773/033-786/033-787/
 035-792/133-231/133-234/133-235/133-236/133-237/133-238/133-239/133-240/
 133-241/133-242/133-243/133-244/133-246/133-247/133-248/133-249/133-251/
 133-252/133-253/133-254/133-280:PWBA FAX Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) PWBA FAX (PL8.1.5)		
1	Checking the firmware version Is the firmware the latest version?	Go to step 2.	Upgrade the firmware, then go to step 2.
2	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.48 017-988:PC Scan Time Out

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the USB connection Reconnect the PC and the printer. Does the error still occur when scanning?	Go to step 2.	End of work.
2	Check the [Dell MFP Laser 2155cn/cdn scanner] icon in the [Scanners and Cameras] of the [Printers and Other Hardware] of the [Control Panel]. Check the following items, before checking the driver software. -Connects the PC and the printer with the USB cable. -Enables the [Windows Image Acquisition (WIA)] of the [Service] in the [Administrative Tool] of the [Control Panel]. Is the scanner driver installed?	Go to step 3.	Install the driver software.
3	Checking the PC program Checked by the [Dell MFP Laser 2155cn/cdn ScanButton Manager] in the [Add or Removal Programs] of the [Control Panel]. Is the [ScanButton Manger] installed?	Go to step 4.	Install the software.
4	Checking the ScanButton Manger setting Checked by the following procedures. Click the [Start] and then select the [All programs], the [Dell Printers], the [Dell MFP Color Laser Printer 2155cn/cdn] and the [ScanButton Manager] in order. Is the setting of [ScanButton Manager] correct?	Go to step 5.	Set these items correctly. Scan Form/Image Type/Resolution/ Paper size/Output Destination NOTE: Check that the directory specified for [Output Destination] really exists.
5	Checking the software. Checked by the following procedures. 1) Select the [Dell MFP Laser 2155cn/cdn scanner] in the [Scanners and Cameras] of the [Printers and Other Hardware] of the [Control Panel] and then open the [Properties]. (click the right button of the mouse or [Properties] button) 2) Select the [Properties] and then select the [Events] tab of the [Dell MFP Laser 2155cn/cdn Scanner Properties] screen.For Windows XP/Vista/Server 2003 3) Check that the [Start this program] displays the [2155cn/cdn MFP Scan Button Manager] and the [Select an event] is set correctly.For Windows 2000 3) Check that the [2155cn/cdn MPF Scan Button Manager] is checked and the [Scanner events] is setcorrectly. Is the selecting of software correct?	Retry the scanning. If the message [Select the program to launch for this action] appears on the PC monitor, select the [2155cn/cdn MFP Scan button Manager] within 30 seconds.	Set the [Events] tab menu of the [Dell MFP Laser 2155cn/cdn Scanner Property] correctly.

FIP-1.49 024-360: MCU DownLoad Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA MCU (PL8.3.6)		
1	Checking the firmware version Is the firmware the latest version?	Go to step 2.	Upgrade the firmware, then go to step 2.
2	Checking the error. Does the error still occur when printing?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.50 024-362: IOT Start Image Marking Time-out

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the firmware version Is the firmware the latest version?	Go to step 2.	Upgrade the firmware, then go to step 2.
2	Checking the error. Does the error still occur when printing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.51 024-985: Waiting for "Continue" key to be pressed after reloading paper to the SSF

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the error. Does the error still occur when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.52 027-446 / 027-452: IPv6 duplicate / IPv4 duplicate

Step	Check	Remedy	
		Yes	No
	Possible causative parts: -		
1	Checking the IP addresses. Remove the duplicate IP addresses. Does the error still occur when the power is turned off and on?	End of work.	Upgrade the firmware.

FIP-1.53 031-521/031-522: SMB Logging Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the customer operation Did the customer input the login name and the password correctly?	Go to step 2.	Try the login again.
2	Checking the access limitation Does the system administrator set the access limit number?	Ask to the system administrator.	Go to step 3.
3	Checking the printer setting Is the [Scan To Network] of the [Scan Defaults] in the [Scan] of the [Default Settings] the [Computer]?	Go to step 4.	Set to [Computer].
4	Checking the network. Checked by [ping] command. Are the printer and the PC connected to the network?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	Check the network.

FIP-1.54 031-523/031-526/031-528: SMB Server Error/DNS Error/In SMB scan, server connection error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the sharing folder. Is the sharing folder name correct?	Go to step 2.	Rename the Shared Folder.
2	Checking the server setting. Is the [Share Name] of the [Server Address] tab in the [Address Book] correct?	Go to step 3.	Rename the [Share Name].
3	Checking the printer. Turning off and on the printer power. Does the error still occur when the network scanning?	Check the server.	End of work.

FIP-1.55 031-524: SMB Scan User Overlimit

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the access limitation Does the system administrator set the access limit number?	Ask to the system administrator.	Go to step 2.
2	Checking the server setting Is the [User Limit] of the [Sharing] tab in the sharing folder properties the [Maximum allowed]?	Go to step 3.	Set to the [Maximum allowed].
3	Checking the printer Turning off and on the printer power. Does the error still occur when the network scanning?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.56 031-525: SMB scan client has no access right (Win9x)

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the client PC. Is the client PC the Windows 2000 or later?	Go to step 2.	Replace to the Windows 2000 or later PC.
2	Checking the printer. Turning off and on the printer power. Does the error still occur when the network scanning?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.57 031-529/031-530/031-531/031-532/031-533/031-534/031-535/031-536/031-541/
031-546/031-547:SMB Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the customer operation. Did the customer input the login name and the password correctly?	Go to step 2.	Try the login again.
2	Checking the Address Book settings. Is the [Server Address] tab on the [Address Book] setting correct?	Go to step 3.	Set it correctly.
3	Checking the sharing folder. Is the [Sharing] tab of the sharing folder setting correct?	Go to step 4.	Set it correctly.
4	Checking the printer. Turning off and on the printer power. Does the error still occur when the network scanning?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.58 031-576/031-579/031-581/031-584/031-587/031-594/031-598/:FTP File
 Appended Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the customer operation. Did the customer input the login name and the password correctly?	Go to step 2.	Try the login again.
2	Checking the Address Book settings. Is the [Server Address] tab on the [Address Book] setting correct?	Go to step 3.	Set it correctly.
3	Checking the sharing folder. Is the [Sharing] tab of the sharing folder setting correct?	Go to step 4.	Set it correctly.
4	Checking the printer. Turning off and on the printer power. Does the error still occur when the network scanning?	Replace the Printer.	End of work.

| FIP-1.59 031-578/031-580/031-582/031-585/031-588/031-595:FTP File Changed Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the customer operation. Did the customer input the login name and the password correctly?	Go to step 2.	Try the login again.
2	Checking the Address Book settings. Is the [Server Address] tab on the [Address Book] setting correct?	Go to step 3.	Set it correctly.
3	Checking the sharing folder. Is the [Sharing] tab of the sharing folder setting correct?	Go to step 4.	Set it correctly.
4	Checking the printer. Turning off and on the printer power. Does the error still occur when the network scanning?	Replace the Printer.	End of work.

FIP-1.60 033-501:CODEC Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) IIT ASSY SUB (PL10.1.11)		
1	Checking the firmware version. Is the firmware the latest version?	Go to step 2.	Upgrade the firmware, then go to step 2.
2	Checking after replacing the PWBA ESS AIO Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36) Does the error still occur when the power is turned off and on?	Replace the IIT ASSY SUB.(Refer to Removal 50/ Replacement 14)	End of work.

FIP-1.61 033-511:Communication Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the telephone line connection. Reconnect the telephone line connector. Does the error still occur when faxing?	Go to step 2.	End of work.
2	Checking the receiving side fax Send the fax data to known good fax machine. Does the error still occur when faxing?	Go to step 3.	END, check the receiving side fax machine.
3	Checking the firmware version. Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.62 033-512/034-515/034-799/035-701/035-702/035-704/035-705/035-706/035-708/
 035-709/035-710/035-716/035-717/035-718/035-720/035-728/035-729/035-730/
 035-737/035-739/035-740/035-742/133-279/133-290:CommunicationJob Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the telephone line connection. Reconnect the telephone line connector. Does the error still occur when receiving fax?	Go to step 2.	End of work.
2	Checking the receiving side fax. Send the fax data to known good fax machine. Does the error still occur when faxing?	Go to step 3.	END, check the receiving side fax machine.
3	Checking the firmware version. Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.63 033-517:DFAX Password Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the password. Check the password of Fax/Scanner Lock in the Panel Lock menu. Is the password correct?	Go to step 2.	Set the correct password.
2	Checking the printer setting Set the [Panel Lock Set] of the [Panel Lock] in the [Secure Settings] to the [Disable]. Does the error still occur when executing the D-FAX?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	Set the [Panel Lock Set] of the [Panel Lock] in the [Secure Settings] to the [Enable]. If the error occurred again, replace the PWBA ESS AIO.

FIP-1.64 033-752:During Call Busy Tone

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the sending side fax. Receive the fax data from known good fax machine. Does the error still occur when receiving fax?	Go to step 2.	END, check the sending side fax machine.
2	Checking the printer setting. Is the [Country] of [Fax setting] on the [Admin Menu] correct?	Go to step 3.	Set the [Country] correctly.
3	Checking the firmware version. Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.65 033-762:DM Prevention Function Receive Refuse

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the fax setting. Is the Junk Fax Setup mode on?	Go to step 2.	Go to step 3.
2	Setting the receiving side fax. Set the Speed Dial. Does the error still occur when receiving the fax?	Go to step 3.	End of work.
3	Checking the firmware version. Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.66 033-774/033-776:Buffer Over

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the resolution setting. Retry sending by lowering the resolution setting. Does the error still occur when faxing?	Go to step 2.	End of work.
2	Checking the firmware version. Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.67 033-775/033-777/033-779/033-784:Buffer Job Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the sending side fax. Receive the fax data from known good fax machine. Does the error still occur when faxing?	Go to step 2.	END, check the sending side fax machine or retry sending by lowering the resolution setting.
2	Checking the firmware version. Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.68 033-782:NSS/DCS Function disagreement

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the printer setting. Set the [Modem Speed] of [Fax setting] in the [Admin Menu] to the 2.4Kbps.Set the [ECM] of [Faxsetting] in the [Admin Menu] to the Off. Does the error still occur when faxing?	Go to step 2.	End of work.
2	Checking the firmware version. Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.69 033-799:Communication Job Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the sending side fax. Receive the fax data from known good fax machine. Does the error still occur when faxing?	Go to step 2.	END, check the sending side fax machine or sending data.
2	Checking the firmware version. Is the firmware the latest version?	Go to step 3.	Upgrade the firmware, then go to step 3.
3	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.70 034-791:Check Line Connection

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5)		
1	Checking the telephone line connection. Reconnect the telephone line connector. Does the error still occur when faxing?	Replace the PWBA FAX. (Removal 27/ Replacement 37)	End of work.

FIP-1.71 035-779:FAX FWD document change Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the firmware version. Is the firmware the latest version?	Go to step 2.	Upgrade the firmware, then go to step 2.
2	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.72 035-781:Busy Job Failure

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the receiving side fax. Send the fax data to known good fax machine. Does the error still occur when faxing?	Go to step 2.	END, check the receiving side fax machine.
2	Checking the printer setting The [Line Type] of the [Fax Settings] on the [Admin Menu]. The [Tone/Pulse] of the [Fax Settings] on the [Admin Menu]. The [Country] of the [Fax setting] on the [Admin Menu]. Are these settings correct?	Go to step 3.	Set the menu correct.
3	Checking the firmware version. Is the firmware the latest version?	Go to step 4.	Upgrade the firmware, then go to step 4.
4	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.73 035-793:Digital Line Detection

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5) PWBA ESS AIO (PL8.1.2)		
1	Checking the PSTN line. Is the printer connected to the PSTN line?	Go to step 2.	Change to the PBX line. Set the [Line Type] of [Fax setting] in the [Admin Menu] to the PBX.
2	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

| FIP-1.74 042-700: IOT Over Heat Stop

Step	Check	Remedy	
		Yes	No
	Possible causative parts: SENSOR HUM (PL8.1.10) PWBA MCU (PL8.3.6) HARNESS ASSY L SIDE MG AIO (PL3.1.18)		
1	Checking the connectors for connection. Check the connections between the PWBA MCU and SENSOR HUM. Are P/J20 and P/J201 connected surely?	Go to step 3.	Reconnect the connector(s) P/J20 and/or P/J201 surely, then go to step 2
2	Does the error still occur when the power is turned off and on?	Go to step 3.	End of work.
3	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect P/J20 from the PWBA MCU. Disconnect P/J201 from the SENSOR HUM. Is each cable of P/J20 <=> P/J201 continuous?	Go to step 4.	Replace the HARNESS ASSY L SIDE MG AIO.
4	Checking the output power of SENSOR HUM. Disconnect P/J20 on the PWBA MCU. Is the voltage across ground <=> J20-4pin on the PWBA MCU, about +5VDC?	Replace the SENSOR HUM. (Refer to Removal 16/ Replacement 48.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

| FIP-1.75 062-311/062-321/062-322/062-360/062-371/062-393:IIT Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: IIT ASSY SUB (PL10.1.11) PWBA ESS AIO (PL8.1.2)		
1	Checking the connector connection. Reseat the connectors (P/J 1001 and 1002) on the PWBA ESS AIO. Does the error still occur when turning off and on the power?	Go to step 3.	End of work.
2	Checking after replacing the IIT ASSY SUB. Replace the IIT ASSY SUB.(Refer to Removal 50/ Replacement 14) Does the error still occur when turning off and on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.76 062-320:Scanner Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: IIT ASSY SUB (PL10.1.11) PWBA ESS AIO (PL8.1.2)		
1	Checking the file data in the printer. Print or clear the stored files and data at the printer memory. Does the error still occur when scanning?	Go to step 2.	End of work.
2	Checking the printer setting. Is the [Resolution] of the [Scan Defaults] on the [Scan] of the [Defaults Settings] the [600]?	Set to the default value.	Go to step 3.
3	Checking the printer setting. Is the [Color] of the [Scan Defaults] on the [Scan] of the [Defaults Settings] the [Color (Photo)]?	Set to the [Color].	Go to step 4.
4	Checking after replacing the IIT ASSY SUB. Replace the IIT ASSY SUB.(Refer to Removal 50/ Replacement 14) Does the error still occur when turning off and on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

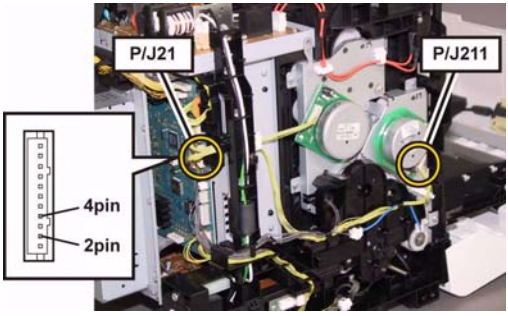
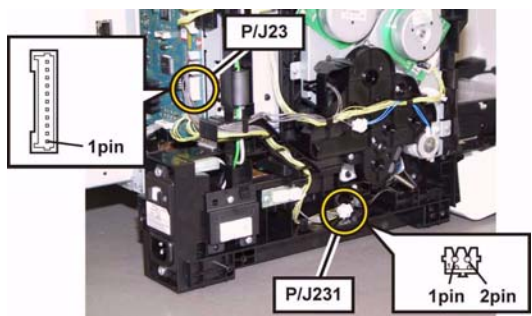
FIP-1.77 062-790:Copy Limit

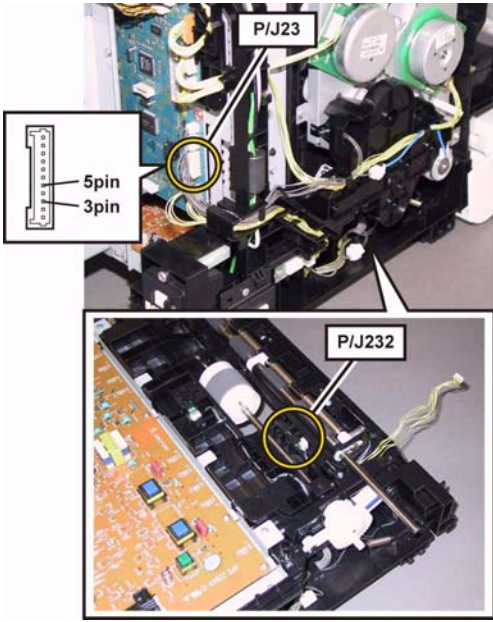
Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the error. Does the error message disappear within 70 seconds automatically, or disappear after pressing the "✓" key?	Go to step 2.	Go to step 4.
2	Checking the error Does the error message still occur when copying, scanning, or faxing the original?	Go to step 3.	Go to step 4.
3	Checking the original. Print the [System Settings]of the [Reports] on the printer menu. Does the error still occur when copying, scanning or faxing the [System Settings] report?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.
4	Checking the error. Turn off and on the power. Does the error message still occur when copying, scanning, or faxing the original?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

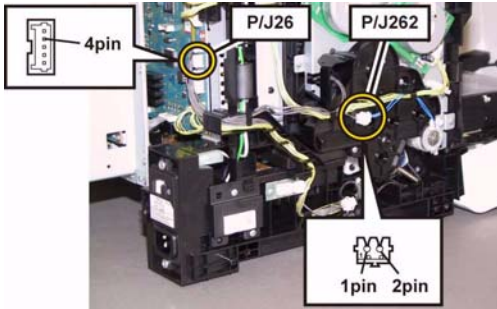
FIP-1.78 071-100: IOT Tray1 Misfeed JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: CASSETTE ASSY 250 MG AIO (PL2.1.1) HOLDER ASSY SEPARATOR (PL2.1.5) CLUTCH ASSY DRV (PL3.1.1) SOLENOID FEED MSI (PL3.1.11) HARNESS ASSY L SIDE MG AIO (PL3.1.18) ROLL ASSY FEED (PL3.2.4) ACTUATOR REGI ROLL M (PL3.2.8) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) DRIVE ASSY MAIN (PL7.1.2) DRIVE ASSY PH (PL7.1.4) PWBA MCU (PL8.3.6) HARNESS ASSY MAIN MOT MG AIO (PL9.1.7) HARNESS ASSY KSNR REGCL MG AIO (PL9.1.9)		
1	Checking the paper condition. Is the paper in the Tray 1 wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 2.	Go to step 3.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after reloading a new paper. Reload a new paper in the Tray 1. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the Main Motor (DRIVE ASSY MAIN) for operation. Does the Main Motor (DRIVE ASSY MAIN) operate properly? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis. During this check, close the COVER ASSY FRONT.	Go to step 6.	Go to step 19.
6	Checking the DRIVE ASSY PH for operation. Does the ROLL ASSY FEED, ROLL ASSY REGI and ROLL REGI METAL rotate properly? Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Reseat or replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)
7	Checking the paper feeding position. Is the paper not fed from the Tray 1?	Go to step 8.	Go to step 12.
8	Checking after resetting the Guide Sides and End Guide on the Tray 1. Reset the Guide Sides and End Guide, and reseat the Tray 1 to the printer correctly. Does the error still occur when printing?	Go to step 9.	End of work.

Step	Check	Remedy	
		Yes	No
9	Checking the HOLDER ASSY SEPARATOR on the Tray 1 for shape and rotation. Pull the Tray 1 out from the printer. Is the HOLDER ASSY SEPARATOR not contaminated and/or damaged, and rotated smoothly?	Go to step 10.	Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/ Replacement 62.)
10	Checking the ROLL ASSY FEED for shape and rotation. Pull the Tray 1 out from the printer. Is the ROLL ASSY FEED not contaminated and/or damaged, and rotated smoothly?	Go to step 11.	Replace the KIT ROLL ASSY FEED.(Refer to Removal 6/ Replacement 58.)
11	Checking the Tray 1 Feed Solenoid (SOLENOID FEED MSI) for operation. Does the Tray 1 Feed Solenoid (SOLENOID FEED MSI) operate properly? Check by [Digital Output] - [DO-b] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Replace the CASSETTE ASSY 250 MG AIO. (Refer to Removal 1/ Replacement 63.)	Go to step 22.
12	Checking the paper lead edge staying position. Does the paper lead edge stay before the ROLL ASSY REGI and ROLL REGI METAL?	Go to step 13.	The paper lead edge stay after the ROLL ASSY REGI and ROLL REGI METAL, then go to step 16.
13	Checking the paper transfer path between the ROLL ASSY FEED and ROLL ASSY REGI. Are there any obstacles on the paper transfer path?	Remove the obstacles or stains from the paper transfer path.	Go to step 14.
14	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 15.	Reseat the ACTUATOR REGI IN. If broken or deformed, replace it.
15	Checking the Regi. Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis.	Go to step 16.	Go to step 26.
16	Checking the Regi. Clutch (CLUTCH ASSY DRV) for operation, and ROLL ASSY REGI and ROLL REGI METAL for rotation. Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. Does the Regi. Clutch (CLUTCH ASSY DRV) operate properly, and the ROLL ASSY REGI and ROLL REGI METAL rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 17.	Go to step 30.

Step	Check	Remedy	
		Yes	No
17	<p>Checking the ACTUATOR REGI ROLL M for shape and operation. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI ROLL M normal?</p>	Go to step 18.	Reseat the ACTUATOR REGI ROLL M. If broken or deformed, replace it with a new one.
18	<p>Checking the Regi. Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis.</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 26.
19	<p>Checking the connectors for connection. Check the connections between the PWBA MCU and DRIVE ASSY MAIN (Main Motor). Are P/J21 and P/J211 connected correctly?</p> 	Go to step 20.	Reconnect the connector(s) P/J21 and/or P/J211 correctly.
20	<p>Checking the HARNESS ASSY MAIN MOT MG AIO for continuity. Disconnect J21 from the PWBA MCU. Disconnect J211 from the DRIVE ASSY MAIN. Is each cable of J21 <=> J211 continuous?</p>	Go to step 21.	Replace the HARNESS ASSY MAIN MOT MG AIO.
21	<p>Checking the power to the DRIVE ASSY MAIN. Disconnect J21 from the PWBA MCU. Are the voltages across J21-2pin/J21-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Replace the KIT DRIVE ASSY MAIN. (Refer to Removal 42/ Replacement 22.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
22	<p>Checking the connectors of the Tray 1 Feed Solenoid (SOLENOID FEED MSI) for connection. Check the connections between the PWBA MCU and SOLENOID FEED MSI. Are P/J23 and P/J231 connected correctly?</p> 	Go to step 23.	Reconnect the connector(s) P/J23 and/or P/J231 correctly.

Step	Check	Remedy	
		Yes	No
23	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect P231 from the SOLENOID FEED MSI. Is each cable of J23 <=> P231 continuous?	Go to step 24.	Replace the HARNESS ASSY L SIDE MG AIO.
24	Checking the power to the SOLENOID FEED MSI. Disconnect J23 from the PWBA MCU. Is the voltage across P23-1pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?	Go to step 25.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
25	Checking the SOLENOID FEED MSI for resistance. Disconnect P/J231 of the SOLENOID FEED MSI. Is the resistance across J231-1 and J231-2 about 96 ohm?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the KIT FEED ROLL/SOL/ CLUTCH. (Refer to Removal 45/ Replacement 19.)
26	Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly? 	Go to step 27.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
27	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?	Go to step 28.	Replace the HARNESS ASSY L SIDE MG AIO.
28	Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?	Go to step 29.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

Step	Check	Remedy	
		Yes	No
29	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)
30	<p>Checking the connectors of the CLUTCH ASSY DRV (Regi Clutch) for connection. Check the connections between the PWBA MCU and CLUTCH ASSY DRV. Are P/J26 and P/J262 connected correctly?</p> 	Go to step 31.	Reconnect the connector(s) P/J26 and/or P/J262 correctly.
31	<p>Checking the HARNESS ASSY KSNR REGCL MG AIO for continuity. Disconnect J26 from the PWBA MCU. Disconnect P262 from the CLUTCH ASSY DRV. Is each cable of J26 <=> P262 continuous?</p>	Go to step 32.	Replace the HARNESS ASSY KSNR REGCL MG AIO.
32	<p>Checking the power to the CLUTCH ASSY DRV. Disconnect J26 from the PWBA MCU. Is the voltage across P26-4pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Go to step 33.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
33	<p>Checking the CLUTCH ASSY DRV for resistance. Disconnect P/J262 of the CLUTCH ASSY DRV. Is the resistance across J262-1 and J262-2 approximately 280-ohm?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the CLUTCH ASSY DRV. (Refer to Removal 40/ Replacement 24.)

FIP-1.79 072-100: IOT Tray2 Misfeed JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA MCU (PL8.3.6) HARNESS ASSY TRAY MOT (PL12.2.2) HARNESS ASSY TEAY COMP (PL12.2.20) PWBA ASSY FEED MG AIO (PL12.2.1) SOLENOID FEED MSI (PL12.2.15) CLUTCH ASSY DRV (PL12.2.6) MOTOR ASSY SUB (PL12.2.16) ROLL ASSY FFED (PL12.4.4) SENSOR PHOTO (12.4.13) CASSETTE ASSY 250 OPT MG AIO (PL12.5.1) HOLDER ASSY SEPARATOR (12.5.5)		
1	Checking the paper condition. Is the paper in the Tray 2 wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 2.	Go to step 3.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after reloading a new paper. Reload a new paper in the Tray 2. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the Paper Path Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Checked by [Digital Input] - [DI-a] in [IOT Diag] of diagnosis.	Go to step 6.	Go to step 15.
6	Checking the MOTOR ASSY SUB for operation. Does the MOTOR ASSY SUB operate properly? Checked by [Digital Output]-[DO-5] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Go to step 19.
7	Checking the paper feeding. Is the paper fed from the Tray 2?	Go to step 12.	Go to step 8.
8	Checking after resetting the Guide Sides and End Guide on the Tray 2. Reset the Guide Sides and End Guide, and reseal the Tray2 to the printer correctly. Does the error still occur when printing?	Go to step 9.	End of work.
9	Checking the HOLDER ASSY SEPARATOR on the Tray 2 for shape and rotation. Pull the Tray 1 out from the printer. Is the HOLDER ASSY SEPARATOR not contaminated and/or damaged, and rotated smoothly?	Go to step 10.	Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/ Replacement 62.)

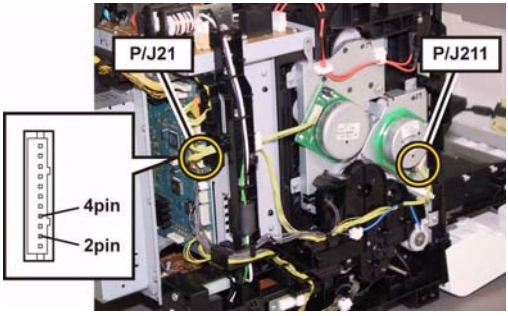
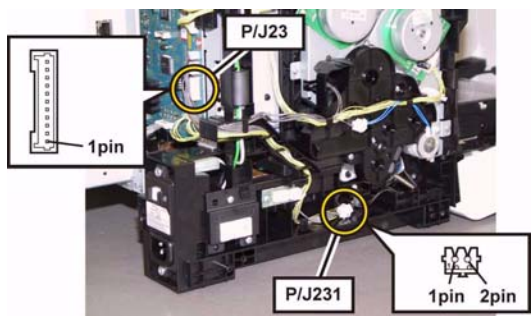
Step	Check	Remedy	
		Yes	No
10	Checking the ROLL ASSY FEED for shape and rotation Pull the Tray 2 out from the printer. Is the ROLL ASSY FEED not contaminated and/or damaged, and rotated smoothly?	Go to step 11.	Replace the KIT ROLL ASSY FEED.(Refer to Removal 6/ Replacement 58.)
11	Checking the Tray 2 Feed Solenoid (SOLENOID FEED MSI) for operation. Does the Tray 2 Feed Solenoid (SOLENOID FEED MSI) operate properly? Checked by [Digital Output] - [DO-31] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Replace the CASSETTE ASSY 250 OPT MG AIO.	Go to step 22.
12	Checking the Tray 2 Turn Clutch (CLUTCH ASSY DRV) for operation. Does the Cassette Tray 2 Turn Clutch (CLUTCH ASSY DRV) operate properly? Checked by [Digital Output] - [DO-33] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 13.	Go to step 26.
13	Checking the paper lead edge staying position. Does the paper lead edge stay before the ROLL ASSY REGI and ROLL REGI METAL?	Go to step 14.	Replace the KIT FEEDER ASSY OPT.(Refer to Removal 67/ Replacement 68)
14	Checking the paper path. Remove the Tray 1 and Tray 2 paper cassettes. Are there any obstacles on the paper transfer path between the Tray 2 and the Regi Assy?	Remove the obstacles or stains from the paper transfer path.	Replace the KIT FEEDER ASSY OPT.(Refer to Removal 67/ Replacement 68)
15	Checking the connectors of the SENSOR PHOTO (Paper Path Sensor) for connection. Check the connections between the PWBA FFE D and SENSOR PHOTO. Are P/J420 and P/J4200 connected correctly?	Go to step 16.	Reconnect the connector(s) P/ J420 and/or P/ J4200 correctly.
16	Checking the HARNESS ASSY TRAY COMP for continuity. Disconnect J420 from the PWB ASSY FEED MG AIO. Disconnect J4200 from the SENSOR PHOTO. Is each cable of J420 <=> J4200 continuous?	Go to step 17.	Replace the HARNESS ASSY TRAY COMP
17	Checking the power to the SENSOR PHOTO. Disconnect J420 from the PWB ASSY FEED MG AIO. Is the voltage across P420-6pin <=> ground on the PWB ASSY FEED MG AIO, about +3.3 VDC?	Go to step 18.	Replace the PWB ASSY FEED MG AIO.
18	Checking the SENSOR PHOTO for operation. Check the voltage across J420-5pin <=> ground on the PWB ASSY FEED MG AIO. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?	Replace the PWB ASSY FEED MG AIO.	Replace the SENSOR PHOTO (Paper Path Sensor).
19	Checking the connectors for connection. Check the connections between the PWB ASSY FEED MG AIO and MOTOR ASSY SUB. Are P/J422 and P/J4221 connected correctly?	Go to step 20.	Reconnect the connector(s) P/ J422 and/or P/ J4221 correctly.

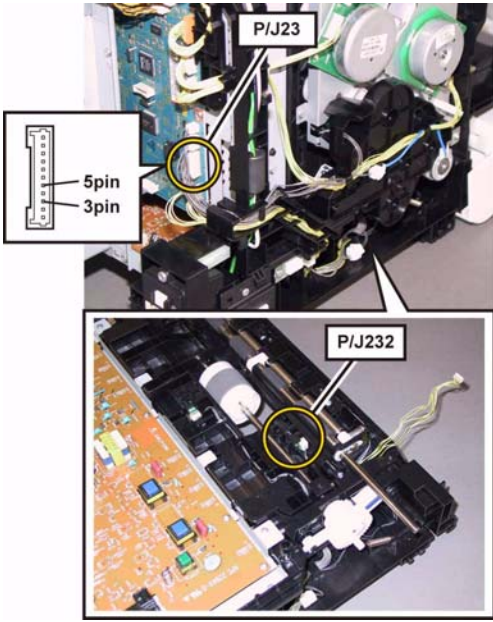
Step	Check	Remedy	
		Yes	No
20	Checking the HARNESS ASSY TRAY MOT for continuity. Disconnect J422 from the PWB ASSY FEED MG AIO. Disconnect J4221 from the MOTOR ASSY SUB. Is each cable of J422 <=> J4221 continuous?	Go to step 21.	Replace the HARNESS ASSY TRAY MOT.
21	Checking the power to the MOTOR. Disconnect J422 from the PWB ASSY FEED MG AIO. Are the voltages across J422-6pin <=> ground on the PWB ASSY FEED MG AIO, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?	Replace the MOTOR ASSY SUB.	Replace the PWB ASSY FEED MG AIO.
22	Checking the connectors of the SOLENOID FEED for connection. Check the connections between the PWB ASSY FEED MG AIO and SOLENOID FEED. Are P/J421 and P/J4211 connected correctly?	Go to step 23.	Reconnect the connector(s) P/J421 and/or P/J4211 correctly.
23	Checking the HARN TRAY COMP for continuity. Disconnect J421 from the PWB ASSY FEED MG AIO. Disconnect P4211 from the SOLENOID FEED. Is each cable of J421 <=> P4211 continuous?	Go to step 24.	Replace the HARNESS ASSY TRAY COMP.
24	Checking the power to the SOLENOID FEED MSI. Disconnect J421 from the PWB ASSY FEED MG AIO. Is the voltage across P421-1pin <=> ground on the PWB ASSY FEED MG AIO, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?	Go to step 25.	Replace the PWB ASSY FEED MG AIO.
25	Checking the SOLENOID FEED MSI for resistance. Disconnect P/J4211 of the SOLENOID FEED MSI. Is the resistance across J4211-1 and J4211-2 approximately 96 ohm?	Replace the PWB ASSY FEED MG AIO.	Replace the SOLENOID FEED MSI.
26	Checking the connectors of the Feed Clutch (CLUTCH ASSY DRV) for connection. Check the connections between the PWB ASSY FEED MG AIO and Feed Clutch. Are P/J420 and P/J4201 connected correctly?	Go to step 27.	Reconnect the connector(s) P/J420 and/or P/J4201 correctly.
27	Checking the HARN TRAY COMP for continuity. Disconnect J420 from the PWB ASSY FEED MG AIO. Disconnect P4201 from the Feed Clutch. Is each cable of J420 <=> P4201 continuous?	Go to step 28.	Replace the HARNESS ASSY TRAY COMP.
28	Checking the power to the Feed Clutch. Disconnect J420 from the PWB ASSY FEED MG AIO. Is the voltage across P420-1pin <=> ground on the PWB ASSY FEED MG AIO, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?	Go to step 29.	Replace the PWB ASSY FEED MG AIO.
29	Checking the Feed Clutch for resistance. Disconnect P/J4201 of the Feed Clutch. Is the resistance across J4201-1 and J4201-2 approximately 280-ohm?	Replace the PWB ASSY FEED MG AIO.	Replace the CLUTCH ASSY DRV

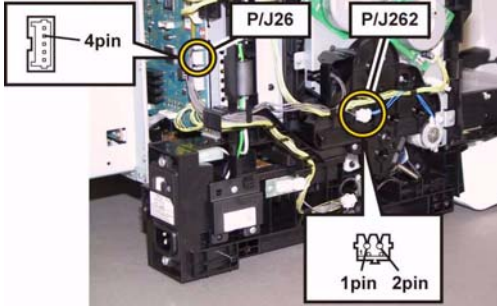
FIP-1.80 072-101: IOT Feeder 2 JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: CASSETTE ASSY 250 MG AIO (PL2.1.1) HOLDER ASSY SEPARATOR (PL2.1.5) CLUTCH ASSY DRV (PL3.1.1) SOLENOID FEED MSI (PL3.1.11) HARNESS ASSY L SIDE MG AIO (PL3.1.18) ROLL ASSY FEED (PL3.2.4) ACTUATOR REGI ROLL M (PL3.2.8) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) DRIVE ASSY MAIN (PL7.1.2) DRIVE ASSY PH (PL7.1.4) PWBA MCU (PL8.3.6) HARNESS ASSY MAIN MOT MG AIO (PL9.1.7) HARNESS ASSY KSNR REGCL MG AIO (PL9.1.9)		
1	Checking the paper condition. Is the paper in the Tray 1 or Tray 2 wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 2.	Go to step 3.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after reloading a new paper. Reload a new paper in the Tray 1 or Tray 2. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the Main Motor (DRIVE ASSY MAIN) for operation. Does the Main Motor (DRIVE ASSY MAIN) operate properly? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 6.	Go to step 19.
6	Checking the DRIVE ASSY PH for operation. Does the ROLL ASSY FEED, ROLL ASSY REGI and ROLL REGI METAL rotate properly? Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Reseat or replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)
7	Checking the paper feeding position Is the paper not fed from the Tray 1 or Tray 2?	Go to step 8.	Go to step 12.
8	Checking after resetting the Guide Sides and End Guide on the Tray 1 or Tray 2. Reset the Guide Sides and End Guide, and reseat the Tray 1 or Tray 2 to the printer correctly. Does the error still occur when printing?	Go to step 9.	End of work.

Step	Check	Remedy	
		Yes	No
9	Checking the HOLDER ASSY SEPARATOR on the Tray 1 or Tray 2 for shape and rotation. Pull the Tray 1 or Tray 2 out from the printer. Is the HOLDER ASSY SEPARATOR not contaminated and/or damaged, and rotated smoothly?	Go to step 10.	Replace the KIT HOLDER ASSY SEPARATOR.(Refer to Removal 2/ Replacement 62.)
10	Checking the ROLL ASSY FEED for shape and rotation. Pull the Tray 1 or Tray 2 out from the printer. Is the ROLL ASSY FEED not contaminated and/or damaged, and rotated smoothly?	Go to step 11.	Replace the KIT ROLL ASSY FEED.(Refer to Removal 6/ Replacement 58.)
11	Checking the Cassette Feed Solenoid (SOLENOID FEED) for operation. Does the Cassette Feed Solenoid (SOLENOID FEED) operate properly? Checked by [Digital Output] - [DO-b] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Replace the CASSETTE ASSY 250 MG AIO. (Refer to Removal 1/ Replacement 63.)	Go to step 22.
12	Checking the paper lead edge staying position. Does the paper lead edge stay before the ROLL ASSY REGI and ROLL REGI METAL?	Go to step 13.	The paper lead edge stay after the ROLL ASSY REGI and ROLL REGI METAL, then go to step 16.
13	Checking the paper transfer path between the ROLL ASSY FEED and ROLL ASSY REGI. Are there any obstacles on the paper transfer path?	Remove the obstacles or stains from the paper transfer path.	Go to step 14.
14	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 15.	Reseat the ACTUATOR REGI IN. If broken or deformed, replace it.
15	Checking the Regi. Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis.	Go to step 16.	Go to step 26.
16	Checking the Regi. Clutch (CLUTCH ASSY DRV) for operation, and ROLL ASSY REGI and ROLL REGI METAL for rotation. Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis. Does the Regi. Clutch (CLUTCH ASSY DRV) operate properly, and the ROLL ASSY REGI and ROLL REGI METAL rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 17.	Go to step 30.

Step	Check	Remedy	
		Yes	No
17	<p>Checking the ACTUATOR REGI ROLL M for shape and operation.</p> <p>Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation.</p> <p>Are the shape and operation of the ACTUATOR REGI ROLL M normal?</p>	Go to step 18.	Reseat the ACTUATOR REGI ROLL M. If broken or deformed, replace it with a new one.
18	<p>Checking the Regi. Sensor (SENSOR PHOTO) for operation.</p> <p>Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated?</p> <p>Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation.</p> <p>Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis.</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 26.
19	<p>Checking the connectors for connection</p> <p>Check the connections between the PWBA MCU and DRIVE ASSY MAIN (Main Motor).</p> <p>Are P/J21 and P/J211 connected correctly?</p> 	Go to step 20.	Reconnect the connector(s) P/J21 and/or P/J211 correctly.
20	<p>Checking the HARNESS ASSY MAIN MOT MG AIO for continuity</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Disconnect J211 from the DRIVE ASSY MAIN.</p> <p>Is each cable of J21 <=> J211 continuous?</p>	Go to step 21.	Replace the HARNESS ASSY MAIN MOT MG AIO.
21	<p>Checking the power to the DRIVE ASSY MAIN</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Are the voltages across J21-2pin/J21-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Replace the KIT DRIVE ASSY MAIN. (Refer to Removal 42/ Replacement 22.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
22	<p>Checking the connectors of the SOLENOID FEED MSI for connection.</p> <p>Check the connections between the PWBA MCU and SOLENOID FEED MSI.</p> <p>Are P/J23 and P/J231 connected correctly?</p> 	Go to step 23.	Reconnect the connector(s) P/J23 and/or P/J231 correctly.

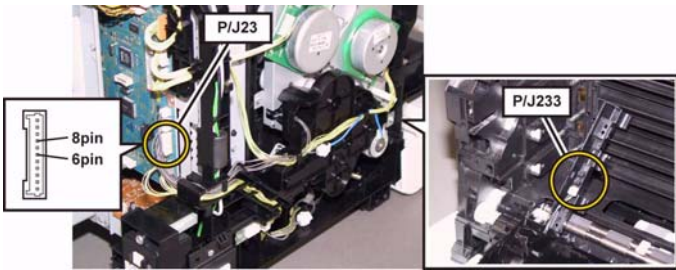
Step	Check	Remedy	
		Yes	No
23	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect P231 from the SOLENOID FEED MSI. Is each cable of J23 <=> P231 continuous?	Go to step 24.	Replace the HARNESS ASSY L SIDE MG AIO.
24	Checking the power to the SOLENOID FEED MSI. Disconnect J23 from the PWBA MCU. Is the voltage across P23-1pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?	Go to step 25.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
25	Checking the SOLENOID FEED MSI for resistance. Disconnect P/J231 of the SOLENOID FEED MSI. Is the resistance across J231-1 and J231-2 about 96 ohm?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace KIT FEED ROLL/SOL/ CLUTCH. (Refer to Removal 45/ Replacement 19.)
26	Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly? 	Go to step 27.	Reconnect the connector(s) P/ J23 and/or P/J232 correctly.
27	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?	Go to step 28.	Replace the HARNESS ASSY L SIDE MG AIO.
28	Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?	Go to step 29.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

Step	Check	Remedy	
		Yes	No
29	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)
30	<p>Checking the connectors of the CLUTCH ASSY DRV (Regi Clutch) for connection. Check the connections between the PWBA MCU and CLUTCH ASSY DRV. Are P/J26 and P/J262 connected correctly?</p> 	Go to step 31.	Reconnect the connector(s) P/J26 and/or P/J262 correctly.
31	<p>Checking the HARNESS ASSY KSNR REGCL MG AIO for continuity. Disconnect J26 from the PWBA MCU. Disconnect P262 from the CLUTCH ASSY DRV. Is each cable of J26 <=> P262 continuous?</p>	Go to step 32.	Replace the HARNESS ASSY KSNR REGCL MG AIO.
32	<p>Checking the power to the CLUTCH ASSY DRV. Disconnect J26 from the PWBA MCU. Is the voltage across P26-4pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Go to step 33.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
33	<p>Checking the CLUTCH ASSY DRV for resistance. Disconnect P/J262 of the CLUTCH ASSY DRV. Is the resistance across J262-1 and J262-2 approximately 280-ohm?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the CLUTCH ASSY DRV. (Refer to Removal 40/ Replacement 24.)

FIP-1.81 072-908: IOT Remain Option Feeder JAM

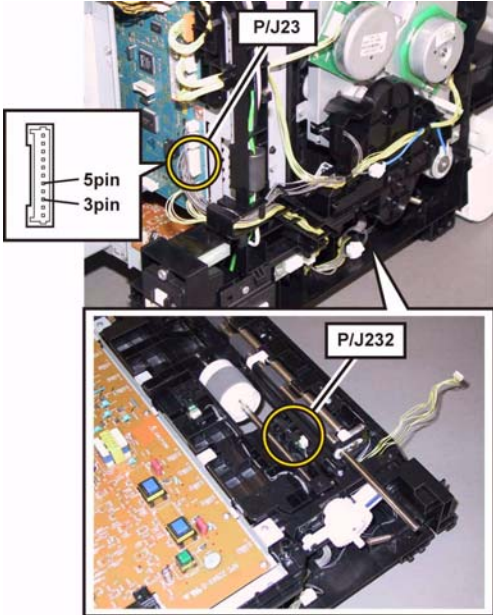
Step	Check	Remedy	
		Yes	No
	Possible causative parts: SENSOR PHOTO (PL12.4.13) PWBA MCU (PL8.3.6) HARNESS ASSY TRAY COMP (PL12.2.20)		
1	Checking the Paper Path Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Checked by [Digital Input] - [DI-a] in [IOT Diag] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 2.
2	Checking the connectors for connection. Check the connections between the PWB ASSY FEED MG AIO and Paper Path Sensor. Are P/J420 and P/J4200 connected correctly?	Go to step 3.	Reconnect the connector(s) P/J420 and/or P/J4200 correctly.
3	Checking the HARNESS ASSY TRAY COMP for continuity. Disconnect J420 from the PWB ASSY FEED MG AIO. Disconnect J4200 from the Paper Path Sensor. Is each cable of J420 <=> J4200 continuous?	Go to step 4.	Replace the HARNESS ASSY TRAY COMP.
4	Checking the power to the SENSOR PHOTO. Disconnect J420 from the PWB ASSY FEED MG AIO. Is the voltage across P420-6pin <=> ground on the PWB ASSY FEED MG AIO, about +3.3 VDC?	Replace the KIT FEEDER ASSY OPT MG AIO.(Refer to Removal 67/ Replacement 68)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.82 075-101 / 075-102 / 075-923: IOT SSF Insert JAM / IOT SSF Paper Pullout JAM /
Waiting for reseal paper of SSF

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO(PL3.1.18) SENSOR PHOTO (PL3.2.13) PWBA MCU (PL8.3.6)		
1	Checking the customer operation. Did the customer insert the paper to the SSF during print?	After print completion, insert the paper to the SSF.	Go to step 2.
2	Checking the SSF No Paper Sensor for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR SSF) is operated by paper. Checked by [Digital Input] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 3.	Go to step 4.
3	Checking the error. Does the error still occur when printing?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.
4	Checking the connectors of the SENSOR PHOTO (SSF No Paper Sensor) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J233 connected correctly? 	Go to step 6.	Reconnect the connector(s) P/ J23 and/or P/J233 correctly, then go to step 5.
5	Does the error still occur when printing?	Go to step 6.	End of work.
6	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J233 from the SENSOR PHOTO. Is each cable of J23 <=> J233 continuous?	Go to step 7.	Replace the HARNESS ASSY L SIDE MG AIO.
7	Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-6pin <=> ground on the PWBA MCU, about +3.3 VDC?	Go to step 8.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
8	Checking the SENSOR PHOTO for operation. Check the voltage across J23-8pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the ACTUATOR SSF is operated?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO.

FIP-1.83 077-100: IOT Regi On early JAM

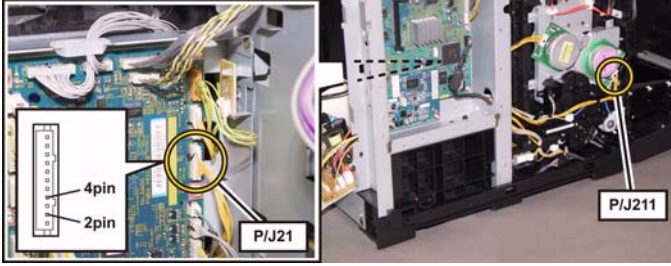
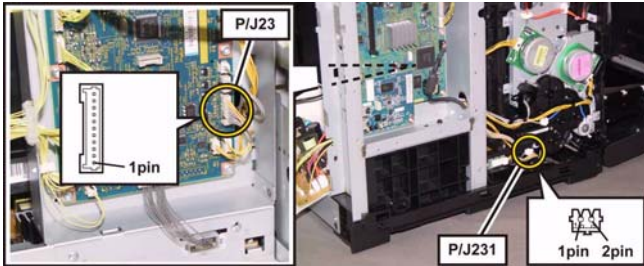
Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO (PL3.1.18) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) PWBA MCU(PL8.2.13)		
1	Checking the error. Replace to known good paper. Does the error still occur when printing?	Go to step 2.	End of work.
2	Checking the Regi Rolls installation. Open the Front Cover and check the Regi Rolls installation. Is the ROLL REGI METAL pressed against the ROLL ASSY REGI by the spring pressure?	Go to step 3.	Replace the printer.
3	Checking the Regi Clutch. Does the clutch noise occur? Checked by [Digital Output]-[DO-29] in [IOT Diag] of diagnosis.	Go to step 4.	Replace the printer.
4	Checking the Regi Sensor for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Checked by [Digital Input]-[DI-2] on [IOT Diag] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 5.
5	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE LOW CST (PL3.2.35) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 6.	Reseat the ACTUATOR REGI IN. (Refer to Removal 61/ Replacement 3) If broken or deformed, replace it.

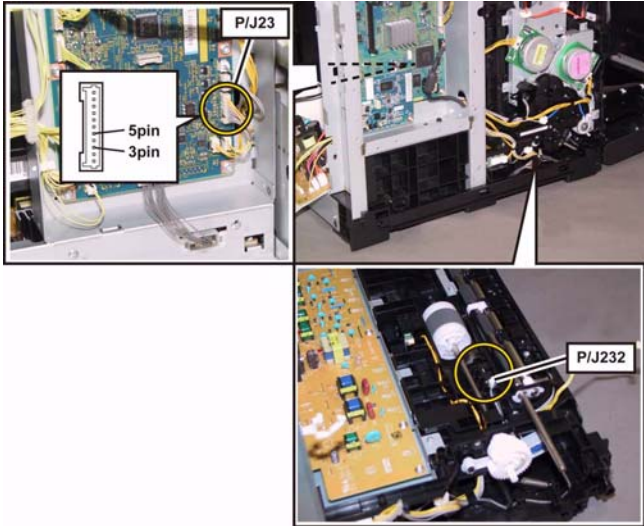
Step	Check	Remedy	
		Yes	No
6	<p>Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly?</p> 	Go to step 7.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
7	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?</p>	Go to step 8.	Replace the HARNESS ASSY L SIDE MG AIO.
8	<p>Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 9.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
9	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE LOW CST (PL3.2.35) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)

FIP-1.84 077-101: IOT Regi OFF Jam

Step	Check	Remedy	
		Yes	No
	Possible causative parts: CASSETTE ASSY 250 MG AIO (PL2.1.1) HOLDER ASSY SEPARATOR (PL2.1.5) CLUTCH ASSY DRV (PL3.1.1) SOLENOID FEED MSI (PL3.1.11) HARNESS ASSY L SIDE MG AIO (PL3.1.18) ROLL ASSY FEED (PL3.2.4) ACTUATOR REGI ROLL M (PL3.2.8) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) DRIVE ASSY MAIN (PL7.1.2) DRIVE ASSY PH (PL7.1.4) PWBA MCU (PL8.3.6) HARNESS ASSY MAIN MOT MG AIO (PL9.1.7) HARNESS ASSY KSNR REGCL MG AIO (PL9.1.9)		
1	Checking the paper condition. Is the paper in the Tray 1 wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 2.	Go to step 3.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after reloading a new paper. Reload a new paper in the Tray 1. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the Main Motor (DRIVE ASSY MAIN) for operation. Does the Main Motor (DRIVE ASSY MAIN) operate properly? Checked by [Digital Output]-[DO-0] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 6.	Go to step 18.
6	Checking the DRIVE ASSY PH for operation. Does the ROLL ASSY FEED, ROLL ASSY REGI and ROLL REGI METAL rotate properly? Checked by [Digital Output]-[DO-29] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Reseat or replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)
7	Checking the paper feeding position. Is the paper not fed from the Tray 1?	Go to step 8.	Go to step 12.
8	Checking after resetting the Guide Sides and End Guide on the Tray 1. Reset the Guide Sides and End Guide, and reseal the Tray 1 to the printer correctly. Does the error still occur when printing?	Go to step 9.	End of work.

Step	Check	Remedy	
		Yes	No
9	Checking the HOLDER ASSY SEPARATOR on the Tray 1 for shape and rotation. Pull the Tray 1 out from the printer. Is the HOLDER ASSY SEPARATOR not contaminated and/or damaged, and rotated smoothly?	Go to step 10.	Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/ Replacement 62.)
10	Checking the ROLL ASSY FEED for shape and rotation. Pull the Tray 1 out from the printer. Is the ROLL ASSY FEED not contaminated and/or damaged, and rotated smoothly?	Go to step 11.	Replace the KIT ROLL ASSY FEED. (Refer to Removal 6/ Replacement 58.)
11	Checking the Cassette Feed Solenoid (SOLENOID FEED) for operation. Does the Cassette Feed Solenoid (SOLENOID FEED) operate properly? Checked by [Digital Output] - [DO-b] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Replace the CASSETTE ASSY 250 MG AIO. (Refer to Removal 1/Replacement 63.)	Go to step 21.
12	Checking the paper lead edge staying position. Does the paper lead edge stay before the ROLL ASSY REGI and ROLL REGI METAL?	Go to step 13.	The paper lead edge stay after the ROLL ASSY REGI and ROLL REGI METAL, then go to step 16.
13	Checking the paper transfer path between the ROLL ASSY FEED and ROLL ASSY REGI. Are there any obstacles on the paper transfer path?	Remove the obstacles or stains from the paper transfer path.	Go to step 14.
14	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 15.	Reseat the ACTUATOR REGI IN. (Refer to Removal 61/ Replacement 3) If broken or deformed, replace it.
15	Checking the Regi. Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis.	Go to step 16.	Go to step 25.
16	Checking the Regi. Clutch (CLUTCH ASSY DRV) for operation, and ROLL ASSY REGI and ROLL REGI METAL for rotation. Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. Does the Regi. Clutch (CLUTCH ASSY DRV) operate properly, and the ROLL ASSY REGI and ROLL REGI METAL rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 17.	Go to step 29.

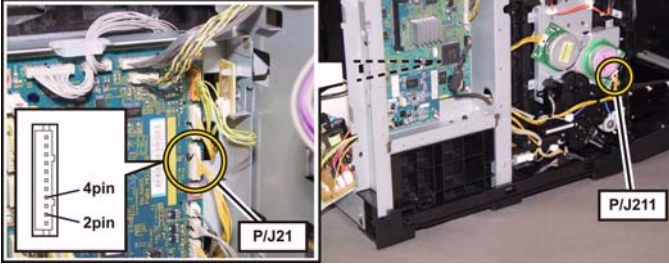
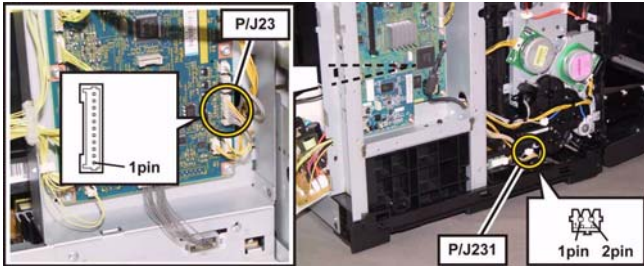
Step	Check	Remedy	
		Yes	No
17	<p>Checking the ACTUATOR REGI ROLL M for shape and operation.</p> <p>Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation.</p> <p>Are the shape and operation of the ACTUATOR REGI ROLL M normal?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Reseat the ACTUATOR REGI ROLL M. If broken or deformed, replace it with a new one.
18	<p>Checking the connectors for connection.</p> <p>Check the connections between the PWBA MCU and DRIVE ASSY MAIN (Main Motor).</p> <p>Are P/J21 and P/J211 connected correctly?</p> 	Go to step 19.	Reconnect the connector(s) P/J21 and/or P/J211 correctly.
19	<p>Checking the HARNESS ASSY MAIN MOT MG AIO for continuity.</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Disconnect J211 from the DRIVE ASSY MAIN.</p> <p>Is each cable of J21 <=> J211 continuous?</p>	Go to step 20.	Replace the HARNESS ASSY MAIN MOT MG AIO.
20	<p>Checking the power to the DRIVE ASSY MAIN.</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Are the voltages across J21-2pin/J21-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Replace the KIT DRIVE ASSY MAIN. (Refer to Removal 42/ Replacement 22.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
21	<p>Checking the connectors of the SOLENOID FEED MSI for connection.</p> <p>Check the connections between the PWBA MCU and SOLENOID FEED MSI.</p> <p>Are P/J23 and P/J231 connected correctly?</p> 	Go to step 22.	Reconnect the connector(s) P/J23 and/or P/J231 correctly.
22	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity.</p> <p>Disconnect J23 from the PWBA MCU.</p> <p>Disconnect P231 from the SOLENOID FEED MSI.</p> <p>Is each cable of J23 <=> P231 continuous?</p>	Go to step 23.	Replace the HARNESS ASSY L SIDE MG AIO.
23	<p>Checking the power to the SOLENOID FEED MSI.</p> <p>Disconnect J23 from the PWBA MCU.</p> <p>Is the voltage across P23-1pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Go to step 24.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

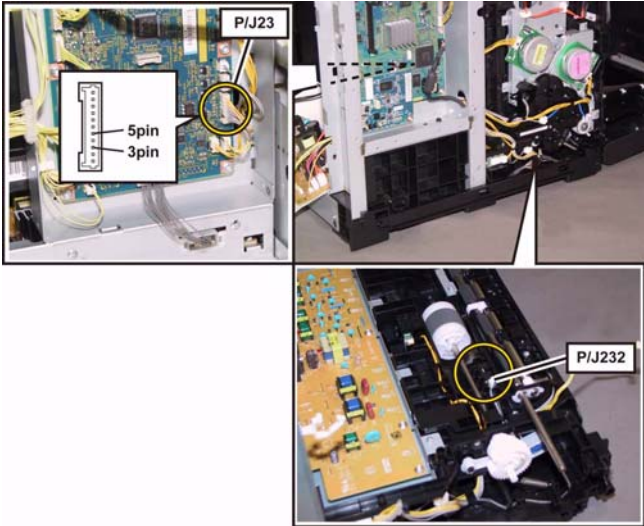
Step	Check	Remedy	
		Yes	No
24	<p>Checking the SOLENOID FEED MSI for resistance. Disconnect P/J231 of the SOLENOID FEED MSI. Is the resistance across J231-1 and J231-2 about 96 ohm?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the KIT FEED ROLL / SOL / CLUTCH. (Refer to Removal 45/ Replacement 19)
25	<p>Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly?</p> 	Go to step 26.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
26	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?</p>	Go to step 27.	Replace the HARNESS ASSY L SIDE MG AIO.
27	<p>Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 28.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
28	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)

FIP-1.85 077-102 / 077-103 / 077-106: IOT Exit On JAM / IOT Exit On early JAM / IOT
Stop Reservation JAM

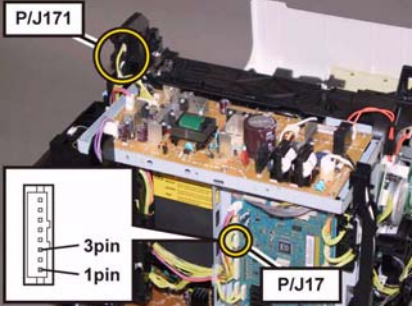
Step	Check	Remedy	
		Yes	No
	Possible causative parts: CASSETTE ASSY 250 MG AIO (PL2.1.1) HOLDER ASSY SEPARATOR (PL2.1.5) CLUTCH ASSY DRV (PL3.1.1) SOLENOID FEED MSI (PL3.1.11) HARNESS ASSY L SIDE MG AIO (PL3.1.18) ROLL ASSY FEED (PL3.2.4) ACTUATOR REGI ROLL M (PL3.2.8) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) DRIVE ASSY MAIN (PL7.1.2) DRIVE ASSY PH (PL7.1.4) PWBA MCU (PL8.3.6) HARNESS ASSY MAIN MOT MG AIO (PL9.1.7) HARNESS ASSY KSNR REGCL MG AIO (PL9.1.9)		
1	Checking the paper condition. Is the paper in the Tray 1 wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 2.	Go to step 3.
2	Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after reloading a new paper. Reload a new paper in the Tray 1. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 5.	End of work.
5	Checking the Main Motor (DRIVE ASSY MAIN) for operation. Does the Main Motor (DRIVE ASSY MAIN) operate properly? Checked by [Digital Output]-[DO-0] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 6.	Go to step 18.
6	Checking the DRIVE ASSY PH for operation. Does the ROLL ASSY FEED, ROLL ASSY REGI and ROLL REGI METAL rotate properly? Checked by [Digital Output]-[DO-29] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Reseat or replace the KIT DRIVE ASSY PH. (Refer to Removal 41/ Replacement 23.)
7	Checking the paper feeding position. Is the paper not fed from the Tray 1?	Go to step 8.	Go to step 12.
8	Checking after resetting the Guide Sides and End Guide on the Tray 1. Reset the Guide Sides and End Guide, and reseal the Tray 1 to the printer correctly. Does the error still occur when printing?	Go to step 9.	End of work.

Step	Check	Remedy	
		Yes	No
9	Checking the HOLDER ASSY SEPARATOR on the Tray 1 for shape and rotation. Pull the Tray 1 out from the printer. Is the HOLDER ASSY SEPARATOR not contaminated and/or damaged, and rotated smoothly?	Go to step 10.	Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/ Replacement 62.)
10	Checking the ROLL ASSY FEED for shape and rotation. Pull the Tray 1 out from the printer. Is the ROLL ASSY FEED not contaminated and/or damaged, and rotated smoothly?	Go to step 11.	Replace the KIT ROLL ASSY FEED. (Refer to Removal 6/ Replacement 58.)
11	Checking the Cassette Feed Solenoid (SOLENOID FEED) for operation. Does the Cassette Feed Solenoid (SOLENOID FEED) operate properly? Checked by [Digital Output] - [DO-b] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Replace the CASSETTE ASSY 250 MG AIO. (Refer to Removal 1/ Replacement 63.)	Go to step 21.
12	Checking the paper lead edge staying position. Does the paper lead edge stay before the ROLL ASSY REGI and ROLL REGI METAL?	Go to step 13.	The paper lead edge stay after the ROLL ASSY REGI and ROLL REGI METAL, then go to step 16.
13	Checking the paper transfer path between the ROLL ASSY FEED and ROLL ASSY REGI. Are there any obstacles on the paper transfer path?	Remove the obstacles or stains from the paper transfer path.	Go to step 14.
14	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 15.	Reseat the ACTUATOR REGI IN. (Refer to Removal 61/ Replacement 3) If broken or deformed, replace it.
15	Checking the Regi. Sensor (SENSOR PHOTO) for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Checked by [Digital Input] - [DI-2] in [IOT Diag] of diagnosis.	Go to step 16.	Go to step 25.
16	Checking the Regi. Clutch (CLUTCH ASSY DRV) for operation, and ROLL ASSY REGI and ROLL REGI METAL for rotation. Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. Does the Regi. Clutch (CLUTCH ASSY DRV) operate properly, and the ROLL ASSY REGI and ROLL REGI METAL rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 17.	Go to step 29.

Step	Check	Remedy	
		Yes	No
17	<p>Checking the ACTUATOR REGI ROLL M for shape and operation.</p> <p>Remove the CHUTE ASSY LOW (PL3.2.27) once to check the shape and operation.</p> <p>Are the shape and operation of the ACTUATOR REGI ROLL M normal?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Reseat the ACTUATOR REGI ROLL M. If broken or deformed, replace it with a new one.
18	<p>Checking the connectors for connection.</p> <p>Check the connections between the PWBA MCU and DRIVE ASSY MAIN (Main Motor).</p> <p>Are P/J21 and P/J211 connected correctly?</p> 	Go to step 19.	Reconnect the connector(s) P/J21 and/or P/J211 correctly.
19	<p>Checking the HARNESS ASSY MAIN MOT MG AIO for continuity.</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Disconnect J211 from the DRIVE ASSY MAIN.</p> <p>Is each cable of J21 <=> J211 continuous?</p>	Go to step 20.	Replace the HARNESS ASSY MAIN MOT MG AIO.
20	<p>Checking the power to the DRIVE ASSY MAIN.</p> <p>Disconnect J21 from the PWBA MCU.</p> <p>Are the voltages across J21-2pin/J21-4pin <=> ground on the PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Replace the KIT DRIVE ASSY MAIN. (Refer to Removal 42/ Replacement 22.)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
21	<p>Checking the connectors of the SOLENOID FEED MSI for connection.</p> <p>Check the connections between the PWBA MCU and SOLENOID FEED MSI.</p> <p>Are P/J23 and P/J231 connected correctly?</p> 	Go to step 22.	Reconnect the connector(s) P/J23 and/or P/J231 correctly.
22	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity.</p> <p>Disconnect J23 from the PWBA MCU.</p> <p>Disconnect P231 from the SOLENOID FEED MSI.</p> <p>Is each cable of J23 <=> P231 continuous?</p>	Go to step 23.	Replace the HARNESS ASSY L SIDE MG AIO.
23	<p>Checking the power to the SOLENOID FEED MSI.</p> <p>Disconnect J23 from the PWBA MCU.</p> <p>Is the voltage across P23-1pin <=> ground on the PWBA MCU, about +24 VDC when the Interlock Switch (HARN ASSY INTERLOCK AIO) is pushed?</p>	Go to step 24.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

Step	Check	Remedy	
		Yes	No
24	<p>Checking the SOLENOID FEED MSI for resistance. Disconnect P/J231 of the SOLENOID FEED MSI. Is the resistance across J231-1 and J231-2 about 96 ohm?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the KIT FEED ROLL / SOL / CLUTCH. (Refer to Removal 45/ Replacement 19)
25	<p>Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly?</p> 	Go to step 26.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
26	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?</p>	Go to step 27.	Replace the HARNESS ASSY L SIDE MG AIO.
27	<p>Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 28.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
28	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)

FIP-1.86 077-104 / 077-105: IOT Exit Off JAM / IOT Exit Off early JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) PWBA MCU (PL8.3.6) HARNESS ASSY FUSER MG AIO (PL6.1.2)		
1	Checking the error. Replace to known good paper. Does the error still occur when printing?	Go to step 2.	End of work.
2	Checking the Exit Sensor for operation. Does the number on the screen increase by one, when the actuator of the Exit Sensor in the FUSER ASSY is operated? Checked by [Digital Input]-[DI-3] on [IOT Diag] of diagnosis. Warning: Start the operation after the FUSER ASSY has cooled down.	Go to step 7.	Go to step 3.
3	Checking the connectors of the Exit Sensor in the FUSER ASSY for connection. Check the connections between the PWBA MCU and FUSER ASSY. Are P/J17 and P/J171 connected correctly? 	Go to step 4.	Reconnect the connector(s) P/J17 and/or P/J171 correctly.
4	Checking the HARNESS ASSY FUSER MG AIO for continuity. Remove the FUSER ASSY. Disconnect J17 from the PWBA MCU. Is each cable of J17 <=> P171 continuous? NOTE: P171 is attached to the frame.	Go to step 5.	Replace the HARNESS ASSY FUSER MG AIO.
5	Checking the power to the Exit Sensor in the FUSER ASSY. Disconnect the connector of J17 on the PWBA MCU. Is the voltage across J17-1pin <=> ground on the PWBA MCU, about +3.3 VDC?	Go to step 6.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
6	Checking the Exit Sensor for operation. Check the voltage across J17-3pin <=> ground on the PWBA MCU. Does the voltage change, when the actuator of the Exit Sensor is operated?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.

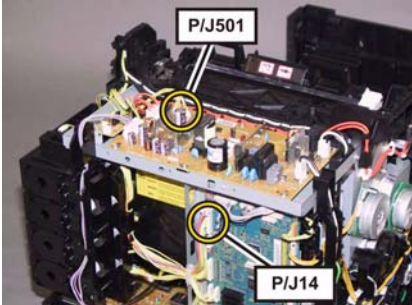
Step	Check	Remedy	
		Yes	No
7	Checking the Regi Rolls installation. Open the Front Cover and check the Regi Rolls installation. Is the ROLL REGI METAL pressed against the ROLL ASSY REGI by the spring pressure?	Go to step 8.	Replace the printer.
8	Checking the Regi Clutch. Does the clutch noise occur? Checked by [Digital Output] - [DO-29] in [IOT Diag] of diagnosis.	Replace the printer.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

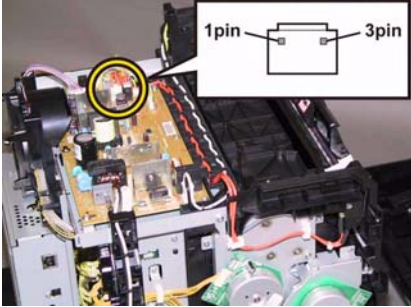
FIP-1.87 077-107 / 077-108: IOT Duplex Misfeed JAM / IOT Duplex JAM (2155cdn only)

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO (PL3.1.18) HARNESS ASSY OPTION MG AIO (PL3.1.20) ROLL ASSY REGI (PL3.2.9) ROLLREGI METAL (PL3.2.10) ROLLER ASSY DUP (PL11.2.9) SENSOR PHOTO(REGI SENSOR) (PL3.2.13) FUSER ASSY (PL6.1.1) PWBA MCU (PL8.3.6) FEEDER ASSY DUP AIO STD (PL11.1.1)		
1	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT, then check the latching. Does the error still occur when printing?	Go to step 2.	End of work.
2	Checking after resetting the FUSER ASSY. Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when printing?	Go to step 3.	End of work.
3	Checking after resetting the Duplex. Reseat the Duplex. Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the DRIVE ASSY EXIT for operation. Does the DRIVE ASSY EXIT operate properly? Checked by [Digital Output]-[DO-D] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 5.	Replace the FEEDER ASSY DUP AIO STD. (Refer to Removal 21/ Replacement 43).
5	Checking the DRIVE ASSY DUP for operation. Does the DRIVE ASSY DUP operate properly? Checked by [Digital Output]-[DO-12] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 6.	Replace the FEEDER ASSY DUP AIO STD. (Refer to Removal 21/ Replacement 43).
6	Checking the Duplex Clutch for operation. Does the Duplex Clutch operate properly? Checked by [Digital Output]-[DO-35] on [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 7.	Replace the FEEDER ASSY DUP AIO STD. (Refer to Removal 21/ Replacement 43).
7	Checking the SENSOR PHOTO (REGI SENSOR) for operation. Does the number on the screen increase by one, every time the actuator of the SENSOR PHOTO (REGI SENSOR) is operated? Checked by [Digital Input]-[DI-2] in [IOT Diagnosis] of diagnosis.	Go to step 8.	Go to step 10.
8	Checking the ROLLER ASSY DUP for shape and operation. Are ROLLER ASSY DUP seated correctly? Also, are they not contaminated and/or damaged, and rotated smoothly? Check these items by turning with your finger.	Go to step 9.	Replace ROLLER ASSY DUP (Refer to Removal 22/ Replacement 42).

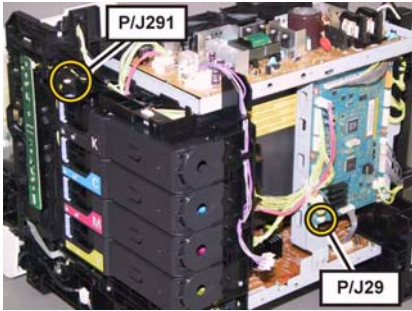
Step	Check	Remedy	
		Yes	No
9	Checking the HARNESS ASSY OPTION MG AIO for continuity. Disconnect J27 from PWBA MCU. Disconnect P272 from HARNESS ASSY OPTION MG AIO. Is each cable of J27 <=> P272 continuous?	Go to step 14.	Replace HARNESS ASSY OPTION MG AIO.
10	Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly?	Go to step 11.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
11	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?	Go to step 12.	Replace the HARNESS ASSY L SIDE MG AIO.
12	Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?	Go to step 13.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
13	Checking the SENSOR PHOTO for operation. Check the voltage across 23-5pin <=> ground on the PWBA MCU. Remove the CHUTE ASSY LOW (PL3.2.27) once to check the operation. Does the voltage change, when the actuator of the SENSOR PHOTO is operated?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the Regi Sensor.
14	Checking after replacing FEEDER ASSY DUP AIO STD. Replace FEEDER ASSY DUP AIO STD. Does the error still occur when printing?	Go to step 15.	End of work.
15	Checking after replacing FUSER ASSY. Replace FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when printing? NOTE: After replacement, be sure to clear life counter value.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.88 077-300: IOT Cover Front Open

Step	Check	Remedy	
		Yes	No
	Possible causative parts: COVER ASSY FRONT (PL1.2.1) PWBA LVPS (PL8.2.12) HARN ASSY INTERLOCK AIO (PL8.1.1) PWBA MCU (PL8.3.6) HARNESS ASSY LVPS MAIN MG AIO (PL9.1.3)		
1	Checking the COVER ASSY FRONT (Front Cover) for shape. Are there any damages on the COVER ASSY FRONT?	Replace the COVER ASSY FRONT. (Refer to Removal 25/ Replacement 39.)	Go to step 2.
2	Checking the COVER ASSY FRONT for latching. Open and close the COVER ASSY FRONT. Is the COVER ASSY FRONT latched correctly?	Go to step 3.	Reseat or replace the COVER ASSY FRONT. (Refer to Removal 25/ Replacement 39.)
3	Checking the interlock switch for operation. Does the number on the screen increase by one, when the COVER ASSY FRONT is closed and opened? Checked by [Digital Input] - [DI-7] in [IOT Diag] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 4.
4	Checking the connectors for connection. Check the connections between PWBA MCU and PWBA LVPS. Are P/J14 and P/J501 connected correctly? 	Go to step 6.	Reconnect the connector(s) P/ J14 and/or P/J501 correctly, then go to step 5.
5	Does the error still occur when the power is turned OFF and ON?	Go to step 6.	End of work.
6	Checking the HARNESS ASSY LVPS MAIN MG AIO for continuity. Disconnect J14 from the PWBA MCU. Disconnect J501 from the PWBA LVPS. Is each cable of J14 <=> J501 continuous?	Go to step 7.	Replace the HARNESS ASSY LVPS MAIN MG AIO.

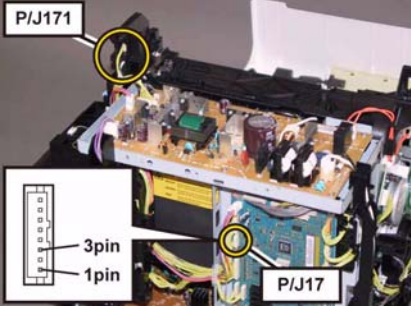
Step	Check	Remedy	
		Yes	No
7	<p>Checking the power to the Interlock Switch Disconnect the connector of J44 on the PWBA LVPS. Is the voltage across P44-1 <=> ground on the PWBA LVPS, about +24 VDC?</p> 	Go to step 8.	Replace the PWBA LVPS (Refer to Removal 33/Replacement 31)
8	<p>Checking the Interlock Switch for operation Check the voltage across P44-3pin <=> ground on the PWBA LVPS. Does the voltage change, when the Interlock Switch is turned ON/OFF?</p>	Replace the PWBA LVPS (Refer to Removal 33/Replacement 31)	Replace the HARN ASSY INTERLOCK AIO. (Refer to Removal 36/ Replacement 28.)

FIP-1.89 077-301: IOT Side Cover Open

Step	Check	Remedy	
		Yes	No
	Possible causative parts: COVER WINDOW TNR AIO (PL1.1.7) SWITCH (PL5.1.9) HARN ASSY SIDE SW (PL5.1.27) PWBA MCU (PL8.3.6)		
1	Checking the COVER WINDOW TNR AIO (Side Cover) for shape. Are there any damages on the COVER WINDOW TNR AIO?	Replace the KIT COVER WINDOW TNR AIO. (Refer to Removal 9/ Replacement 55.)	Go to step 2.
2	Checking the COVER WINDOW TNR AIO for latching. Open and close the COVER ASSY WINDOW TRN. Is the COVER WINDOW TNR AIO latched correctly?	Go to step 3.	Replace the KIT COVER WINDOW TNR AIO. (Refer to Removal 9/ Replacement 55.)
3	Checking the Side R Switch (SWITCH) for operation. Does the number on the screen increase by one, when the COVER ASSY WINDOW TRN is closed and opened? Checked by [Digital Input] - [DI-6] in [IOT Diag] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 4.
4	Checking the HARN ASSY SIDE SW for continuity. Disconnect J29 from the PWBA MCU. Disconnect J291 from the SIDE R SWITCH. Is each cable of J29 <=> J291 continuous? 	Go to step 5.	Replace the HARN ASSY SIDE SW.
5	Checking after replacing the Side R Switch (SWITCH). Replace the Side R Switch (SWITCH). (Refer to Removal 13/ Replacement 41.) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

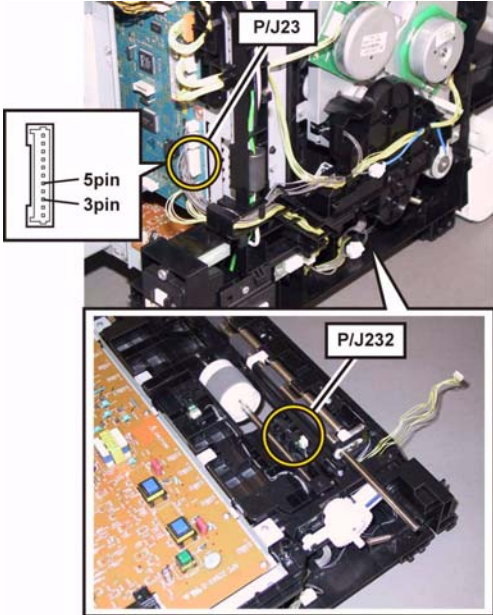
FIP-1.90 077-900: IOT Exit JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FUSER ASSY (PL6.1.1) HARNESS ASSY FUSER MG AIO (PL6.1.2) PWBA MCU (PL8.3.6)		
1	Checking the paper feeding Was a paper fed from SSF?	Go to step 2.	Go to step 4.
2	Checking the paper setting Was the paper correctly set to SSF without slant?	Go to step 4.	Set the paper to SSF correctly, and go to step 3.
3	Does the error still occur when printing?	Go to step 4.	End of work.
4	Checking the paper condition Is the paper wrinkled or damaged?	Replace the paper with a new and dry one, then go to step 5.	Go to step 6.
5	Does the error still occur when printing?	Go to step 7.	End of work.
6	Checking after reloading a new paper Reload a new paper. Does the error still occur when printing?	Go to step 7.	End of work.
7	Checking the COVER ASSY FRONT for latching Open and close the COVER ASSY FRONT, and then latch correctly. Does the error still occur when printing?	Go to step 8.	End of work.
8	Checking the FUSER ASSY Are there any remaining paper and/or foreign substance in the FUSER ASSY? Warning: Start the operation after the FUSER ASSY has cooled down.	Remove the paper and/or substance, then go to step 9.	Go to step 9.
9	Checking after resetting the FUSER ASSY Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the error still occur when printing?	Go to step 10.	End of work.
10	Checking the Exit Sensor for operation Does the number on the screen increase by one, when the actuator of the Exit Sensor in the FUSER ASSY is operated? Checked by [Digital Input] - [DI-3] in [IOT Diag] of diagnosis. Warning: Start the operation after the FUSER ASSY has cooled down.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 11.

Step	Check	Remedy	
		Yes	No
11	<p>Checking the connectors of the Exit Sensor in the FUSER ASSY for connection. Check the connections between the PWBA MCU and FUSER ASSY. Are P/J17 and P/J171 connected correctly?</p> 	Go to step 12.	Reconnect the connector(s) P/J17 and/or P/J171 correctly.
12	<p>Checking the HARNESS ASSY FUSER MG AIO for continuity. Remove the FUSER ASSY. Disconnect J17 from the PWBA MCU. Is each cable of J17 <=> P171 continuous? NOTE: P171 is attached to the frame.</p>	Go to step 13.	Replace the HARNESS ASSY FUSER MG AIO.
13	<p>Checking the power to the Exit Sensor in the FUSER ASSY. Disconnect the connector of J17 on the PWBA MCU. Is the voltage across J17-1pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 14.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
14	<p>Checking the Exit Sensor for operation. Check the voltage across J17-3pin <=> ground on the PWBA MCU. Does the voltage change, when the actuator of the Exit Sensor is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.

FIP-1.91 077-901: IOT Remain Registration JAM

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO (PL3.1.18) ACTUATOR REGI IN (PL3.2.11) SENSOR PHOTO (PL3.2.13) PWBA MCU(PL8.2.13)		
1	Checking the error. Replace to known good paper. Does the error still occur when printing?	Go to step 2.	End of work.
2	Checking the Regi Rolls installation. Open the Front Cover and check the Regi Rolls installation. Is the ROLL REGI METAL pressed against the ROLL ASSY REGI by the spring pressure?	Go to step 3.	Replace the printer.
3	Checking the Regi Clutch. Does the clutch noise occur? Checked by [Digital Output]-[DO-29] in [IOT Diag] of diagnosis.	Go to step 4.	Replace the printer.
4	Checking the Regi Sensor for operation. Does the number on the screen increase by one, when the actuator (ACTUATOR REGI IN) is operated? Checked by [Digital Input]-[DI-2] on [IOT Diag] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 5.
5	Checking the ACTUATOR REGI IN for shape and operation. Remove the CHUTE LOW CST (PL3.2.35) once to check the shape and operation. Are the shape and operation of the ACTUATOR REGI IN normal?	Go to step 6.	Reseat the ACTUATOR REGI IN. (Refer to Removal 61/ Replacement 3) If broken or deformed, replace it.

Step	Check	Remedy	
		Yes	No
6	<p>Checking the connectors of the SENSOR PHOTO (REGI SENSOR) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J232 connected correctly?</p> 	Go to step 7.	Reconnect the connector(s) P/J23 and/or P/J232 correctly.
7	<p>Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J232 from the SENSOR PHOTO. Is each cable of J23 <=> J232 continuous?</p>	Go to step 8.	Replace the HARNESS ASSY L SIDE MG AIO.
8	<p>Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-3pin <=> ground on the PWBA MCU, about +3.3 VDC?</p>	Go to step 9.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)
9	<p>Checking the SENSOR PHOTO for operation. Check the voltage across J23-5pin <=> ground on the PWBA MCU. Remove the CHUTE LOW CST (PL3.2.35) once to check the operation. Does the voltage change, when the actuator (ACTUATOR REGI IN) is operated?</p>	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Replace the SENSOR PHOTO:REGI. (Refer to Removal 59/ Replacement 5.)

FIP-1.92 077-907: IOT Remain Duplex JAM (2155cdn only)

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO (PL3.1.18) SENSOR PHOT (SSF No Paper Sensor) (PL3.2.13) PWBA MCU (PL8.3.6)		
1	Checking the SENSOR PHOTO (SSF No Paper Sensor) for operation. Does the number on the screen increase by one, every time the actuator of the SENSOR PHOTO (SSF No Paper Sensor) is operated? Checked by [Digital Input]-[DI-0] in [IOT Diagnosis] of diagnosis.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	Go to step 2.
2	Checking the connectors of the SENSOR PHOTO (SSF No Paper Sensor) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J233 connected correctly?	Go to step 3.	Reconnect the connector(s) P/J23 and/or P/J233 correctly.
3	Checking the connectors of the SENSOR PHOTO (SSF No Paper Sensor) for connection. Check the connections between the PWBA MCU and SENSOR PHOTO. Are P/J23 and P/J233 connected correctly?	Go to step 4.	Reconnect the connector(s) P/J23 and/or P/J233 correctly.
4	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J23 from the PWBA MCU. Disconnect J233 from the SENSOR PHOTO. Is each cable of J23 <=> J233 continuous?	Go to step 5.	Replace the HARNESS ASSY L SIDE MG AIO.
5	Checking the power to the SENSOR PHOTO. Disconnect J23 from the PWBA MCU. Is the voltage across P23-6pin <=> ground on the PWBA MCU, about +3.3 VDC?	Replace the SENSOR PHOTO(SSF No Paper Sensor)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.93 091-402: IOT PHD Life Pre Warning

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6)		
1	Checking the life counter value of the PHD ASSY. Does the life count value show the near of the end?	Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61)	Go to step 2.
2	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) CAUTION: Be sure to pull eight sealing tapes out from a new PHD ASSY before installation. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

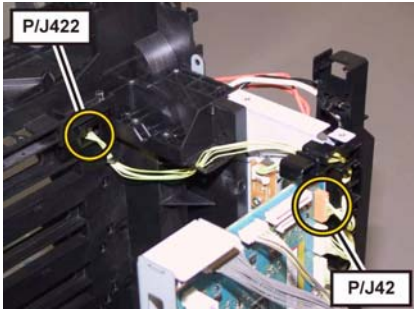
FIP-1.94 091-912: PHD Tape Staying

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6)		
1	Checking the sealing tapes of the PHD ASSY staying. Turn off the power, and open the COVER ASSY FRONT. Remove the PHD ASSY. Has the sealing tapes (total eight sealing tapes) been pulled out? After checking, reseal the PHD ASSY correctly.	Go to step 3.	Pull the sealing tapes out, then go to step 2.
2	Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) CAUTION: Be sure to pull eight sealing tapes out from a new PHD ASSY before installation. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.


FIP-1.95 091-935: IOT PHD Life Over

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6)		
1	Checking the life counter value of the PHD ASSY. Does the life count value show the near of the end?	Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61)	Go to step 2.
2	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 3.	End of work.
3	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) CAUTION: Be sure to pull eight sealing tapes out from a new PHD ASSY before installation. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.96 091-972: IOT PHD Detached

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6) HARN ASSY PHD XPRO (PL9.1.11)		
1	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the connectors for connection. Check the connectors between the PWBA MCU and PHD ASSY. Are P/J42 and P/J422 connected correctly? 	Go to step 4.	Reconnect the connector(s) P/J42 and/or P/J422 surly, then go to step 3.
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking the HARN ASSY PHD XPRO for continuity. Disconnect P422 from the PHD ASSY. Disconnect J42 from the PWBA MCU. Is each cable of P422 <=> J42 continuous?	Go to step 5.	Replace the HARN ASSY PHD XPRO.
5	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) CAUTION: Be sure to pull eight sealing tapes out from a new PHD ASSY before installation. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.


FIP-1.97 092-310 / 092-910: IOT CTD (ADC) Sensor Dustiness / CTD (ADC) Sensor Dustiness Warning

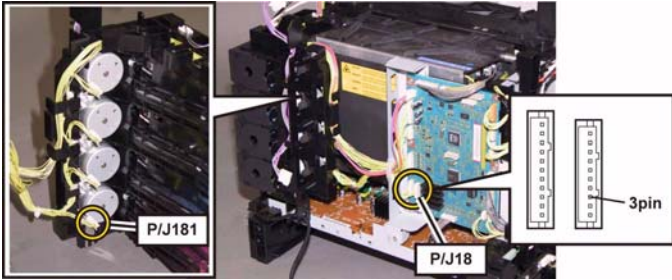
Step	Check	Remedy	
		Yes	No
	Possible causative parts: HARNESS ASSY L SIDE MG AIO (PL3.1.18) TRANSFER ASSY (PL6.1.7) PWBA MCU (PL8.3.6)		
1	Turn OFF the power, and gently wipe the CTD (ADC) Sensor window with a clean dry cloth or cotton swab. After wiping the window, close the COVER ASSY FRONT. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the connectors for connection. Check the connectors between the PWBA MCU and CTD (ADC) Sensor. Are P/J28 and P/J281 connected correctly? 	Go to step 4.	Reconnect the connector(s) P/J28 and/or P/J281 correctly, then go to step 3.
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking the HARNESS ASSY L SIDE MG AIO for continuity. Disconnect J28 from the PWBA MCU. Disconnect J281 from the TRANSFER ASSY. Is each cable of J28 <=> J281 continuous?	Go to step 5.	Replace the HARNESS ASSY L SIDE MG AIO.
5	Checking the surface of the belt on the TRANSFER ASSY. Is the belt dirty?	Clean the belt with a clean dry cloth, then go to step 6.	Go to step 7.
6	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
7	Checking after replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.98 093-423 / 093-424 / 093-425 / 093-426: IOT Toner Cartridge Near Life

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) PWBA MCU (PL8.3.6)		
1	Checking after replacing the Dell-TONER CARTRIDGE (Y, M, C or K). Replace the Dell-TONER CARTRIDGE (Y, M, C or K). (Refer to Removal 5/Replacement 59.) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.99 093-919 / 093-920 / 093-921 / 093-922: IOT YMCK Toner Low Density

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) DISPENSER ASSY (PL5.1.1) FRAME ASSY MOT (PL5.1.2) MOTOR ASSY DISP (PL5.1.3) GEAR IDLER (PL5.1.6) GEAR IDLER AUG (PL5.1.7) GEAR IDLER AGI (PL5.1.8) TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) HARN ASSY TNR MOT (PL5.1.25) TRANSFER ASSY (PL6.1.7) PWBA MCU (PL8.3.6)		
1	Checking the Toner Type. Is the Dell Toner seated?	Go to step 2.	Go to step 5.
2	Checking the sealing tapes on the PHD ASSY staying. Are there sealing tapes on the PHD ASSY? 	Pull the tape out.	Go to step 3.
3	Checking the life count value of the TONER CARTRIDGE (Y, M, C or K). Check the life count value of the TONER CARTRIDGE (Y, M, C or K) in [Parameter] in [IOT Diag] of diagnosis. Does the remainder value shows the near of the end? (Refer to Chapter 2 for details of the life counter value.)	Replace the TONER CARTRIDGE (Y, M, C or K), then go to step 4. (Refer to Removal 5/Replacement 59.)	Go to step 7.
4	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
5	Checking the toner remainder in the Non-Dell Toner Cartridge (Y, M, C or K). Is the toner that remains in the Non-Dell Toner Cartridge (Y, M, C or K) a little?	Replace the Non-Dell Toner Cartridge (Y, M, C or K), then go to step 6.	Go to step 7.
6	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
7	Checking the sealing tapes for yellow toner of the PHD ASSY staying. Turn off the power, and open the COVER ASSY FRONT. Remove the PHD ASSY. Has the sealing tapes for yellow toner been pulled out? After checking, reseal the PHD ASSY.	Go to step 9.	Pull the sealing tapes out, then go to step 8.

Step	Check	Remedy	
		Yes	No
8	Does the error still occur when the power is turned OFF and ON?	Go to step 9.	End of work.
9	Checking after resetting the TONER CARTRIDGE (Y, M, C or K). Remove the TONER CARTRIDGE (Y, M, C or K), and shake it from side to side. Reseat the TONER CARTRIDGE (Y, M, C or K), and check that the lock key is in the lock position. Does the error still occur when the power is turned OFF and ON?	Go to step 10.	End of work.
10	Checking the DISPENSE MOTOR (Y, M, C and K) for rotation. Does the DISPENSE MOTOR (Y, M, C and K) function normally? Checked by [Digital Output] - [DO-21(Y),DO-23(M),DO-25(C),DO-27(K)] in [IOT Diag] of diagnosis. During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	Go to step 11.	Go to step 12.
11	Checking the gears of the DISPENSER ASSY for shape and operation. Are the shape and operation of the gears of the DISPENSER ASSY normal?	Go to step 16.	Replace the defective gear(s) or DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.)
12	Checking the connector for connection. Check the connectors between the PWBA MCU and DISPENSE MOTOR (Y, M, C and K). Are P/J18 and P/J181(Y)/P/J182(M) connected correctly? Are P/J19 and P/J191(C)/P/J192(K) connected correctly? Example: For Yellow 	Go to step 14.	Reconnect the connector(s) P/J18 and P/J181 surly, then go to step 8. or reconnect the connector(s) P/J19 and P/J191 surly, then go to step 8.
13	Does the error still occur when the power is turned OFF and ON?	Go to step 14.	End of work.
14	Checking the HARN ASSY TNR MOT for continuity. Disconnect J18 from the PWBA MCU. Disconnect J181(Y)/J182(M)/J191(C)/J192(K) from the DISPENSE MOTOR (YMCK) MOT. Is each cable of J18 <=> J181/182 continuous? or Is each cable of J19 <=> J191/192 continuous?	Go to step 15.	Replace the HARN ASSY TNR MOT.
15	Checking the power to TNR (Y) MOT (MOTOR ASSY DISP). Disconnect J18/J19 from the PWBA MCU. Is the voltage across P18P/19-3pin <=> ground on PWBA MCU, about +24 VDC when the interlock switch (HARN ASSY INTERLOCK AIO) is pushed.	Replace the MOTOR ASSY DISP or FRAME ASSY MOT.	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

Step	Check	Remedy	
		Yes	No
16	<p>Checking after replacing the TONER CARTRIDGE (Y, M, C or K). Replace the TONER CARTRIDGE (Y, M, C or K), and check that the lock key is in the lock position. (Refer to Removal 5/ Replacement 59.) Does the error still occur when the power is turned OFF and ON?</p>	Go to step 17.	End of work.
17	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Does the error still occur when the power is turned OFF and ON?</p>	Go to step 18.	End of work.
18	<p>Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Does the error still occur when the power is turned OFF and ON?</p>	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	End of work.

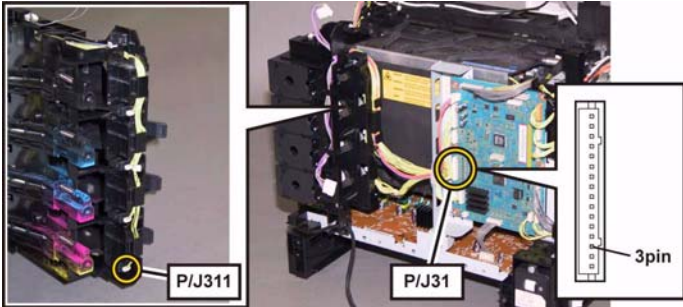
FIP-1.100 093-930 / 093-931 / 093-932 / 093-933: IOT Toner Cartridge Life Over

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) PWBA MCU (PL8.3.6)		
1	Checking after replacing the Dell-TONER CARTRIDGE (Y, M, C or K). Replace the Dell-TONER CARTRIDGE (Y, M, C or K). (Refer to Removal 5/Replacement 59.) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.101 093-934 / 093-935 / 093-936 / 093-937: IOT CRU Waste (YMCK) Full

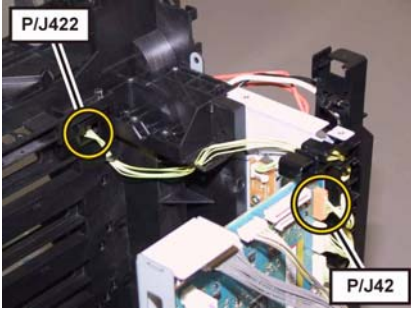
Step	Check	Remedy	
		Yes	No
	Possible causative parts: TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) PWBA MCU (PL8.3.6)		
1	Checking after replacing the Dell-TONER CARTRIDGE (Y, M, C or K). Replace the Dell-TONER CARTRIDGE (Y, M, C or K). (Refer to Removal 5/Replacement 59.) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.102 093-960 / 093-961 / 093-962 / 093-963: IOT (YMCK) CRUM ID Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: CONNECTOR CRUM (PL5.1.14) TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) HARN ASSY TONER CRUM (PL5.1.26) PWBA MCU (PL8.3.6)		
1	Close the COVER WINDOW TNR AIO correctly. Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the Toner Type. Is the Dell Toner seated?	Go to step 3.	Change the Toner Type setting to Non-Dell Toner.
3	Checking after resetting the TONER CARTRIDGE (Y, M, C or K). Reseat the TONER CARTRIDGE (Y, M, C or K), and check that the lock key is in the lock position. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after replacing the TONER CARTRIDGE (Y, M, C or K). Replace the TONER CARTRIDGE (Y, M, C or K), and check that the lock key is in the lock position. (Refer to Removal 5/ Replacement 59.) Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Checking the connector for connection. Check the connectors between the PWBA MCU and CONNECTOR CRUM. Are P/J31 and P/J311(Y),P/J312(M),P/J313(C),P/J314(K) connected correctly? Example: For Yellow 	Go to step 7.	Reconnect the connector(s) P/J31 and/or P/J311 (Y),P/J312 (M),P/J313 (C),P/J314 (K) surly, then go to step 6.
6	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
7	Checking the HARN ASSY TONER CRUM for continuity. Disconnect J31 from the PWBA MCU. Disconnect J31 from the CONNECTOR CRUM. Is each cable of J31 <=> J311/J312/J313/J314 continuous?	Go to step 8.	Replace the HARN ASSY TONER CRUM(Y, M, C or K).

Step	Check	Remedy	
		Yes	No
8	Checking the power to CONNECTOR CRUM. Disconnect J31 from the PWBA MCU. Is the voltage across P31-3pin(Y)/-7pin(M)/-11pin(C)/-15pin <=> ground on the PWBA MCU, about +3.3 VDC?	Replace the CONNECTOR CRUM(Y, M, C or K).	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.103 093-965: IOT PHD CRUM ID Error

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) PWBA MCU (PL8.3.6) HARN ASSY PHD XPRO (PL9.1.11)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the PHD ASSY type. Is the seated PHD ASSY for 2155cn/cdn?	Go to step 4.	Replace the PHD ASSY for 2155cn/cdn, then go to step 3.
3	Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Checking the connectors for connection. Check the connectors between the PWBA MCU and PHD ASSY. Are P/J42 and P/J422 connected correctly?	Go to step 7.	Reconnect the connector(s) P/J42 and/or P/J422 surly, then go to step 6.
6	Does the error still occur when the power is turned OFF and ON?	Go to step 7.	End of work.
7	Checking the HARN ASSY PHD XPRO for continuity. Disconnect P422 from the PHD ASSY. Disconnect J42 from the PWBA MCU. Is each cable of P422 <=> J42 continuous? 	Go to step 8.	Replace the HARN ASSY PHD XPRO.
8	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.104 093-970 / 093-971 / 093-972 / 093-973: IOT Print Cartridge Detached

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TONER CARTRIDGE (Y) (PL5.1.24) TONER CARTRIDGE (M) (PL5.1.23) TONER CARTRIDGE (C) (PL5.1.22) TONER CARTRIDGE (K) (PL5.1.21) HARN ASSY TONER CRUM (PL5.1.26) PWBA MCU (PL8.3.6)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the Toner Type. Is the Dell Toner seated?	Go to step 3.	Change the Toner Type setting to Non-Dell Toner.
3	Checking after resetting the TONER CARTRIDGE (Y, M, C or K). Reseat the TONER CARTRIDGE (Y, M, C or K), and check that the lock key is in the lock position. Does the error still occur when the power is turned OFF and ON?	Go to step 4.	End of work.
4	Checking after replacing the TONER CARTRIDGE (Y, M, C or K). Replace the TONER CARTRIDGE (Y, M, C or K). (Refer to Removal 5/Replacement 59.) Does the error still occur when the power is turned OFF and ON?	Go to step 5.	End of work.
5	Checking the HARN ASSY TONER CRUM for continuity. Disconnect J31 from the PWBA MCU. Disconnect J311 (Y) from the connector CRUM. Are P/J31 and P/J311(Y),P/J312(M),P/J313(C),P/J314(K) connected correctly?	Go to step 6.	Replace the HARN ASSY TONER CRUM
6	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Does the error still occur when the power is turned OFF and ON?	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)	End of work.

FIP-1.105 094-422: IOT Belt Unit Near Life

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TRANSFER ASSY (PL6.1.7) PWBA MCU (PL8.3.6)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the life counter value of the TRANSFER ASSY. Does the life counter value show the near of the end? (Refer to Chapter 2 for details of the life counter value.)	Initialize the life counter value at the Customer Diag, after replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.106 094-911: IOT Belt Unit Life Over

Step	Check	Remedy	
		Yes	No
	Possible causative parts: TRANSFER ASSY (PL6.1.7) PWBA MCU (PL8.3.6)		
1	Does the error still occur when the power is turned OFF and ON?	Go to step 2.	End of work.
2	Checking the life counter value of the TRANSFER ASSY. Does the life counter value show the near of the end? (Refer to Chapter 2 for details of the life counter value.)	Initialize the life counter value at the Customer Diag, after replacing the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Replace the KIT PWBA MCU. (Refer to Removal 39/ Replacement 25)

FIP-1.107 134-211: Fax Card Modem Error

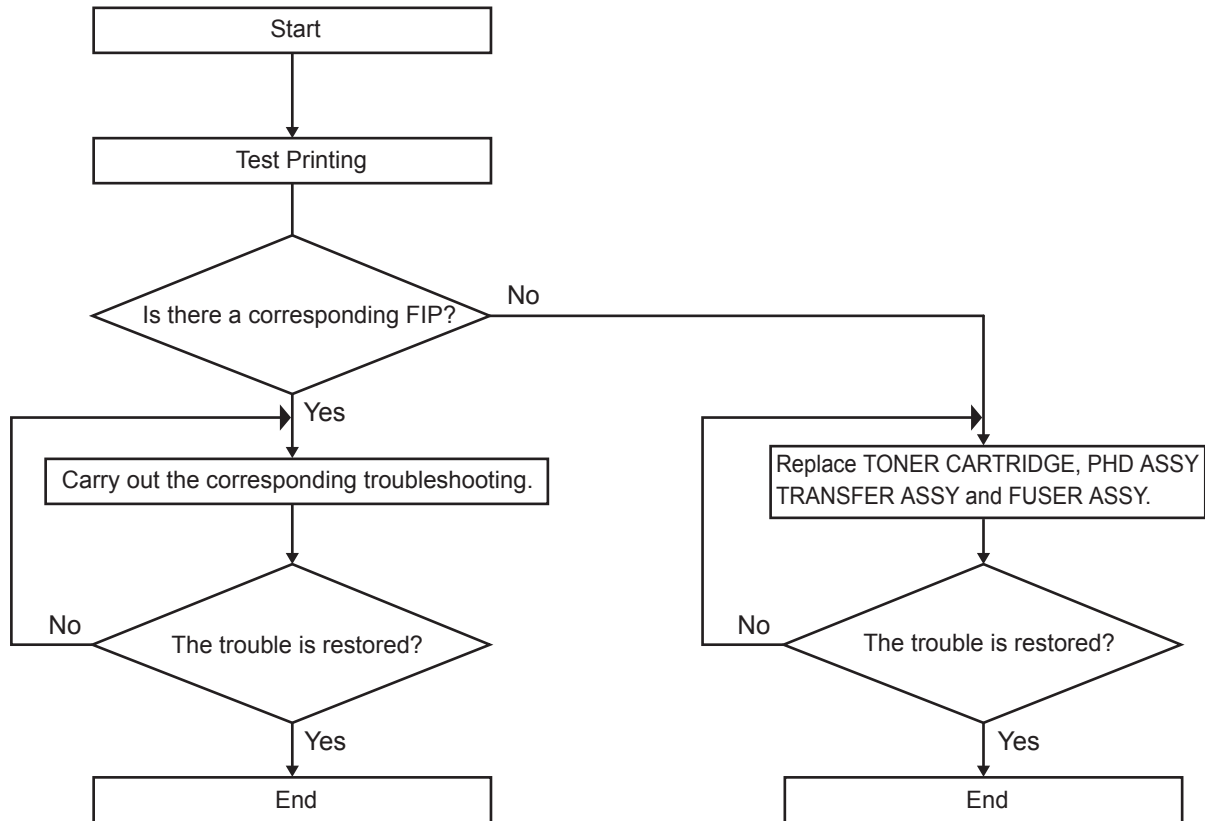
Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2) PWBA FAX (PL8.1.5)		
1	Checking the error Turn off and on the power. Does the error still occur when faxing?	Go to step 2.	End of work.
2	Checking the PWBA FAX installation Reseat the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Go to step 3.	End of work.
3	Checking after replacing the PWBA FAX Replace the PWBA FAX. (Removal 27/Replacement 37) Does the error still occur when faxing?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

FIP-1.108 193-700: Custom Toner Mode

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the Toner Cartridge. Is the installed toner cartridge to the printer the DELL toner?	Go to step 2.	End of work.
2	Checking the printer setting. Is the [Non-Dell Toner] of the [Maintenance] on the [Admin Menu] of the [SET UP] the [On]?	Set to the [Off].	Go to step 3.
3	Checking the Toner Cartridge. Replace to the known good toner cartridges. Does the error still occur when turning on the power?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

4. Image Quality Trouble

4.1 Entry Chart for Image Quality Troubleshooting



Leg_Sec001_001FA

NOTE

It is stated as the ESS is normal. By operating test print with the Printer Engine only, if the trouble is on ESS side or the Printer Engine side can simply be diagnosed, except those phenomena that are not able to be diagnosed by test print.

- Test print result with the Printer Engine only is normal. --- >Malfunction on ESS side

- Test print result with the Printer Engine only is also abnormal. ---> Malfunction on the Printer Engine side

When it is the case of [Malfunction on ESS side], replace with normal ESS and normal Interface Cable, and check.

When the trouble still occurs after replacement, check the host computer side, and operate Troubleshooting efficiently, using the following image quality FIP according to each phenomenon.

When an image quality problem occurs, output a sample print to grasp the nature of the problem, and then perform troubleshooting using "Image Quality FIP List".

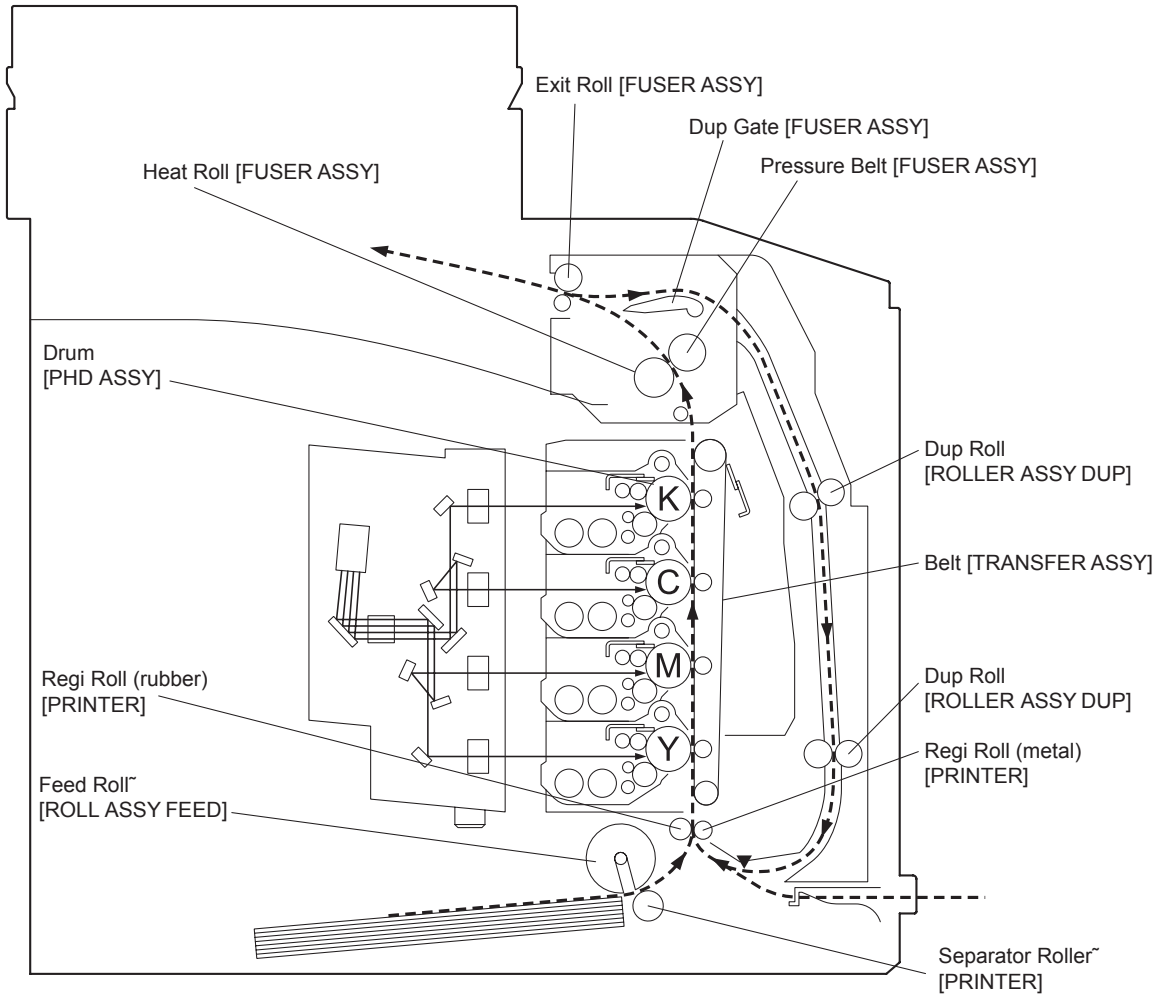
If the problem persists even after a troubleshooting with the Image Quality FIP, check using the FIP again, and then replace the Possible causative parts listed in the relevant FIP one by one.

Image Quality FIP List

- FIP-1.P1 The output is too light
- FIP-1.P2 The entire output is blank
- FIP-1.P3 Part or the entire output is black.
- FIP-1.P4 Toner smears
- FIP-1.P5 Random spots
- FIP-1.P6 Streaks appear on the output
- FIP-1.P7 Pitched color dots
- FIP-1.P8 Vertical blanks
- FIP-1.P9 Ghosting
- FIP-1.P10 Light-Induced Fatigue
- FIP-1.P11 Fog
- FIP-1.P12 Bead-Carry-Out (BCO)
- FIP-1.P13 Jagged characters
- FIP-1.P14 Banding/Horizontal band cross out
- FIP-1.P15 Auger mark
- FIP-1.P16 Wrinkled/Stained paper (Envelope Wrinkle)
- FIP-1.P17 The top margin is incorrect / The side margin is incorrect
- FIP-1.P18 Color registration is out of alignment
- FIP-1.P19 Images are skewed
- FIP-1.P20 Paper Damage
- FIP-1.P21 Unfusing
- FIP-1.P22 Label Stuck

NOTE

When horizontal lines and/or spot occur periodically, it is possibly caused by the trouble of a particular roll. In this case, compare the trouble intervals on the test print with the Pitch Chart. The interval does not necessarily match circumference of the roll. The trouble may be solved easily by the check.

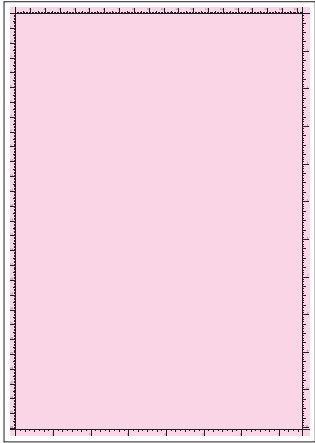


No	Roll Parts	Period (mm)	Replaceable parts
1	Heat Roll	67	FUSER ASSY
2	Pressure Belt	63	FUSER ASSY
3	Drum	76	PHD ASSY
4	Belt	410	TRANSFER ASSY
5	Regi Roll (rubber)	37	PRINTER

-Pitch Chart

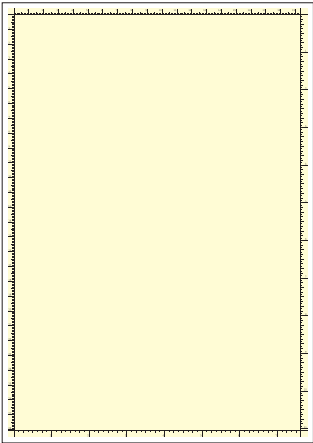
The chart is printed [Contamination Check] in the [Test Print] of the [Diagnosis].

Page 1



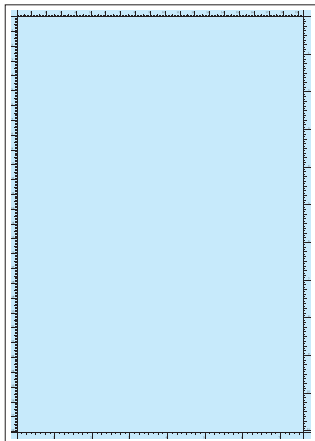
Wsb02028KA

Page 2



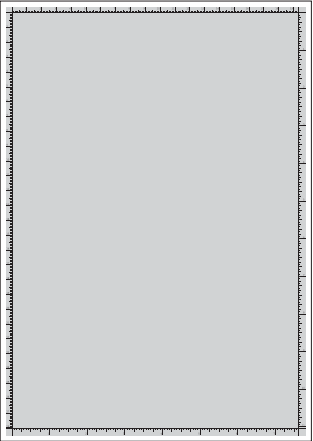
Wsb02027KA

Page 3



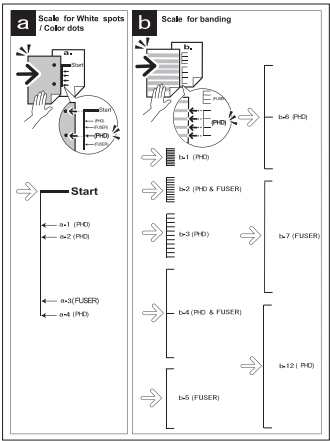
Wsb02029KA

Page 4



Wsb02030KA

Page 5



Wsb02025KA

4.2 Print Image Quality Specifications

Image Quality Guarantee Conditions

The image quality is specified and guaranteed under the following conditions.

1) Environmental Condition

Temperature: 5°C - 32°C

Humidity: 15% RH - 85% RH (85% RH at 28°C)

Note that defect may occur due to condensation after around 30 minutes if the printer is turned on in a critical environment.

2) Guaranteed Paper

The print image quality specified in this chapter should be guaranteed when the standard paper is fed from the cassette tray. The print image quality is evaluated on the maximum size of each standard paper.

Color print quality: X-Pression 24 lb paper

Black and White quality: 4200 paper

3) Paper condition

The paper used is flesh paper immediately after unpacked, which has been left in the operating environment for 12 hours before unpacking.

4) Printer condition

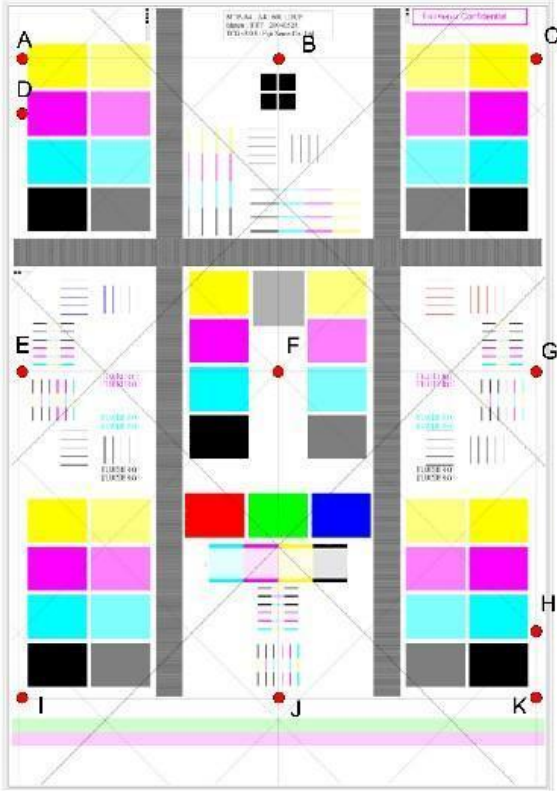
The print image quality specified in this chapter is guaranteed with the printer in normal condition.

5) Criterion for judgment

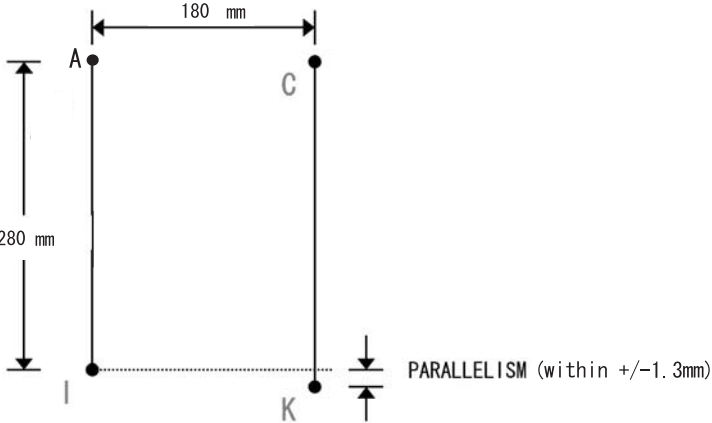
The print image quality is guaranteed with Spec. In rate = 90% ($\lambda = 90\%$).

6) For Color chart, Parallelism, Perpendicularity, Skew, Linearity, Magnification Error, Registration and Printed Guaranteed Area, refer to each chart below.

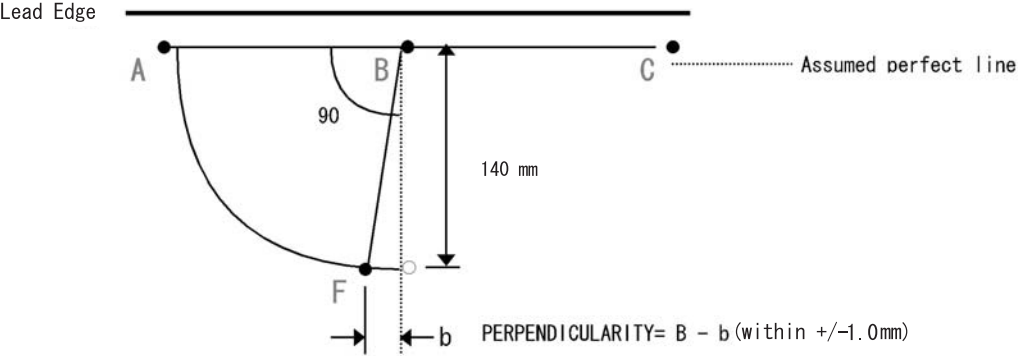
Chart



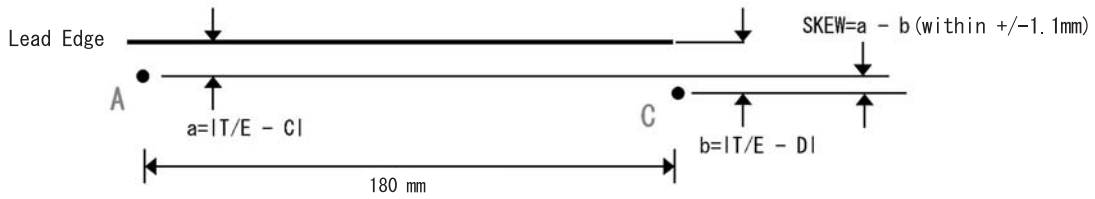
Parallelism



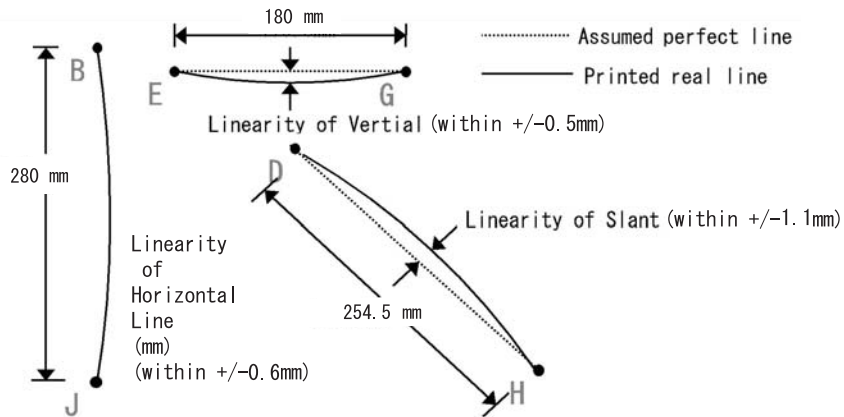
Perpendicularity



Skew

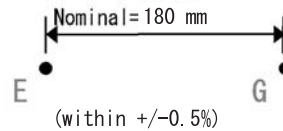
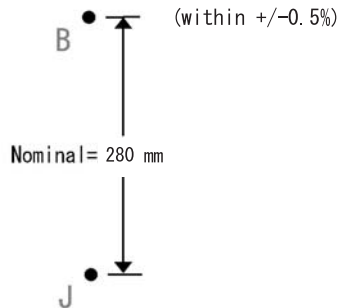


Linearity



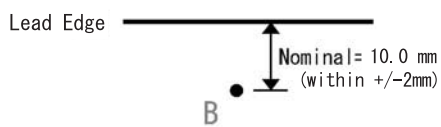
Magnification Error

Magnification = measured length ÷ Nominal

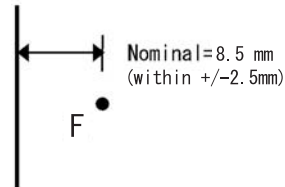


Registration

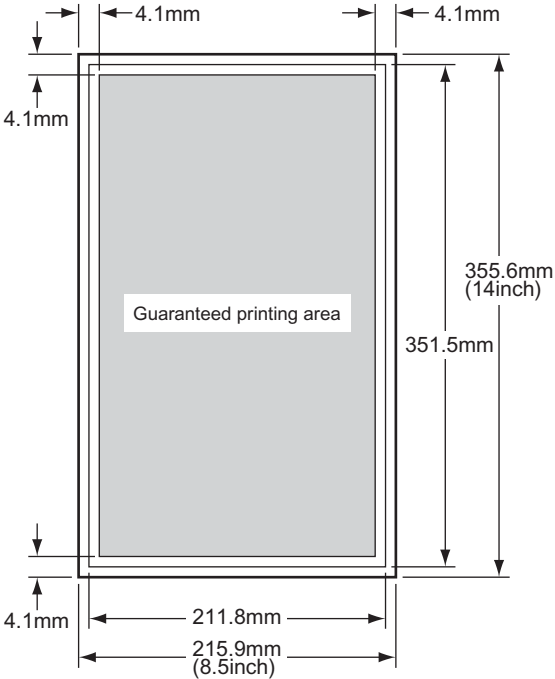
Registration = measured length - Nominal



Side Edge (Left)



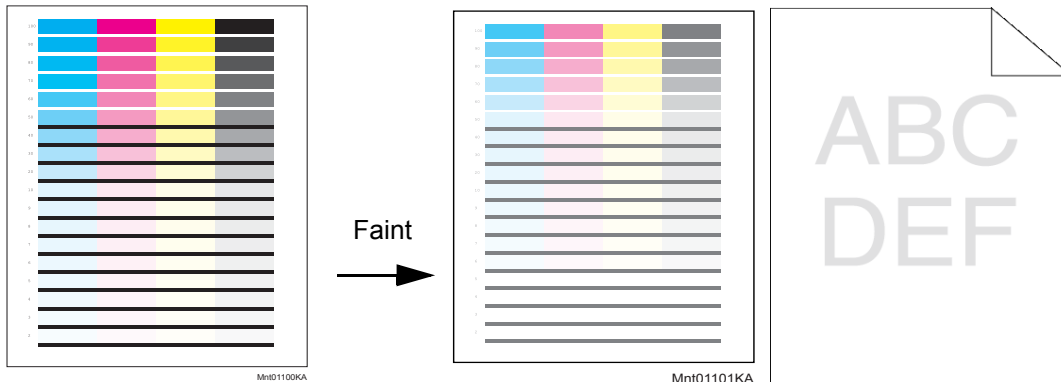
Guaranteed Printing Area



Rio01001KA

4.3 Image Quality FIP

FIP-1.P1 The output is too light

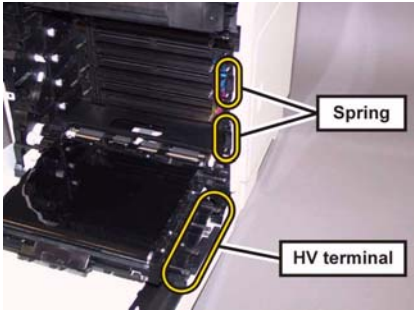


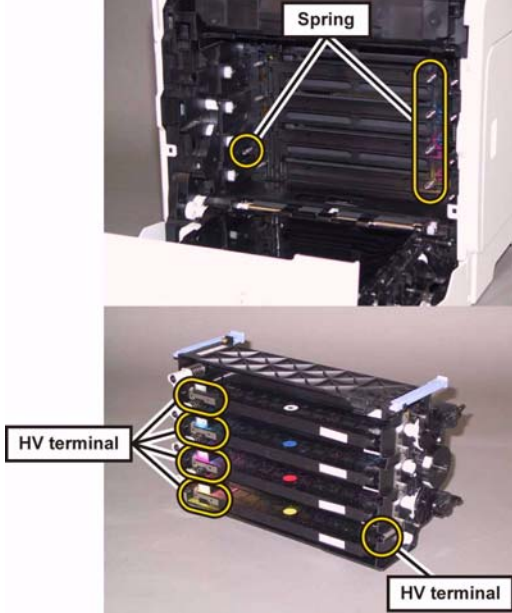
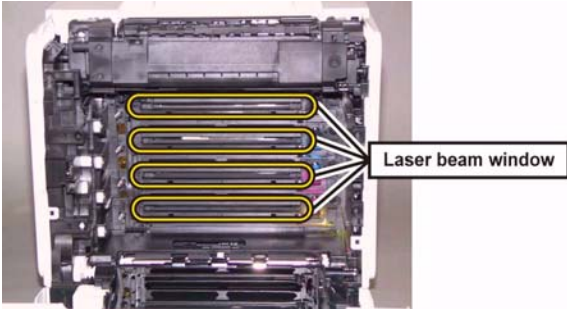
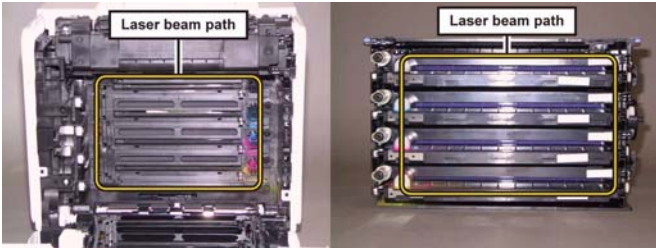
ESS and possible causative parts

- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)
- DISPENSER ASSY (PL5.1.1)
- ROS ASSY (PL4.1.1)
- PWBA HVPS (PL4.1.19)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

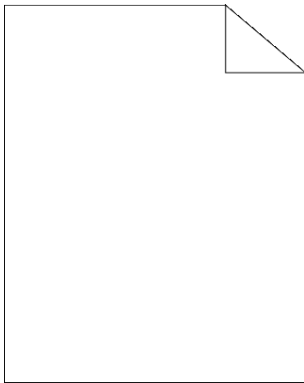
Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 4.
2	Checking the original. Is the original color density low?	END, change the original.	Go to step 3.
3	Checking the Default setting. Is the [Lighter/Darker] of the [Copy Default] in the [Copy] of the [Default Settings] the [Lighter 2 or 3]?	Set the [Normal] or [Darker 1 to 3].	Go to step 5.
4	Checking the printing. Checked by [Test Print]-[Gradation] in diagnosis. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 5.
5	Changing the printer driver setting. 1. Reset Image Settings (Brightness/Contrast) to defaults. - Click [Restore Defaults] in [Image Settings] on the [Graphics] tab. 2. Disable Toner Saving Mode. - Deselect the [Toner Saving Mode] check box on the [Advanced] tab. Is the image printed correctly?	End of work.	Go to step 6.

Step	Check	Remedy	
		Yes	No
6	<p>Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?</p>	Go to step 7.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
7	<p>Checking the TONER CARTRIDGE (Y, M, C or K) for installation. Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K). Is the image printed correctly?</p>	End of work.	Go to step 8
8	<p>Checking the TONER CARTRIDGE (Y,M,C or K). Is the toner cartridges installed to the printer the DELL toner?</p>	Go to step 10	Go to step 9
9	<p>Set the Non-Dell toner option to [Off]. (Refer to [Non-Dell Toner] in "21 Understanding the Tool Box Menus".) Is the image printed correctly?</p>	End of work.	Go to step 10
10	<p>Checking the PHD ASSY sealing ribbon. After turning the printer off, open the front cover and remove the PHD ASSY from the printer.Remove any of the 8 pieces of sealing ribbon that may be left on the PHD ASSY.Then, install the PHD ASSY into the printer.If the ribbon is found, it takes a long time until the density is recovered. To use the printer immediately, change the PHD ASSY to another one. Is the image printed correctly?</p>	End of work.	Go to step 11
11	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the right side of the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s), then go to step 12.	Go to step 13.
12	Is the image printed correctly?	End of work.	Go to step 13.

Step	Check	Remedy	
		Yes	No
13	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s), then go to step 14.	Go to step 14.
14	<p>Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?</p>	End of work.	Go to step 15.
15	<p>Checking the laser beam windows of the ROS ASSY. Are the laser beam windows on the ROS ASSY clean?</p> 	Go to step 16.	Clean the window(s) with soft cloth or cotton swab gently.
16	<p>Checking the laser beam path. Are there any foreign substances between the ROS ASSY and PHD ASSY?</p> 	Remove the foreign substances.	Go to step 17.

Step	Check	Remedy	
		Yes	No
17	Does the Toner Dispenser Motor function normally? Checked by [Digital Output] - [DO-21(Y), DO-23(M), DO-25(C), DO-27(K)] in [IOT Diag] of diagnosis.	Go to step 19.	Replace the DISPENSER ASSY. (Refer to Removal 54/Replacement 10.), then go to step 18.
18	Is the image printed correctly?	End of work.	Go to step 19.
19	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Is the image printed correctly?	End of work.	Go to step 20.
20	Checking after resetting the PWBA ESS AIO. Reseat the PWBA ESS AIO. Is the image printed correctly?	End of work.	Go to step 21.
21	Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Is the image printed correctly?	End of work.	Go to step 22.
22	Checking after replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/Replacement 46) Is the image printed correctly?	End of work.	Go to step 23.
23	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Go to step 24.
24	Checking after resetting the PWBA HVPS. Reseat the PWBA HVPS. Is the image printed correctly?	End of work.	Go to step 25.
25	Checking after replacing the DISPENSER ASSY. Replace the DISPENSER ASSY. (Refer to Removal 54/Replacement 10.) Is the image printed correctly?	End of work.	Go to step 26.
26	Checking after replacing the KIT ROS. Replace the KIT ROS. (Refer to Removal 56/Replacement 8.) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

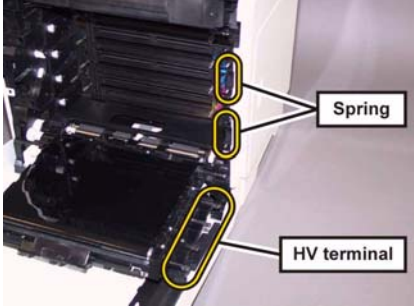
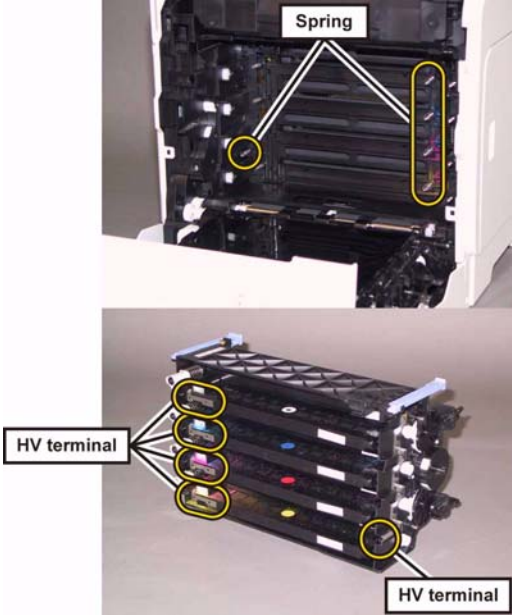
FIP-1.P2 The entire output is blank

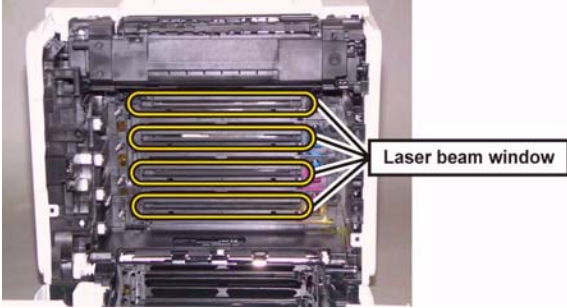
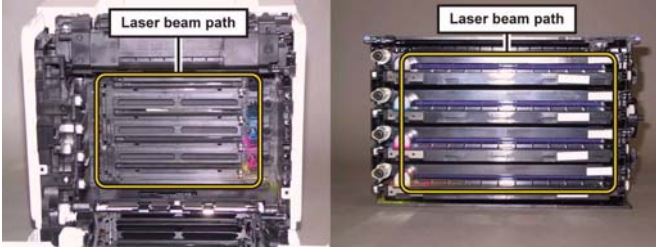
**ESS and possible causative parts**

- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)
- DISPENSER ASSY (PL5.1.1)
- ROS ASSY (PL4.1.1)
- PWBA HVPS (PL4.1.19)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

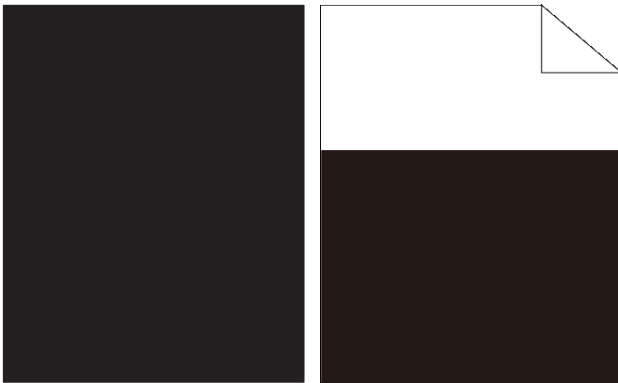
Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 3.
2	Checking the original. Is the original placed correctly?	Go to step 4.	Set the original correctly.
3	Checking the blank print. Print the Windows test page. Is the image printed correctly?	Printing data form is not suitable for the printer, then check the printing data which the problem generated.	Go to step 4.
4	Checking the TONER CARTRIDGE (Y, M, C or K) for installation. Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K). Is the image printed correctly?	End of work.	Go to step 5
5	Checking the TONER CARTRIDGE (Y,M,C or K). Is the toner cartridges installed to the printer the DELL toner?	Go to step 7	Go to step 6
6	Set the Non-Dell toner option to [Off]. (Refer to [Non-Dell Toner] in "21 Understanding the Tool Box Menus".) Is the image printed correctly?	End of work.	Go to step 7
7	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 8.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)

Step	Check	Remedy	
		Yes	No
8	<p>Checking the PHD ASSY sealing ribbon. After turning the printer off, open the front cover and remove the PHD ASSY from the printer. Remove any of the 8 pieces of sealing ribbon that may be left on the PHD ASSY. Then, install the PHD ASSY into the printer. If the ribbon is found, it takes a long time until the density is recovered. To use the printer immediately, change the PHD ASSY to another one. Is the image printed correctly?</p>	End of work.	Go to step 9
9	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the right side of the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s), then go to step 10.	Go to step 11.
10	Is the image printed correctly?	End of work.	Go to step 11.
11	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s), then go to step 12.	Go to step 12.
12	<p>Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?</p>	End of work.	Go to step 13.

Step	Check	Remedy	
		Yes	No
13	<p>Checking the laser beam windows of the ROS ASSY. Are the laser beam windows on the ROS ASSY clean?</p> 	Go to step 14.	Clean the window(s) with soft cloth or cotton swab gently.
14	<p>Checking the laser beam path. Are there any foreign substances between the ROS ASSY and PHD ASSY?</p> 	Remove the foreign substances.	Go to step 15.
15	<p>Does the Toner Dispenser Motor function normally? Checked by [Digital Output] - [DO-21(Y), DO-23(M), DO-25(C), DO-27(K)] in [IOT Diag] of diagnosis.</p>	Go to step 17.	Replace the DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.), then go to step 16.
16	Is the image printed correctly?	End of work.	Go to step 17.
17	<p>Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Is the image printed correctly?</p>	End of work.	Go to step 18.
18	<p>Checking after resetting the PWBA ESS AIO. Reseat the PWBA ESS AIO. Is the image printed correctly?</p>	End of work.	Go to step 19.
19	<p>Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Is the image printed correctly?</p>	End of work.	Go to step 20.
20	<p>Checking after replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46) Is the image printed correctly?</p>	End of work.	Go to step 21.
21	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	Go to step 22.
22	<p>Checking after resetting the PWBA HVPS. Reseat the PWBA HVPS. Is the image printed correctly?</p>	End of work.	Go to step 23.
23	<p>Checking after replacing the DISPENSER ASSY. Replace the DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.) Is the image printed correctly?</p>	End of work.	Go to step 24.

Step	Check	Remedy	
		Yes	No
24	Checking after replacing the KIT ROS. Replace the KIT ROS. (Refer to Removal 56/Replacement 8.) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

FIP-1.P3 Part or the entire output is black.

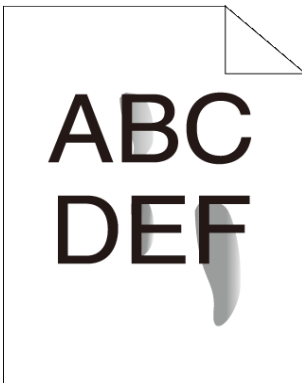
**ESS and possible causative parts**

- PWBA HVPS (PL4.1.19)
- PHD ASSY (PL4.1.21)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 3.
2	Checking the original. Is the original placed correctly?	Go to step 4.	Set the original correctly.
3	Checking the solid black. Checked by [Test Print]-[Test Pattern 600] in diagnostic. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 4.
4	Checking the printer driver setting. Is the [Output Color] option under the [Graphics] tab set to "Color (Auto)"?	Go to step 5.	Set the option to "Color (Auto)".
5	Checking the Toner Type Is the Dell Toner seated?	Go to step 6.	Replace the toner with the Dell toner.
6	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?	End of work.	Go to step 7.
7	Checking after resetting the PWBA HVPS. Reseat the PWBA HVPS. Is the image printed correctly?	End of work.	Go to step 8.
8	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

FIP-1.P4 Toner smears

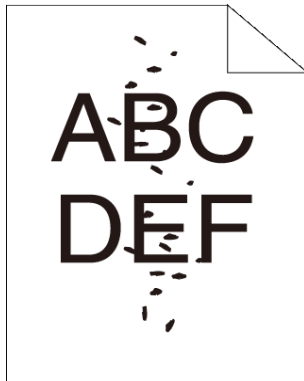
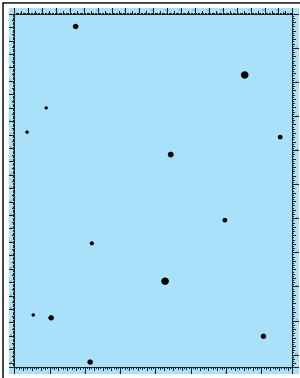
**Possible causative parts**

- PHD ASSY (PL4.1.21)
- TRANSFER ASSY (PL6.1.7)
- FUSER ASSY (PL6.1.1)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the printer environment. Check that the printer is in a room where air conditioner is operating. If the air conditioner is not operating, turn it on or move the printer to a room with an air conditioner. Are printouts still toner smears after turning on the air conditioner?	Go to step 2.	End of work.
2	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 3.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
3	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Go to step 4.
4	Checking after replacing the FUSER ASSY. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60) Is the image printed correctly? Warning: Start the operation after the FUSER ASSY has cooled down. NOTE: After replacement, be sure to clear the life counter value.	End of work.	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)

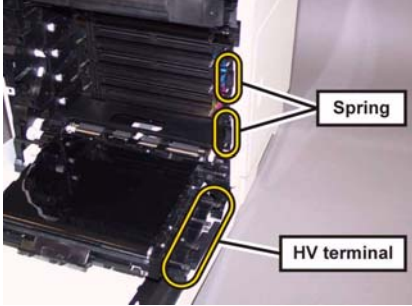
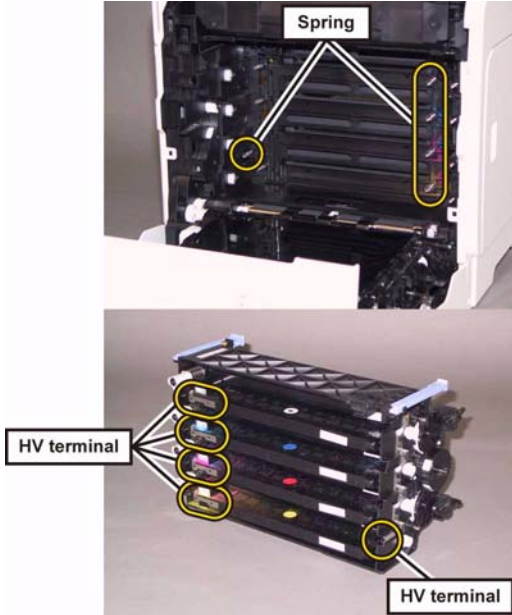
FIP-1.P5 Random spots

**ESS and possible causative parts**

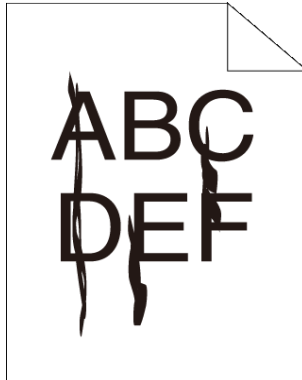
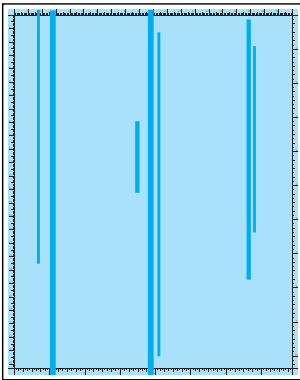
- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)
- FUSER ASSY (PL6.1.1)
- IIT ASSY SUB (PL10.1.11)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 4.
2	Checking the original. Is the original color clean?	Go to step 3.	Checking the original.
3	Checking the platen glass and ADF Feed Roller. Are there any damages or foreign substances?	Remove the foreign substances or Clean up the Scanner.If platen glass has been damaged, Replace the IIT ASSY SUB (Refer to Removal 50/ Replacement 14)	Go to step 5.
4	Checking the Print. Checked by [Test-Print]-[Contamination check] in diagnosis. Is the image printed correctly?	Printing data is incorrect,then check the printing data which the problem generated.	Go to step 5.
5	Checking after cleaning Inside the Printer. Is the image printed correctly?	End of work.	Go to step 6.
6	Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K) Is the image printed correctly?	End of work.	Go to step 7.
7	Checking the belt surface of the TRANSFER ASSY. Are there any damages on the belt surface of the TRANSFER ASSY?	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Go to step 8.

Step	Check	Remedy	
		Yes	No
8	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Go to step 9.
9	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 10.
10	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	<p>Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.</p>

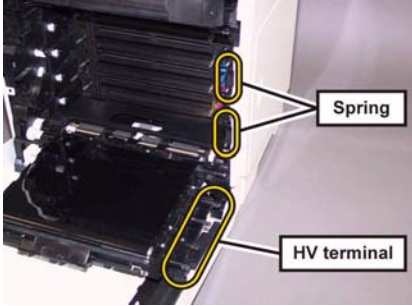
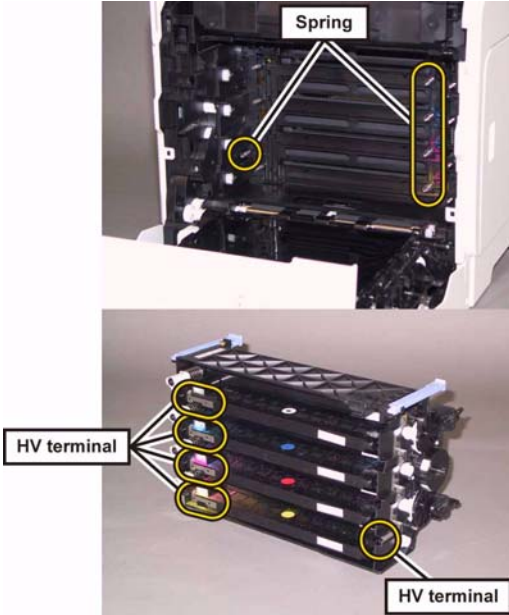
FIP-1.P6 Streaks appear on the output

**ESS and possible causative parts**

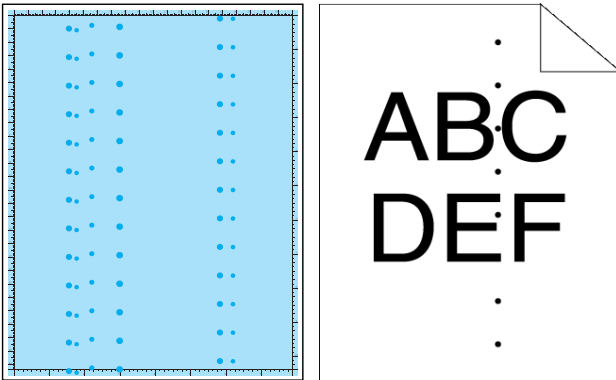
- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)
- FUSER ASSY (PL6.1.1)
- IIT ASSY SUB (PL10.1.11)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 4.
2	Checking the original. Is the original color clean?	Go to step 3.	Checking the original.
3	Checking the platen glass and ADF Feed Roller. Are there any damages or foreign substances?	Remove the foreign substances or Clean up the Scanner.If platen glass has been damaged, Replace the IIT ASSY SUB (Refer to Removal 50/ Replacement 14)	Go to step 5.
4	Checking the Print. Checked by [Test-Print]-[Contamination check] in diagnosis. Is the image printed correctly?	Printing data is incorrect,then check the printing data which the problem generated.	Go to step 5.
5	Checking after cleaning Inside the Printer. Is the image printed correctly?	End of work.	Go to step 6.
6	Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K) Is the image printed correctly?	End of work.	Go to step 7.
7	Checking the belt surface of the TRANSFER ASSY. Are there any damages on the belt surface of the TRANSFER ASSY?	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Go to step 8.

Step	Check	Remedy	
		Yes	No
8	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Go to step 9.
9	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 10.
10	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	<p>Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.</p>

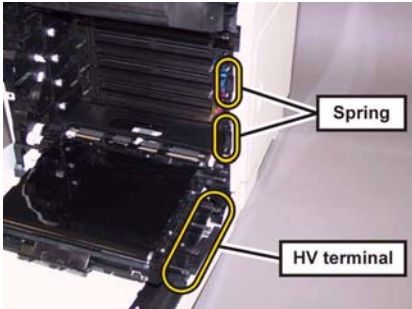
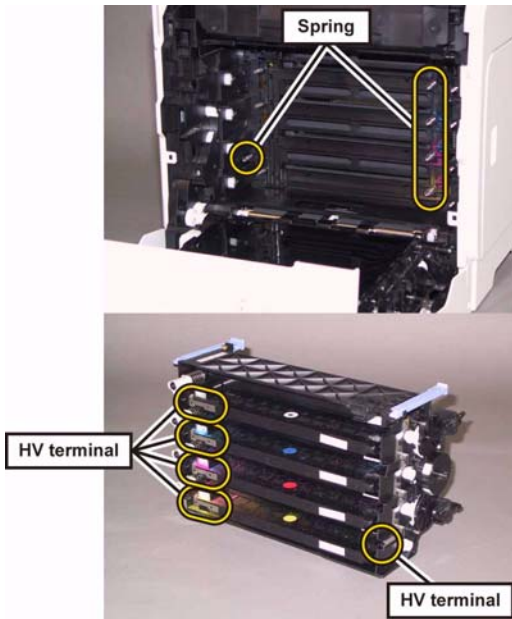
FIP-1.P7 Pitched color dots

**ESS and possible causative parts**

- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)
- FUSER ASSY (PL6.1.1)
- IIT ASSY SUB (PL10.1.11)

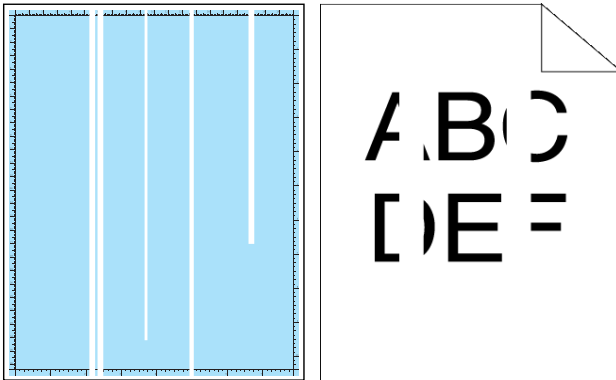
Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 4.
2	Checking the original. Is the original color clean?	Go to step 3.	Checking the original.
3	Checking the platen glass and ADF Feed Roller. Are there any damages or foreign substances?	Remove the foreign substances or Clean up the Scanner.If platen glass has been damaged, Replace the IIT ASSY SUB (Refer to Removal 50/ Replacement 14)	Go to step 5.
4	Checking the Print. Checked by [Test-Print]-[Contamination check] in diagnosis. Is the image printed correctly?	Printing data is incorrect,then check the printing data which the problem generated.	Go to step 5.
5	Checking after cleaning Inside the Printer. Is the image printed correctly?	End of work.	Go to step 6.
6	Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K) Is the image printed correctly?	End of work.	Go to step 7.
7	Checking the defective parts. Print the [Pitch Configuration Chart] in [Chart Print] in [Diagnosis] tab of [Tool Box]. When the partial lacks of periodicity are observed, check the defective parts by comparing the printed partial lacks with the Pitch Chart. Are there any partial lacks matching the chart?	Replace the corresponding parts.	Go to step 8.

Step	Check	Remedy	
		Yes	No
8	<p>Checking the belt surface of the TRANSFER ASSY. Are there any damages on the belt surface of the TRANSFER ASSY?</p>	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Go to step 9.
9	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Go to step 10.
10	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 11.

Step	Check	Remedy	
		Yes	No
11	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.

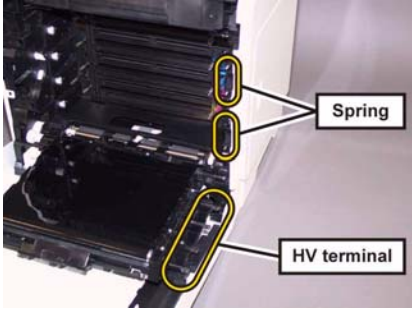
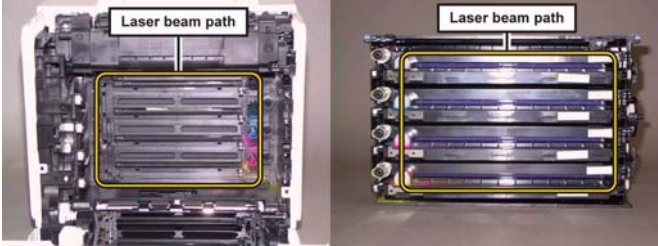
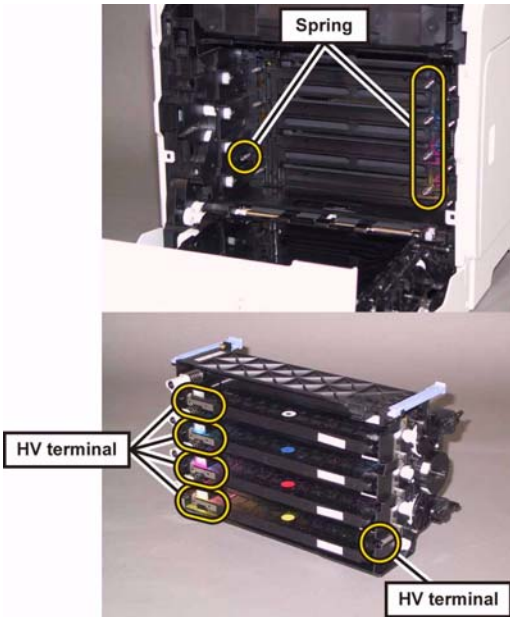
FIP-1.P8 Vertical blanks

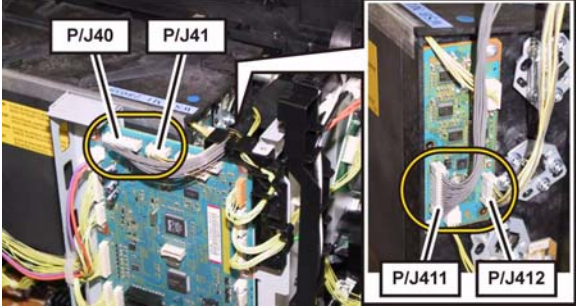
**ESS and possible causative parts**

- PHD ASSY (PL4.1.21)
- TRANSFER ASSY (PL6.1.7)
- ROS ASSY (PL4.1.1)
- FUSER ASSY (PL6.1.1)

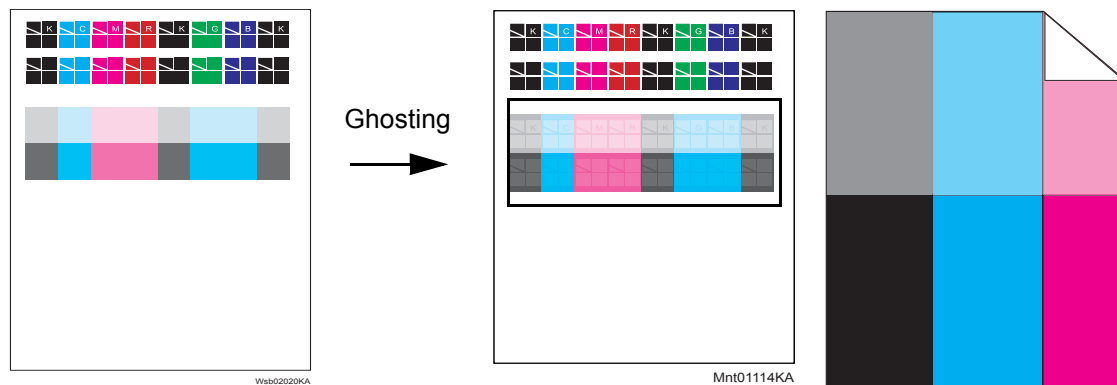
Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 3.
2	Checking the original. Is the original color clean?	Go to step 4.	END, change the original.
3	Checking the Print. Checked by [Test-Print]-[Contamination check] in diagnosis. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 4.
4	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 5.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
5	Checking for foreign objects in the paper transfer path. Remove any foreign objects in the paper transfer path between the KIT TRANSFER ASSY and the FUSER ASSY. Does the printout have vertical blank lines (white stripes in the paper feed direction)?	Go to step 6.	End of work.
6	Checking the belt surfaces of the TRANSFER ASSY. Are there any damages on the belt surface of the TRANSFER ASSY?	Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46)	Go to step 7.

Step	Check	Remedy	
		Yes	No
7	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Go to step 8.
8	<p>Checking the laser beam path. Are there any foreign substances between the ROS ASSY and PHD ASSY?</p> 	Remove the foreign substances.	Go to step 9.
9	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 10.

Step	Check	Remedy	
		Yes	No
10	<p>Checking the ROS ASSY for connection. Check the connections between the ROS ASSY and PWBA MCU. Are P/J40, P/J 41, P/J411 and P/J 412 connected correctly?</p> 	Go to step 12.	Reconnect the connector(s) P/J40, P/J41, P/J411 and/or P/J412 surely, then go to step 11.
11	Is the image printed correctly?	End of work.	Go to step 12.
12	<p>Checking after replacing the ROS ASSY. Replace the KIT ROS. (Refer to Removal 56/Replacement 8.) Is the image printed correctly?</p>	End of work.	Go to step 13.
13	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	<p>Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.</p>

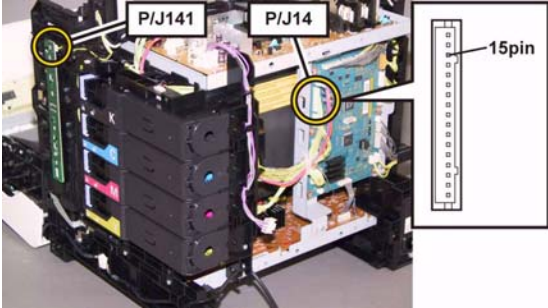
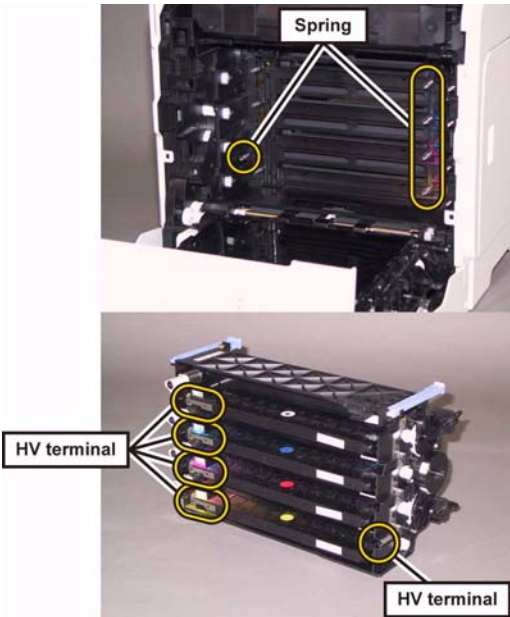
FIP-1.P9 Ghosting

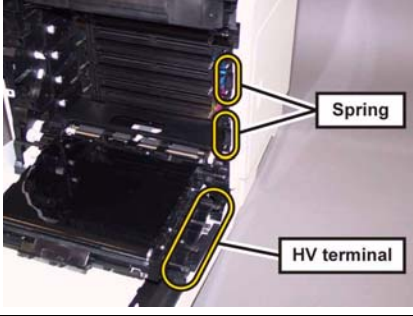
**ESS and possible causative parts**

- LED ASSY ERASE (PL4.1.8)
- HARNESS ASSY LVPS MAIN MG AIO (PL9.1.3)
- PHD ASSY (PL4.1.21)
- TRANSFER ASSY (PL6.1.7)

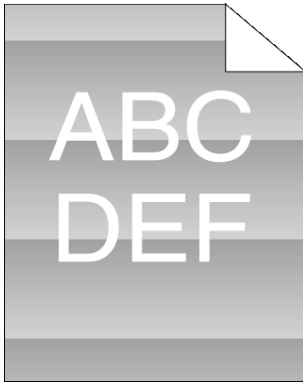
Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 3.
2	Checking the original. Is the original color clean?	Go to step 3.	END, change the original.
3	Checking the Afterimage (Ghost). Print the Ghost Configuration Chart Page. - To print "Ghost Configuration Chart", click [Ghost Configuration Chart] in [Chart Print] on the diagnosis tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 4.
4	Checking the paper. Does the paper satisfy the specification?	Go to step 5.	Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
5	Adjusting the transfer bias. Adjust the voltage value of the BTR. - To adjust the voltage value of the BTR, use [Adjust BTR] on the Printer Maintenance tab of Web Tool. Is the image printed correctly?	End of work.	Go to step 6.

Step	Check	Remedy	
		Yes	No
6	<p>Checking after "Drum Refresh Mode". Execute the "Drum Refresh Mode". - To execute the "Drum Refresh Mode", click [Drum Refresh Mode] in [Refresh Mode] on the diagnosis tab of Tool Box. Is the image printed correctly?</p>	End of work.	Go to step 7.
7	<p>Checking the erase lamps. Open the COVER ASSY FRONT, and remove the PHD ASSY. Check the safety interlock switch. Does the four erase LEDs light correctly?</p>	Go to step 10.	Go to step 8.
8	<p>Checking the connectors for connection. Check the connections between the PWBA MCU and LED ASSY ERASE. Are P/J141 and P/J14 connected correctly?</p> 	Go to step 9.	Reconnect the connector(s) P/J141 and/or P/J14 surely, then go to step 9.
9	<p>Checking the HARN ASSY LVPS for continuity. Disconnect J14 from the PWBA MCU. Disconnect J141 from the LED ASSY ERASE. Is each cable of J14 <=> J141 continuous?</p>	Replace the LED ASSY ERASE (Refer to Removal 14/ Replacement 50.), then go to step 10.	Replace the HARNESS ASSY LVPS MAIN MG AIO.
10	<p>Checking the PHD ASSY for connection Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 11.

Step	Check	Remedy	
		Yes	No
11	<p>Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?</p>	End of work.	Go to step 12.
12	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61)

FIP-1.P10 Light-Induced Fatigue

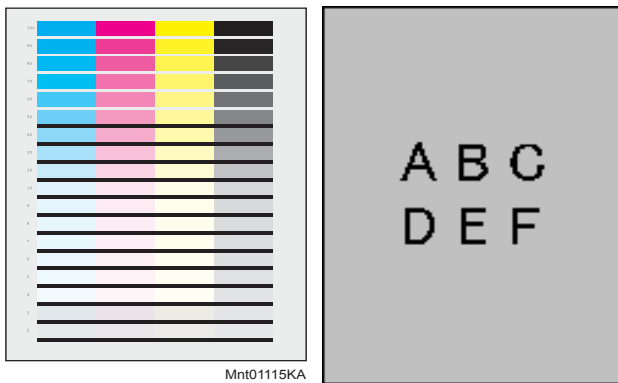


Possible causative parts
- PHD ASSY (PL4.1.21)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking after "Drum Refresh Mode". Execute the "Drum Refresh Mode". - To execute the "Drum Refresh Mode", click [Drum Refresh Mode] in [Refresh Mode] on the diagnosis tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 2.
2	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Does the error still occur when printing?	Replace the Printer.	End of work.

FIP-1.P11 Fog

**ESS and possible causative parts**

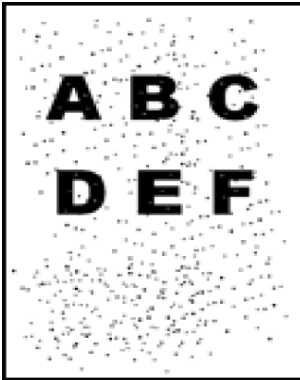
- PWBA HVPS (PL4.1.19)
- PHD ASSY (PL4.1.21)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 4.
2	Checking the original. Is the original color clean?	Go to step 3.	END, change the original.
3	Checking the Default setting. Is the [Lighter/Darker] of the [Copy Default] in the [Copy] of the [Default Settings] the [Darker 2 or 3]?	Set the [Normal] or [Lighter 1 to 3].	Go to step 5.
4	Checking the printing. Checked by [Test Print]-[Gradation] in diagnosis. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 5.
5	Changing the printer driver setting. Reset Image Settings (Brightness/Contrast) to defaults. - Click [Restore Defaults] in [Image Settings] on the [Graphics] tab. Is the image printed correctly?	End of work.	Go to step 6.
6	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 7.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
7	Checking after "Drum Refresh Mode". Execute the "Drum Refresh Mode". - To execute the "Drum Refresh Mode", click [Drum Refresh Mode] in [Refresh Mode] on the diagnosis tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 8.
8	Checking the Toner Type Is the Dell Toner seated?	Go to step 9.	Replace the toner with the Dell toner.

Step	Check	Remedy	
		Yes	No
9	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?	End of work.	Go to step 10.
10	Checking after resetting the PWBA HVPS. Reseat the PWBA HVPS. Is the image printed correctly?	End of work.	Go to step 11.
11	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

FIP-1.P12 Bead-Carry-Out (BCO)

**ESS and possible causative parts**

- PWBA HVPS (PL4.1.19)
- PHD ASSY (PL4.1.21)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Setting the altitude. Set the altitude. - To set the altitude, use [Adjust Altitude] on the Printer Maintenance tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 2.
2	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?	End of work.	Go to step 3.
3	Checking after resetting the PWBA HVPS. Reseat the PWBA HVPS. Is the image printed correctly?	End of work.	Go to step 4.
4	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

FIP-1.P13 Jagged characters



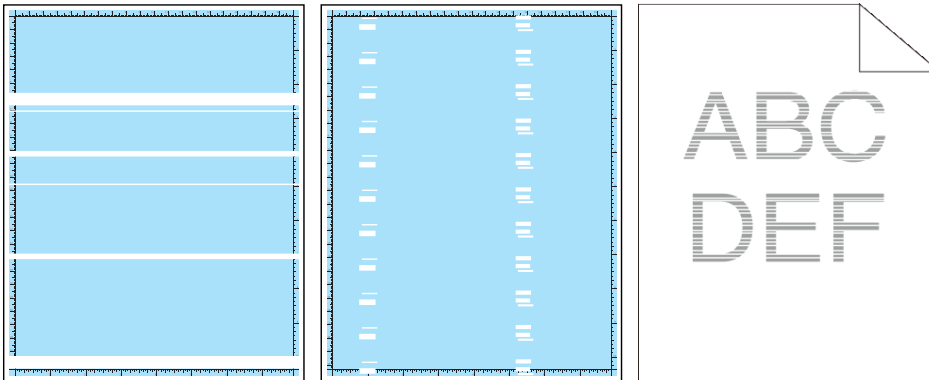
Possible causative parts
- ROS ASSY (PL4.1.1)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 2.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
2	Checking the printer setting. Change the Screen setting to "Fineness" via the printer driver. - To change the Screen settings, use [Screen] on the Advanced Property tab of the printer driver. NOTE: If using a downloaded font, ensure that the font is recommended for the printer, operating system, and the application being used. Is the image printed correctly?	End of work.	Go to step 3.
3	Checking the printer setting. Change the Print Mode setting to "High Quality" via the printer driver. - To change the Print Mode settings, use [Print Mode] on the Graphics Property tab of the printer driver. Is the image printed correctly?	End of work.	Go to step 4.
4	Checking the printer setting. Change the Bitmap Smoothing setting to On via the printer driver. - To change the Bitmap Smoothing setting, use [Bitmap Smoothing] on the Advanced Property tab of the printer driver. Is the image printed correctly?	End of work.	Go to step 5.

Step	Check	Remedy	
		Yes	No
5	Checking the Toner Type Is the Dell Toner seated?	Go to step 6.	Replace the toner with the Dell toner.
6	Checking after resetting the KIT ROS ASSY. Reseat the KIT ROS ASSY. Is the image printed correctly?	End of work.	Replace the KIT ROS. (Refer to Removal 56/ Replacement 8.)

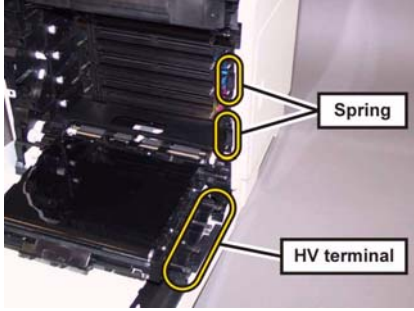
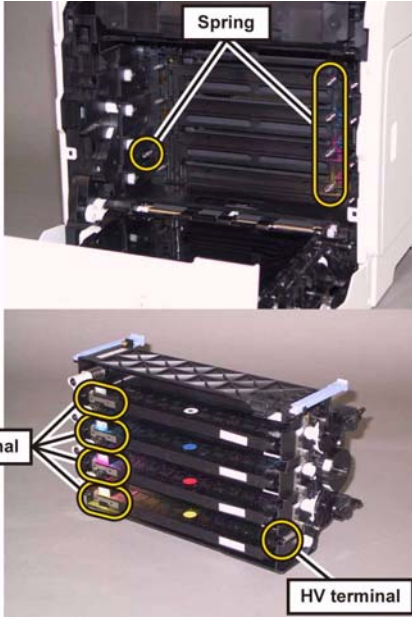
FIP-1.P14 Banding/Horizontal band cross out

**Possible causative parts**

- ROS ASSY (PL4.1.1)
- PHD ASSY (PL4.1.21)
- TRANSFER ASSY (PL6.1.7)
- PWBA HVPS (PL4.1.19)

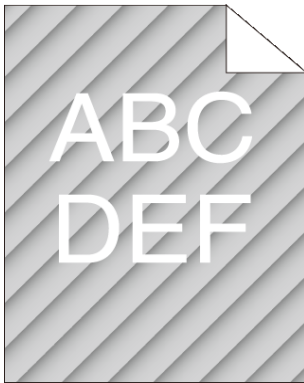
Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 3.
2	Checking the original. Is the original color clean?	Go to step 4.	END, change the original.
3	Checking the Print. Checked by [Test-Print]-[Contamination check] in diagnosis. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 4
4	Checking the paper. Is the installed paper with a new and dry one? or does the paper satisfy the specification?	Go to step 5.	Replace the paper with a new and dry one. or Change the paper to the one that satisfies the specification. (Refer to "14 Print Media Guidelines" in the User Guide.)
5	Checking for foreign objects in the paper transfer path. Remove any foreign objects in the paper transfer path between the KIT TRANSFER ASSY and the FUSER ASSY. Does the printout have Banding/Horizontal band cross out?	Go to step 6.	End of work.

Step	Check	Remedy	
		Yes	No
6	<p>Checking the defective parts. Print the [Pitch Configuration Chart] in [Chart Print] in [Diagnosis] tab of [Tool Box]. When the vertical stripes of periodicity are observed, check the defective parts by comparing the printed vertical stripes with the Pitch Chart. Are there any vertical stripes matching the chart?</p>	Replace the corresponding parts.	Go to step 7.
7	<p>Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?</p> 	Clean or replace the TRANSFER ASSY or SPRING(s).	Go to step 8.
8	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 9.
9	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	Go to step 10.
10	<p>Checking after replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46) Is the image printed correctly?</p>	End of work.	Go to step 11.

Step	Check	Remedy	
		Yes	No
11	Checking after replacing the ROS ASSY. Replace the KIT ROS.(Refer to Removal 56/Replacement 8.) Is the image printed correctly?	End of work.	Replace the PWBA HVPS. (Refer to Removal 58/Replacement 6.)

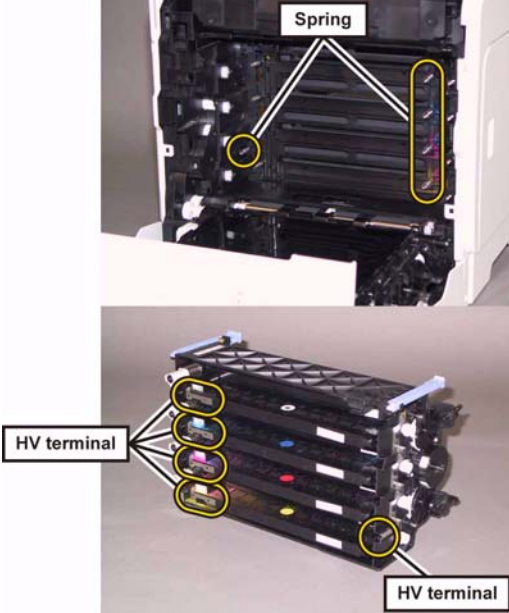
FIP-1.P15 Auger mark

**Possible causative parts**

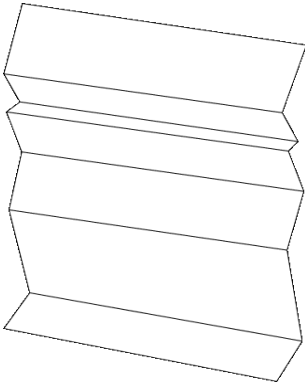
- PHD ASSY (PL4.1.21)
- DISPENSER ASSY (PL5.1.1)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the TONER CARTRIDGE (Y, M, C or K) for installation. Shake and reseal the suspected TONER CARTRIDGE (Y, M, C, or K) Is the image printed correctly?	End of work.	Go to step 2
2	Checking the Toner Type. Is the Dell Toner seated?	Go to step 3.	Replace the toner with the Dell toner.
3	Checking Dispense Motor (Y, M, C or K) for operation. Operate the Dispense Motor (Y, M, C or K) for the color in which the problem lies. - To check the operation of the Dispense Motor (Y, M, C or K), click [Dispense Motor (Y, M, C or K)] in [Machine Check] on the diagnosis tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 4
4	Execute the "Clean Developer". - To execute the "Clean Developer", click Start in [Clean Developer] on the diagnosis tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 5

Step	Check	Remedy	
		Yes	No
5	<p>Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?</p> 	Clean and/or replace the PHD ASSY or SPRING(s).	Go to step 6.
6	<p>Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Is the image printed correctly?</p>	End of work.	Go to step 7.
7	<p>Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Is the image printed correctly?</p>	End of work.	Replace the DISPENSER ASSY. (Refer to Removal 54/ Replacement 10.)

FIP-1.P16 Wrinkled/Stained paper (Envelope Wrinkle)

**.Possible causative parts**

- HOLDER ASSY SEPARATOR (PL2.1.5)
- ROLL ASSY FEED (PL3.2.4)
- ROLL ASSY REGI (PL3.2.9)
- ROLL REGI METAL (PL3.2.10)

NOTE

Tray is recommended for paper feeding because sheets fed via SSF is prone to skew depending on how the sheet is placed on SSF.

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the paper feeding tray. Is the skewed paper fed from the SSF?	Go to step 2.	Go to step 6.
2	Checking the side guides setting of SSF. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 3.
3	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 4.	Go to step 5.
4	Is the image printed correctly?	End of work.	Go to step 5.
5	Checking the ROLL ASSY REGI and ROLL ASSY METAL for rotation. Checked by [Digital Output] - [DO-0] in [IOT Diag], and then enter the [Digital Output] - [DO-29] in [IOT Diag]. Does the Roll Assy Regi and Roll Regi Metal rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	End of work.	Replace the ROLL ASSY REGI and/or ROLL REGI METAL.
6	Checking after resetting the Paper Cassette. Reseat the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 7.
7	Checking after resetting the paper. Reseat the paper in the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 8.
8	Checking the side guides of the Paper Cassette. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 9.

Step	Check	Remedy	
		Yes	No
9	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 10.	Go to step 11.
10	Is the image printed correctly?	End of work.	Go to step 11.
11	Checking after resetting the HOLDER ASSY SEPARATOR. Reseat the HOLDER ASSY SEPARATOR. Is the image printed correctly?	End of work.	Go to step 12.
12	Checking after replacing the HOLDER ASSY SEPARATOR. Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/Replacement 62.) Is the image printed correctly?	End of work.	Go to step 13.
13	Checking after resetting the ROLL ASSY FEED. Reseat the ROLL ASSY FEED. Is the image printed correctly?	End of work.	Replace the KIT ROLL ASSY FEED. (Refer to Removal 6/Replacement 58.)

FIP-1.P17 The top margin is incorrect / The side margin is incorrect

**ESS and possible causative parts**

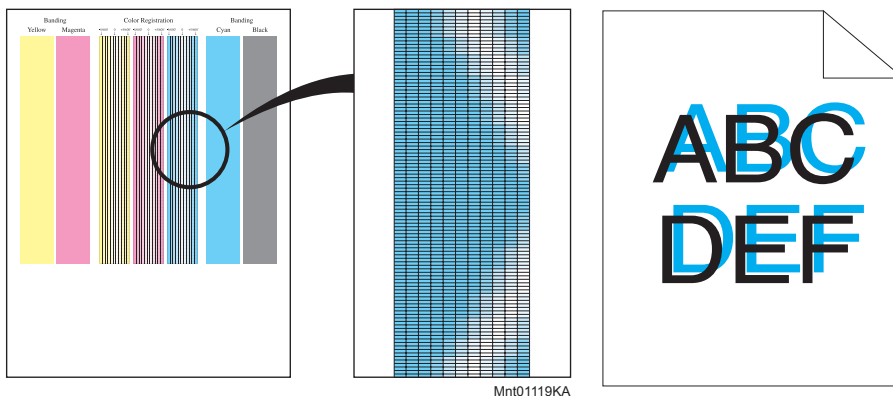
- PHD ASSY (PL4.1.21)
- TRANSFER ASSY (PL6.1.7)
- ROS ASSY (PL4.1.1)
- IIT ASSY SUB (PL10.1.11)
- ROLL ASSY FEED (PL10.1.5)
- PAD ASSY SEPARATOR (PL10.1.6)
- ADF ASSY (PL10.1.3)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 7.
2	Checking the error mode. Does the error occur when feeding the original at the ADF?	Go to step 4.	Go to step 3.
3	Checking the original setting. Is the original set to the platen glass correctly?	Replace the IIT ASSY SUB (Refer to Removal 50/ Replacement 14)	Reseat the original.
4	Checking the original setting. Does the original meet the ADF spec?	Go to step 5.	Use the platen mode or change the paper type.
5	Checking the ADF Guides setting. Reseat the ADF Guides. Does the error still occur when copying?	Go to step 6.	End of work.
6	Checking the KIT ADF FEED ROLL & SEPARATOR ROLL. Are there any damages or foreign substances on the KIT ADF FEED ROLL & SEPARATOR ROLL?	Remove the foreign substances or Replace the KIT ADF FEED ROLL & SEPARATOR ROLL. (Removal 64/Replacement 64)	Replace the KIT ADF ASSY. (Removal 48/ Replacement 16)

Step	Check	Remedy	
		Yes	No
7	Checking the printing. Checked by [Test Print]-[Gradation] in diagnosis. Is the image printed correctly?	Printing data is incorrect, then check the printing data which the problem generated.	Go to step 8.
8	Checking after replacing the PHD ASSY. Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61) Does the error appear on the printed material when printing?	Go to step 9.	End of work.
9	Checking after replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46) Does the error appear on the printed material when printing?	Replace the KIT ROS. (Refer to Removal 56/ Replacement 8.)	End of work.

FIP-1.P18 Color registration is out of alignment

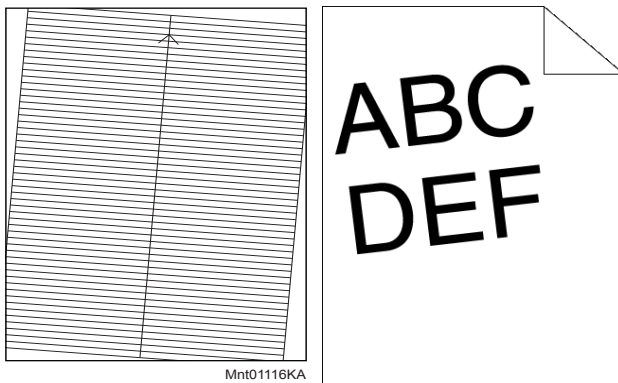
**Possible causative parts**

- TRANSFER ASSY (PL6.1.7)
- PHD ASSY (PL4.1.21)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the Color registration. Print the Color Regi Chart. - To print "Color Regi Chart", click [Color Regi Chart] in [Color Registration Adjustments] on the Printer Maintenance tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 2.
2	Checking after cleaning the CTD (ADC) Sensor. Clean the CTD (ADC) Sensor, and print the Color Regi Chart. - For details on how to clean the CTD (ADC) Sensor, refer to "Appendix_3.2 Cleaning the CTD Sensor". Is the image printed correctly?	End of work.	Go to step 3.
3	Checking after automatic color registration. Execute the automatic color registration. - To execute the automatic color registration, click [Auto Correct] in [Color Registration Adjustments] on the Printer Maintenance tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 4.
4	Checking after manual color registration. Manually adjust the color registration. - To adjust the color registration manually, use [Color Registration Adjustment 1 or 2] in [Color Registration Adjustments] on the Printer Maintenance tab of Tool Box. Is the image printed correctly?	End of work.	Go to step 5.
5	Checking after Replacing the TRANSFER ASSY. Replace the KIT TRANSFER ASSY. (Refer to Removal 18/ Replacement 46) Does the color registration appear on the printed material when printing?	Replace the PHD ASSY. (Refer to Removal 3 / Replacement 61)	End of work.

FIP-1.P19 Images are skewed

**ESS and possible causative parts**

- HOLDER ASSY SEPARATOR (PL2.1.5)
- ROLL ASSY FEED (PL3.2.4)
- ROLL ASSY REGI (PL3.2.9)
- ROLL REGI METAL (PL3.2.10)
- IIT ASSY SUB (PL10.1.11)
- ROLL ASSY FEED (PL10.1.5)
- PAD ASSY SEPARATOR (PL10.1.6)
- ADF ASSY (PL10.1.3)

NOTE

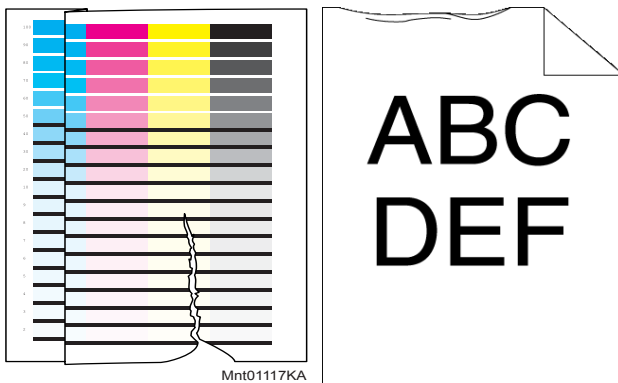
Tray is recommended for paper feeding because sheets fed via SSF is prone to skew depending on how the sheet is placed on SSF.

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the error mode. Does the error occur only during copying?	Go to step 2.	Go to step 7.
2	Checking the error mode. Does the error occur when feeding the original at the ADF?	Go to step 4.	Go to step 3.
3	Checking the original setting. Is the original set to the platen glass correctly?	Replace the IIT ASSY SUB (Refer to Removal 50/Replacement 14)	Reseat the original.
4	Checking the original setting. Does the original meet the ADF spec?	Go to step 5.	Use the platen mode or change the paper type.
5	Checking the ADF Guides setting. Reseat the ADF Guides. Does the error still occur when copying?	Go to step 6.	End of work.
6	Checking the KIT ADF FEED ROLL & SEPARATOR ROLL. Are there any damages or foreign substances on the KIT ADF FEED ROLL & SEPARATOR ROLL?	Remove the foreign substances or Replace the KIT ADF FEED ROLL & SEPARATOR ROLL. (Removal 64/Replacement 64)	Replace the KIT ADF ASSY. (Removal 48/Replacement 16)
7	Checking the paper feeding tray. Is the skewed paper fed from the SSF?	Go to step 8.	Go to step 12.
8	Checking the side guides setting of SSF. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 9.

Step	Check	Remedy	
		Yes	No
9	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 10.	Go to step 11.
10	Is the image printed correctly?	End of work.	Go to step 11.
11	Checking the ROLL ASSY REGI and ROLL ASSY METAL for rotation. Checked by [Digital Output] - [DO-0] in [IOT Diag], and then enter the [Digital Output] - [DO-29] in [IOT Diag]. Does the Roll Assy Regi and Roll Regi Metal rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	End of work.	Replace the ROLL ASSY REGI and/or ROLL REGI METAL.
12	Checking after resetting the Paper Cassette. Reseat the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 13.
13	Checking after resetting the paper. Reseat the paper in the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 14.
14	Checking the side guides of the Paper Cassette. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 15.
15	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 16.	Go to step 17.
16	Is the image printed correctly?	End of work.	Go to step 17.
17	Checking after resetting the HOLDER ASSY SEPARATOR. Reseat the HOLDER ASSY SEPARATOR. Is the image printed correctly?	End of work.	Go to step 18.
18	Checking after replacing the HOLDER ASSY SEPARATOR. Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/Replacement 62.) Is the image printed correctly?	End of work.	Go to step 19.
19	Checking after resetting the ROLL ASSY FEED. Reseat the ROLL ASSY FEED. Is the image printed correctly?	End of work.	Replace the KIT ROLL ASSY FEED. (Refer to Removal 6/Replacement 58.)

FIP-1.P20 Paper Damage

**.Possible causative parts**

- HOLDER ASSY SEPARATOR (PL2.1.5)
- ROLL ASSY FEED (PL3.2.4)
- ROLL ASSY REGI (PL3.2.9)
- ROLL REGI METAL (PL3.2.10)

NOTE

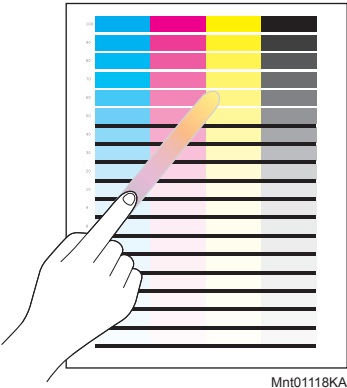
Tray is recommended for paper feeding because sheets fed via SSF is prone to skew depending on how the sheet is placed on SSF.

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the paper feeding tray. Is the skewed paper fed from the SSF?	Go to step 2.	Go to step 6.
2	Checking the side guides setting of SSF. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 3.
3	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 4.	Go to step 5.
4	Is the image printed correctly?	End of work.	Go to step 5.
5	Checking the ROLL ASSY REGI and ROLL ASSY METAL for rotation. Checked by [Digital Output] - [DO-0] in [IOT Diag], and then enter the [Digital Output] - [DO-29] in [IOT Diag]. Does the Roll Assy Regi and Roll Regi Metal rotate? During this check, cheat the interlock switch (HARN ASSY INTERLOCK AIO).	End of work.	Replace the ROLL ASSY REGI and/or ROLL REGI METAL.
6	Checking after resetting the Paper Cassette. Reseat the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 7.
7	Checking after resetting the paper. Reseat the paper in the Paper Cassette. Is the image printed correctly?	End of work.	Go to step 8.
8	Checking the side guides of the Paper Cassette. Reset the side guides. Is the image printed correctly?	End of work.	Go to step 9.
9	Checking the paper path. Are there any foreign substances on the paper path?	Remove the foreign substances, then go to step 10.	Go to step 11.

Step	Check	Remedy	
		Yes	No
10	Is the image printed correctly?	End of work.	Go to step 11.
11	Checking after resetting the HOLDER ASSY SEPARATOR. Reseat the HOLDER ASSY SEPARATOR. Is the image printed correctly?	End of work.	Go to step 12.
12	Checking after replacing the HOLDER ASSY SEPARATOR. Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/Replacement 62.) Is the image printed correctly?	End of work.	Go to step 13.
13	Checking after resetting the ROLL ASSY FEED. Reseat the ROLL ASSY FEED. Is the image printed correctly?	End of work.	Replace the KIT ROLL ASSY FEED.(Refer to Removal 6/Replacement 58.)

FIP-1.P21 Unfusing

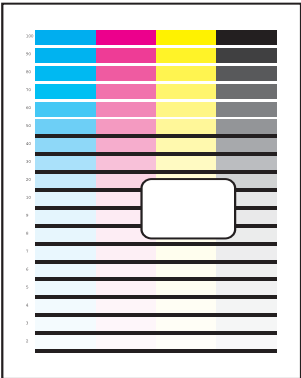


Possible causative parts
 - FUSER ASSY (PL6.1.1)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking the using paper Does the using paper meet the specifications?	Go to step 3.	Use the paper that meets the specifications, then go to step 2.
2	Is the image printed correctly?	End of work.	Go to step 3.
3	Checking after resetting the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Reseat the FUSER ASSY. Is the image printed correctly?	End of work.	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.

FIP-1.P22 Label Stuck



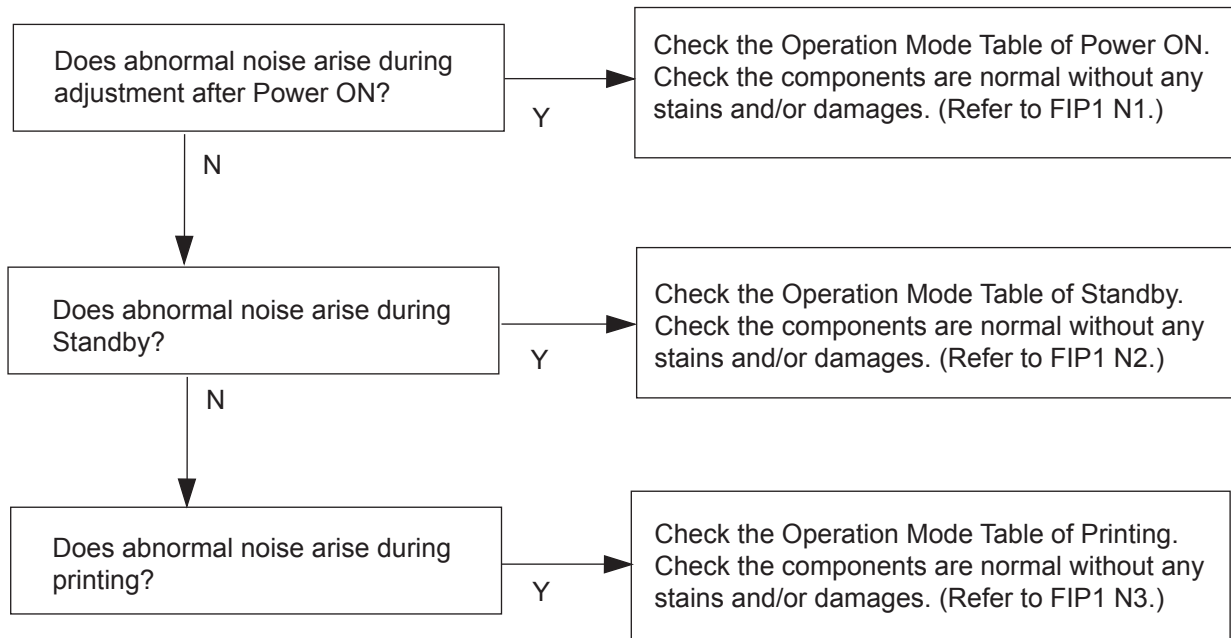
.Possible causative parts
 - FUSER ASSY (PL6.1.1)

Before commencing troubleshooting, check the paper transfer path. Make sure there is no foreign materials on the transfer path, such as staples, paper clips, scraps of paper and so on.

Step	Check	Remedy	
		Yes	No
1	Checking for foreign materials around the paper transfer path. Are there any foreign materials such as precut adhesive labels in the the paper transfer path?	Remove the foreign materials.	Warning: Start the operation after the FUSER ASSY has cooled down. Replace the FUSER ASSY. (Refer to Removal 4/ Replacement 60.) After replacement, be sure to clear the life counter value.

5. Abnormal Noise Trouble

5.1 Entry Chart for Abnormal Noise Troubleshooting



5.2 Operation Mode Table

FIP-1.N1 Noise: When Power is Turned On

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) FUSER ASSY (PL6.1.1) TRANSFER ASSY (PL6.1.7) DRIVE ASSY SUB (PL7.1.1) DRIVE ASSY MAIN (PL7.1.2)		
1	Checking the Main Motor. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] tab of [IOT Diag].	Go to step 2.	Go to step 5.
2	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 3.	End of work.
3	Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 4.	End of work.
4	Checking after resetting the DRIVE ASSY MAIN. Reseat the DRIVE ASSY MAIN. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Try replacing the PHD ASSY (refer to Removal 3/ Replacement 61), KIT TRANSFER ASSY (refer to Removal 18/ Replacement 46) and KIT DRIVE ASSY MAIN (refer to Removal 42/ Replacement 22) one after another.	End of work.
5	Checking the Sub Motor. Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.	Go to step 6.	Check the installation situation of printer.
6	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.	Go to step 7.	End of work.
7	Checking after resetting the FUSER ASSY. Reseat the FUSER ASSY. Warning: Start the operation after the FUSER ASSY has cooled down. Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.	Go to step 8.	End of work.

Step	Check	Remedy	
		Yes	No
8	Checking after resetting the DRIVE ASSY SUB. Reseat the DRIVE ASSY SUB. Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.	Try replacing the PHD ASSY (refer to Removal 3/Replacement 61), FUSER ASSY (Refer to Removal 4/Replacement 60) after replacement, be sure to clear the life counter value, and DRIVE ASSY SUB (Refer to Removal 43/Replacement 21) one after another.	End of work.

FIP-1.N2 Noise: During Standby

Step	Check	Remedy	
		Yes	No
	Possible causative parts: FAN (PL8.2.8) PWBA LVPS (PL8.2.12)		
1	Checking the FAN. Does the noise arise from the Fan? Checked by [Digital Output] - [DO-1e] in [IOT Diag] of diagnosis.	Replace the DUCT FAN ASSY AIO. (Refer to Removal 34/Replacement 30.)	Replace the PWBA LVPS (Refer to Removal 33/Replacement 31)

FIP-1.N3 Noise: During Printing (Checking for other items than "power on noise")

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HOLDER ASSY SEPARATOR (PL2.1.5) ROLL ASSY FEED (PL3.2.4) ROLL ASSY REGI (PL3.2.9) ROLL REGI METAL (PL3.2.10) PHD ASSY (PL4.1.21) FUSER ASSY (PL6.1.1) TRANSFER ASSY (PL6.1.7) DRIVE ASSY SUB (PL7.1.1) DRIVE ASSY MAIN (PL7.1.2) FAN (PL8.2.8) FEEDER ASSY DUP AIO STD(PL11.1.1) ADF ASSY (PL10.1.97) ROLL ASSY FEED (PL10.1.5) PAD ASSY SEPARATOR (PL10.1.5)		
1	Checking the ADF feeding. Does the noise arise from the printer when the original is fed from the ADF?	Go to step 2.	Go to step 4.
2	Checking the original. Does the original meet the ADF spec?	Go to step 3	END, change the original.
3	Checking the KIT ADF FEED ROLL & SEPARATOR ROLL Are there any damages or foreign substances on the Roller?	Remove the foreign substances or Replace the KIT ADF FEED ROLL & SEPARATOR ROLL.(Removal 64/ Replacement 64)	Replace the KIT ADF ASSY. (Removal 48/ Replacement 16)
4	Checking the paper feeding. Does the noise arise from the printer when the paper is fed from the Tray 1?	Go to step 5.	Go to step 9.
5	Checking the paper condition in the Paper Cassette. Is the paper dry and recommended paper?	Go to step 7.	Replace the paper with a new dry and recommended one, then go to step 6.
6	Checking noise when the paper is fed from the Tray 1. Does the noise arise from the printer?	Go to step 7.	End of work.
7	Checking the HOLDER ASSY SEPARATOR in the Paper Cassette for rotation. Remove the Paper Cassette from the printer. Does the SEPARATOR ROLLER rotate smoothly? Turning it with your finger.	Go to step 8.	Replace the KIT HOLDER ASSY SEPARATOR. (Refer to Removal 2/ Replacement 62.)
8	Checking the ROLL ASSY FEED for rotation. Remove the Paper Cassette from the printer. Checked by [Digital Output] - [DO-0] in [IOT Diag] and then enter the [Digital Output] - [DO-b] in [IOT Diag] of diagnosis. Does the noise arise from this Roller?	Replace the KIT ROLL ASSY FEED. (Refer to Removal 6/ Replacement 58.)	Go to step 12.

Step	Check	Remedy	
		Yes	No
9	Checking the paper guide sides setting and paper setting of SSF. Were the paper guide sides of SSF correctly set, and was the paper correctly inserted into SSF?	Go to step 10.	Reset the paper guide sides, and correctly insert the paper to SSF, then go to step 10.
10	Checking the paper condition. Is the paper dry and recommended paper?	Go to step 12.	Replace the paper with a new dry and recommended one, then go to step 11.
11	Checking noise when the paper is fed from the SSF. Does the noise arise from the printer?	Go to step 12.	End of work.
12	Checking the Duplex. Does the noise arise when feeding the paper from the Duplex?	Go to step 13.	Go to step 15.
13	Checking the FEEDER ASSY DUP AIO STD for installation. Reseat the FEEDER ASSY DUP AIO STD. Does the noise arise from the printer?	Go to step 14.	End of work.
14	Checking the Duplex Motor (MOTOR ASSY DUP). Does the noise arise from the printer? Checked by [Digital Output] - [DO-12] in [IOT Diag] of diagnosis.	Replace FEEDER ASSY DUP SFP STD (Refer to Removal 21/ Replacement 43).	End of work.
15	Checking the Main Motor. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 16.	Go to step 22.
16	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 17.	End of work.
17	Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.	Go to step 18.	End of work.
18	Checking the foreign substances on the surfaces of the ROLL ASSY REGI and ROLL REGI METAL. Are there any foreign substances on the surfaces of these parts?	Remove the foreign substances, then go to step 19.	Go to step 20.
19	Checking noise when printing. Does the noise arise from the printer?	Go to step 20.	End of work.
20	Checking the ROLL ASSY REGI and ROLL REGI METAL for rotation. Checked by [Digital Output] - [DO-0] in [IOT Diag] and then enter the [Digital Output] - [DO-29] in [IOT Diag] of diagnosis. Does the noise arise from the Roller(s)?	Replace the ROLL ASSY REGI and/ or ROLL REGI METAL.	Go to step 21.

Step	Check	Remedy	
		Yes	No
21	<p>Checking the DRIVE ASSY MAIN for installation. Reseat the DRIVE ASSY MAIN.</p> <p>Does the noise arise from the printer? Checked by [Digital Output] - [DO-0] in [IOT Diag] of diagnosis.</p>	<p>Try replacing the PHD ASSY(refer to Removal 3/ Replacement 61), KIT TRANSFER ASSY (refer to Removal 18/ Replacement 46) and KIT DRIVE ASSY MAIN (refer to Removal 42/ Replacement 22) one after another.</p>	<p>End of work.</p>
22	<p>Checking the Sub Motor.</p> <p>Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.</p>	<p>Go to step 23.</p>	<p>Check the installation situation of the printer.</p>
23	<p>Checking the PHD ASSY for installation. Reseat the PHD ASSY.</p> <p>Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.</p>	<p>Go to step 24.</p>	<p>End of work.</p>
24	<p>Checking the FUSER ASSY for installation. Reseat the FUSER ASSY.</p> <p>Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.</p>	<p>Go to step 25.</p>	<p>End of work.</p>
25	<p>Checking the DRIVE ASSY SUB for installation. Reseat the DRIVE ASSY SUB.</p> <p>Does the noise arise from the printer? Checked by [Digital Output] - [DO-5] in [IOT Diag] of diagnosis.</p>	<p>Try replacing the PHD ASSY (Refer to Removal 3/ Replacement 61), FUSER ASSY (Refer to Removal 4/Replacement 60)after replacement, be sure to clear the life counter value, and DRIVE ASSY SUB (Refer to Removal 43/ Replacement 21) one after another.</p>	<p>End of work.</p>

6. Other FIP

Other FIP covers the Electrical Noise FIP, Power Supply FIP and Multiple Feed FIP, except Error Code FIP, Abnormal Noise FIP and Image Quality FIP.

FIP-Electrical Noise

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PHD ASSY (PL4.1.21) TRANSFER ASSY (PL6.1.7) PWBA HVPS (PL4.1.19)		
1	Checking the external noise. Are there any other electrical appliances within 3 meters from the printer, such as generators, radio and appliances with motors? Either turn off the other electrical appliances, or relocate the printer at least 6 meters away from other appliances. Does the electrical noise error still occur?	Go to step 2.	End of work.
2	Checking the AC ground. Is AC power supply outlet wired and grounded appropriately?	Go to step 3.	Request the client to fix AC power supply outlet.
3	Checking the TRANSFER ASSY for connection. Open the COVER ASSY FRONT. Are four HV terminals on the TRANSFER ASSY, and four springs on the frame (PL4.1.11, 12, 13 and 14) dirty and/or deformed?	Clean or replace the KIT TRANSFER ASSY (refer to Removal 18/ Replacement 46) or SPRING(s).	Go to step 4.
4	Checking the PHD ASSY for connection. Remove the PHD ASSY. Are five HV terminals on the PHD ASSY, and five springs on the frame (PL4.1.10 and PL4.1.15 to 18) dirty and/or deformed?	Clean or replace the PHD ASSY (refer to Removal 3/ Replacement 61) or SPRING(s).	Go to step 5.
5	Checking after resetting the PHD ASSY. Reseat the PHD ASSY. Does the electrical noise error still occur?	Go to step 6.	End of work.
6	Checking after resetting the TRANSFER ASSY. Reseat the TRANSFER ASSY. Does the electrical noise error still occur?	Reseat the PWBA HVPS.(refer to Removal 58/ Replacement 6)	End of work.

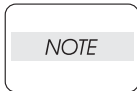
FIP-AC Power

Step	Check	Remedy	
		Yes	No
	Possible causative parts: SWITCH ASSY INLET MG AIO (PL8.3.7) PWBA LVPS (PL8.2.12)		
1	Checking the printer. Does the motor noise arise when turning on the power? During this test, close the COVER ASSY FRONT MG.	Go to FIP-DC.	Go to step 2.
2	Checking the power supply on wall outlet. Connect the power cord with other wall outlet. Does the printer operate normally?	End of work.	Go to step 3.
3	Checking the power code for connection. Reconnect the power cord. Does the printer operate normally?	End of work.	Go to step 4.
4	Checking the connector of SWITCH ASSY INLET MG AIO for connection. Disconnect the power cord and wait for one minute. Reconnect the connector of SWITCH ASSY INLET MG AIO. Does the printer operate normally?	End of work.	Replace the SWITCH ASSY INLET MG AIO ,then go to step 5.
5	Checking the connector of PWBA LVPS for connection. Disconnect the power cord and wait for one minute. Reconnect the all connectors of PWBA LVPS. Does the printer operate normally?	End of work.	Replace the PWBA LVPS (Refer to Removal 33/Replacement 31)

FIP-DC Power

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA LVPS (PL8.2.12) PWBA MCU (PL8.3.6) PWBA ESS AIO (PL8.1.2)		
1	Checking the connector of the PWBA LVPS for connection. Disconnect the power cord and wait for one minute. Reconnect the all connectors of the PWBA LVPS. Does the printer operate normally?	End of work.	Go to step 2.
2	Checking the connector of the CONSOLE ASSY PANEL for connection. Reconnect the connector (P/J202) of the CONSOLE ASSY PANEL. Does the CONSOLE ASSY PANEL operate normally?	End of work.	Go to step 3.
3	Checking after resetting the PWBA MCU. Reseat the PWBA MCU. Does the printer operate normally?	End of work.	Replace the PWBA LVPS (Refer to Removal 33/Replacement 31)

FIP-Multiple Feed



This multiple feed trouble occurs only when the paper is fed from the Paper Cassette.

Step	Check	Remedy	
		Yes	No
	Possible causative parts: HOLDER ASSY SEPARATOR (PL2.1.5) ROLL ASSY FEED (PL3.2.4) ROLL ASSY REGI (PL3.2.9) ROLL REGI METAL (PL3.2.10)		
1	Checking the using paper. Does the using paper meet the specifications?	Go to step 3.	Use the paper that meets the specifications, then go to step 2.
2	Does the multi feed still occur when printing?	Go to step 3.	End of work.
3	Checking paper condition. Is the paper dry and recommended paper?	Go to step 5.	Replace the paper with a new dry and recommended one, then go to step 4.
4	Does the multi feed still occur when printing?	Go to step 5.	End of work.
5	Checking the ROLL ASSY FEED and HOLDER ASSY SEPARATOR for rotation. Does the ROLL ASSY FEED and HOLDER ASSY SEPARATOR rotate smoothly and operate correctly?	End of work.	Replace the KIT ROLL ASSY FEED (refer to Removal 6/ Replacement 58) and/or KIT HOLDER ASSY SEPARATOR (refer to Removal 2/ Replacement 62).

FIP-Control Panel Freezes

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA ESS AIO (PL8.1.2)		
1	Checking the operating environment. Is the printer connected to the Network?	Go to step 2.	Replace the Printer.
2	Checking the IP address. Can you change the IP address?	Go to step 5.	Go to step 3.
3	Checking the internet connectivity. Is there any internet connection available for your PC?	Go to step 4.	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)
4	Updating the firmware to the latest version. Download the latest version of the firmware from the DELL Support Web site, and execute the update. NOTE: Before updating the firmware to the latest version, reset the error following the steps of procedure described below. In addition, update the firmware by way of a USB storage. 1) Remove the network cable. 2) Connect the USB cable. 3) Turn the power off and on. Does the error persist when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.
5	Changing the IP address. Contact your system administrator for obtaining a new IP address. Refer to Reference_1 for details of how to change the IP address. Does the error persist when the power is turned off and on?	Replace the KIT PWBA ESS AIO.(Refer to Removal 28/ Replacement 36)	End of work.

Reference_1:Changing the IP address

- 1) Remove the network cable, and power off the printer and then on
- 2) Change the IP address on the Control Panel.
- 3) Plug the network cable back into the printer, and then turn the power on.
- 4) On the Control Panel, open [Admin] > [Network] > [TCP/IP], and confirm that the IP address has been changed.

FIP-Freezes with "Printing..." during Fax Reception

Step	Check	Remedy	
		Yes	No
	Possible causative parts: PWBA FAX (PL8.1.5)		
1	Checking Discard Size under Fax Setting. On the Control Panel, open [Admin Menu] > [Fax Settings] > [Discard Size]. Is the Discard Size option set to ON?	Go to step 2.	Replace the PWBA FAX.(Refer to Removal 27/ Replacement 37)
2	Disabling Discard Size On the Control Panel, open [Admin Menu] > [Fax Settings] > [Discard Size],and select "Off". Power off the printer and then on. Does the problem persist?	Replace the PWBA FAX.(Refer to Removal 27/ Replacement 37)	End of work.

Appendix

This section describes procedure of clearing paper jams, procedure of replacing the main parts, and procedure of cleaning the printer.

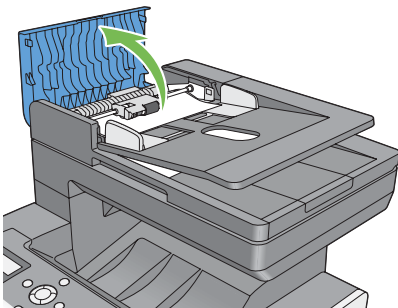
Appendix_1 Clearing Jams

1.1 Clearing Paper Jams From the ADF

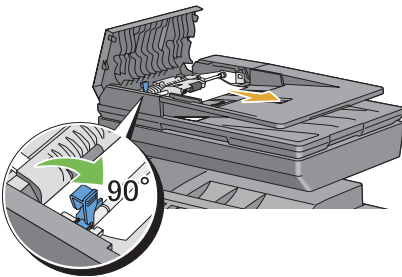
- 1) Remove the remaining documents from the ADF.

If the document is jammed in the paper feed area:

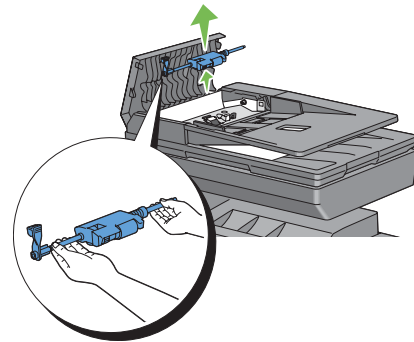
- a. Open the ADF cover.



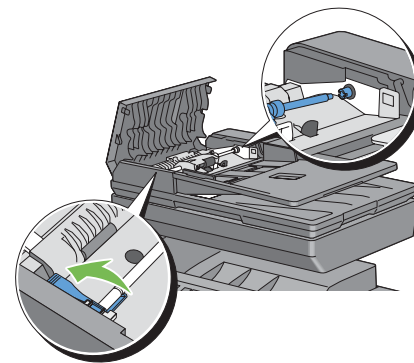
- b. Lift the release lever 90 degrees and remove the jammed document by carefully pulling it to the right.



- If you find it difficult to pull the document:
- c. Remove the release roller assembly and remove the document by gently pulling it straight up.

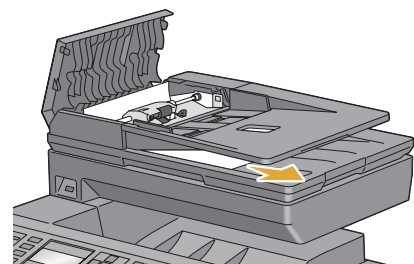


- d. Insert the release roller assembly and press down the release lever.



If the document is jammed in the paper exit area:

- e. Remove the jammed document from the document output tray.

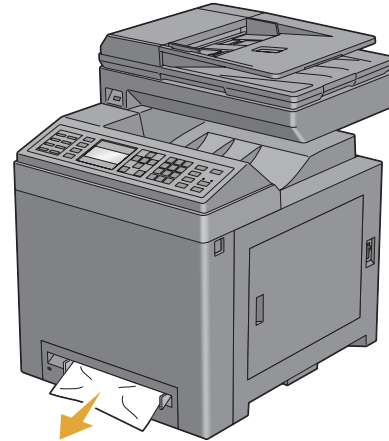


- f. Close the ADF cover, and then load the documents back into the ADF.

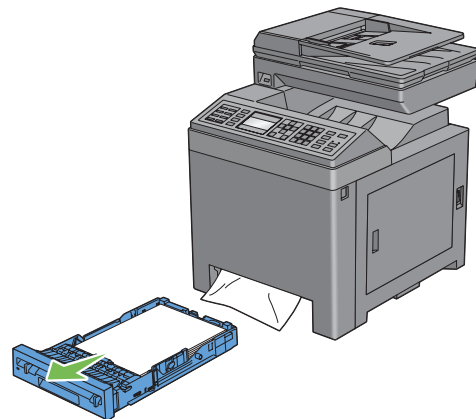
1.2 Clearing Paper Jams From the SSF

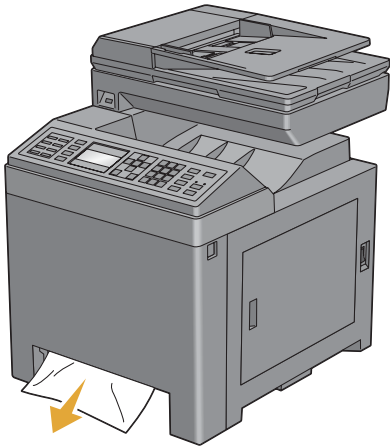


- 2) If you cannot see the jammed document or the jammed document do not move when you pulled, open the document cover.
- 3) Remove the document from the ADF feeder roller or the feed area by carefully pulling it to the right.
- 4) Close the document cover, and then load the documents back into the ADF.

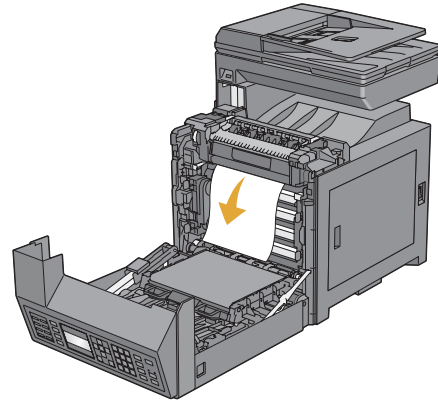


- 2) Remove the standard 250-sheet tray from the printer, and then pull out the jammed paper remaining inside the printer. If no jammed paper can be found or you are unable to remove the paper, go to the next step to remove the jammed paper from the inside of the printer.

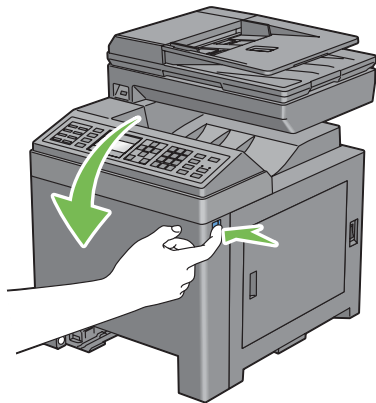




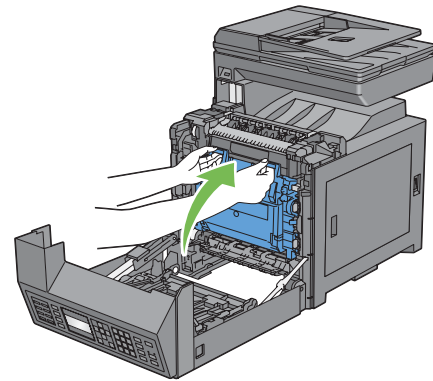
- 3) Push the side button to open the front cover.



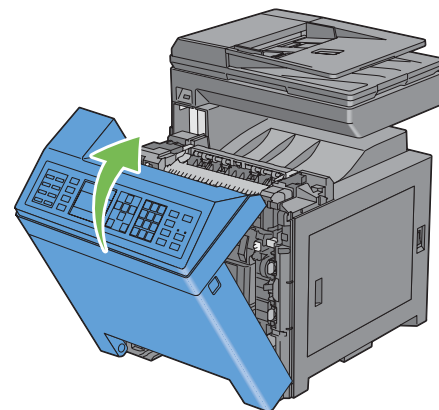
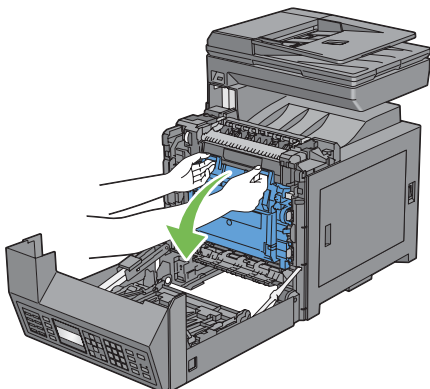
- 5) Close the belt unit, and push at the top of the unit until it clicks.



- 4) Open the belt unit until it stops and remove the jammed paper. Confirm that there are no scraps of paper remaining inside the printer.

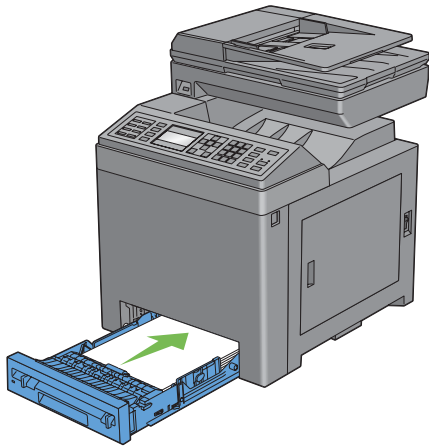


- 6) Close the front cover.

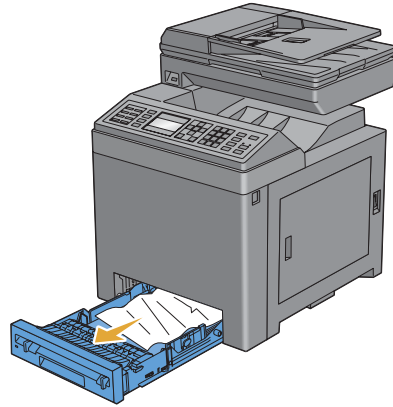


- 7) Insert the standard 250-sheet tray into the printer, and push until it stops.

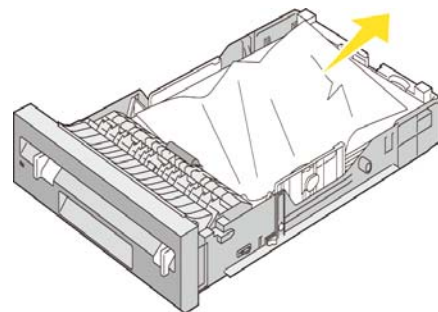
1.3 Clearing Paper Jams From the Standard 250-Sheet Tray



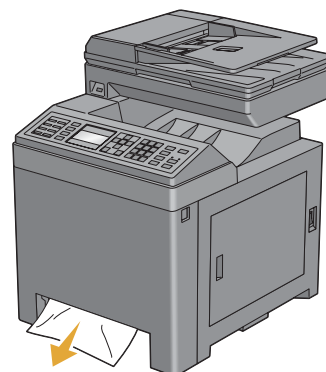
- 1) Pull the standard 250-sheet tray out of the printer carefully. Hold the tray with both hands, lift the front slightly, and remove it from the printer.



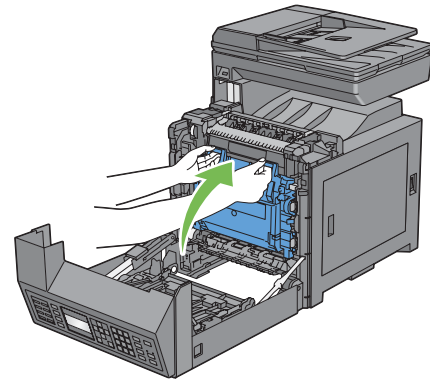
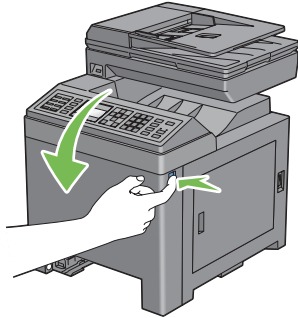
- 2) Remove all the jammed and/or creased paper from the tray.



- 3) Pull the jammed paper out carefully to avoid tearing it. If you are still unable to remove the paper, go to the next step to remove the jammed paper from the inside of the printer.

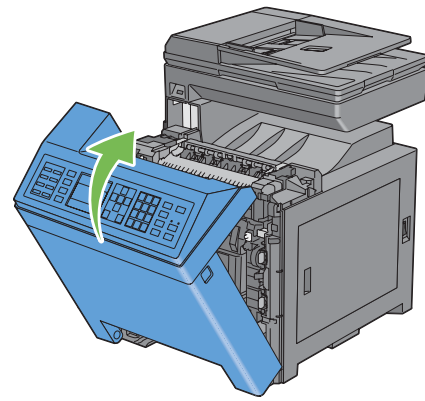
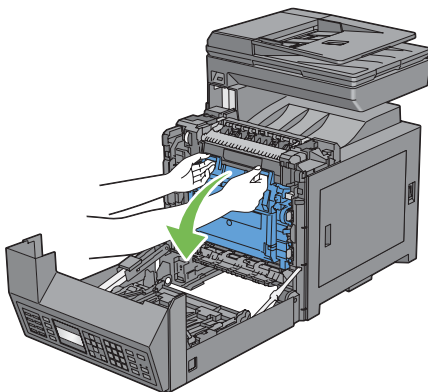


- 4) Push the side button to open the front cover.

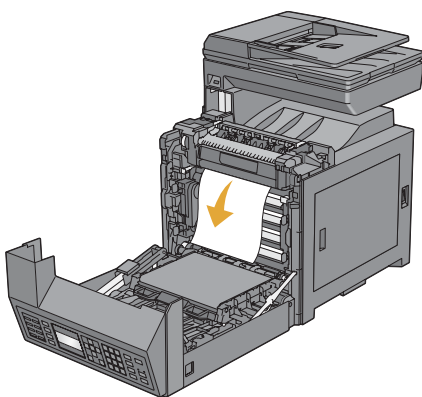


- 7) Close the front cover.

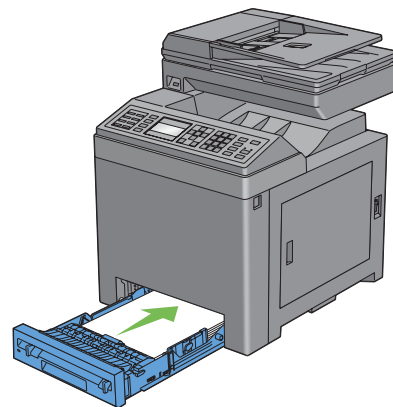
- 5) Open the belt unit until it stops and remove the jammed paper. Confirm that there are no scraps of paper remaining inside the printer.



- 8) Insert the standard 250-sheet tray into the printer, and push until it stops.

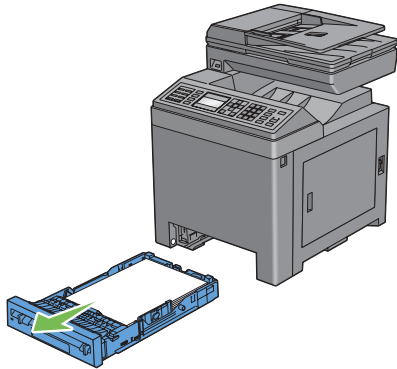


- 6) Close the belt unit, and push at the top of the unit until it clicks.

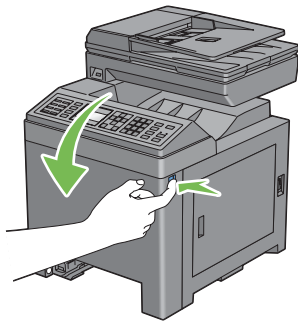


1.4 Clearing Paper Jams From the Fuser

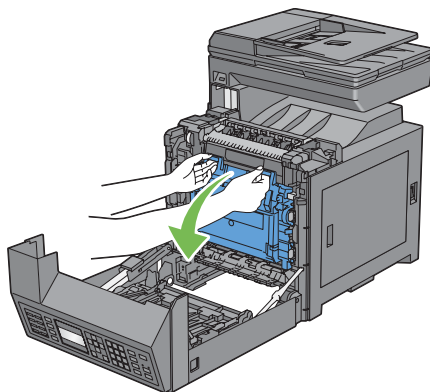
- 1) Turn off the printer and wait for 30 minutes.
- 2) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.



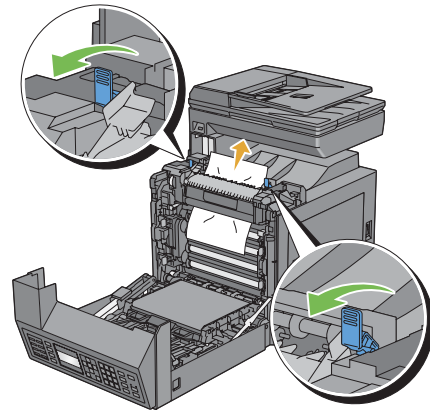
- 3) Push the side button to open the front cover.



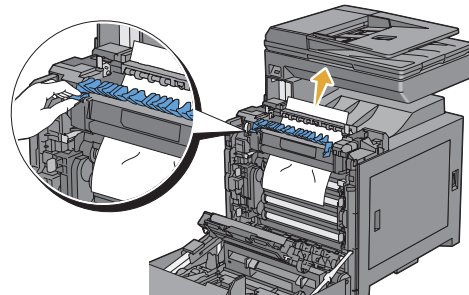
- 4) Open the belt unit.



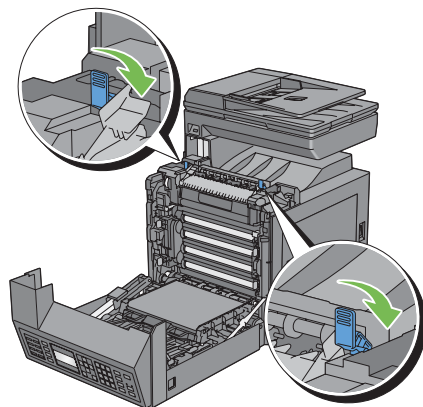
- 5) Lift the levers at both ends of the fuser, and remove the jammed paper. If you are still unable to remove the paper, go to the next step.



- 6) Open the cover of the fuser and remove the jammed paper.



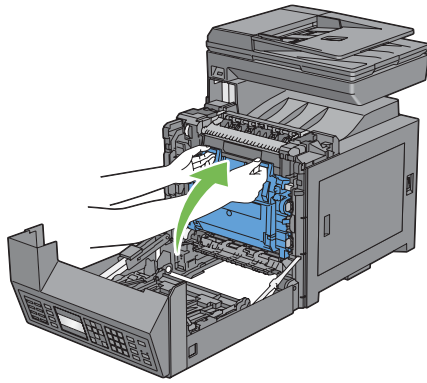
- 7) Close the cover of the fuser and press down the levers at both ends of the fuser.



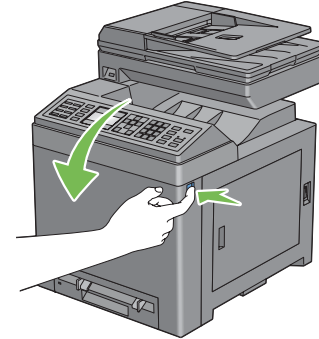
- 8) Confirm that there are no scraps of paper remaining inside the printer, and then close the belt unit.

1.5 Clearing Paper Jams From the Duplexer

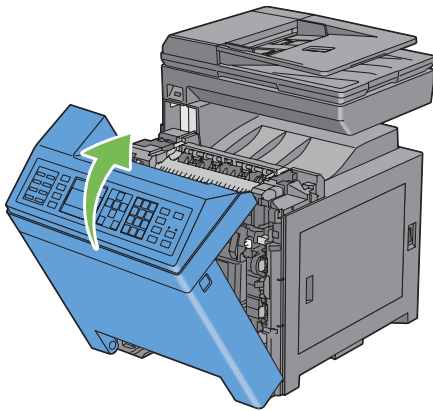
- 1) Push the side button to open the front cover.



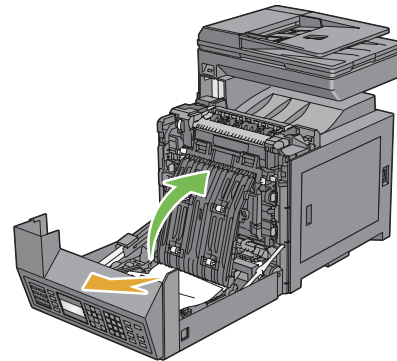
- 9) Close the front cover.



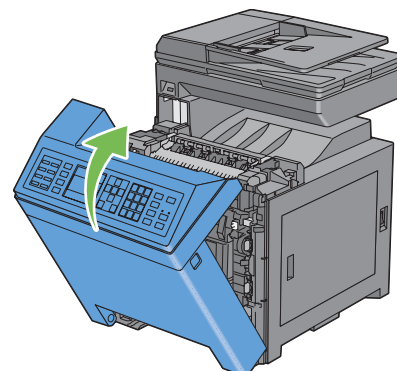
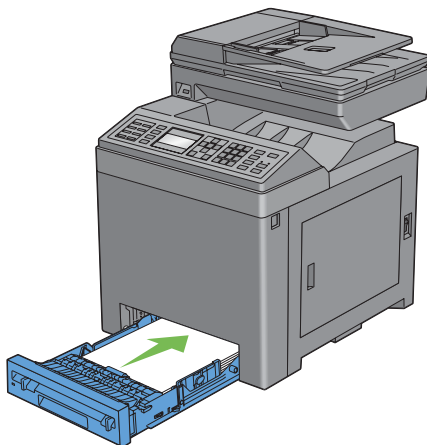
- 2) Open the cover of the duplexer.
- 3) Remove the jammed paper from the duplexer.



- 10) Insert the standard 250-sheet tray into the printer, and push until it stops.

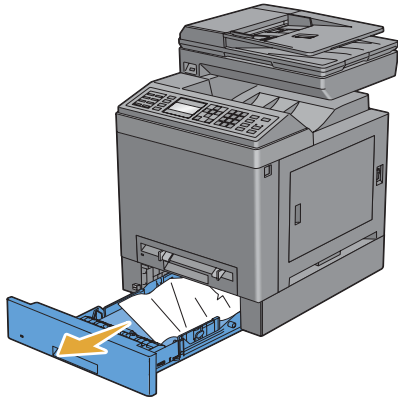


- 4) Close the cover of the duplexer.
- 5) Close the front cover.

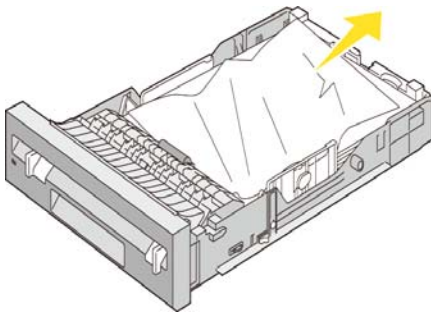


1.6 Clearing Paper Jams From the Optional 250-Sheet Feeder

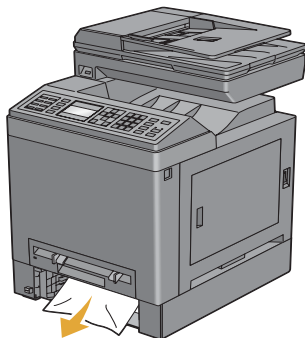
- 1) Pull the optional 250-sheet feeder out of the printer carefully. Hold the feeder with both hands, and remove it from the printer.



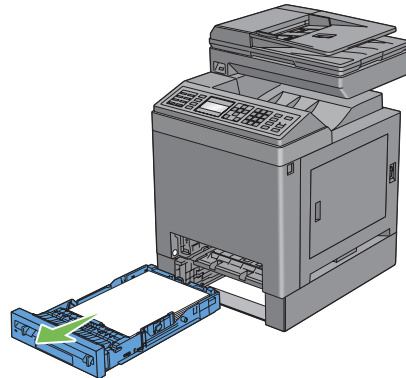
- 2) Remove all jammed and/or creased paper from the feeder.



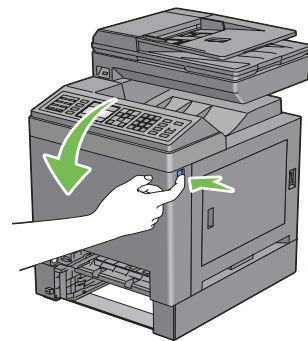
- 3) Pull the jammed paper out carefully to avoid tearing it. If you are still unable to remove the paper, go to the next step to remove the jammed paper from the inside of the printer.



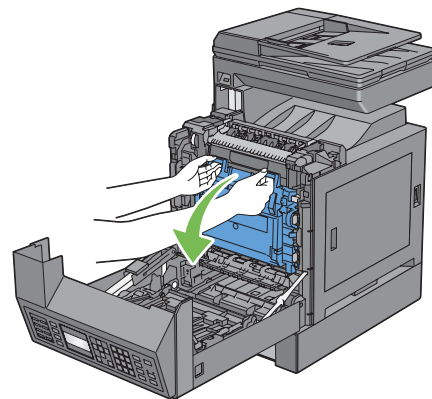
- 4) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.

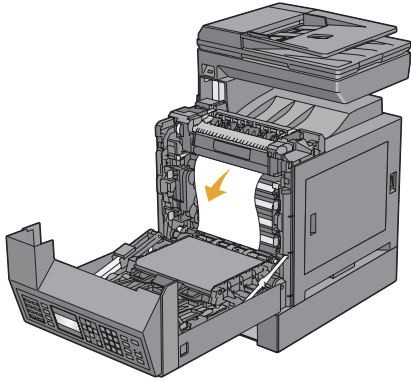


- 5) Push the side button to open the front cover.

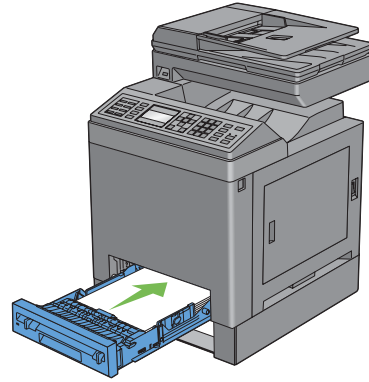


- 6) Open the belt unit until it stops and remove the jammed paper. Confirm that there are no scraps of paper remaining inside the printer.

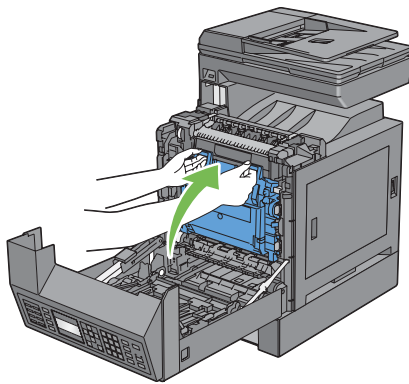




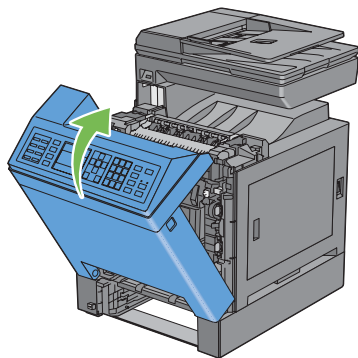
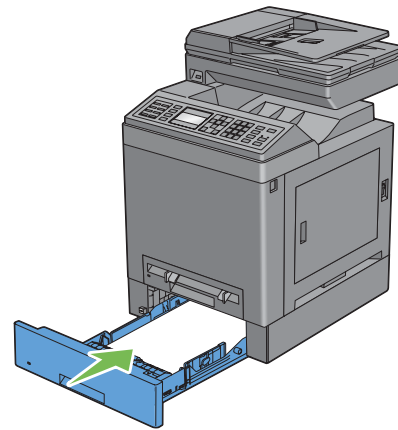
7) Close the belt unit, and push at the top of the unit until it clicks.



10) Insert the optional 250-sheet feeder into the printer, and push until it stops.



8) Close the front cover.



9) Insert the standard 250-sheet tray into the printer, and push until it stops.

Appendix_2 Replacing the Main Parts

2.1 Consumables and Periodic Replacement Parts Life

2.1.1 Replacement Timing of Consumables and Periodic Replacement Parts

(1) Types of Consumables and Periodic Replacement Parts

Listed below are the consumables and periodic replacement parts for this printer (including options).

	Product Name	Lifespan (approximate)*1
Consumables	TONER CARTRIDGE (K) (Starter capacity)	1,200 pages
	TONER CARTRIDGE (YMC) (Starter capacity)	1,200 pages
	TONER CARTRIDGE (K) (Standard capacity)	3,000 pages
	TONER CARTRIDGE (YMC) (Standard capacity)	2,500 pages
Periodic Replacement Parts	FUSER	100,000 pages
	PHD ASSY	24,000 pages
	SEPARATOR ROLLERS	150,000 pages

*1: The page counts are for reference only.

The actual page count may vary greatly depending on conditions such as print settings, document contents, or power-on/off frequency.

(2) Replacement Timing of Consumables

When a consumable part is about to reach its replacement period, one of the following messages appears on the Operator Panel:

	Message	Meaning	Detection device
TONER CARTRIDGE (YMCK)	<Near Life> Ready to Print 093-XXX*1 ↕ Flip YYY*1 Crtridge Is close to life	The TONER CARTRIDGE (Y, M, C, or K) is near its replacement period. Have ready a new TONER CARTRIDGE (Y, M, C, or K). You can still print approximately another 900 pages (Standard capacity: 1,800 pages) in K, and 600 (Standard capacity: 1,200 pages) in Y, M, and C.	The TONER CRUM detects the replacement period from the remaining toner amount. The CTD Sensor detects the life end.
	<Life Over> Replace Cart. 093-XXX*2 ↕ Flip Replace YYY*2 Crtridge	The TONER CARTRIDGE (Y, M, C, or K) has reached its replacement period. The printer stops operating. Immediately replace the TONER CARTRIDGE (Y, M, C, or K) with a new one.	

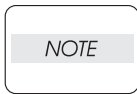
*1-*4: XXX/YYY in the message denotes the following.

*1: 423/Yellow, 424/Magenta, 425/Cyan, 426/Black

*2: 930/Yellow, 931/Magenta, 932/Cyan, 933/Black

(3) Replacement Timing of Periodic Replacement Parts

When a periodic replacement part is about to reach its replacement period, one of the following messages appears on the Operator Panel:



No replacement timing message is displayed for the ROLL ASSY 2ND BTR, FEED ROLL, and SEPARATOR ROLL.

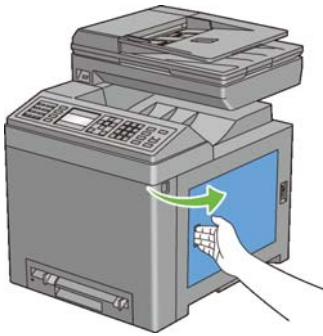
Ensure that the ROLL ASSY 2ND BTR is replaced concurrently with the BELT ASSY IBT. It is recommended that the FEED ROLL and the SEPARATOR ROLL are also replaced concurrently with the BELT ASSY IBT.

	Message	Meaning	Detection device
FUSER ASSY	<Near Life> Ready to Print 010-421 ↕ Flip Ready to Print Contact Support	The FUSER ASSY is near its replacement period. Have ready a new FUSER ASSY. You can still print approximately another 5,000 pages before the Life Over message appears.	The replacement period is detected with the operation counter of the FUSER ASSY.
	<Life Over> Replace FUSER 010- 351 ↕ Flip Replace FUSER Contact Support	The FUSER ASSY has reached its replacement period. You can still print some more pages, but the print quality will not be assured. It is recommended that you replace the FUSER ASSY with a new one immediately.	
PHD ASSY	<Near Life> Ready to Print 091-402 ↕ Flip Ready to Print Contact Support	The PHD ASSY is near its replacement period. Have ready a new PHD ASSY. You can still print approximately another 2,400 pages before the Life Over message appears.	The replacement period is detected with the operation counter of the PHD ASSY.
	<Life Over> Replace PHS 091-935 ↕ Flip Replace PHD Contact Support	The PHD ASSY has reached its replacement period. You can still print some more pages, but the print quality will not be assured. It is recommended that you replace the PHD ASSY with a new one immediately.	

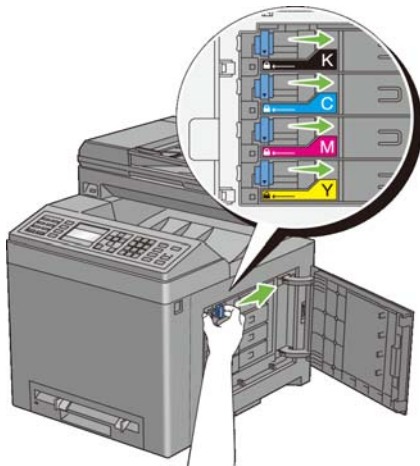
2.2 Replacing the Toner Cartridges

- Removing the Toner Cartridges

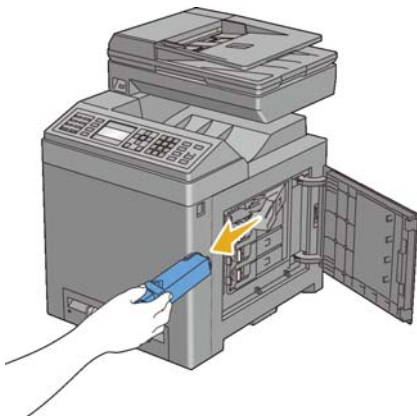
- 1) Open the toner access cover.



- 2) Push the latch(es) backwards to pop open the toner cartridge(s) that you want to replace.

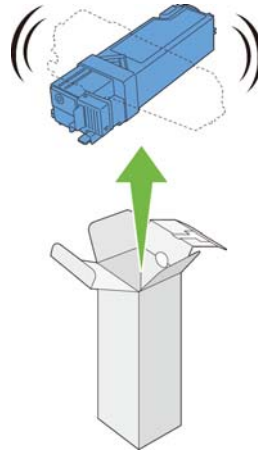


- 3) Pull the cartridge holder until it clicks, and then pull out the toner cartridge.

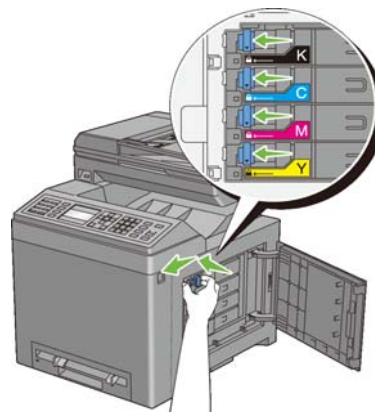
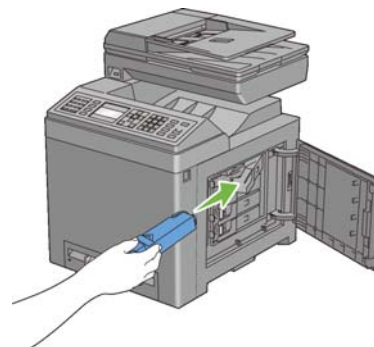


- Installing a Toner Cartridge

- 1) Ensure that the color of the new toner cartridge matches that on the handle before replacing it. Shake the new toner cartridge five or six times to distribute the toner evenly.



- 2) Insert the toner cartridge into the associated cartridge holder, and then slide the latch of the toner cartridge.



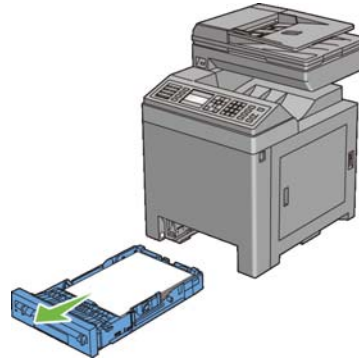
- 3) Close the toner access cover.



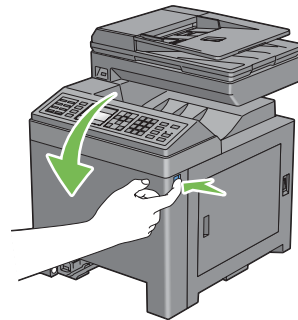
2.3 Replacing the Print Head Device (PHD) Unit

- Removing the PHD Unit

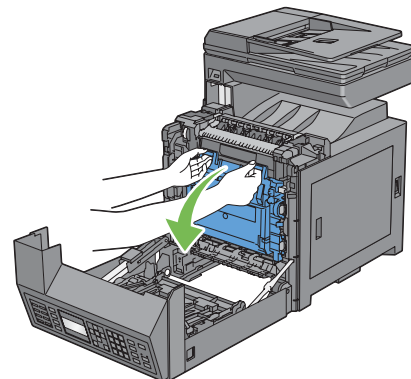
- 1) Ensure that the printer is turned off.
- 2) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.



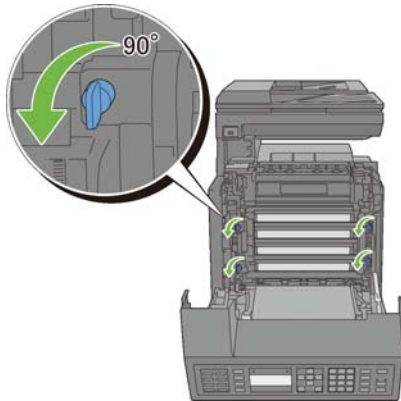
- 3) Push the side button to open the front cover.



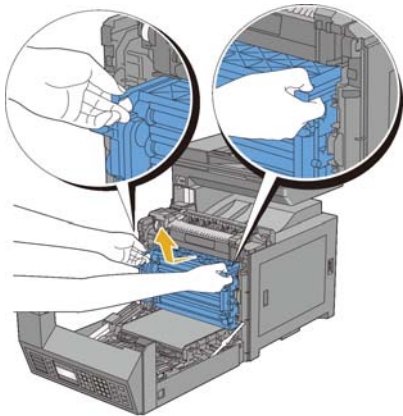
- 4) Open the belt unit.



- 5) Turn the four PHD lock levers 90-degrees counterclockwise.



- 6) Hold the gray tabs, and then pull the PHD unit out of the printer.



- Installing a PHD Unit

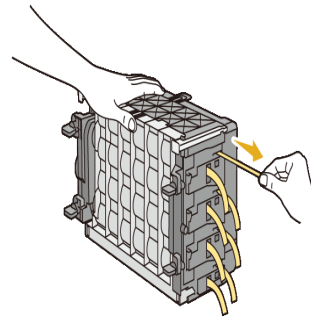
- 1) Open the PHD packaging.



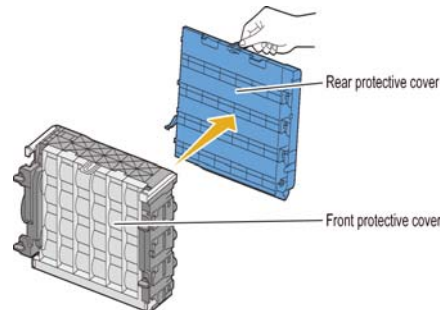
- 2) Take out the PHD unit from the packaging.



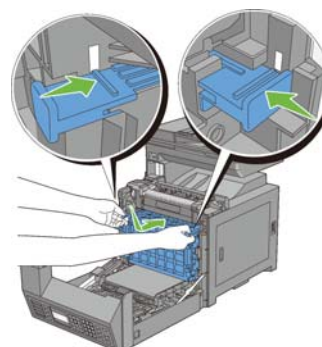
- 3) Completely pull out the eight yellow ribbons from the PHD unit.



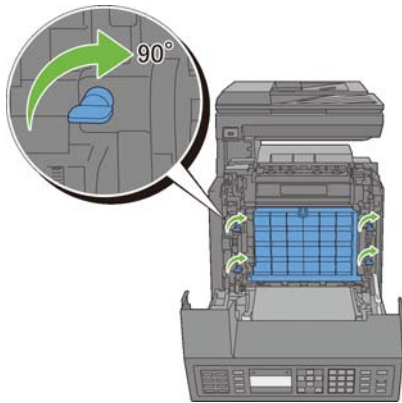
- 4) Remove the rear protective cover from the PHD unit.



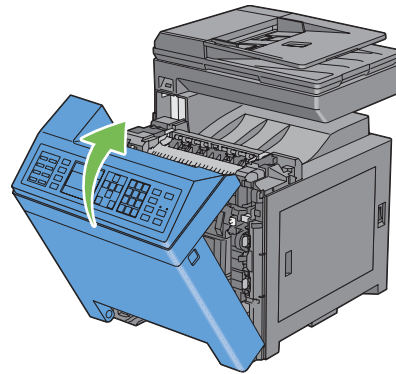
- 5) Insert the PHD unit until the line on the handle aligns with the white line on the printer.



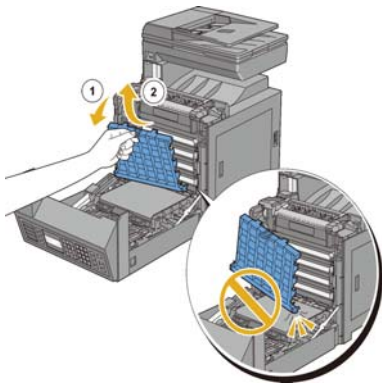
- 6) Turn the four PHD lock levers 90-degrees clockwise to lock the PHD unit.



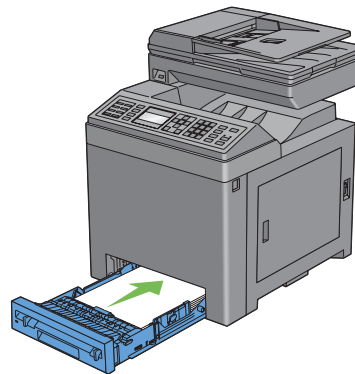
- 9) Close the front cover.



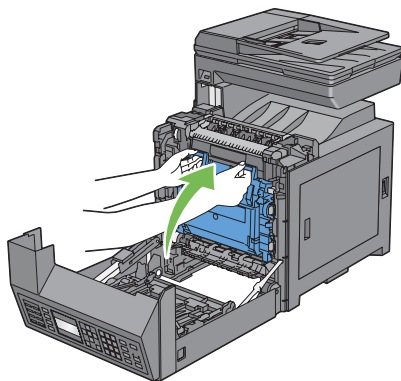
- 7) Remove the front protective cover from the PHD unit.



- 10) Insert the standard 250-sheet tray into the printer, and push until it stops.



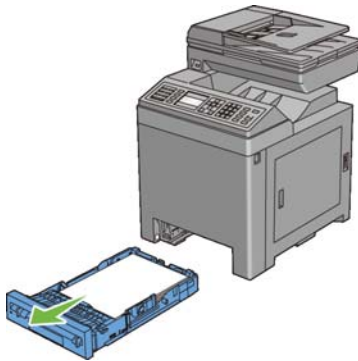
- 8) Close the belt unit, and push at the top of the unit until it clicks.



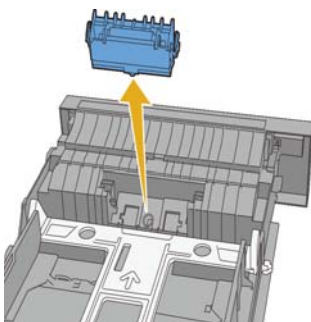
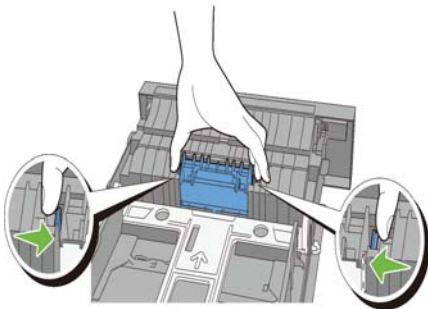
2.4 Replacing the Retard Roller

- Removing the Retard Roller in the Standard 250-Sheet Tray

- 1) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.

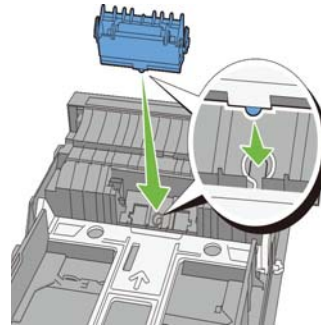


- 2) Holding the retard roller tabs with your fingers, pull the retard roller out of the groove in the axle.

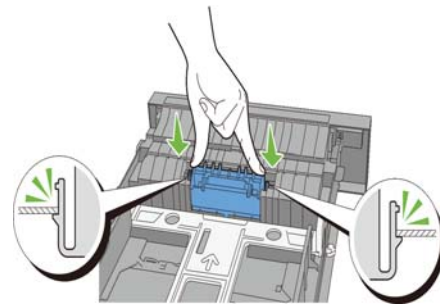


- Installing a Retard Roller in the Standard 250-Sheet Tray

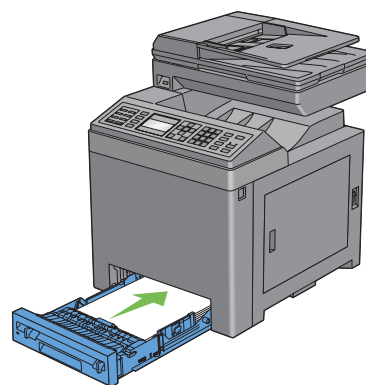
- 1) Align the new retard roller with the groove on the axle.



- 2) Insert the retard roller into the axle until it snaps. The protrusions fit completely into the slots and the roller hook reseats into the groove on the axle.



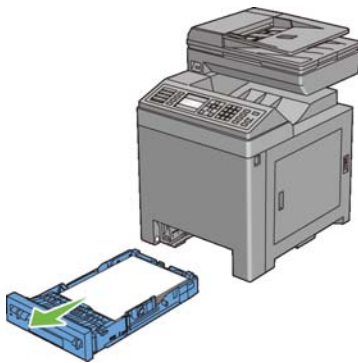
- 3) Load paper in the standard 250-sheet tray, and then insert the tray into the printer and push until it stops.



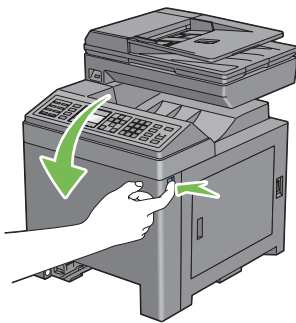
Appendix_3 Cleaning the Printer

3.1 Cleaning Inside the Printer

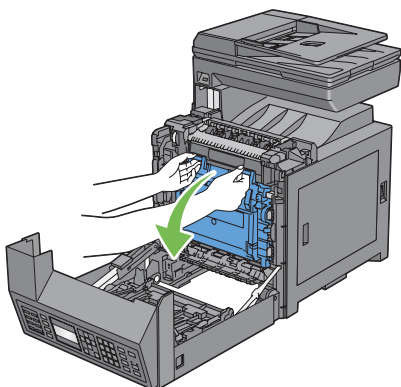
- 1) Ensure that the printer is turned off.
- 2) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.



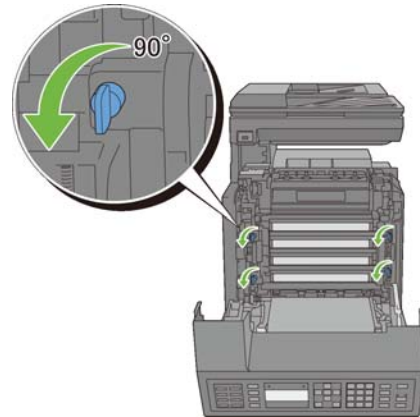
- 3) Push the side button to open the front cover.



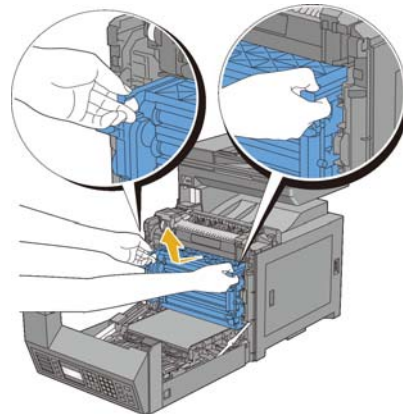
- 4) Open the belt unit.



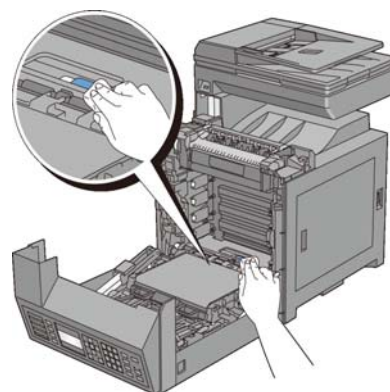
- 5) Turn the four PHD lock levers 90-degrees counterclockwise.



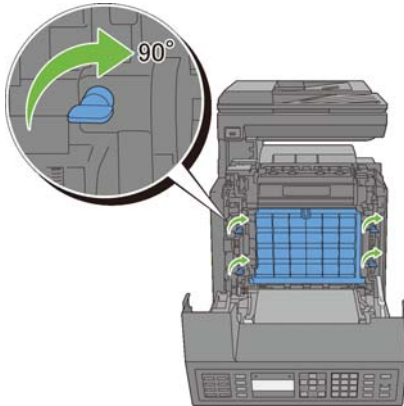
- 6) Hold the gray tabs, and then pull out the PHD unit.



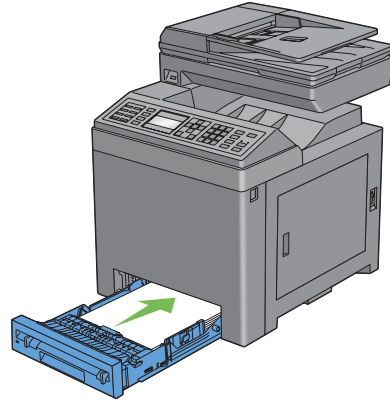
- 7) Clean the feed roller inside the printer with a dry cloth.



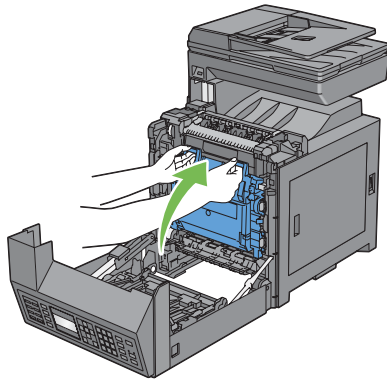
- 8) Insert the PHD unit until it stops, and then turn the four PHD lock levers 90-degrees clockwise to lock the PHD unit.



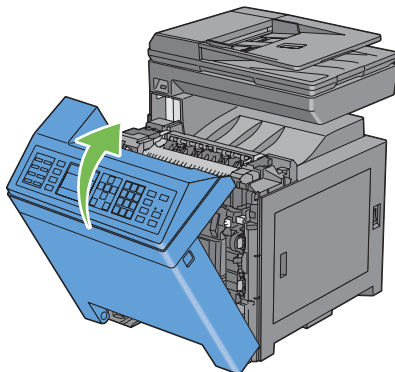
- 11) Insert the standard 250-sheet tray into the printer, and push until it stops.



- 9) Close the belt unit, and push at the top of the unit until it clicks.

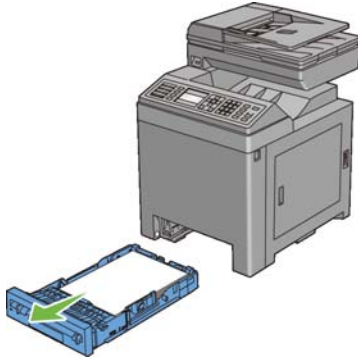


- 10) Close the front cover.

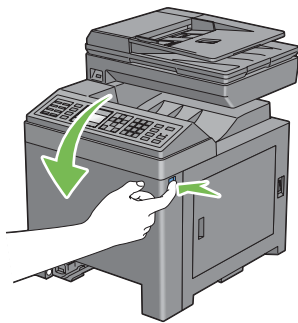


3.2 Cleaning the CTD Sensor

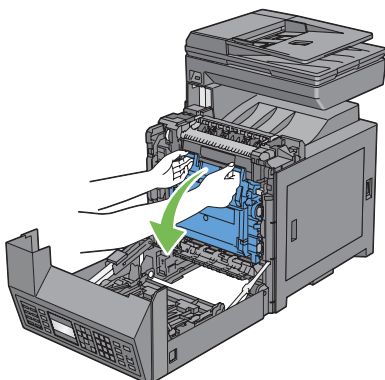
- 1) Ensure that the printer is turned off.
- 2) Pull the standard 250-sheet tray out of the printer about 200 mm. Hold the standard 250-sheet tray with both hands, and remove it from the printer.



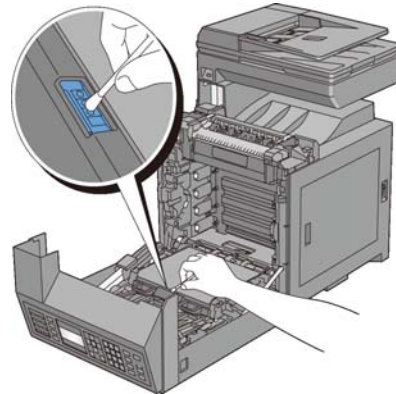
- 3) Push the side button to open the front cover.



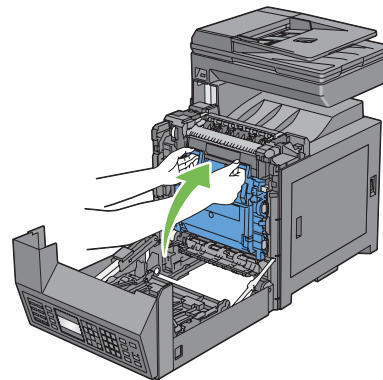
- 4) Open the belt unit.



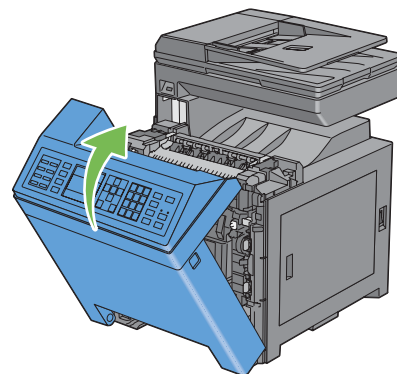
- 5) Clean the CTD sensor inside the printer with a clean dry cotton swab.



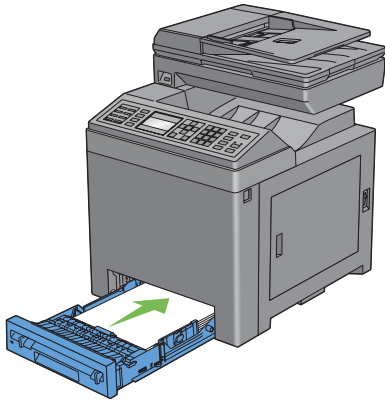
- 6) Close the belt unit, and push at the top of the unit until it clicks.



- 7) Close the front cover.



- 8) Insert the standard 250-sheet tray into the printer, and push until it stops.

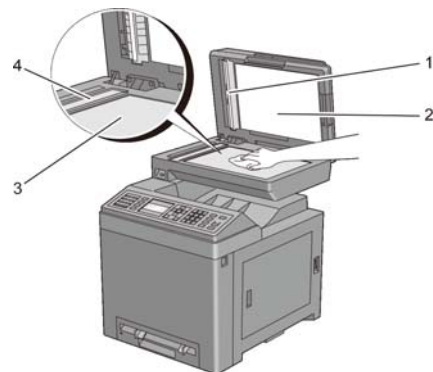


3.3 Cleaning the Scanner

- 1) Slightly dampen a soft lint-free cloth or paper towel with water.
- 2) Open the document cover.



- 3) Wipe the surface of the document glass and ADF glass until it is clean and dry.

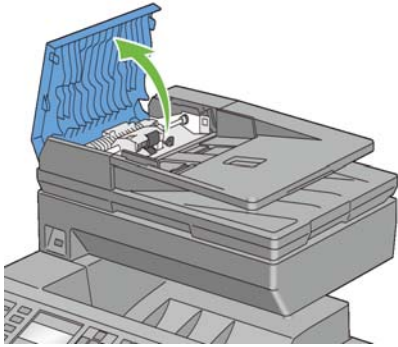


- 1.White Sheet
- 2.Document Cover
- 3.Document Glass
- 4.ADF Glass

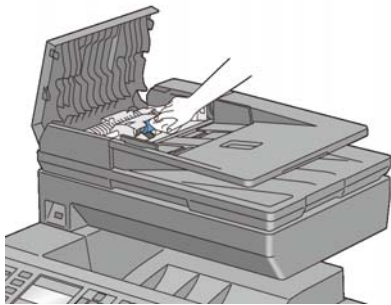
- 4) Wipe the underside of the white document cover and white sheet until it is clean and dry.
- 5) Close the document cover.

3.4 Cleaning the ADF Feed Roller

- 1) Open the ADF cover.



- 2) Wipe the ADF feed roller with a dry soft lint-free cloth or paper towel until it is clean. If the ADF feed roller gets soiled with ink stains, paper from the ADF may also be soiled. In this case, slightly dampen a soft lint-free cloth or paper towel with a neutral detergent or water, and then remove the contamination from the ADF feed roller until it is clean and dry.



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1. Overview

1.1 Purpose of This Software

This software is mainly intended for the following purposes:

- ESS diagnosis to locate a chip which causes a problem
- Diagnosing IOT
- Setting parameters such as registration in the feeding direction.

1.2 Operating Methods

This software can be operated via the Control Panel.

2. Configuration

The operation of this Diag can be selected from the following three modes according to the purpose, target user, and function.

Only "Customer Mode" is detailed in this manual.

Customer Mode:

This mode is intended for the end user to use for isolating a problem to a replaceable unit level.

This mode allows operations such as ESS diagnostic, test printing, and parameter setting to be performed via the Control Panel.

CE (Customer Engineer) Mode:

This mode is intended for the customer engineer (CE) to use for isolating a problem to a replaceable unit level. This mode allows operations such as ESS diagnostic, test printing, and parameter setting to be performed via the Control Panel.

This mode is protected by password.

Production Line Mode:

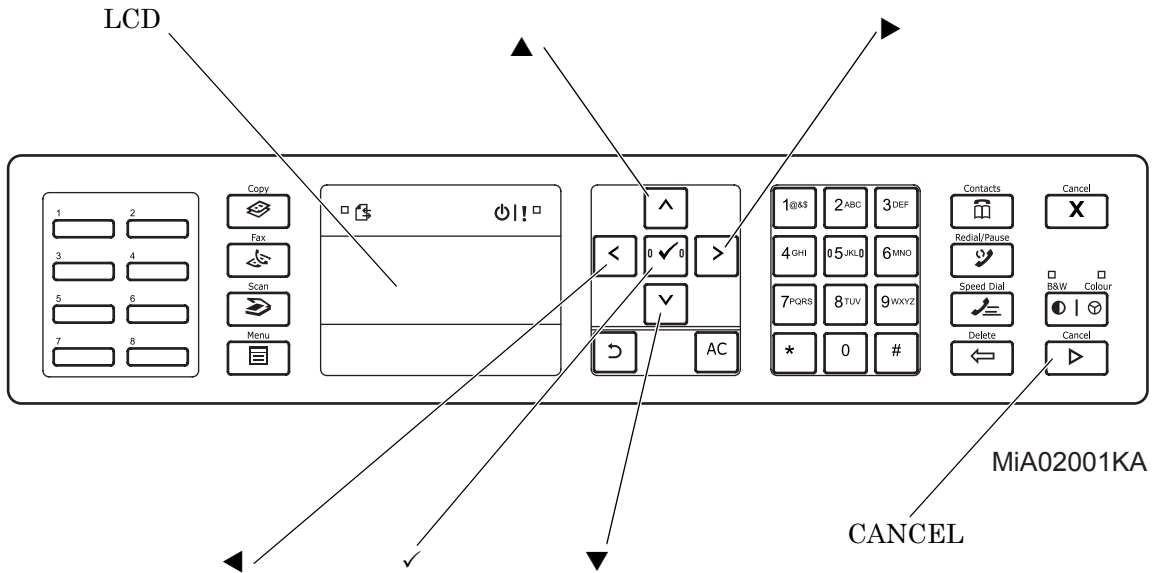
This mode is intended for the production line to use for isolating a problem.

The diag is executed by sending commands via a serial debug terminal.

This mode is protected by password.

3. How to use Diag in Customer Mode

3.1 Control Panel Functions for Diag



LCD : Displays the Diag item and its results.

▲, ▼ : Selects the Diag item or parameter value.

◀, ▶ : Moves the cursor to the left or right.

✓ : Confirms or executes the Diag item or parameter value selected.

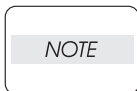
MENU : Returns to the previous menu from any test item of the Digital Input or Digital Output test.

Cancel : Cancels the Diag menu (Returns to the menu one level higher).

3.2 Entering Customer Mode

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)

3.3 Selecting Diag. mode



Once FAX/Scanner Diag or Printer Diag is selected, the diag mode cannot be changed. To change the diag mode, exit the selected diag mode and enter the diag mode again.

There are two diag modes in the customer diag.

-FAX/Scanner Diag

The menu of the FAX, ADF and Scanner relation.

-Printer Diag

The menu of the printer relation.

3.4 Selecting Diag Item

The Diag setting menu can be operated via the control panel keys.

Select the menu item with the arrow keys, and press "✓" key to execute the operation.

3.5 Changing Parameter Values

To change the parameter setting, select the currently set value and press "✓" key. Select a numeric value using "▼" and "▲" keys, and then press "✓" key to write the value into the NVM (Non-Volatile Memory).

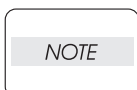
3.6 Executing/Exiting Diag Mode

To execute the Diag, use the following procedure:

- 1) A test item is displayed. Press "✓" key to confirm the selection.
- 2) The display prompts the user to start the test. Press "✓" key to start the test.

To exit the Diag, use the following procedure:

- 1) During the Diag test, press the "Cancel" key.
- 2) The Diag is stopped, and the display moves to a menu one level higher.

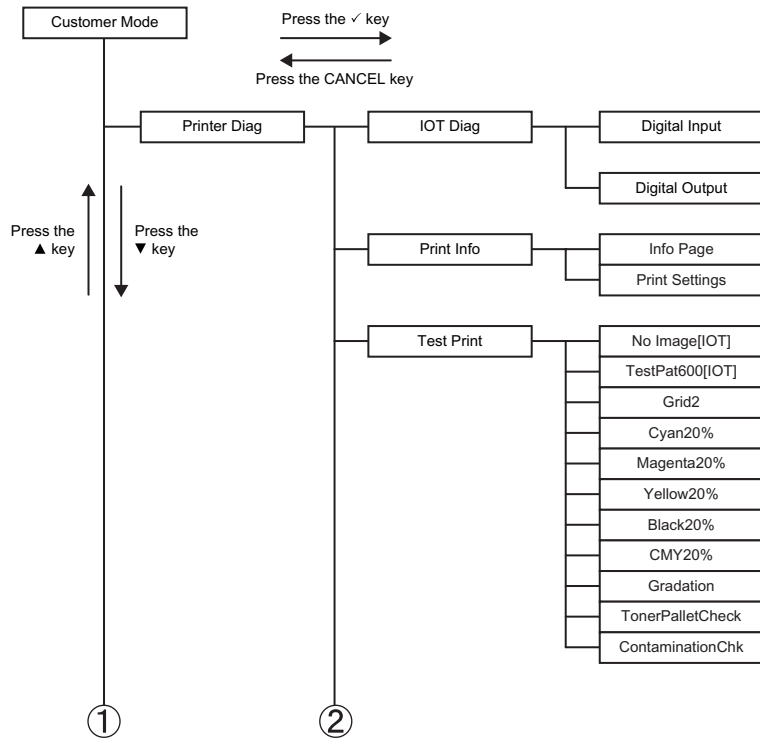


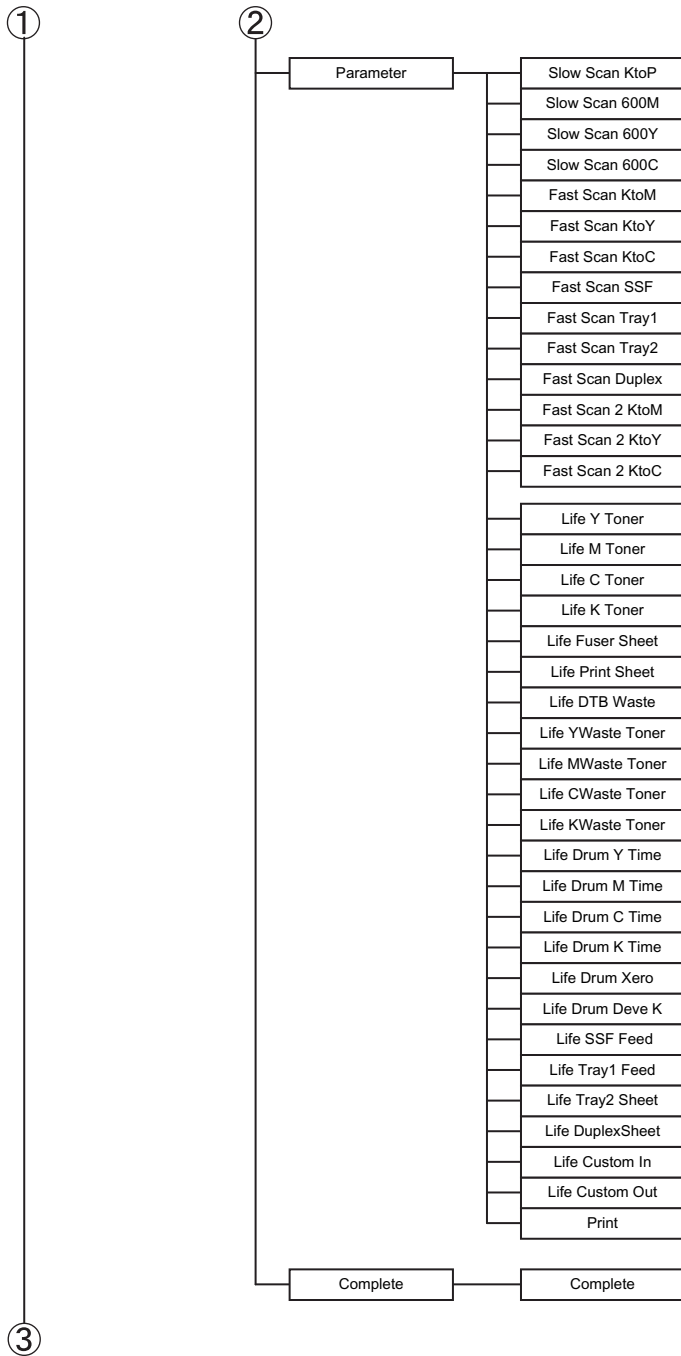
If an error occurs during the diag. sequence, the diagnosis displays the error and stops, leaving the remaining items unperformed.

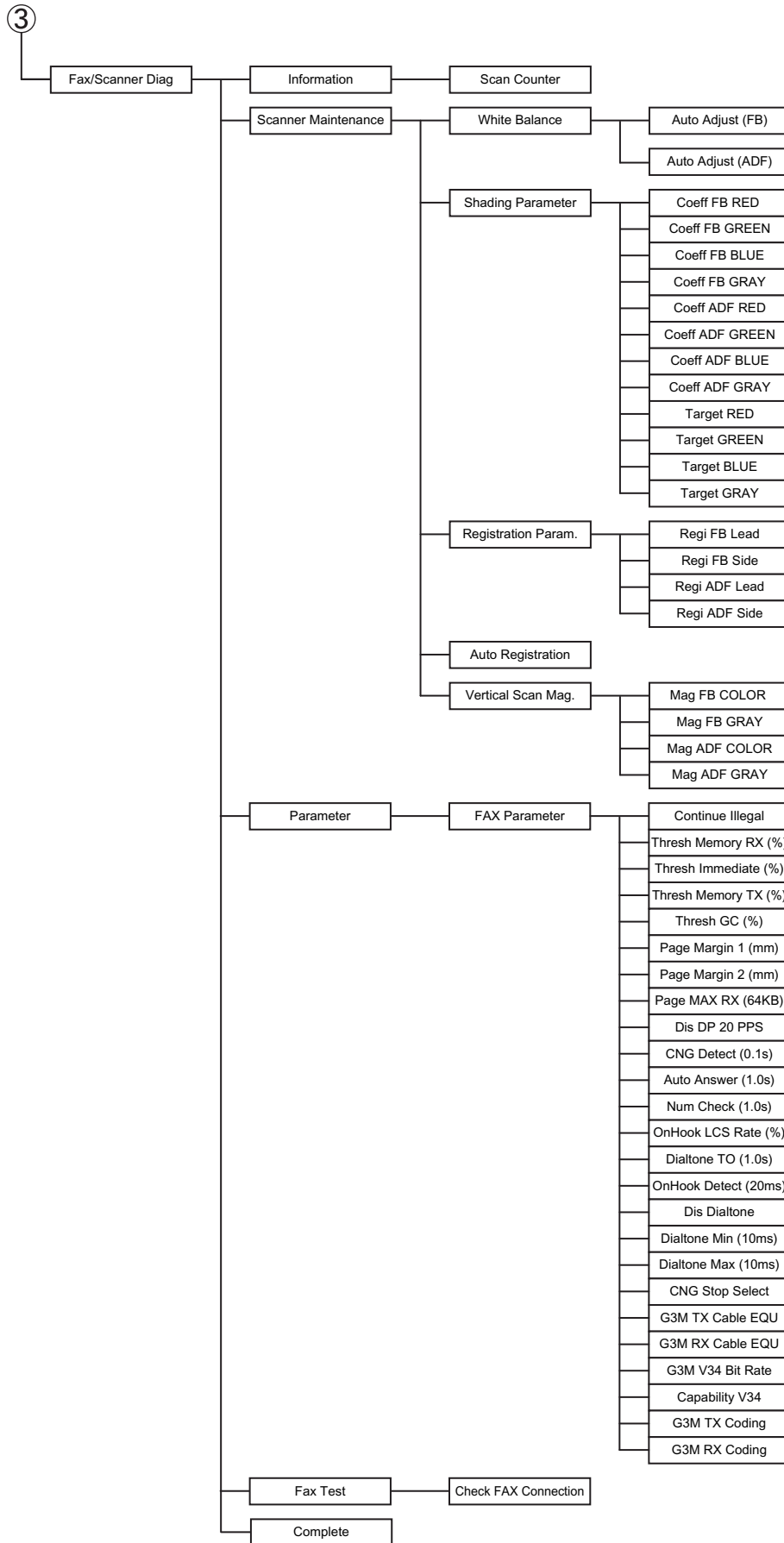
Pressing "CANCEL" or "✓" key releases the error display, and then the menu items are displayed.

3.7 Diag Mode Menu Tree

The menu tree of the Customer Mode is as follows:





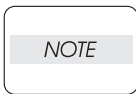


4. Diag Types and Test Contents

4.1 FAX Scanner Diag.

4.1.1 Executing FAX Scanner Diag

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "▼" to select "FAX/Scanner Diag", and press "✓" key. (Entered the FAX /Scanner Diag mode.)
- 6) Press "▲" or "▼" key to select the test item.
- 7) Press "✓" key twice to execute the test.



To exit the test, press the "Cancel" key. To return to the previous menu, press the "Menu" key.

4.1.2 Information

- Scan Counter

The value of scan count is displayed. FB: Scanning of platen mode/ADF: Scanning of ADF mode.

4.1.3 Scanner Maintenance

- White Balance

Enables automatic calibration of the correction value for platen scanning (FB) and ADF scanning (ADF).

- Shading Parameter

Adjusts the white balance value read from the white reference plate.

Coeff: White reference plate value after shading correction.

Target: Target value of Coeff.

Do not change this setting; the image quality may be affected.

- Registration Param.

Adjusts the side and lead registrations during document scanning.

Do not change this setting; the image quality may be affected.

- Auto Registration

Sets whether or not to auto-adjust the registration.

- Vertical Scan Mag.

Adjusts the scaling in the sub-scanning direction.

Do not change this setting; the image quality may be affected.

4.1.4 Parameter

- Continue Illegal

Specifies how to handle the document data when the document data in the transmission queue overflows the memory.

Clear	Delete the document data.
Transmit	Place the portion of the document data up to the memory limit in the transmission queue.

- Thresh Memory RX (%)

Sets the amount of memory to be left free when the received document data is stored. When the remaining memory amount falls below this threshold, data reception is denied.

The value can be set in the range of 0 to 100. The smaller the value, the larger the memory capacity becomes

- Thresh Immediate (%)

Sets the remaining memory amount threshold that triggers immediate output. Immediate output refers to an automatic image data output that is performed to accommodate the overflowing data when the incoming document data exceeds the memory capacity.

The value can be set in the range of 0 to 99. The larger the value, the sooner the immediate output is initiated.

- Thresh Memory TX (%)

Sets the amount of memory to be left free when the document data is placed in the transmission queue.

The value can be set in the range of 0 to 100. The smaller the value, the larger the memory capacity for transmission queue becomes.

- Thresh GC (%)

Sets the remaining memory amount in the Flash file system for image data storage that triggers the "garbage collection"

- Page Margin 1 (mm): Valid when the Discard Size setting in Fax Setting is "OFF".

Sets the page size margin that allows a larger-than-standard size document to be handled as a standard size document. The document is reduced to the standard size, assuming it is larger than the standards size by the set value.

The value can be set in the range of 0 to 127. When the value is 10, the margin is 10 mm.

- Page Margin 2 (mm): Valid when the Discard Size setting in Fax Setting is "ON".

Sets the page size margin that allows a larger-than-standard size document to be handled as a standard size document. The document is reduced to the standard size, assuming it is larger than the standards size by the set value.

The value can be set in the range of 0 to 127. When the value is 10, the margin is 10 mm.

- Page Max RX (64KB)

Sets the maximum reception capacity per page for color FAX data. The value can be set in the range of 0 to 64 in 64Kbyte steps.

- Dis DP 20PPS

Sets whether or not to enable 20PPS dial pulse. When 20PPS is disabled in this menu, any 20PPS setting in other menu will be overridden with 10PPS.

- CNG Detect (0.1s)

Sets the CNG detection duration for telephone-FAX switching.

The value can be set in the range of 0 to 255. When the value is 100, the detecting time is 10 sec.

- Auto Answer (1.0s)

Sets the ringing tone duration of the external telephone terminal for FAX-telephone switching.

The value can be set in the range of 0 to 255. When the value is 100, the ringing tone duration is 100 sec.

- Num Check (1.0s)

Inhibits autodialing for a specified duration when different sets of document data bound for the same destination are placed consecutively in the transmission queue. This pause allows the receiving side to make time for processing.

The value can be set in the range of 1 to 255. When the value is 10, the autodialing pause is 10 sec.

- OnHook LCS Rate (%)

Sets the threshold of OFF HOOK detection at LCS.

The value can be set in the range of 1 to 100.

- Dial tone TO (1.0s)

Sets the duration for detecting the dial tone. The value can be set in the range of 0 to 255. When the value is 10, the dial tone is detected for 10 sec.

- OnHook Detect (20ms)

Sets the detecting duration for a valid onhook signal. The value can be set in the range of 10 to 255. When the value is 10, the onhook detecting duration is 200 msec. Any onhook signal shorter than the set time is invalid.

- Dis Dial tone

Sets whether or not to enable dial tone pattern detection.

- Dial tone Min (10ms)

Sets the minimum limit of dial tone pattern detection duration.

- Dial tone Max (10ms)

Sets the maximum limit of dial tone pattern detection duration.

- CNG Stop Select

Sets the conditions for stopping CNG transmission. Below are the setting conditions:

CED&V21	When CED and V.21 preamble are detected.
CED	When CED is detected.
V21	When V.21 preamble is detected.

- G3M TX Cable EQU

Sets the cable amplitude equalizer value for transmission. Below are the setting values:

0db	Equivalent to a cable length of 0km.
4db	Equivalent to a cable length of 1.9km.
8db	Equivalent to a cable length of 3.6km.
12db	Equivalent to a cable length of 7.2km.

- G3M RX Cable EQU

Sets the cable amplitude equalizer value for reception (applicable to V17, V29, and V27ter). Below are the setting values:

0db	Equivalent to a cable length of 0km.
4db	Equivalent to a cable length of 1.9km.
8db	Equivalent to a cable length of 3.6km.
12db	Equivalent to a cable length of 7.2km.

- G3M V34 Bit Rate

Sets the signaling rate for the Super G3 (V34) mode.

The value can be set in the range of 2400bps to 33600bps in 14 steps. Below are the signaling rates:

2400/4800/7200/9600/12000/14400/16800/19200/21600/24000/26400/28800/31200/33600

- Capability V34

Sets the communication capability of the Super G3 (V34) mode.

- G3M TX Coding

Sets the data encoding method for transmission. When the encoding method set here is not supported by the receiving side, the receiving side's method is adopted. Below are the encoding methods:

MH/MR/ MMR/JBIG

- G3M RX Coding

Sets the data encoding method for reception. Below are the encoding methods:

MH/MR/ MMR/JBIG

4.1.5 Fax Test

Checks the connection status of the fax cable.

One of the following statuses is displayed as the check result.

Connection status	Check result (LCD)
When the fax cable is not connected	Connection not Detected. Please Reconnect Telephone Line.
When the fax cable is connected wrongly	Cable Connected Wrongly. Reconnect Telephone Line from Wall Jack to Line Connection.
When the fax cable is connected correctly	FAX Connection OK. Please Check Setting of Tone/Pulse in Admin Menu after Restart Printer.

4.1.6 Complete

Exits the diagnostics and returns to normal operation, taking the changes of the data into effect.

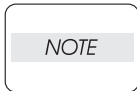
4.2 IOT Diag

4.2.1 Digital Input (DI) Test

This function checks whether the DI components operate normally.

The DI test is performed for all DI components.

Exiting the DI Test moves the Control Panel display to the Customer Diag Functions menu.



During the DI test, other Customer Diag functions cannot be performed simultaneously. Therefore, the printer does not accept any operation except operations for the DI components and exit operation of the DI test.

At the start of the DI test, number "0" is displayed on the control panel. This number is counted up when a DI component is turned on from off, allowing the user to know that the component is active.

When a paper jam has occurred, or an error message or code is displayed, execute this test to locate the faulty parts.

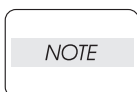
Before executing the test, isolate the faulty parts by examining the jam or error in detail. (Refer to the FIP in Chapter 1.)

Test Result: NG (Go to the FIP or replace the parts.)

OK (Power off the printer and then on.)

4.2.2 Executing Digital Input (DI) Test

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" to select "IOT Diag", and then press "✓" key.
- 7) Press "▼" key to select "Digital Input", and then press "✓" key.
- 8) Press "▲" or "▼" key to select the test item.
- 9) Press "✓" key twice to execute the test.



To exit the test, press the "Cancel" key. To return to the previous menu, press the "Menu" key.

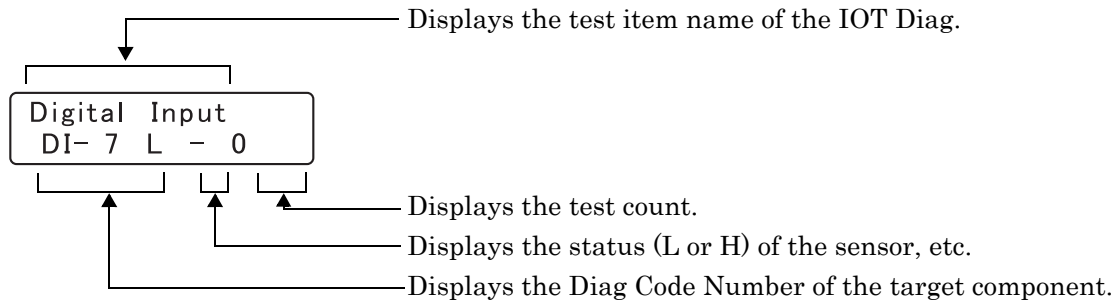
<Example of Digital Input Test Operation>

Checking Interlock Switch (DI-7) via Digital Input Test

This test is intended for checking whether the Interlock (open/close detection) Switch of the Front Cover functions properly.

- 1) Power on the machine and enter the Diag mode.
- 2) Execute Interlock Switch (DI-7).

The LCD Panel displays the following:



- 3) Check the operation of the sensor.

Opening the Front Cover turns off the Interlock Switch, changing "H" in the bottom line of the display to "L".



Closing the Front Cover turns on the Interlock Switch, changing "L" in the bottom line to "H". Meanwhile, the rightmost number in the bottom line changes from "0" to "1", indicating that the sensor check has been completed once.



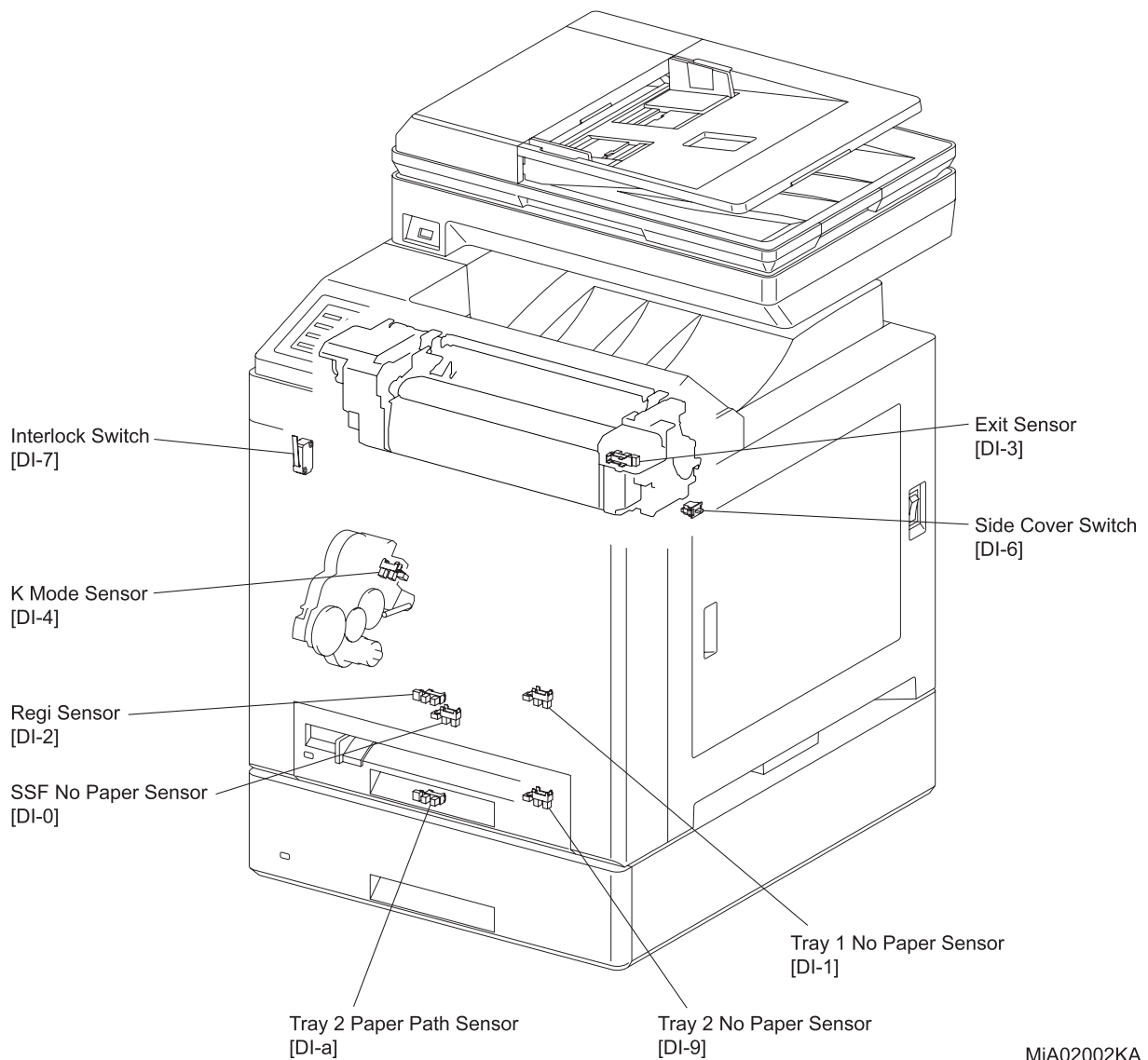
NOTE

When the rightmost number in the bottom line of the display changes from "0" to "1", the Interlock Switch is functioning properly.

Otherwise, it is suspected that a component related to the Interlock Switch is faulty.

Parameters for the Digital Input Test are as follows.

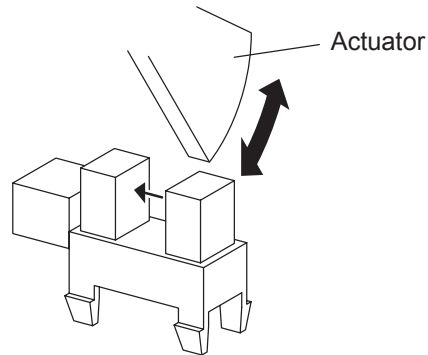
Code	Component
DI-0	SSF No Paper Sensor
DI-1	Tray 1 No Paper Sensor
DI-2	Regi Sensor
DI-3	Exit Sensor
DI-4	K Mode Sensor
DI-6	Side Cover Switch
DI-7	Interlock Switch
DI-9	Tray 2 No Paper Sensor
DI-a	Tray 2 Paper Path Sensor



MiA02002KA

- About Sensor

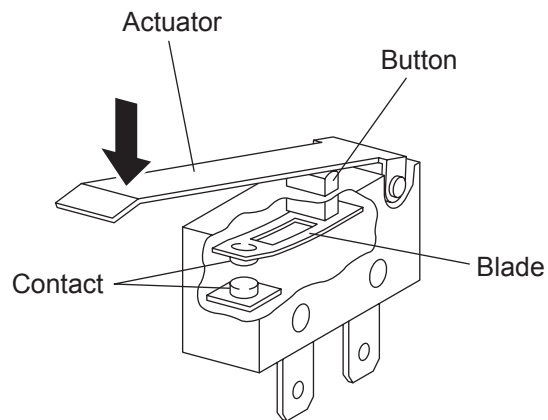
A transmission type sensor is composed of the light-emitting side and the light-receiving side that are placed opposite to each other, allowing the light to pass from the former to the latter. On the basis of whether or not the light path is blocked by the actuator, etc., the sensor detects the paper absence/presence or the moving part position such as at the home position or elsewhere.



Leg_Sec02_016FA

- About Switch

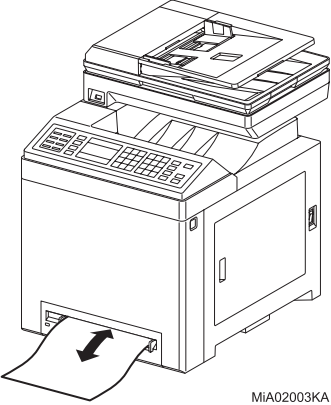
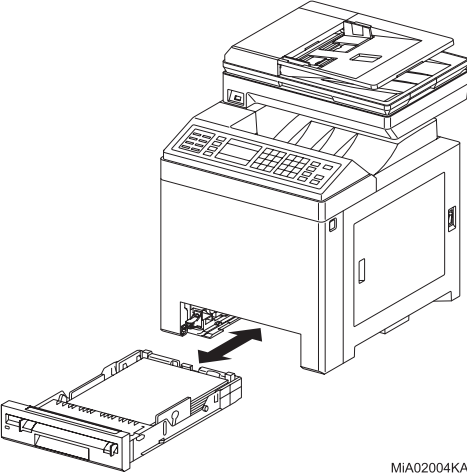
A micro-switch closes the internal contacts via the button which is pushed down under the provided leaf spring which is held down by the actuator of the cover or door that is being closed. When the door or cover is opened, the leaf spring returns to its original position, and the button is pushed up by the spring in the switch, allowing the internal contacts to open.

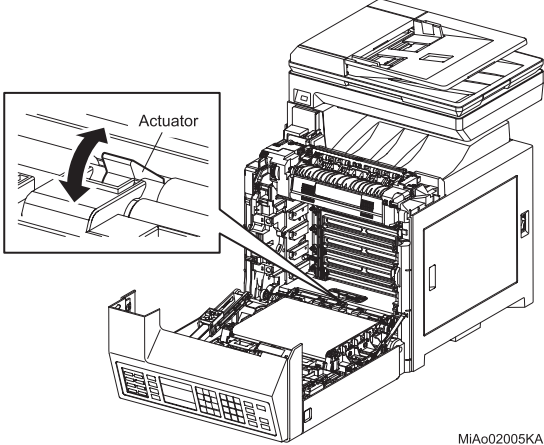
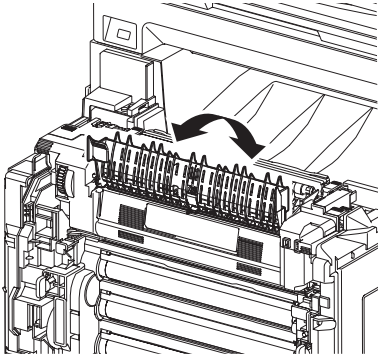


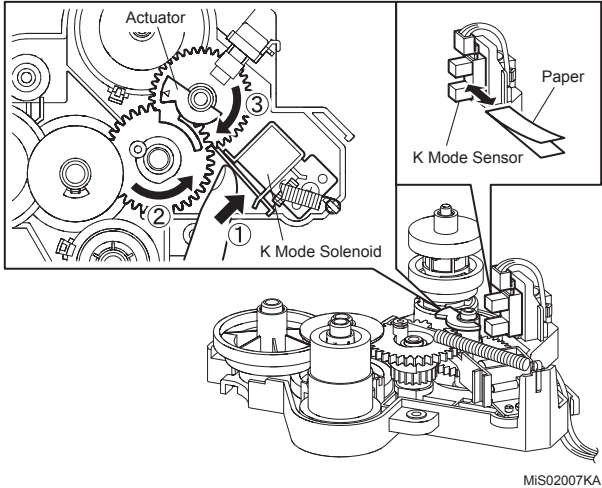
Leg_Sec02_018FA

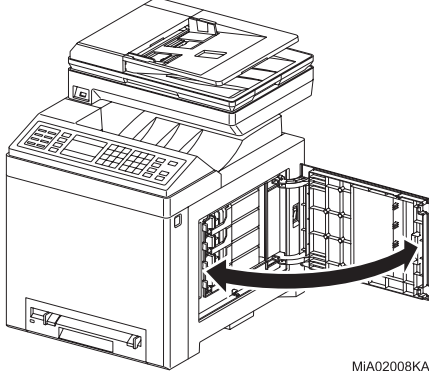
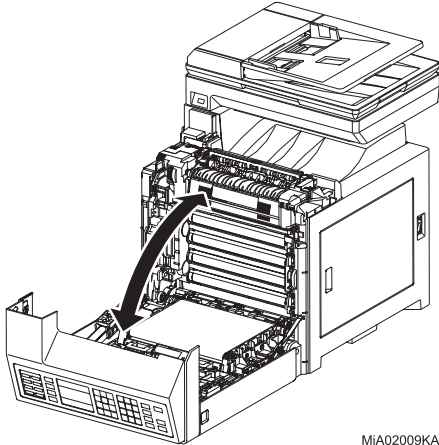
- Printer

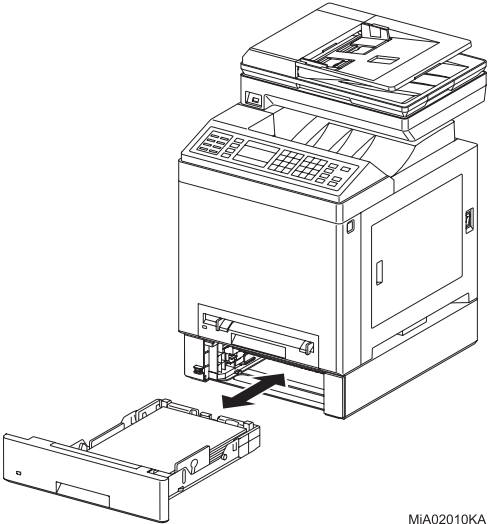
Checking the Sensor and Switch

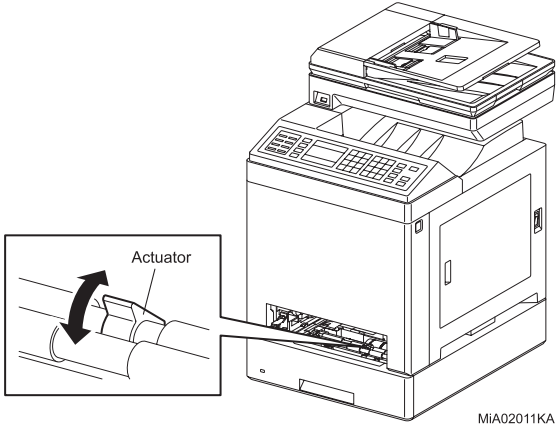
Sensor Name (Diag. Code)	Check Procedure
<p>SSF No Paper Sensor (DI-0)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DI-0. The bottom line of the LCD displays: [DI-0 H 0] 3) Insert a sheet into the SSF to check whether the sensor functions properly.  <p style="text-align: right; font-size: small;">MIA02003KA</p> <ol style="list-style-type: none"> 4) Confirm that the number shown on the bottom of the display increases each time the sheet is inserted. [DI-0 H 1] 5) Press the "Cancel" key to stop the test.
<p>Tray 1 No Paper Sensor (DI-1)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Remove the paper from Tray1. 3) Execute the DI-1. The bottom line of the LCD displays: [DI-1 L 0] 4) Check whether the sensor functions properly by removing and replacing the Tray1.  <p style="text-align: right; font-size: small;">MIA02004KA</p> <ol style="list-style-type: none"> 5) Confirm that the number in the lower section of the display increases each time the Tray1 is removed and replaced. [DI-1 L 1] 6) Press the "Cancel" key to stop the test.

Sensor Name (Diag. Code)	Check Procedure
<p>Regi Sensor (DI-2)</p>	<p>NOTE: When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Execute DI-2. The bottom line of the LCD displays: [DI-2 H 0] 4) Manually operate the actuator to check whether the sensor functions properly.  <p style="text-align: right; font-size: small;">MIAo02005KA</p> <ol style="list-style-type: none"> 5) Check that the number in the bottom line of the display increases by one every time the actuator is operated. [DI-2 H 1] 6) Press the "Cancel" key to stop the test. 7) Close the Front Cover.
<p>Exit Sensor (DI-3)</p>	<p>NOTE: Because the Fuser is very hot, be careful not to burn yourself.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Execute DI-3. The bottom line of the LCD displays: [DI-3 H 0] 4) Manually operate the actuator to check whether the sensor functions properly.  <p style="text-align: right; font-size: small;">MIAo02006KA</p> <ol style="list-style-type: none"> 5) Check that the number in the bottom line of the display increases by one every time the actuator is operated. [DI-3 H 1] 6) Press the "Cancel" key to stop the test. 7) Close the Front Cover.

Sensor Name (Diag. Code)	Check Procedure
<p>K Mode Sensor (DI-4) (Color Mode Switching Sensor)</p>	<p>NOTE: These procedures are for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Remove the KIT DRIVE ASSY PH (Refer to Removal 31). (Step 1 to 9, and Step 11 to 14). 2) Power on the printer, and enter the Diag Mode. 3) Execute the DI-4. The bottom line of the LCD displays: [DI-4 H 0] 4) Block the sensor light path by placing a piece of paper or the like between the light emitting unit and the light receiving unit to check whether the sensor functions properly.  <p>The diagram consists of two parts. The top part is a detailed view of the printer's internal mechanism, showing gears and components. It is labeled with 'Actuator' at the top, 'K Mode Solenoid' at the bottom, and three numbered arrows (1, 2, 3) pointing to specific gears. The bottom part of the diagram shows a close-up of the 'K Mode Sensor' with a piece of 'Paper' inserted to block the light path. The reference code 'MIS02007KA' is located at the bottom right of the diagram.</p> <ol style="list-style-type: none"> 5) Check that the number in the bottom line of the display increases by one every time the sensor light path is blocked. [DI-4 H 1] 6) Press the "Cancel" key to stop the test. 7) Replace the KIT DRIVE ASSY PH (Refer to Replacement 23). (Step 3 to 6).

Sensor Name (Diag. Code)	Check Procedure
<p>Side Cover Switch (DI-6) (Toner Access Cover Switch)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DI-6. The bottom line of the LCD displays: [DI-6 L 0] 3) Open or close the Toner Access Cover to check whether the sensor functions properly.  <p style="text-align: right; font-size: small;">MIA02008KA</p> <ol style="list-style-type: none"> 4) Check that the number in the bottom line of the display increases by one every time the Front Cover is opened or closed. [DI-6 L 1] 5) Press the "Cancel" key to stop the test. 6) Close the Toner Access Cover.
<p>Interlock Switch (DI-7) (Front Cover Switch)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DI-7. The bottom line of the LCD displays: [DI-7 L 0] 3) Open or close the Front Cover to check whether the sensor functions properly.  <p style="text-align: right; font-size: small;">MIA02009KA</p> <ol style="list-style-type: none"> 4) Check that the number in the bottom line of the display increases by one every time the Front Cover is opened or closed. [DI-7 L 1] 5) Press the "Cancel" key to stop the test. 6) Close the Front Cover.

Sensor Name (Diag. Code)	Check Procedure
<p>Tray 2 No Paper Sensor (DI-9)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Remove the paper from Tray2. 3) Execute the DI-9. The bottom line of the LCD displays: [DI-9 L 0] 4) Check whether the sensor functions properly by removing and replacing the Tray2. <div style="text-align: center;">  <p style="text-align: right; font-size: small;">MIA02010KA</p> </div> <ol style="list-style-type: none"> 5) Confirm that the number in the lower section of the display increases each time the Tray2 is removed and replaced. [DI-9 L 1] 6) Press the "Cancel" key to stop the test.

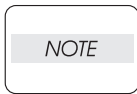
Sensor Name (Diag. Code)	Check Procedure
<p>Tray 2 Paper Path Sensor (DI-a)</p>	<p>NOTE: This procedure is for the technical staff.</p> <ol style="list-style-type: none"> 1) Remove the COVER CHUTE (PL12.1.5). <p>NOTE: To remove the COVER CHUTE, remove the Optional 250-Sheet Feeder from the printer.</p> <ol style="list-style-type: none"> 2) Remove the Tray 1. 3) Power on the printer, and enter the Diag Mode. 4) Execute the DI-a. The bottom line of the LCD displays: [DI-a L 0] 5) Manually operate the actuator to check whether the sensor functions properly. <div style="text-align: center;">  <p>MIA02011KA</p> </div> <ol style="list-style-type: none"> 6) Check that the number in the bottom line of the display increases by one every time the actuator is operated. [DI-a L 1] 7) Press the "Cancel" key to stop the test. 8) Replace the Tray 1. 9) Replace the COVER CHUTE.

4.2.3 Digital Output (DO) Test of Customer Mode

This function checks whether the DO components operate normally.

The DO test is performed for some of DO components in Customer Mode.

If the interlock is opened during the DO test, each component comes to rest.



In this Test Mode, each DO component can be turned on individually.
When all the Diag functions are stopped, all DO components can be turned off.
DO test can operate all components at the same time.

When a paper jam or PQ problem occurs, or an error message or code is displayed, this test enables to pinpoint the faulty part.

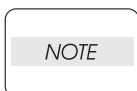
Before executing the test, examine the details of the jam, PQ problem, or error, and isolate the faulty parts. (Refer to the FIP in Chapter 1.)

Test result: NG (Go to the FIP or replace the parts.)

OK (Power off the printer and then on.)

4.2.4 Executing Digital Output (DO) Test of Customer Mode

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" to select "IOT Diag", and then press "✓" key.
- 7) Press "▼" key to select "Digital Output", and then press "✓" key.
- 8) Press "▲" or "▼" key to select the test item.
- 9) Press "✓" key twice to execute the test.



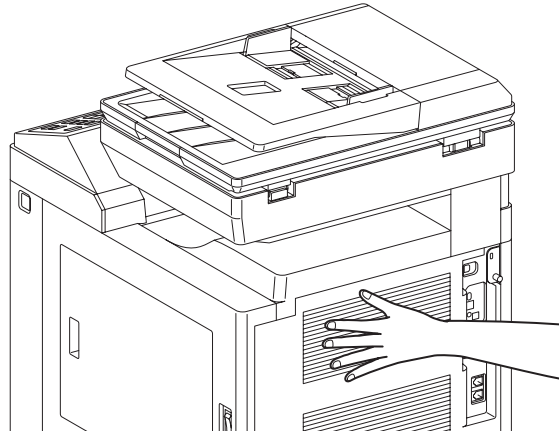
To exit the test, press the "Cancel" key. To return to the previous menu, press the "Menu" key.

<Example of Digital Output Test Operation>

Checking Fan Motor (DO-1e) via Digital Output Test

This test is intended for checking whether the Fan functions properly.

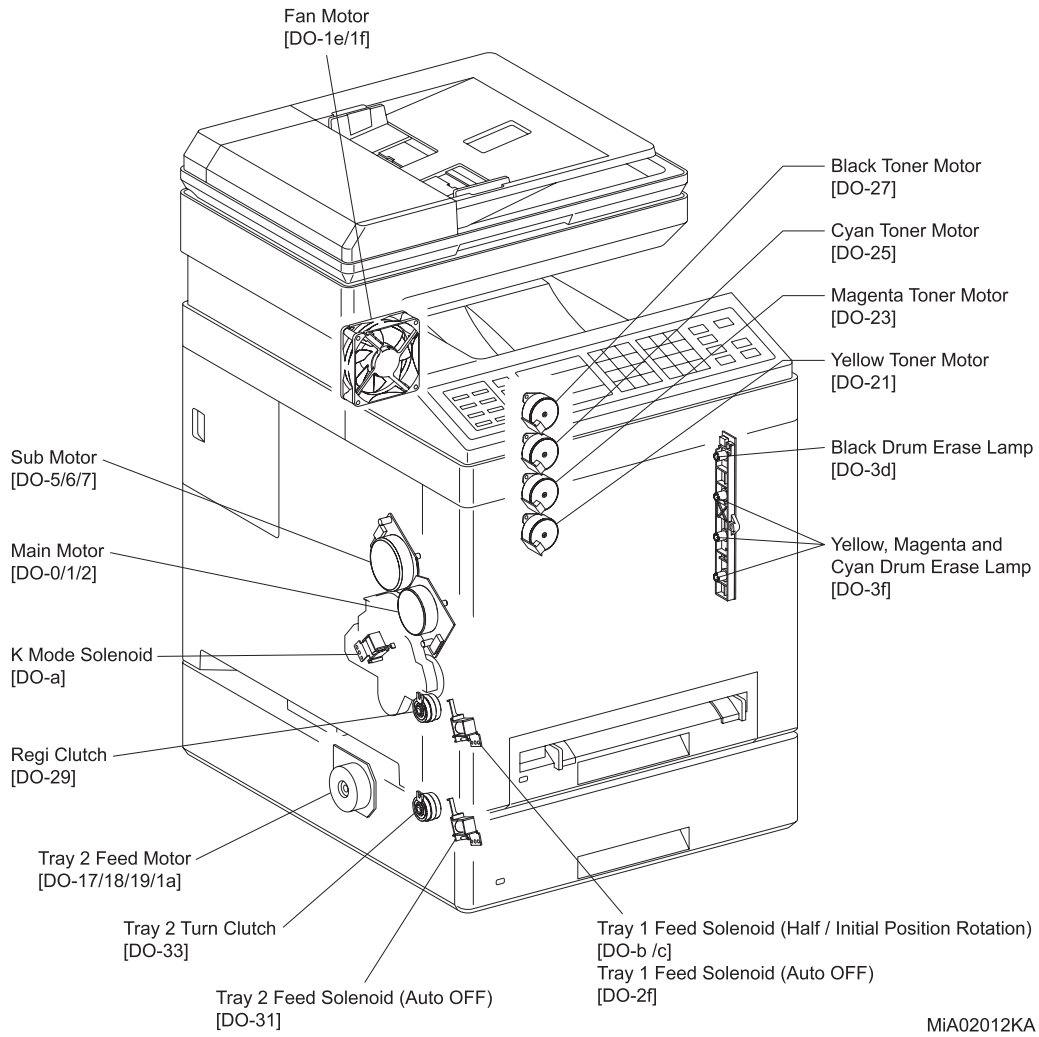
- 1) Power on the printer, and enter the Customer Diag Mode.
- 2) Execute Fan Motor (DO-1e) to check whether the Fan Motor is rotating. If rotating, the Fan is functioning properly. Otherwise, it is suspected that a component related to the Fan Motor is faulty.



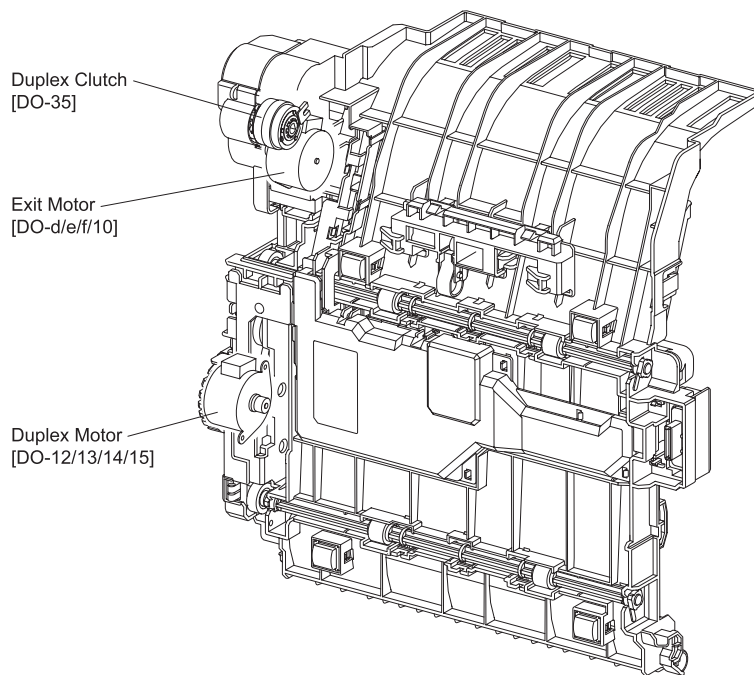
MIA02022KA

Parameters for the Digital Output Test are as follows.

Code	Component
DO-0,1	Main Motor (Full Rotation)
DO-2	Main Motor (Half Rotation)
DO-5,6	Sub Motor (Full Rotation)
DO-7	Sub Motor (Half Rotation)
DO-a	K Mode Solenoid
DO-b	Tray1 Feed Solenoid (Half Rotation)
DO-c	Tray1 Feed Solenoid (Initial Position Rotation)
DO-d,e,f	Exit Motor (Full Rotation)
DO-10	Exit Motor (Half Rotation)
DO-12,13,14	Duplex Motor (Full Rotation)
DO-15	Duplex Motor (Half Rotation)
DO-17,18,19	Tray 2 Feed Motor (Full Rotation)
DO-1a	Tray 2 Feed Motor (Half Rotation)
DO-1e	Fan Motor (Full Rotation)
DO-1f	Fan Motor (Half Rotation)
DO-21	Yellow Toner Motor
DO-23	Magenta Toner Motor
DO-25	Cyan Toner Motor
DO-27	Black Toner Motor
DO-29	Regi Clutch
DO-2f	Tray 1 Feed Solenoid (Auto OFF)
DO-31	Tray 2 Feed Solenoid (Auto OFF)
DO-33	Tray 2 Turn Clutch
DO-35	Duplex Clutch
DO-3d	Black Drum Erase Lamp
DO-3f	Yellow, Magenta and Cyan Drum Erase Lamp



MiA02012KA



MiS02013KA

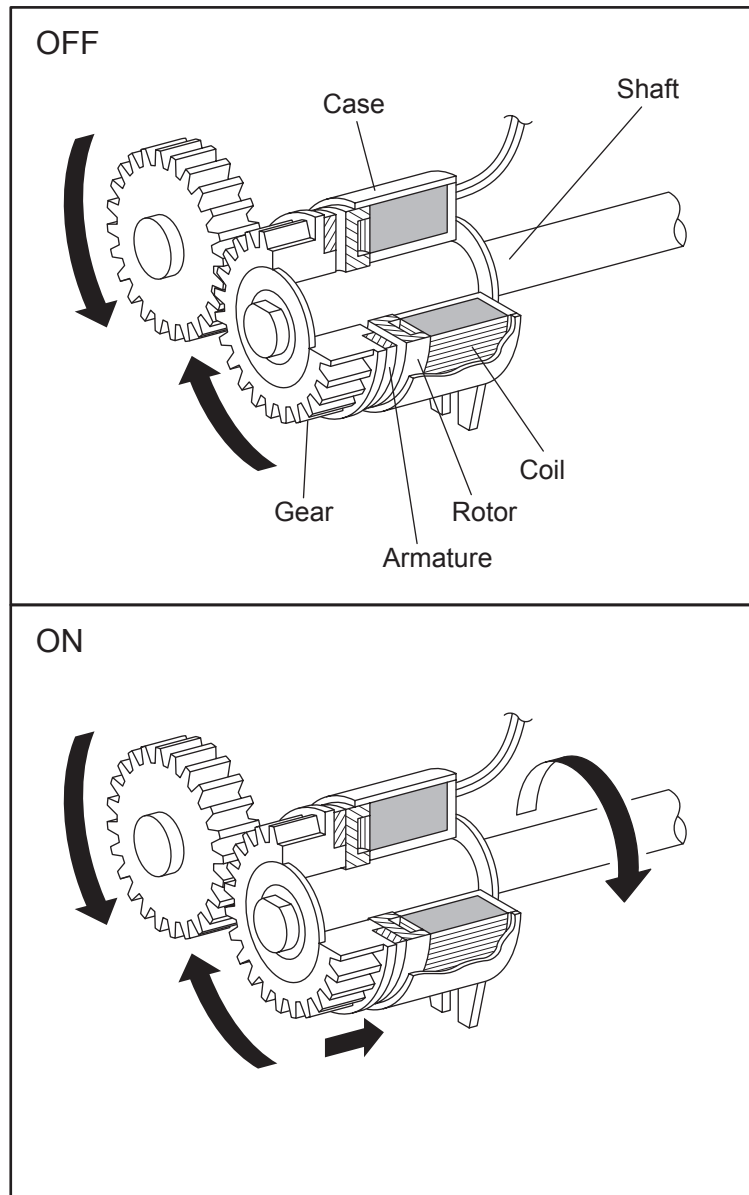
- About Clutch

The electromagnetic clutch in the printer controls the rotation of the roller by allowing or interrupting the torque transmission from the motor to the roller.

By the passage of electric current through the coil inside the case, the electromagnetic clutch becomes an electromagnet, and attracts the armature and gear to the rotating rotor, thereby rotating the gear.

Upon the loss of power to the coil, electromagnetic force is lost and the armature comes off the rotor, and the gear comes to rest.

The clutch makes so soft noises that you must be close the component to audibly confirm the operation of the component.



Leg_Sec02_050FA

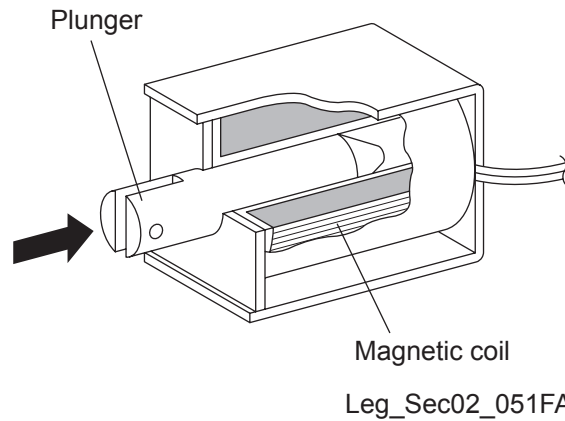
- About Solenoid

The solenoid in the printer opens or closes the shutter, or controls the position of the gear for transferring the torque of the motor to the roller.

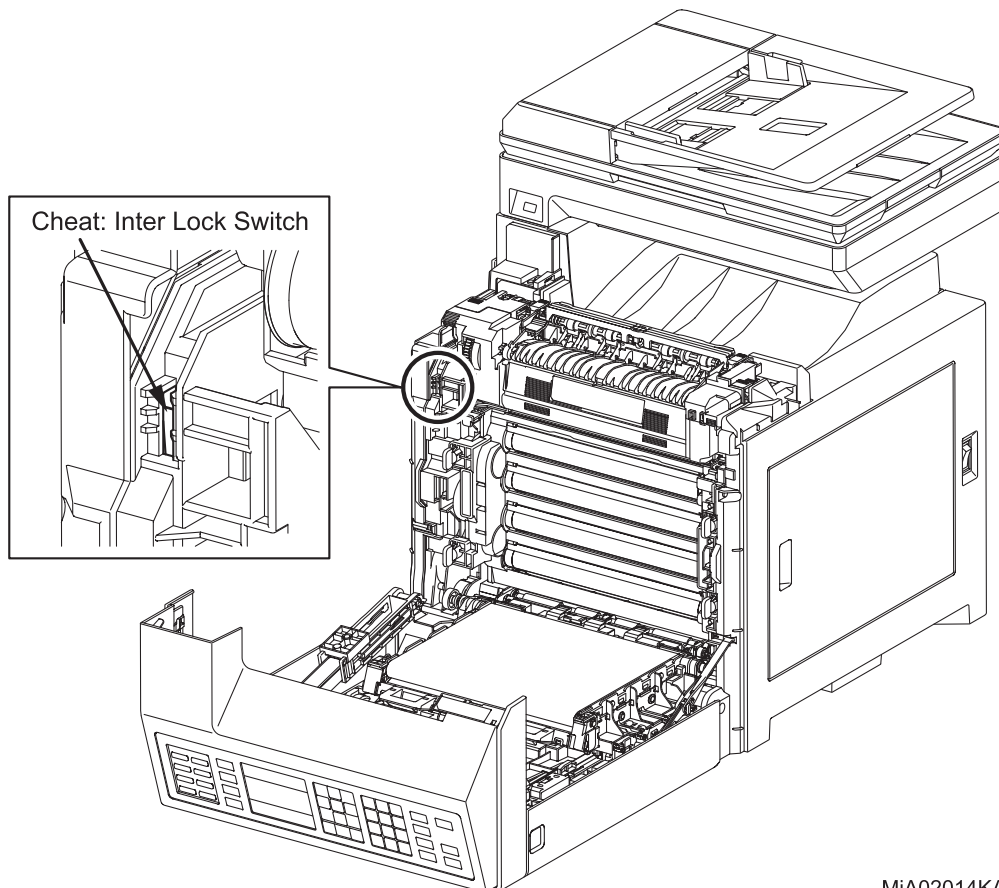
By the passage of electric current through the coil inside the case, the solenoid becomes an electromagnet and attracts the plunger.

Upon the loss of power to the coil, electromagnetic force is lost, and the plunger returns to its original position by spring action, thereby allowing the shutter to operate or the gear to move to the predefined position.

Unlike a clutch, a solenoid generates a loud operation noise.



- About Interlock

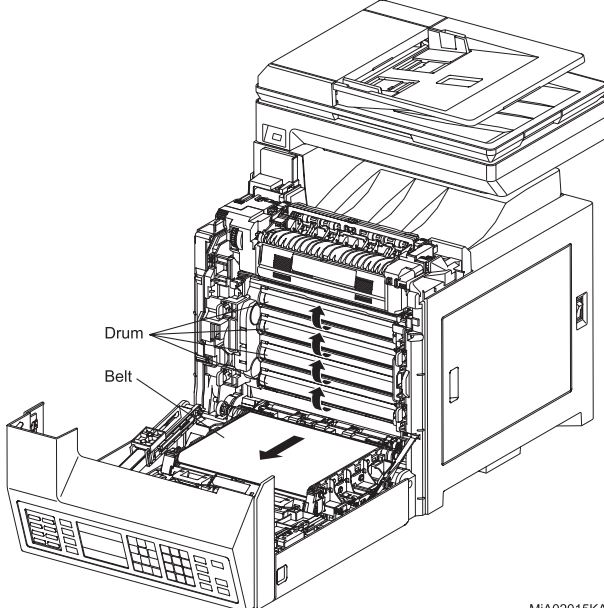


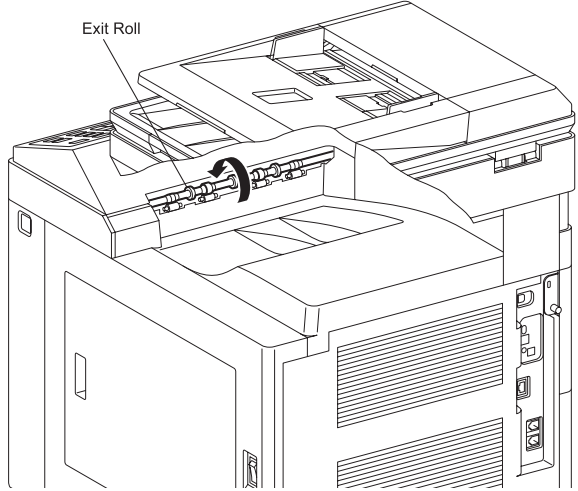
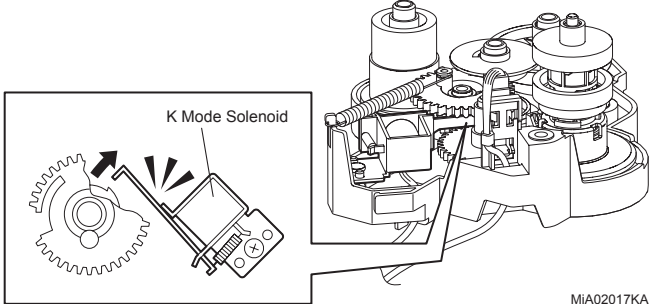
MiA02014KA

- Checking Motor, Clutch and Solenoid

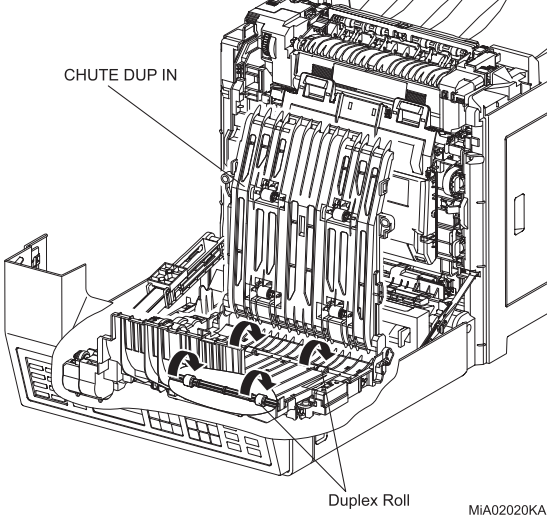
NOTE

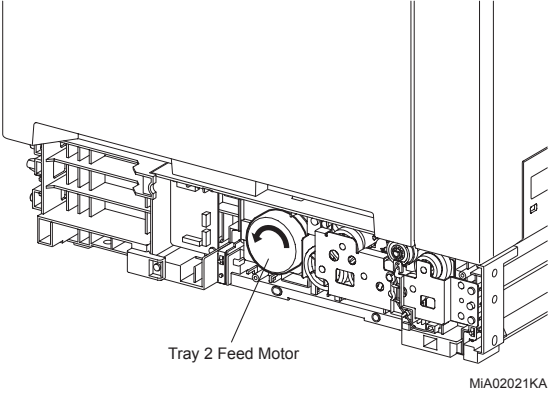
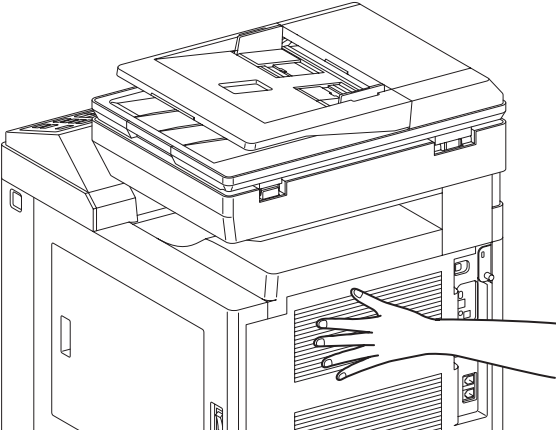
Before executing the DO test, close all covers and doors.

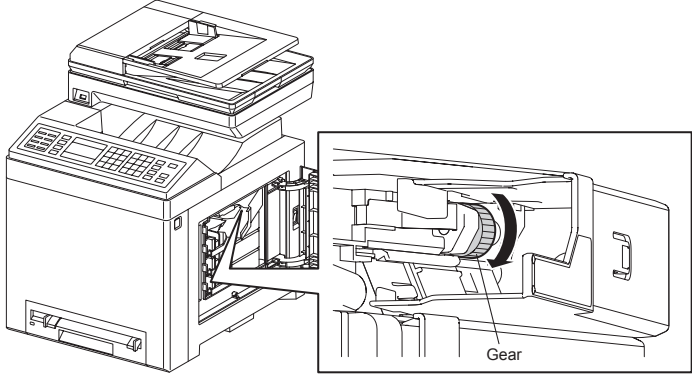
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Main Motor (DO-0/DO-1/DO-2)</p>	<p>NOTE: This procedure is for the Customer.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute the DO-0. Upon pressing the "✓" key, the operating noise of the motor will be heard. 3) Press the "Cancel" key to stop the motor. <p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover 3) Cheat the Safety Interlock System. 4) Execute DO-0. 5) Check that the Drum rotates.  <p style="text-align: right; font-size: small;">MIA02015KA</p> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the test. 7) Remove the cheater. 8) Close the Front Cover.

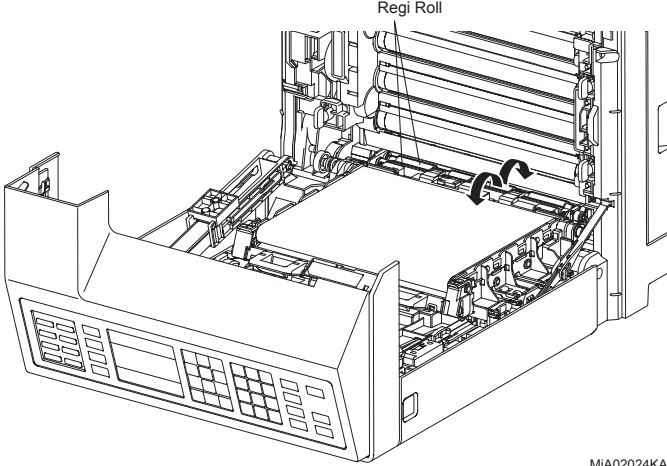
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
Sub Motor (DO-5/DO-6/DO-7)	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-5. 3) Check that the Exit Roll rotates.  <p style="text-align: right; font-size: small;">MIA02016KA</p> <ol style="list-style-type: none"> 4) Press the "Cancel" key to stop the test.
K Mode Solenoid (DO-a)	<p>NOTE: This procedure is for the Customer. Since the solenoid noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-a. Upon pressing the "✓" key, the operating noise of the solenoid will be heard. 3) Press the "Cancel" key to stop the solenoid. <p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Remove the KIT DRIVE ASSY PH (Refer to Removal 31). (Step 1 to 9, and Step 11 to 14). 2) Cheat the safety Interlock System. 3) Power on the printer, and enter the Diag Mode. 4) Execute the DO-a. 5) Check the K Mode Solenoid movement.  <p style="text-align: right; font-size: small;">MIA02017KA</p> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the test. 7) Remove the cheater. 8) Replace the KIT DRIVE ASSY PH (Refer to Replacement 23). (Step 3 to 6).

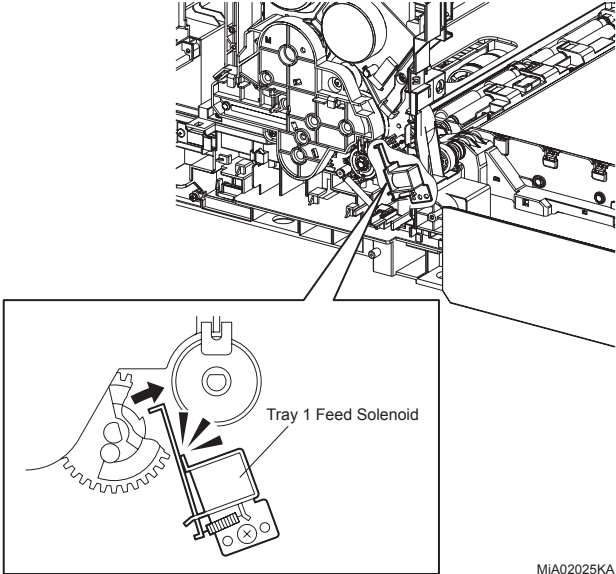
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Tray1 Feed Solenoid (Half / Initial position) (DO-b/DO-c)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Tray 1. 3) Execute DO-c. 4) Check that the Feed Roll rotates. <div style="text-align: center;"> <p style="text-align: right; font-size: small;">MiA02018KA</p> </div> <ol style="list-style-type: none"> 5) Press the "Cancel" key to stop the test. 6) Replace the Tray 1.
<p>Exit Motor (DO-d/DO-e/DO-f/DO-10)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-d. 3) Check that the Exit Roll rotates. <div style="text-align: center;"> <p style="text-align: right; font-size: small;">MiA02019KA</p> </div> <ol style="list-style-type: none"> 4) Press the "Cancel" key to stop the test.

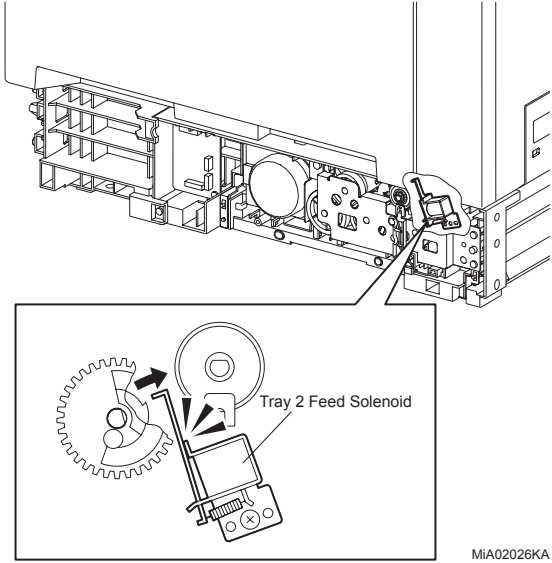
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Duplex Motor (DO-12/DO-13/DO-14/DO-15)</p>	<p>NOTE: This procedure is for the Customer.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-12. Upon pressing the "✓" key, the operating noise of the motor will be heard. 3) Press the "Cancel" key to stop the motor. <p>NOTE: This procedure is for the technical staff.</p> <p>When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover and CHUTE DUP IN (PL11.1.2). 3) Cheat the Safety Interlock System. 4) Execute DO-12. 5) Check that the Duplex Roller rotates.  <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the test. 7) Remove the cheater. 8) Close the CHUTE DUP IN (PL11.1.2) and Front Cover.

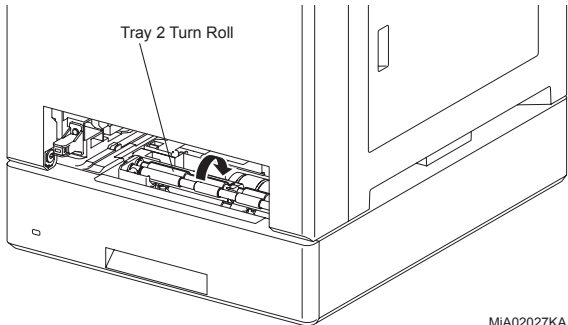
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Tray 2 Feed Motor (DO-17/DO-18/DO-19/DO-1a)</p>	<p>NOTE: This procedure is for the Customer.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-17. Upon pressing the "✓" key, the operating noise of the motor will be heard. 3) Press the "Cancel" key to stop the motor. <p>NOTE: This procedure is for the technical staff.</p> <ol style="list-style-type: none"> 1) Remove the Tray 2. 2) Remove the COVER REAR OPT (PL12.1.6) and COVER SIDE L OPT (PL12.1.4). 3) Power on the printer, and enter the Diag Mode. 4) Execute DO-17. 5) Check that the Tray 2 Feed Motor rotates.  <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the clutch. 7) Replace the COVER REAR OPT (PL12.1.6) and COVER SIDE L OPT (PL12.1.4). 8) Replace the Tray 2.
<p>Fan Motor (DO-1e/DO-1f)</p>	<ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-1e. 3) Check that the Fan rotates.  <ol style="list-style-type: none"> 4) Press the "Cancel" key to stop the clutch.

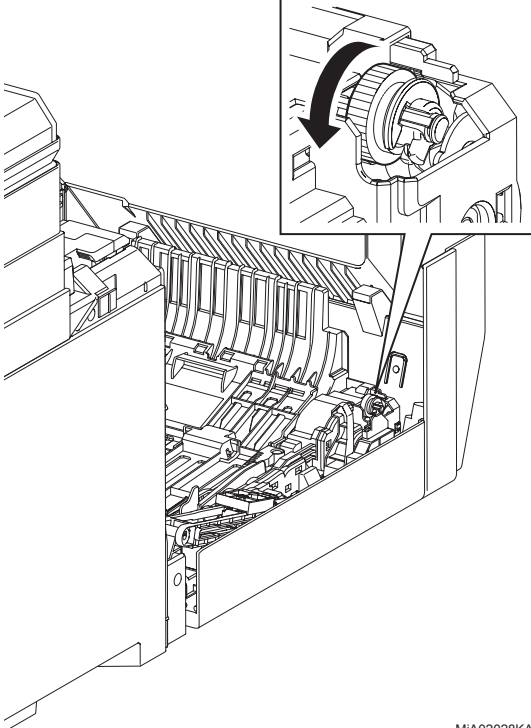
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Yellow Toner Motor (DO-21) / Magenta Toner Motor (DO-23) / Cyan Toner Motor (DO-25) / Black Toner Motor (DO-27)</p>	<p>NOTE: This procedure is for the Customer.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-21, DO-23 DO-25 or DO-27. Upon pressing the "✓" key, the operating noise of the motor will be heard. 3) Press the "Cancel" key to stop the motor. <p>NOTE: These procedures are for the technical staff. Described below is the check procedure common among the four toner motor. Note the operation for the toner in the PHD ASSY spills if the motor is rotated for a long time.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Toner Access Cover and remove the toner cartridge. 3) Execute DO-21, DO-23 DO-25 or DO-27. 4) Check that the Gear rotates. <div style="text-align: center;">  <p style="text-align: right; font-size: small;">MiA02023KA</p> </div> <ol style="list-style-type: none"> 5) Press the "Cancel" key to stop the clutch. 6) Replace the toner cartridge and close the Toner Access Cover.

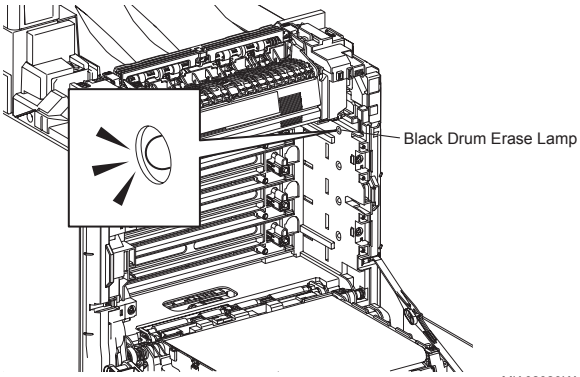
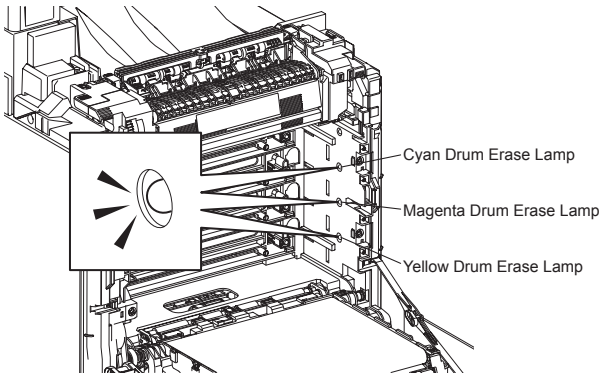
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
Regi Clutch (DO-29)	<p>NOTE: This procedure is for the Customer. Since the clutch noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-29. Upon pressing the "✓" key, the operating noise of the clutch will be heard. 3) Press the "Cancel" key to stop the clutch. <p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light. Combination test is as follows: The Regi Roll rotates when the D-0(Main Motor) and the D-29 are executed.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Cheat the Safety Interlock System. 4) Execute DO-0 and DO-12. 5) Check that the Regi Roll rotates. <div style="text-align: center;">  <p style="text-align: right; font-size: small;">MIA02024KA</p> </div> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the clutch. 7) Press the "▼" key to display DO-0. 8) Press the "Cancel" key to stop the motor. 9) Remove the cheater. 10) Close the Front Cover.

Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Tray 1 Feed Solenoid (Auto OFF) (DO-2f/DO-31)</p>	<p>NOTE: This procedure is for the Customer. Since the solenoid noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-2f. Upon pressing the "✓" key, the operating noise of the solenoid will be heard. 3) Press the "Cancel" key to stop the solenoid. <p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Remove the COVER SIDE L (Refer to Removal 17). 2) Power on the printer, and enter the Diag Mode. 3) Cheat the Safety Interlock System. 4) Execute DO-2f. 5) Check that the Feed Solenoid movement. <div style="text-align: right;">  <p style="text-align: right; font-size: small;">MIA02025KA</p> </div> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the test. 7) Remove the cheater. 8) Replace the COVER SIDE L (Refer to Replacement 37).

Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Tray 2 Feed Solenoid :Auto OFF (DO-31)</p>	<p>NOTE: This procedure is for the Customer. Since the solenoid noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-31. Upon pressing the "✓" key, the operating noise of the solenoid will be heard. 3) Press the "Cancel" key to stop the solenoid. <p>NOTE: This procedure is for the technical staff.</p> <ol style="list-style-type: none"> 1) Remove the COVER REAR OPT (PL12.1.6) and COVER SIDE L OPT (PL12.1.4). 2) Power on the printer, and enter the Diag Mode. 3) Execute DO-31. 4) Check that the Feed Solenoid movement. <div style="text-align: center;">  <p style="text-align: right; font-size: small;">MIA02026KA</p> </div> <ol style="list-style-type: none"> 5) Press the "Cancel" key to stop the test. 6) Replace the COVER REAR OPT (PL12.1.6) and COVER SIDE L OPT (PL12.1.4).

Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
Tray 2 Turn Clutch (DO-33)	<p>NOTE: This procedure is for the Customer. Since the clutch noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-33. Upon pressing the "✓" key, the operating noise of the clutch will be heard. 3) Press the "Cancel" key to stop the clutch. <p>NOTE: This procedure is for the technical staff. Combination test is as follows: Tray 2 turn roll rotates when the DO-17 and the DO-33 are executed.</p> <ol style="list-style-type: none"> 1) Remove the COVER CHUTE (PL12.1.5). 2) Power on the printer, and enter the Diag Mode. 3) Remove the Tray 1 and Tray 2. 4) Execute DO-17 and the DO-33. 5) Check that the Turn Roll rotates. <div style="text-align: center;">  <p style="text-align: right; font-size: small;">MiA02027KA</p> </div> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the clutch. 7) Press the "▼" key to display DO-17. 8) Press the "Cancel" key to stop the motor. 9) Replace the COVER CHUTE (PL12.1.5), Tray 1 and Tray 2.

Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
Duplex Clutch (DO-35)	<p>NOTE: This procedure is for the Customer. Since the clutch noise is so soft that it may be hard to recognize, the noise check described below should be performed in as silent an environment as possible. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Execute DO-35. Upon pressing the "✓" key, the operating noise of the clutch will be heard. 3) Press the "Cancel" key to stop the clutch. <p>NOTE: This procedure is for the technical staff. Combination test is as follows. The duplex gear rotates when the DO-d and the DO-35 are executed.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Cheat the Safety Interlock System. 4) Execute DO-d and DO-35. 5) Check that the Gear rotates.  <p style="text-align: right; font-size: small;">MiA02028KA</p> <ol style="list-style-type: none"> 6) Press the "Cancel" key to stop the clutch. 7) Press the "▼" key to display DO-D. 8) Press the "Cancel" key to stop the motor. 9) Remove the cheater. 10) Close the Front Cover.

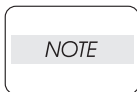
Motor/Clutch/Solenoid Name (Diag. Code)	Check procedure
<p>Black Drum Erase Lamp (DO-3d)</p>	<p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Remove the PHD ASSY. 4) Cheat the Safety Interlock System. 5) Execute the DO-3d. 6) Check that the ERASE LAMP (Black) illuminates.  <p style="text-align: right; margin-right: 50px;">Black Drum Erase Lamp</p> <p style="text-align: right; margin-right: 50px;">MIA02029KA</p> <ol style="list-style-type: none"> 7) Press the "Cancel" key to stop the test. 8) Replace the PHD ASSY. 9) Remove the cheater. 10) Close the Front Cover.
<p>Yellow, Magenta and Cyan Drum Erase Lamp (DO-3f)</p>	<p>NOTE: This procedure is for the technical staff. When performing operation for five minutes or longer with the front cover open, remove the PHD ASSY, and cover the drum to avoid exposure to light.</p> <ol style="list-style-type: none"> 1) Power on the printer, and enter the Diag Mode. 2) Open the Front Cover. 3) Remove the PHD ASSY. 4) Cheat the Safety Interlock System. 5) Execute the DO-3f. 6) Check that the ERASE LAMP (YMC) illuminates.  <p style="text-align: right; margin-right: 50px;">Cyan Drum Erase Lamp</p> <p style="text-align: right; margin-right: 50px;">Magenta Drum Erase Lamp</p> <p style="text-align: right; margin-right: 50px;">Yellow Drum Erase Lamp</p> <p style="text-align: right; margin-right: 50px;">MIA02030KA</p> <ol style="list-style-type: none"> 7) Press the "Cancel" key to stop the test. 8) Replace the PHD ASSY. 9) Remove the cheater. 10) Close the Front Cover.

4.3 Print Info

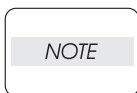
Outputs the detailed information on the printer settings and configuration.

4.3.1 Executing Print Info

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" key to select "Print Info", and then press "✓" key.
- 7) Press "▲" or "▼" key to select an item from "Print Info".
- 8) Press "✓" key twice to execute the process.



To exit the print or to return to one step higher menu, press the "Cancel" key.



A test is not performed when an obstacle is in IOT.

4.3.2 Config Page

Allows you to check the IOT software version or printer configuration.

4.3.3 Print Settings

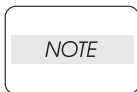
Allows you to check the service tag, print count, and error count.

4.4 Test Print

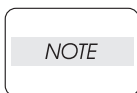
Outputs test patterns stored in the printer. If an error such as paper jam or paper out occurs during printing, the test is suspended until the problem is solved.

4.4.1 Executing Test Print

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" key to select "Test Print", and then press "✓" key.
- 7) Press "▲" or "▼" key to select an item from "Test Print".
- 8) Press "✓" key twice to execute the process.



To stop the test or to return to one step higher menu, press "Cancel" key.



A test is not performed when an obstacle is in IOT.

4.4.2 No Image [IOT]

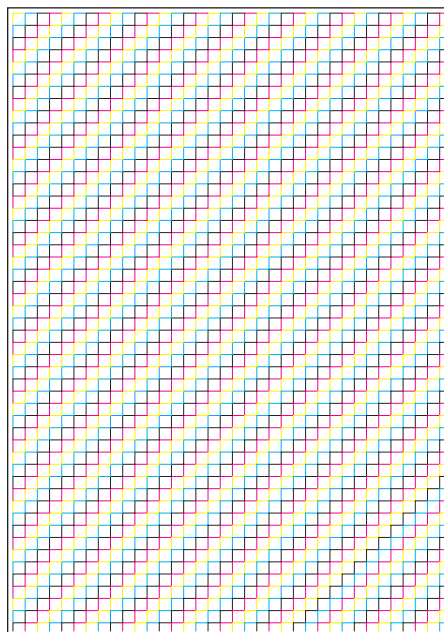
Outputs a blank sheet.

4.4.3 Test Pattern 600 [IOT]

Outputs the 600dpi pattern stored in the IOT.

When a PQ problem occurs, this test isolates the problem to the print process or PWBA ESS by comparing the print with the sample chart.

Check result: NG (Check the print process.) OK (Check the PWBA ESS.)



Kmy02001KA

4.4.4 Grid 2

Outputs the grid pattern stored in the ESS.

When a PQ problem occurs, this test isolates the trouble to the printer or other causes by comparing the print with the sample chart.

Check result: NG (Check the print process and PWBA ESS.) OK (Check the network, cable, PC, etc.)



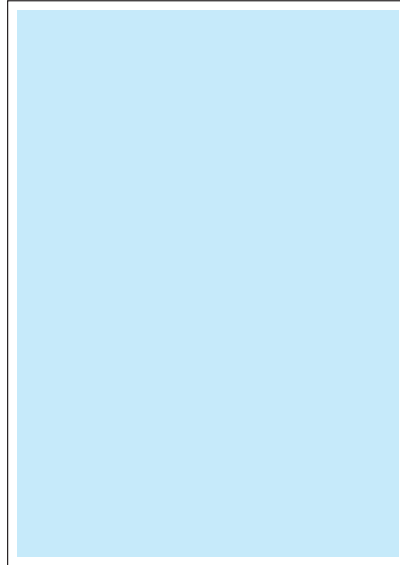
Leg_Sec02_004FA

4.4.5 Cyan 20%

Outputs the cyan 20% density solid pattern on the whole area of an A4 sheet.

When a PQ problem occurs, this test isolates the problem to the cyan toner or other color toners by comparing the print with the sample chart.

Check result: NG (Check the cyan toner.) OK (Check other color toners.)



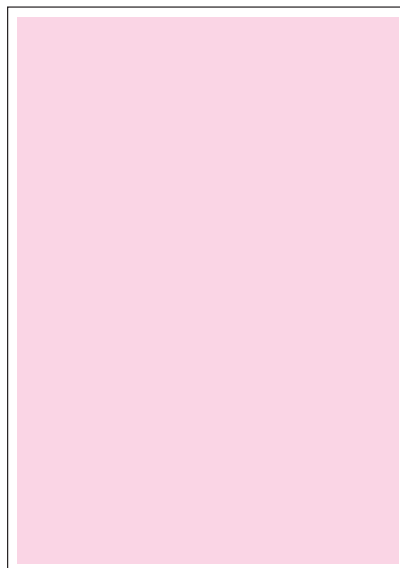
Leg_Sec02_005FA

4.4.6 Magenta 20%

Outputs the magenta 20% density solid pattern on the whole area of an A4 sheet.

When a PQ problem occurs, this test isolates the problem to the magenta toner or other color toners by comparing the print with the sample chart.

Check result: NG (Check the magenta toner.) OK (Check other color toners.)



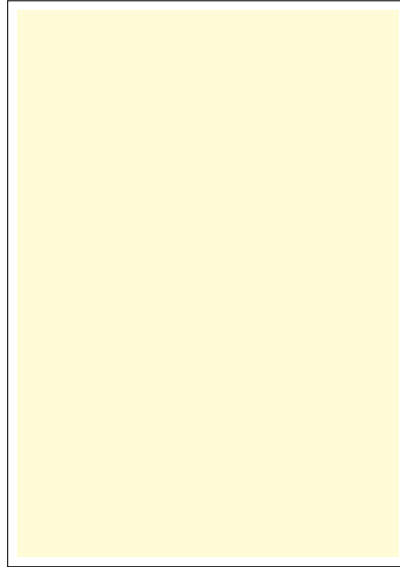
Leg_Sec02_006FA

4.4.7 Yellow 20%

Outputs the yellow 20% density solid pattern on the whole area of an A4 sheet.

When a PQ problem occurs, this test isolates the problem to the yellow toner or other color toners by comparing the print with the sample chart.

Check result: NG (Check the yellow toner.) OK (Check other color toners.)



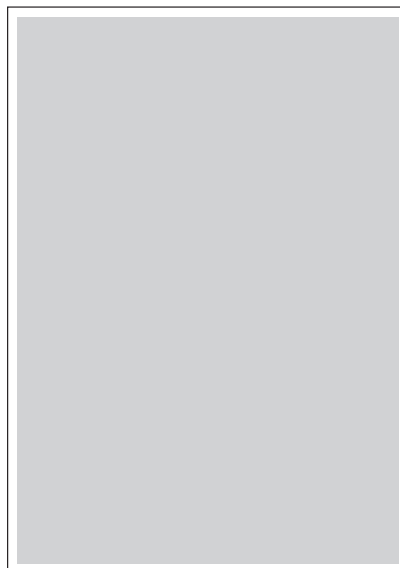
Leg_Sec02_007FA

4.4.8 Black 20%

Outputs the black 20% density solid pattern on the whole area of an A4 sheet.

When a PQ problem occurs, this test isolates the problem to the black toner or other color toners by comparing the print with the sample chart.

Check result: NG (Check the black toner.) OK (Check other color toners.)



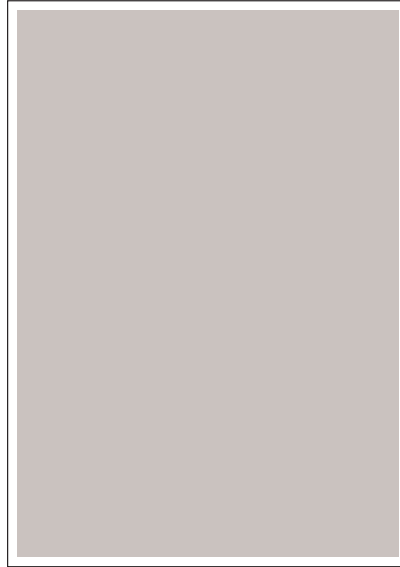
Leg_Sec02_008FA

4.4.9 CMY 20%

Outputs C/M/Y 20% density solid pattern on the whole area of an A4 sheet.

When a PQ problem occurs, this test isolates the problem to the imbalance of C/M/Y toners or the black toner by comparing the print with the sample chart.

Check result: NG (Check the yellow, magenta, and cyan toners.) OK (Check the black toner.)



Leg_Sec02_009FA

4.4.10 Gradation

Outputs the gradation pattern of 2 to 100% density on an A4 sheet for each of the four colors.

When a PQ problem occurs, this test isolates the problem to the print process or PWBA ESS by comparing the sample chart with the print.

Check result: NG (Check the print process.) OK (Check the PWBA ESS.)



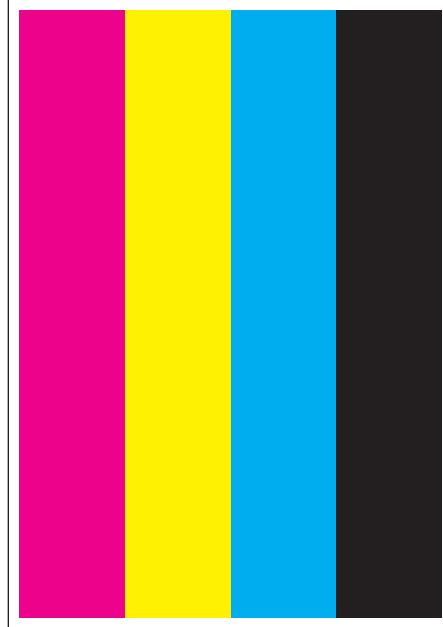
Leg_Sec02_010FA

4.4.11 Toner Pallet Check

Outputs the 100% density color pattern of C/M/Y/K.

When a PQ problem occurs, this test isolates the problem to the toner or otherwise by comparing the sample chart with the print.

Check result: NG (Check the toner.) OK (Check the print job or print data.)



Leg_Sec02_011FA

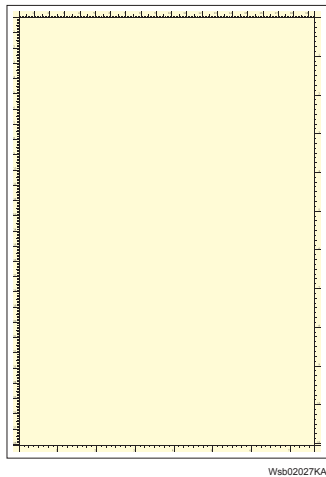
4.4.12 Contamination Check

Allows you to check the print for any regular lines or toner spots when encountering PQ problems. From the interval of regular lines or spots, you can determine the parts that have caused the problem.

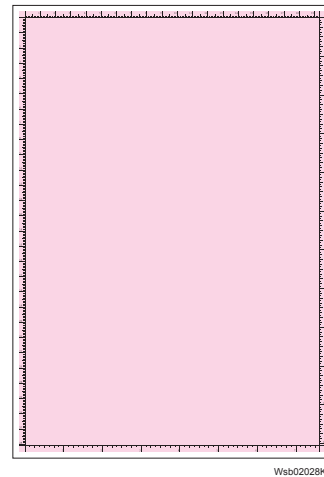
Page 1 to 4: Outputs the scale patterns in vertical and horizontal directions for evaluating regularity and intervals.

Page 5: Outputs the correspondence between interval and faulty component.

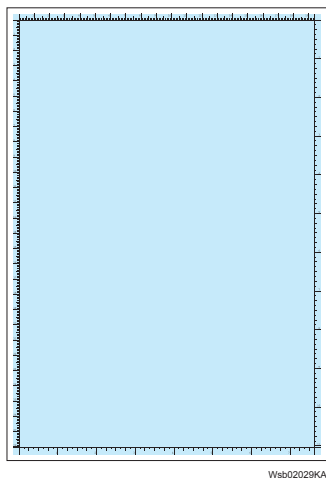
Page 1



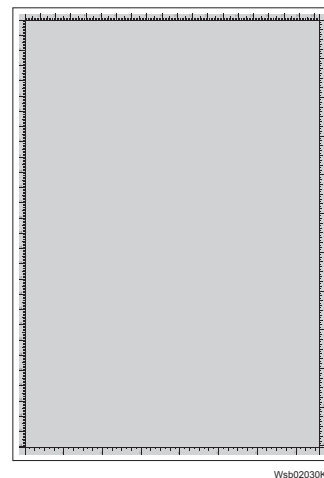
Page 2



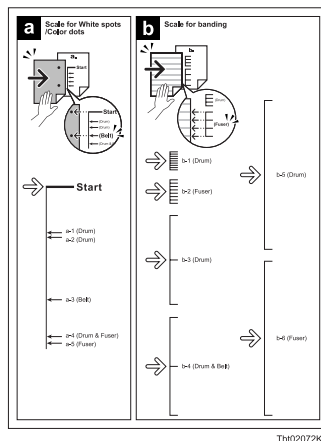
Page 3



Page 4



Page 5

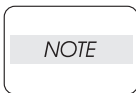


4.5 Parameter

This function reads/writes the following parameters stored in the printer.

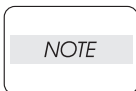
4.5.1 Executing Parameter (Registration Adjustment)

- 1) Turn off the power.
- 2) Turn on the power while holding down "▲" and "▼" keys.
- 3) Release the fingers from these keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" to select "Parameter", and then press "✓" key.
- 7) Press "▲" and "▼" key to select the Adjustment item, and then press "✓" key.
The current registration adjustment value is displayed. (The value is changed with "▲" and "▼" key.)
- 8) Press "✓" key to execute the setting.

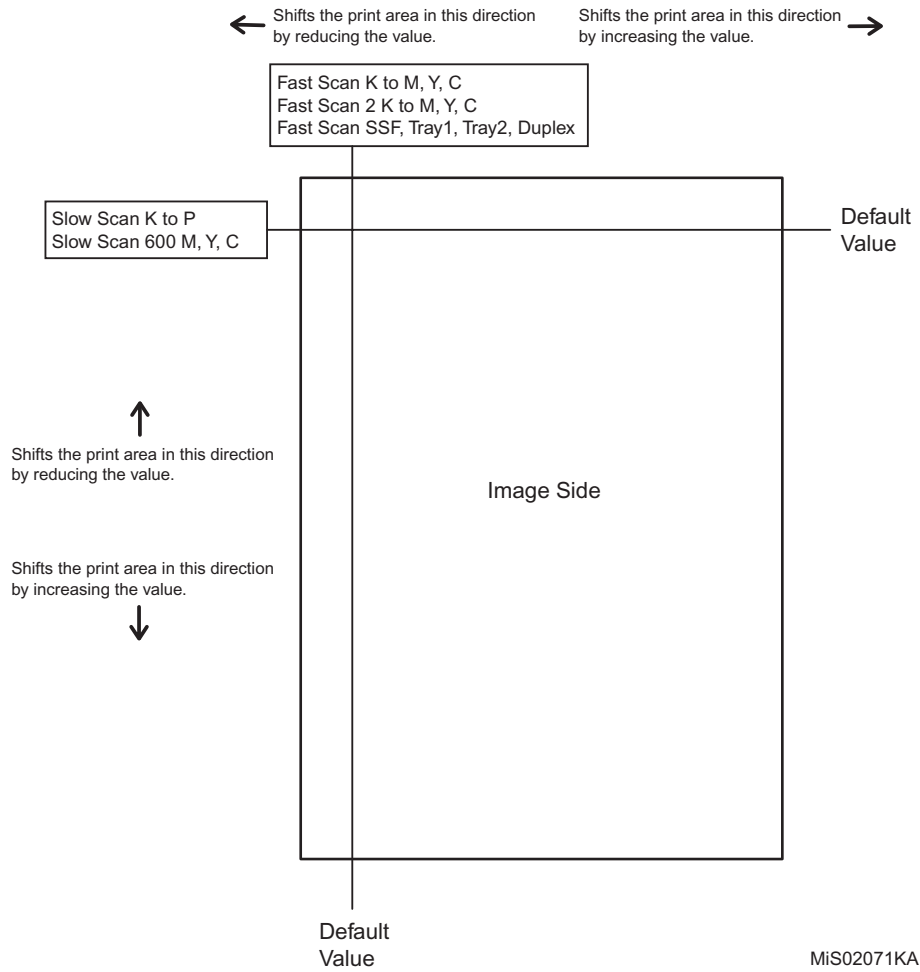


To exit the test or to returning to one step higher menu, press "CANCEL" key.

Item	Range	Description
Slow Scan K to P	-128 to 127	Sets the registration in the paper feeding direction.
Slow Scan 600 M, Y, C		
First Scan K to M, Y or C	-128 to 127	Sets the registration in the scanning direction.
First Scan SSF, Tray 1, Tray 2, Duplex	-30 to 30	
First Scan 2 K to M, Y or C	-1 to 2	

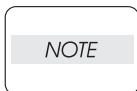


Print the parameter list using the Print function of Parameter Menu in diagnosis before changing the value of the registration.



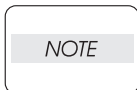
4.5.2 Executing Parameter (Life Counter)

- 1) Turn off the power.
- 2) Turn on the power while holding down "▲" and "▼" keys.
- 3) Release the fingers from these keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" to select "Parameter", and then press "✓" key.
- 7) Press "▲" and "▼" key to select the Life Counter item, and then press "✓" key.
- 8) Press "✓" key to execute the setting.
The current life counter value is displayed.



To exit the test or to returning to one step higher menu, press "CANCEL" key.

- Reference Counter Values

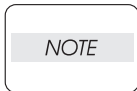


These counter values are reference only. Do not use as the official value.

Counter Name	Value of life warning
Life Y Toner	Std.:1000/High:2500
Life M Toner	Std.:1000/High:2500
Life C Toner	Std.:1000/High:2500
Life K Toner	Std.:1000/High:3000
Life Fuser	50000
Life Printer	100000
Life DTB (Transfer Belt)	-
Life Y Waste Toner	-
Life M Waste Toner	-
Life C Waste Toner	-
Life K Waste Toner	-
Life Y Drum	24000
Life M Drum	24000
Life C Drum	24000
Life K Drum	24000
Life Drum Xero	-
Life Drum Deve K	-
Life SSF (MPF) Sheet	-
Life Tray 1 Sheet	-
Life Tray 2 Sheet	-
Life Duplex Sheet	-
Life Custom In	-
Life Custom Out	-

4.5.3 Executing Parameter (Printing the parameter list)

- 1) Turn off the power.
 - 2) Turn on the power while holding down "▲" and "▼" keys.
 - 3) Release the fingers from these keys when "Diagnosing..." is displayed.
 - 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
 - 5) Press "✓" key. (Entered the Printer Diag. mode.)
 - 6) Press "▼" to select "Parameter", and then press "✓" key.
 - 7) Press "▼" key to select the "Print", and then press "✓" key.
- The parameter list is printed.



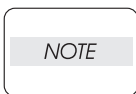
To exit the test or to returning to one step higher menu, press "CANCEL" key.

4.6 Complete

Completes the Diag operation and reloads the data.

4.6.1 Executing Complete

- 1) Power off the printer.
- 2) Power on the printer while pressing "▲" and "▼" keys.
- 3) Release the keys when "Diagnosing..." is displayed.
- 4) "Customer Mode", "Printer Diag" and "FAX/Scanner Diag" are displayed. (Now in the Customer Diag mode.)
- 5) Press "✓" key. (Entered the Printer Diag. mode.)
- 6) Press "▼" key to select "Complete", and then press "✓" key.
- 7) Press "✓" key twice to execute the process.

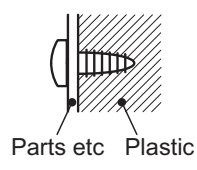
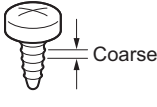
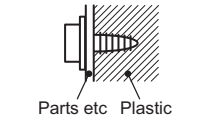
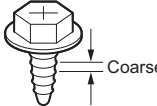
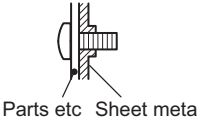
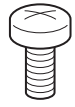
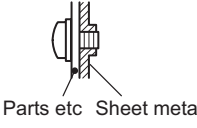
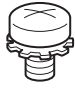


To exit the print or to return to one step higher menu, press the "Cancel" key.

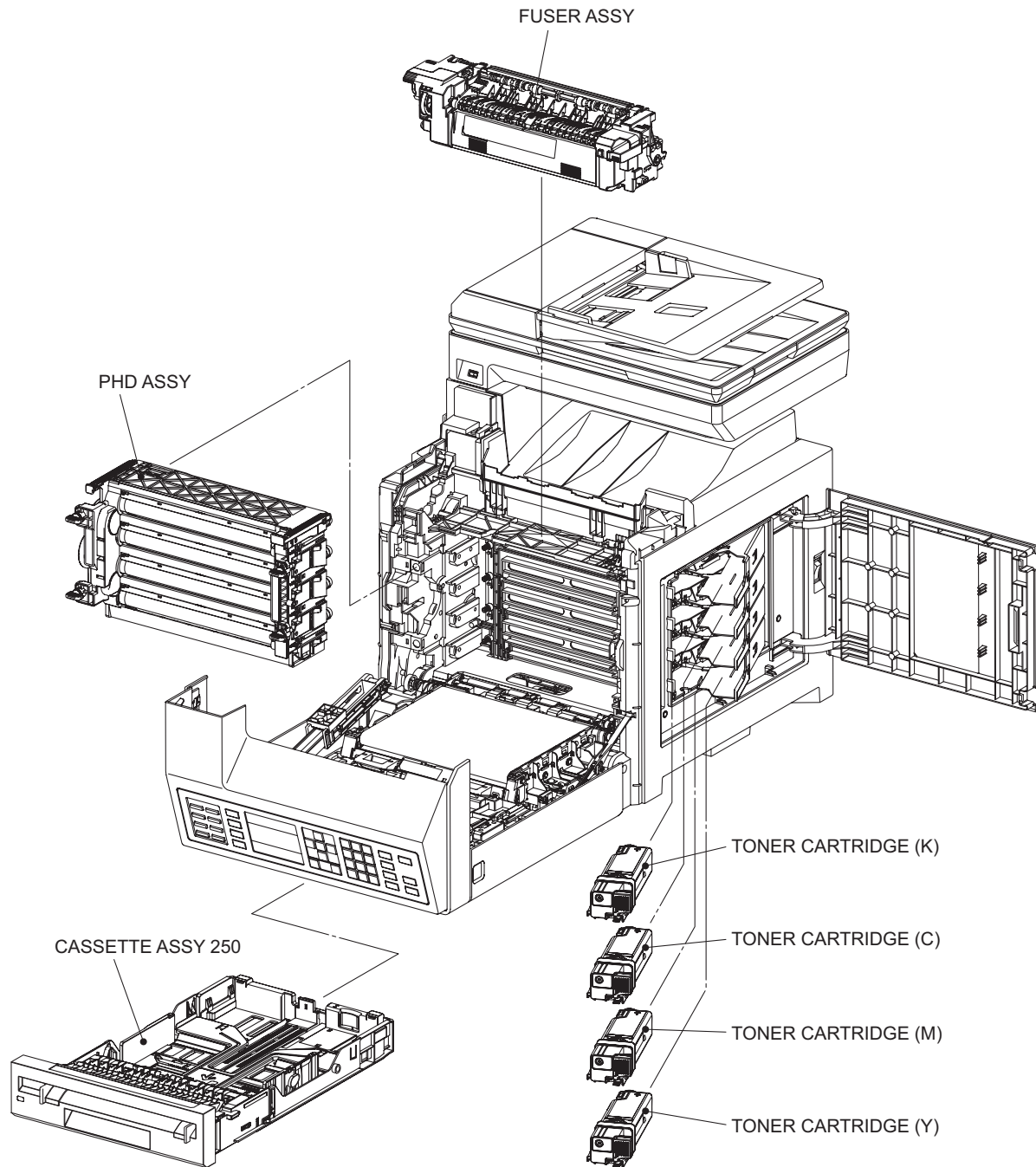
1. Removal and Replacement Procedures (RRPs)

1.1 Before starting service procedure

- Start the procedure after turning off the power and removing the power cord from the outlet.
- When performing the service operation around the FUSER ASSY, ensure that FUSER ASSY and its surrounding area have cooled down sufficiently.
- Pay sufficient attention to the parts during the procedure because they may be broken or may not perform their functions properly if unreasonable force is applied.
- Since various types of screws are used, ensure that the right screws are used in their right positions. Use special caution not to confuse the screws for plastic and the ones for sheet metal, because using the wrong type of screw may result in damage to the screw threads or other troubles.

No.	Type	Application	Shape	How to distinguish	Points to be noted	Major application locations
1	Screw for plastic Silver, tap	Plastic  Parts etc Plastic	 Coarse	<ul style="list-style-type: none"> • Silver-colored • Thread is coarser than that of the sheet metal type. • Screw tip is thin. 	Oblique screwing damages the thread because this screw cuts female threads in the base material as it goes in.	-
2	Screw for plastic Silver, tap, with flange	Plastic  Parts etc Plastic	 Coarse	<ul style="list-style-type: none"> • Silver-colored • It has a flange. • Screw thread is coarse comparing to the sheet metal type. • Screw tip is thin. 	As it has a function to cut the thread by itself, if the screw is inserted in an angle and tightened, the screw thread will be damaged.	• FUSER ASSY
3	Screw for metal sheet Silver	Sheet metal  Parts etc Sheet metal		<ul style="list-style-type: none"> • Silver-colored • Diameter of the thread section is uniform. 		-
4	Screw for metal sheet Silver, with an external tooth washer	Sheet metal  Parts etc Sheet metal		<ul style="list-style-type: none"> • Silver-colored • Provided with an external tooth washer. • Diameter of the thread section is uniform. 		• Mounting positions of the ground wires.

- Wear a wristband or the like as far as possible to remove static electricity of the human body.
- Keep the front cover closed. Buzzer goes off when the machine is left powered on with the front cover open for five minutes or longer to prevent the drum deterioration due to exposure to light.
- When opening the front door in a removal/replacement operation, cover the drum to keep it from being exposed to light.
- Remove CASSETTE ASSY 250, PHD ASSY, TONER CARTRIDGE and FUSER ASSY, and put them in a place where they do not affect the procedure. (Note that the service procedures can be performed with those parts in place depending on the target section of removal/replacement.)



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1.2 General notes

- The string “(PL X.Y.Z)” suffixed to the part name in the procedure denotes that the part corresponds to the plate (PL) “X.Y”, item “Z” of [Engineering Parts list], and its shape and fitting position can be checked in [Engineering Parts list].
- Directional descriptions used in the procedures are defined as follows:
 - Front : Direction toward you when facing the front of the printer.
 - Rear : Direction opposite to the front when facing the front of the printer.
 - Left : Left-hand direction when facing the front of the printer.
 - Right : Right-hand direction when facing the front of the printer.

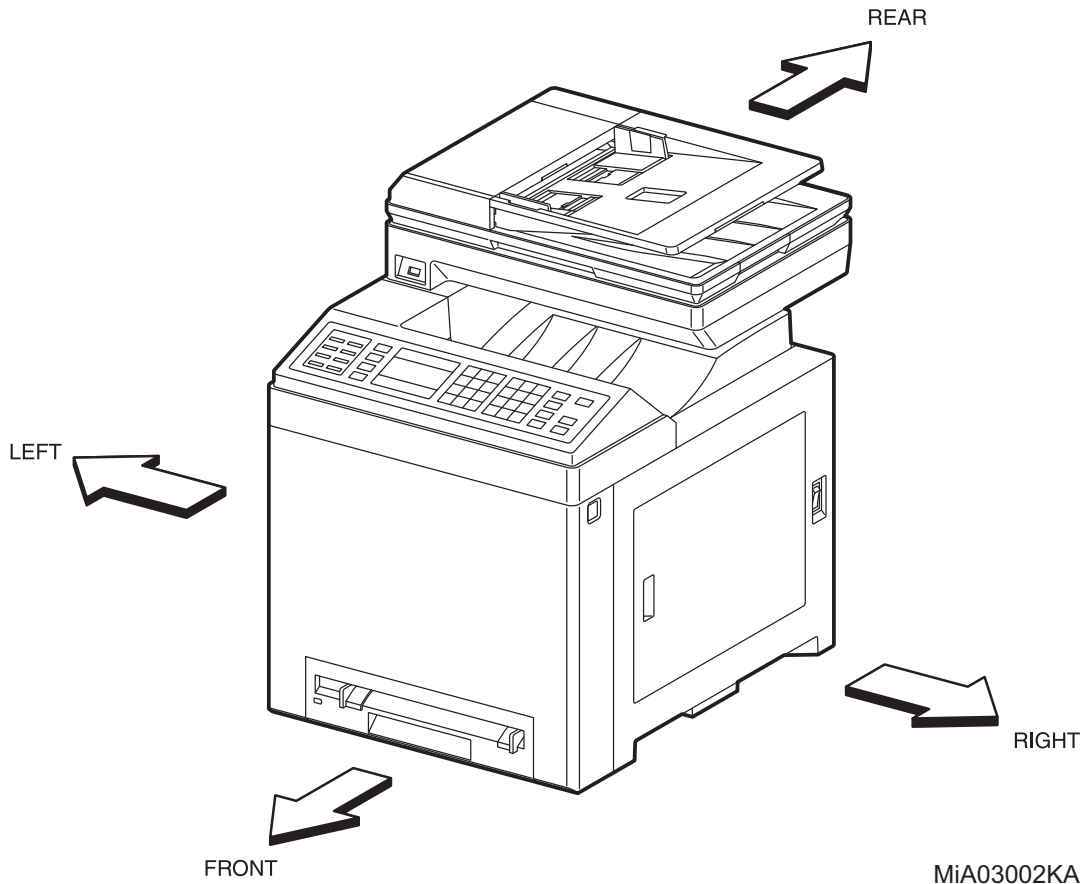
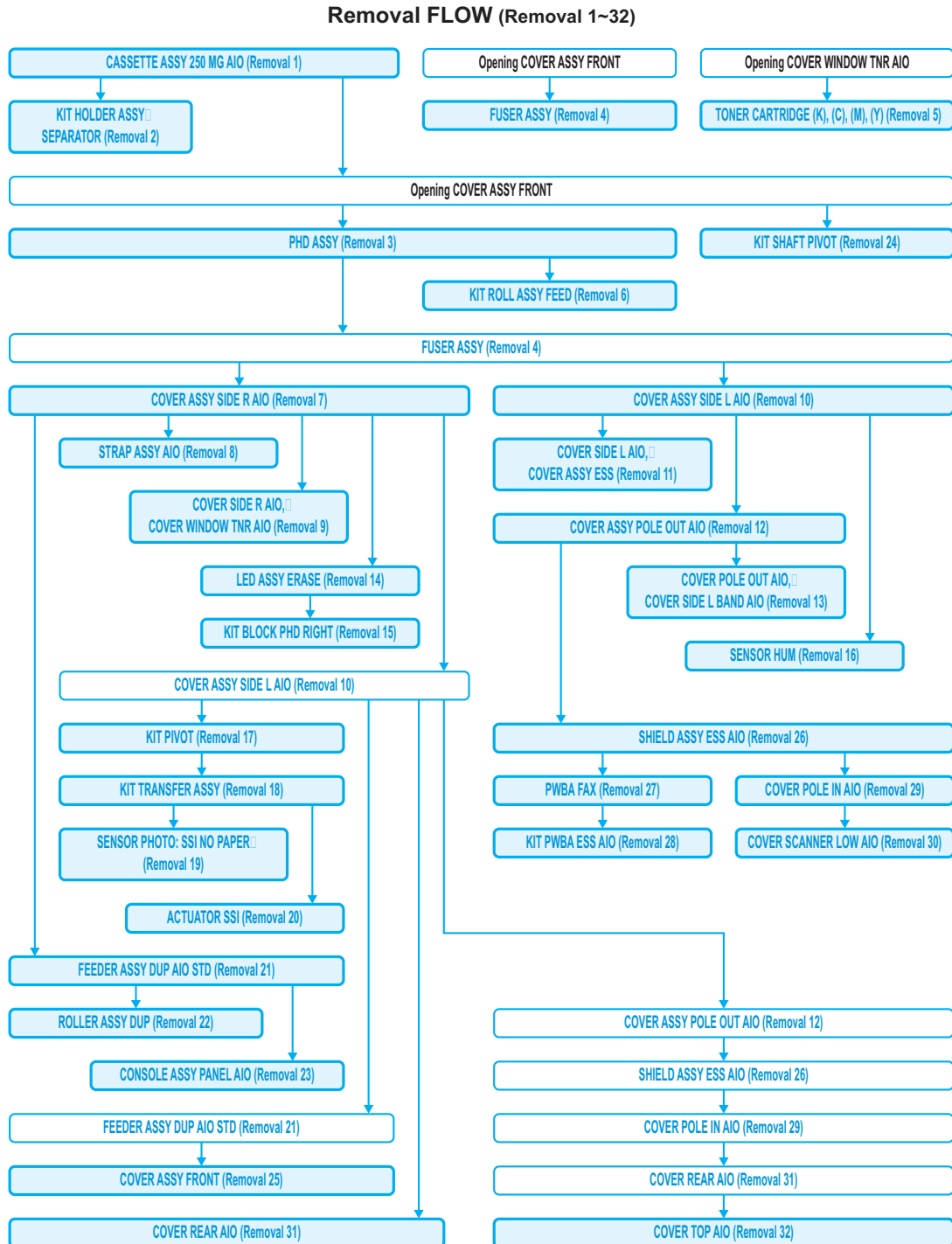


Figure: Definitions of Printer Orientation

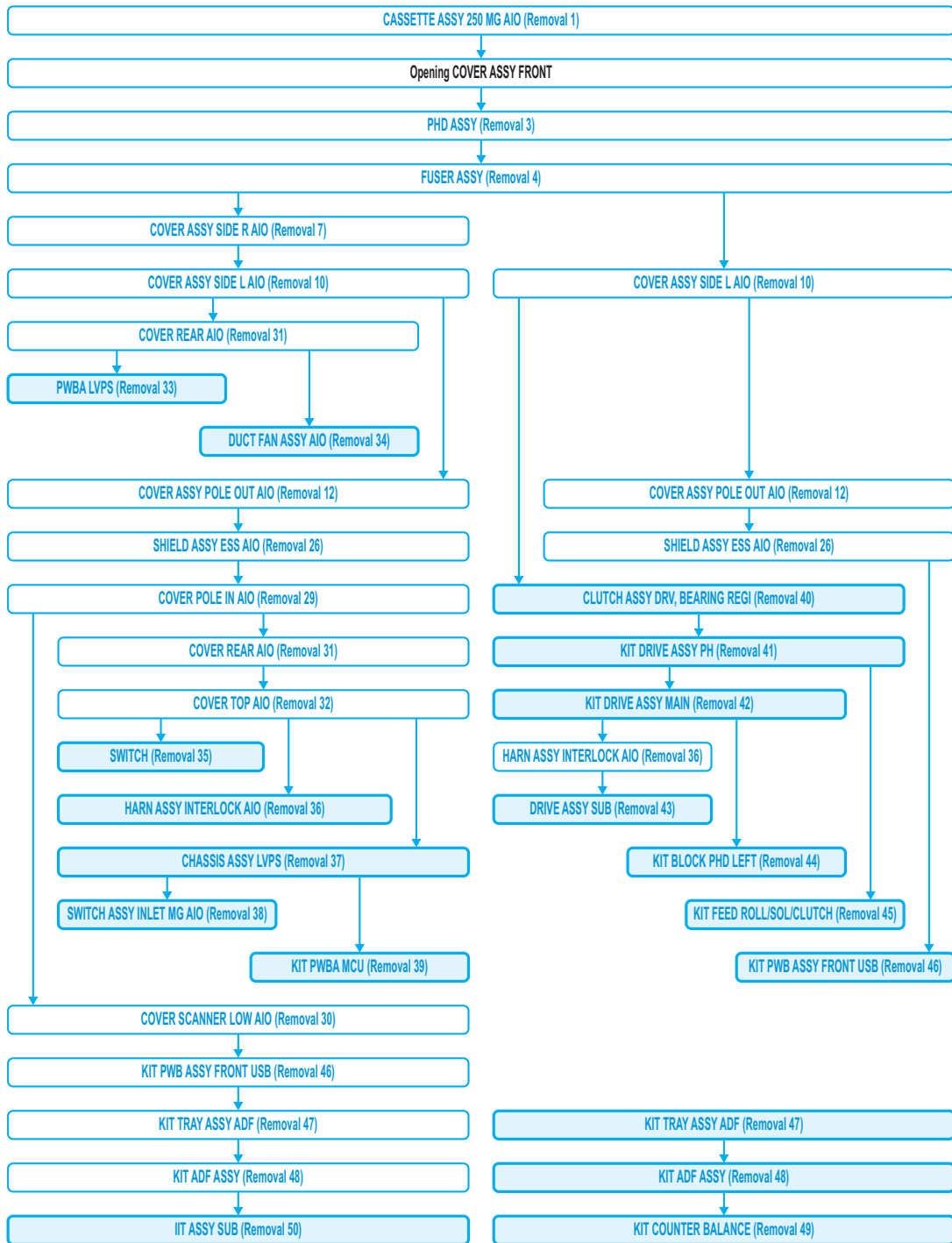
- The string “(RRP X.Y)” that appears in or at the end of the procedure denotes that the related service procedure is described in [RRP X.Y].
- Screws shown in the illustrations are to be unscrewed and removed using a Phillips head (cross-slot) screwdriver, unless otherwise specified.
- Black arrows shown in the illustrations denote moving directions. When numbers are assigned to these arrows, they refer to the order in the procedure.
- Refer to [Chapter 4 Plug/Jack (P/J) Connector Locations] for the positions of connectors (P/J).

Removal Flows

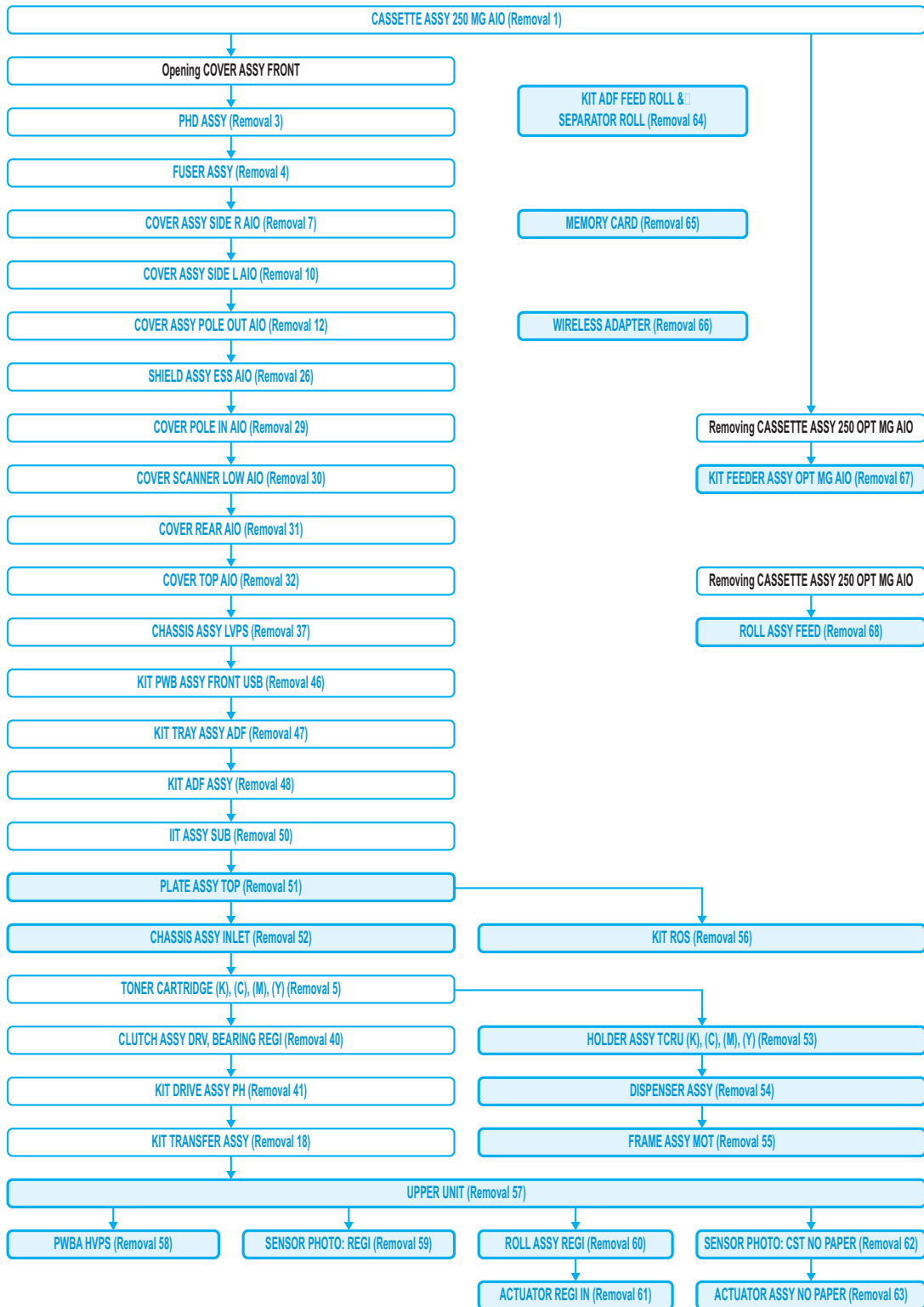
The components not connected with arrows in the flow below can be removed independently.



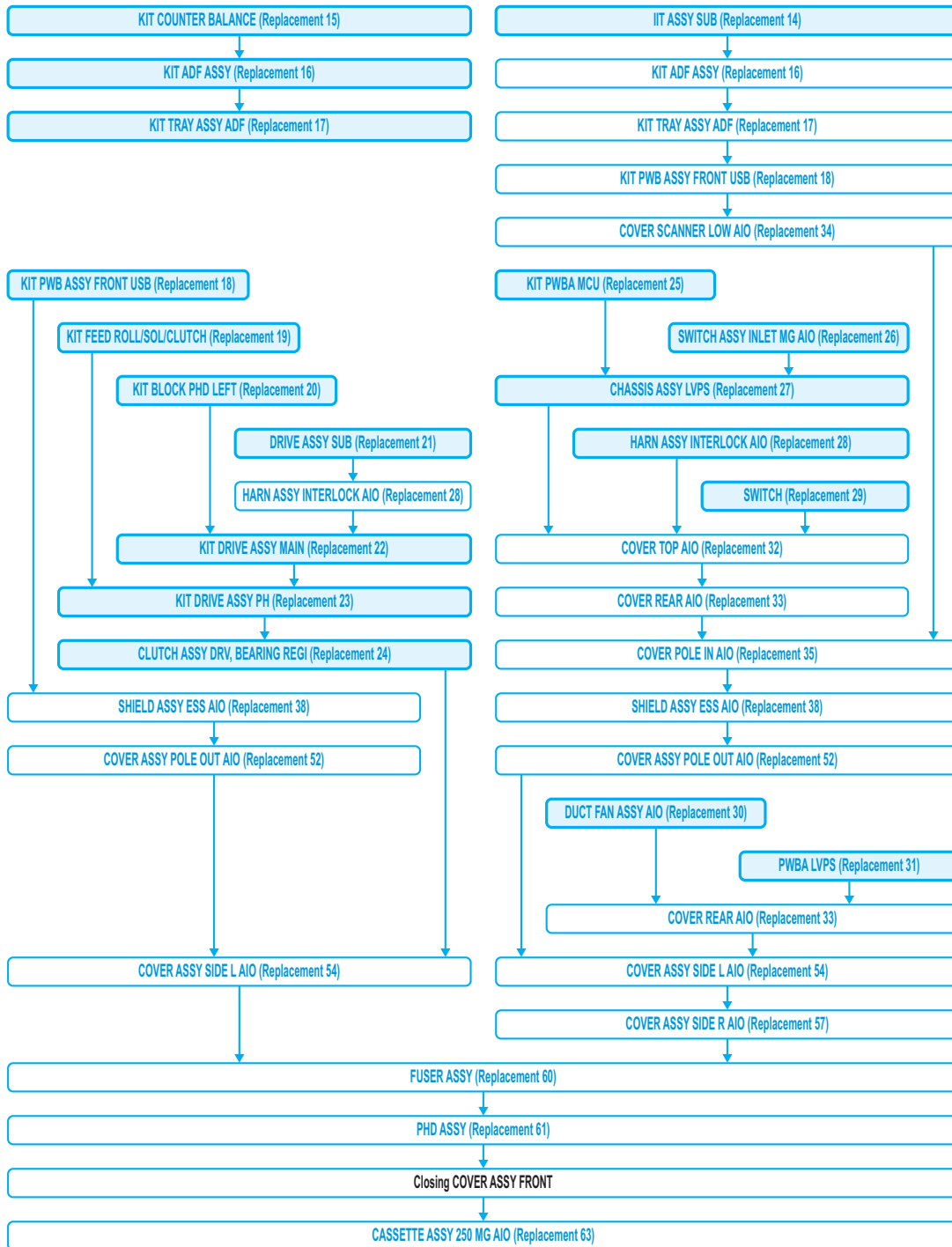
Removal FLOW (Removal 33–50)



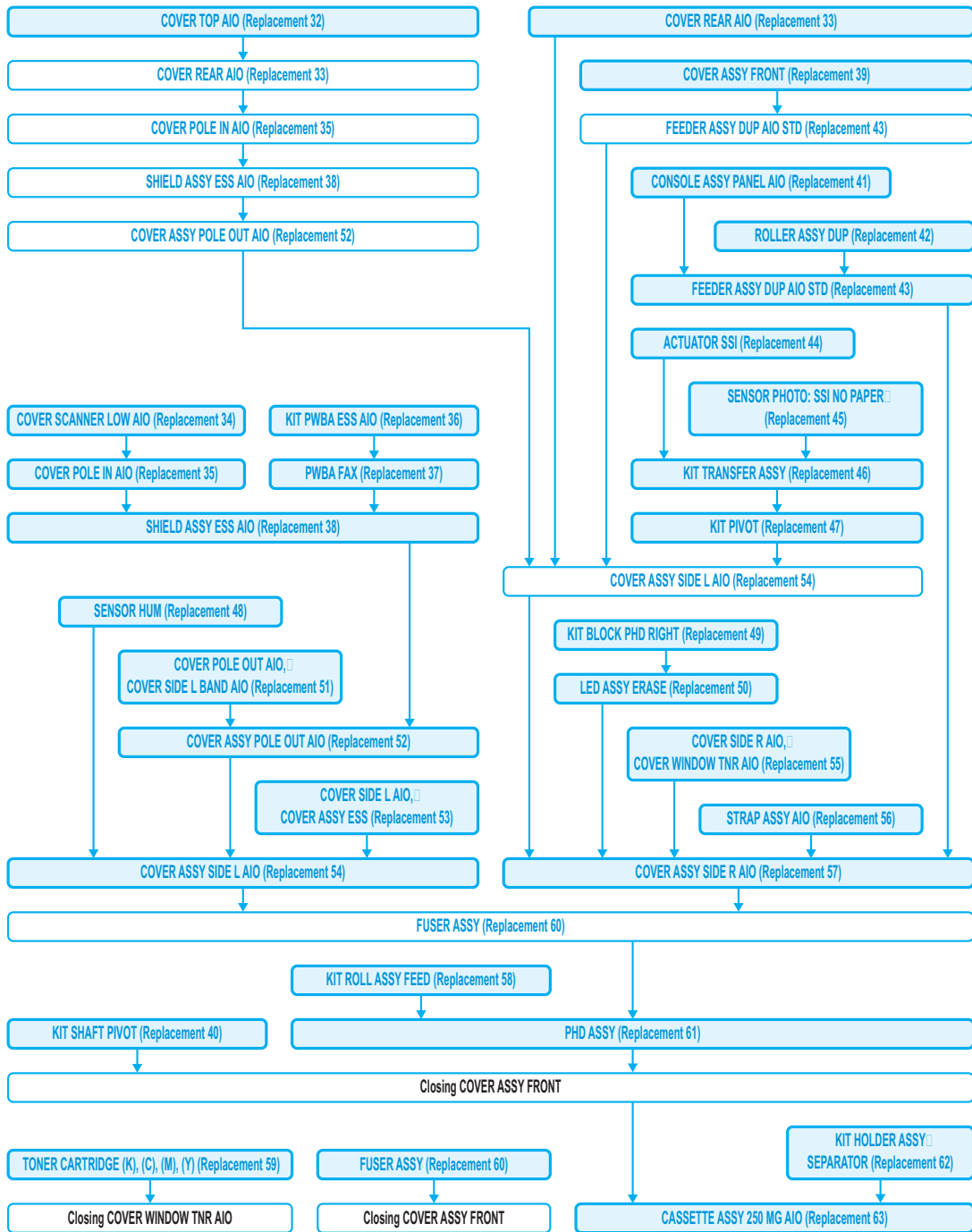
Removal FLOW (Removal 51–68)



Replacement FLOW (Replacement 14~31)



Replacement FLOW (Replacement 32-63)



Removal 1 CASSETTE ASSY 250 MG AIO (PL2.1.1)

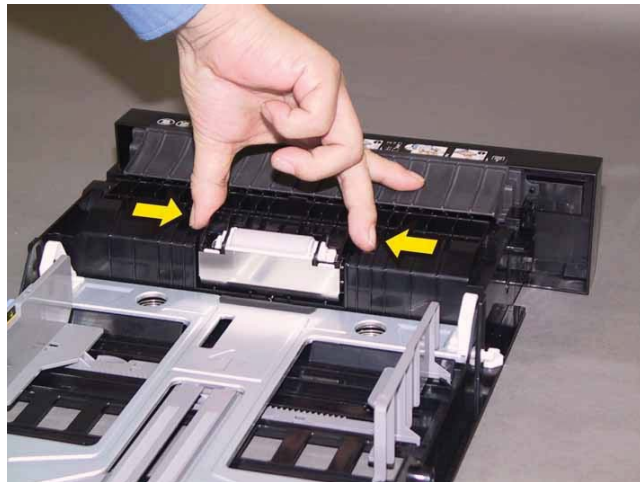
1) Pull out the CASSETTE ASSY 250 MG AIO (PL2.1.1) from the printer.



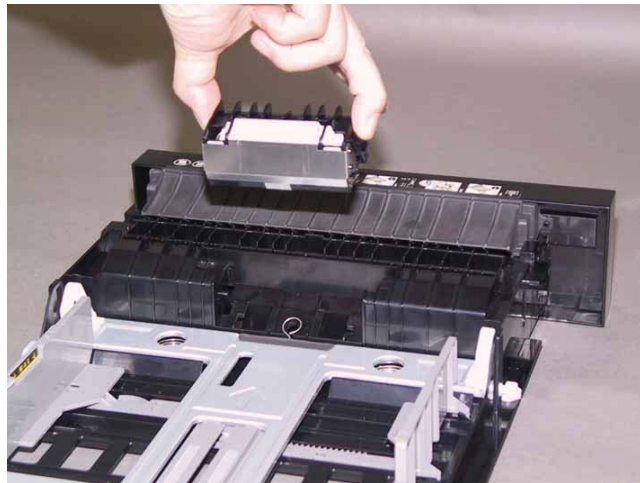
Removal 2 KIT HOLDER ASSY SEPARATOR (PL2.1.99)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Release the two hooks of the HOLDER ASSY SEPARATOR (PL2.1.5).



3) Pull up the HOLDER ASSY SEPARATOR to remove the HOLDER ASSY SEPARATOR from the CASSETTE ASSY 250 MG AIO (PL2.1.1).



Removal 3 PHD ASSY (PL4.1.21)

Note: Remove the CASSETTE ASSY 250 MG AIO before working.

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

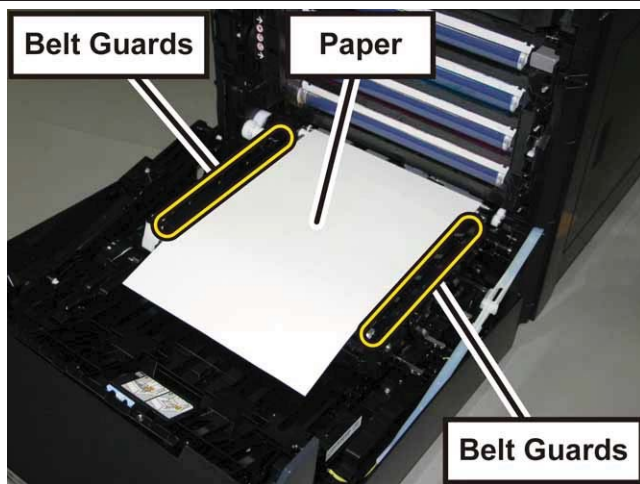
2) Open the COVER ASSY FRONT (PL1.2.1).

3) Open the TRANSFER ASSY (PL6.1.7).

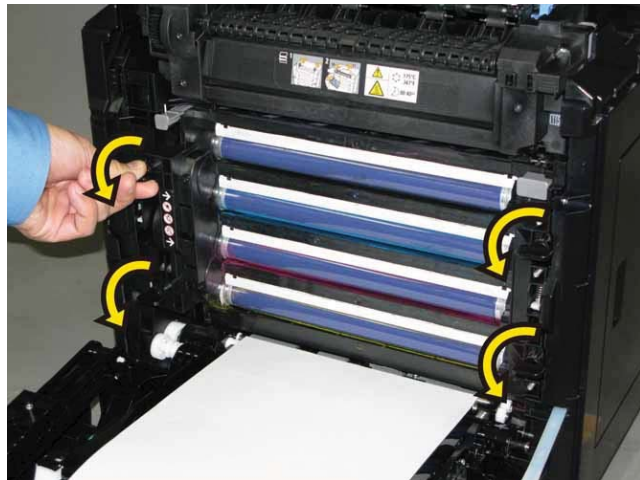


4) Put the paper on the TRANSFER ASSY to protect the belt.

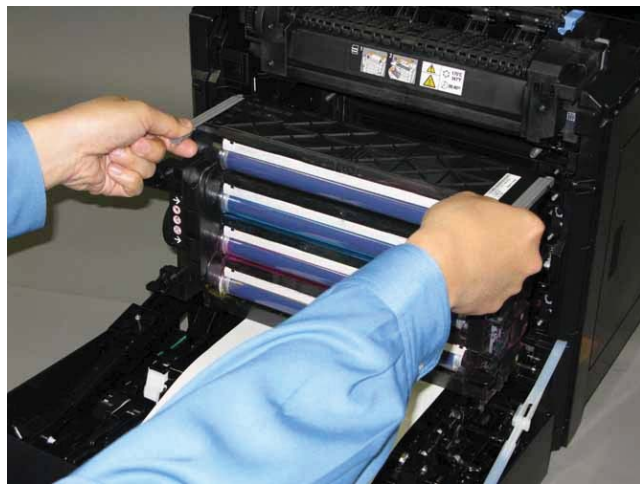
Note: When carrying out the work this procedure, take care not to cover the left and right of the belt guards with the paper.



5) Rotate the four stoppers of the PHD ASSY (PL4.1.21) to the counter clock wise direction, to release the lock.



6) Remove the PHD ASSY toward you by pulling it by the left and right handles.



7) Lift up the PHD ASSY from the printer.



Removal 4 FUSER ASSY (PL6.1.1)

1) Open the COVER ASSY FRONT (PL1.2.1).

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

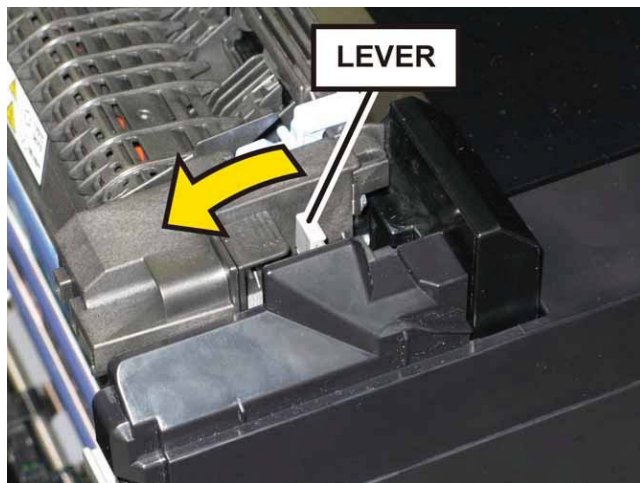
2) Open the TRANSFER ASSY (PL6.1.7).



3) Remove the one screw (silver, with flange, tap, 10mm) that fixes the FUSER ASSY (PL6.1.1) to the printer.



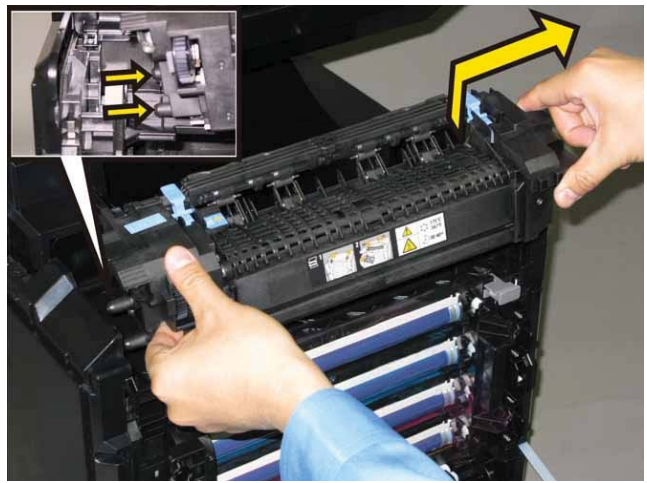
4) Pull the LEVER to release the lock.



5) Disengage the connector of the FUSER ASSY by pulling the right side of the FUSER ASSY toward you with the LEVER released.



6) Lift up the FUSER ASSY, move the FUSER ASSY to the right side.



Removal 5 TONER CARTRIDGE (K), (C), (M), (Y) (PL5.1.21~24)

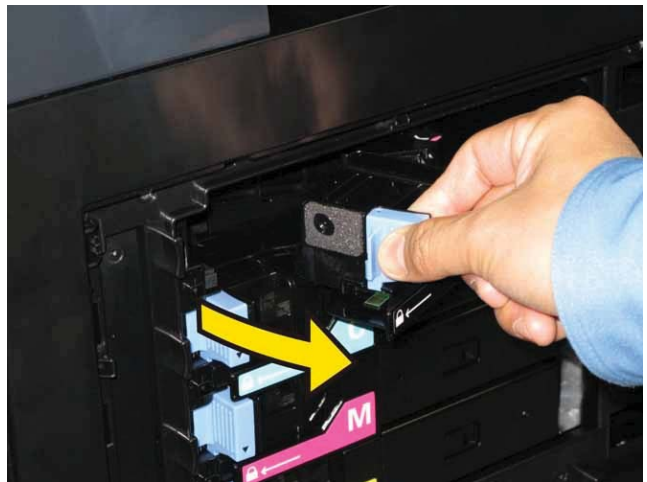
Note: Described below is the removal procedure common among the four TONER CARTRIDGES.

1) Open the COVER WINDOW TNR AIO (PL1.1.7).

2) Move the handle of the TONER CARTRIDGE to backward, to release the lock.



3) Open the HOLDER ASSY TCRU K (PL5.1.17).



4) Remove the TONER CARTRIDGE from the HOLDER ASSY TCRU.



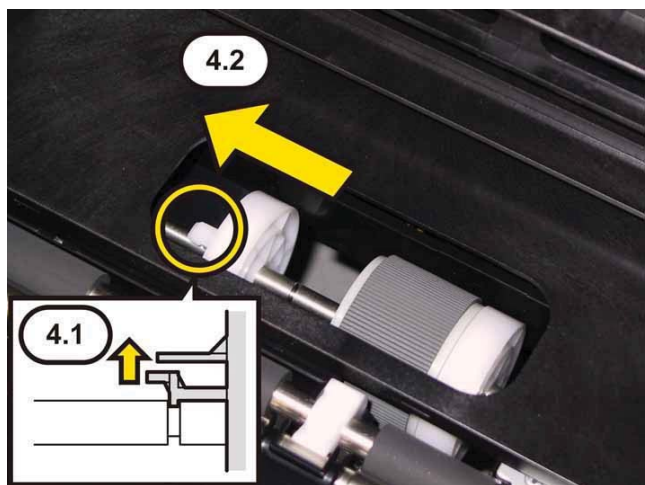
Removal 6 KIT ROLL ASSY FEED (PL3.2.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

4) Release the hook of the ROLL CORE MSI (PL3.2.3) on the left of the ROLL ASSY FEED (PL 3.2.4), and move the ROLL CORE MSI to left until it stops.

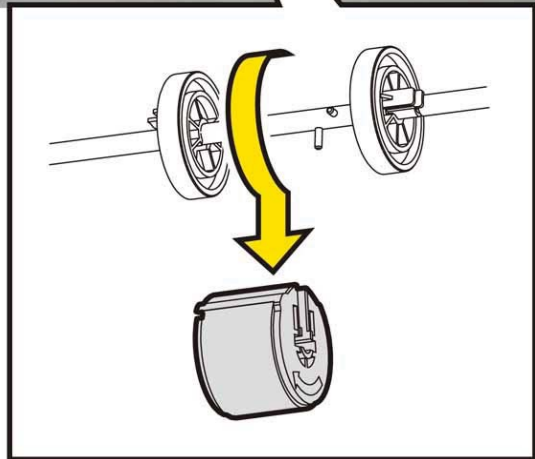


5) Release the groove on the ROLL ASSY FEED from the vertical pin mounted on the SHAFT ASSY FEED (PL3.2.2) by sliding the ROLL ASSY FEED to the left.



- 6) Close the COVER ASSY FRONT.

7) Remove the ROLL ASSY FEED from the SHAFT ASSY FEED by rotating the ROLL ASSY FEED 180 degrees.



Removal 7 COVER ASSY SIDE R AIO (PL1.1.12)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

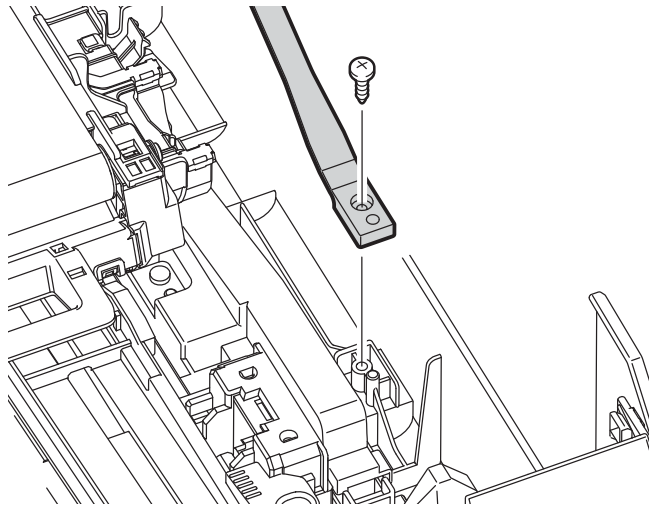
3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Open the COVER WINDOW TNR AIO (PL1.1.7).

6) Remove the one screw (silver, tap, 8mm) that fixes the STRAP ASSY AIO (PL1.2.30) to the COVER ASSY FRONT, remove the STRAP ASSY AIO from the COVER ASSY FRONT.

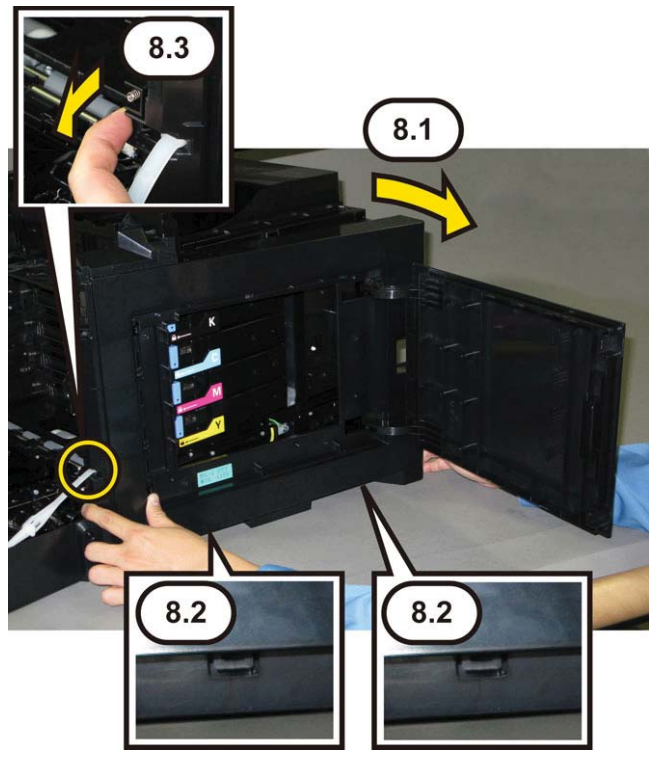


7) Remove the eight screws (silver, tap, 8mm) that fix the COVER ASSY SIDE R AIO (PL1.1.12) to the printer.



8) Release the three hooks of the COVER ASSY SIDE R AIO, remove the COVER ASSY SIDE R AIO.

Note: Please use the miniature screwdriver when the front hook doesn't come off easily.



Removal 8 STRAP ASSY AIO (PL1.2.30)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

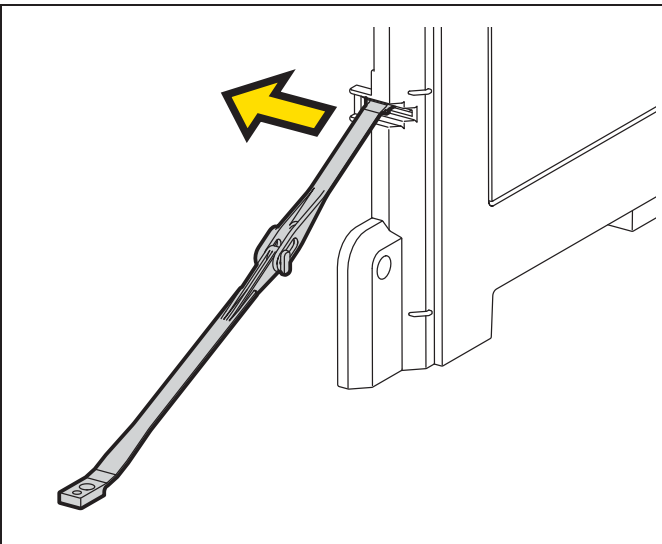
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

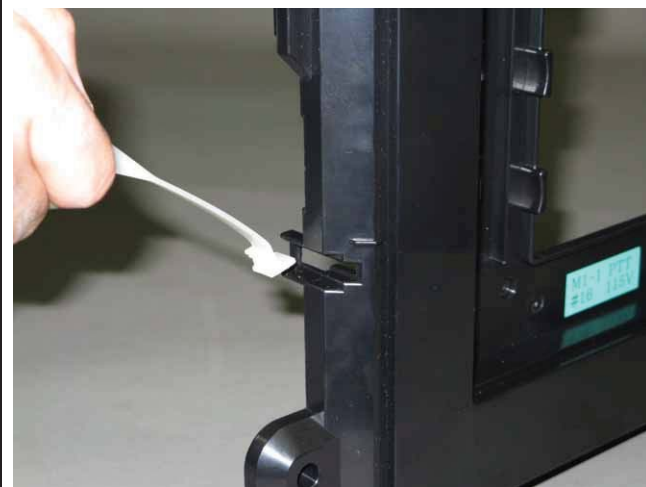
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

6) Shift the STRAP ASSY AIO (PL1.2.30), release the hook of the STRAP ASSY AIO from the COVER ASSY SIDE R AIO.



7) Remove the STRAP ASSY AIO from the COVER ASSY SIDE R AIO.



Removal 9 COVER SIDE R AIO (PL1.1.6), COVER WINDOW TNR AIO (PL1.1.7)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

6) Release the boss on the upper hinge of the COVER WINDOW TNR AIO (PL1.1.7) from the hole of the COVER SIDE R AIO (PL1.1.6).



7) Release the boss on the lower hinge of the COVER WINDOW TNR AIO from the hole of the COVER SIDE R AIO.



8) Remove the COVER WINDOW TNR AIO from the COVER SIDE R AIO.



Removal 10 COVER ASSY SIDE L AIO (PL1.1.13)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

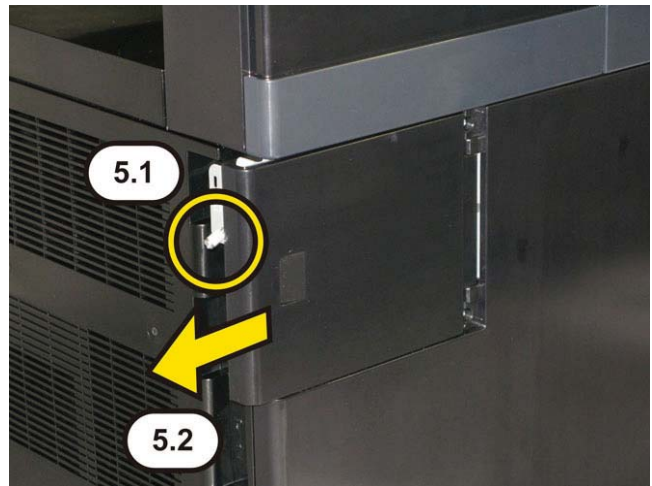
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)

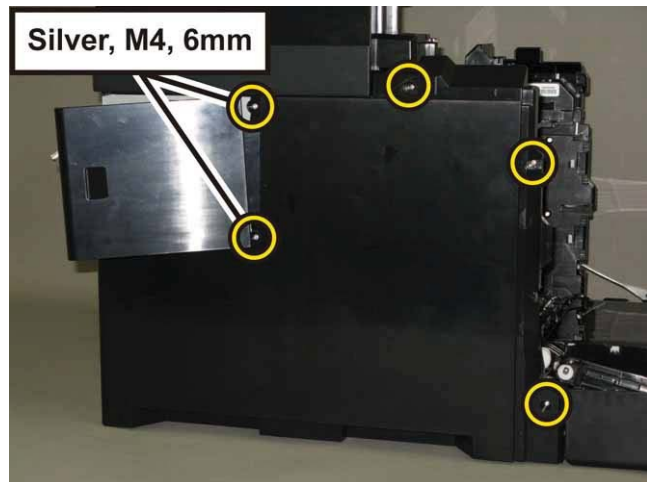
- 5) Loosen the SCREW KNURLING, shift the COVER ASSY ESS (PL1.1.9) to rear side.



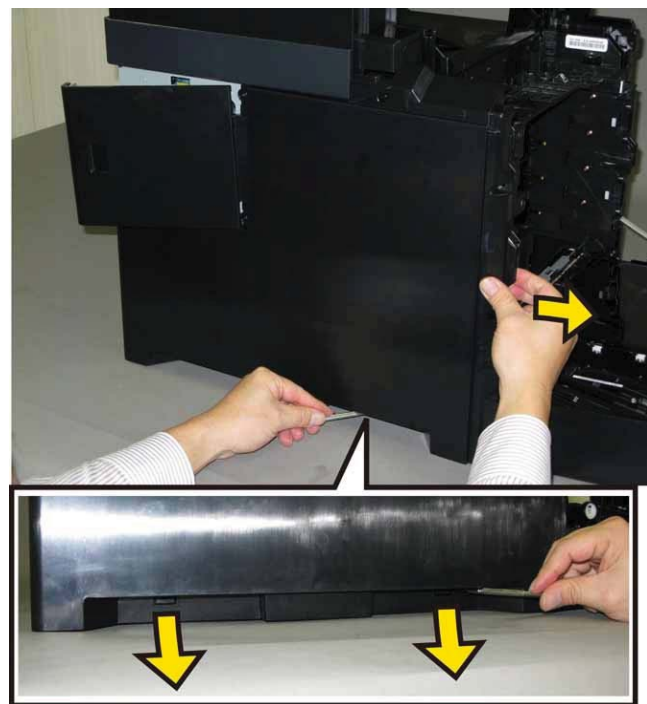
- 6) Open the COVER ASSY ESS.



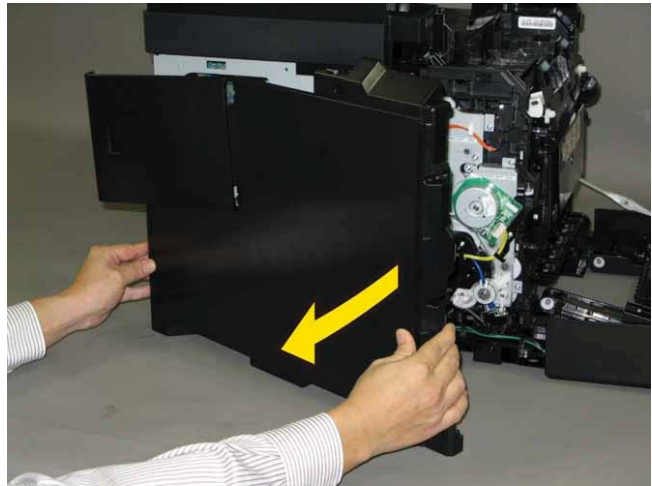
7) Remove the two screws (silver, M4, 6mm) and the three screws (silver, tap, 8mm) that fix the COVER ASSY SIDE L AIO (PL1.1.13) to the printer.



8) Release the three hooks of the COVER ASSY SIDE L AIO.



9) Shift the COVER ASSY SIDE L AIO to front side, release the two hooks of the COVER ASSY SIDE L AIO. Remove the COVER ASSY SIDE L AIO from the printer.



Removal 11 COVER SIDE L AIO (PL1.1.8), COVER ASSY ESS (PL1.1.9)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

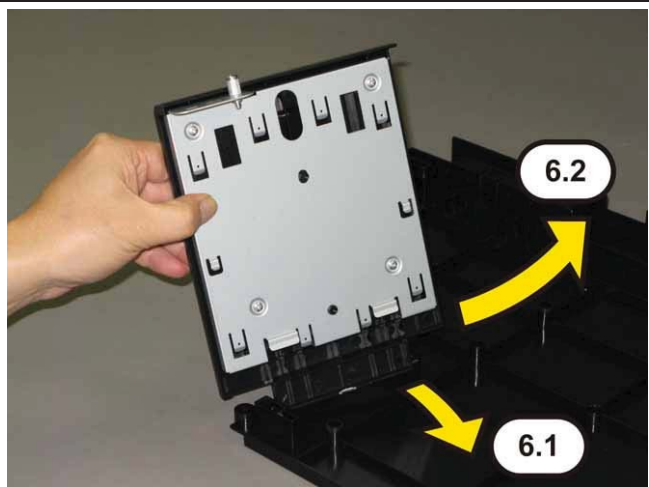
3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

6) Release the boss of the COVER ASSY ESS (PL1.1.9) from the hole of the COVER SIDE L AIO (PL1.1.8), remove the COVER ASSY ESS from the COVER SIDE L AIO.



Removal 12 COVER ASSY POLE OUT AIO (PL1.1.11)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

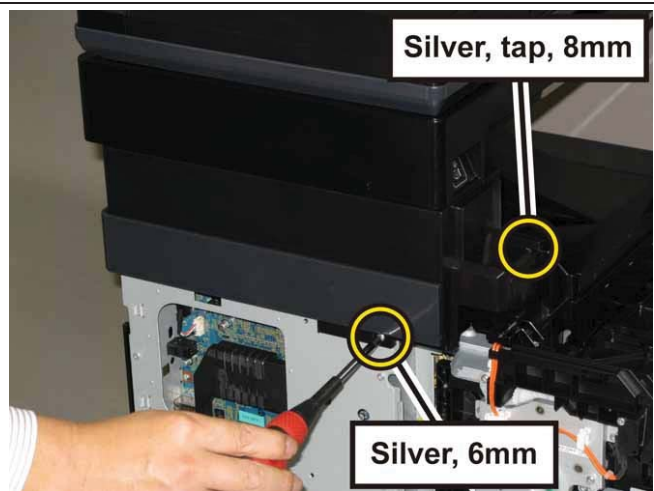
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

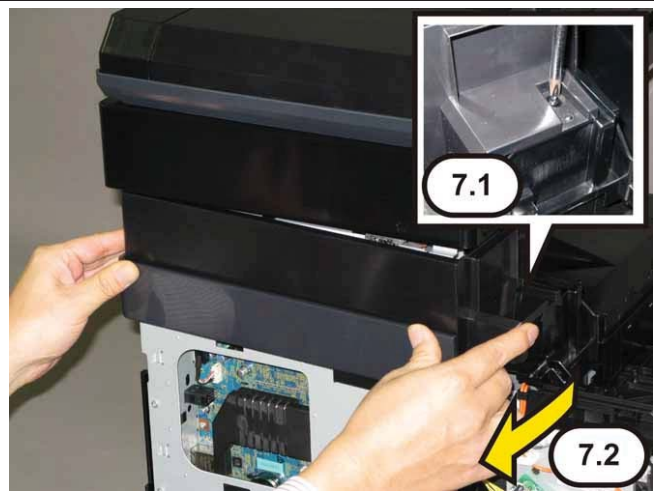
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

- 6) Remove the one screw (silver, 6mm) and the one screw (silver, tap, 8mm) that fix the COVER ASSY POLE OUT AIO (PL1.1.11) to the printer.



- 7) Push the boss of the COVER TOP AIO (PL1.1.4) using the screwdriver, remove the front side of the COVER ASSY POLE OUT AIO.



8) Release the two hooks of the COVER ASSY POLE OUT AIO, remove the COVER ASSY POLE OUT AIO from the printer.



Removal 13 COVER POLE OUT AIO (PL1.1.1), COVER SIDE L BAND AIO (PL1.1.10)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

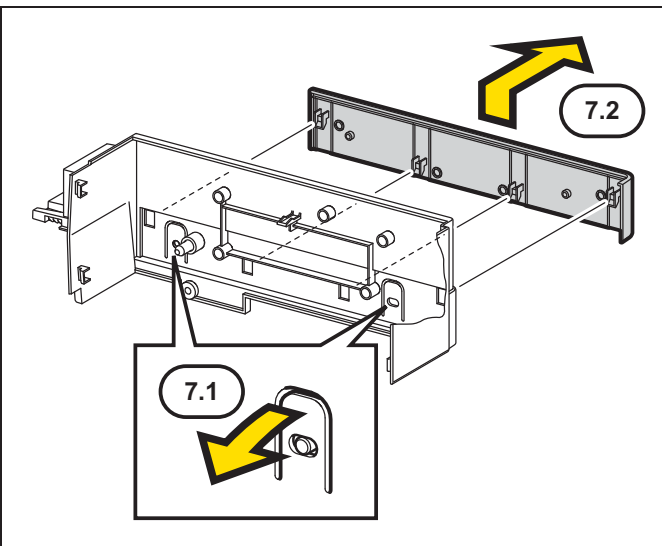
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)

7) Release the two bosses and the four hooks of the COVER SIDE L BAND AIO (PL1.1.10), remove the COVER SIDE L BAND AIO from the COVER POLE OUT AIO.



Removal 14 LED ASSY ERASE (PL4.1.8)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

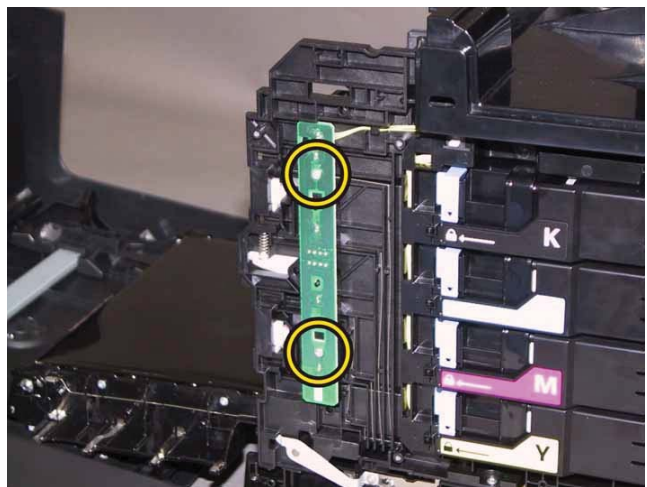
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

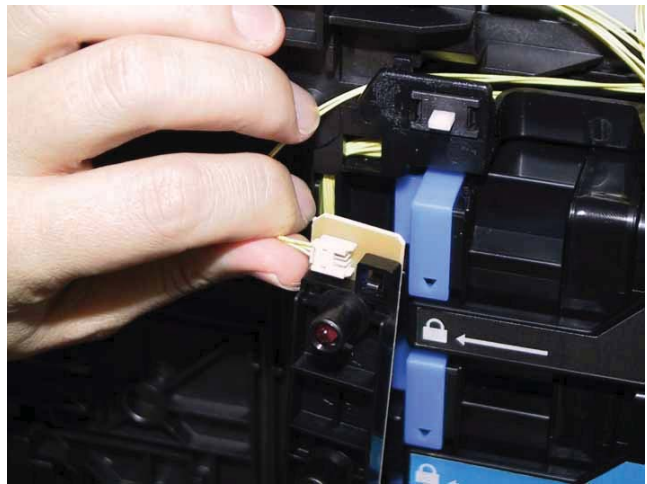
6) Remove the two screws (silver, tap, 8mm) that fix the LED ASSY ERASE (PL4.1.8) to the printer.



7) Remove the LED ASSY ERASE from the printer.



8) Disengage the connector (P/J141) of the LED ASSY ERASE.



Removal 15 KIT BLOCK PHD RIGHT (PL4.1.97)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

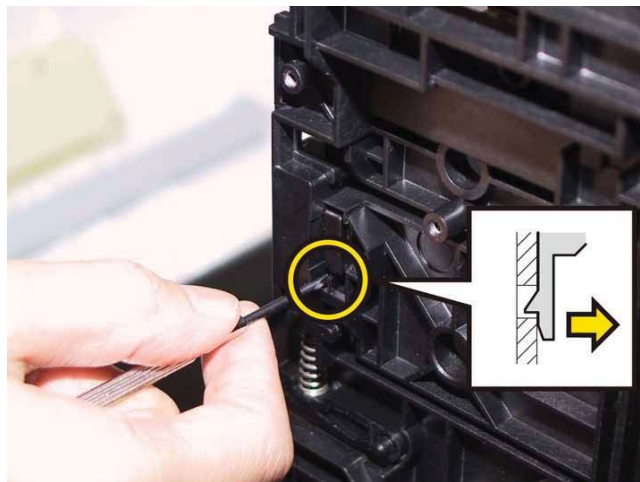
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

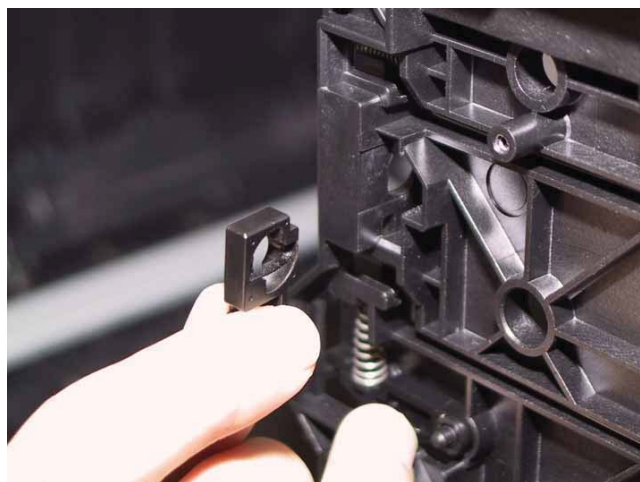
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the LED ASSY ERASE. (Removal 14)

Note: Described below is the removal procedure common among the upper and lower BLOCK STOPPER PHD ADs (PL4.1.7).

7) Release the hook of the BLOCK STOPPER PHD AD (PL4.1.7), using a miniature screwdriver.



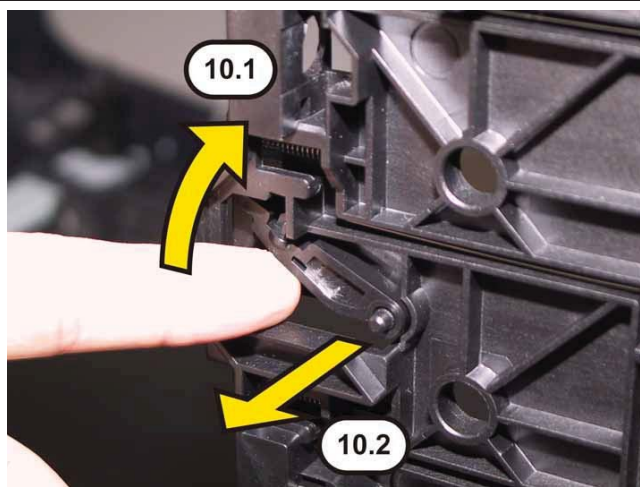
8) Remove the BLOCK STOPPER PHD AD from the printer.



9) Remove the SPRING PHD (PL4.1.4) from the printer.



10) Rotate the LEVER PHD (PL4.1.5) slightly, remove the LEVER PHD from the printer.



Removal 16 SENSOR HUM (PL8.1.10)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

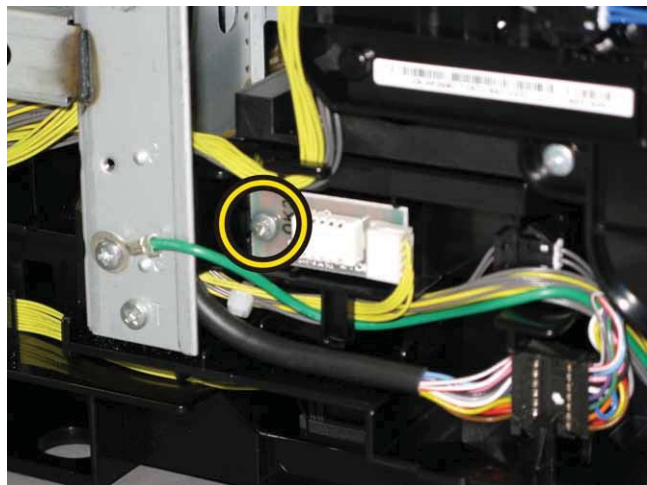
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

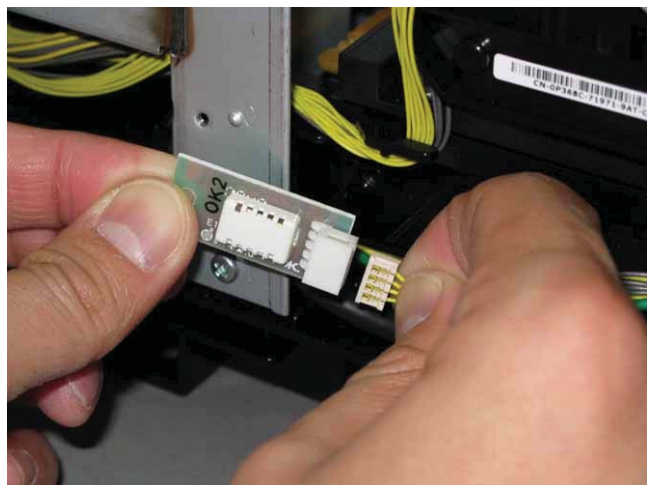
- 4) Remove the FUSER ASSY. (Removal 4)

- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

6) Remove the one screw (silver, tap, 8mm) that fixes the SENSOR HUM (PL8.1.10) to the printer, remove the SENSOR HUM.



7) Disengage the connector (P/J201) of the SENSOR HUM.



Removal 17 KIT PIVOT (PL6.1.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

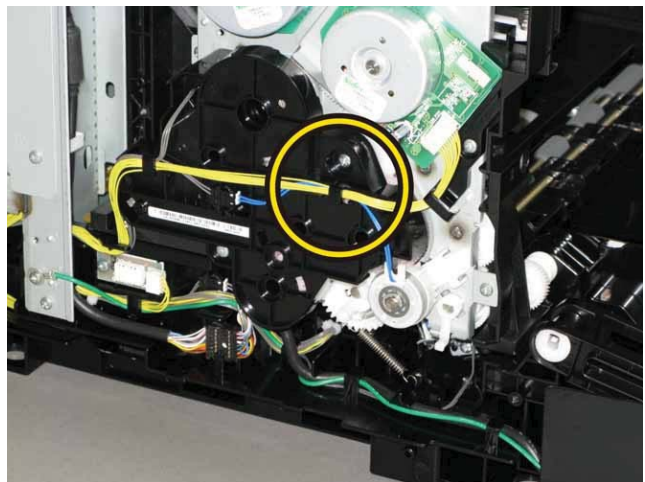
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

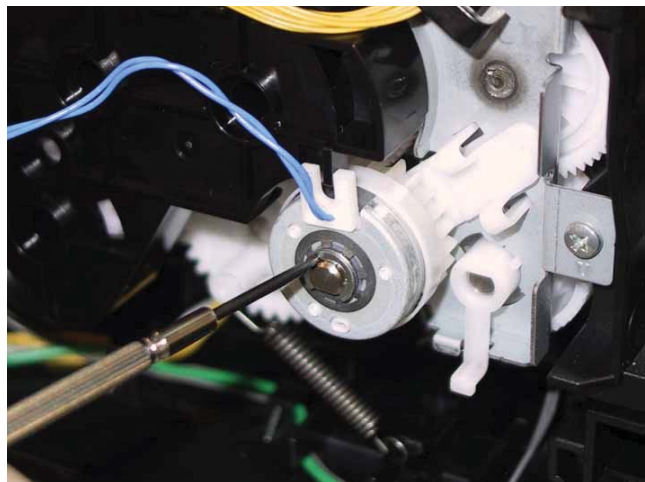
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)

Note: When performing the step described below, it is not necessary to disengage the connector of the CLUTCH ASSY DRV.

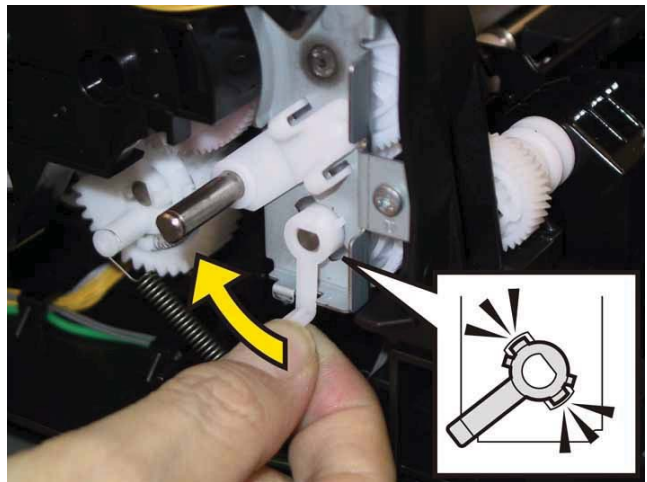
- 7) Release the harness of the CLUTCH ASSY DRV (PL3.1.1) from the hook of the DRIVE ASSY PH (PL7.1.4).



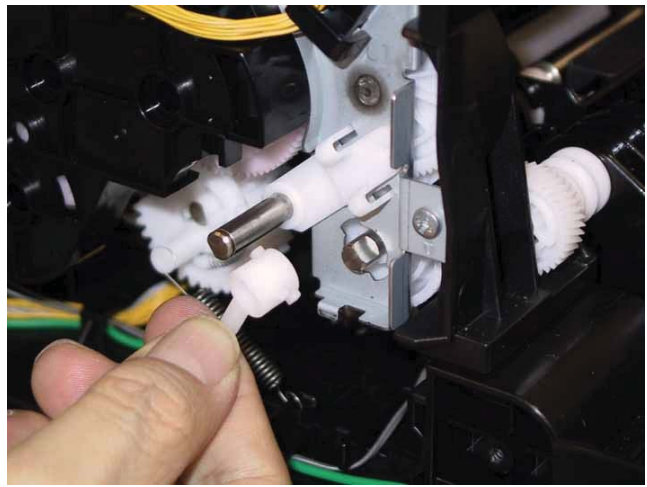
- 8) Remove the E-ring that fixes the CLUTCH ASSY DRV to the shaft, using a miniature screwdriver, remove the CLUTCH ASSY DRV.



9) Rotate the STOPPER PIVOT (PL6.1.3), mate the tabs of the STOPPER PIVOT with the notches of the DRIVE ASSY MAIN (PL7.1.2).

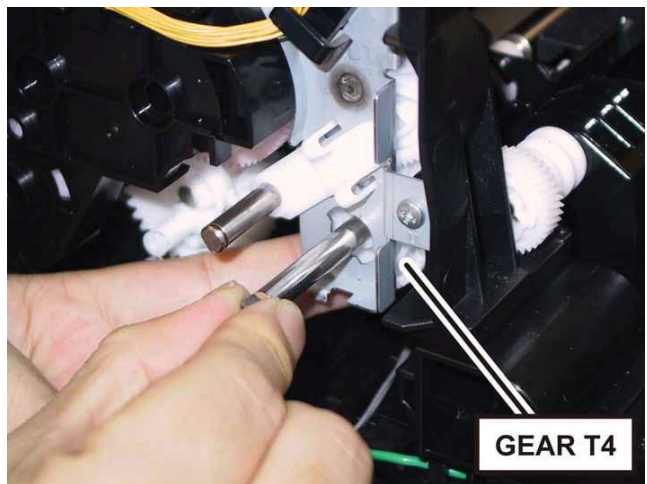


10) Remove the STOPPER PIVOT from the printer.

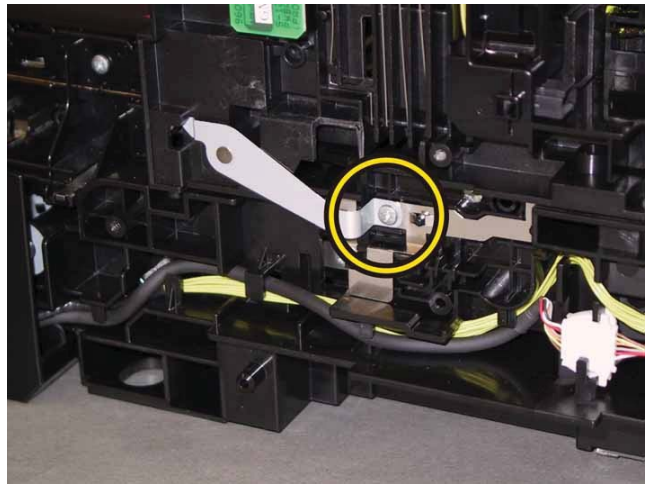


Note: When carrying out the work described next procedure, take care not to drop the GEAR T4.

11) Pull out the PIVOT TRANS L (PL6.1.4), remove the GEAR T4 (PL6.1.5) from the printer.



12) Remove the one screw (silver, tap, 8mm) that fixes the SHAFT ASSY PIVOT (PL6.1.6) to the printer.



Note: When carrying out the work described next procedure, keep the TRANSFER ASSY slightly lifted for ease of work.

13) Pull out the SHAFT ASSY PIVOT from the printer.



Removal 18 KIT TRANSFER ASSY (PL6.1.98)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

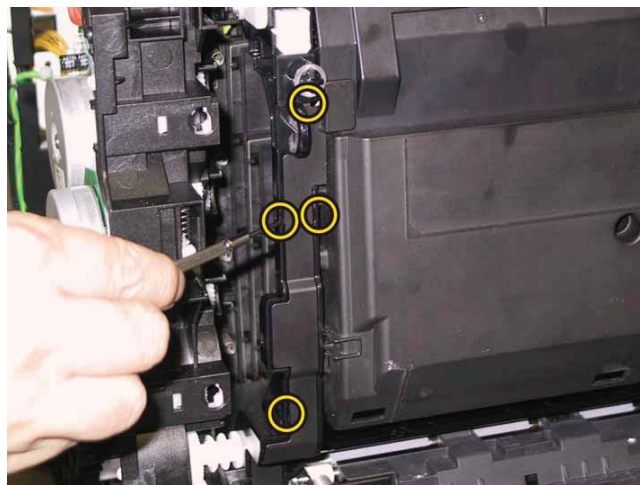
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Close the TRANSFER ASSY (PL6.1.7).

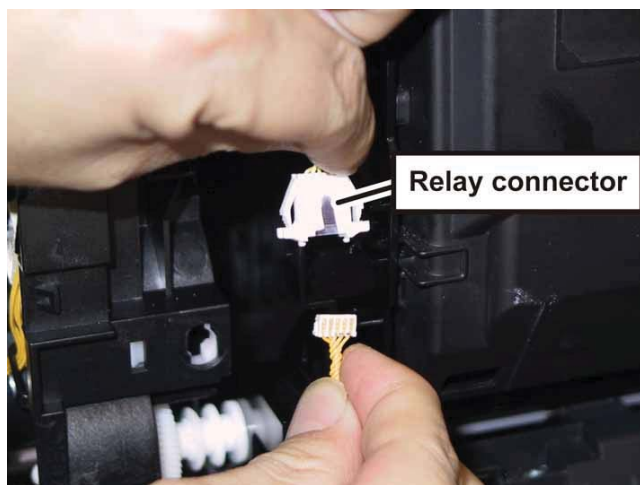
Note: When carrying out the work described next procedure, take care not to scratch the belt surface of the TRANSFER ASSY.

8) Release the hooks of the COVER HARNESS (PL6.1.8), using a miniature screwdriver, and then remove the COVER HARNESS.

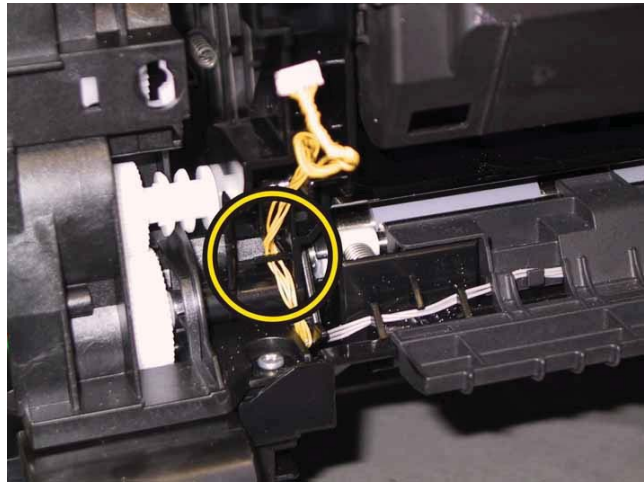


Note: When carrying out the work described below, leave the relay connector on the TRANSFER ASSY harness side.

9) Release the harness from the pegs of the TRANSFER ASSY, disengage the connector (P/J281) of the TRANSFER ASSY.

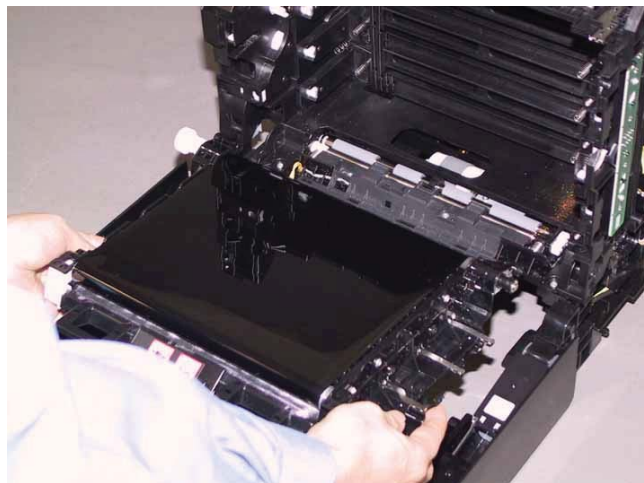


10) Release the harness coming from printer from hook of the TRANSFER ASSY.



11) Tilt the TRANSFER ASSY slowly.
12) Remove the KIT PIVOT. (Removal 17)

13) Remove the TRANSFER ASSY from the printer.



Removal 19 SENSOR PHOTO: SSI NO PAPER (PL3.2.13)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

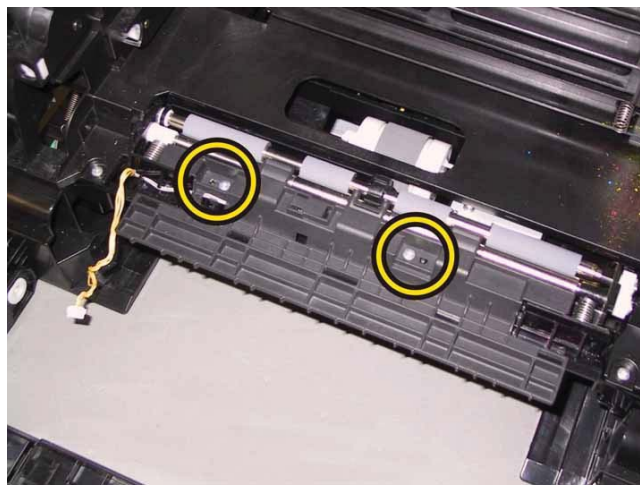
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

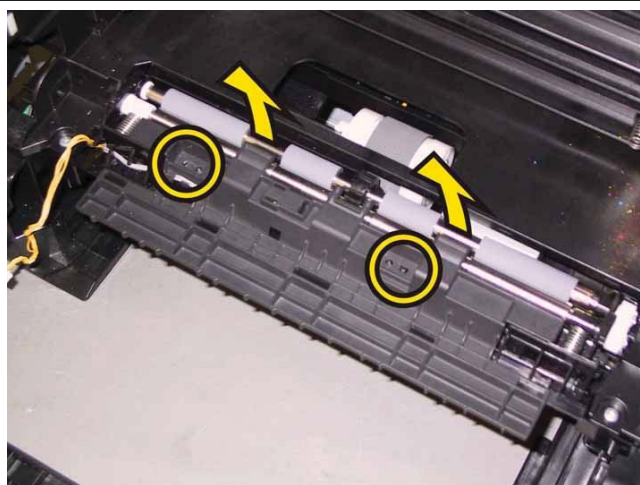
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the KIT TRANSFER ASSY. (Removal 18)

Note: When carrying out the work described next procedure, take care not to move the BRACKET SNS from the printer too far because they are connected with the harness.

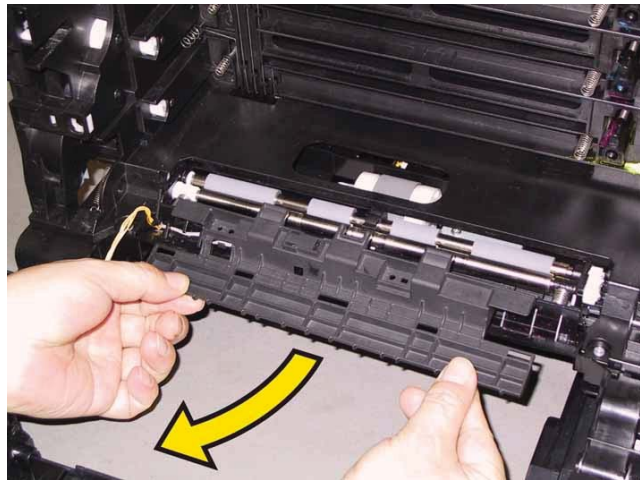
- 8) Remove the two screws (silver, tap, 8mm) that fix the BRACKET SNS (PL3.2.28) to the printer, remove the BRACKET SNS.



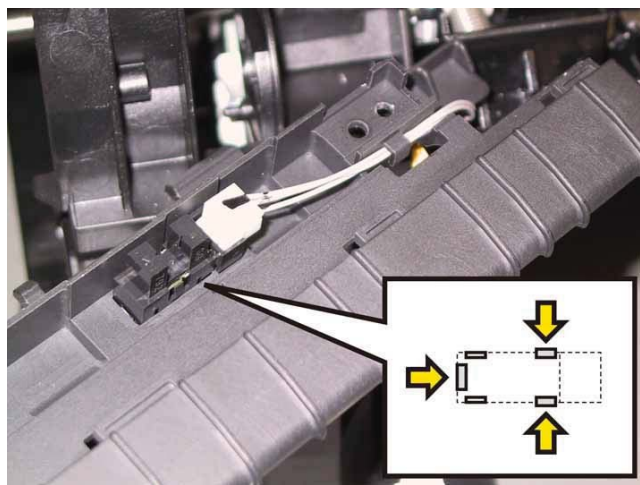
- 9) Lift the rear part of the BRACKET SNS up to release the two holes of the BRACKET SNS from the bosses of the printer.



10) Shift the BRACKET SNS to frontward, release the five tabs of the BRACKET SNS from the printer. Remove the BRACKET SNS.



11) Release the three hooks that fix the SENSOR PHOTO: SSI NO PAPER (PL3.2.13) to the BRACKET SNS, and remove the SENSOR PHOTO: SSI NO PAPER.



12) Disengage the connector (P/J233) of the SENSOR PHOTO: SSI NO PAPER.



Removal 20 ACTUATOR SSI (PL3.2.14)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

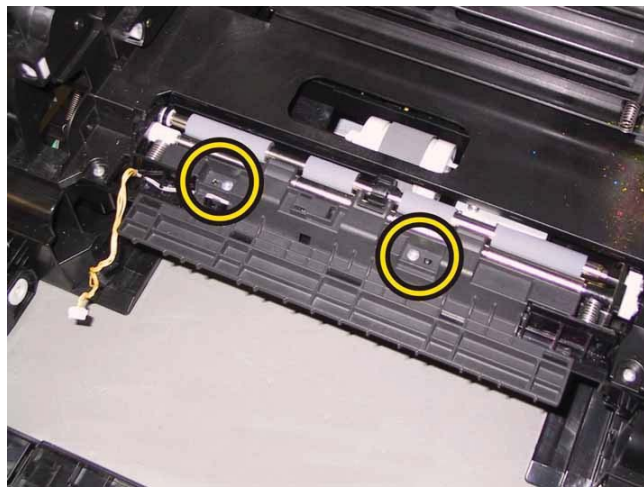
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

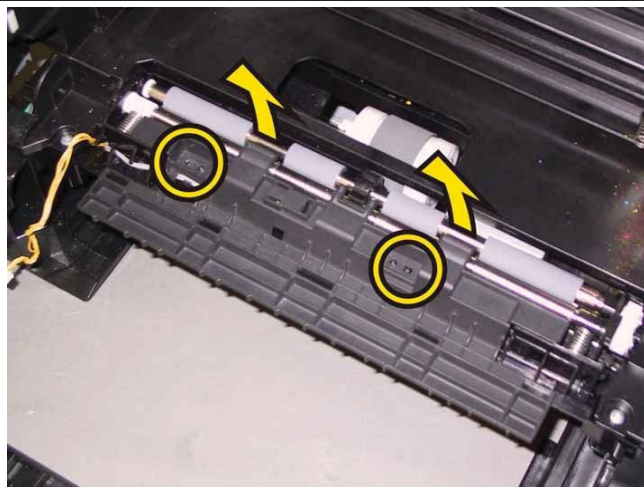
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the KIT TRANSFER ASSY. (Removal 18)

Note: When carrying out the work described next procedure, take care not to move the BRACKET SNS from the printer too far because they are connected with the harness.

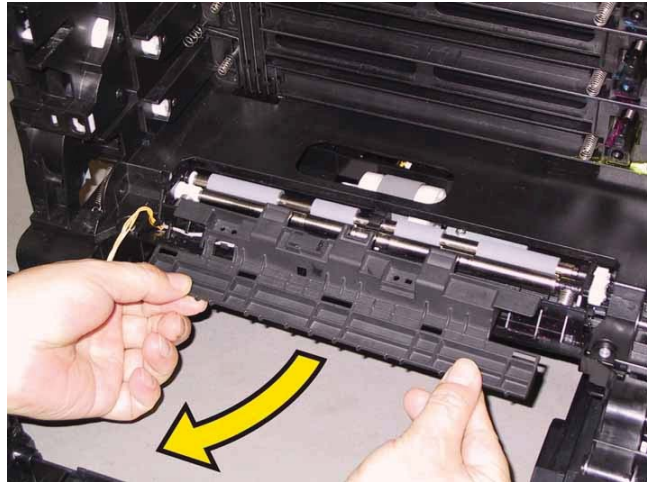
- 8) Remove the two screws (silver, tap, 8mm) that fix the BRACKET SNS (PL3.2.28) to the printer, remove the BRACKET SNS.



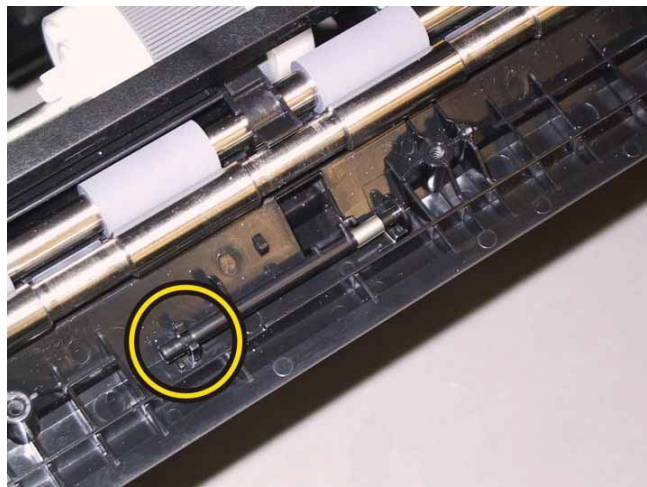
- 9) Lift the rear part of the BRACKET SNS up to release the two holes of the BRACKET SNS from the bosses of the printer.



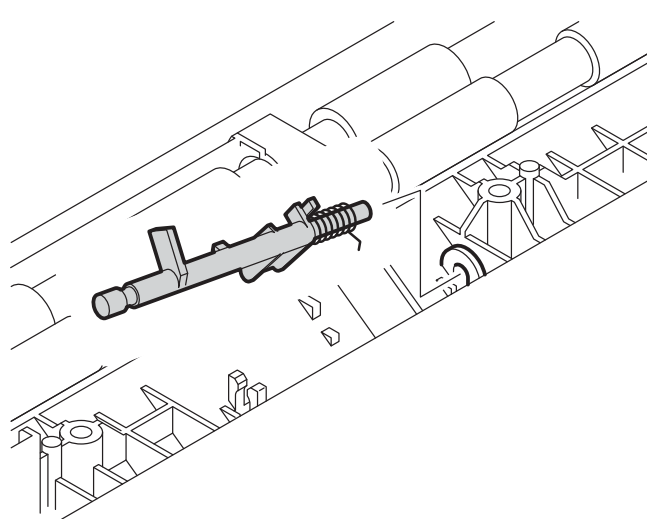
10) Shift the BRACKET SNS to frontward, release the five tabs of the BRACKET SNS from the printer. Remove the BRACKET SNS.



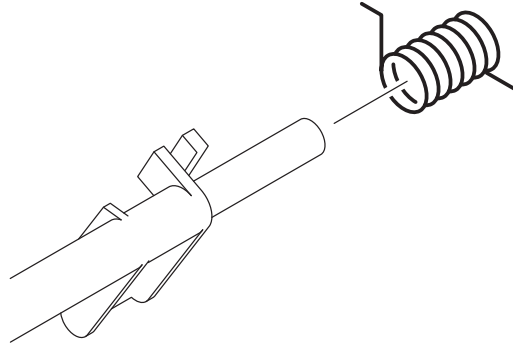
11) Release the left shaft of the ACTUATOR SSI (PL3.2.14) from the hook of the CHUTE UP (PL3.2.26).



12) Remove the ACTUATOR SSI and the SPRING ACT SSI (PL3.2.15) by releasing the right shaft of the ACTUATOR SSI from the hole of the CHUTE UP.



13) Remove the SPRING ACT SSI from the ACTUATOR SSI.



Removal 21 FEEDER ASSY DUP AIO STD (PL11.1.1) [2155cdn Only]

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

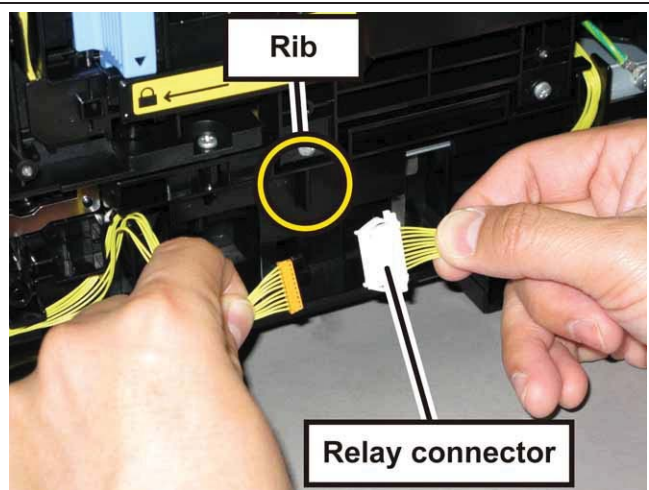
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

Note: When carrying out the work described next procedure, leave the relay connector on the printer harness side.

6) Release the relay connector from the rib of the printer, disengage the connector (P/J271) of the HARNESS ASSY DUP STD MG AIO (PL11.1.14).



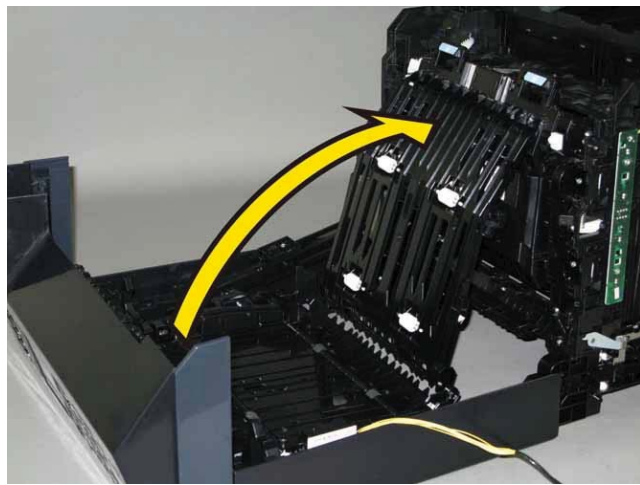
7) Release the HARNESS ASSY DUP STD MG AIO from the hooks of the printer.



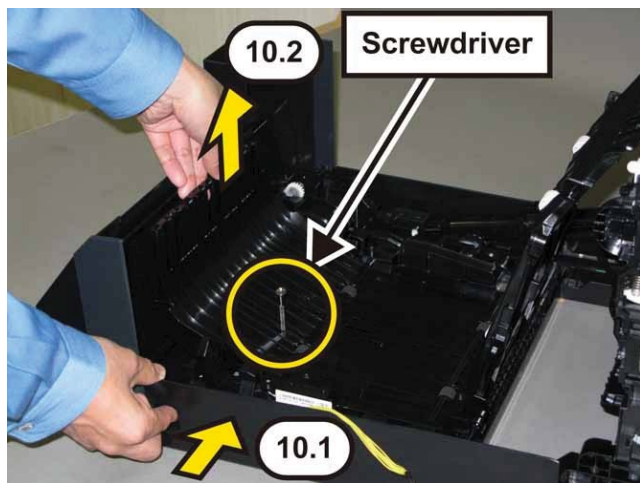
8) Release the HARNESS ASSY DUP STD MG AIO from the hooks of the HOLDER FRONT R AIO (PL1.2.24).



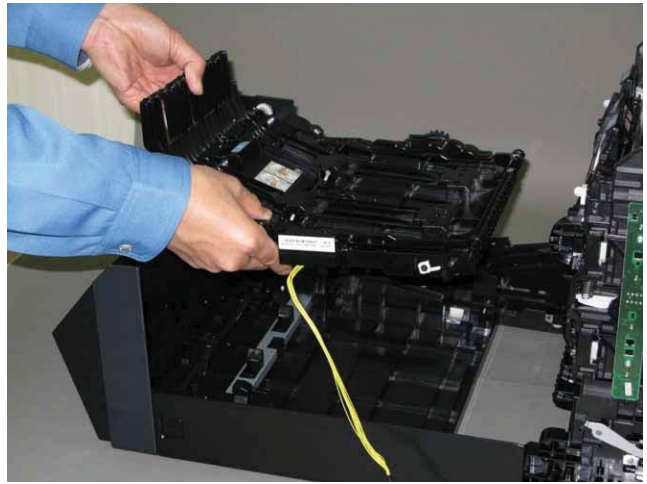
9) Open the CHUTE DUP IN (PL11.1.2).



10) Through the hole indicated by the arrow, insert a screwdriver and press the LATCH BUTTON to unlock the FEEDER ASSY DUP AIO STD (PL11.1.1).



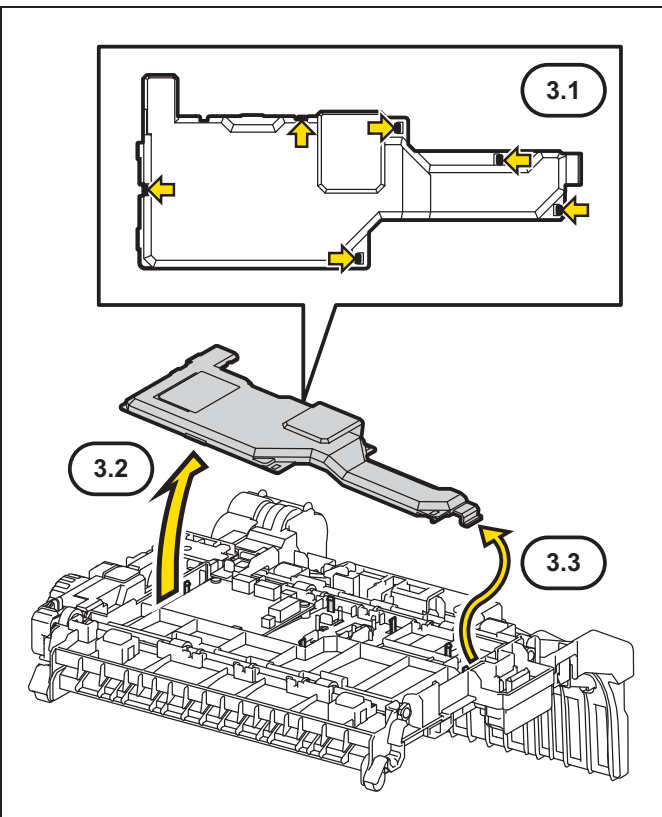
11) Lift up the FEEDER ASSY DUP AIO STD from the printer.



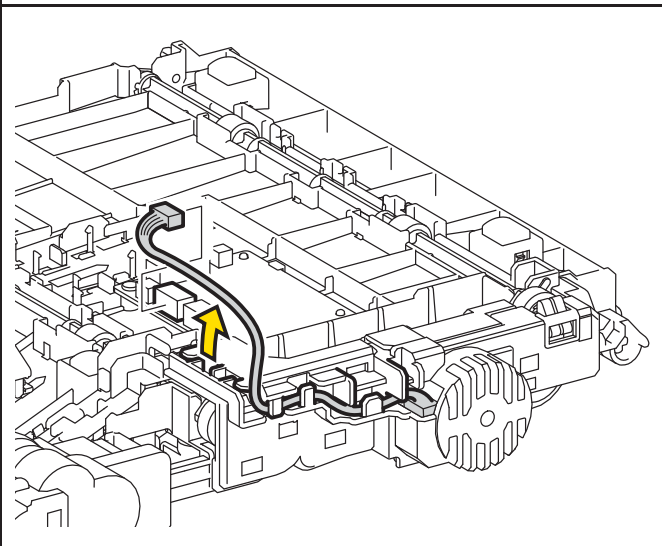
Removal 22 ROLLER ASSY DUP (PL11.2.9) [2155cdn Only]

- 1) Open the COVER ASSY FRONT MG (PL1.2.1).
- 2) Remove the FEEDER ASSY DUP AIO STD. (Removal 21)

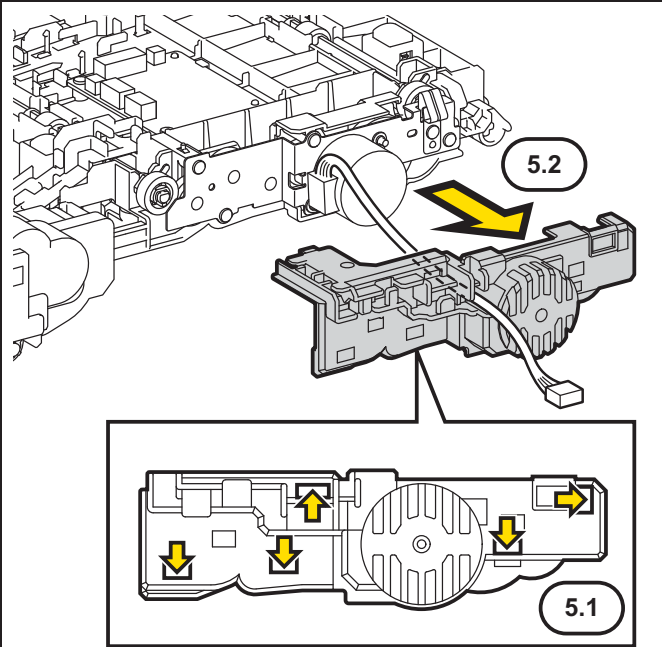
3) Release the six hooks that fixes the COVER PWBA DUP (PL11.1.15), remove the COVER PWBA DUP from the FEEDER ASSY DUP AIO STD (PL11.1.1).



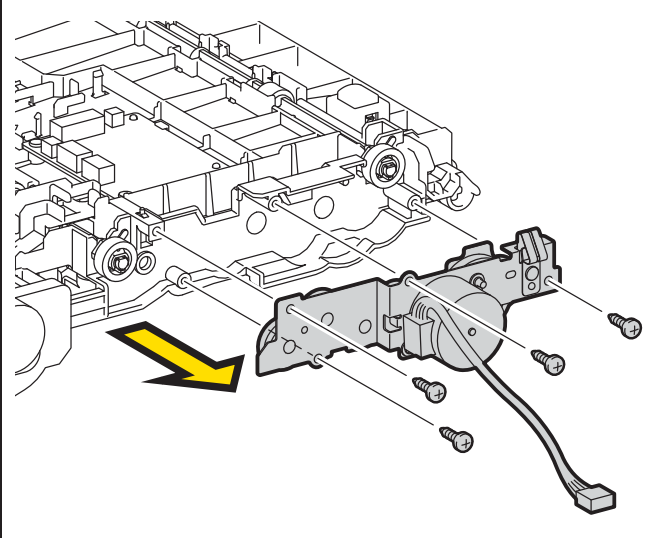
4) Disengage the connector (P/J603) of the DRIVE ASSY DUP (PL11.2.5) on the PWBA DUP (PL11.1.16), release the harness of the DRIVE ASSY DUP from the hooks of the COVER DRIVE DUP (PL11.2.3).



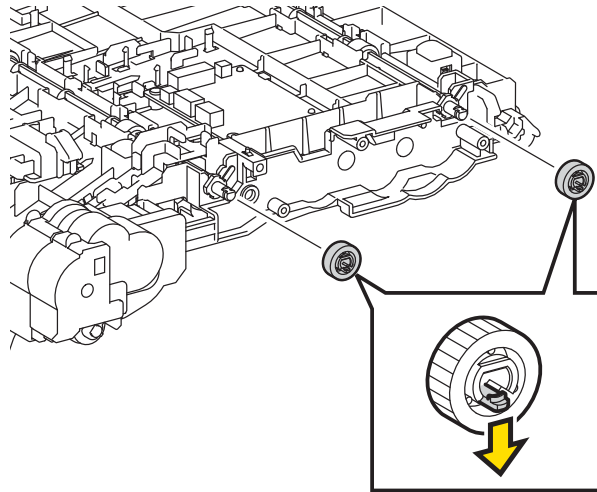
5) Release the five hooks of the COVER DRIVE DUP. Draw out the connector of the DRIVE ASSY DUP from the hole of the COVER DRIVE DUP, and then remove the COVER DRIVE DUP from the FEEDER ASSY DUP AIO STD.



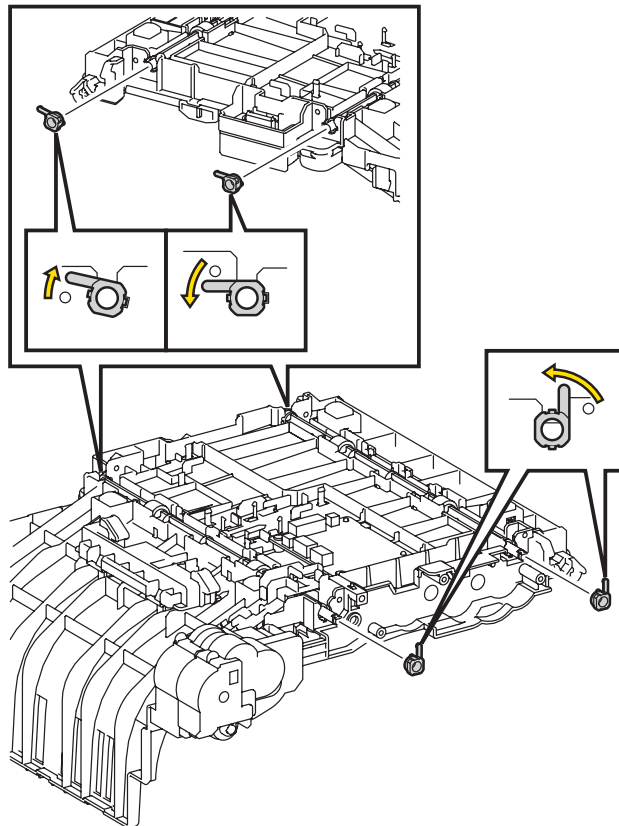
6) Remove the four screws (silver, tap, 8mm) that fix the DRIVE ASSY DUP to the FEEDER ASSY DUP AIO STD, remove the DRIVE ASSY DUP.



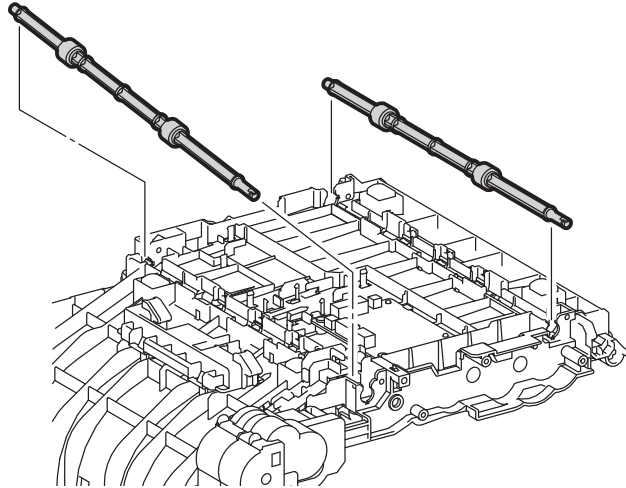
7) Release the hook of the GEAR ROLL DUP (PL11.2.6), remove the GEAR ROLL DUP from the ROLLER ASSY DUP (PL11.2.9).



8) Remove the BEARING DUP (PL11.2.7) that fixes the right and left sides of the ROLLER ASSY DUP by rotating in the direction shown by the arrow.



9) Remove the ROLLER ASSY DUP from the FEEDER ASSY DUP AIO STD.



Removal 23 CONSOLE ASSY PANEL AIO (PL1.2.3)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

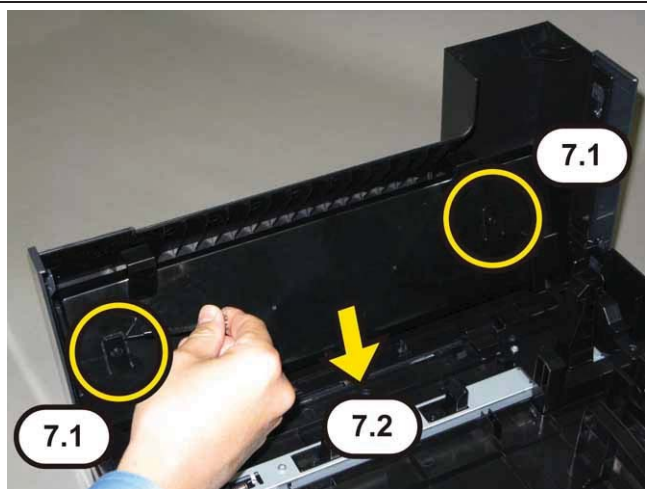
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the FEEDER ASSY DUP AIO STD. (Removal 21) [2155cdn Only]

7) Release the two holes of the COVER INNER FRONT AIO (PL1.2.4) from the two bosses of the CONSOLE ASSY PANEL AIO (PL1.2.3) using a miniature screwdriver, shift the COVER INNER FRONT AIO to lower side. Release the five hooks of the COVER INNER FRONT AIO.



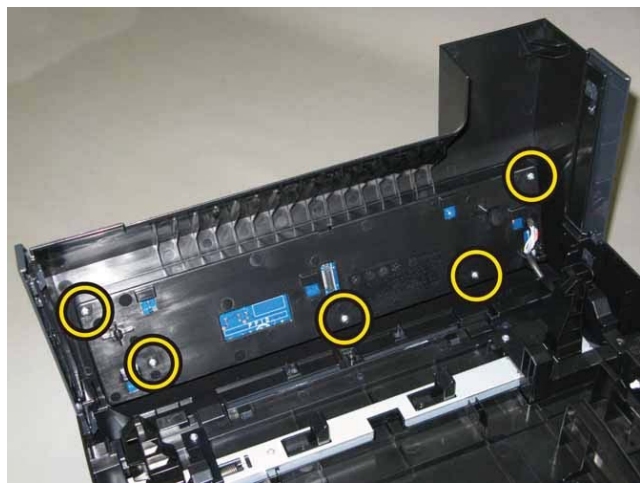
8) Remove the COVER INNER FRONT AIO from the COVER ASSY FRONT.



9) Disengage the connector (P/J202) of the CONSOLE ASSY PANEL AIO.

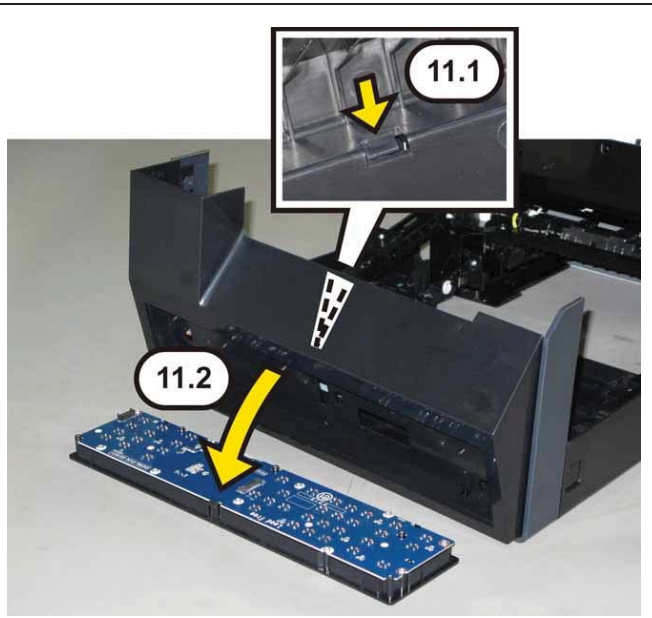


10) Remove the five screws (silver, tap, 8mm) that fix the CONSOLE ASSY PANEL AIO to the COVER ASSY FRONT.



Note: When carrying out the work described next procedure, take care not to drop the CONSOLE ASSY PANEL AIO.

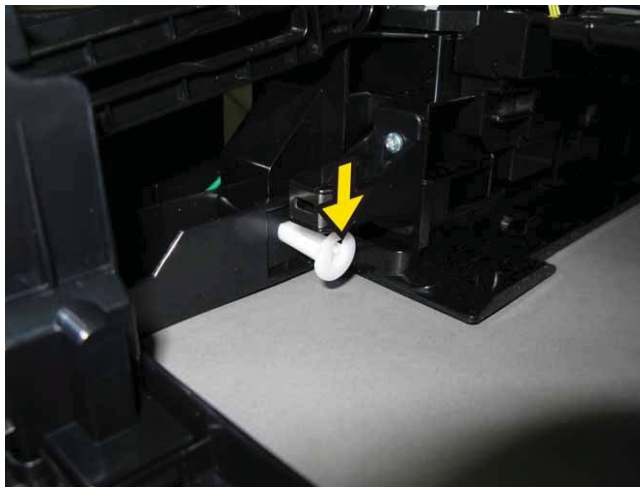
11) Release the three hooks of the CONSOLE ASSY PANEL AIO , remove the CONSOLE ASSY PANEL AIO from the COVER ASSY FRONT.



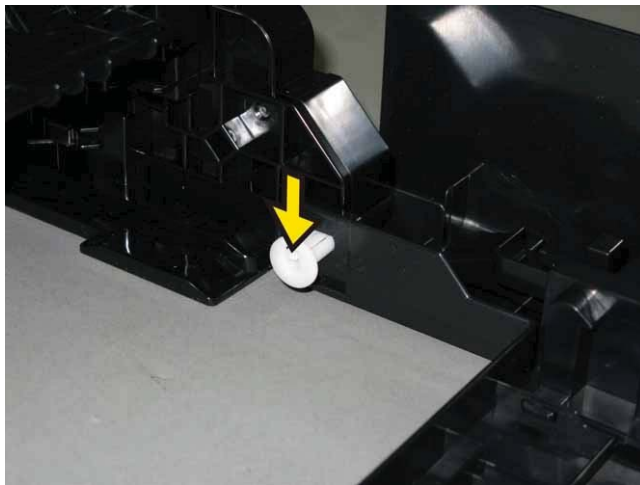
Removal 24 KIT SHAFT PIVOT (PL1.2.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

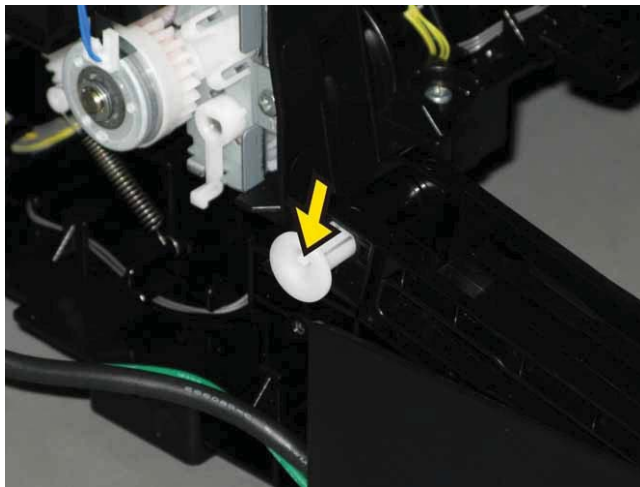
3) Release the hook of the SHAFT PIVOT (PL1.2.14), pull out the left side SHAFT PIVOT.



4) Release the hook of the SHAFT PIVOT, pull out the right side SHAFT PIVOT.



5) Release the hook of the SHAFT PIVOT, pull out the SHAFT PIVOT that is the fixation of the LINK ASSY FRONT AIO (PL1.2.28).



Removal 25 COVER ASSY FRONT (PL1.2.1)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

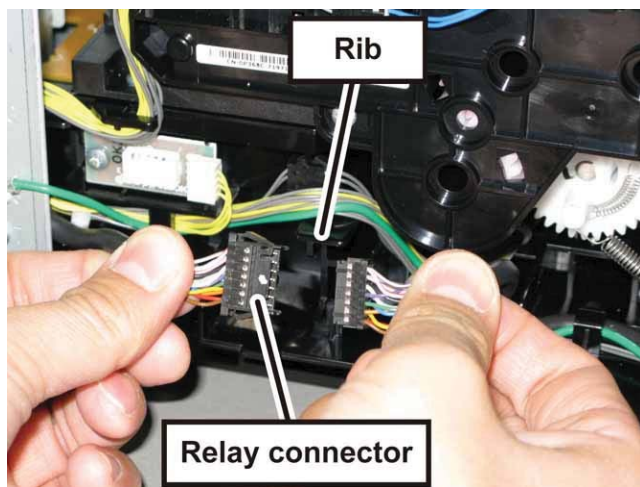
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

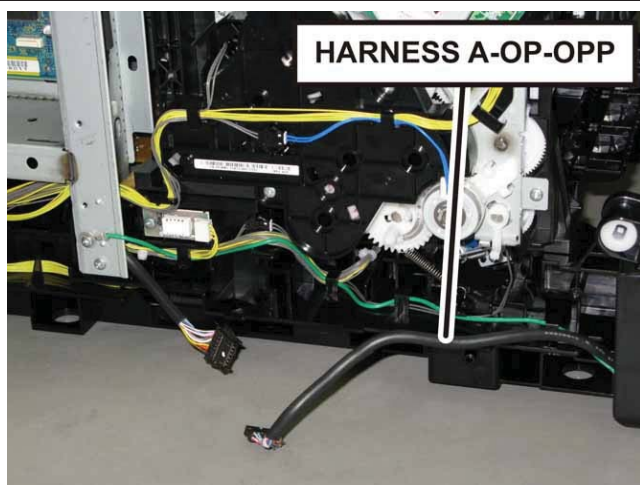
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the FEEDER ASSY DUP AIO STD. (Removal 21) [2155cdn Only]

Note: When carrying out the work described below, leave the relay connector on the printer side.

- 8) Release the relay connector from the rib of the printer, disengage the connector (P/J5301) of the HARNESS A-OP-OPP (PL1.2.27).

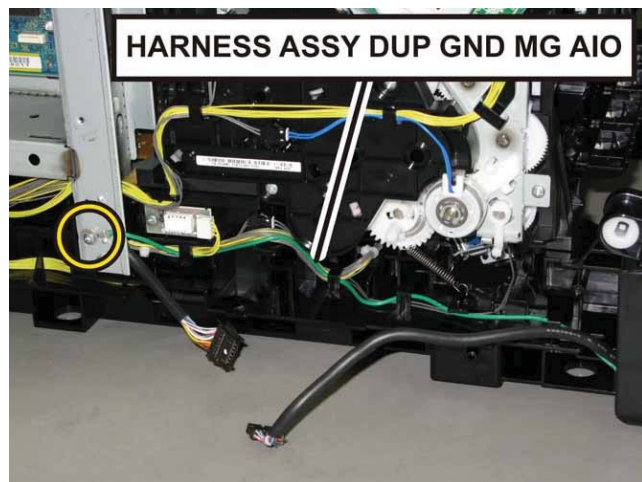


- 9) Release the HARNESS A-OP-OPP from the hooks of the printer.



10) Remove the one screw (silver, 6mm) that fixes the grounding terminal of the HARNESS ASSY DUP GND MG AIO (PL1.2.15), release the HARNESS ASSY DUP GND MG AIO from the hooks of the printer.

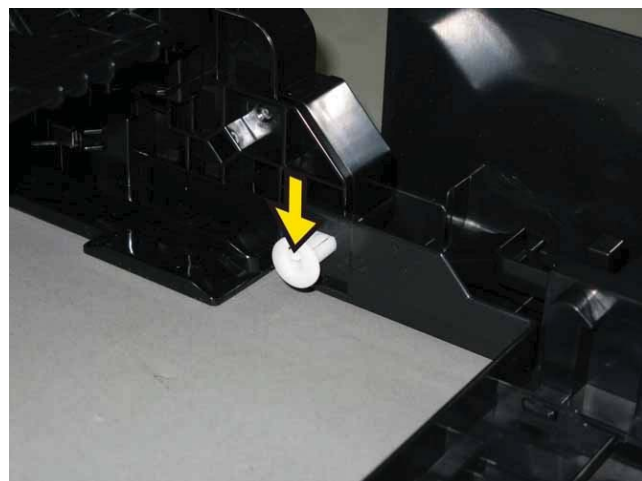
Note: This step is only 2155cdn.



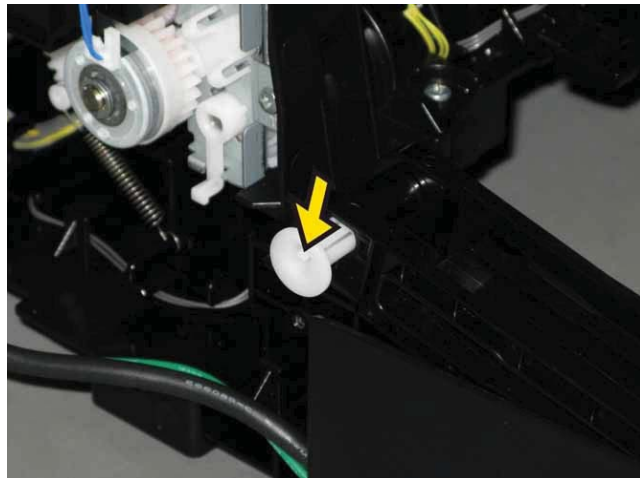
11) Release the hook of the SHAFT PIVOT (PL1.2.14), pull out the left side SHAFT PIVOT.



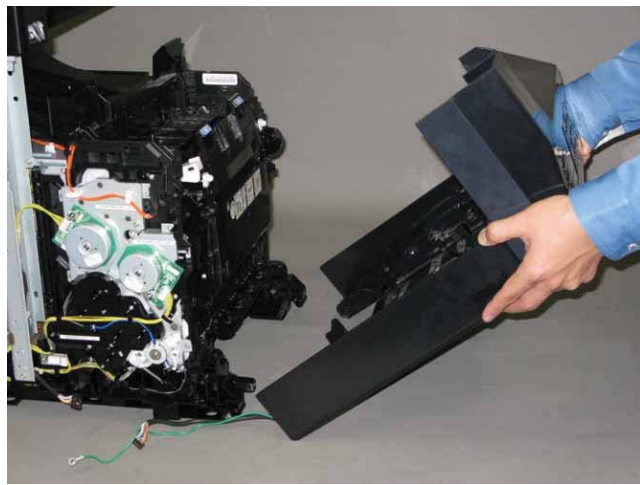
12) Release the hook of the SHAFT PIVOT, pull out the right side SHAFT PIVOT.



13) Release the hook of the SHAFT PIVOT, pull out the SHAFT PIVOT that is the fixation of the LINK ASSY FRONT AIO (PL1.2.28).



14) Lift the COVER ASSY FRONT (PL1.2.1) slightly up to remove the COVER ASSY FRONT from the printer.



Removal 26 SHIELD ASSY ESS AIO (PL8.1.7)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

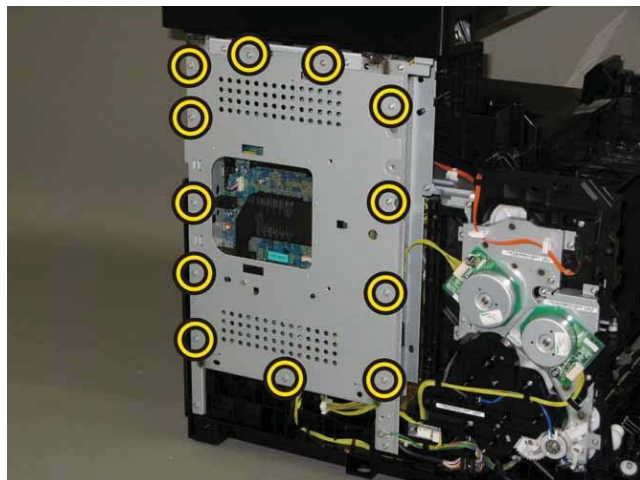
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

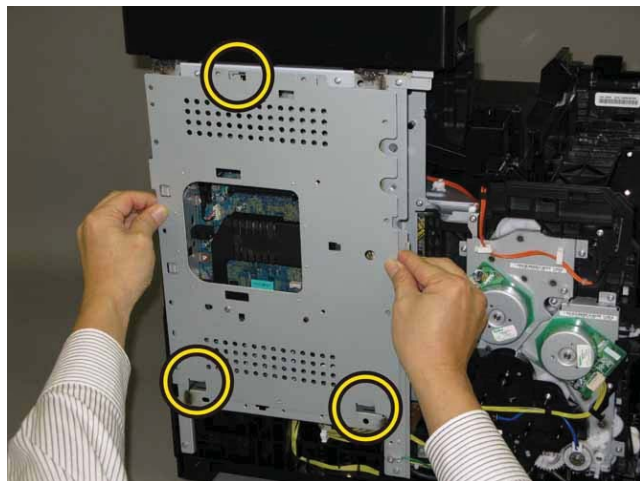
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)

- 7) Remove the twelve screws (silver, 6mm) that fix the SHIELD ASSY ESS AIO (PL8.1.7) to the printer.



- 8) Lift the SHIELD ASSY ESS AIO slightly up to release the three tabs of the SHIELD ASSY ESS AIO, remove the SHIELD ASSY ESS AIO from the printer.



Removal 27 PWBA FAX (PL8.1.5)

Note: Use the wrist strap to protect the PWB from the electrostatic.

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 7) Remove the SHIELD ASSY ESS AIO. (Removal 26)

- 8) Remove the two screws (silver, 6mm) that fix the PWBA FAX (PL8.1.5) to the printer.



- 9) Remove the PWBA FAX from the PWBA ESS AIO (PL8.1.2).



Removal 28 KIT PWBA ESS AIO (PL8.1.99)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)

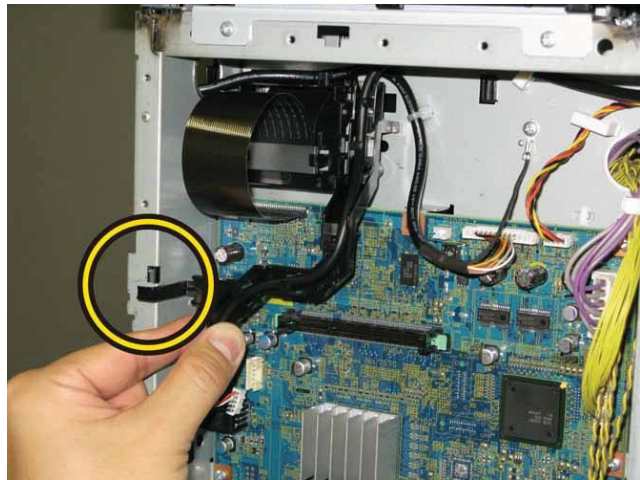
7) Remove the SHIELD ASSY ESS AIO. (Removal 26)

8) Remove the PWBA FAX. (Removal 27)

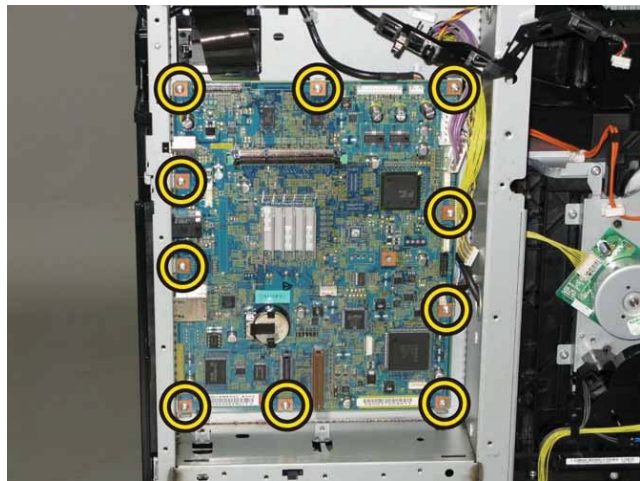
9) Disengage all the connectors of the PWBA ESS AIO (PL8.1.2).



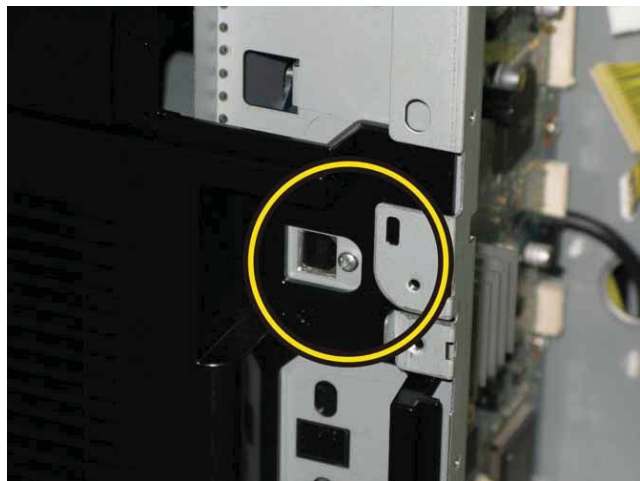
10) Release the hook of the GUIDE HARNESS USB (PL8.4.5), remove the GUIDE HARNESS USB from the printer.



11) Remove the ten screws (silver, 6mm) that fix the PWBA ESS AIO to the printer.



12) Remove the one screw (silver, 4mm) that fixes the USB connector of the PWBA ESS AIO to the printer.



13) Remove the PWBA ESS AIO from the printer.



Removal 29 COVER POLE IN AIO (PL1.1.3)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

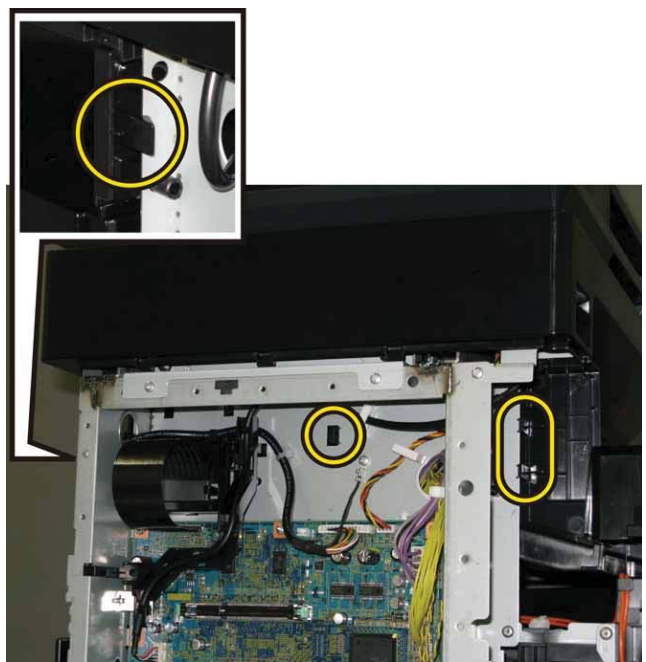
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 7) Remove the SHIELD ASSY ESS AIO. (Removal 26)

- 8) Release the four hooks of the COVER POLE IN AIO (PL1.1.3).



- 9) Remove the COVER POLE IN AIO from the printer.



Removal 30 COVER SCANNER LOW AIO (PL1.1.2)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 7) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 8) Remove the COVER POLE IN AIO. (Removal 29)

9) Shift the COVER SCANNER LOW AIO to right side, release the four hooks of the COVER SCANNER LOW AIO. Remove the COVER SCANNER LOW AIO from the printer.



Removal 31 COVER REAR AIO (PL1.1.5)

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

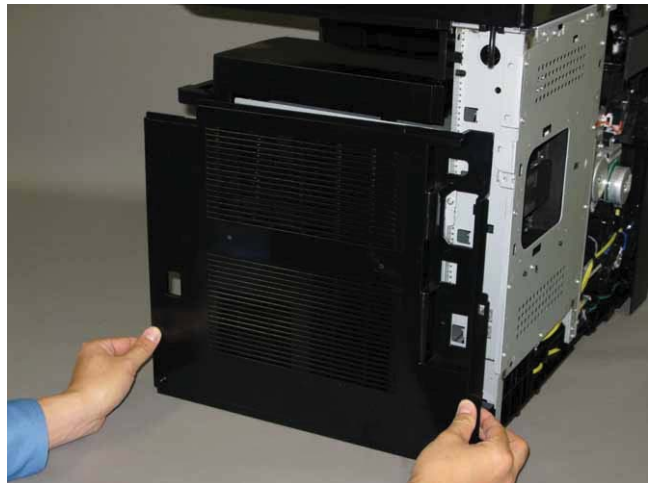
5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

6) Remove the COVER ASSY SIDE L AIO. (Removal 10)

7) Remove the two screws (silver, tap, 8mm) that fix the COVER REAR AIO (PL1.1.5) to the printer.



8) Remove the COVER REAR AIO from the printer.



Removal 32 COVER TOP AIO (PL1.1.4)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER REAR AIO. (Removal 31)

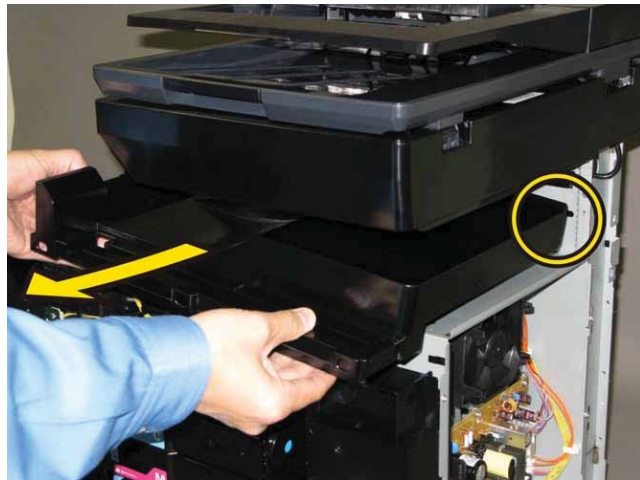
- 11) Remove the two screws (silver, tap, 8mm) that fix the COVER TOP AIO (PL10.1.4) to the printer.



- 12) Lift up the front side of the COVER TOP AIO to release the COVER TOP AIO from the two pegs on the printer.



13) Remove the boss of the COVER TOP AIO from the hole of the printer, remove the COVER TOP AIO from the printer.



Removal 33 PWBA LVPS (PL8.2.12)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE R AIO. (Removal 7)

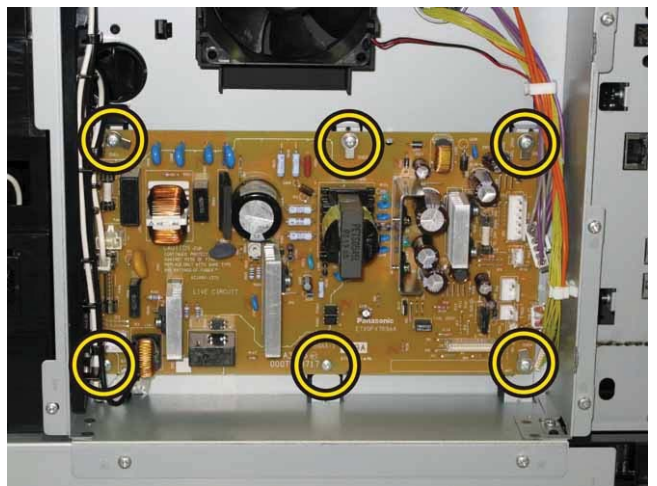
6) Remove the COVER ASSY SIDE L AIO. (Removal 10)

7) Remove the COVER REAR AIO. (Removal 31)

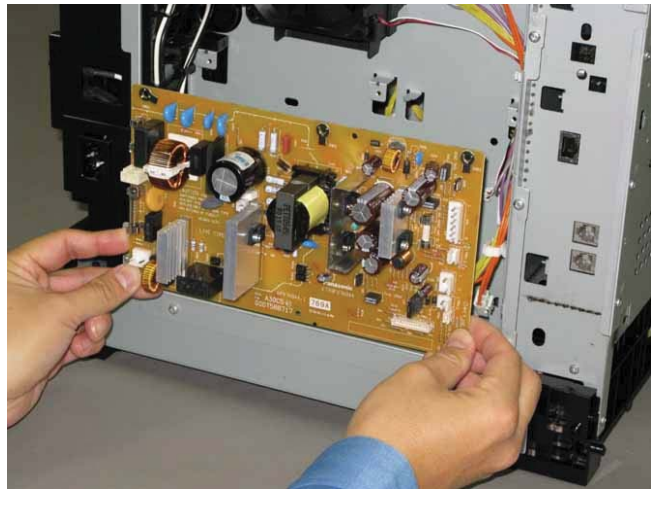
8) Disengage all the connectors of the PWBA LVPS (PL8.2.12).



9) Remove the six screws (silver, 6mm) that fix the PWBA LVPS to the printer.



10) Remove the PWBA LVPS from the printer.



Removal 34 DUCT FAN ASSY AIO (PL8.2.7)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER REAR AIO. (Removal 31)

8) Disengage the DUCT FAN ASSY AIO (PL8.2.7) connector (P/J503) on the PWBA LVPS (PL8.2.12), release the harness of the DUCT FAN ASSY AIO from the clamp.



9) Release the four hooks of the DUCT FAN ASSY AIO, remove the DUCT FAN ASSY AIO from the printer.



Removal 35 SWITCH (PL5.1.9)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

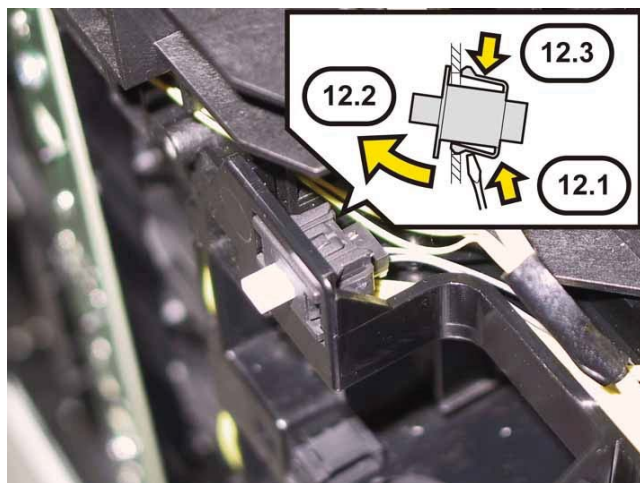
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER REAR AIO. (Removal 31)
- 11) Remove the COVER TOP AIO. (Removal 32)

12) Release the hooks of the SWITCH (PL5.1.9) by using the miniature screwdriver, remove the SWITCH from the printer.



13) Disengage the connector (P/J291) of the SWITCH.



Removal 36 HARN ASSY INTERLOCK AIO (PL8.1.1)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

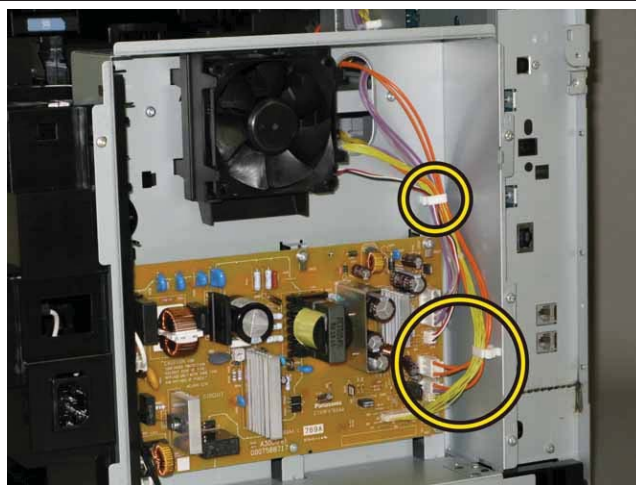
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

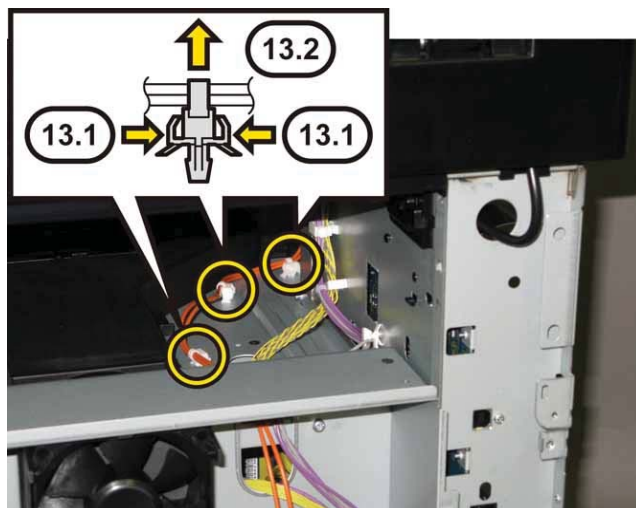
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER REAR AIO. (Removal 31)
- 11) Remove the COVER TOP AIO. (Removal 32)

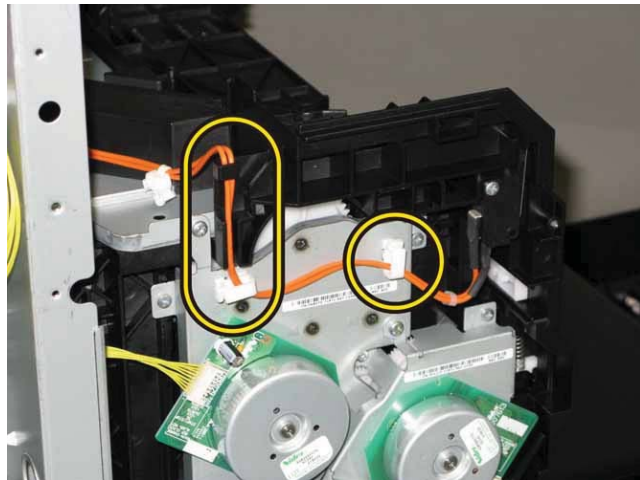
12) Disengage the HARN ASSY INTERLOCK AIO (PL8.1.1) connector (P/J44) on the PWBA LVPS (PL8.2.12), release the harness of the HARN ASSY INTERLOCK AIO from the two clamps.



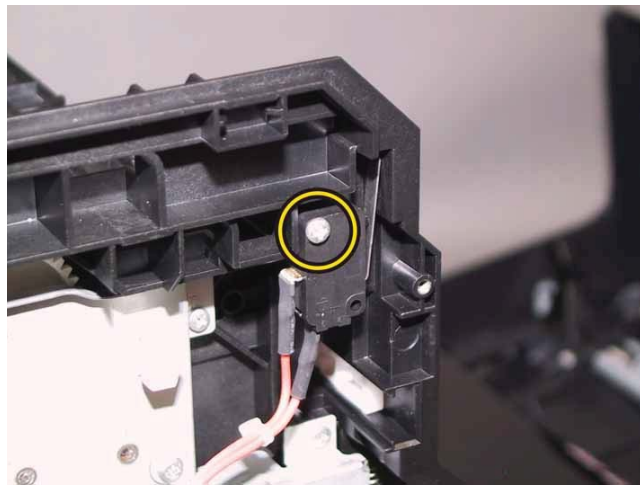
13) Remove the three clamps on the PLATE ASSY TOP (PL8.2.2) that fix the harness of the HARN ASSY INTERLOCK AIO, pull the harness of the HARN ASSY INTERLOCK AIO out from the hole of the CHASSIS LVPS (PL8.2.13).



14) Release the clamps that fix the harness of the HARN ASSY INTERLOCK AIO, remove the harness.



15) Remove the one screw (sliver, tap, 16mm) that fixes the HARN ASSY INTERLOCK AIO to the printer, remove the HARN ASSY INTERLOCK AIO.



Removal 37 CHASSIS ASSY LVPS (Reference only)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

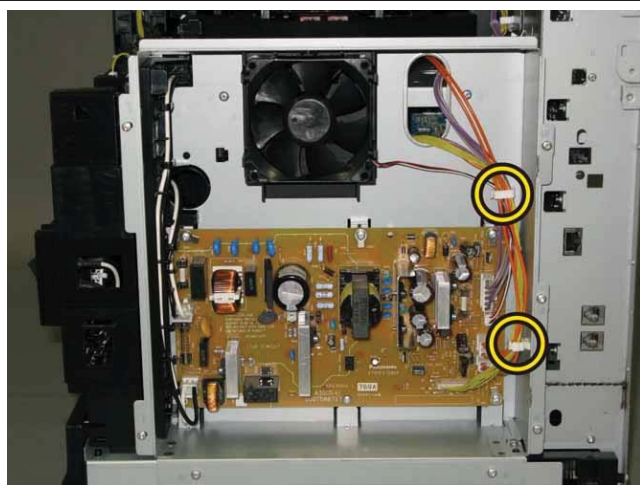
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

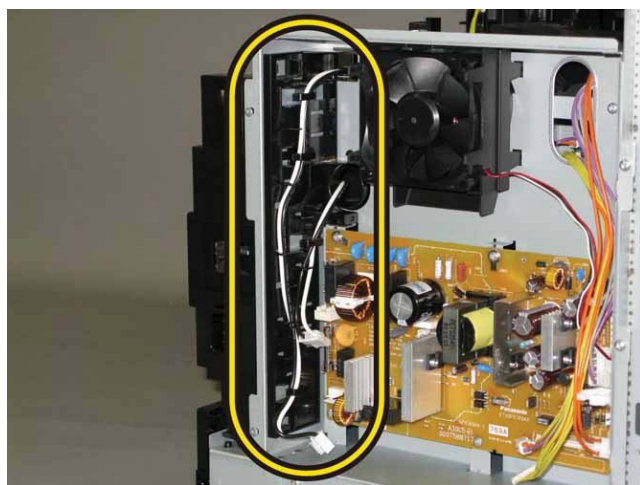
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER REAR AIO. (Removal 31)
- 11) Remove the COVER TOP AIO. (Removal 32)

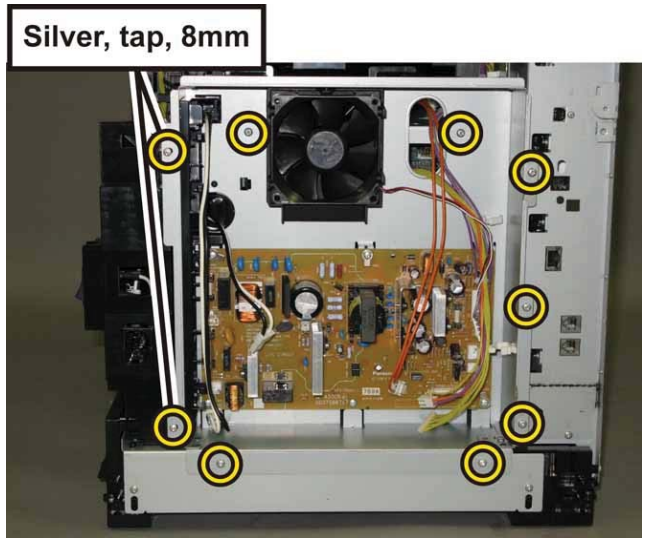
12) Disengage all the connectors of the PWBA LVPS (PL8.2.12), release the harnesses from the two clamps on the CHASSIS LVPS (PL8.2.13).



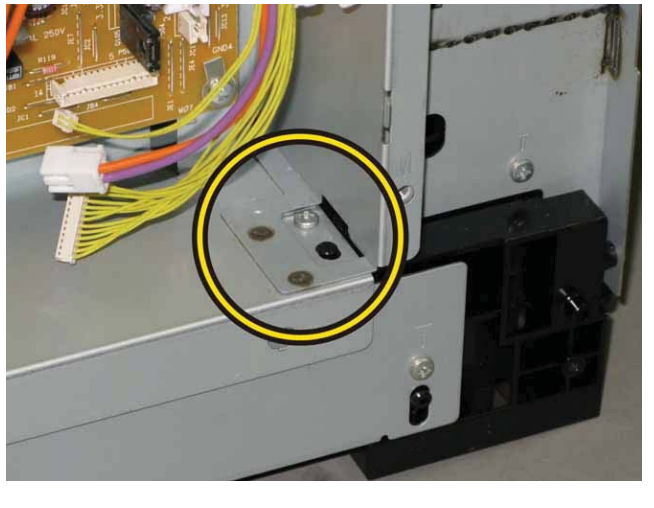
13) Release the harness of the HARNESS ASSY FUSER MG AIO (PL6.1.2) and harness of the SWITCH ASSY INLET MG AIO (PL8.3.7) from the GUIDE HARNESS LVPS (PL8.2.11).



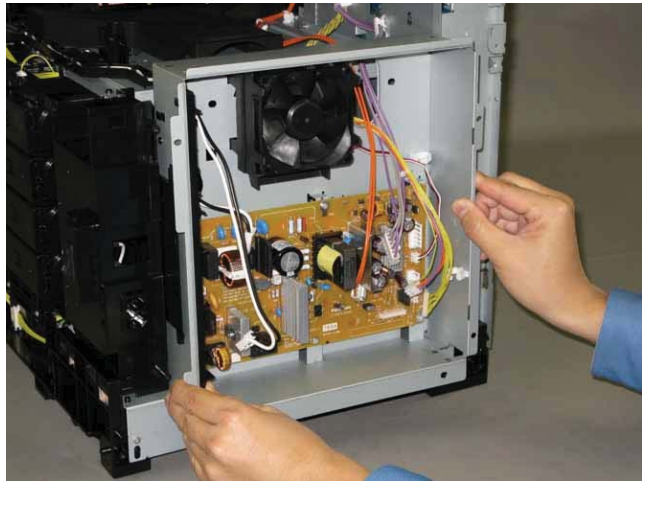
14) Remove the seven screws (silver, M4, 6mm) and the two screws (silver, tap, 8mm) that fix the CHASSIS LVPS to the printer.



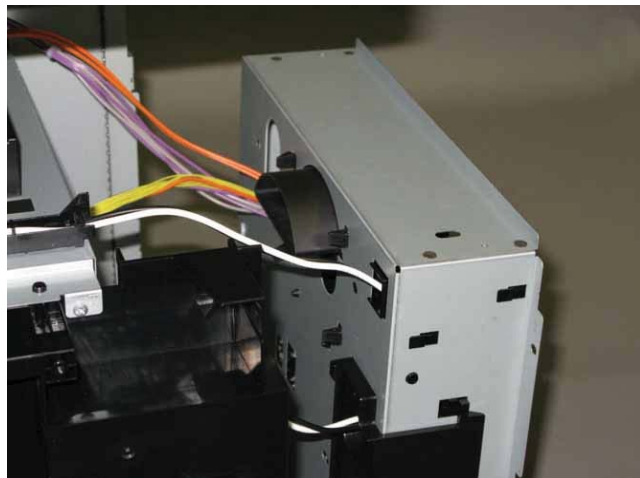
Note: When carrying out the work described next procedure, lift the CHASSIS LVPS slightly up, because the notch of the CHASSIS LVPS hits the screw.



15) Move the CHASSIS LVPS with the PWBA LVPS and the DUCT FAN ASSY AIO (PL8.2.7) slightly from the printer.



16) Pull the harnesses out from the hole of the CHASSIS LVPS, remove the CHASSIS ASSY LVPS from the printer.



Removal 38 SWITCH ASSY INLET MG AIO (PL8.3.7)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

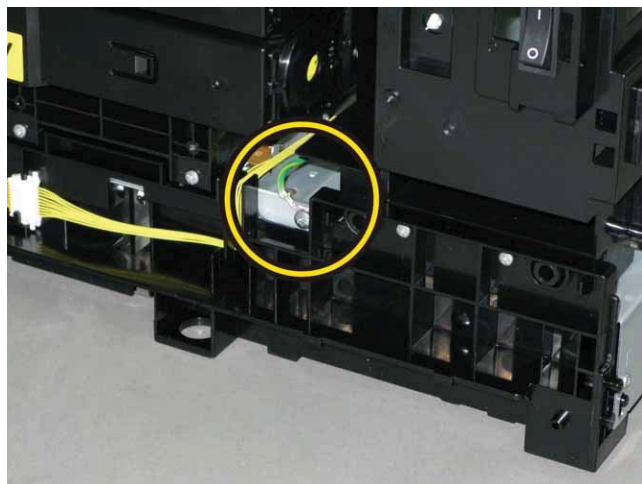
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

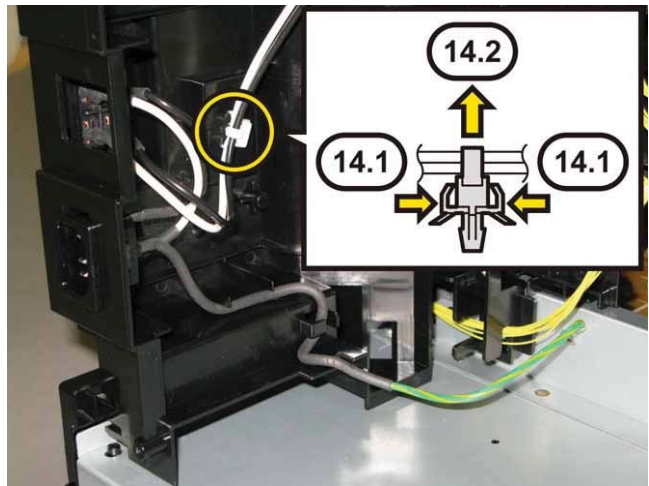
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER REAR AIO. (Removal 31)
- 11) Remove the COVER TOP AIO. (Removal 32)
- 12) Remove the CHASSIS ASSY LVPS. (Removal 37)

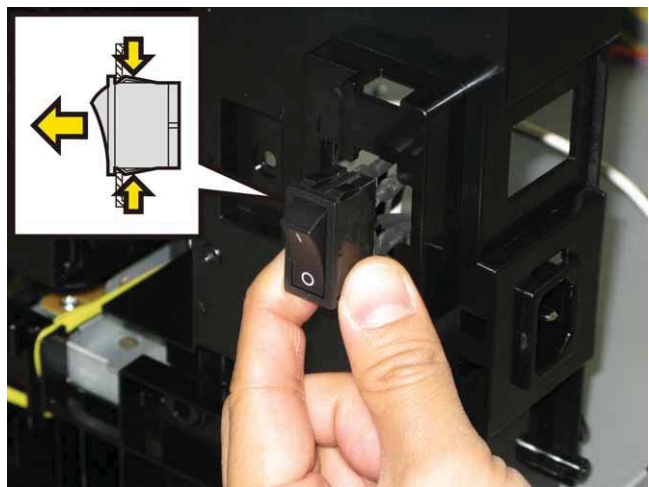
- 13) Remove the one screw (silver, with washer, 6mm) that fixes the grounding terminal of the SWITCH ASSY INLET MG AIO (PL8.3.7).



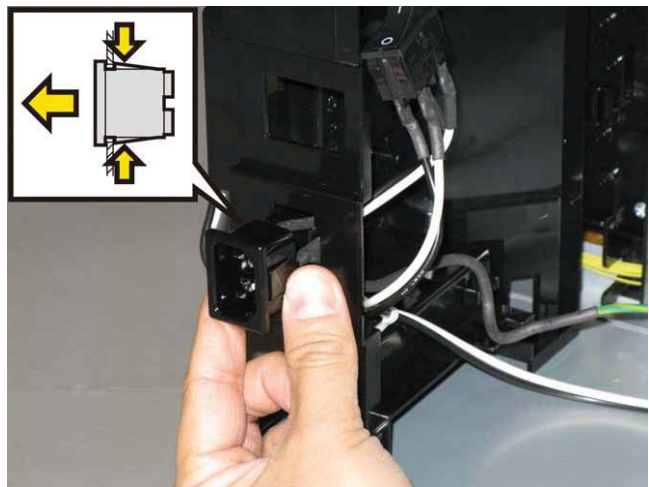
14) Release the clamp on the CHASSIS INLET (PL8.4.11) that fixes the harness of the SWITCH ASSY INLET MG AIO. Then release the harness of the SWITCH ASSY INLET MG AIO from hook of the CHASSIS INLET.



15) Release the hooks of the SWITCH POWER, remove the SWITCH POWER of the SWITCH ASSY INLET MG AIO from the CHASSIS INLET.



16) Release the hooks of the AC INLET, remove the AC INLET of the SWITCH ASSY INLET MG AIO from the CHASSIS INLET.



17) Pull out the harness, SWITCH POWER and connector (J48) through the hole of the CHASSIS INLET, remove the SWITCH ASSY INLET MG AIO from the printer.



Removal 39 KIT PWBA MCU (PL8.3.99)

Note: Never fail to perform the diagnostic operation. Otherwise the data will be lost in the worst case.

Note: Use the wrist strap to protect the PWB from the electrostatic.

- 1) Perform the NVM Save to evacuate the MCU data.
- 2) Turn on the power while pressing the "▶" key, "◀" key, and [MENU] key on the control panel.
- 3) Enter the password, press the "▲" key twice, and press the " ✓ " key once. The diagnostic screen comes up.
- 4) Press the " ✓ " key once.
- 5) Press the "▼" key several times until "IOT Diag" is displayed. Press the " ✓ " key once.
- 6) Press the "▼" key several times until "NVM Settings" is displayed. Press the " ✓ " key once.
- 7) Press the "▼" key several times until "SaveNVM to ESS" is displayed. Press the " ✓ " key once.
- 8) Press the " ✓ " key once, and NVM Save is performed.
- 9) After NVM Save is complete, press the [CANCEL] key several times until "IOT Diag" is displayed.
- 10) Press the "▼" key several times until "Complete" is displayed.
- 11) Press the " ✓ " key two times. "COPY, SCAN and FAX" are displayed.
- 12) Turn off the power to exit.
- 13) Remove the POWER CORD from outlet.
- 14) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 15) Open the COVER ASSY FRONT (PL1.2.1).

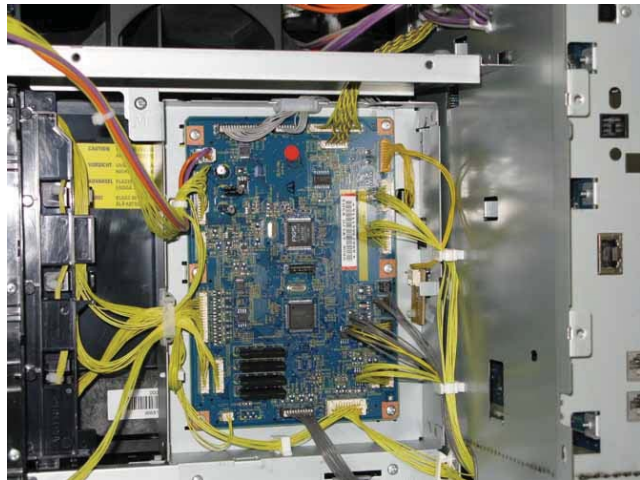
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 16) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 17) Remove the FUSER ASSY. (Removal 4)
- 18) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 19) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 20) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 21) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 22) Remove the COVER POLE IN AIO. (Removal 29)
- 23) Remove the COVER REAR AIO. (Removal 31)
- 24) Remove the COVER TOP AIO. (Removal 32)
- 25) Remove the CHASSIS ASSY LVPS. (Removal 37)

26) Disengage all the connectors of the PWBA MCU (PL8.3.6), release the harnesses from the three clamps on the CHASSIS MCU (PL8.3.1).



27) Remove the six screws (silver, 6mm) that fix the PWBA MCU to the printer.



28) Remove the PWBA MCU from the printer.



Removal 40 CLUTCH ASSY DRV (PL3.1.1), BEARING REGI (PL3.1.2)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)

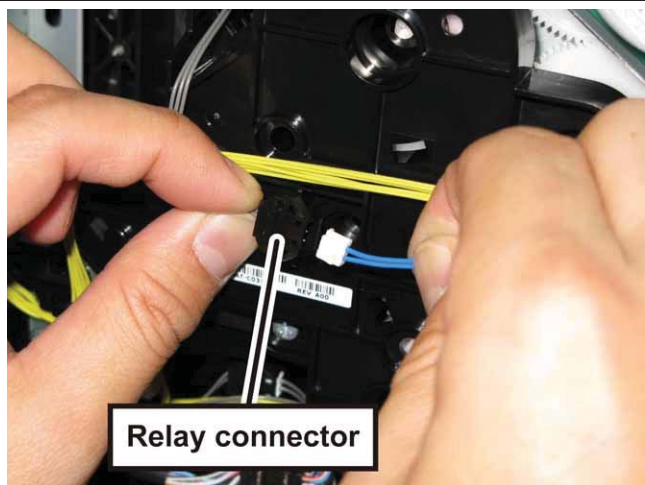
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

- 6) Release the harness of the CLUTCH ASSY DRV (PL3.1.1) from the hook of the DRIVE ASSY PH (PL7.1.4).

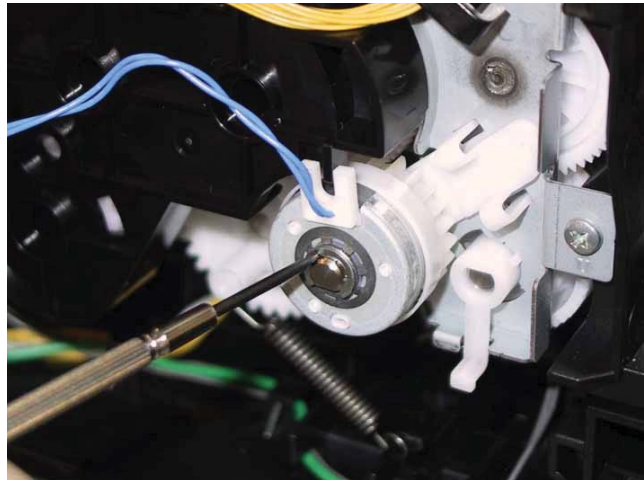


Note: When carrying out the work described below, leave the relay connector on the printer harness side.

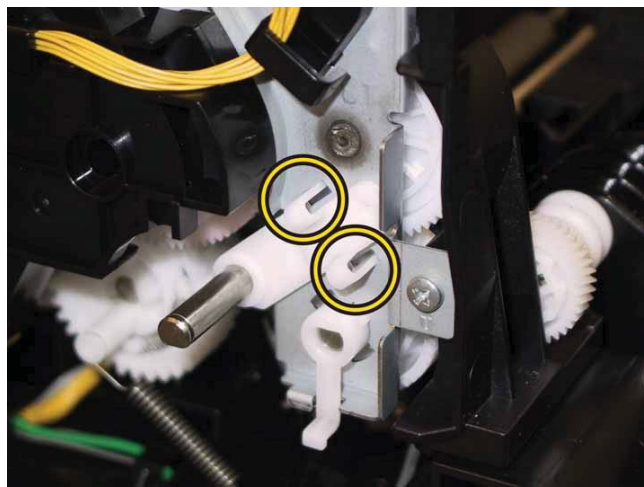
- 7) Disengage the connector (P/J262) of the CLUTCH ASSY DRV.



8) Remove the E-ring that fixes the CLUTCH ASSY DRV to the shaft, using a miniature screwdriver, remove the CLUTCH ASSY DRV.



9) Release the two hooks of the BEARING REGI (PL3.1.2), remove the BEARING REGI from the shaft.



Removal 41 KIT DRIVE ASSY PH (PL7.1.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

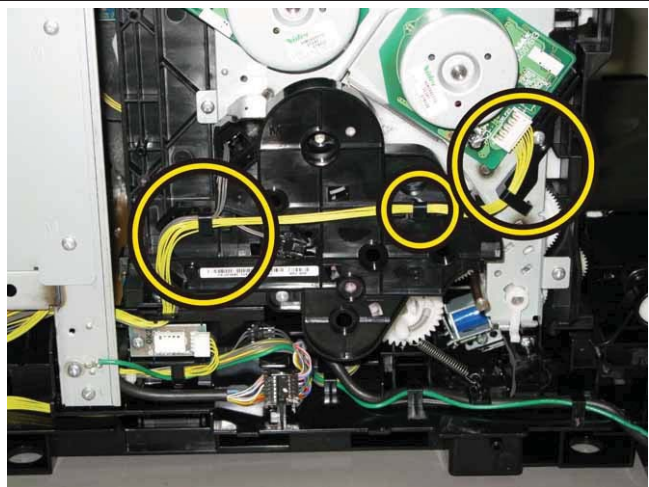
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

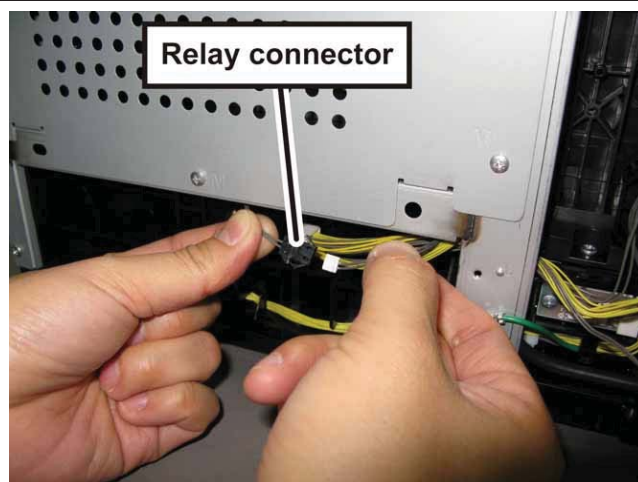
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)

7) Disengage the connector (P/J211) of the DRIVE ASSY MAIN (PL7.1.2), release all the harness from the hooks of the DRIVE ASSY PH.

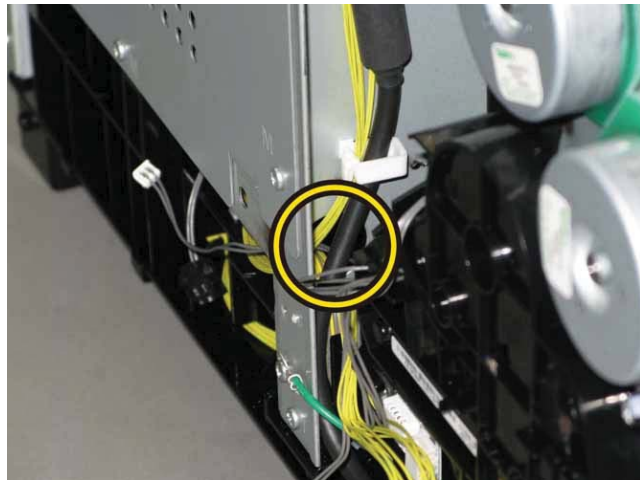


Note: When carrying out the work described below, leave the relay connector on the printer harness side.

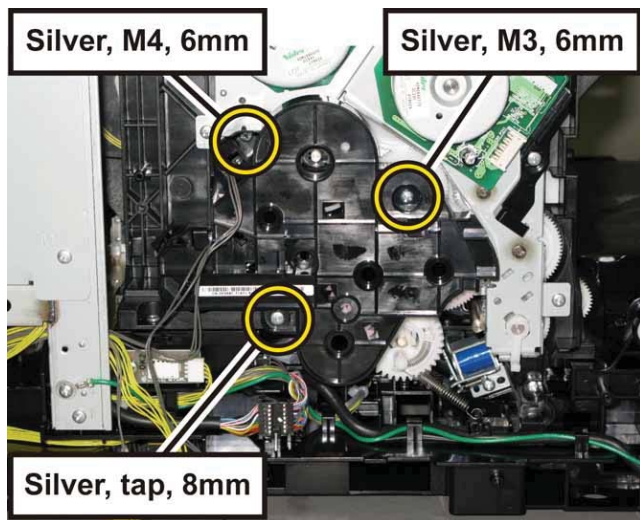
8) Disengage the connector (P/J241) of the DRIVE ASSY PH (PL7.1.4).



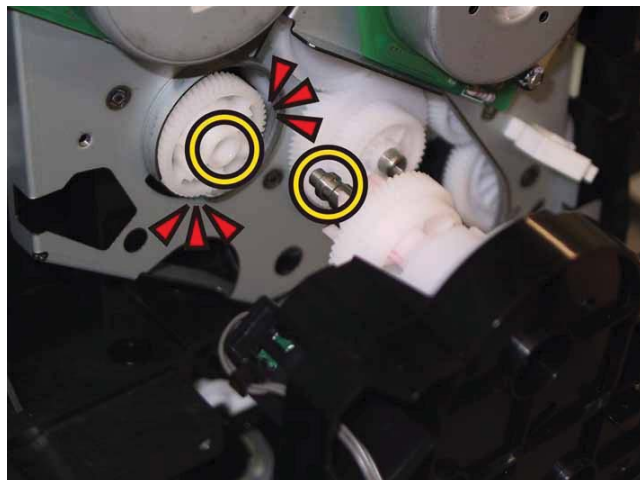
9) Pull out the harness of the DRIVE ASSY PH from the hole of the printer.



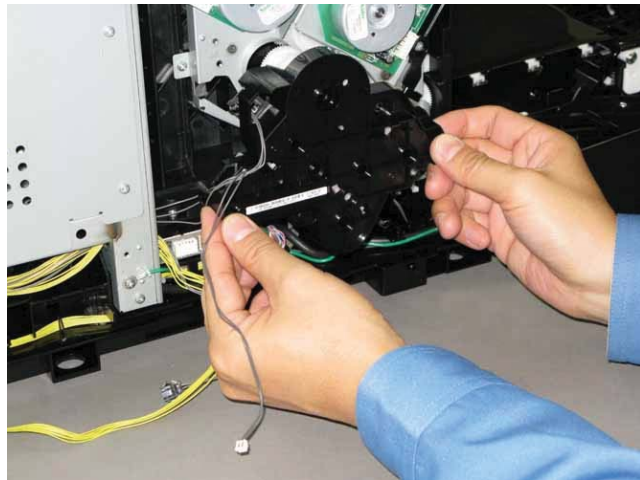
10) Remove the one screw (silver, M4, 6mm), the one screw (silver, M3, 6mm) and the one screw (silver, tap, 8mm) that fix the DRIVE ASSY PH to the printer.



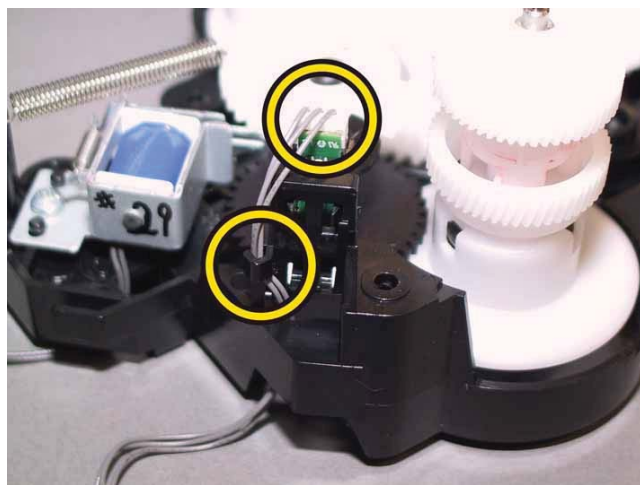
Note: When carrying out the work described next procedure, take care not to drop the coupling gear to inside.



11) Remove the DRIVE ASSY PH from the printer.



12) Disengage the connector (P/J261) of the color mode sensor on the DRIVE ASSY PH, release the HARN ASSY KSNR REGCL (PL9.1.9) from the hook of the DRIVE ASSY PH.



13) Remove the GEAR P2 (PL7.1.3) from the shaft of the DRIVE ASSY SUB (PL7.1.1).



Removal 42 KIT DRIVE ASSY MAIN (PL7.1.98)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

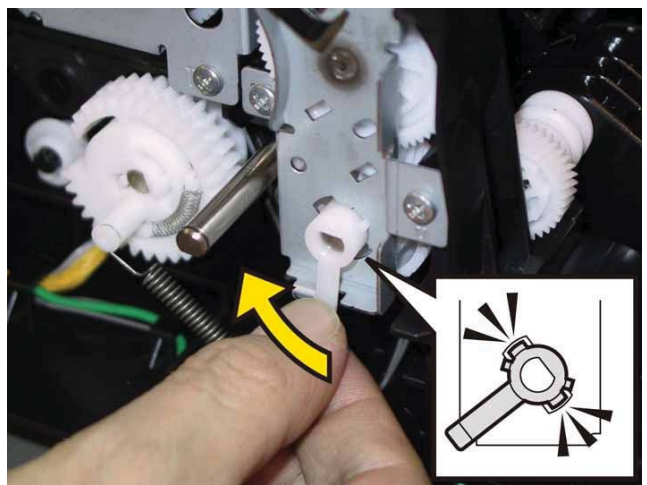
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

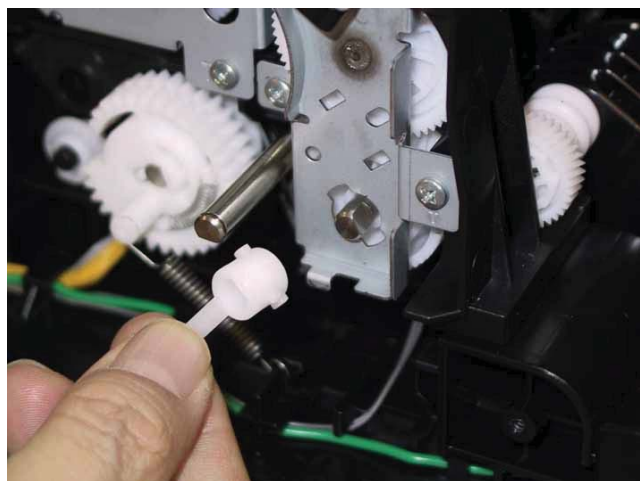
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 7) Remove the KIT DRIVE ASSY PH. (Removal 41)

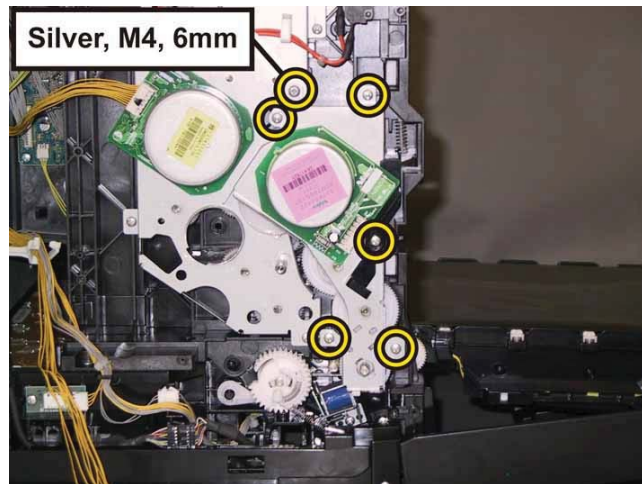
- 8) Rotate the STOPPER PIVOT (PL6.1.3), mate the tabs of the STOPPER PIVOT with the notches of the DRIVE ASSY MAIN (PL7.1.2).



- 9) Remove the STOPPER PIVOT from the printer.



10) Remove the one screw (silver, M4, 6mm) and the five screws (silver, tap, 8mm) that fix the DRIVE ASSY MAIN to the printer.



11) Remove the DRIVE ASSY MAIN from the printer.



Removal 43 DRIVE ASSY SUB (PL7.1.1)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

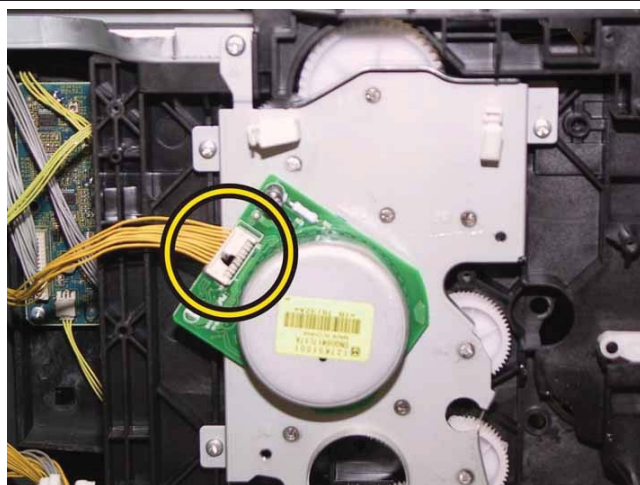
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 7) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 8) Remove the KIT DRIVE ASSY MAIN. (Removal 42)

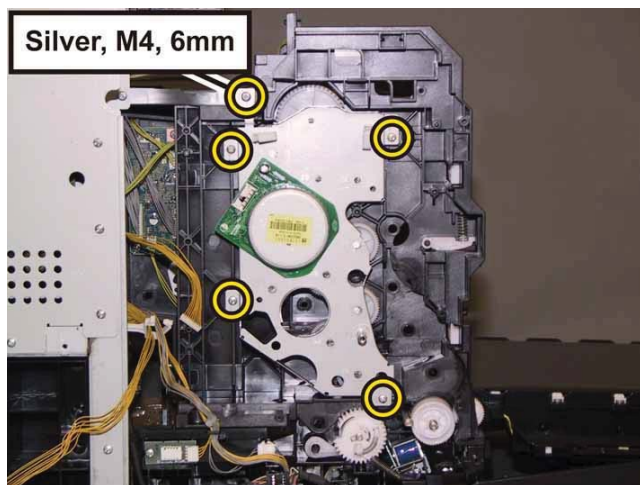
Note: When performing the step described below, it is not necessary to disengage the connector of the HARN ASSY INTERLOCK AIO.

- 9) Remove the HARN ASSY INTERLOCK AIO. (Removal 36)

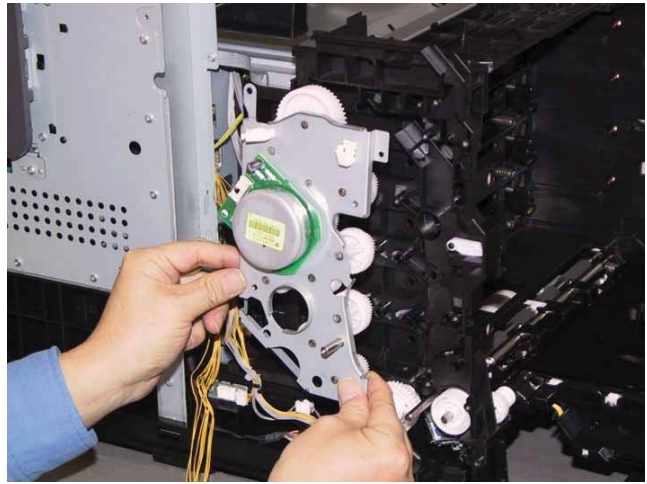
- 10) Disengage the connector (P/J221) of the DRIVE ASSY SUB (PL7.1.1).



- 11) Remove the one screw (silver, M4, 6mm) and the four screws (silver, tap, 8mm) that fix the DRIVE ASSY SUB to the printer.



12) Remove the DRIVE ASSY SUB from the printer.



Removal 44 KIT BLOCK PHD LEFT (PL4.1.98)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

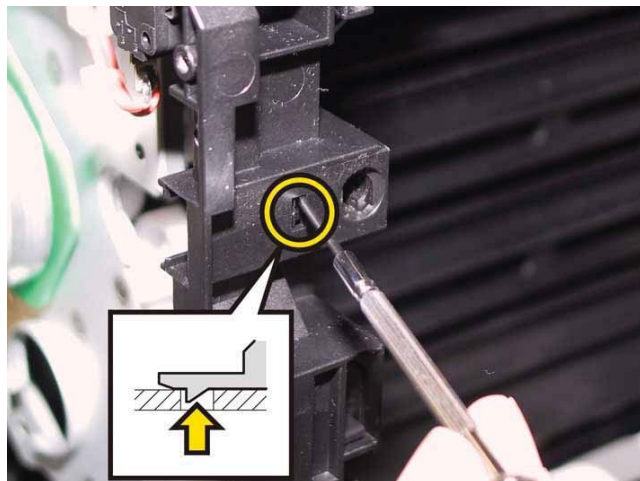
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

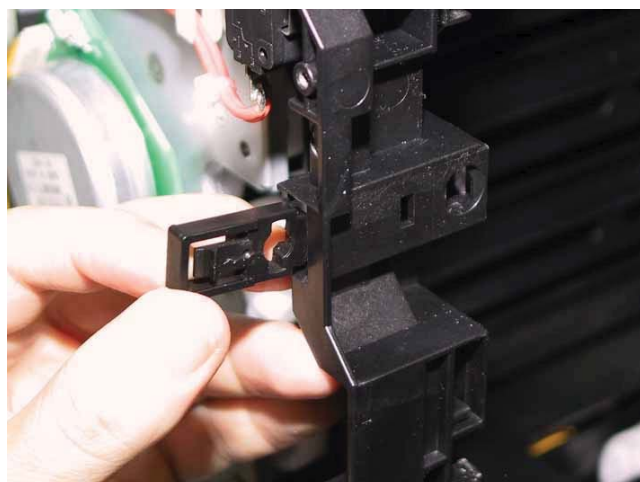
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 7) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 8) Remove the KIT DRIVE ASSY MAIN. (Removal 42)

Note: Described next procedure is the removal procedure common among the upper and lower BLOCK STOPPER PDH Ds (PL4.1.7).

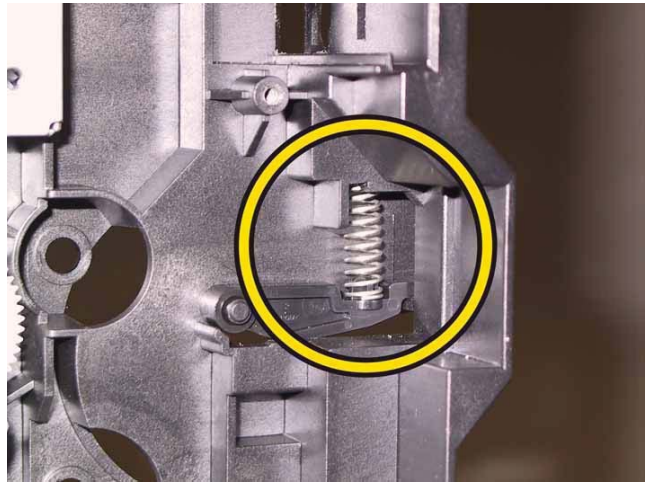
- 9) Release the hook of the BLOCK STOPPER PHD D (PL4.1.6), using a miniature screwdriver.



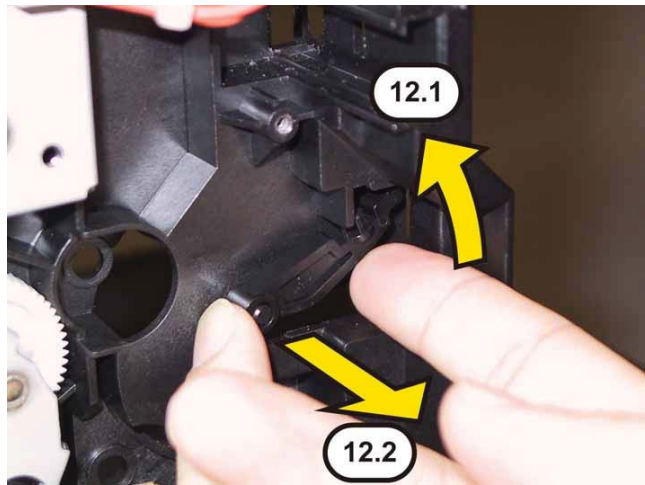
- 10) Remove the BLOCK STOPPER PHD D from the printer.



11) Remove the SPRING PHD (PL4.1.4) from the printer.



12) Rotate the LEVER PHD (PL4.1.5) slightly, remove the LEVER PHD from the printer.



Removal 45 KIT FEED ROLL/SOL/CLUTCH (PL3.1.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

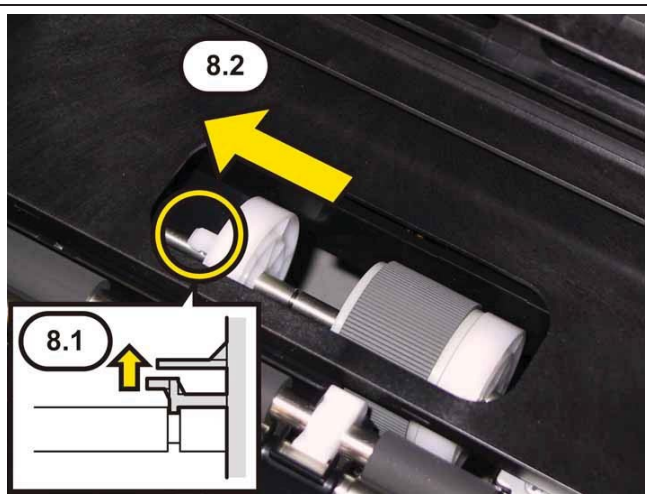
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 6) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 7) Remove the KIT DRIVE ASSY PH. (Removal 41)

- 8) Release the hook of the ROLL CORE MSI (PL3.2.3) on the left of the ROLL ASSY FEED (PL 3.2.4), and move the ROLL CORE MSI to left until it stops.

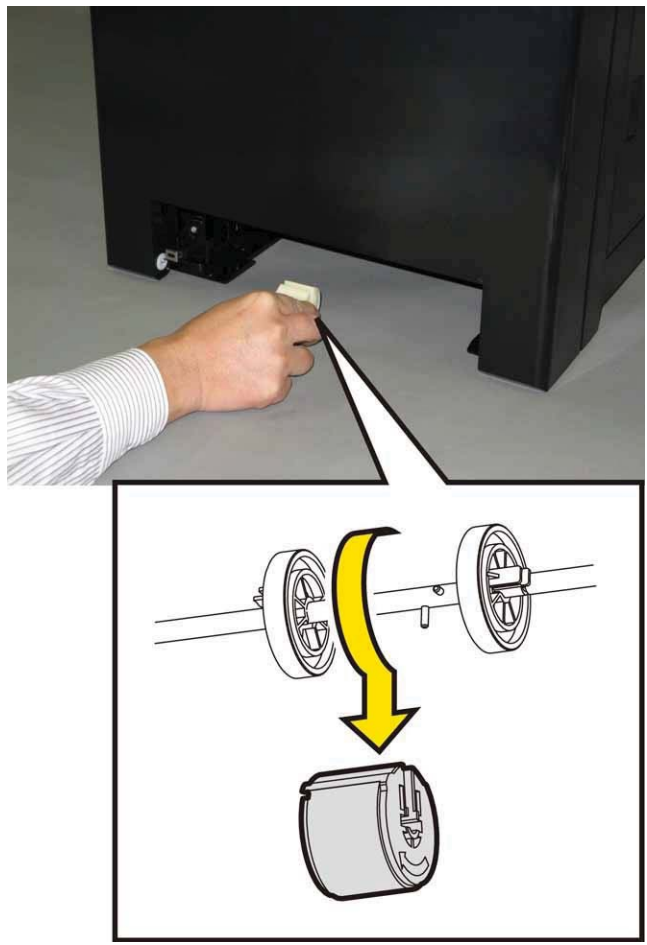


- 9) Release the groove on the ROLL ASSY FEED from the vertical pin mounted on the SHAFT ASSY FEED (PL3.2.2) by sliding the ROLL ASSY FEED to the left.



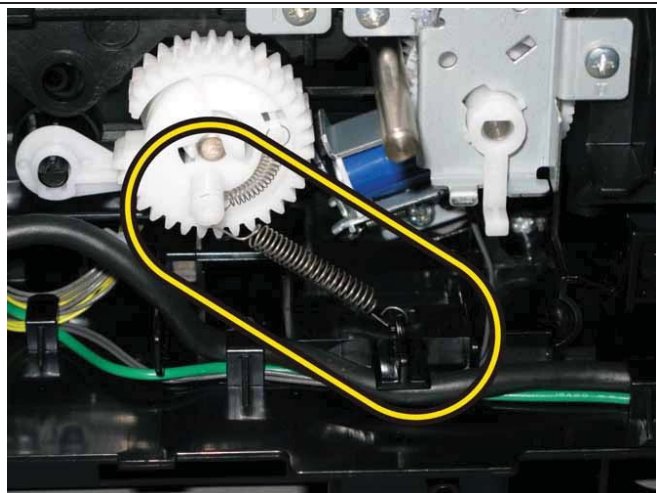
- 10) Close the COVER ASSY FRONT.

11) Remove the ROLL ASSY FEED from the SHAFT ASSY FEED by rotating the ROLL ASSY FEED 180 degrees.



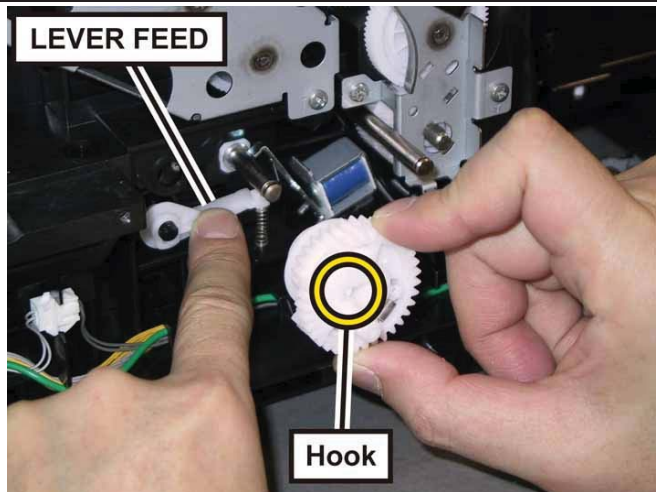
12) Open the COVER ASSY FRONT.

13) Remove the SPRING FEED OUT (PL3.1.15) from the printer.

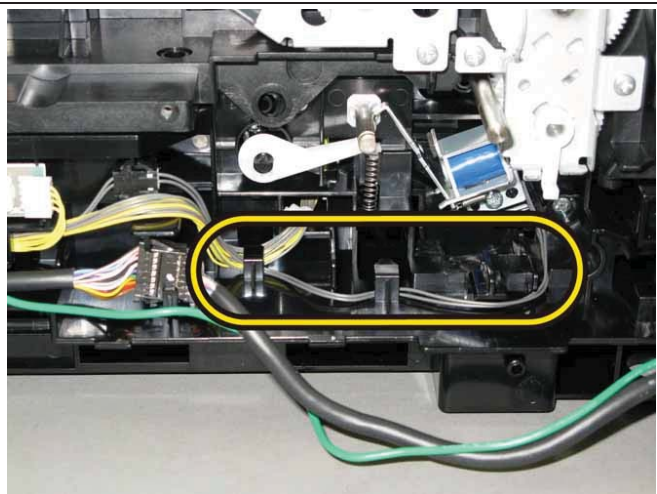


14) Release the hook of the GEAR ASSY FEED (PL3.1.19), remove the GEAR ASSY FEED from the SHAFT ASSY FEED (PL3.2.2).

Note: When carrying out the work this procedure, pushing down the LEVER FEED (PL3.1.13).

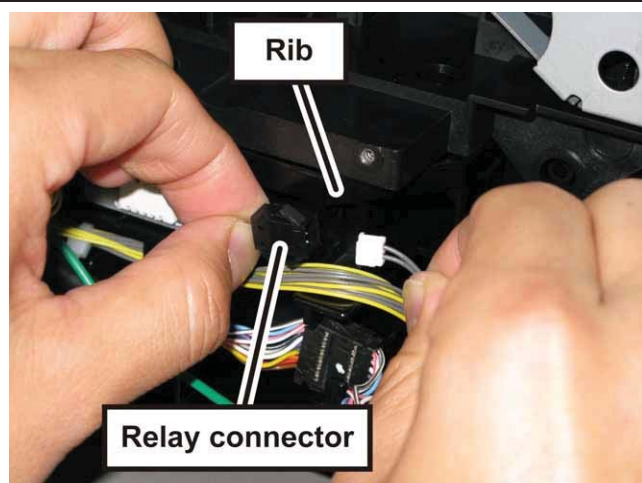


15) Release the harness of the SOLENOID FEED MSI (PL3.1.11) from the hooks of the printer.

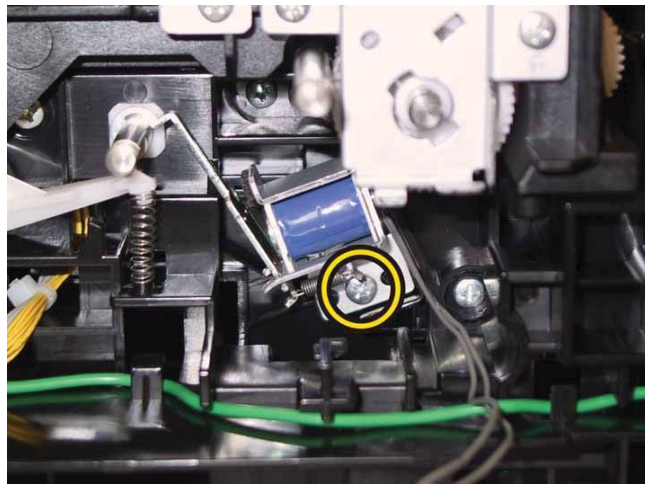


Note: When carrying out the work described next procedure, leave the relay connector on the printer harness side.

16) Release the relay connector from the rib of the printer, disengage the connector (P/J231) of the SOLENOID FEED MSI.



17) Remove the one screw (silver, tap, 8mm) that fixes the SOLENOID FEED MSI to the printer, remove the SOLENOID FEED MSI.



Removal 46 KIT PWB ASSY FRONT USB (PL10.1.95)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

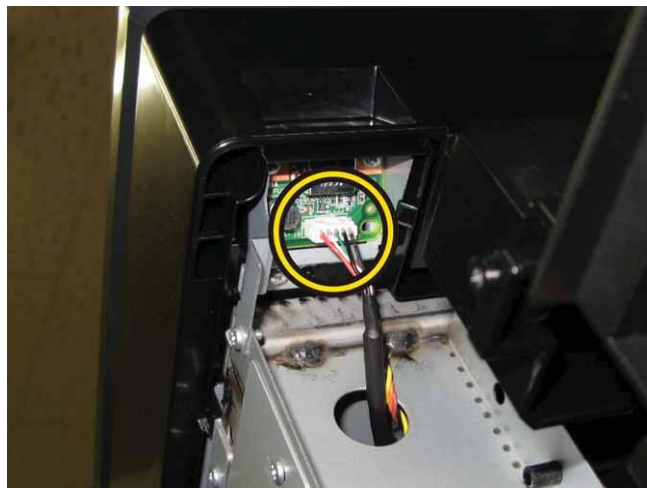
4) Remove the FUSER ASSY. (Removal 4)

5) Remove the COVER ASSY SIDE L AIO. (Removal 10)

6) Remove the COVER ASSY POLE OUT AIO. (Removal 12)

7) Remove the SHIELD ASSY ESS AIO. (Removal 26)

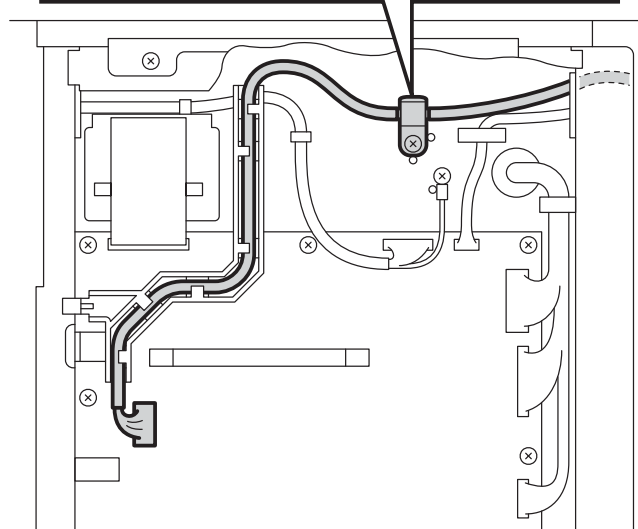
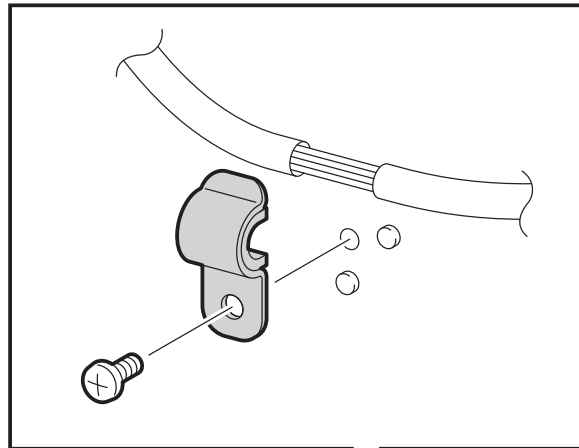
8) Disengage the connector (P/J2) of the PWB ASSY FRONT USB (PL10.1.15).



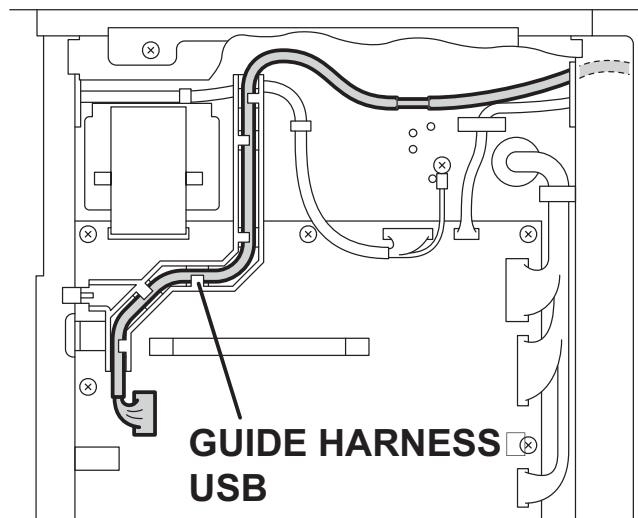
9) Remove the one screw (silver, 6mm) and the one screw (silver, tap, 8mm) that fix the BRACKET ASSY USB (PL10.1.14) to the printer, remove the BRACKET ASSY USB.



10) Remove the one screw (silver, 6mm) that fixes the CLAMP (PL8.4.12) to the printer, remove the CLAMP.



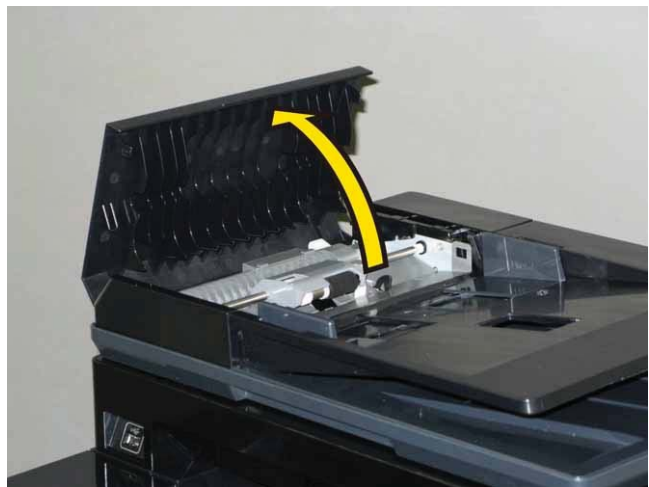
11) Disengage the connector (P/J1301) of the HARNESS ASSY FRONT USB (PL10.1.13), release the HARNESS ASSY FRONT USB from the GUIDE HARNESS USB (PL8.4.5). Pull out the HARNESS ASSY FRONT USB from the hole of the printer, remove the HARNESS ASSY FRONT USB from the printer.



**GUIDE HARNESS
USB**

Removal 47 KIT TRAY ASSY ADF (PL10.1.96)

1) Open the COVER TOP ADF
(PL10.10.2).



2) Bend the rear side hinge of the TRAY
ASSY ADF (PL10.1.8), release the boss
from the hole of the ADF ASSY.



3) Release the front side boss of the TRAY
ASSY ADF from the hole of the ADF
ASSY, remove the TRAY ASSY ADF.



Removal 48 KIT ADF ASSY (PL10.1.97)

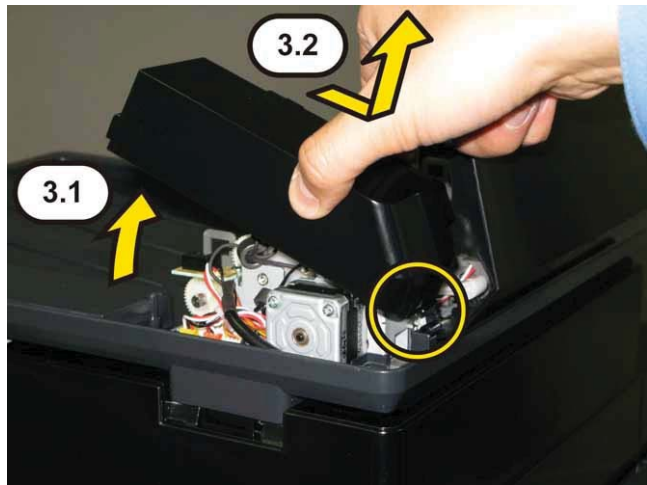
Note: To replace the HARN ASSY ADF (PL10.1.2), IIT ASSY SUB (Removal 50) removing.

1) Remove the KIT TRAY ASSY ADF. (Removal 47)

2) Remove the one screw (silver, tap, 8mm) that fixes the COVER ASSY REAR ADF (PL10.1.7) to the ADF ASSY (PL10.1.3).



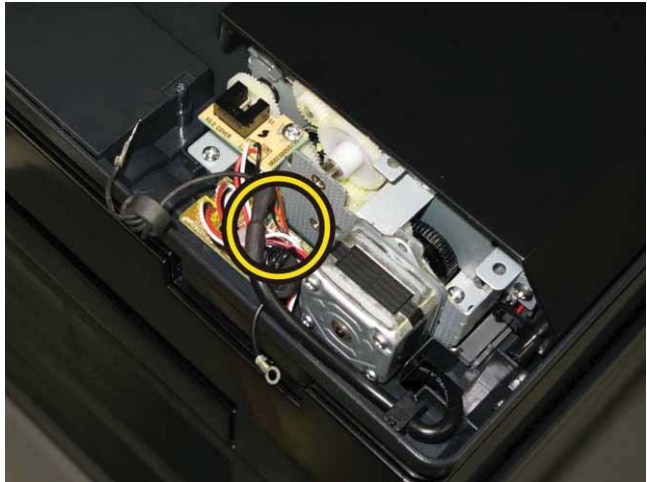
3) Slightly raise the right side of the COVER ASSY REAR ADF, and then move the COVER ASSY REAR ADF to the left until its two hooks are released.



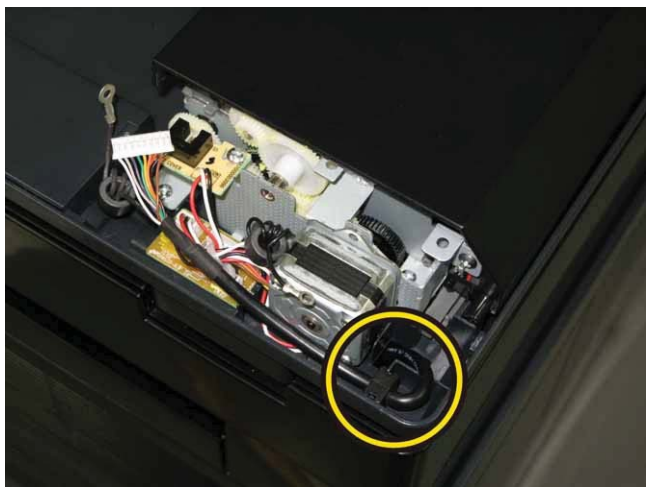
4) Remove the one screw (silver, 4mm) that fixes the grounding terminal of the HARN ASSY ADF (PL10.1.2) from the ADF ASSY.



5) Disengage the connector (P/JADF1) of the HARN ASSY ADF on the PWBA.



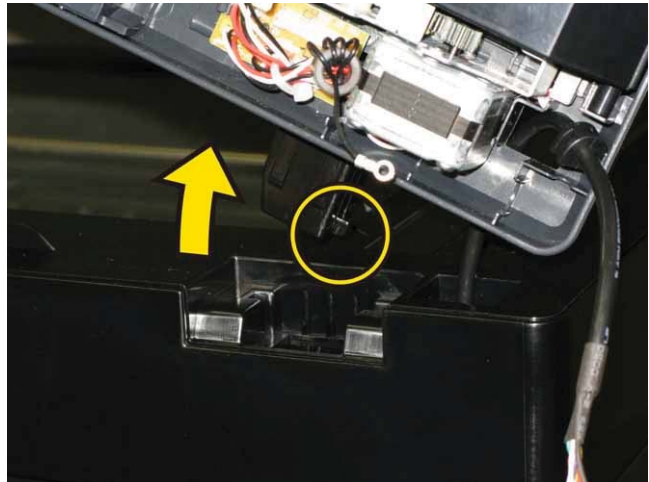
6) Remove the RUBBER BUSH of the HARN ASSY ADF from the ADF ASSY.



7) Release the hook of the COUNTER BALANCE R (PL10.1.10) using the miniature screwdriver, remove the COUNTER BALANCE R from the IIT ASSY SUB (PL10.1.11).



8) Tilt the ADF ASSY to the right side, release the tab of the COUNTER BALANCE L (PL10.1.9) from the IIT ASSY SUB.



9) Lift the ADF ASSY up, remove the HARN ASSY ADF from the hole of the ADF ASSY. Remove the ADF ASSY from the IIT ASSY SUB.

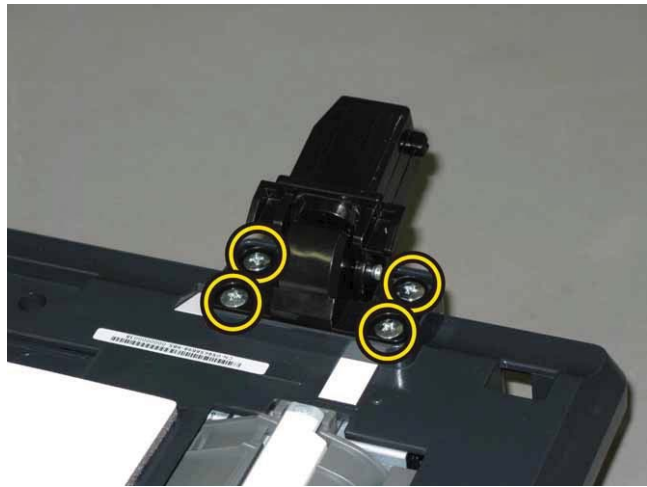


Removal 49 KIT COUNTER BALANCE (PL10.1.99)

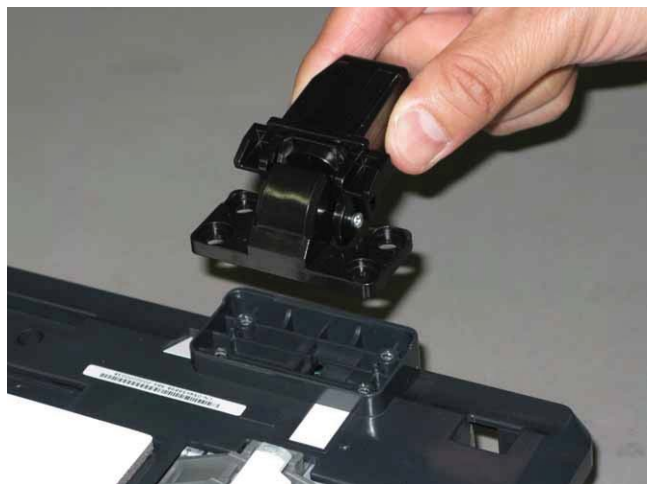
1) Remove the KIT TRAY ASSY ADF. (Removal 47)

2) Remove the KIT ADF ASSY. (Removal 48)

3) Remove the four screws (silver, tap, 8mm) that fix the COUNTER BALANCE L (PL10.1.9) to the ADF ASSY.



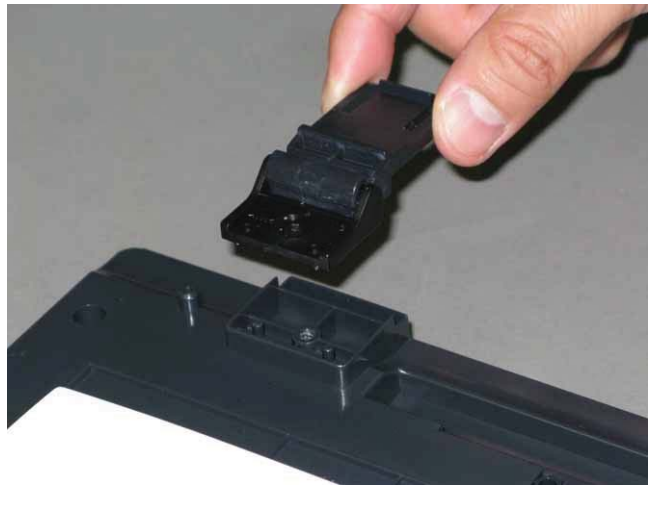
4) Remove the COUNTER BALANCE L from the ADF ASSY.



5) Remove the one screw (silver, tap, 8mm) that fixes the COUNTER BALANCE R (PL10.1.10) to the ADF ASSY.



6) Remove the COUNTER BALANCE R
from the ADF ASSY.



Removal 50 IIT ASSY SUB (PL10.1.11)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

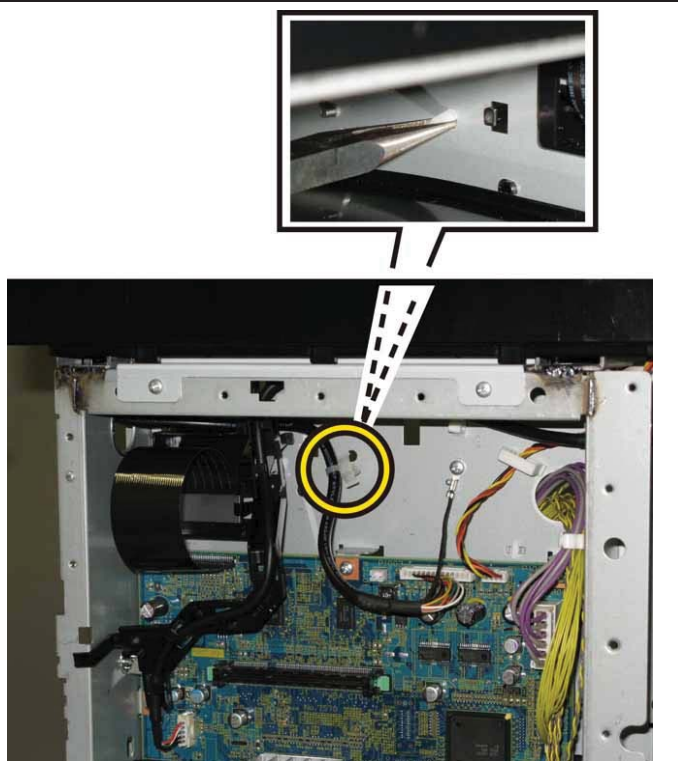
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 12) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 13) Remove the KIT ADF ASSY. (Removal 48)

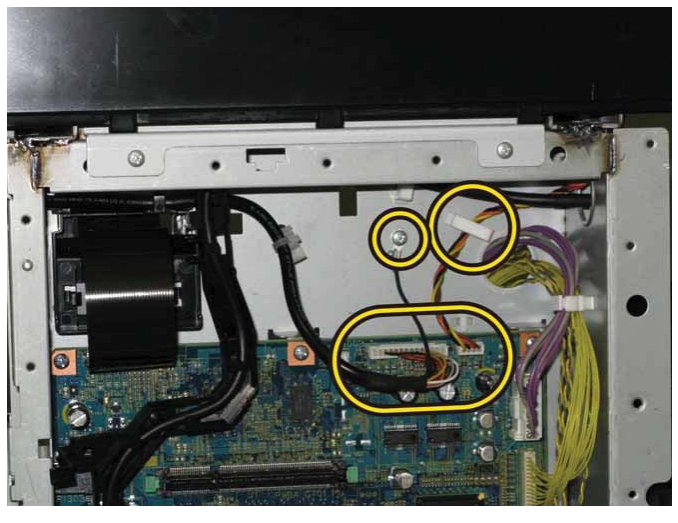
- 14) Release the two hooks of the COVER FFC (PL8.4.8), remove the COVER FFC from the printer.



15) Remove the clamp that fixes the HARN ASSY ADF (PL10.1.2) from the printer.



16) Remove the one screw (silver, 6mm) that fixes the ground wire of the HARN ASSY ADF. Disengage the two connectors (P/J1002 and 1003) on the PWBA ESS AIO (PL8.1.2), release the harness of the IIT ASSY SUB from the clamp.



17) Pull out the harness of the IIT ASSY SUB to outside from the hole of the frame.



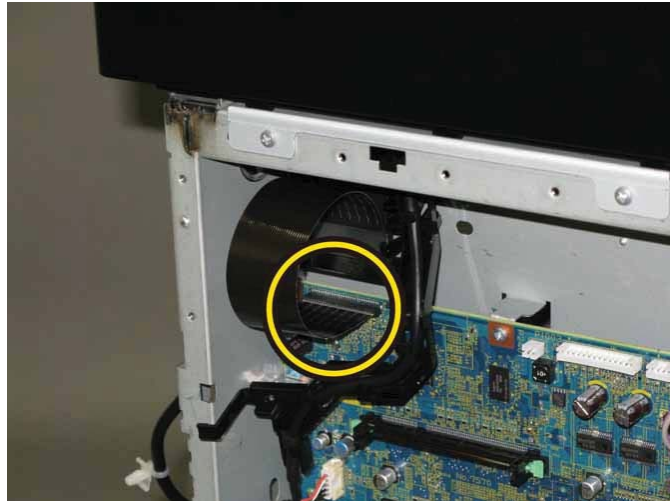
18) Release the HARN ASSY ADF from the hook of the HOLDER FFC (PL8.4.7).



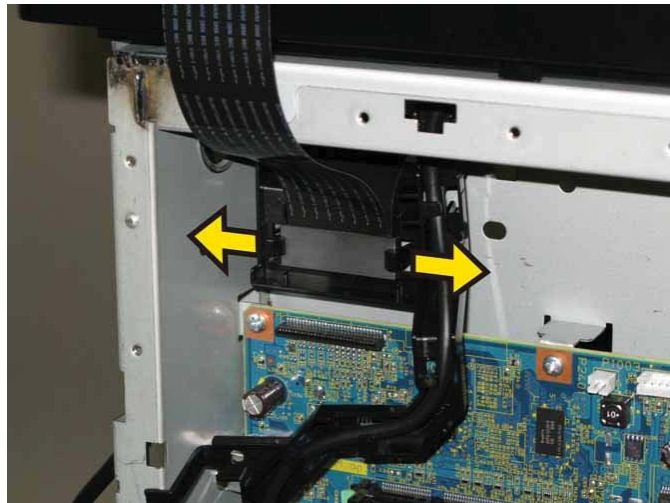
19) Pull out the HARN ASSY ADF to outside from the hole of the frame.



20) Disengage the flat cable (P/J1001) of the IIT ASSY SUB (PL10.1.11) on the PWBA ESS AIO.



21) Release the two hooks of the HOLDER FFC, remove the CORE FERR FFC (PL10.1.12) from the printer.



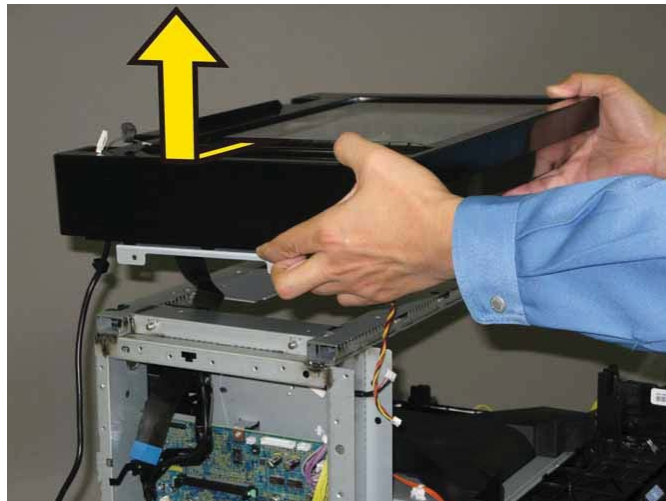
22) Remove the CORE FERR FFC from the flat cable of the IIT ASSY SUB.



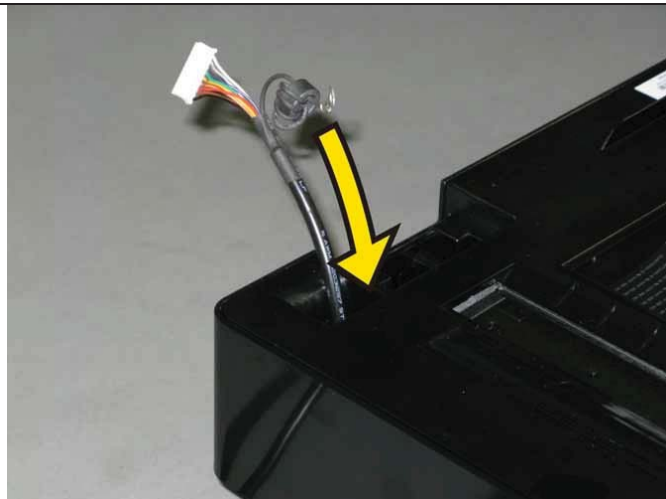
23) Remove the two screws (silver, 6mm) that fix the IIT ASSY SUB to the printer.



24) Shift the IIT ASSY SUB to left side to release the holes of the IIT ASSY SUB from the four studs, lift the IIT ASSY SUB up. Remove the IIT ASSY SUB together with the HARN ASSY ADF.



25) Pull out the HARN ASSY ADF through the hole of the IIT ASSY SUB.



Removal 51 PLATE ASSY TOP (PL8.2.2)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

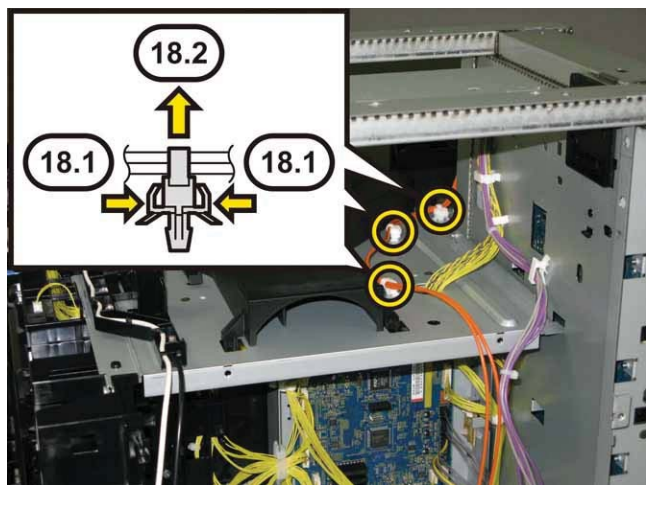
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)

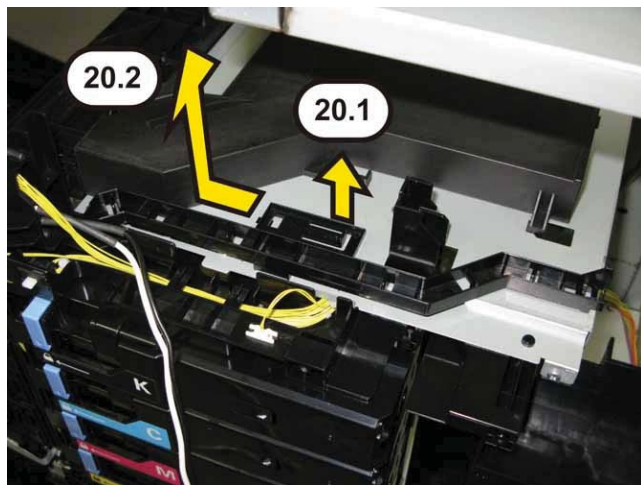
- 18) Remove the three clamps on the PLATE ASSY TOP (PL8.2.2) that fix the harness of the HARN ASSY INTERLOCK AIO (PL8.1.1).



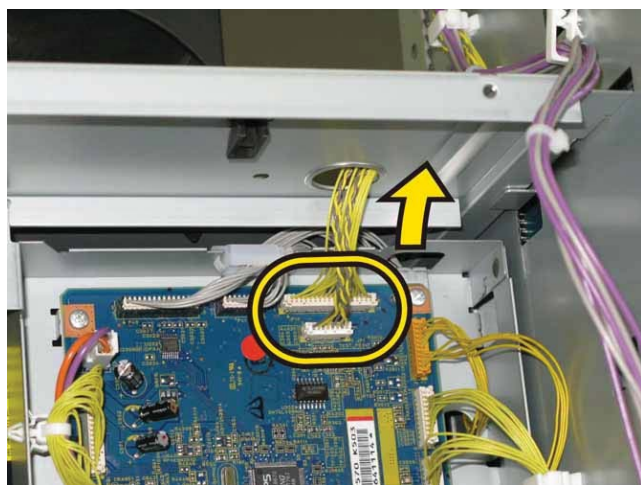
19) Release the harness of the HARNESS ASSY FUSER MG AIO (PL6.1.2) from the GUIDE HARNESS FSR AIO (PL8.2.1).



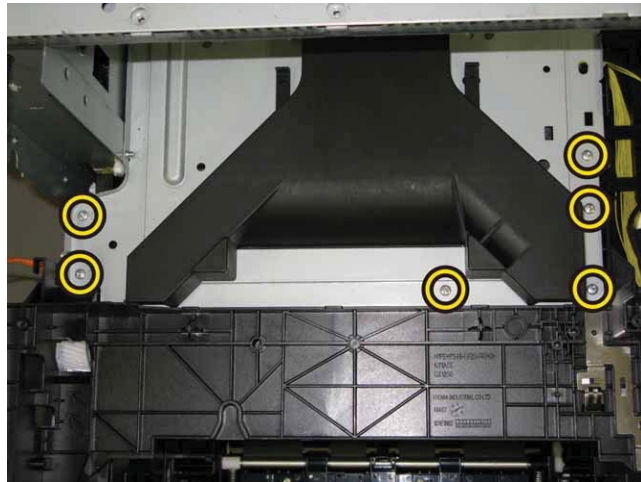
20) Release the boss of the GUIDE HARNESS FSR AIO, move the GUIDE HARNESS FSR AIO to remove it from the printer.



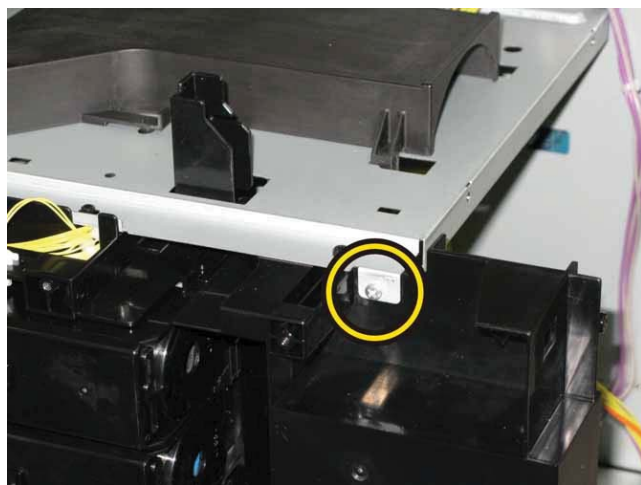
21) Disengage the two connectors (P/J10 and 11) on the PWBA MCU (PL8.3.6), pull it out from the hole of the PLATE ASSY TOP.



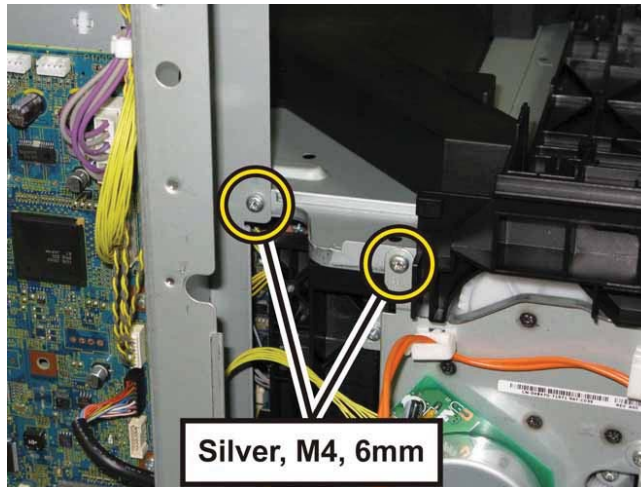
22) Remove the six screws (silver, tap, 8mm) that fix the upper side of the PLATE ASSY TOP to the printer.



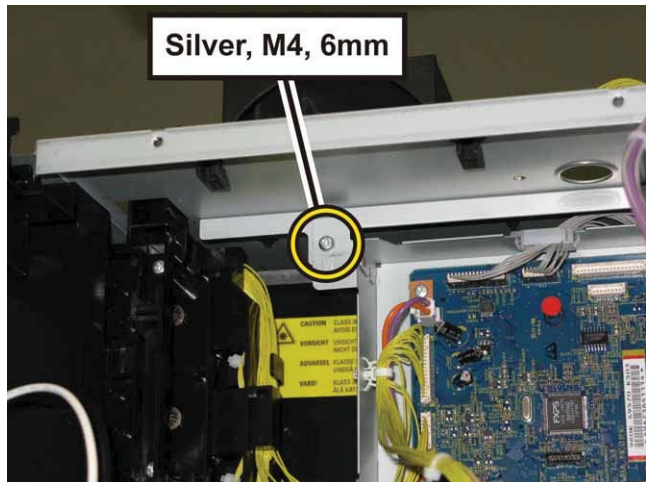
23) Remove the one screw (silver, tap, 8mm) that fixes the right side of the PLATE ASSY TOP to the printer.



24) Remove the two screws (silver, M4, 6mm) that fix the left side of the PLATE ASSY TOP to the printer.



25) Remove the one screw (silver, M4, 6mm) that fixes the inside of the PLATE ASSY TOP to the printer.



26) Remove the PLATE ASSY TOP from the printer.



Removal 52 CHASSIS ASSY INLET (Reference only)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

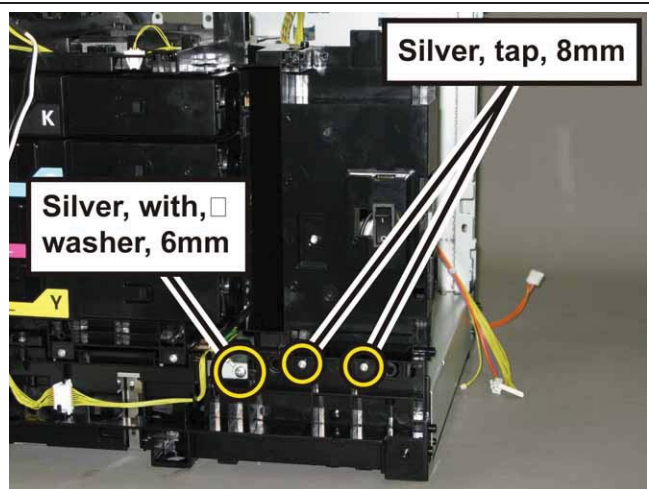
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

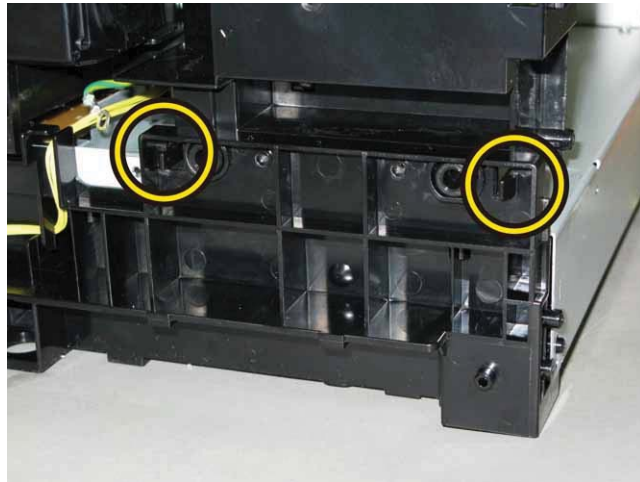
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)

19) Remove the two screws (silver, tap, 8mm) that fix the CHASSIS INLET (PL8.4.11) to the printer, remove the one screw (silver, with washer, 6mm) that fixes the grounding terminal of the SWITCH ASSY INLET MG AIO (PL8.3.7) to the printer.



20) Release the two hooks of the CHASSIS INLET.



21) Remove the CHASSIS INLET together with the SWITCH ASSY INLET MG AIO.



Removal 53 HOLDER ASSY TCRU (K), (C), (M), (Y) (PL5.1.17~20)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

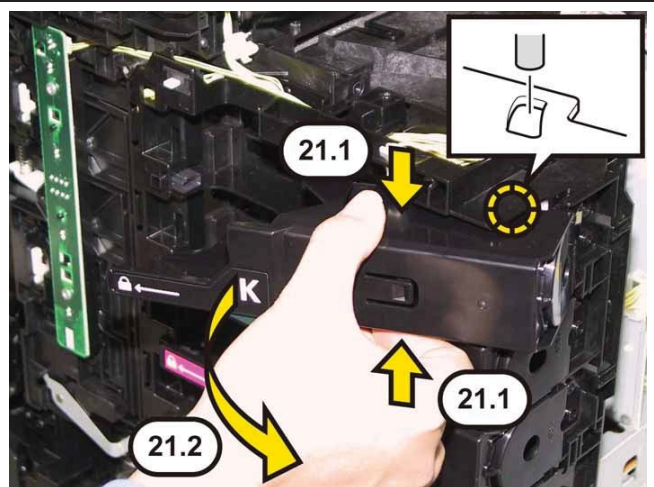
- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

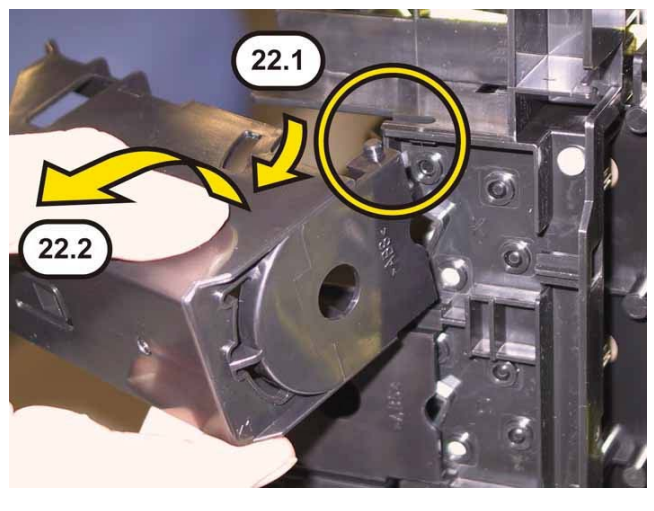
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)

Note: Described below is the removal procedure common among the four HOLDER ASSY TCRU.

21) Press the central part of the HOLDER ASSY TCRU to release the hole of the HOLDER ASSY TCRU from the boss of the FRAME DISP (PL5.1.12). Open the HOLDER ASSY TCRU by 90 degrees.



22) Press the boss part of the HOLDER ASSY TCRU, remove the HOLDER ASSY TCRU from the printer.



Removal 54 DISPENSER ASSY (PL5.1.1)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

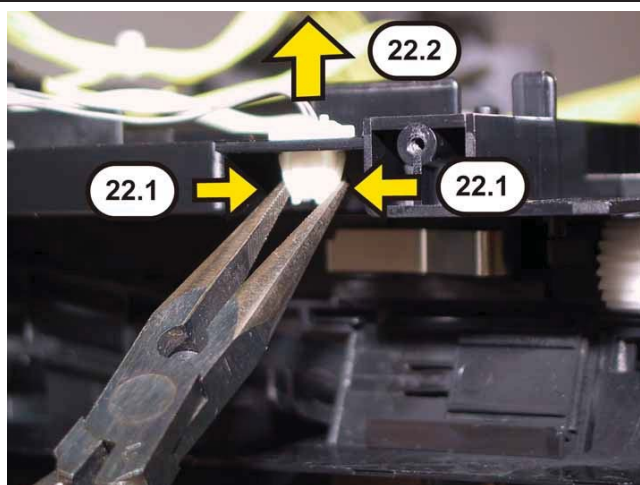
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

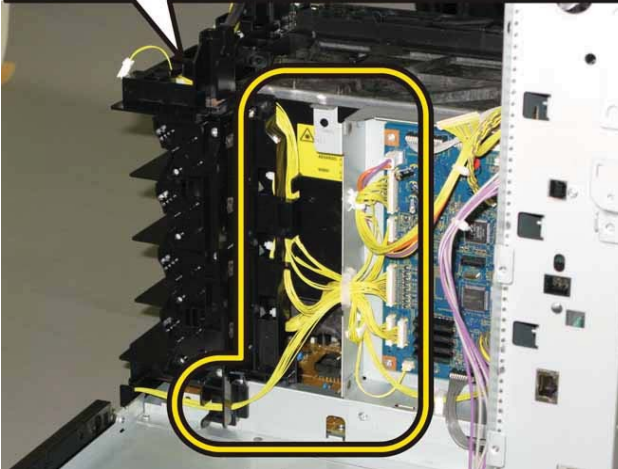
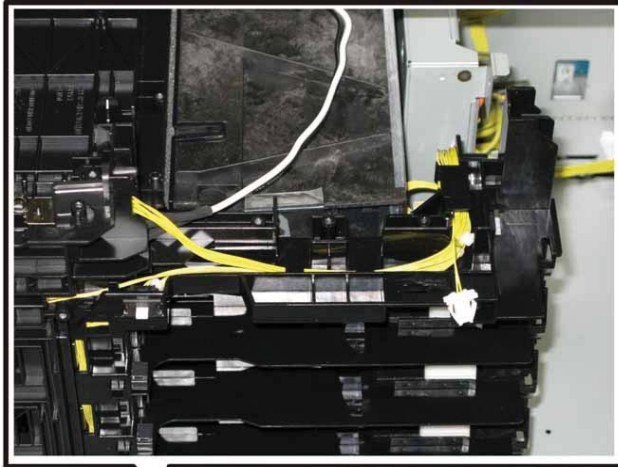
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the HOLDER ASSY TCRU (K), (C), (M), (Y). (Removal 53)

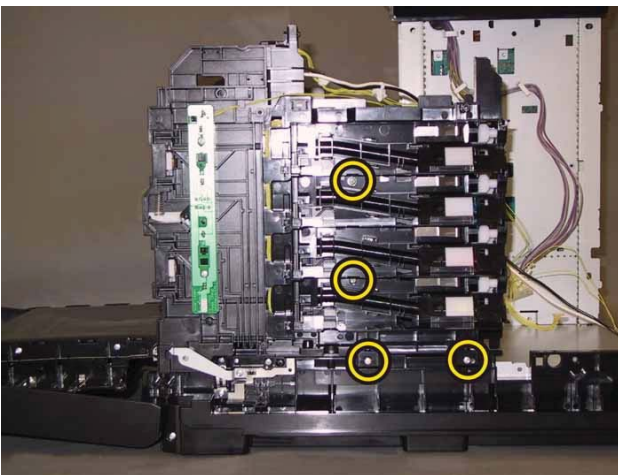
22) Release the hooks of the connector (P5041) of the HARNESS ASSY LVPS MAIN MG AIO (PL9.1.3), using a pliers, and then remove it from the DISPENSER ASSY (PL5.1.1).



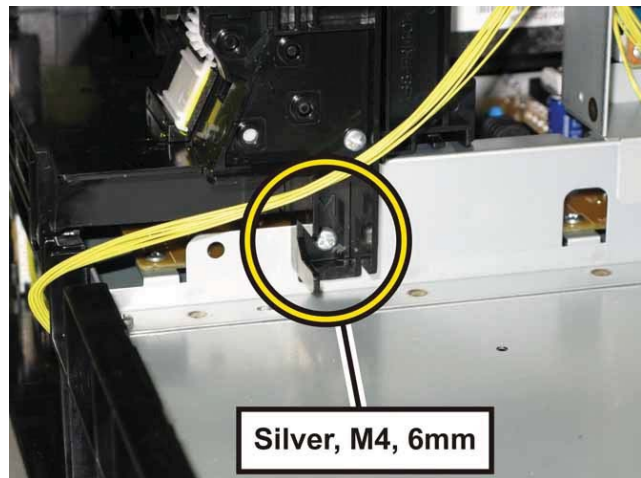
23) Disengage the seven connectors (P/J14, 15, 17, 18, 19, 29 and 31) on the PWBA MCU (PL8.3.6), release the HARNESS ASSY FUSER MG AIO (PL6.1.2) and HARNESS ASSY LVPS MAIN MG AIO from the hooks of the DISPENSER ASSY.



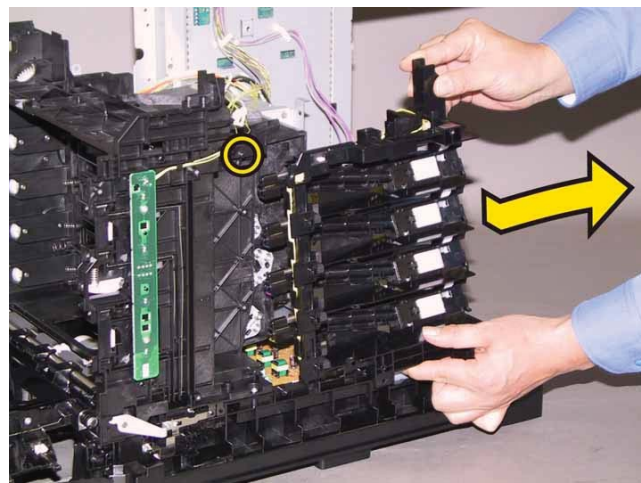
24) Remove the four screws (silver, tap, 8mm) that fix the DISPENSER ASSY to the printer.



25) Remove the one screw (silver, M4, 6mm) that fixes the rear side of the DISPENSER ASSY to the printer.



26) Release the hole of the DISPENSER ASSY from the boss of the printer, move the DISPENSER ASSY to backward. Remove the DISPENSER ASSY from the printer.



Removal 55 FRAME ASSY MOT (PL5.1.2)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

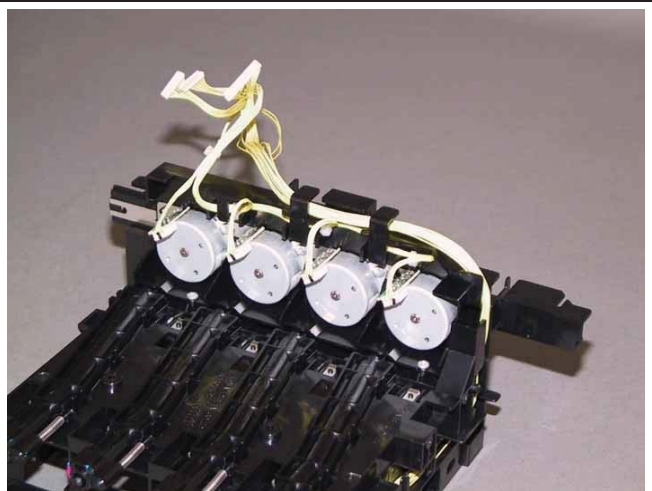
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

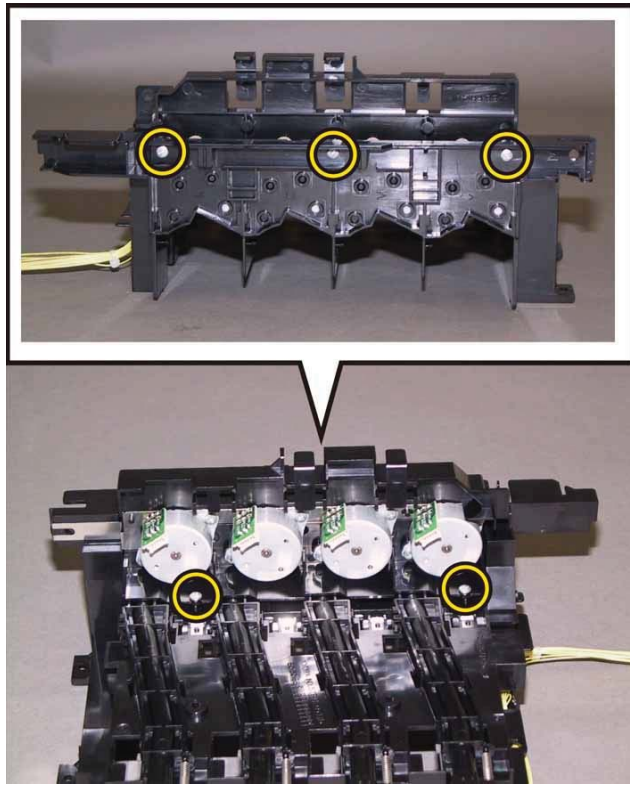
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the HOLDER ASSY TCRU (K), (C), (M), (Y). (Removal 53)
- 22) Remove the DISPENSER ASSY. (Removal 54)

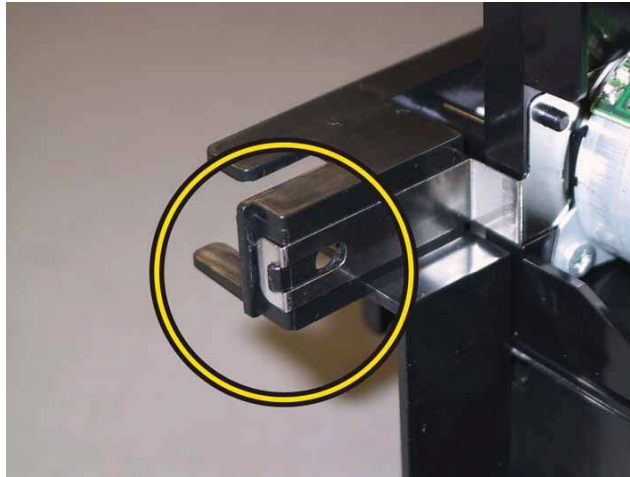
23) Disengage all the connectors of the MOTOR ASSY DISP (PL5.1.3), release all the harness from the hooks of the FRAME ASSY MOT (PL5.1.2).



24) Remove the five screws (silver, tap, 8mm) that fix the FRAME ASSY MOT to the DISPENSER ASSY (PL5.1.1).

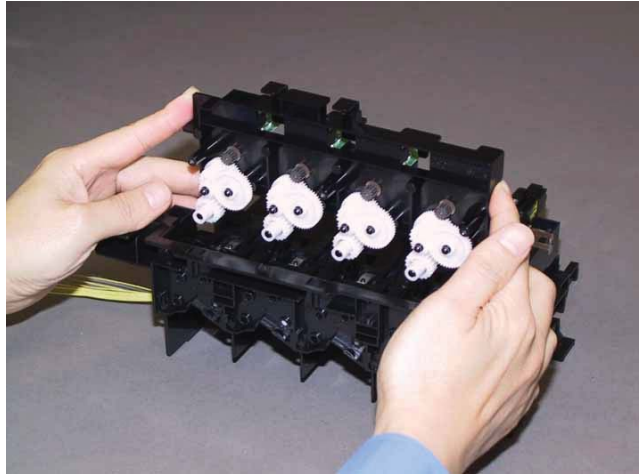


25) Release the notch of the CONDUCTOR MOTOR (PL5.1.4) from the hook of the FRAME DISP (PL5.1.12),



Note: When carrying out the work described next procedure, take care not to drop and lose the GEARs.

26) Remove the FRAME ASSY MOT from the DISPENSER ASSY.



Removal 56 KIT ROS (PL4.1.99)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

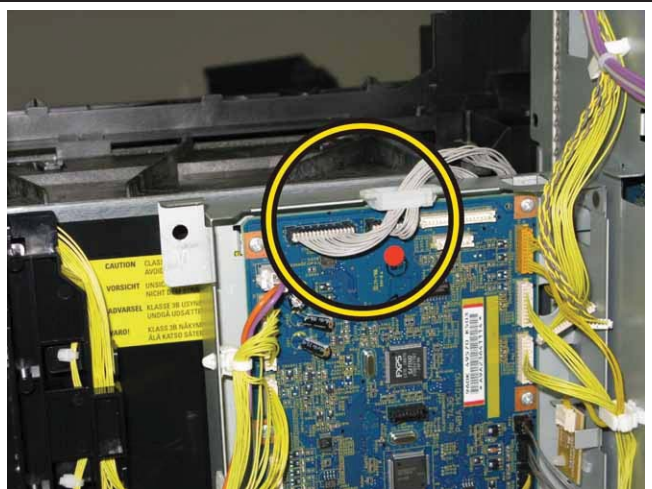
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

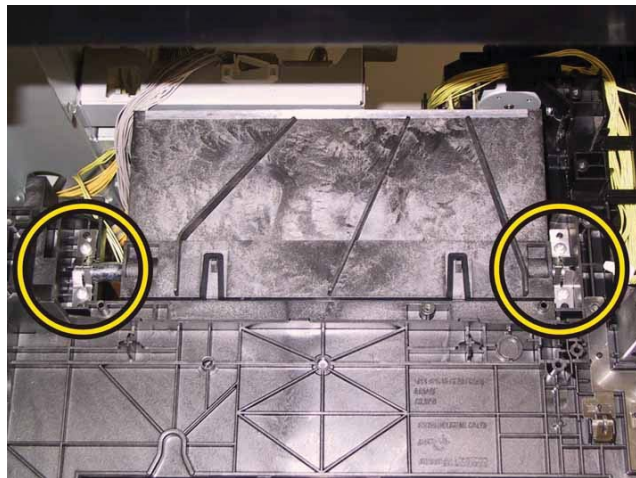
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)

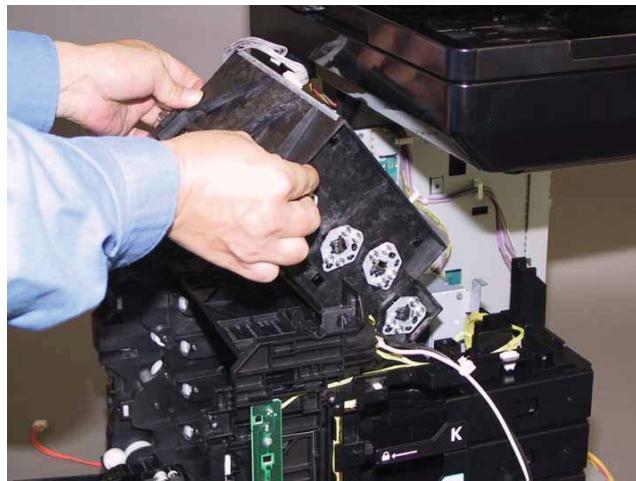
- 19) Disengage the two connectors (P/J40 and 41) on the PWBA MCU (PL8.3.6), release the harness from the EDGING SADDLE (PL8.3.2).



20) Remove the four screws (silver, tap 8mm) that fix the left and right sides of the SPRING ROSs (PL4.1.2) to the printer. Remove the SPRING ROSs from the printer.



21) Lift up the ROS ASSY (PL4.1.1) slowly from the printer.



22) Disengage the two connectors (P/J411 and 412) of the ROS ASSY, remove the HARN ASSY ROS RE (PL4.1.22) and HARN ASSY ROS VIDEO (PL4.1.23).



Removal 57 UPPER UNIT (Reference only)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

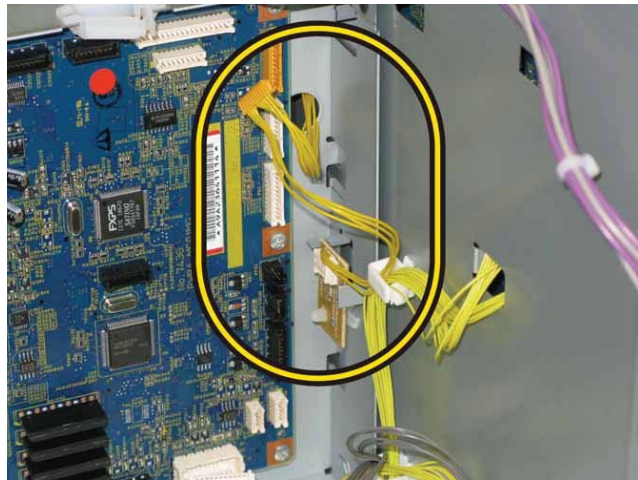
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)

- 24) Disengage all the connectors of the PWBA MCU (PL8.3.6), release all the harnesses from the clamps on the CHASSIS MCU (PL8.3.1).



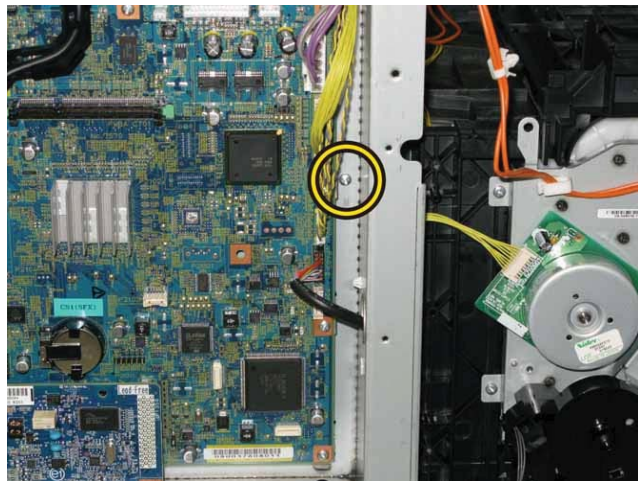
25) Disengage the connector (P/J144) of the PWBA EEPROM (PL8.3.4), release the HARN ASSY PHD XPRO (PL9.1.11) from the clamp, pull the HARN ASSY PHD XPRO out from the hole of the CHASSIS MCU.



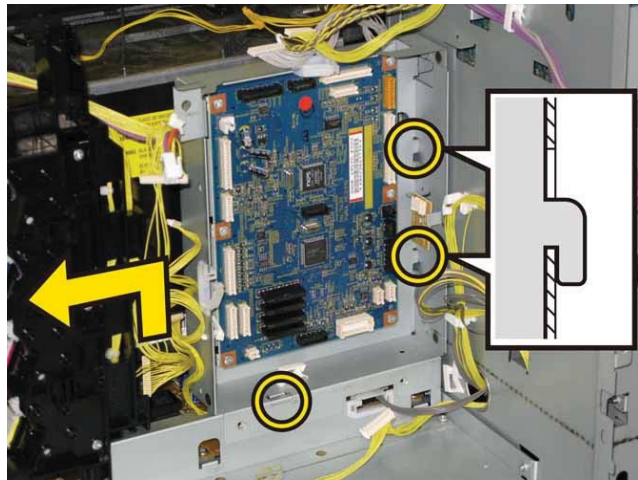
26) Remove the two screws (silver, 6mm) that fix the under part of the CHASSIS MCU.



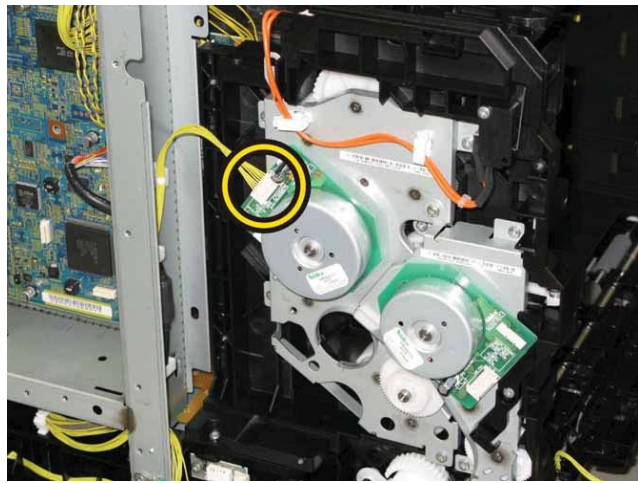
27) Remove the one screw (silver, 6mm) that fixes the side part of the CHASSIS MCU.



28) Release the three tabs of the CHASSIS MCU from the holes of the printer, remove the CHASSIS MCU together with the PWBA MCU from the printer.



29) Disengage the connector (P/J221) of the DRIVE ASSY SUB (PL7.1.1).



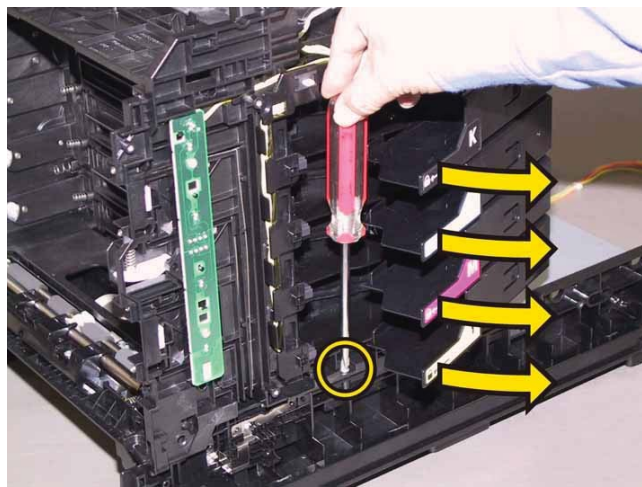
30) Remove the two screws (silver, tap, 8mm) that fix the front side of the printer frame.



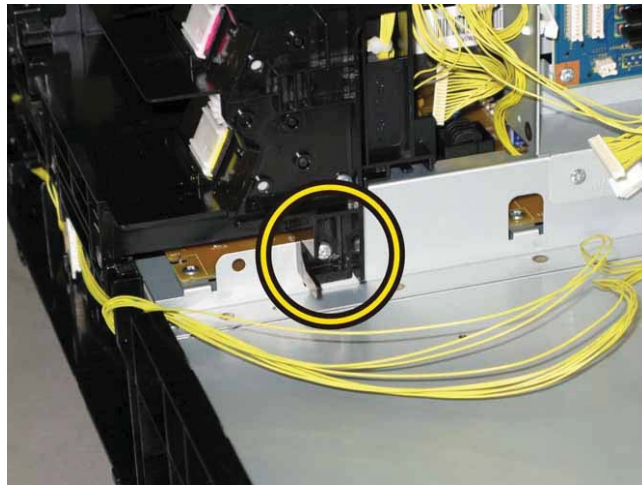
31) Remove the two screws (silver, tap, 8mm) that fix the under part of the DISPENSER ASSY.



32) Open the HOLDER ASSY TCRU (K), (C), (M), and (Y), remove the one screw (silver, tap, 8mm) that fixes the right side of the printer frame.



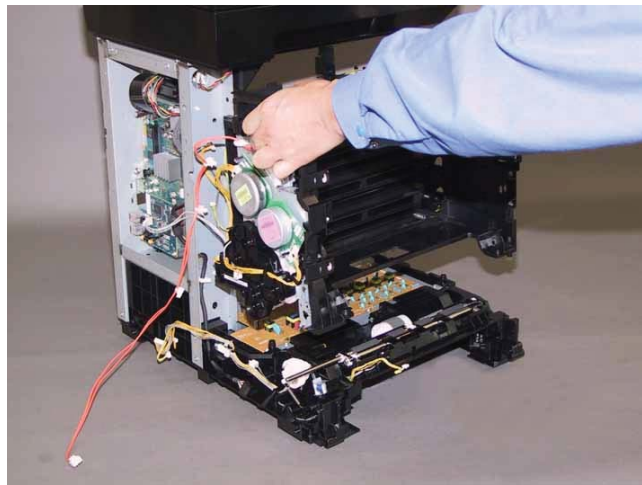
33) Remove the one screw (silver, M4, 6mm) that fixes the rear side of the DISPENSER ASSY.



34) Remove the one screw (silver, tap, 8mm) that fixes the left side of the printer frame.



35) Remove the UPPER UNIT.



Removal 58 PWBA HVPS (PL4.1.19)

Note: Use the wrist strap to protect the PWB from the electrostatic.

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

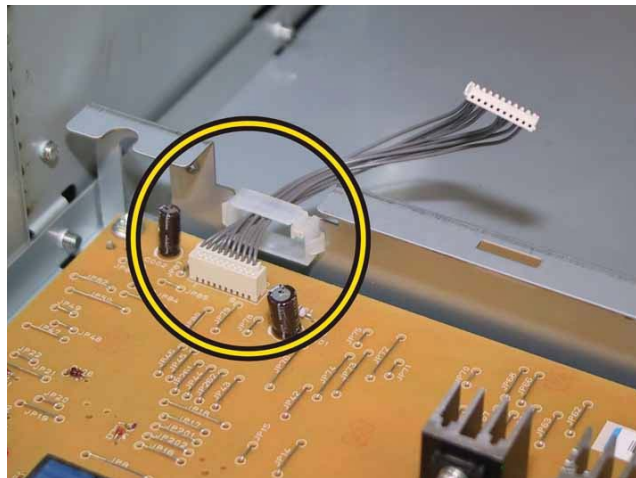
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

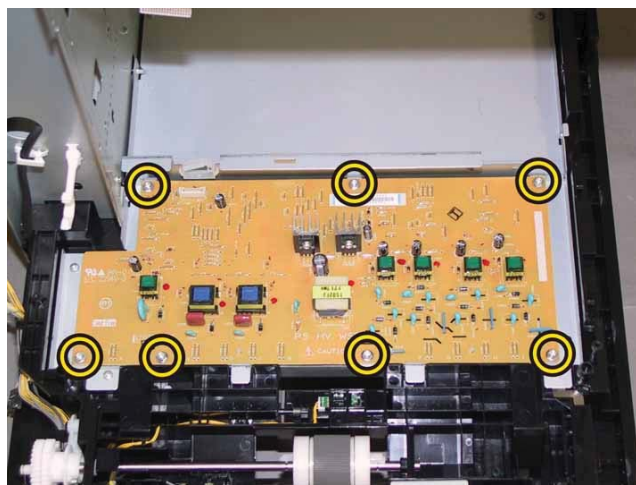
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)

25) Open the EDGING SADDLE (PL8.4.9), removal the HARN ASSY HVPS AIO (PL9.1.6) from the PWBA HVPS (PL4.1.19).



26) Remove the seven screws (silver, 6mm) that fix the PWBA HVPS to the CHASSIS ASSY HVPS (PL8.4.10).



27) Remove the PWBA HVPS from the CHASSIS ASSY HVPS.



Removal 59 SENSOR PHOTO: REGI (PL3.2.13)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

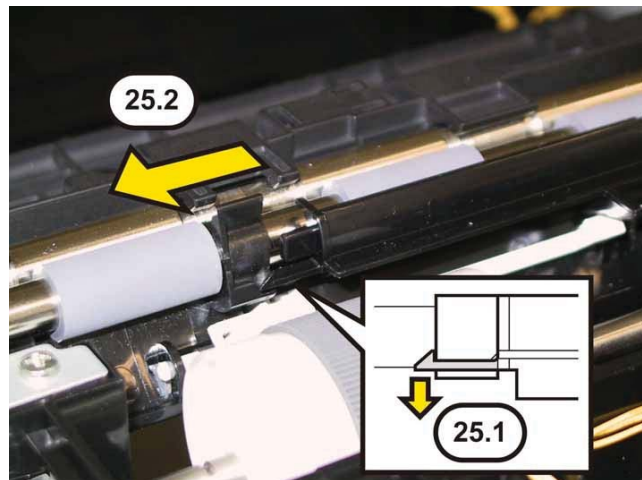
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

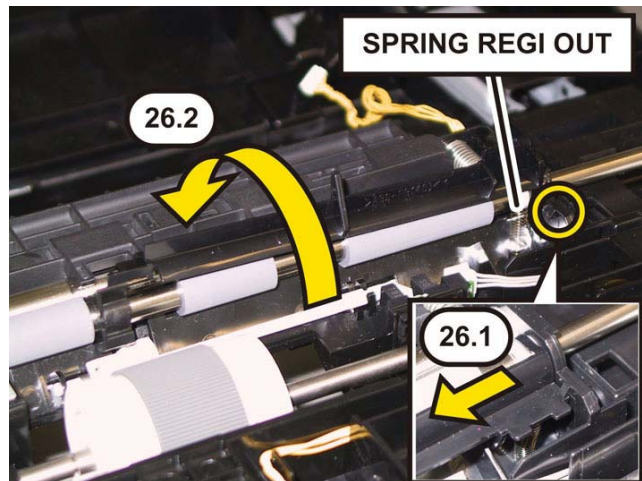
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)

25) Release the hook of the ACTUATOR REGI OUT (PL3.2.6), shift the ACTUATOR REGI ROLL M (PL3.2.8) to right side.



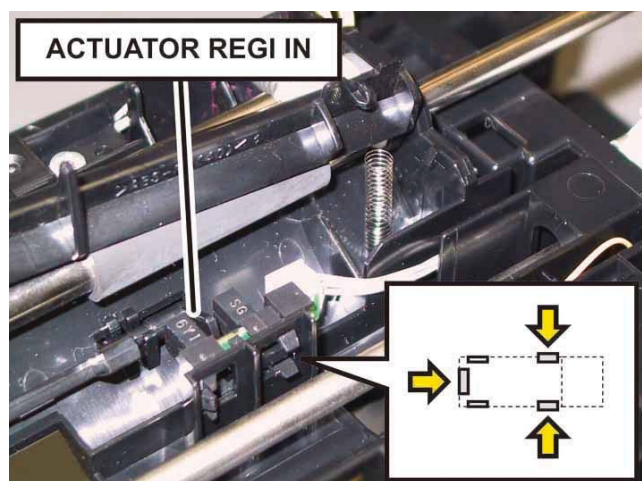
Note: When carrying out the work described next procedure, take care not to drop and lose the SPRING REGI OUT (PL3.2.7).

26) Release the ACTUATOR REGI OUT from the hook on the CHUTE UP (PL3.2.26), open the ACTUATOR REGI OUT.

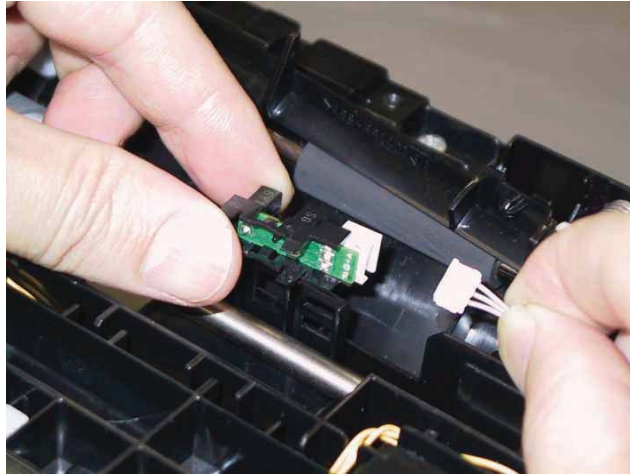


27) Release the three hooks that fix the SENSOR PHOTO: REGI (PL3.2.13) to the FEEDER ASSY MG AIO (PL3.1.98), and remove the SENSOR PHOTO: REGI.

Note: When carrying out the work this procedure, it is easier to push the ACTUATOR.



28) Disengage the connector (P/J232) of the SENSOR PHOTO: REGI.



Removal 60 ROLL ASSY REGI (PL3.2.9)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

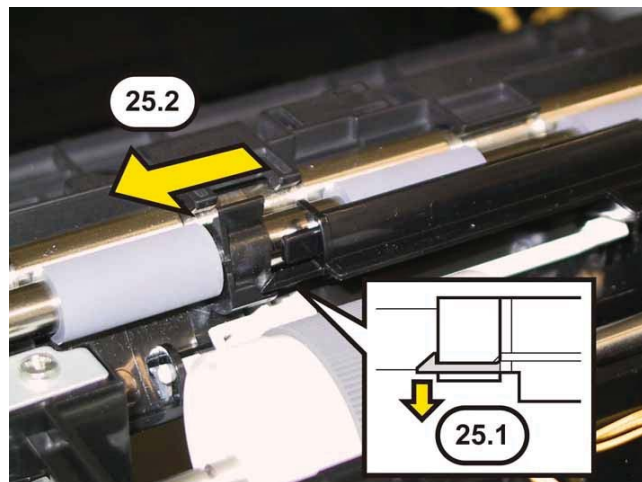
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

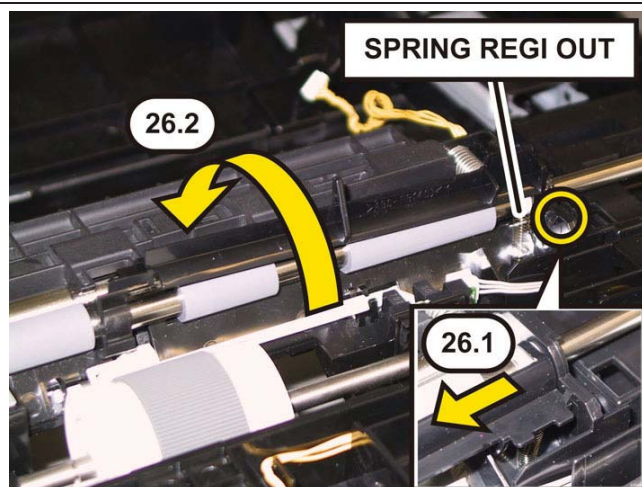
- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)

25) Release the hook of the ACTUATOR REGI OUT (PL3.2.6), shift the ACTUATOR REGI ROLL M (PL3.2.8) to right side.



Note: When carrying out the work described next procedure, take care not to drop and lose the SPRING REGI OUT (PL3.2.7).

26) Release the ACTUATOR REGI OUT from the hook on the CHUTE UP (PL3.2.26), open the ACTUATOR REGI OUT.

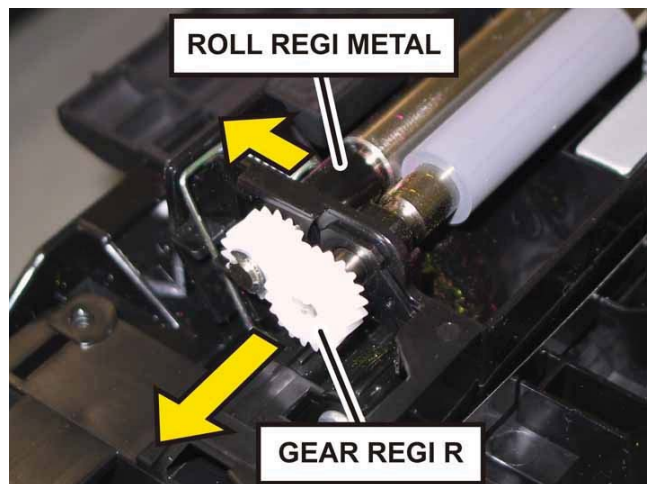


27) Remove the E-ring that fixes the GEAR REGI R (PL3.2.22) to the ROLL ASSY REGI (PL3.2.9), using a miniature screwdriver.



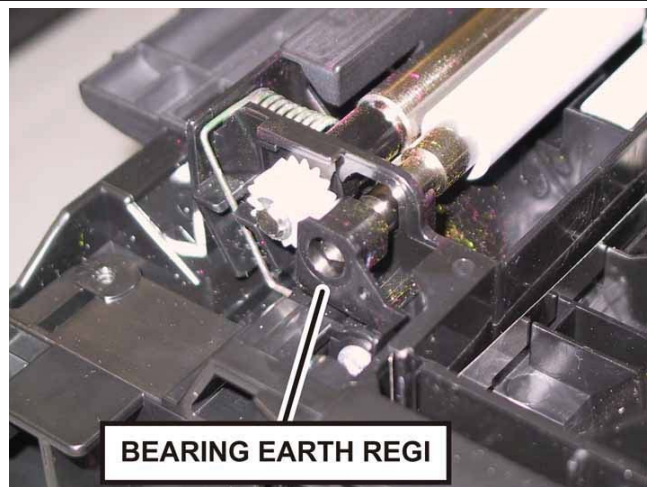
28) Remove the GEAR REGI R from the ROLL ASSY REGI.

Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to forward.

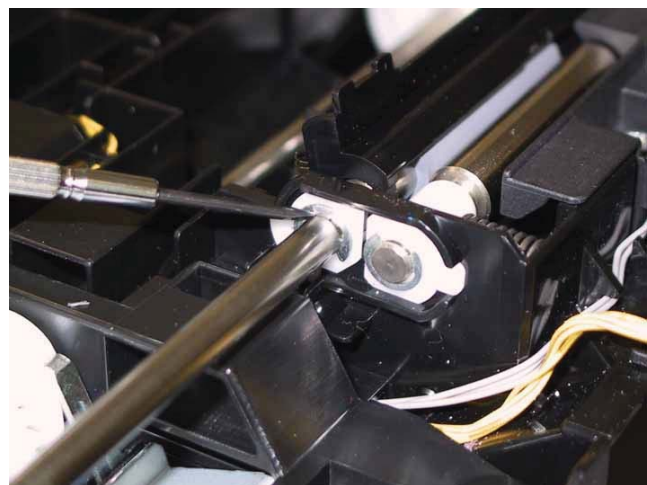


29) Remove the BEARING EARTH REGI (PL3.2.21) from the ROLL ASSY REGI.

Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to forward.

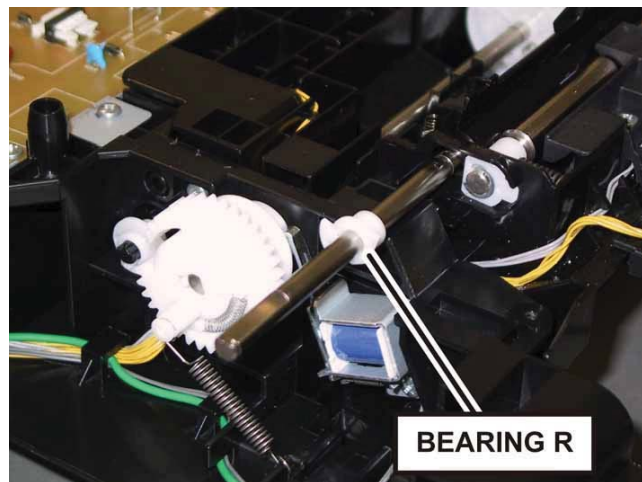


30) Remove the E-ring that fixes the BEARING R (PL3.2.31) to the ROLL ASSY REGI, using a miniature screwdriver.



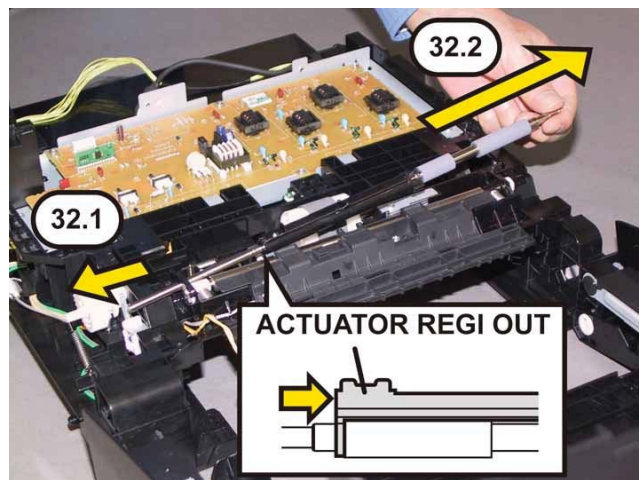
31) Remove the BEARING R from the ROLL ASSY REGI.

Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to frontward.



32) Shift the ROLL ASSY REGI to left to remove the right shaft of the ROLL ASSY REGI, remove the ROLL ASSY REGI from the FEEDER ASSY MG AIO (PL3.1.98) together with the ACTUATOR REGI OUT and the ACTUATOR REGI ROLL M.

Note: When carrying out the work this procedure, move the ACTUATOR REGI OUT to right until it stops.



Removal 61 ACTUATOR REGI IN (PL3.2.11)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

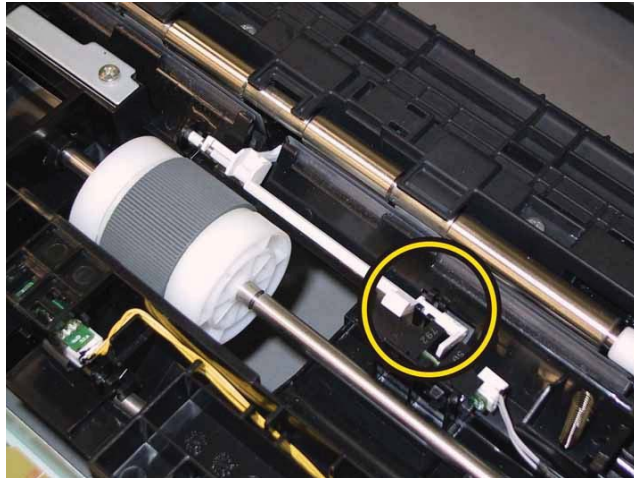
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

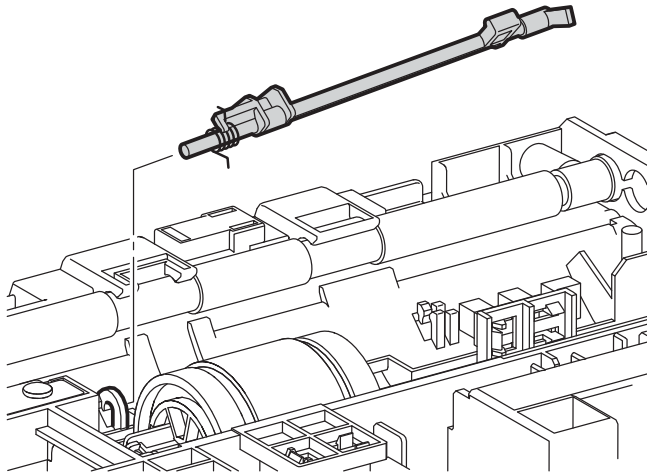
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)

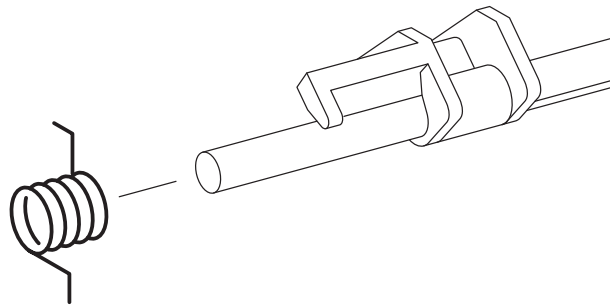
25) Release the left shaft of the ACTUATOR REGI IN (PL3.2.11) from the hook of the CHUTE UP (PL3.2.26).



26) Remove the ACTUATOR REGI IN and the SPRING ACT REGI (PL3.2.12) by releasing the right shaft of the ACTUATOR REGI IN from the hole of the CHUTE UP.



27) Remove the SPRING ACT REGI from the ACTUATOR REGI IN.



Removal 62 SENSOR PHOTO: CST NO PAPER (PL3.2.13)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

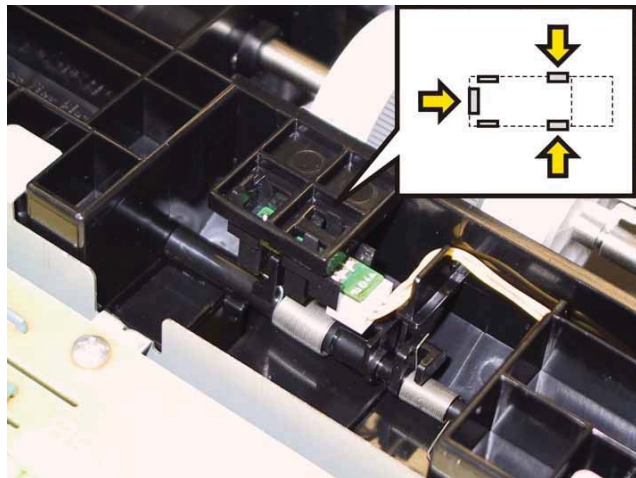
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

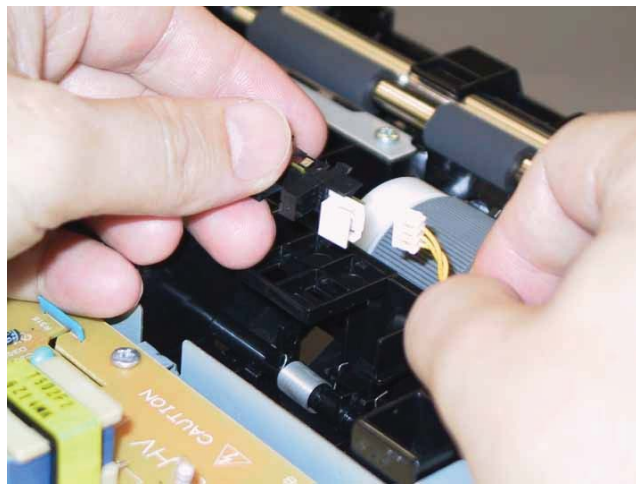
Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)

25) Release the three hooks that fix the SENSOR PHOTO: CST NO PAPER (PL3.2.13) to the FEEDER ASSY MG AIO (PL3.1.98), and remove the SENSOR PHOTO: CST NO PAPER.



26) Disengage the connector (P/J234) of the SENSOR PHOTO: CST NO PAPER.



Removal 63 ACTUATOR ASSY NO PAPER (PL3.2.32)

- 1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)
- 2) Open the COVER ASSY FRONT (PL1.2.1).

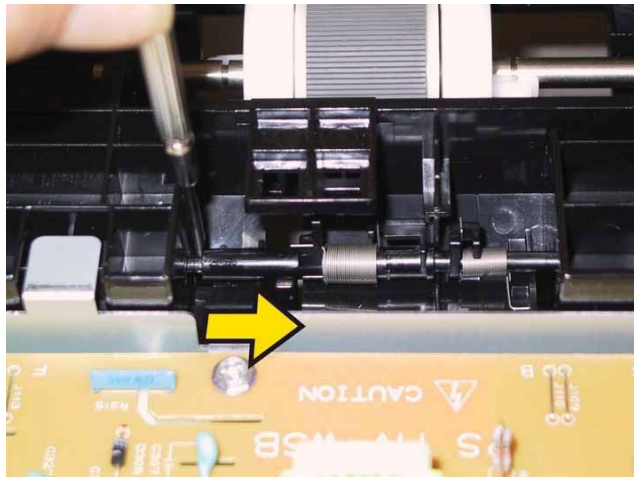
Note: Cover the drum of the PHD ASSY to avoid exposure to light.

- 3) Remove the PHD ASSY. (Removal 3)

Note: The FUSER part is very hot. Take added care not to get burned when performing the service operation.

- 4) Remove the FUSER ASSY. (Removal 4)
- 5) Remove the COVER ASSY SIDE R AIO. (Removal 7)
- 6) Remove the COVER ASSY SIDE L AIO. (Removal 10)
- 7) Remove the COVER ASSY POLE OUT AIO. (Removal 12)
- 8) Remove the SHIELD ASSY ESS AIO. (Removal 26)
- 9) Remove the COVER POLE IN AIO. (Removal 29)
- 10) Remove the COVER SCANNER LOW AIO. (Removal 30)
- 11) Remove the COVER REAR AIO. (Removal 31)
- 12) Remove the COVER TOP AIO. (Removal 32)
- 13) Remove the CHASSIS ASSY LVPS. (Removal 37)
- 14) Remove the KIT PWB ASSY FRONT USB. (Removal 46)
- 15) Remove the KIT TRAY ASSY ADF. (Removal 47)
- 16) Remove the KIT ADF ASSY. (Removal 48)
- 17) Remove the IIT ASSY SUB. (Removal 50)
- 18) Remove the PLATE ASSY TOP. (Removal 51)
- 19) Remove the CHASSIS ASSY INLET. (Removal 52)
- 20) Remove the TONER CARTRIDGE (K), (C), (M), (Y). (Removal 5)
- 21) Remove the CLUTCH ASSY DRV and BEARING REGI. (Removal 40)
- 22) Remove the KIT DRIVE ASSY PH. (Removal 41)
- 23) Remove the KIT TRANSFER ASSY. (Removal 18)
- 24) Remove the UPPER UNIT. (Removal 57)
- 25) Remove the SENSOR PHOTO: CST NO PAPER. (Removal 62)

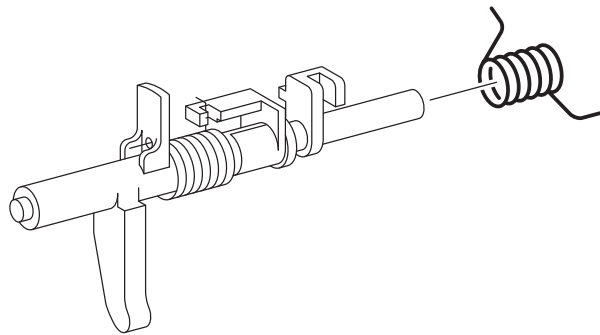
26) Release the right shaft of the ACTUATOR ASSY NO PAPER (PL3.2.32) from the hole of the CHUTE UP (PL3.2.26), using a miniature screwdriver.



27) Remove the ACTUATOR ASSY NO PAPER and the SPRING STP (PL3.2.16) by releasing the left shaft of the ACTUATOR ASSY NO PAPER from the hole of the CHUTE UP.

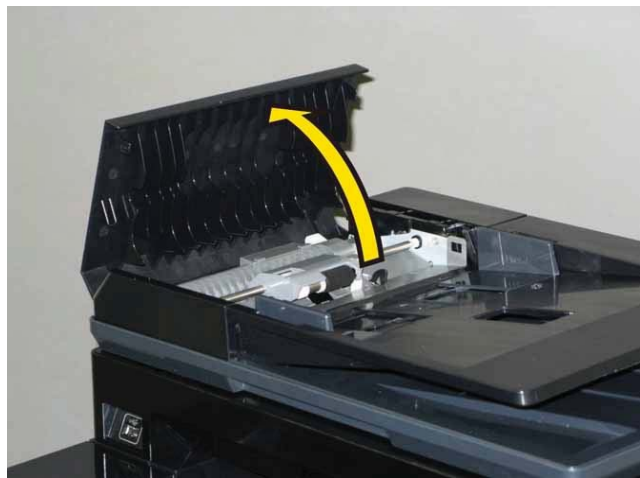


28) Remove the SPRING STP from the ACTUATOR ASSY NO PAPER.

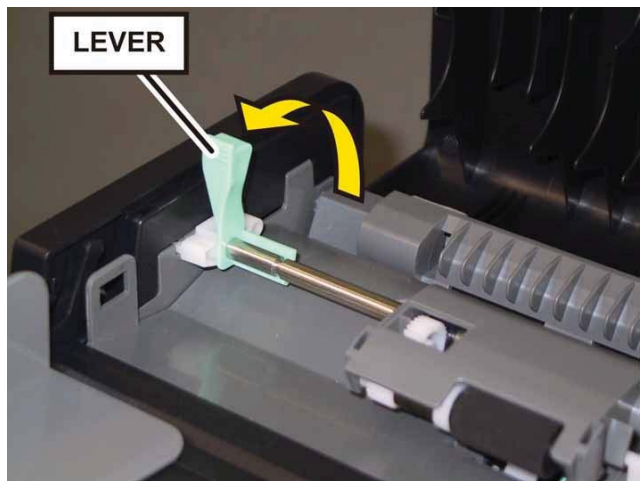


Removal 64 KIT ADF FEED ROLL & SEPARATOR ROLL (PL10.1.98)

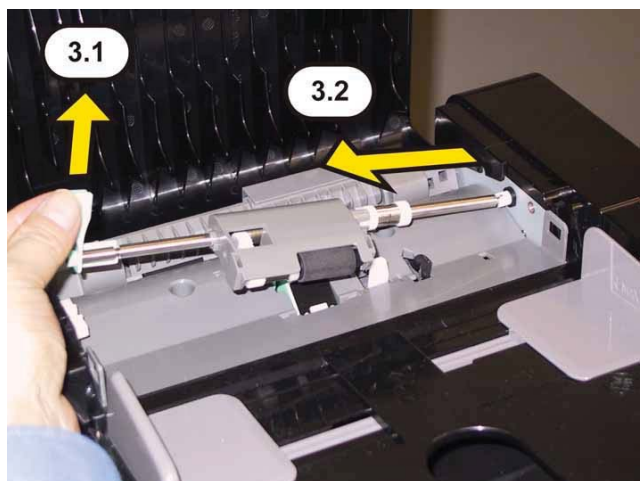
1) Open the COVER TOP ADF (PL10.1.4).



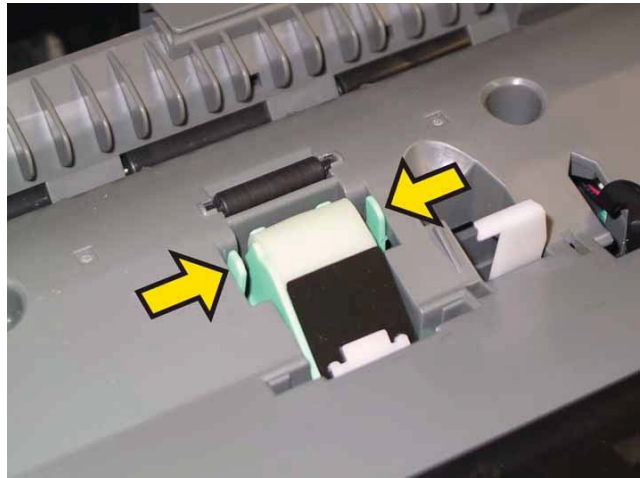
2) Raise the LEVER of the ROLL ASSY FEED (PL10.1.5) by 90 degrees.



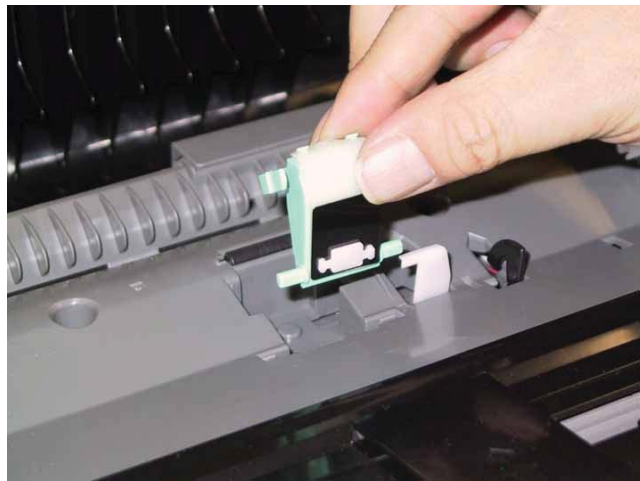
3) After removing the lever of the ROLL ASSY FEED from the guide, pull the rear shaft out. Remove the ROLL ASSY FEED.



4) Release the two hooks of the PAD ASSY SEPARATOR (PL10.1.6), raise the PAD ASSY SEPARATOR.



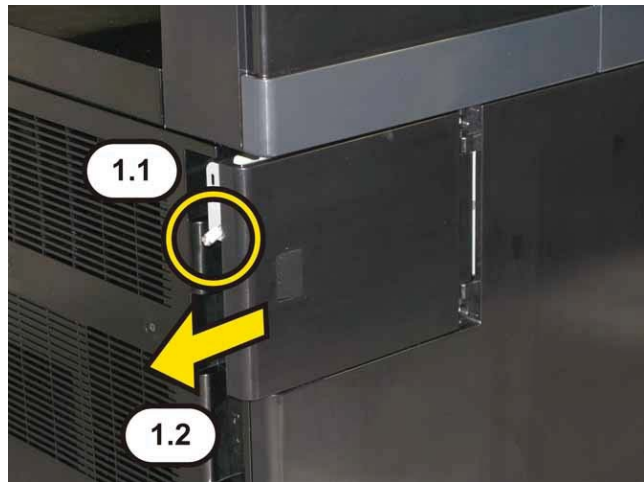
5) Remove the PAD ASSY SEPARATOR.



Removal 65 MEMORY CARD (PL8.1.4)

Note: Use the wrist strap to protect the PWB from the electrostatic.

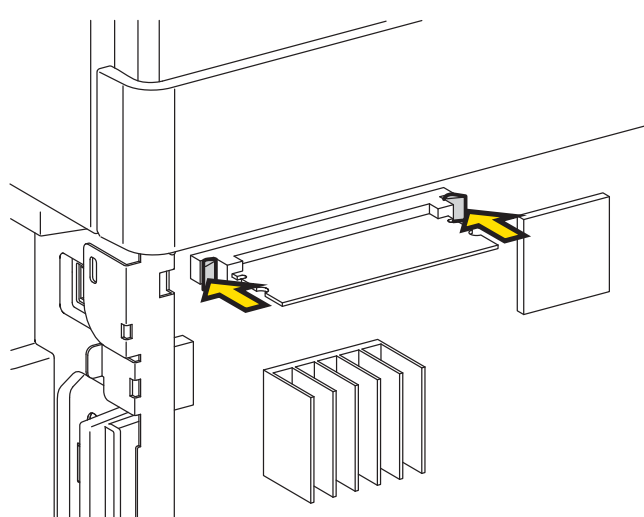
1) Loosen the SCREW KNURLING, shift the COVER ASSY ESS (PL1.1.9) to rear side.



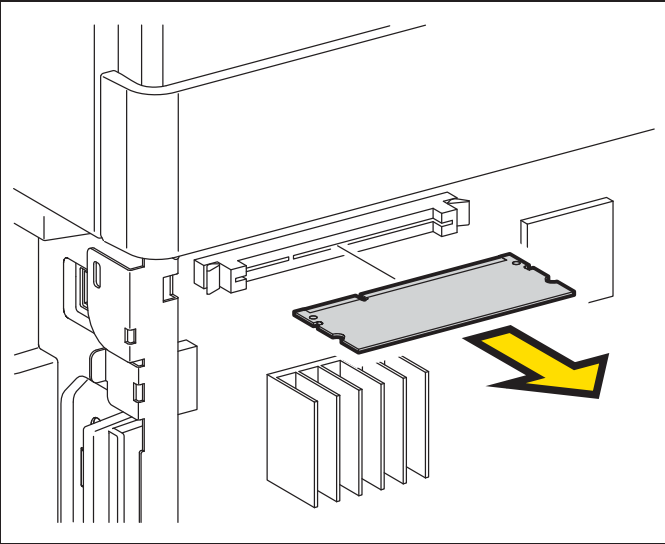
2) Open the COVER ASSY ESS.



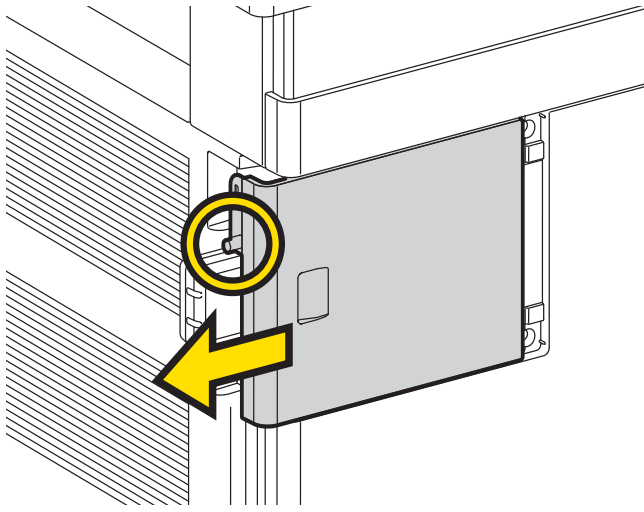
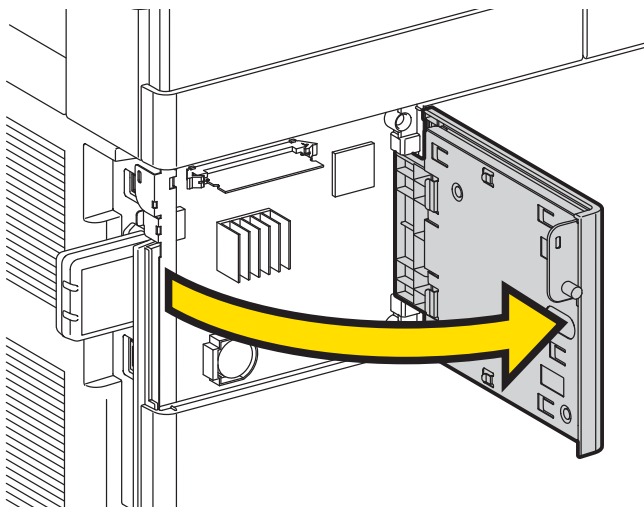
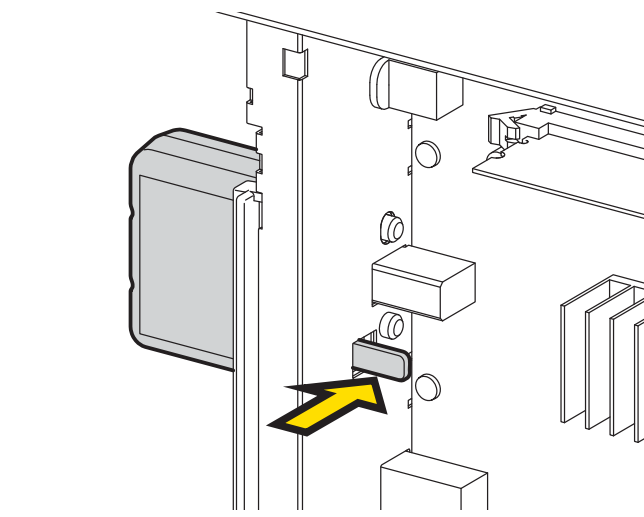
3) Push the release latches of the socket to release the MEMORY CARD (PL8.1.4).



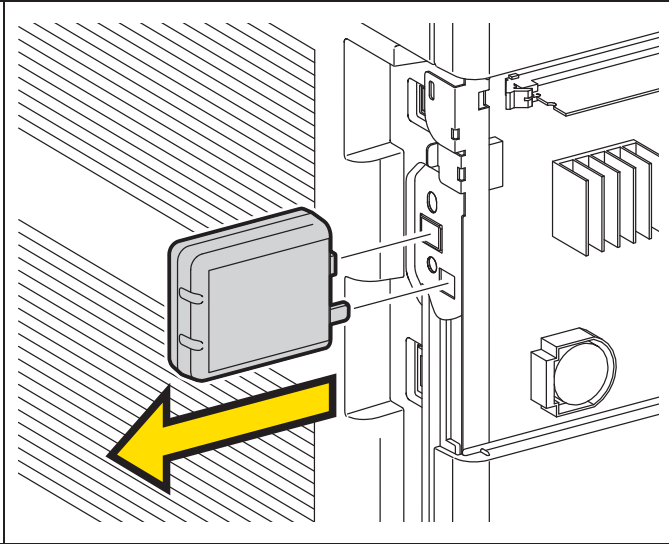
4) Remove the MEMORY CARD.



Removal 66 WIRELESS ADAPTER (PL8.1.11)

<p>1) Loosen the SCREW KNURLING, shift the COVER ASSY ESS (PL1.1.9) to rear side.</p>	
<p>2) Open the COVER ASSY ESS.</p>	
<p>3) Release the one hook of the WIRELESS ADAPTER (PL8.1.11).</p>	

4) Remove the WIRELESS ADAPTER.



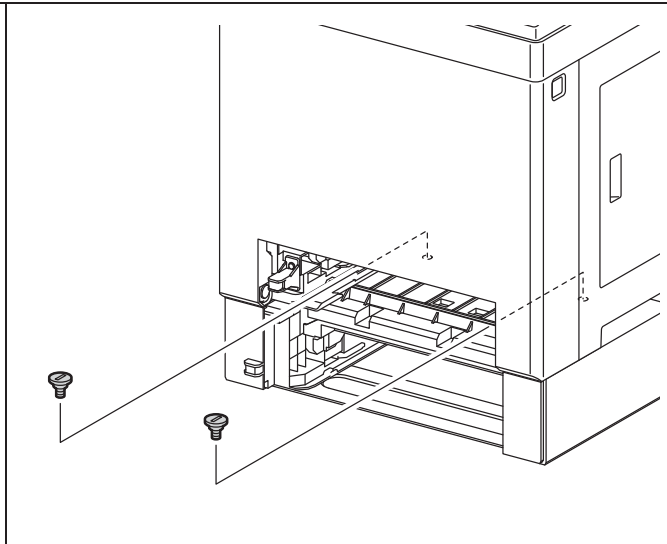
Removal 67 KIT FEEDER ASSY OPT MG AIO (PL12.1.99)

Note: The printer must be lifted by two people.

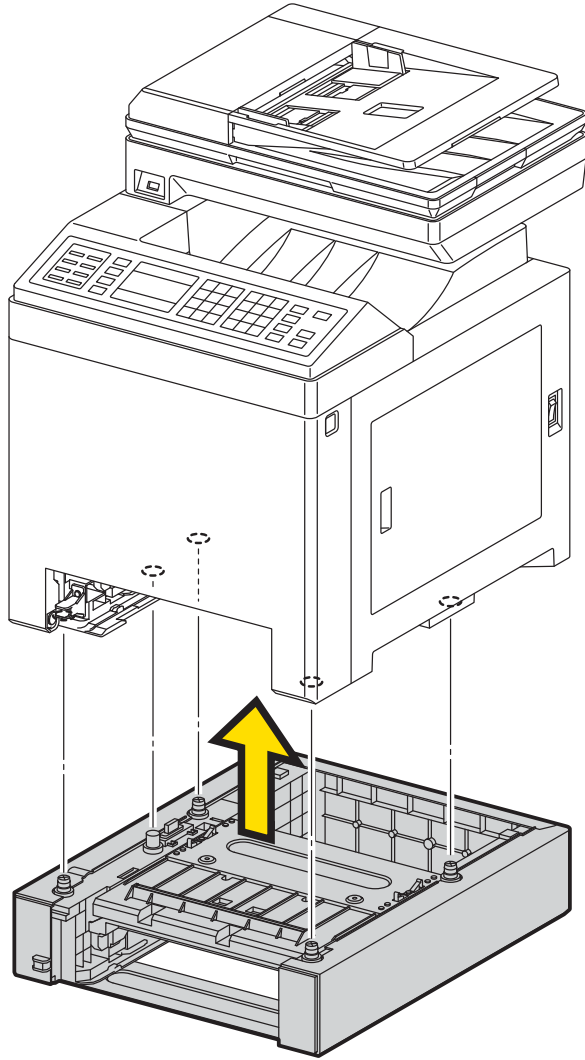
1) Remove the CASSETTE ASSY 250 MG AIO. (Removal 1)

2) Remove the CASSETTE ASSY 250 OPT MG AIO.

3) Remove the two SCREW JOINTs (PL12.1.2) that fix the FEEDER ASSY OPT MG AIO (PL12.1.3) to the printer.



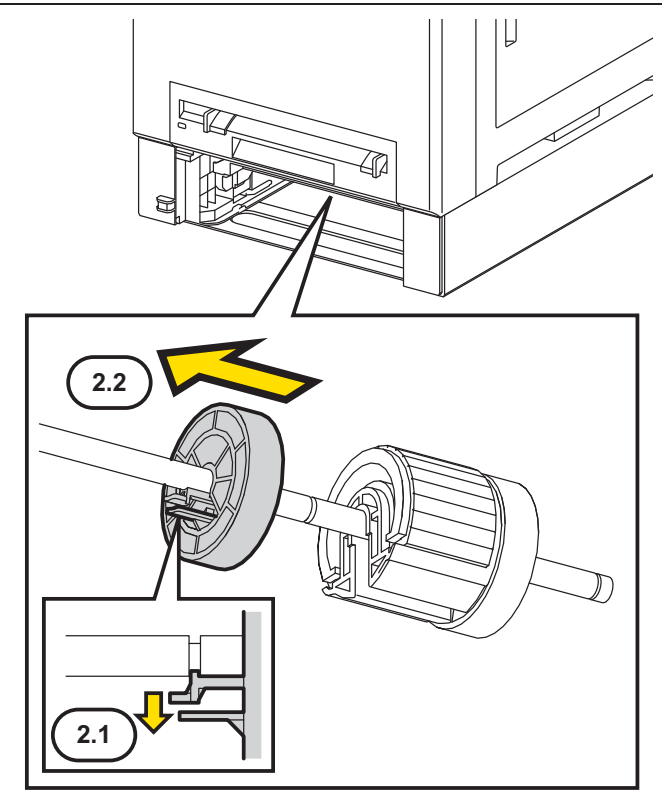
4) Lift up the printer to separate it from the FEEDER ASSY OPT MG AIO.



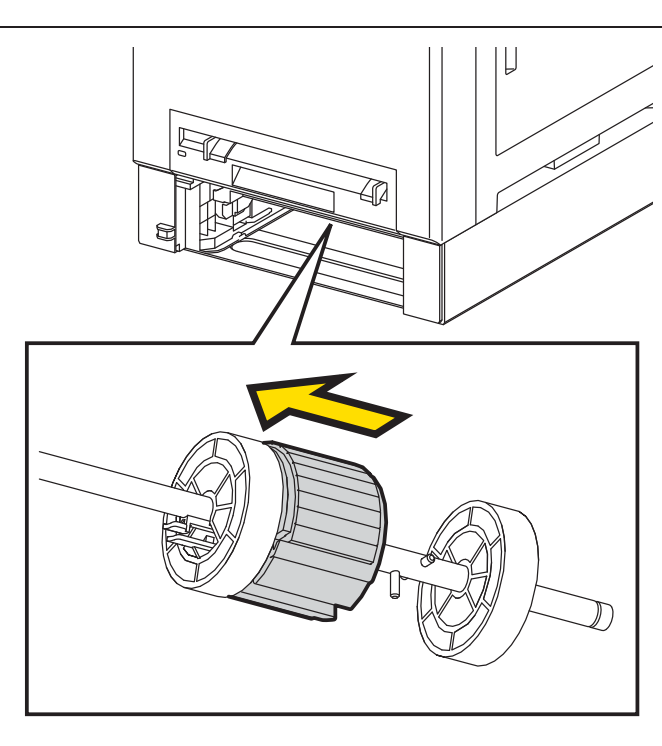
Removal 68 ROLL ASSY FEED (Parts of the FEEDER ASSY OPT) (PL12.4.4)

1) Remove the CASSETTE ASSY 250 OPT MG AIO.

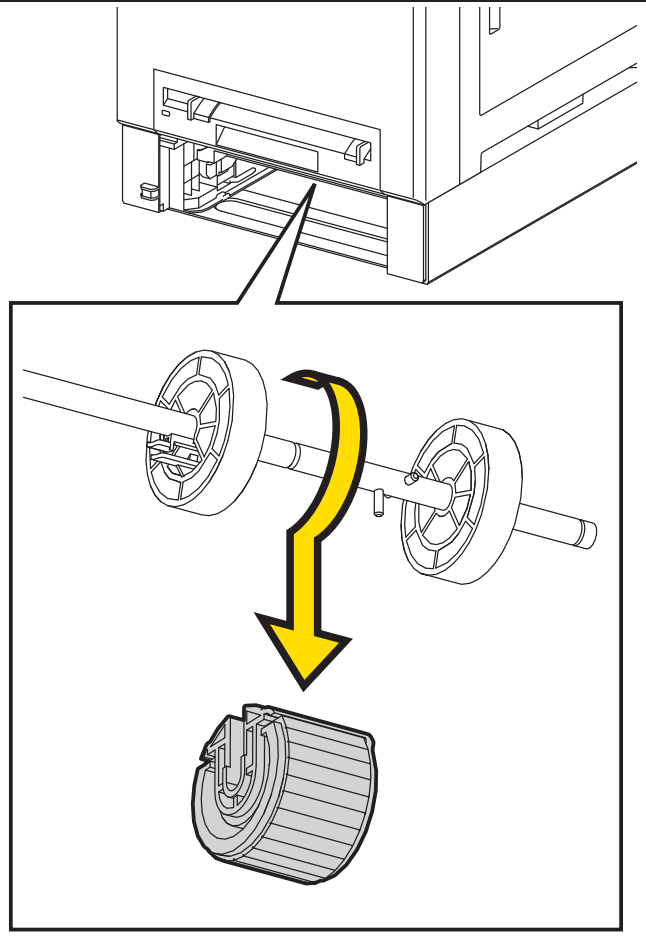
2) Release the hook of the ROLL CORE MSI (PL12.4.3) on the left of the ROLL ASSY FEED (PL 12.4.4), and move the ROLL CORE MSI to left until it stops.



3) Release the groove on the ROLL ASSY FEED from the vertical pin mounted on the SHAFT ASSY FEED (PL12.4.2) by sliding the ROLL ASSY FEED to the left.

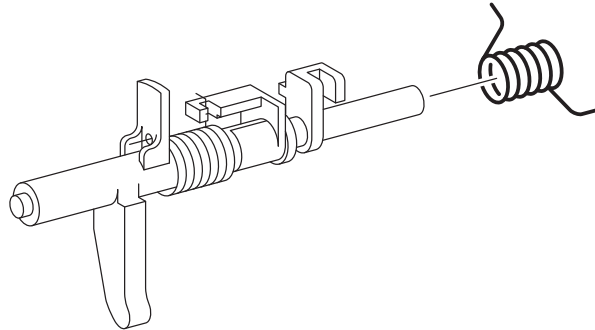


4) Remove the ROLL ASSY FEED from the SHAFT ASSY FEED by rotating the ROLL ASSY FEED 180 degrees.

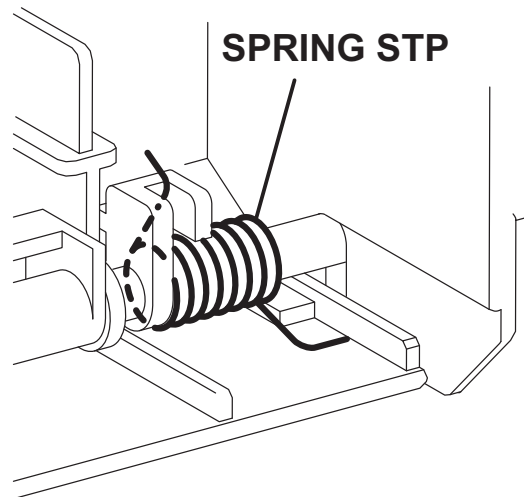


Replacement 1 ACTUATOR ASSY NO PAPER (PL3.2.32)

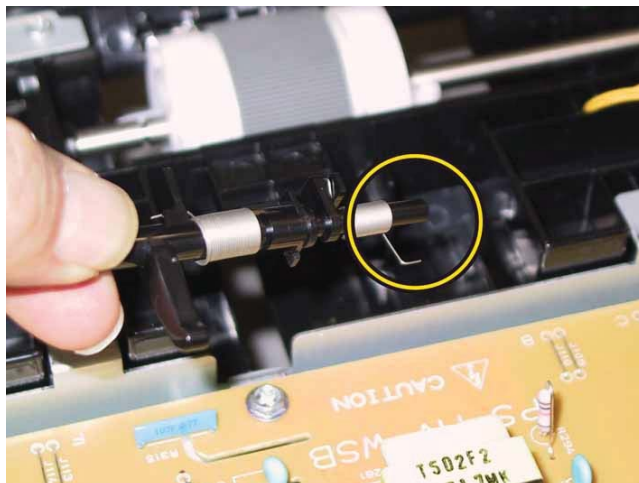
1) Attach the SPRING STP to the ACTUATOR ASSY NO PAPER.



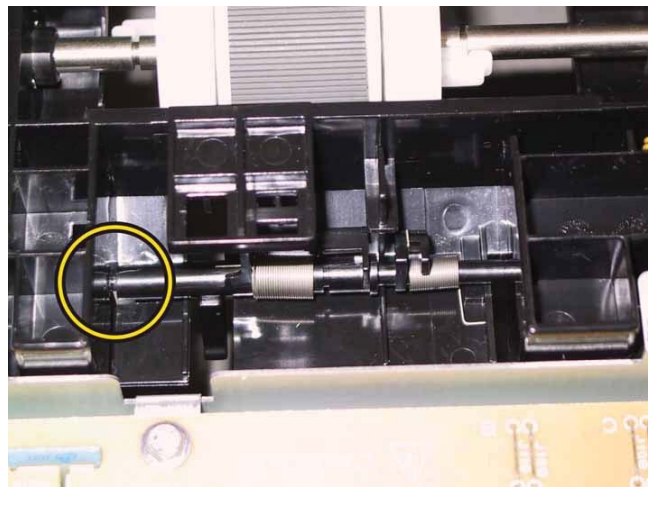
Note: When carrying out the work described next procedure, ensure that the SPRING STP is hung to ACTUATOR NO PAPER and the CHUTE UP correctly.



2) Insert the left shaft of the ACTUATOR ASSY NO PAPER into the hole of the CHUTE UP, hang the SPRING STP to the CUHTE UP.



3) Insert the right shaft of the ACTUATOR ASSY NO PAPER into the hole of the CHUTE UP. Attach the ACTUATOR ASSY NO PAPER.



Check the ACTUATOR ASSY NO PAPER movement, after the procedure 3 is completed.

Go to the next replacement step:

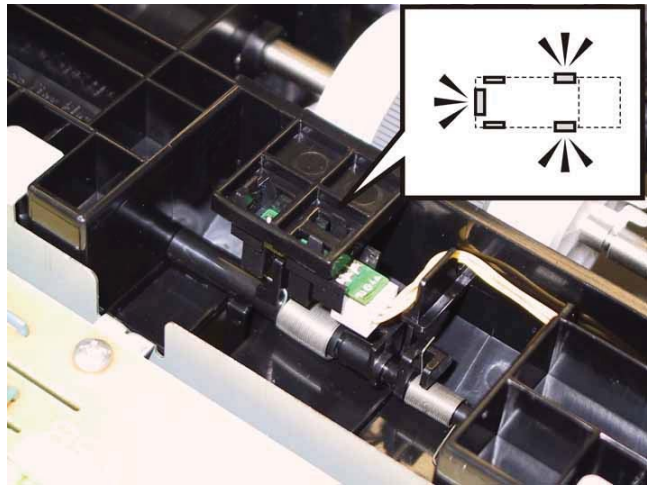
Replacement 2 SENSOR PHOTO: CST NO PAPER (PL3.2.13)

Replacement 2 SENSOR PHOTO: CST NO PAPER (PL3.2.13)

1) Engage the connector (P/J234) of the SENSOR PHOTO: CST NO PAPER.

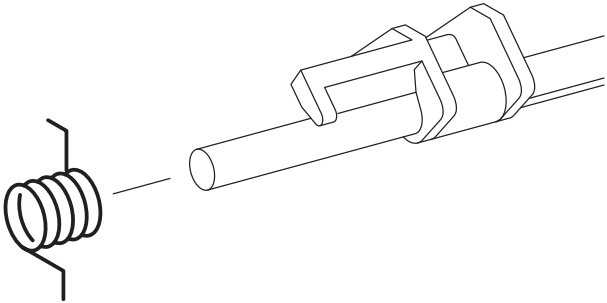
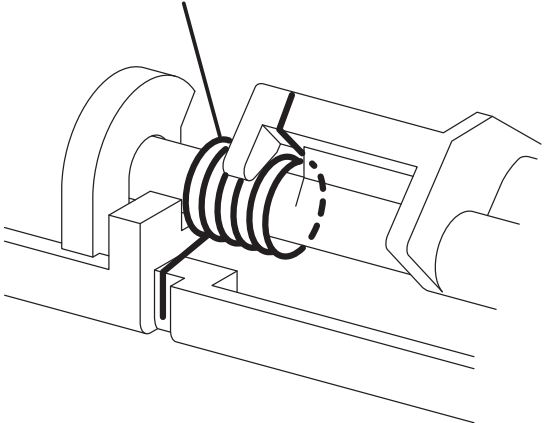
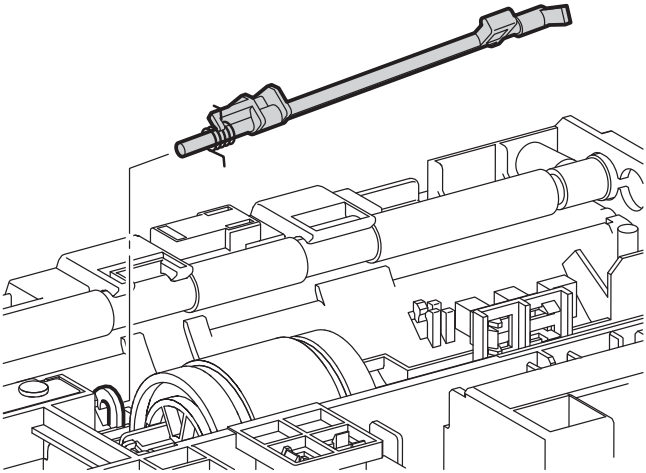


2) Replace the SENSOR PHOTO: CST NO PAPER to the FEEDER ASSY MG AIO by mating the hook of the SENSOR PHOTO: CST NO PAPER with its mounting position.

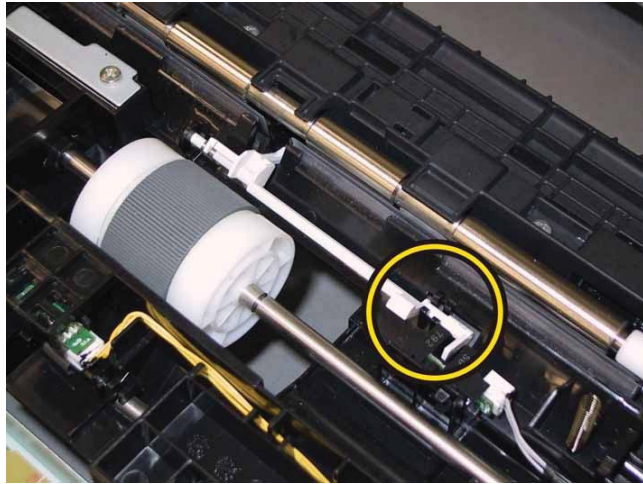


**Go to the next replacement step:
Replacement 7 UPPER UNIT (Reference only)**

Replacement 3 ACTUATOR REGI IN (PL3.2.11)

<p>1) Attach the SPRING ACT REGI to the ACTUATOR REGI IN.</p>	 A technical drawing showing a coiled spring on the left and a shaft with a clamp on the right. A dashed line indicates the spring is being moved towards the shaft.
<p>Note: When carrying out the work described next procedure, ensure that the SPRING ACT REGI is hung to ACTUATOR REGI IN and the CHUTE UP correctly.</p>	<p style="text-align: center;">SPRING ACT REGI</p>  A technical drawing showing a coiled spring being hung onto a shaft. A label 'SPRING ACT REGI' with a pointer indicates the spring. The shaft is part of a larger mechanical assembly.
<p>2) Insert the right shaft of the ACTUATOR REGI IN into the hole of the CHUTE UP, hang the SPRING ACT REGI to the CUHTE UP.</p>	 A technical drawing showing a shaft with a clamp being inserted into a hole in a larger mechanical assembly. A label 'SPRING ACT REGI' with a pointer indicates the spring is being hung onto the shaft.

3) Fix the left shaft of the ACTUATOR REGI IN with the hook of the CHUTE UP to attach the ACTUATOR REGI IN.



Check the ACTUATOR REGI IN movement, after the procedure 3 is completed.

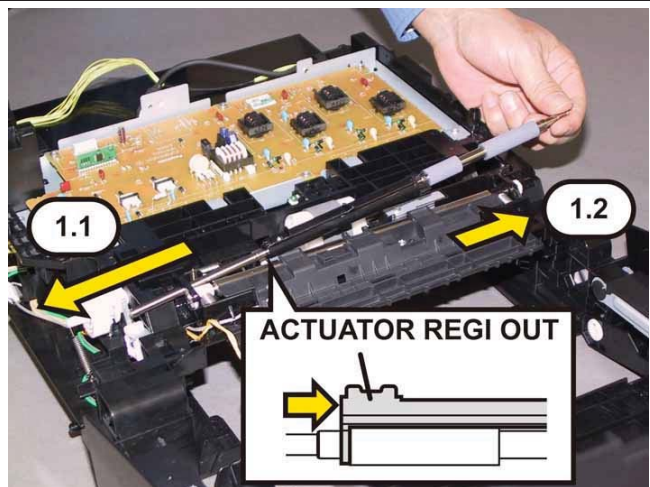
Go to the next replacement step:

Replacement 4 ROLL ASSY REGI (PL3.2.9)

Replacement 4 ROLL ASSY REGI (PL3.2.9)

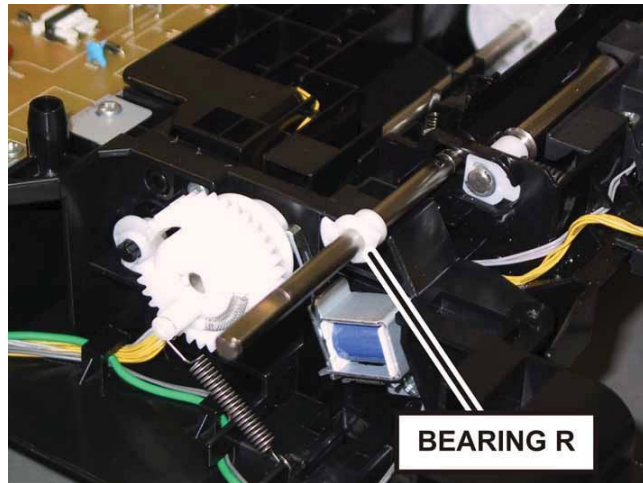
1) After the inserting the left shaft of the ROLL ASSY REGI into the hole of the FEEDER ASSY MG AIO, insert the right shaft of the ROLL ASSY REGI into the hole. Attach the ROLL ASSY REGI together with the ACTUATOR REGI OUT and the ACTUATOR REGI ROLL M.

Note: When carrying out the work this procedure, move the ACTUATOR REGI OUT to right until it stops.

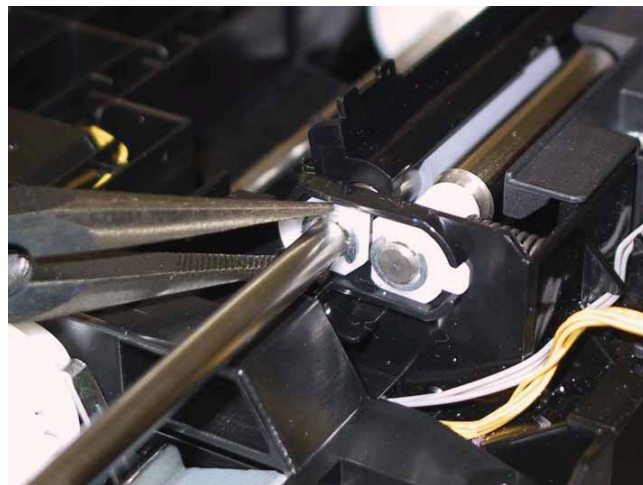


2) Attach the BEARING R to the ROLL ASSY REGI.

Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to frontward.



3) Secure the BEARING R to the ROLL ASSY REGI with the E-ring by using the pliers.



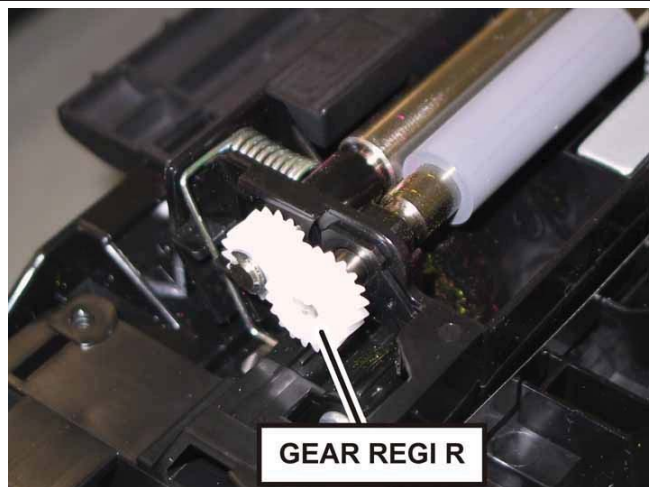
4) Attach the BEARING EARTH REGI to the ROLL ASSY REGI.

Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to forward.



5) Attach the GEAR REGI R to the ROLL ASSY REGI.

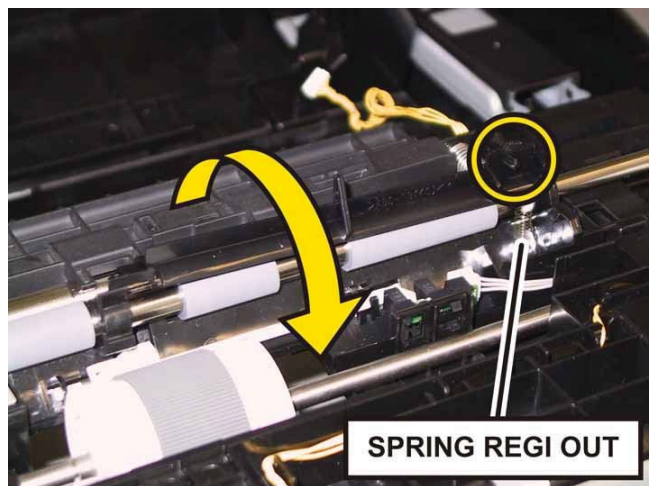
Note: When carrying out the work this procedure, it is easier to push the ROLL REGI METAL (PL3.2.10) to forward.



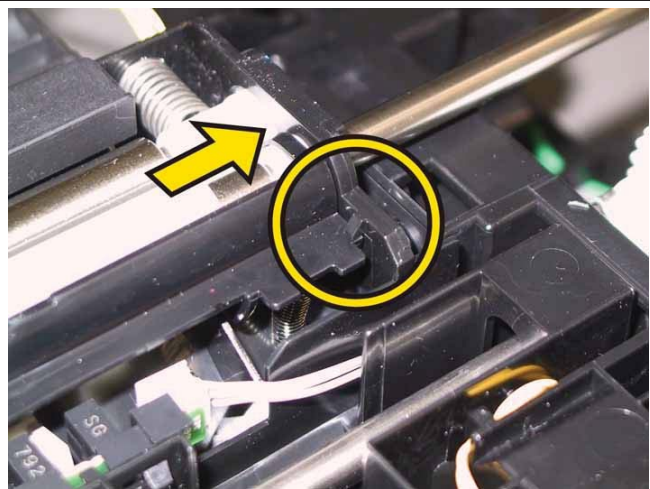
6) Secure the GEAR REGI R to the ROLL ASSY REGI with the E-ring by using the pliers.



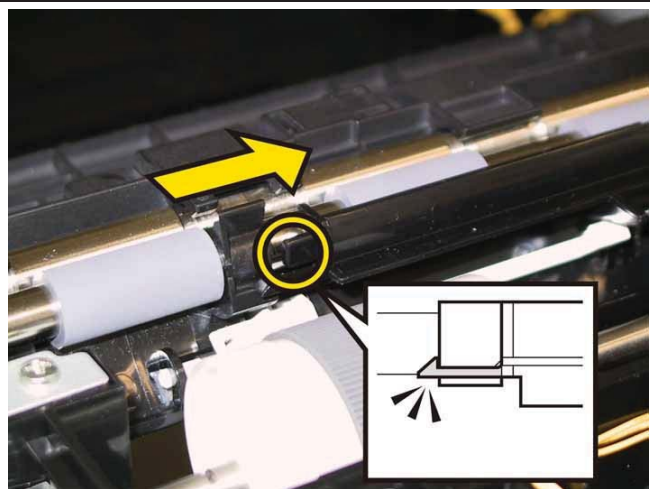
7) Close the ACTUATOR REGI OUT by inserting the boss of the ACTUATOR REGI OUT into the SPRING REGI OUT.



8) Shift the ACTUATOR REGI OUT to left, fix the CHUTE UP using the hook.



9) Attach the ACTUATOR REGI ROLL M by mating the hole of the ACTUATOR REGI ROLL M with the tab of the ACTUATOR REGI OUT. Fix it using the hook of the ACTUATOR REGI OUT.



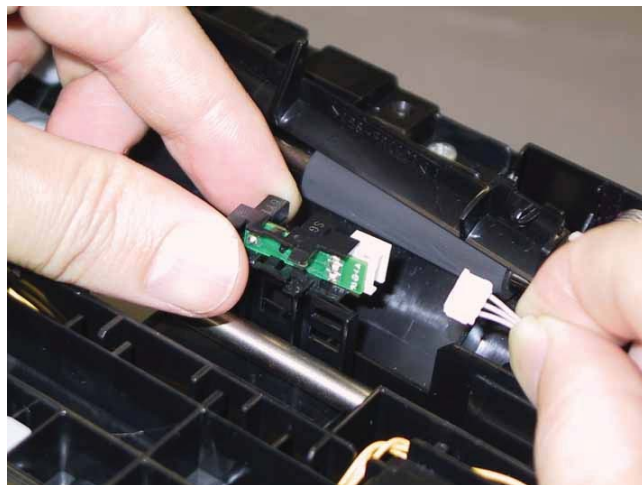
Note: Check the ACTUATOR REGI OUT and the ACTUATOR REGI IN movement, after the procedure 9 is completed.

Go to the next replacement step:

Replacement 7 UPPER UNIT (Reference only)

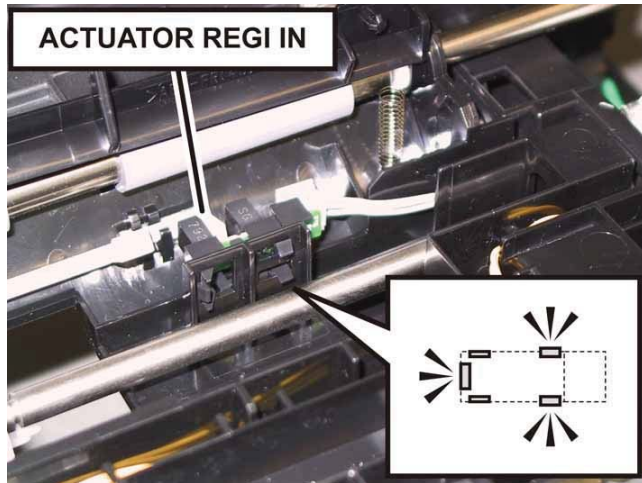
Replacement 5 SENSOR PHOTO: REGI (PL3.2.13)

1) Engage the connector (P/J232) of the SENSOR PHOTO: REGI.

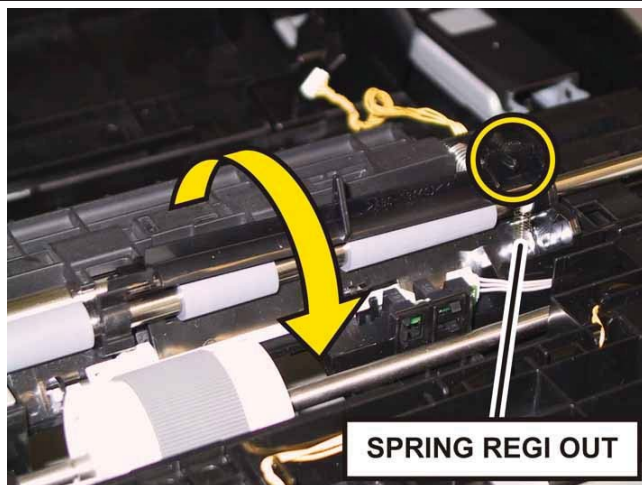


2) Replace the SENSOR PHOTO: REGI to the FEEDER ASSY MG AIO by mating the three hooks of the SENSOR PHOTO: REGI.

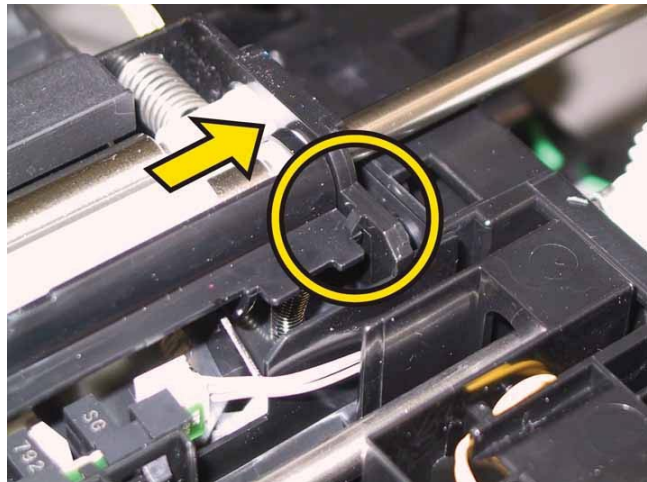
Note: When carrying out the work this procedure, it is easier to push the ACTUATOR REGI IN (PL3.2.11) to downward.



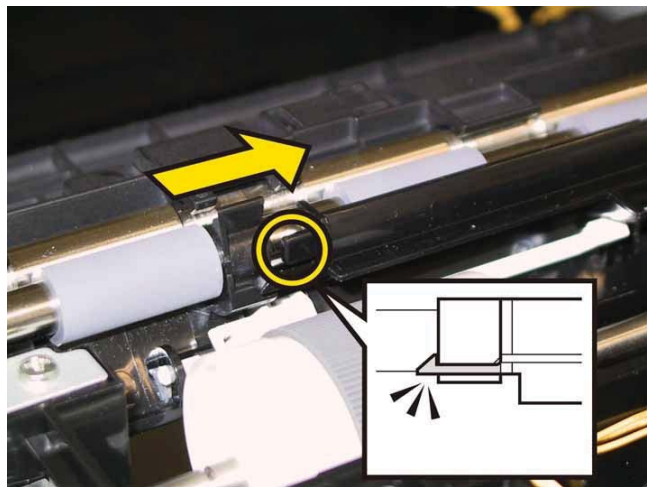
3) Close the ACTUATOR REGI OUT by inserting the boss of the ACTUATOR REGI OUT into the SPRING REGI OUT.



4) Shift the ACTUATOR REGI OUT to left, fix the CHUTE UP using the hook.



5) Attach the ACTUATOR REGI ROLL M by mating the hole of the ACTUATOR REGI ROLL M with the tab of the ACTUATOR REGI OUT. Fix it using the hook of the ACTUATOR REGI OUT.



Note: Check the ACTUATOR REGI OUT and the ACTUATOR REGI IN movement, after the procedure 5 is completed.

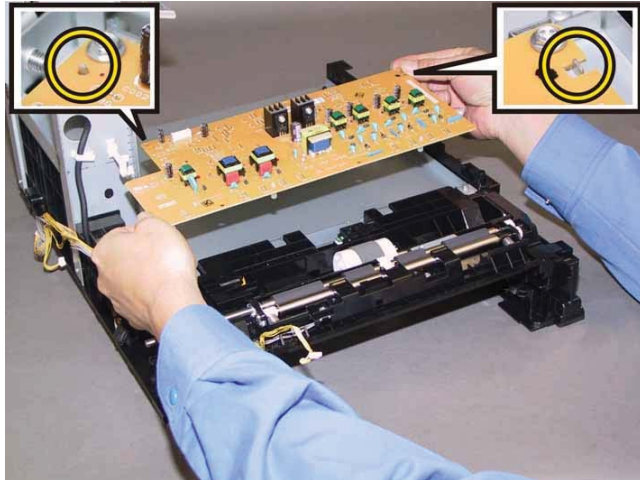
Go to the next replacement step:

Replacement 7 UPPER UNIT (Reference only)

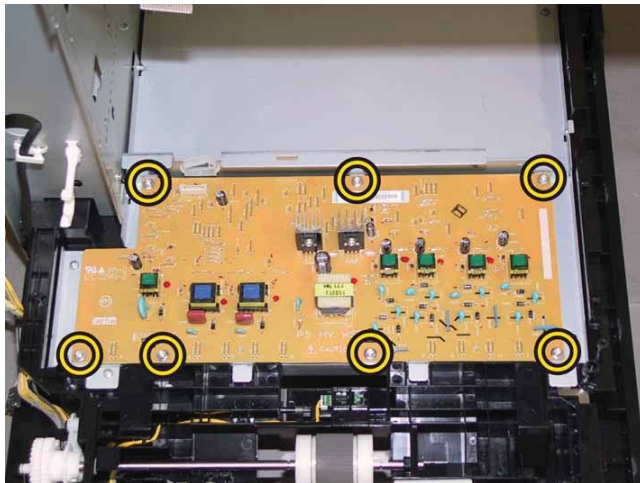
Replacement 6 PWBA HVPS (PL4.1.19)

Note: Use the wrist strap to protect the PWB from the electrostatic.

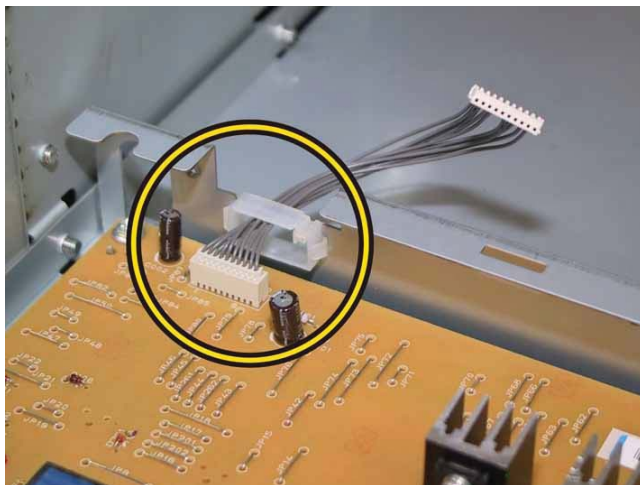
1) Mate the notch and hole of the PWBA HVPS with the tabs of the CHASSIS ASSY HVPS, attach the PWBA HVPS.



2) Secure the PWBA HVPS to the CHASSIS ASSY HVPS with the seven screws (silver, 6mm).



3) Engage the connector (P/J161) of the HARN ASSY HVPS to the PWBAHVPS, route the HARN ASSY HVPS to the EDGING SADDLE. Close the EDGING SADDLE.

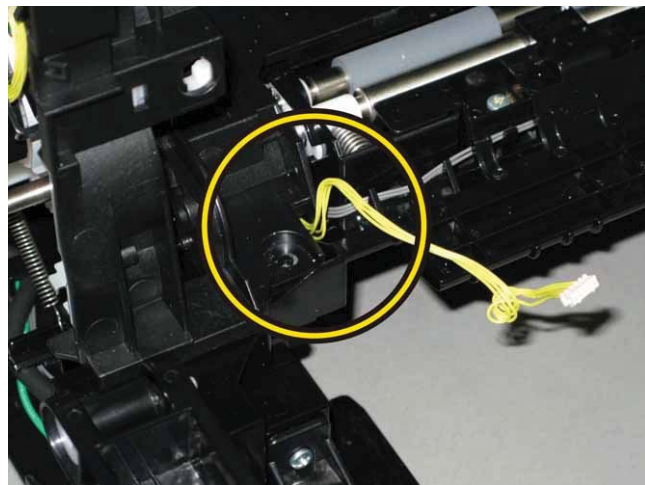


Go to the next replacement step:

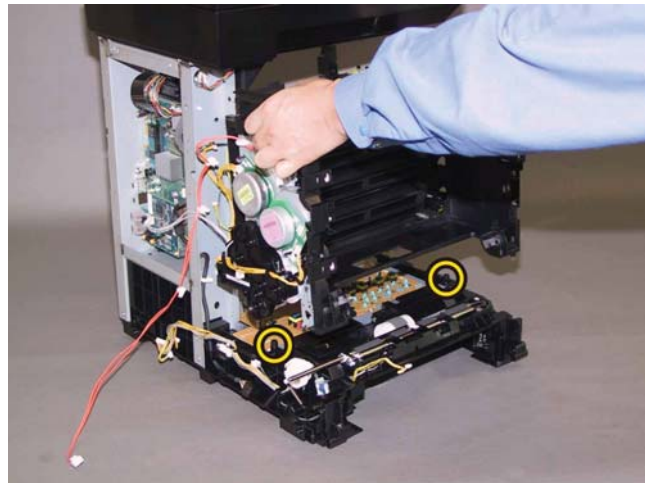
Replacement 7 UPPER UNIT (Reference only)

Replacement 7 UPPER UNIT (Reference only)

Note: When carrying out the work described next procedure, route the harness of the TRANSFER ASSY through the groove of the UPPER UNIT.



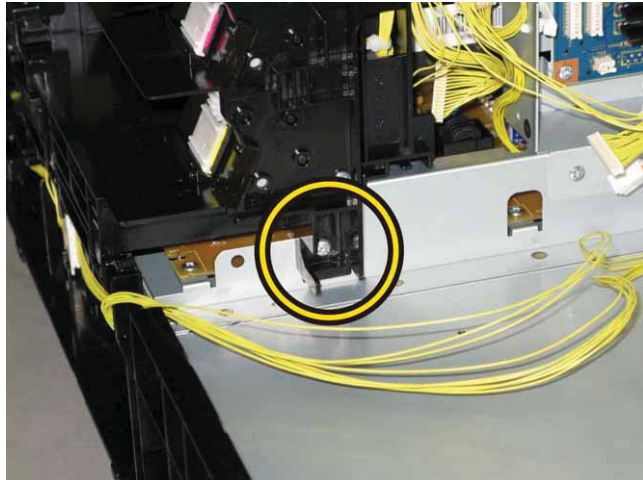
1) Mate the two holes of the UPPER UNIT with the bosses of the FEEDER ASSY MG AIO and attach it.



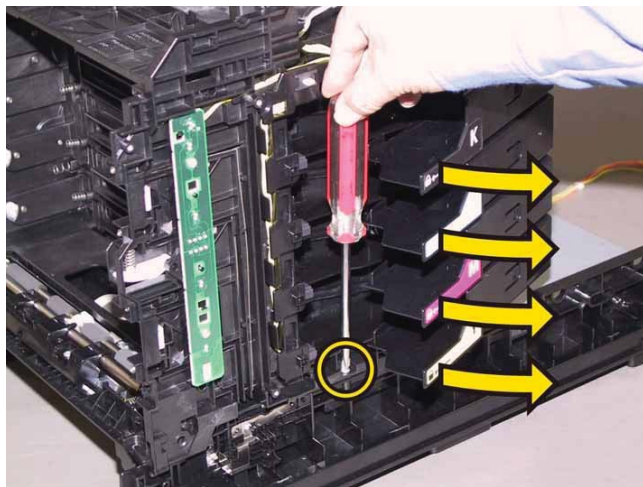
2) Secure the left side of the printer frame with the one screw (silver, tap, 8mm).



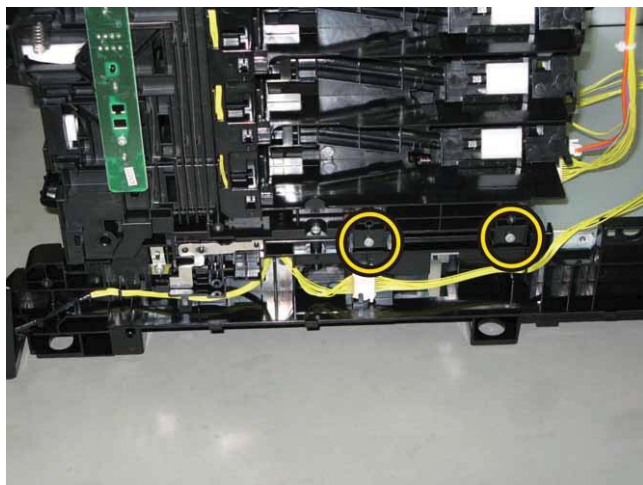
3) Secure the rear side of the DISPENSER ASSY with the one screw (silver, M4, 6mm).



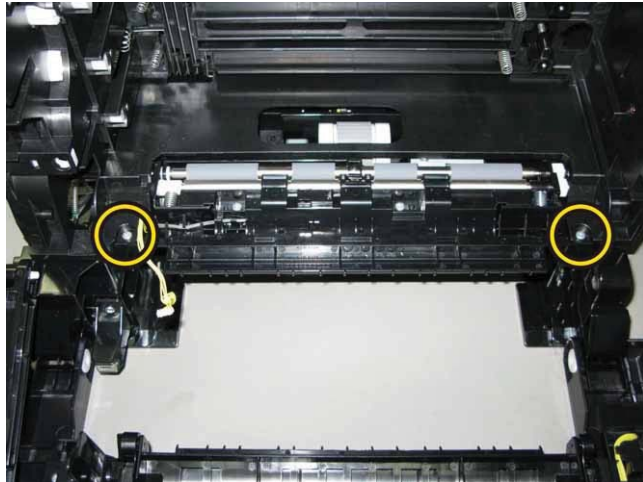
4) Open the HOLDER ASSY TCRU (K), (C), (M) and (Y), secure the right side of the printer frame with the one screw (silver, tap, 8mm).



5) Secure the under part of the DISPENSER ASSY with the two screws (silver, tap, 8mm).



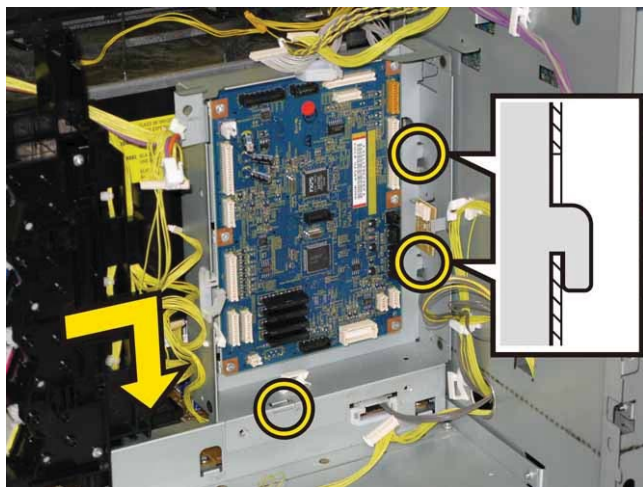
6) Secure the front side of the printer frame with the two screws (silver, tap, 8mm).



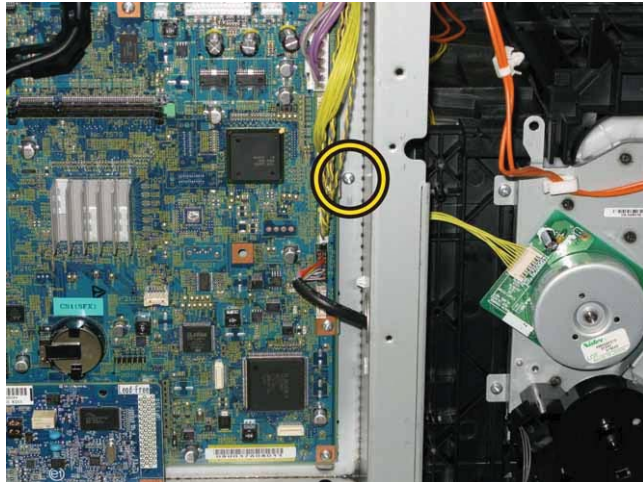
7) Engage the connector (P/J221) of the DRIVE ASSY SUB.



8) Mate the three tabs of the CHASSIS MCU with the holes of the printer, attach the CHASSIS MCU to the printer together with the PWBA MCU.



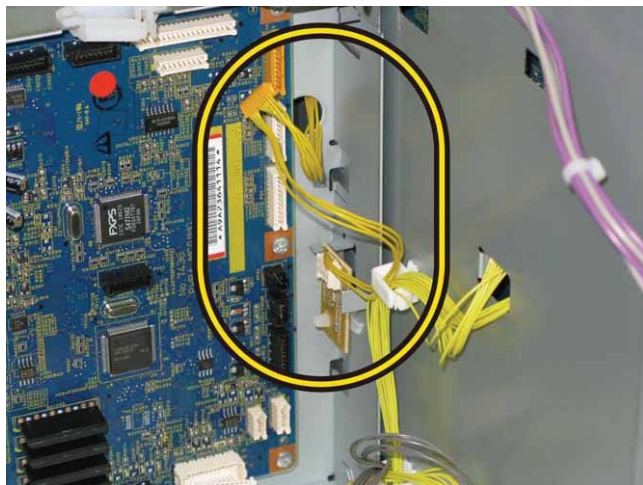
9) Secure the side part of the CHASSIS MCU with the one screw (silver, 6mm).



10) Secure the under part of the CHASSIS MCU with the two screws (silver, 6mm).



11) Route the HARN ASSY PHD XPRO through the hole of the CHASSIS MCU, engage the connector (P/J144) of the PWBA EEPROM. Secure the HARN ASSY PHD XPRO using the clamp.



12) Engage all the connectors of the PWBA MCU, secure all the harnesses using the clamps on the CHASSIS MCU.

Note: When carrying out the work this procedure, do not engage the two connectors (P10, P11).



Go to the next replacement step:

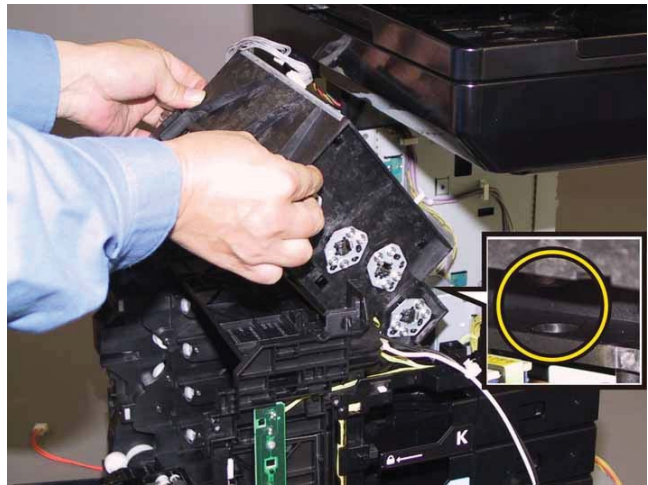
Replacement 46 KIT TRANSFER ASSY (PL6.1.98)

Replacement 8 KIT ROS (PL4.1.99)

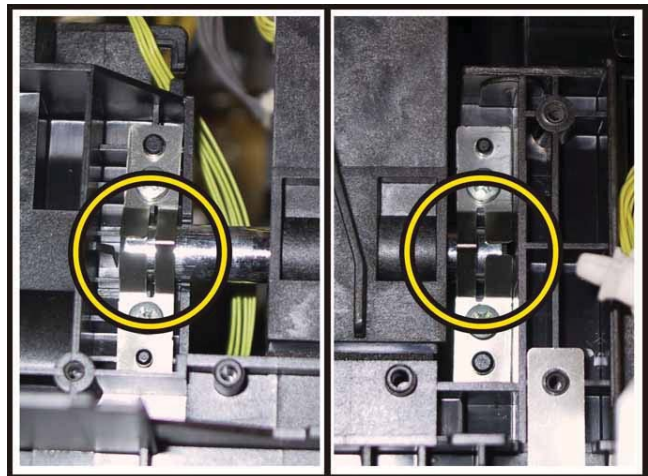
1) Engage the two connectors (P/J411 and 412) of the ROS ASSY.



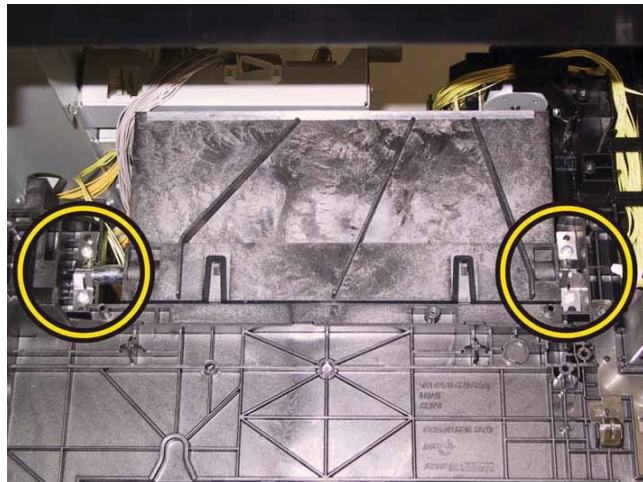
2) Mate the under side boss of the ROS ASSY with the hole of the printer, attach the ROS ASSY.



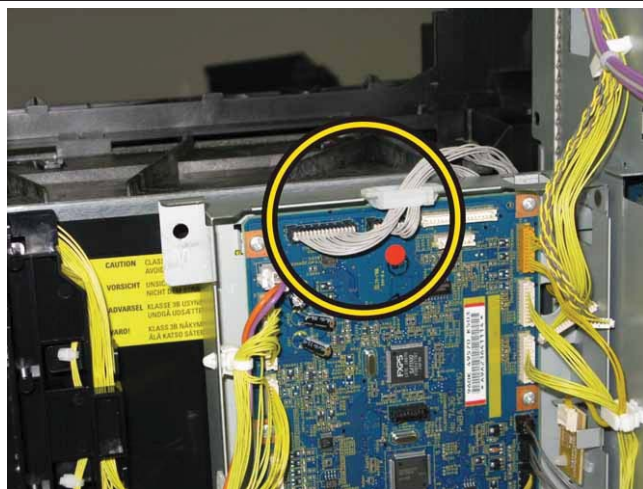
Note: When carrying out the work described next procedure, ensure that the SPRING ROS is oriented to the direction shown in the right.



3) Mate the holes of the SPRING ROS with the bosses of the printer, secure it with the four screws (silver, tap, 8mm).



4) Engage the two connectors (P/J40 and 41) with the PWBA MCU, fix the harness using the EDGING SADDLE.

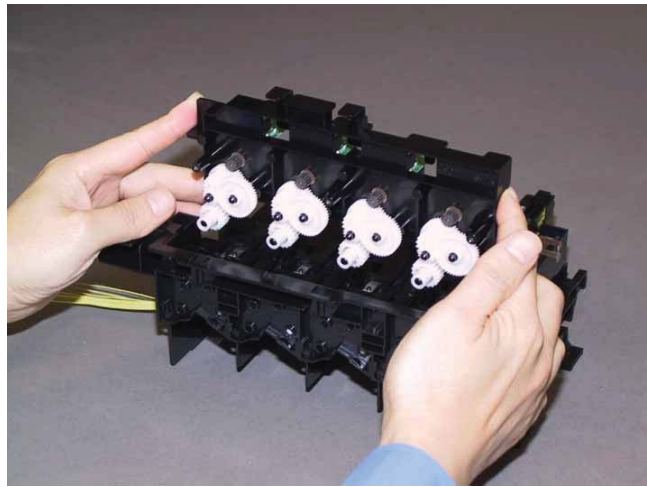


**Go to the next replacement step:
Replacement 13 PLATE ASSY TOP (PL8.2.2)**

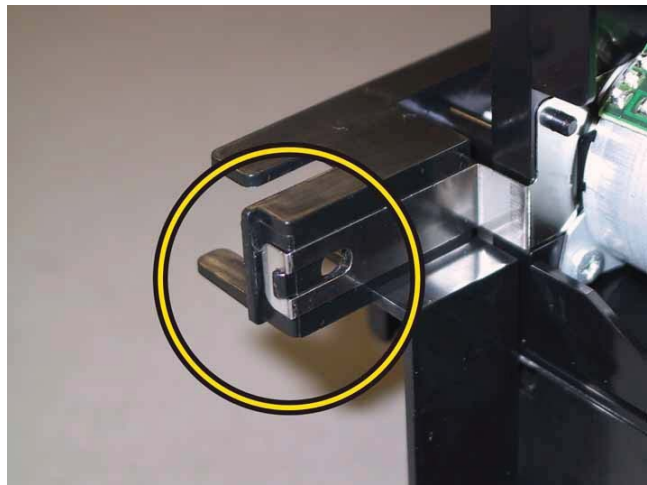
Replacement 9 FRAME ASSY MOT (PL5.1.2)

Note: When carrying out the work described next procedure, take care not to drop and lose the GEARS.

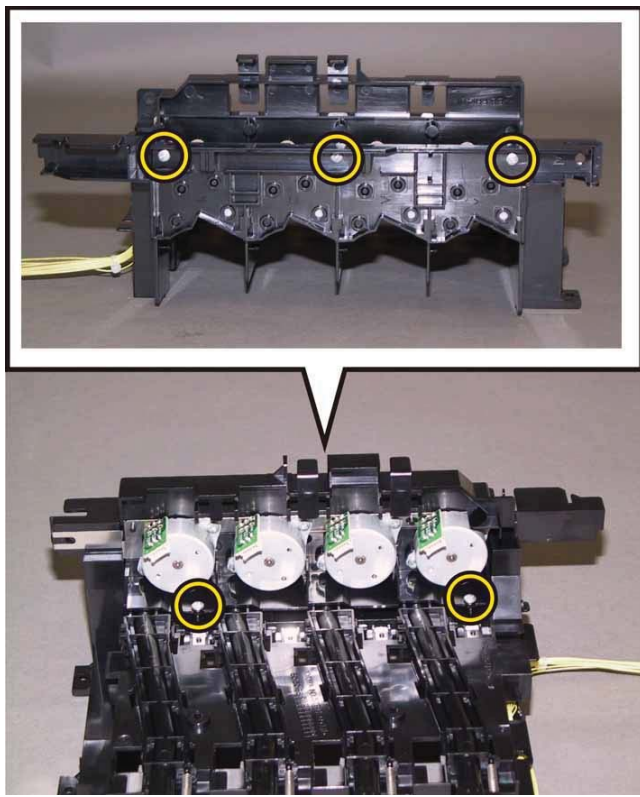
1) Attach the FRAME ASSY MOT to the DISPENSER ASSY.



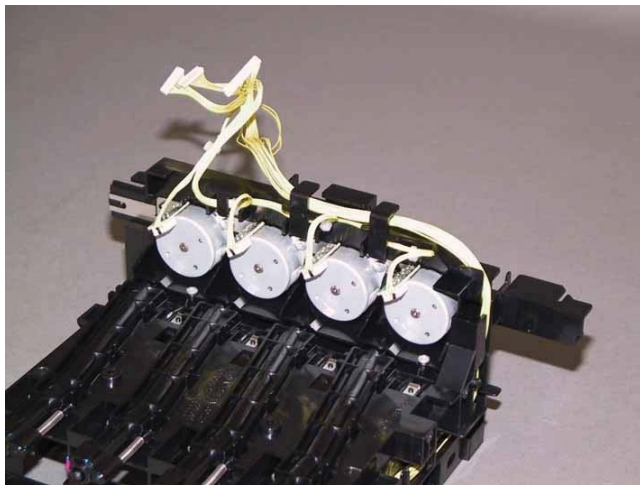
2) Hang the notch of the CONDUCTOR MOTOR to the hook of the FRAME DISP.



3) Secure the FRAME ASSY MOT to the DISPENSER ASSY with the five screws (silver, tap, 8mm).



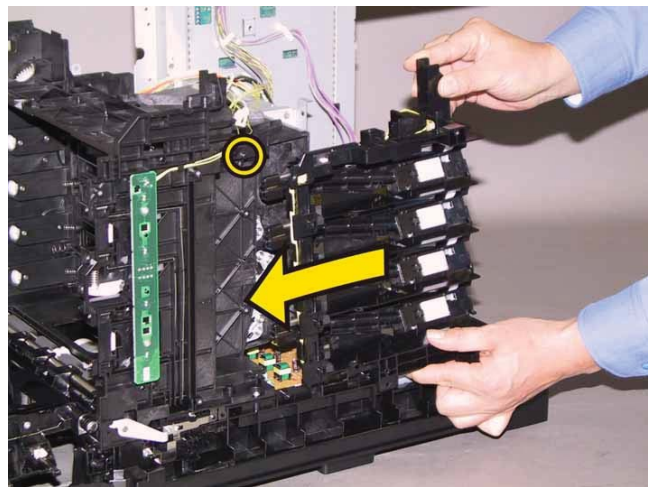
4) Route all the harness through the hooks of the FRAME ASSY MOT, engage all the connectors of the MOTOR ASSY DISP.



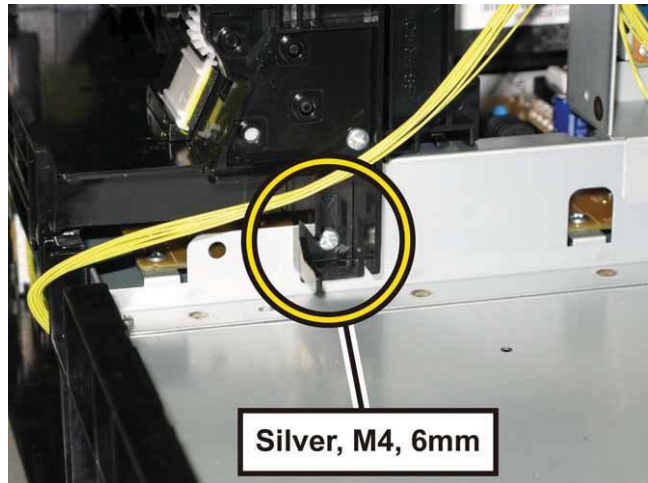
**Go to the next replacement step:
Replacement 10 DISPENSER ASSY (PL5.1.1)**

Replacement 10 DISPENSER ASSY (PL5.1.1)

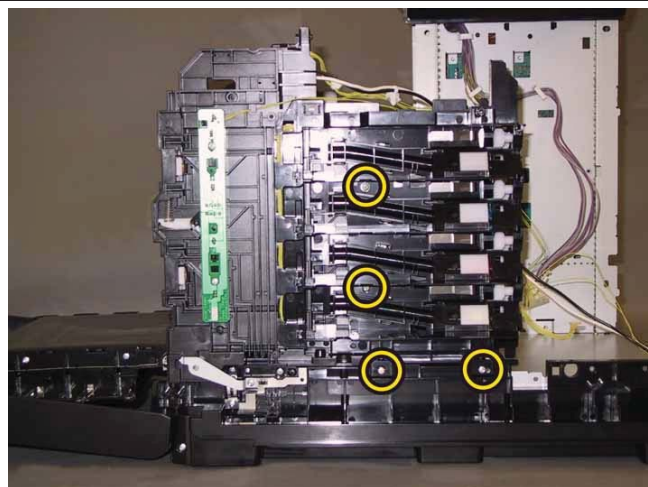
1) Insert the AUGER part of the DISPENSER ASSY into the hole of the printer, mate the hole of the DISPENSER ASSY with the boss of the printer, and then attach the DISPENSER ASSY.



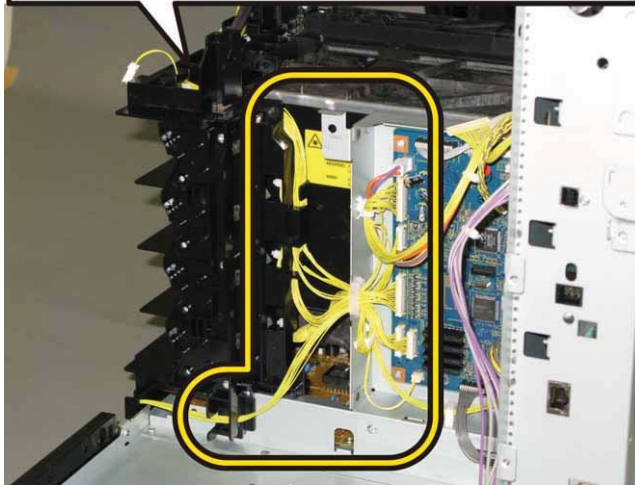
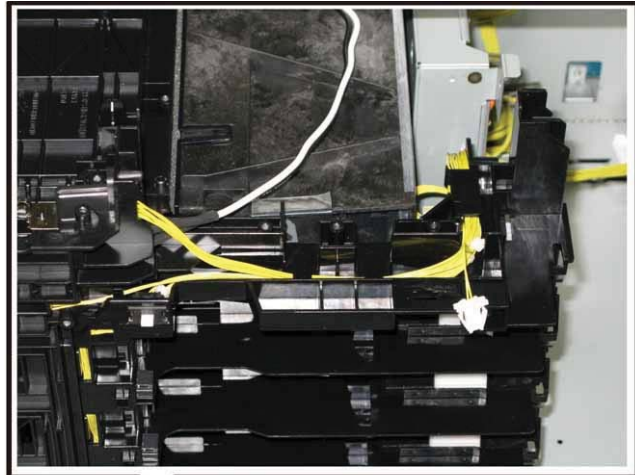
2) Secure the rear side of DISPENSER ASSY to the printer with the one screw (silver, M4, 6mm).



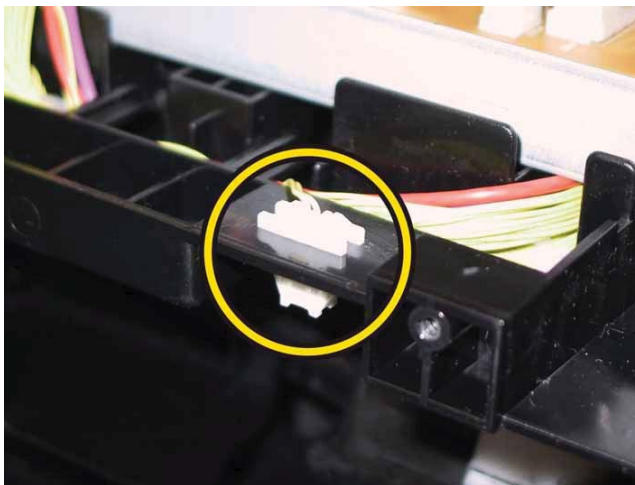
3) Secure the DISPENSER ASSY to the printer with the four screws (silver, tap, 8mm).



4) Route the HARNESS ASSY FUSER MG AIO and HARNESS ASSY LVPS MAIN MG AIO through the hooks of the DISPENSER ASSY, engage the seven connectors (P/J14, 15, 17, 18, 19, 29 and 31) with the PWBA MCU.



5) Attach the connector (P5041) of the HARNESS ASSY LVPS MAIN MG AIO to the DISPENSER ASSY.



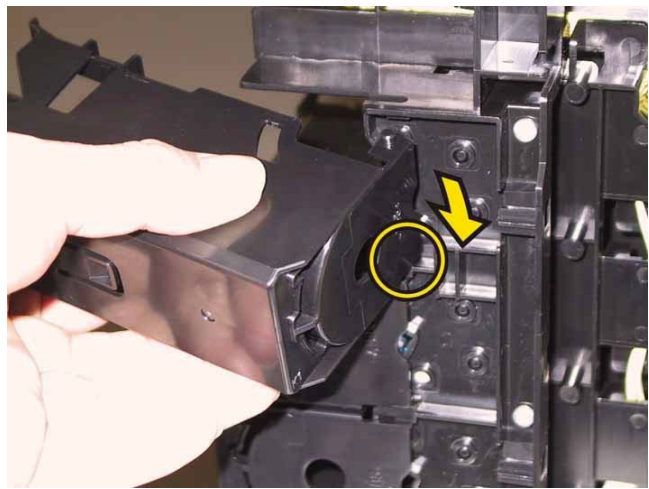
Go to the next replacement step:

Replacement 11 HOLDER ASSY TCRU (K), (C), (M), (Y) (PL5.1.17~20)

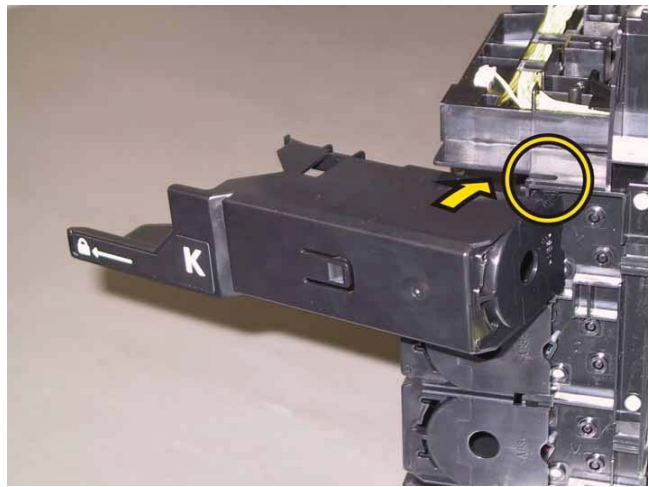
Replacement 11 HOLDER ASSY TCRU (K), (C), (M), (Y) (PL5.1.17~20)

Note: Described below is the replacement procedure common among the four HOLDER ASSY TCRU.

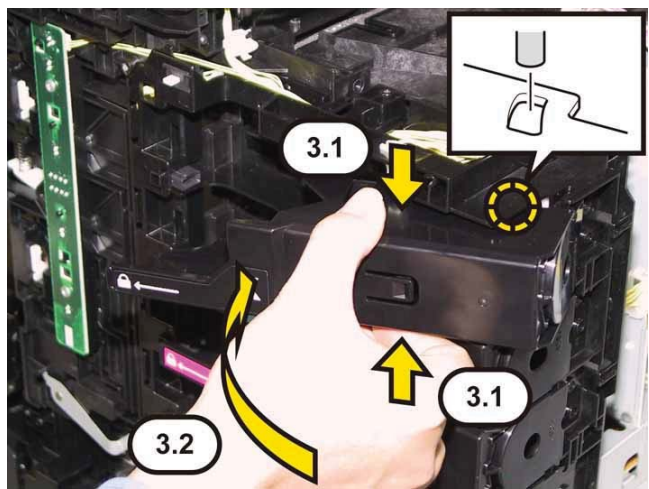
1) Mate the lower boss of the HOLDER ASSY TCRU with the hole of the FRAME DISP.



2) Bend the HOLDER ASSY TCRU, mate the upper boss of the HOLDER ASSY TCRU with the hole of the FRAME DISP.



3) Press the central part of the HOLDER ASSY TCRU, mate the hole of the HOLDER ASSY TCRU with the boss of the FRAME DISP.



Go to the next replacement step:

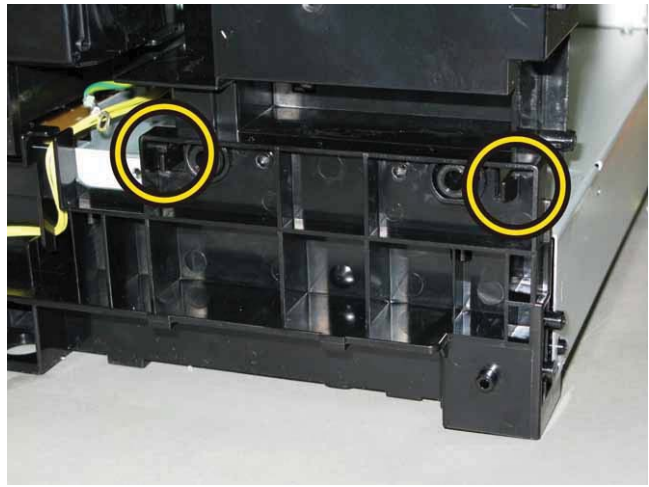
Replacement 12 CHASSIS ASSY INLET (Reference only)

Replacement 12 CHASSIS ASSY INLET (Reference only)

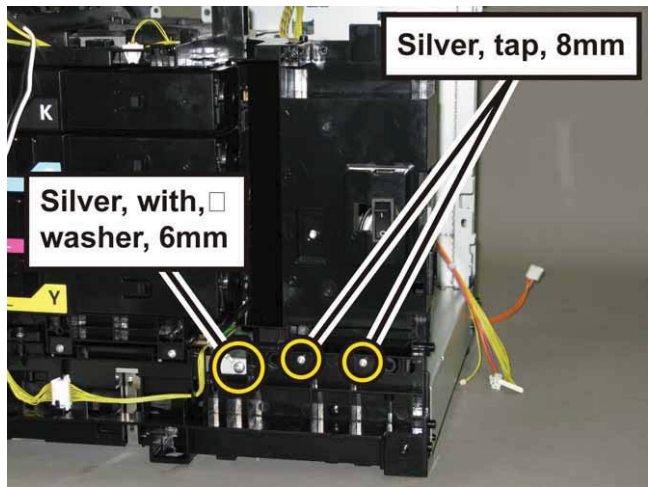
1) Mate the two bosses of the CHASSIS INLET with the hole of the printer, attach the CHASSIS INLET to the printer together with the SWITCH ASSY INLET MG AIO.



2) Secure the CHASSIS INLET to the printer with the two hooks.



4) Secure the CHASSIS INLET to the printer with the two screws (silver, tap, 8mm), secure the grounding terminal of the SWITCH ASSY INLET MG AIO to the printer with the one screw (silver, with washer, 6mm).

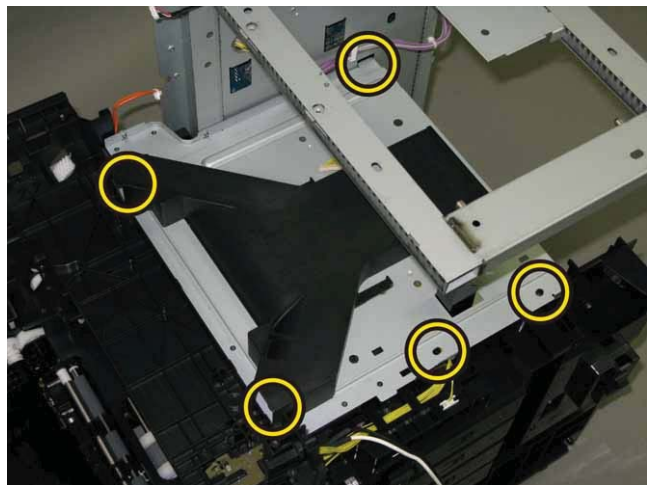


Go to the next replacement step:

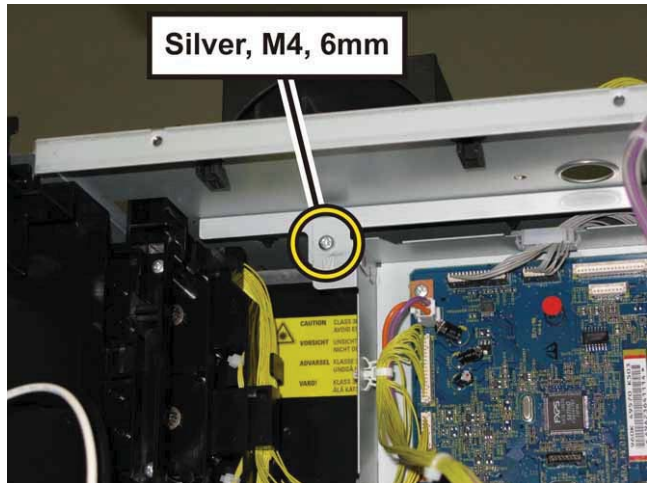
Replacement 13 PLATE ASSY TOP (PL8.2.2)

Replacement 13 PLATE ASSY TOP (PL8.2.2)

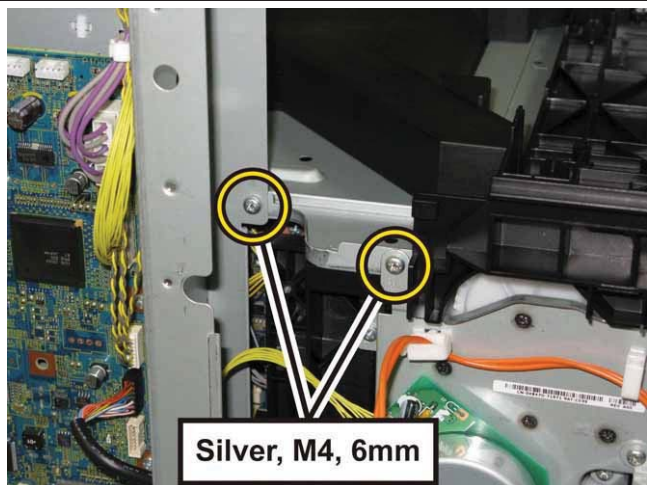
1) Mate the four holes and tab of the PLATE ASSY TOP with the bosses and hole of the printer, attach the FRAME ASSY LVPS to the printer.



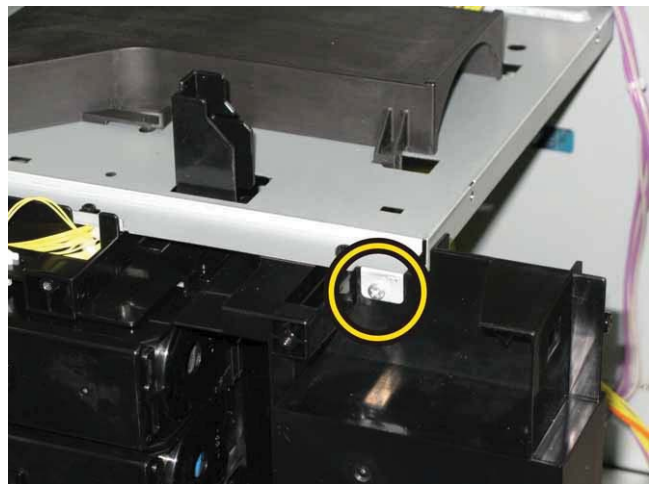
2) Secure the inside of the PLATE ASSY TOP with the one screw (silver, M4, 6mm).



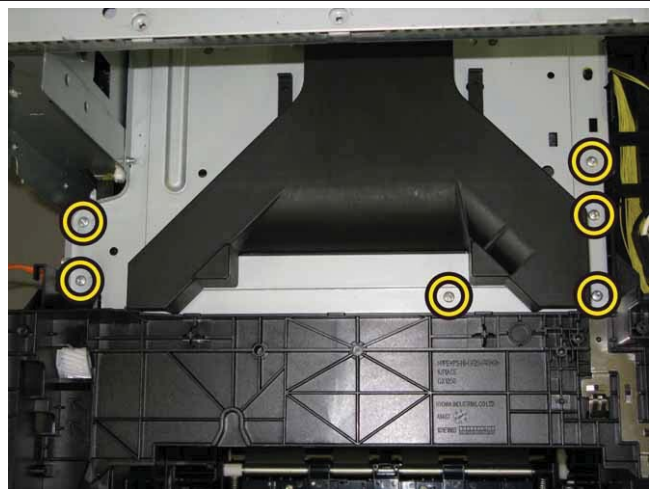
3) Secure the left side of the PLATE ASSY TOP with the two screws (silver, M4, 6mm).



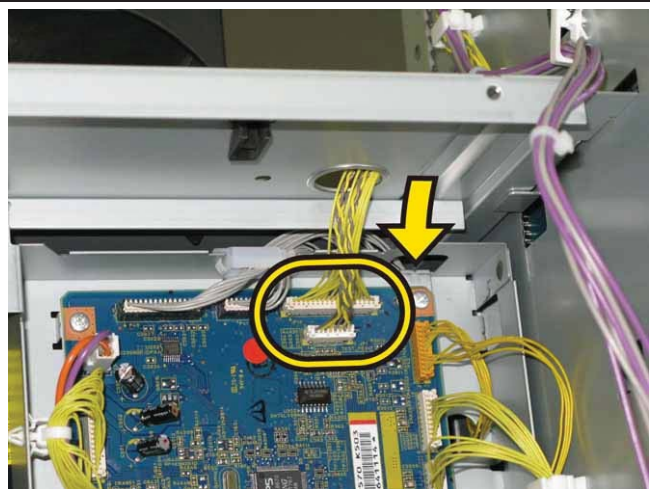
4) Secure the right side of the PLATE ASSY TOP with the one screw (silver, tap, 8mm).



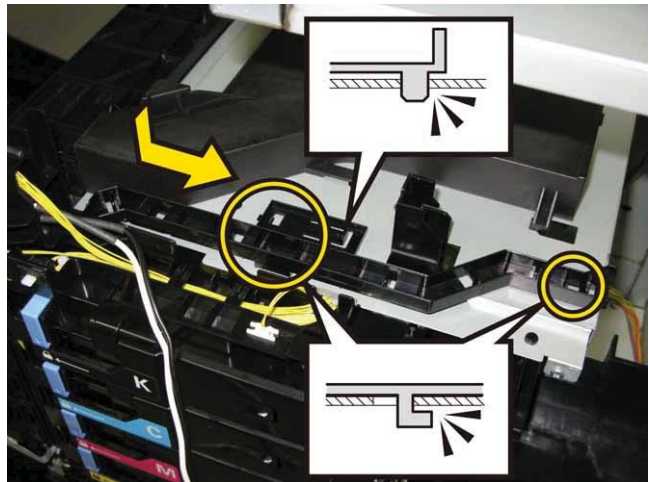
5) Secure the upper side of the PLATE ASSY TOP with the six screws (silver, tap, 8mm).



6) Route the HARNESS ASSY ESS MG AIO (PL9.1.1) and the HARNESS ASSY ESS VIDEO MG AIO (PL9.1.2) through the hole of the PLATE ASSY TOP, engage the two connectors (P/J10 and 11) with the PWBA MCU.



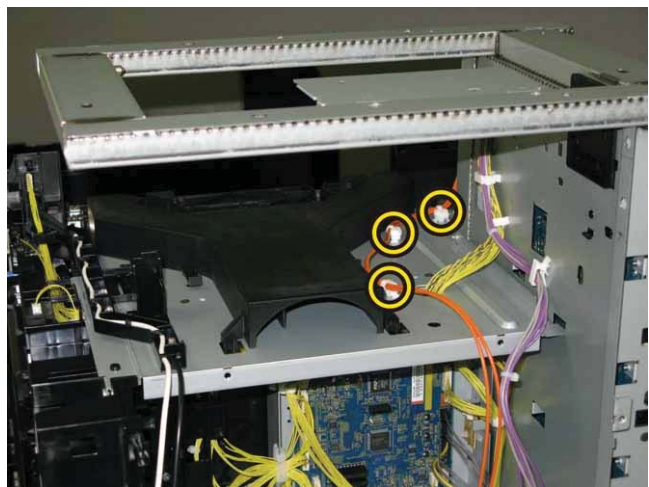
7) Mate the hooks of the GUIDE HARNESS FSR AIO with the holes of the PLATE ASSY TOP, move the GUIDE HARNESS FSR AIO to secure it.



8) Route the harness of the HARNESS ASSY FUSER MG AIO along the GUIDE HARNESS FSR AIO.



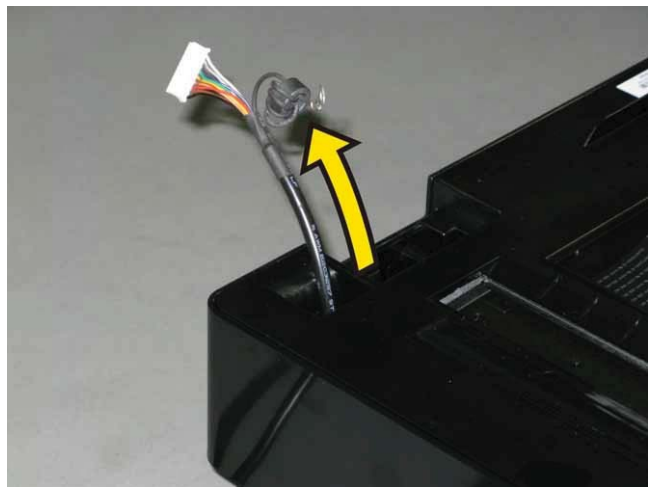
9) Replace the three clamps that secure the harness of the HARN ASSY INTERLOCK AIO to the PLATE ASSY TOP.



**Go to the next replacement step:
Replacement 14 IIT ASSY SUB (PL10.1.11)**

Replacement 14 IIT ASSY SUB (PL10.1.11)

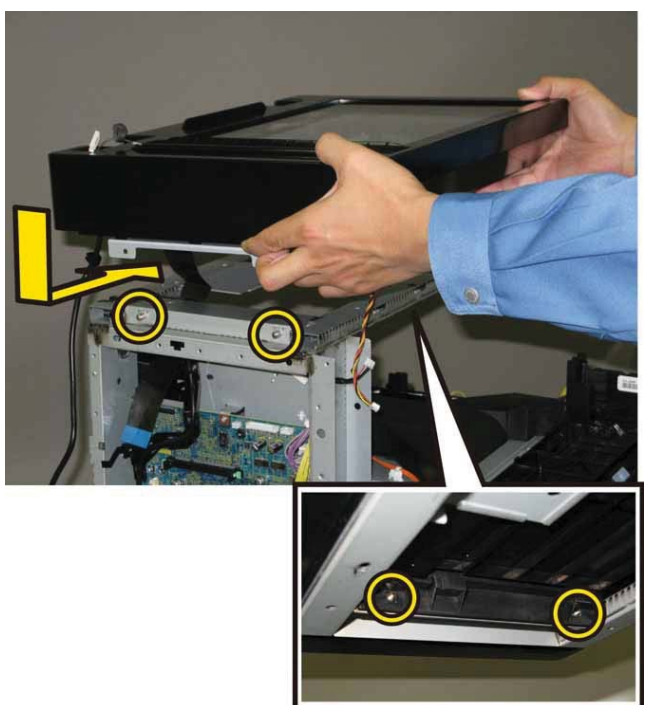
1) Route the HARN ASSY ADF through the hole of the IIT ASSY SUB.



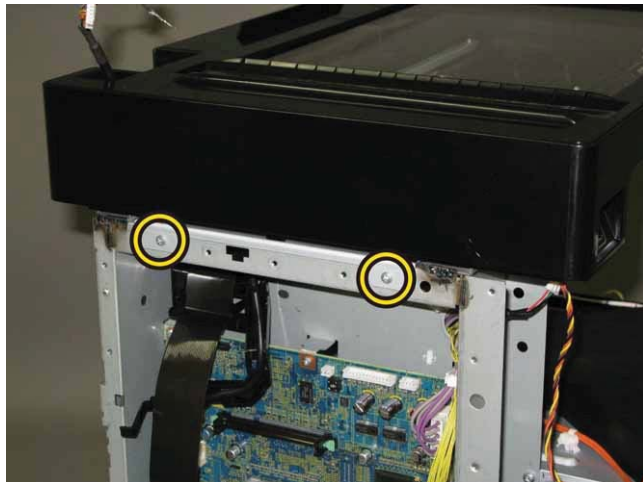
Note: When carrying out the work described next procedure, take care not to damage the harnesses of the ADF ASSY and IIT ASSY SUB by pinching them between the frame and the IIT ASSY SUB.

2) Put the IIT ASSY SUB on the frame, shift it to right side to mate the four holes of the IIT ASSY SUB with the studs of the frame.

Note: When carrying out the work this procedure, route the harness of the ADF ASSY and the flat cable into the printer, route the harness of the IIT ASSY SUB to outside.



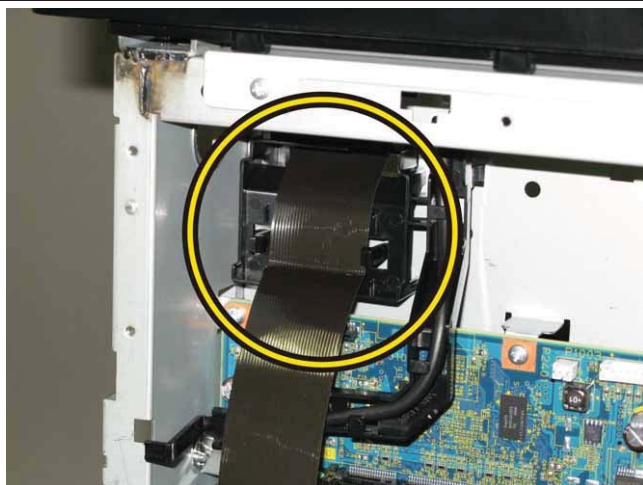
3) Secure the IIT ASSY SUB to the printer with the two screws (silver, 6mm).



4) Route the flat cable through the HOLDER FFC, attach the CORE FERR FFC to the flat cable of the IIT ASSY SUB.
Note: When carrying out this procedure, ensure that the flat cable is pulled out without a slack between the IIT ASST SUB and the frame.



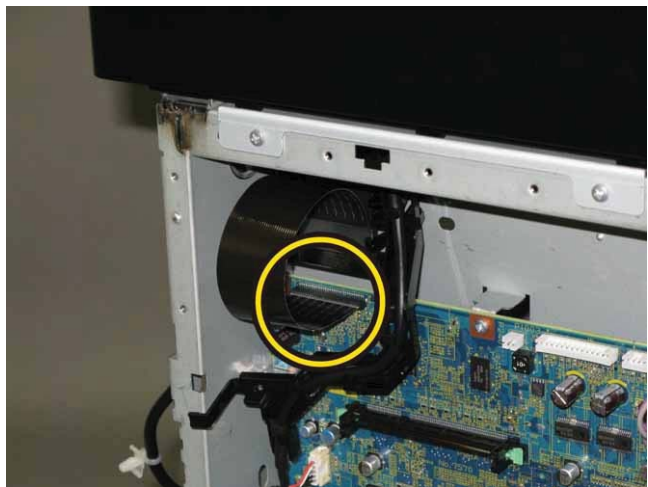
5) With the flat cable stretched tight, bend it lightly so that it is aligned to the underside of the HOLDER FFC.



6) Move the CORE FERR FFC to the bend of the flat cable, and then secure the CORE FERR FFC with the two hooks on the HOLDER FFC.



7) Engage the flat cable (P/J1001) of the IIT ASSY SUB to the PWBA ESS AIO.



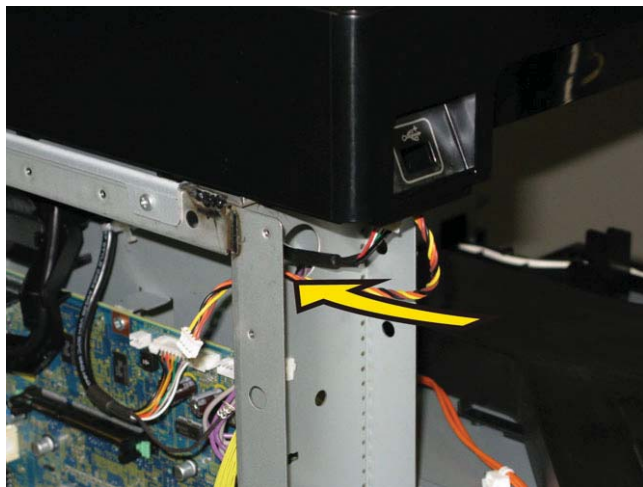
8) Route the HARN ASSY ADF through the hole of the frame.



9) Route the HARN ASSY ADF along the hook of the HOLDER FFC.



10) Route the harness of the IIT ASSY SUB through the hole of the frame.



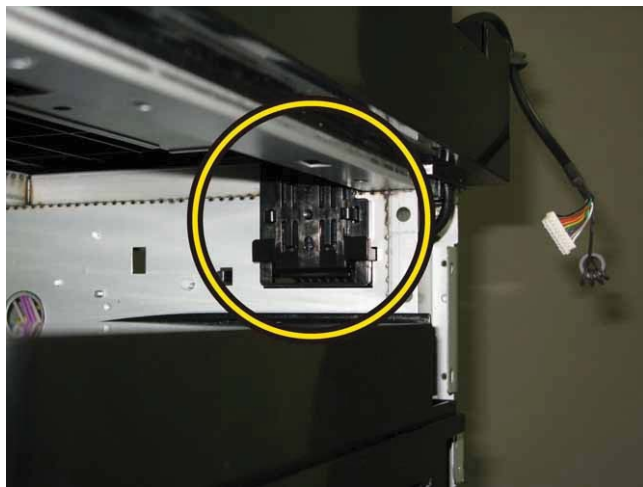
11) Engage the two connectors (P/J1002 and 1003) on the PWBA ESS AIO, secure the harness of the IIT ASSY SUB using the clamp. Secure the ground wire of the HARN ASSY ADF to the printer with the one screw (silver, 6mm).



12) Replace the clamp that secures the HARN ASSY ADF to the printer.



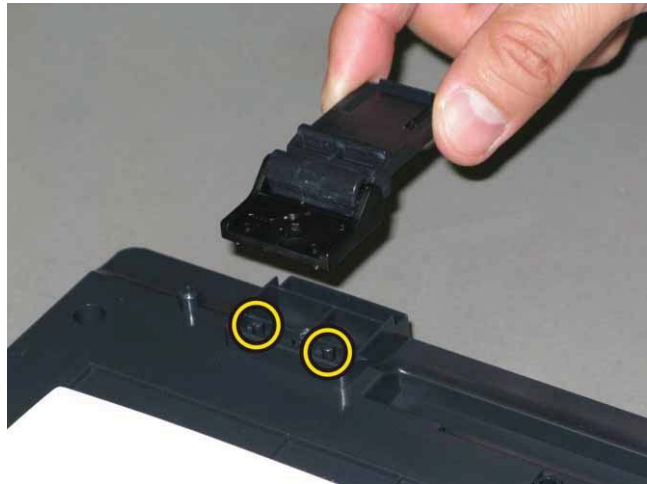
13) Secure the COVER FFC to the printer with the two hooks.



**Go to the next replacement step:
Replacement 16 KIT ADF ASSY (PL10.1.97)**

Replacement 15 KIT COUNTER BALANCE

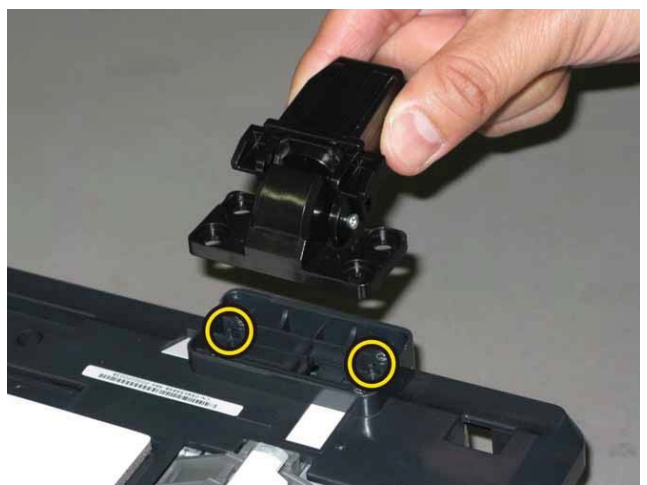
1) Mate the two holes of the COUNTER BALANCE R with the bosses of the ADF ASSY, attach the COUNTER BALANCE R.



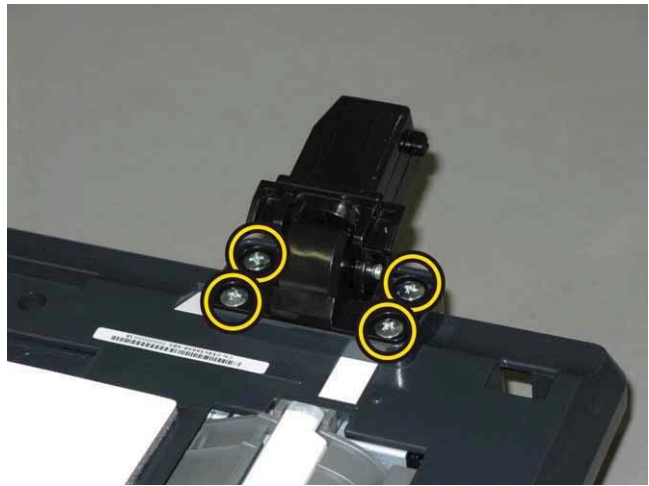
2) Secure the COUNTER BALANCE R to the ADF ASSY with the one screw (silver, tap, 8mm).



3) Mate the two holes of the COUNTER BALANCE L with the bosses of the ADF ASSY, attach the COUNTER BALANCE L.



4) Secure the COUNTER BALANCE L to the ADF ASSY with the four screws (silver, tap, 8mm).

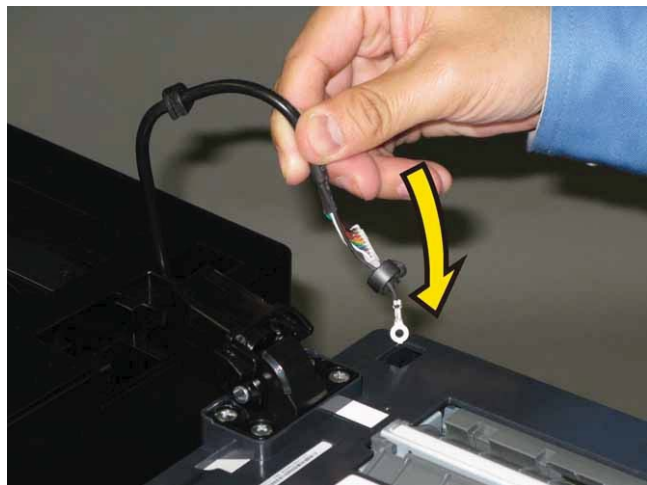


Go to the next replacement step:

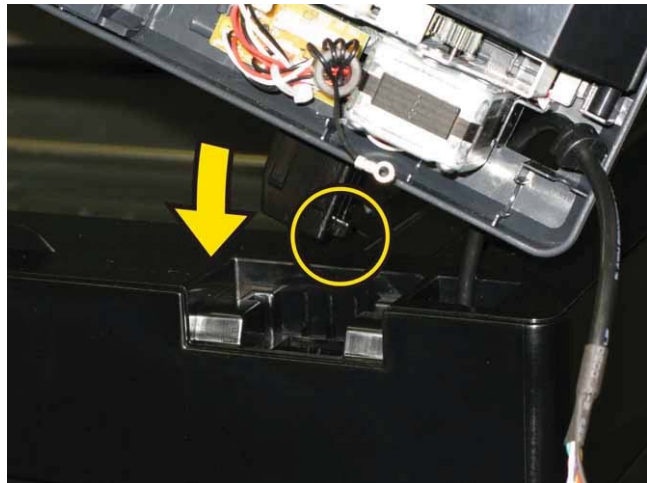
Replacement 16 KIT ADF ASSY (PL10.1.97)

Replacement 16 KIT ADF ASSY (PL10.1.97)

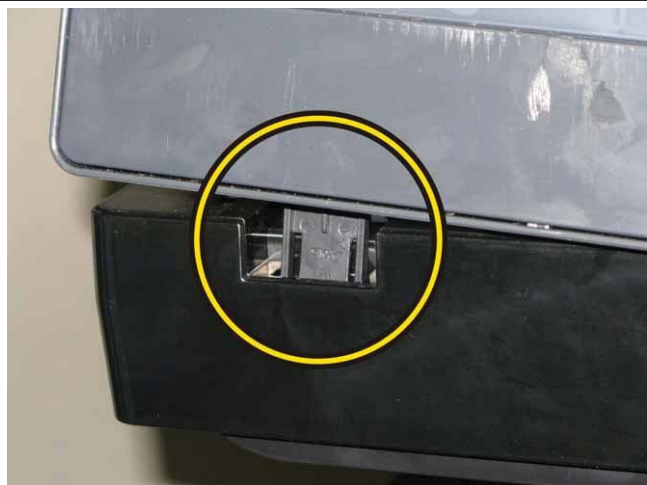
1) Route the HARN ASSY ADF through the hole of the ADF ASSY.



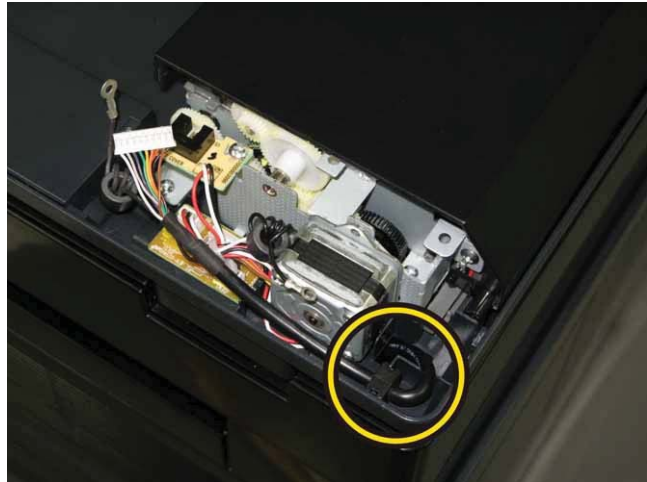
2) Tilt the ADF ASSY to left side, put the tab of the COUNTER BALANCE L into the hole of the IIT ASSY SUB. Attach the COUNTER BALANCE L to the IIT ASSY SUB.



3) Attach the COUNTER BALANCE R to the IIT ASSY SUB, fix the hook of the COUNTER BALANCE R. Attach the ADF ASSY to the IIT ASSY SUB.



4) Attach the RUBBER BUSH of the HARN ASSY ADF to the rib of the ADF ASSY.



5) Engage the connector (P/JADF1) of the HARN ASSY ADF to the PWBA.



6) Secure the grounding terminal of the HARN ASSY ADF to the ADF ASSY with the one screw (silver, 4mm).



7) Install the COVER ADF REAR to the ADF ASSY by locking the two hooks in place.

Note: When performing this step, ensure that the notch on the front side of the COVER ADF REAR is aligned with the screw hole.



8) Secure the COVER ADF REAR to the ADF ASSY with the one screw (silver, tap, 8mm).



Go to the next replacement step:

Replacement 17 KIT TRAY ASSY ADF (PL10.1.96)

Replacement 17 KIT TRAY ASSY ADF (PL10.1.96)

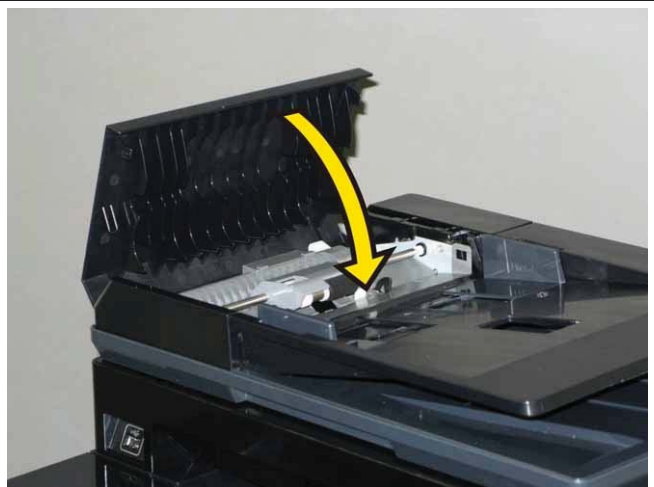
1) Mate the boss of the TRAY ASSY ADF with the hole of the ADF ASSY.



2) Depress the hinge of the TRAY ASSY ADF to mate the boss of the TRAY ASSY ADF with the hole of the ADF ASSY. Attach the TRAY ASSY ADF.



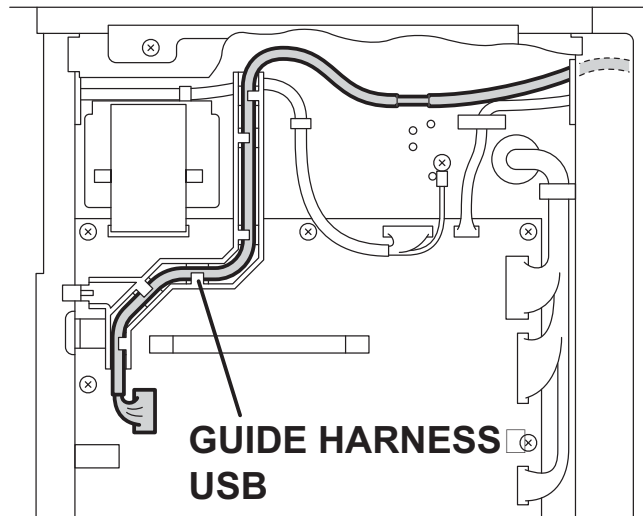
3) Close the COVER TOP ADF.



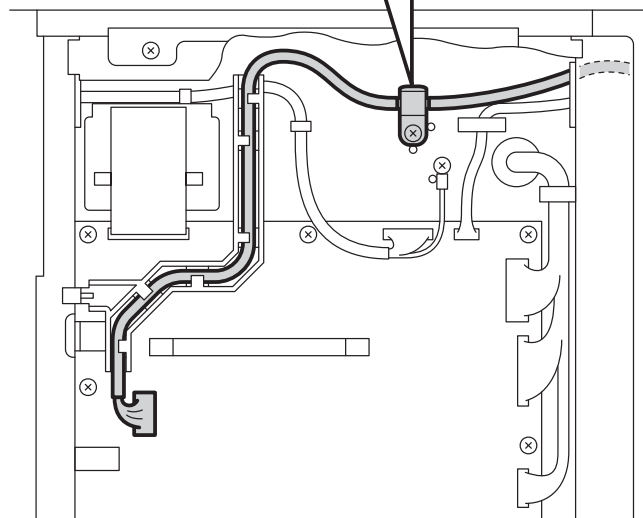
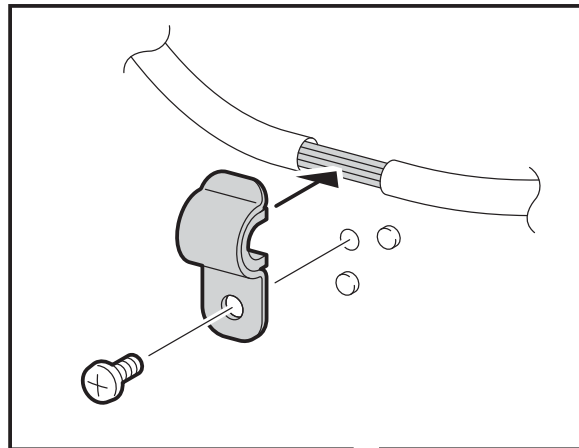
Replacement 18 KIT PWB ASSY FRONT USB (PL10.1.95)

Note: Use the wrist strap to protect the PWB from the electrostatic.

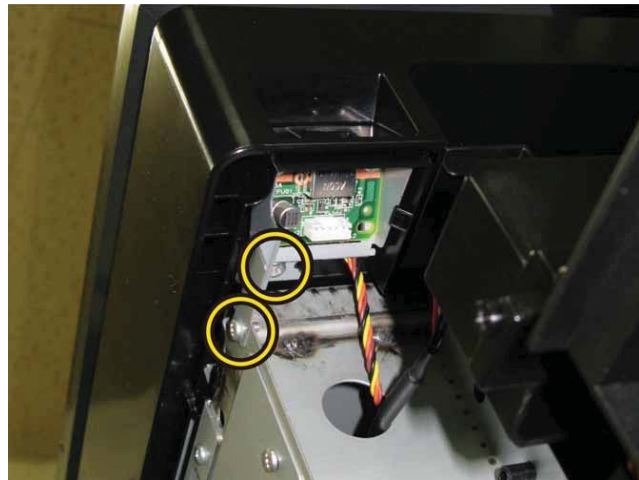
1) Route the HARNESS ASSY FRONT USB through the hole of the printer.
Engage the connector (P/J1301) on the PWBA ESS AIO, secure the HARNESS ASSY FRONT USB using the GUIDE HARNESS USB.



2) Fit the CLAMP to the stripped-off portion of the HARNESS ASSY FRONT USB, and then secure the CLAMP to the printer using one screw (silver, 6mm).
Note: Since the CLAMP also serves as a grounding means, ensure that the CLAMP is fit to the stripped-off section of the HARNESS ASSY FRONT USB.



3) Mate the two holes of the BRACKET ASSY USB with the two bosses of the IIT ASSY SUB, secure the BRACKET ASSY USB with the one screw (silver, tap, 8mm) and the one screw (silver, 6mm).



4) Engage the connector (P/J2) of the PWB ASSY FRONT USB.

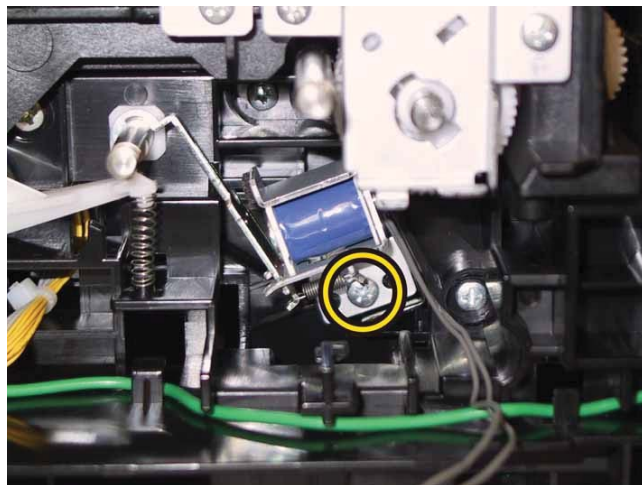


Go to the next replacement step:

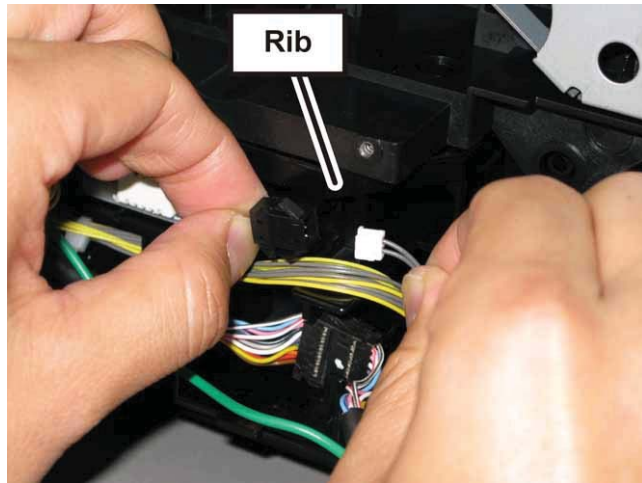
Replacement 38 SHIELD ASSY ESS AIO (PL8.1.7)

Replacement 19 KIT FEED ROLL/SOL/CLUTCH (PL3.1.99)

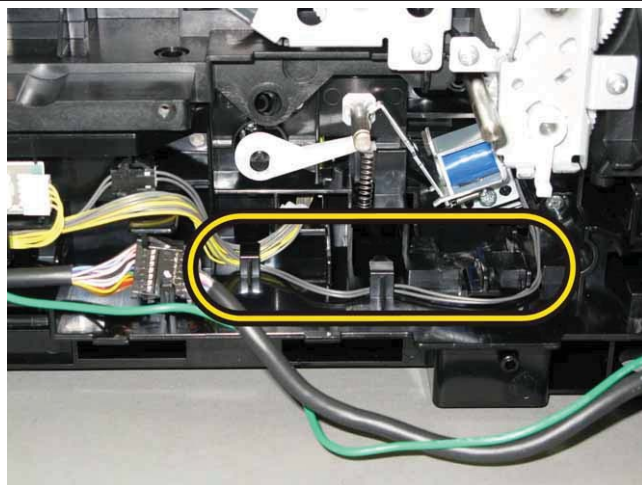
1) Mate the holes of the SOLENOID FEED MSI with the two bosses of the printer, secure the SOLENOID FEED MSI with the one screw (silver, tap, 8mm).



2) Engage the connector (P/J231) of the SOLENOID FEED MSI, secure the relay connector with the rib of the printer.

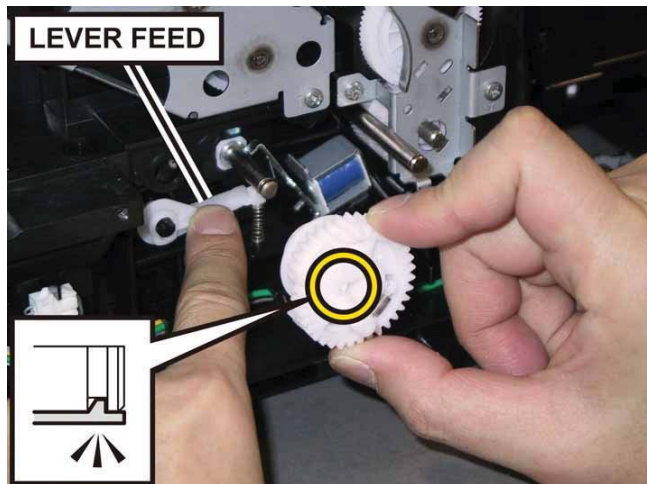


3) Route the harness of the SOLENOID FEED MSI through the hooks of the printer.

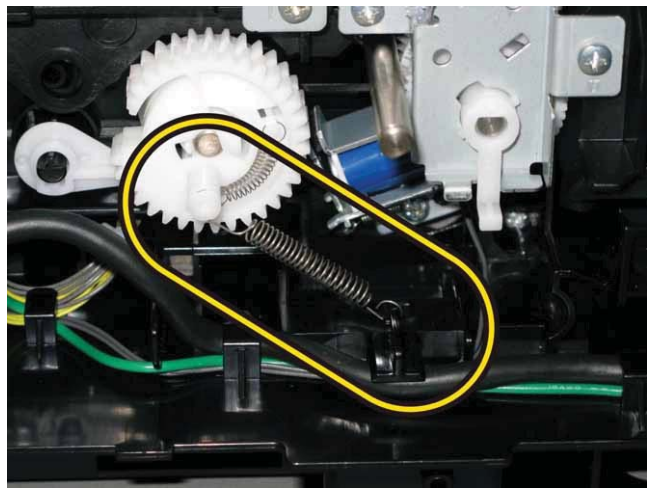


Note: When carrying out the work described next procedure, it is easier to put the D-cut surface of the SHAFT ASSY FEED on the front.

4) Attach the GEAR ASSY FEED to the SHAFT ASSY FEED by pushing down the LEVER FEED, mate the hook of the GEAR ASSY FEED with the groove of the SHAFT ASSY FEED.

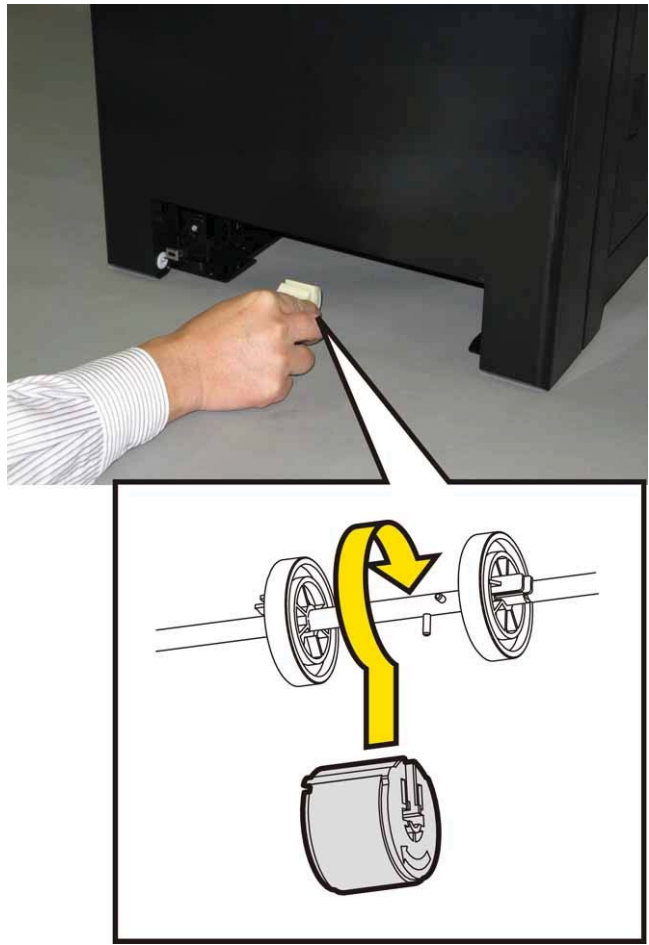


5) Hang the SPRING FEED OUT to the GEAR ASSY FEED and the printer.
Note: Ensure that the SPRING FEED OUT is oriented to the direction shown in the right.



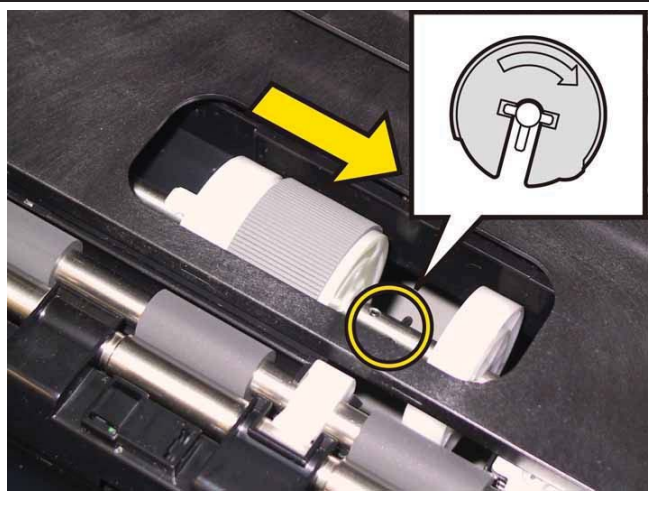
6) Close the COVER ASSY FRONT.

7) Fit the ROLL ASSY FEED to the SHAFT ASSY FEED with the groove of the ROLL ASSY FEED facing upward, rotate the ROLL ASSY FEED 180 degrees so that the pin on the SHAFT ASSY FEED is aligned with the groove on the ROLL ASSY FEED.

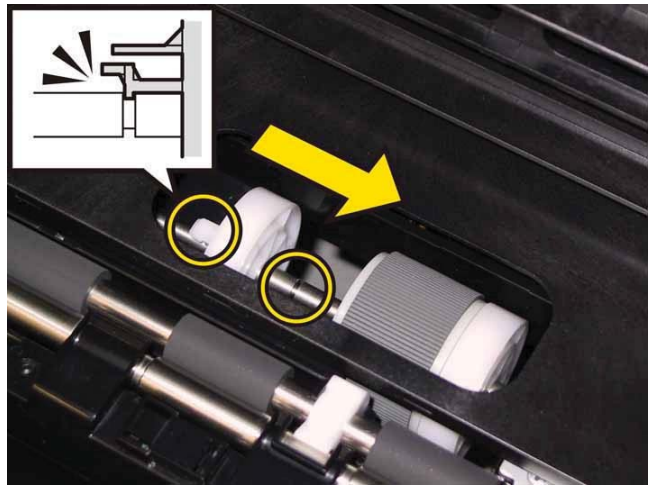


8) Open the COVER ASSY FRONT.

9) Move the ROLL ASSY FEED to the right side, put the groove of the ROLL ASSY FEED on the pin of the SHAFT ASSY FEED.



10) Move the ROLL CORE MSI to the right side, to secure the hook of the ROLL CORE MSI with the groove of the SHAFT ASSY FEED.

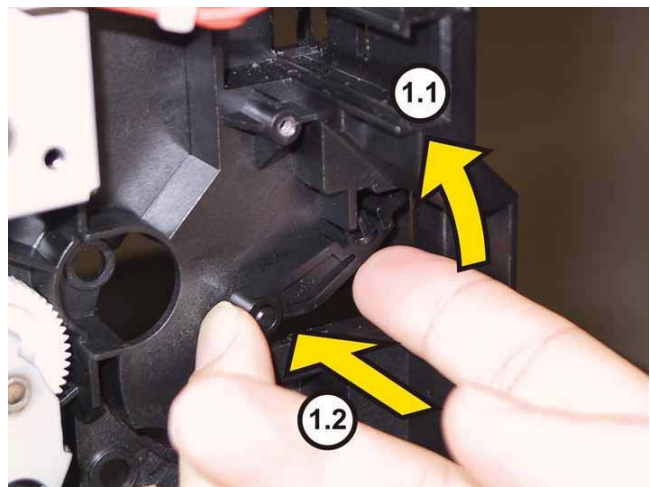


Go to the next replacement step:

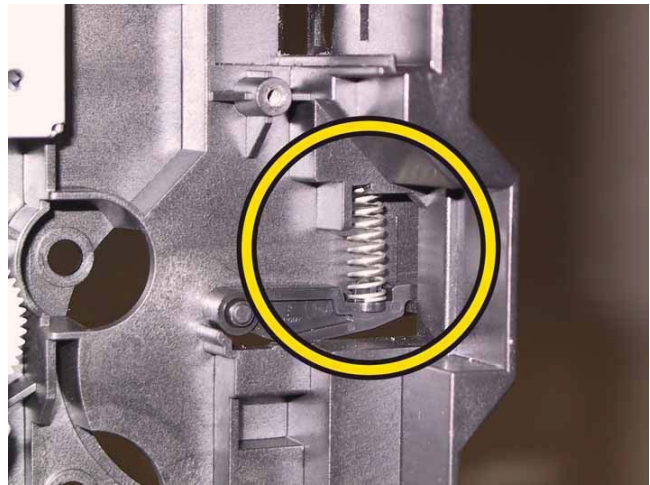
Replacement 23 KIT DRIVE ASSY PH (PL7.1.99)

Replacement 20 KIT BLOCK PHD LEFT (PL4.1.98)

1) Tilt the LEVER PHD slightly, attach the LEVER PHD to the printer.

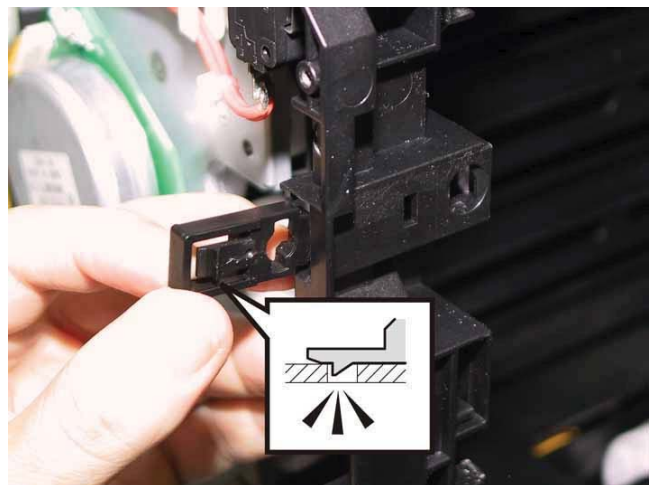


2) Attach the SPRING PHD to the printer.



Note: Described below is the replacement procedure common among the upper and lower of the **BLOCK STOPPER PHD Ds**.

3) Push the BLOCK STOPPER PHD D to the printer until it is locked.

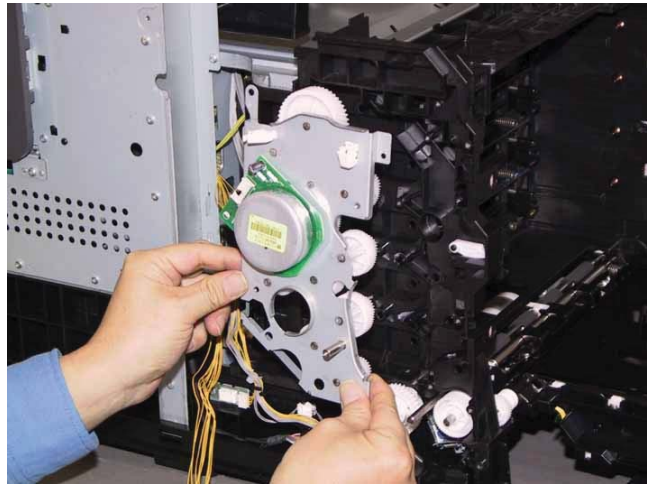


Go to the next replacement step:

Replacement 22 KIT DRIVE ASSY MAIN (PL7.1.98)

Replacement 21 DRIVE ASSY SUB (PL7.1.1)

1) Attach the DRIVE ASSY SUB to the printer.

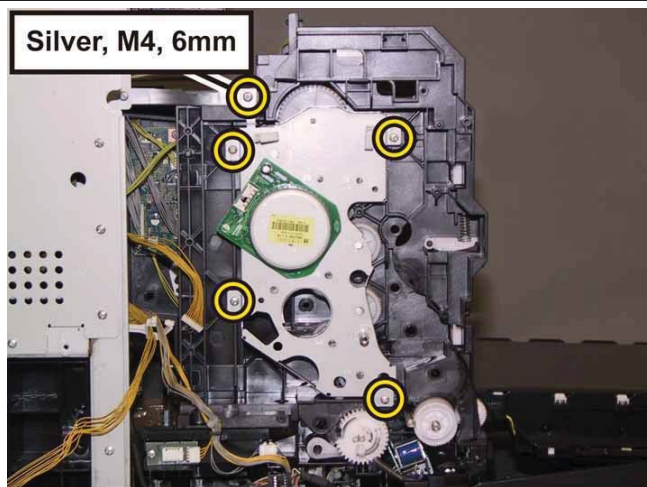


Note: Since two types of screws are used for securing the DRIVE ASSY SUB, ensure that the right screws are used at their right securing positions.

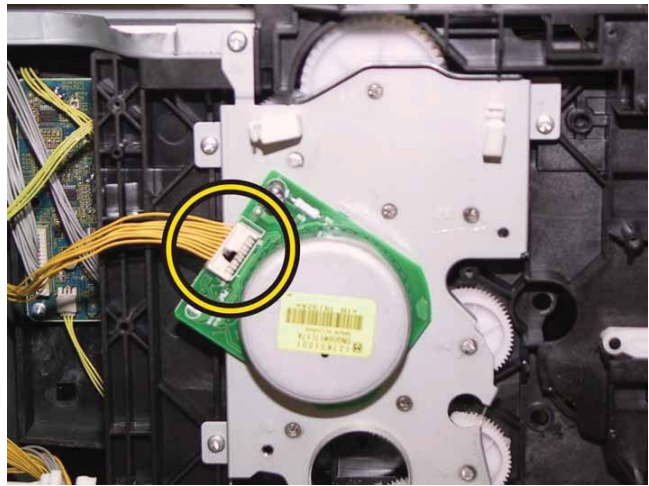
The securing positions for tap screws are marked with [T].

The securing positions for metal screws are marked with [M].

2) Secure the DRIVE ASSY SUB to the printer with the one screw (silver, M4, 6mm) and the four screws (silver, tap, 8mm).



3) Engage the connector (P/J221) of the DRIVE ASSY SUB.

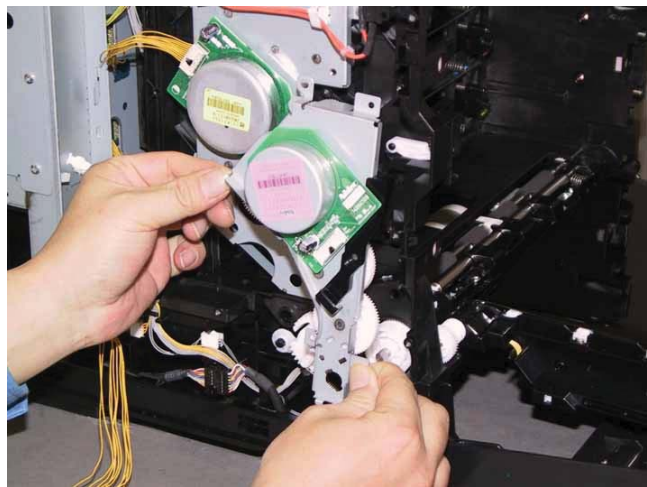


Go to the next replacement step:

Replacement 22 KIT DRIVE ASSY MAIN (PL7.1.98)

Replacement 22 KIT DRIVE ASSY MAIN (PL7.1.98)

1) Attach the DRIVE ASSY MAIN to the printer.



Note: Since two types of screws are used for securing the DRIVE ASSY MAIN, ensure that the right screws are used at their right securing positions.

The securing positions for tap screws are marked with [T].

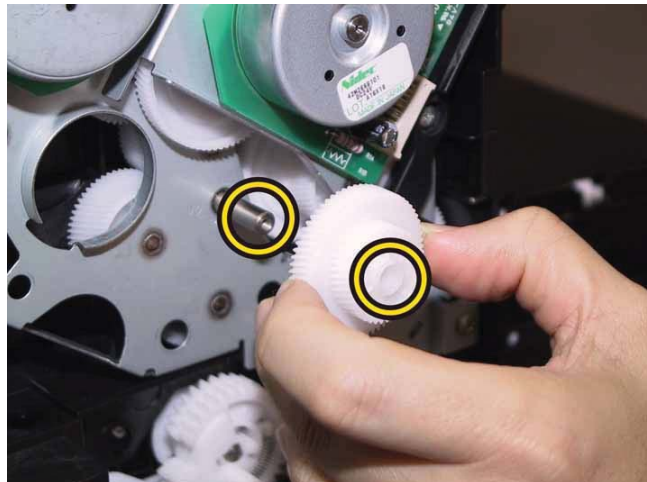
The securing positions for metal screws are marked with [M].

2) Secure the DRIVE ASSY MAIN to the printer with the one screw (silver, M4, 6mm) and the five screws (silver, tap, 8mm).

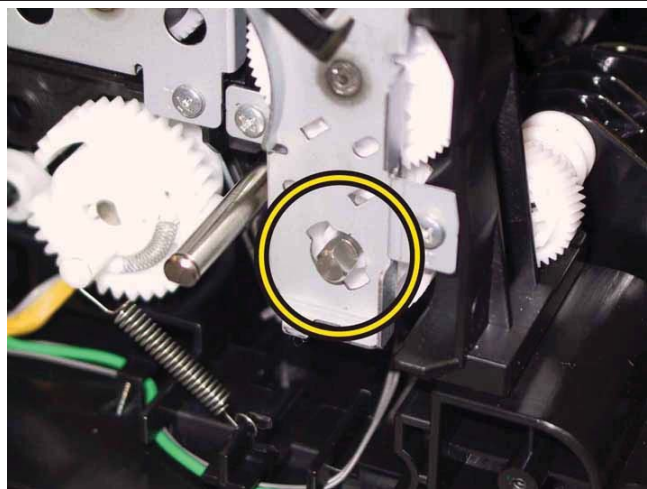


3) Attach the GEAR P2 to the shaft of DRIVE ASSY SUB.

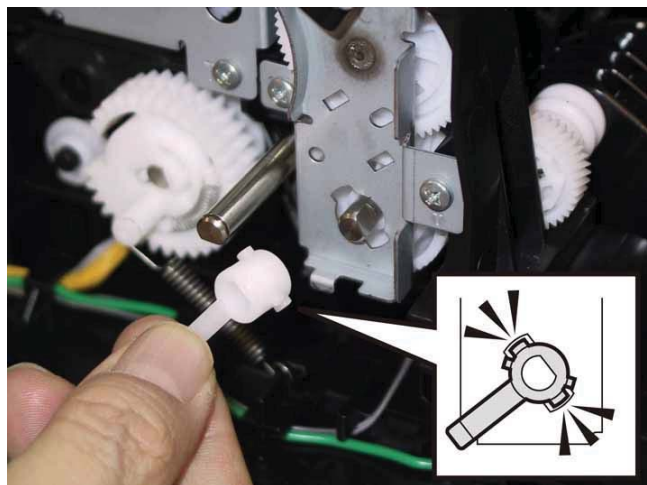
Note: Ensure that the GEAR P2 is oriented to the direction shown in the right.



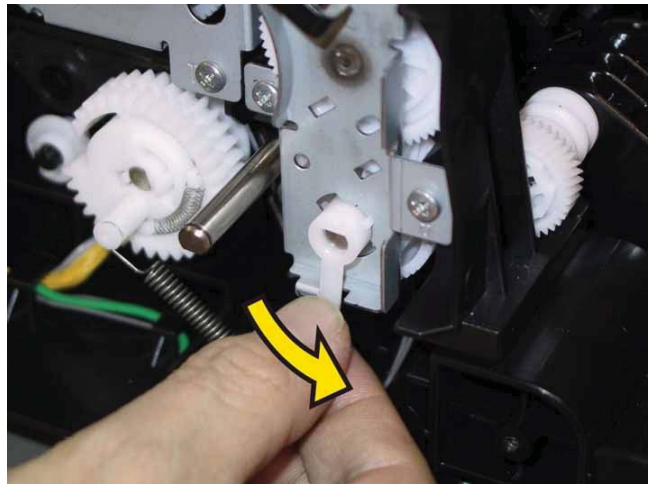
Note: When carrying out the work described next procedure, ensure that the flat face of the PIVOT TRANS L is oriented to the direction shown in the right.



4) Mate the tab of the STOPPER PIVOT with the notch of the DRIVE ASSY MAIN, attach the STOPPER PIVOT to the PIVOT TRANS L.



5) Rotate the STOPPER PIVOT to the left, secure the STOPPER PIVOT to the DRIVE ASSY MAIN frame.



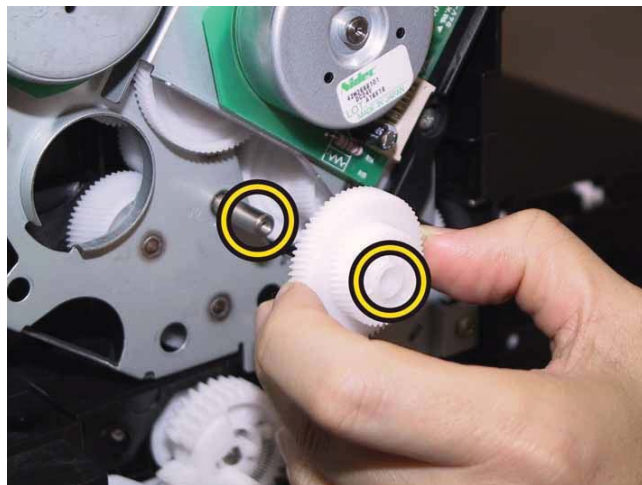
Go to the next replacement step:

Replacement 23 KIT DRIVE ASSY PH (PL7.1.99)

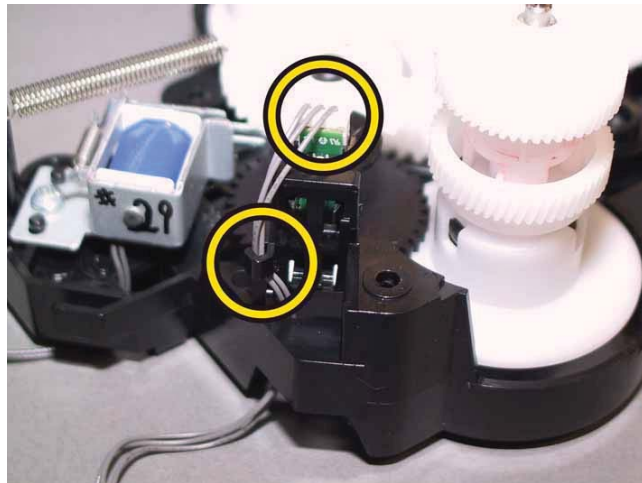
Replacement 23 KIT DRIVE ASSY PH (PL7.1.99)

1) Attach the GEAR P2 to the shaft of DRIVE ASSY SUB.

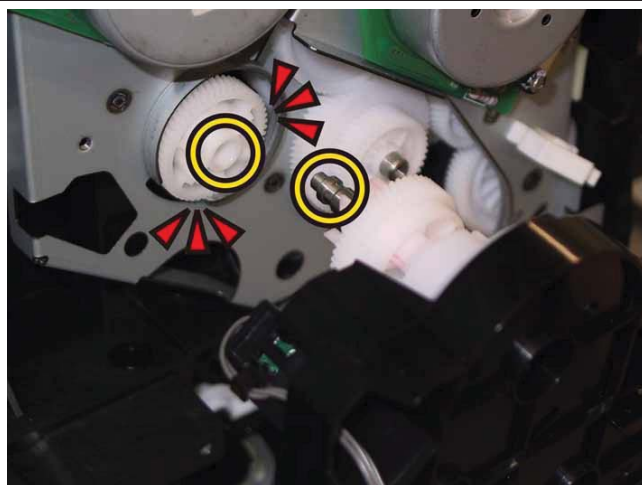
Note: Ensure that the GEAR P2 is oriented to the direction shown in the right.



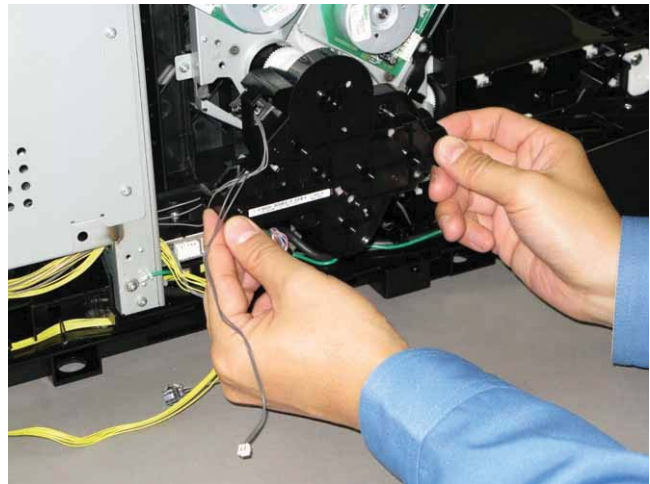
2) Engage the connector (J261) of the HARN ASSY KSNR REGCL with the Color mode switching sensor of the DRIVE ASSY PH, route the HARN ASSY KSNR REGCL through the hook of the DRIVE ASSY PH.



Note: When carrying out the work described next procedure, take care not to drop the coupling gear to inside.



3) Attach the DRIVE ASSY PH to the printer.

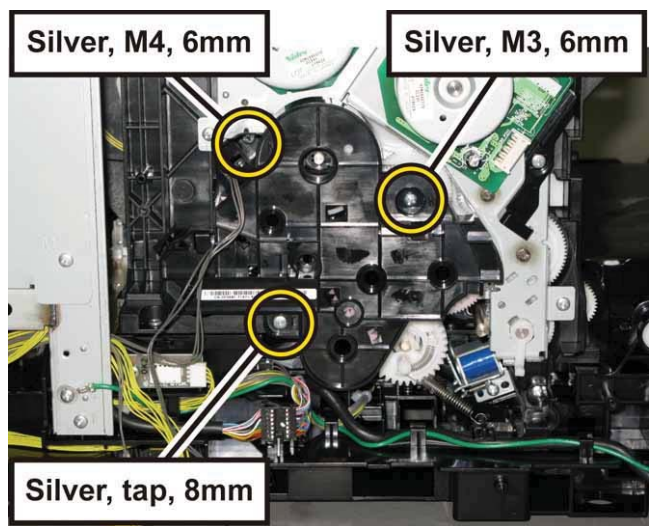


Note: Since three types of screws are used for securing the DRIVE ASSY PH, ensure that the right screws are used at their right securing positions.

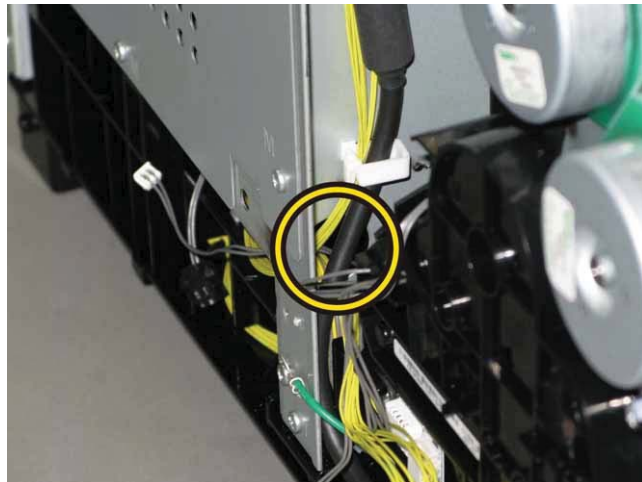
The securing positions for tap screws are marked with [T].

The securing positions for metal screws are marked with [M].

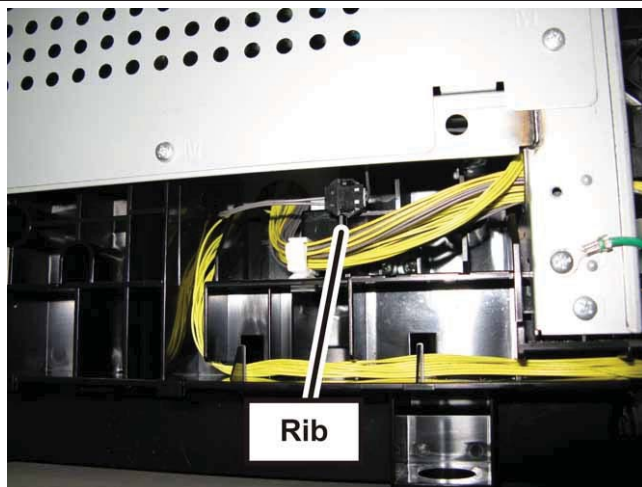
4) Secure the DRIVE ASSY PH to the printer with the one screw (silver, M4, 6mm), the one screw (silver, M3, 6mm) and the one screw (silver, tap, 8mm).



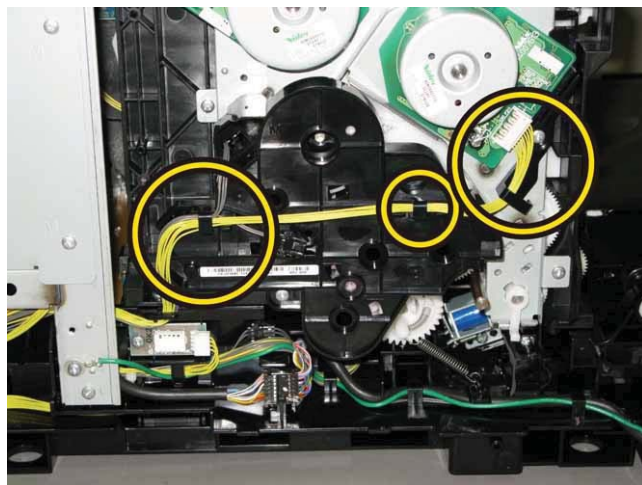
5) Route the harness of the DRIVE ASSY PH through the hole of the printer.



6) Engage the connector (P/J241) of the DRIVE ASSY PH, secure the relay connector with the rib of the printer.



7) Route all the harness through the hooks of the DRIVE ASSY PH, engage the connector (P/J211) of the DRIVE ASSY MAIN.

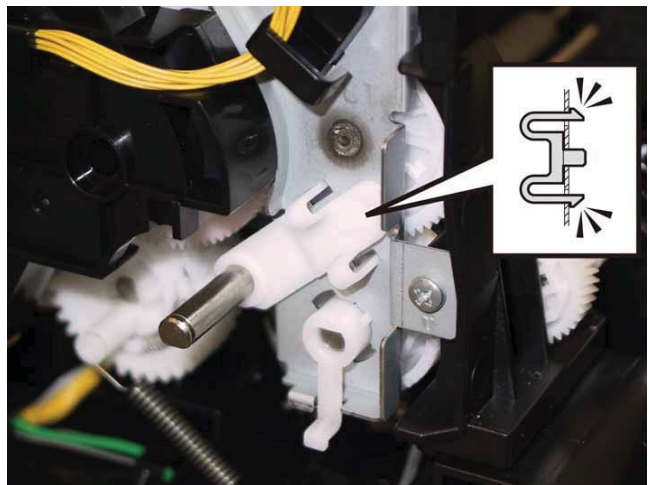


Go to the next replacement step:

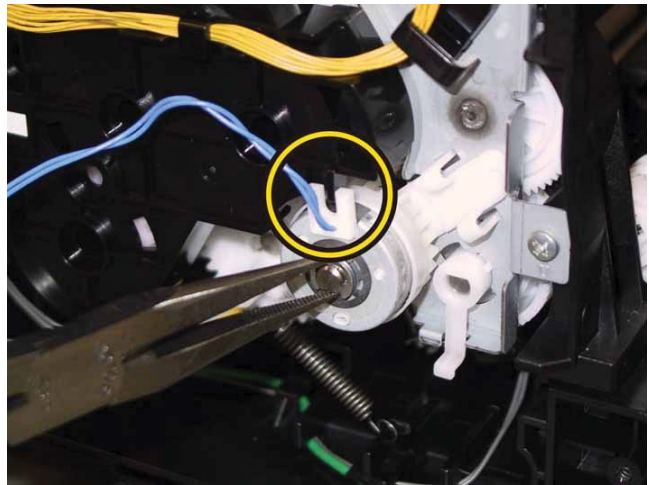
Replacement 24 CLUTCH ASSY DRV (PL3.1.1), BEARING REGI (PL3.1.2)

Replacement 24 CLUTCH ASSY DRV (PL3.1.1), BEARING REGI (PL3.1.2)

1) Attach the BEARING REGI to the shaft of the ROLL ASSY REGI, secure the BEARING REGI with the hooks.



2) Mate the notch of the CLUTCH ASSY DRV with the rib of the DRIVE ASSY PH, secure the CLUTCH ASSY DRV to the ROLL ASSY REGI with the E-ring by using a pliers.



3) Route the harness of the CLUTCH ASSY DRV through the hook of the DRIVE ASSY PH.



4) Engage the connector (P/J262) of the CLUTCH ASSY DRV, secure the relay connector with the pegs of the DRIVE ASSY PH.



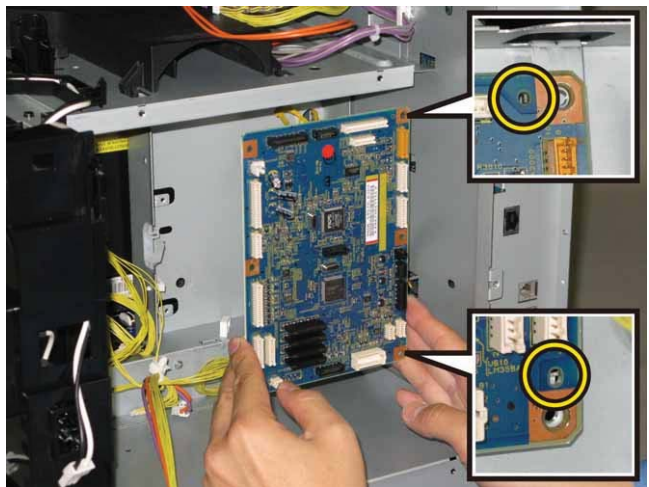
Go to the next replacement step:

Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 25 KIT PWBA MCU (PL8.3.99)

Note: Use the wrist strap to protect the PWB from the electrostatic.

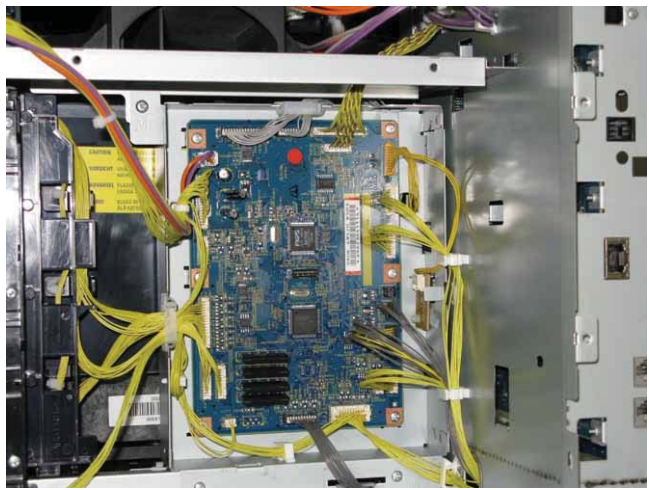
1) Mate the holes of the PWBA MCU with the tabs of the printer, attach it.



2) Secure the PWBA MCU to the printer with the six screws (silver, 6mm).



3) Engage all the connectors of the PWBA MCU, secure the harnesses using three clamps on the CHASSIS MCU.



Go to the next replacement step:

Replacement 27 CHASSIS ASSY LVPS (Reference only)

Note: When the PWBA MCU is replaced with a new one, perform the following steps.

(After completing all steps up to Replacement 68.)

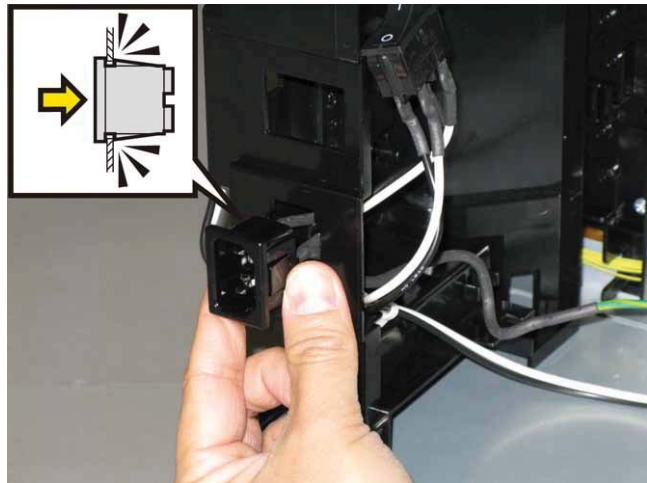
- 4) Plug in the power cord to the printer.
- 5) Execute diagnostic operation of NVM Load, and write the data into PWBA MCU.
- 6) Turn off the power.
- 7) Perform the diagnostic operation of NVM Load, and write the data into the MCU.
- 8) Turn on the power while pressing the "▶" key, "◀" key, and [MENU] key on the control panel.
- 9) Enter the password, press the "▲" key twice, and press the " ✓ " key once. The diagnostic screen comes up.
- 10) Press the " ✓ " key once.
- 11) Press the "▼" key several times until "IOT Diag" is displayed. Press the " ✓ " key once.
- 12) Press the "▼" key several times until "NVM Settings" is displayed. Press the " ✓ " key once.
- 13) Press the "▼" key several times until "LoadNVM from ESS" is displayed. Press the " ✓ " key once.
- 14) Press the " ✓ " key once, and NVM Load is performed.
- 15) After NVM Load is complete, press the [CANCEL] key several times until "IOT Diag" is displayed.
- 16) Press the "▼" key several times until "Complete" is displayed.
- 17) Press the " ✓ " key two times. "COPY, SCAN and FAX" are displayed.
- 18) Turn off the power to exit.

Replacement 26 SWITCH ASSY INLET MG AIO (PL8.3.7)

1) Route the connector (J48) of the SWITCH ASSY INLET MG AIO through the hole of the CHASSIS INLET.

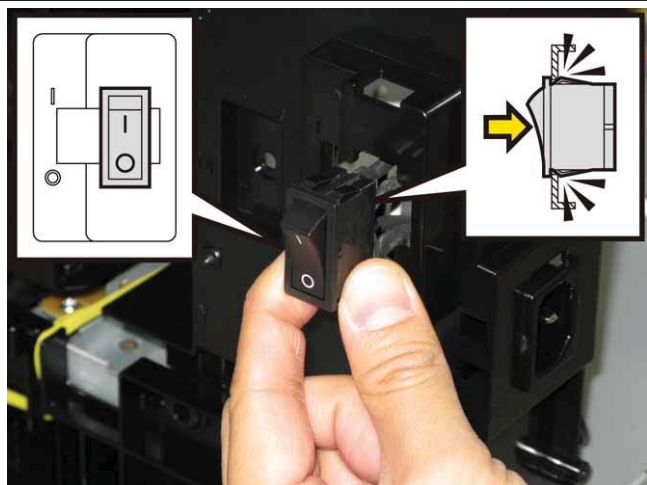


2) Attach the AC INLET of the SWITCH ASSY INLET MG AIO to the CHASSIS INLET, and secure it with the hooks.

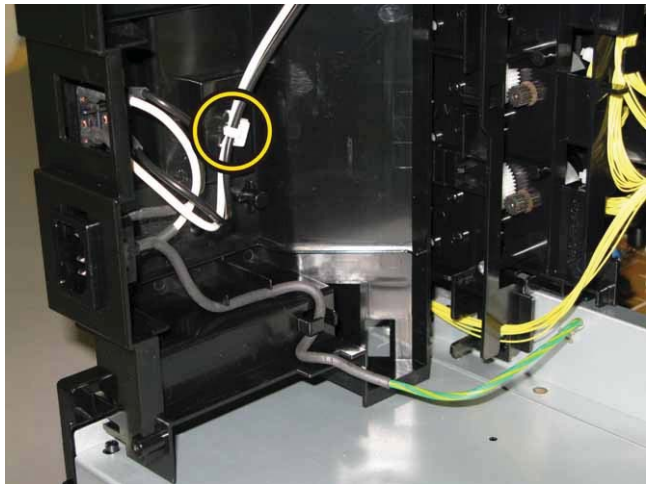


3) Attach the SWITCH POWER of the SWITCH ASSY INLET MG AIO to the CHASSIS INLET, and secure it with the hooks.

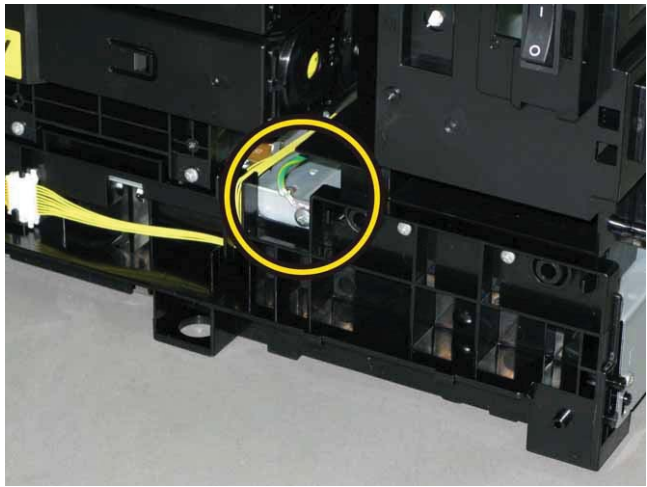
Note: When replacing the SWITCH ASSY INLET MG AIO, match the ON/OFF mark of the SWITCH POWER with the mark on the CHASSIS INLET.



4) Replace the clamp that secure the harness of the SWITCH ASSY INLET MG AIO to the PLATE ASSY DUCT, route the harness of the SWITCH ASSY INLET MG AIO through the hook of the CHASSIS INLET.



5) Secure the grounding terminal of the SWITCH ASSY INLET MG AIO with the one screw (silver, with washer, 6mm).

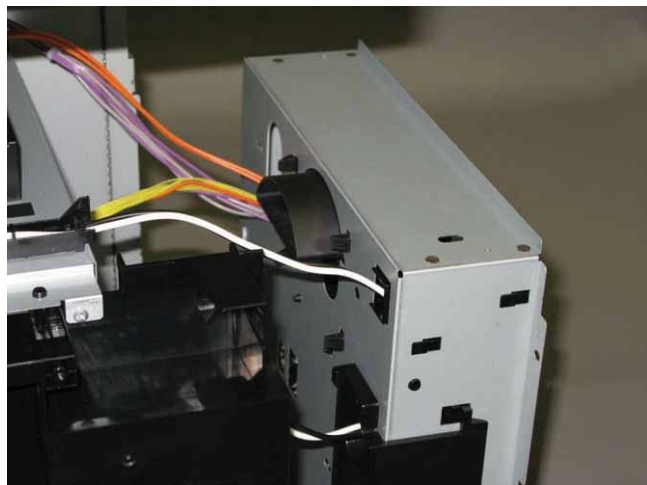


**Go to the next replacement step:
Replacement 27 CHASSIS ASSY LVPS (Reference only)**

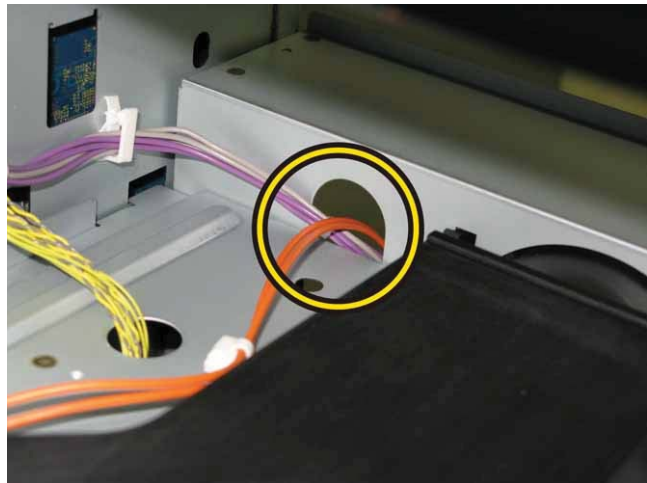
Replacement 27 CHASSIS ASSY LVPS (Reference only)

1) Route the harnesses into the hole of the CHASSIS LVPS.

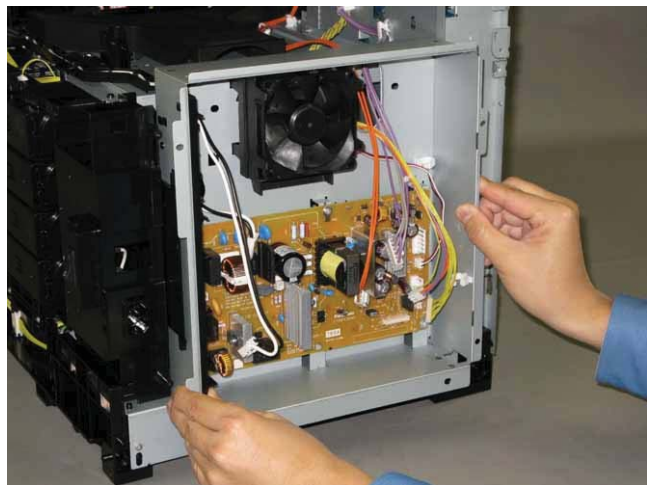
Note: Take care not to route the harness through the wrong hole.



Note: When carrying out the work described next procedure, take care not to damage the harness by pinching it between the CHASSIS LVPS and the printer.



2) Attach the CHASSIS LVPS to the printer together with the PWBA LVPS and the DUCT FAN ASSY.

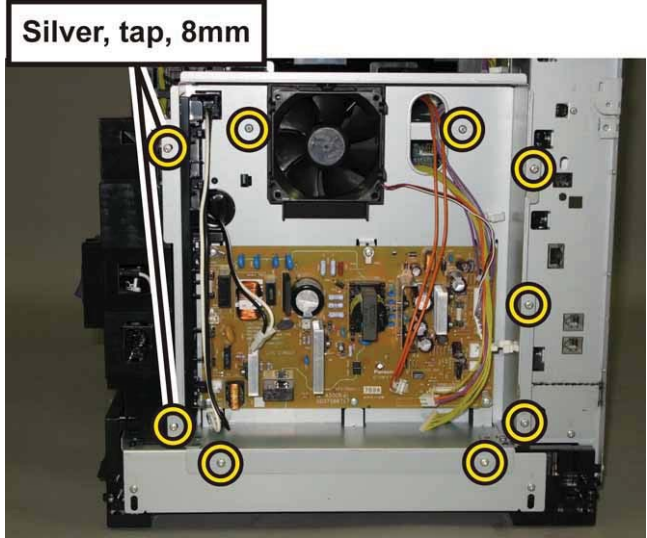


Note: Since three types of screws are used for securing the CHASSIS LVPS, ensure that the right screws are used at their right securing positions.

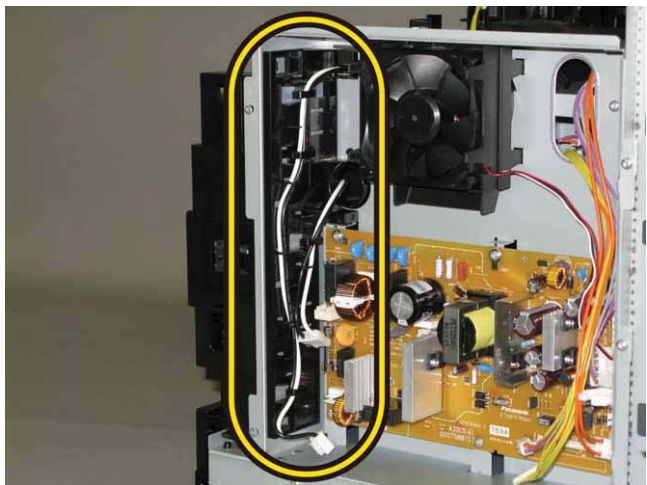
The securing positions for tap screws are marked with [T].

The securing positions for metal screws are marked with [M].

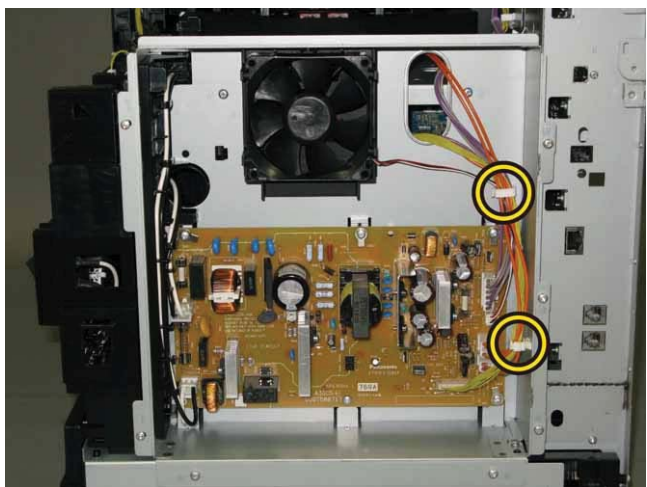
3) Secure the CHASSIS LVPS to the printer with the seven screws (silver, M4, 6mm) and the two screws (silver, tap, 8mm).



4) Route the harness of the HARNESS ASSY FUSER MG AIO and harness of the SWITCH ASSY INLET MG AIO along the GUIDE HARNESS LVPS.



5) Engage all the connectors of the PWBA LVPS, secure the harnesses using the two clamps on the CHASSIS LVPS.

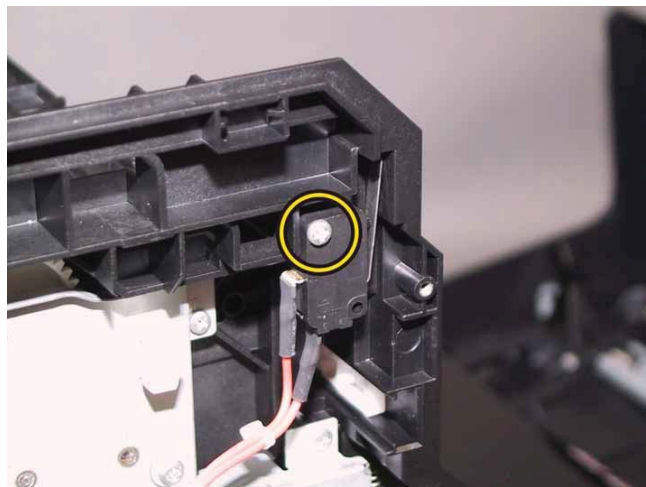


Go to the next replacement step:

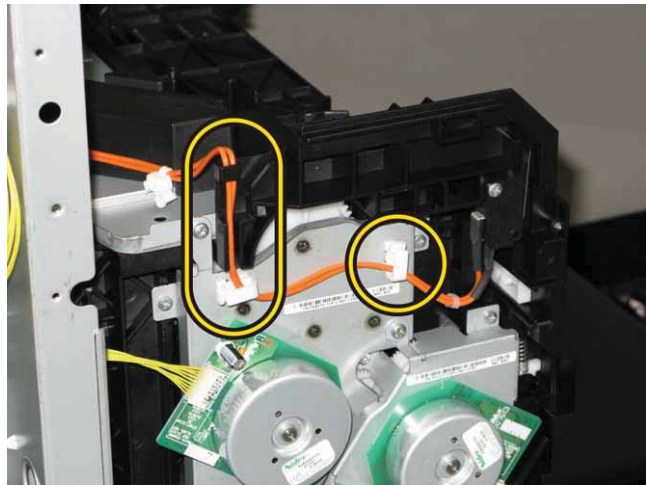
Replacement 32 COVER TOP AIO (PL1.1.4)

Replacement 28 HARN ASSY INTERLOCK AIO (PL8.1.1)

1) Mate the hole of the switch with the boss of the printer, secure the switch with the one screw (silver, tap, 16mm).



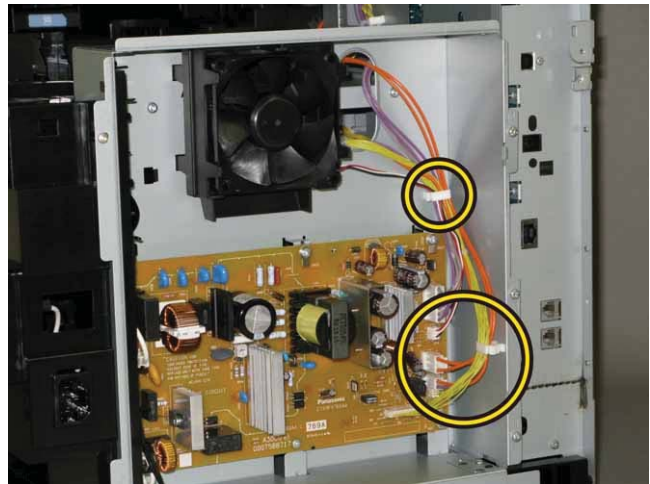
2) Secure the harness of the HARN ASSY INTERLOCK AIO with the clamps.



3) Route the HARN ASSY INTERLOCK AIO through the hole of the CHASSIS LVPS, attach the three clamps that secure the harness of the INTERLOCK SWITCH AIO to the PLATE ASSY TOP.



4) Engage the connector (P/J44) of the HARN ASSY INTERLOCK AIO to the PWBA LVPS, secure the harness using the two clamps.



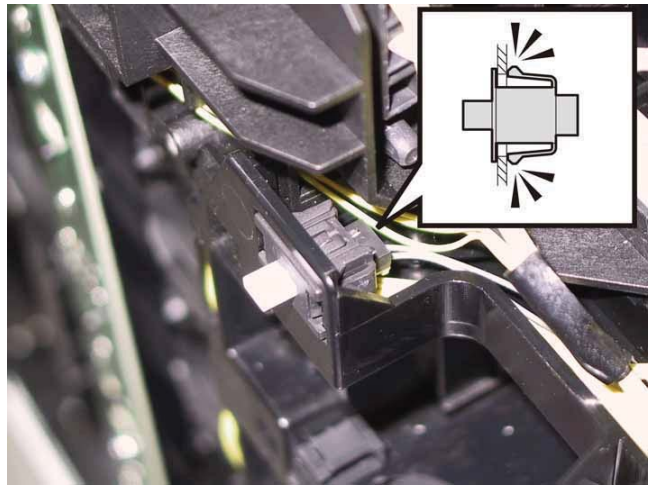
**Go to the next replacement step:
Replacement 32 COVER TOP AIO (PL1.1.4)**

Replacement 29 SWITCH (PL5.1.9)

1) Engage the connector (P/J291) of the SWITCH.



2) Attach the SWITCH to the printer, secure the SWITCH with the two hooks.



Go to the next replacement step:

Replacement 32 COVER TOP AIO (PL1.1.4)

Replacement 30 DUCT FAN ASSY AIO (PL8.2.7)

Note: When carrying out the work described next procedure, take care to check the orientation of the FAN. (Attach the FAN so that its labeled surface faces front.)

1) Secure the DUCT FAN ASSY AIO to the printer with the four hooks.



2) Engage the connector (P/J503) of the DUCT FAN ASSY AIO to the PWBA LVPS, secure the harness using the clamp.



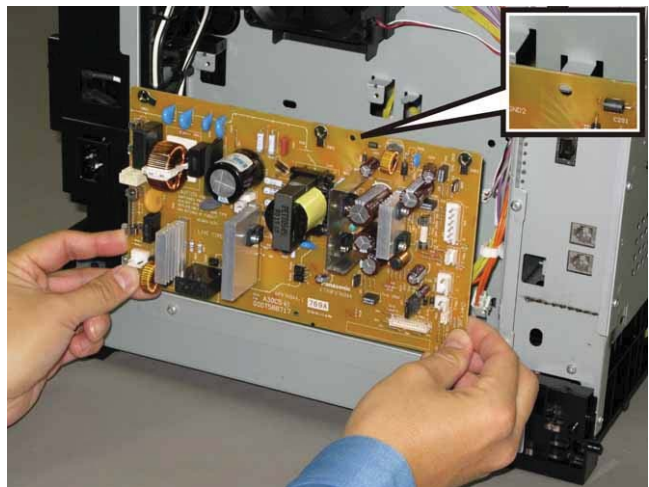
Go to the next replacement step:

Replacement 33 COVER REAR AIO (PL1.1.5)

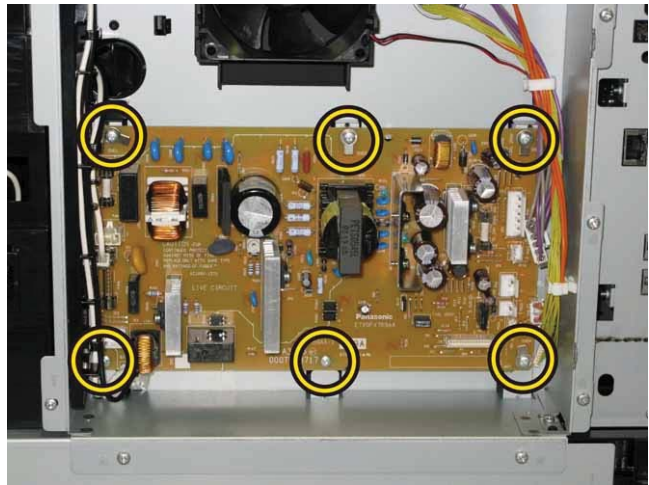
Replacement 31 PWBA LVPS (PL8.2.12)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Attach the PWBA LVPS to the printer.



2) Secure the PWBA LVPS to the printer with the six screws (silver, 6mm).



3) Engage all the connectors of the PWBA LVPS.



Go to the next replacement step:

Replacement 33 COVER REAR AIO (PL1.1.5)

Replacement 32 COVER TOP AIO (PL1.1.4)

1) Mate the boss of the COVER TOP AIO with the hole of the printer.



2) Mate the two holes of the COVER TOP AIO with the pegs of the printer by pulling down the COVER TOP AIO.



4) Secure the COVER TOP AIO to the printer with the two screws (silver, tap, 8mm).

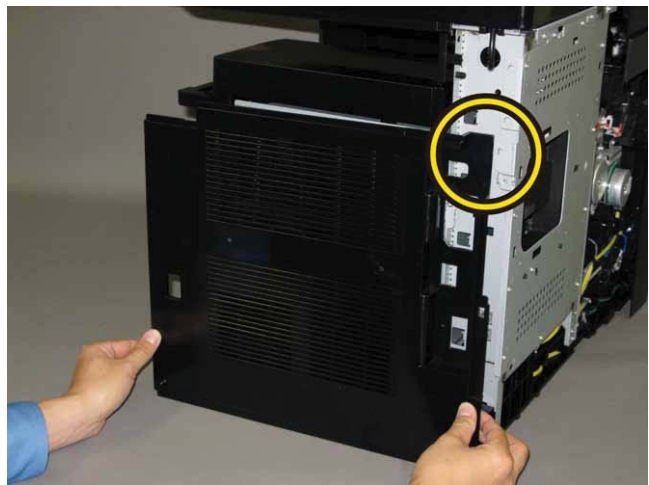


Go to the next replacement step:

Replacement 33 COVER REAR AIO (PL1.1.5)

Replacement 33 COVER REAR AIO (PL1.1.5)

1) Insert the rim on the upper side of the REAR COVER AIO into the inside of the COVER TOP AIO, attach the COVER REAR to the printer.



2) Secure the COVER REAR AIO to the printer with the two screws (silver, tap, 8mm).

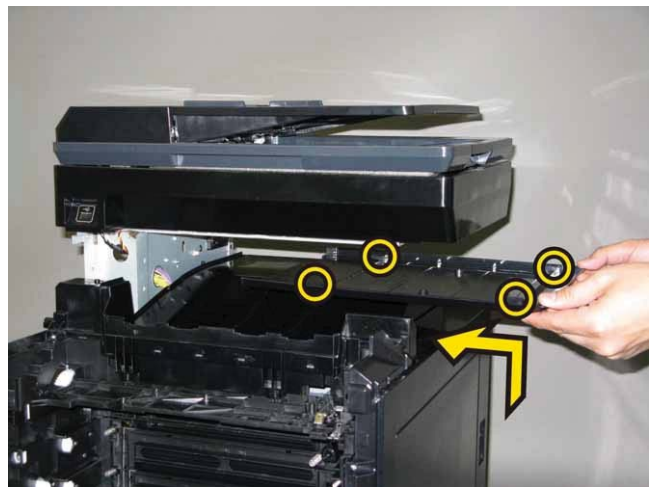


Go to the next replacement step:

Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 34 COVER SCANNER LOW AIO (PL1.1.2)

1) Mate the four hooks of the COVER SCANNER LOW AIO with the holes of the printer, move the COVER SCANNER LOW AIO to secure it.



Go to the next replacement step:

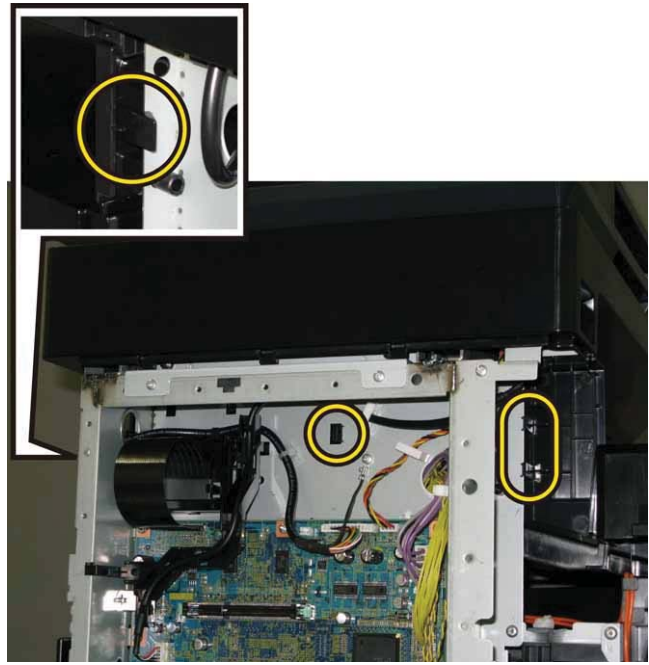
Replacement 35 COVER POLE IN AIO (PL1.1.3)

Replacement 35 COVER POLE IN AIO (PL1.1.3)

1) Mate the two bosses of the COVER POLE IN AIO with the holes of the printer, attach the COVER POLE IN AIO.



2) Secure the COVER POLE IN AIO to the printer with the four hooks.



Go to the next replacement step:

Replacement 38 SHIELD ASSY ESS AIO (PL8.1.7)

Replacement 36 KIT PWBA ESS AIO (PL8.1.99)

Note: Ensure proper electrostatic discharge procedures are followed to prevent damage to the PWBA ESS SFP and options during replacement.

Note: The replacement steps of procedure 1) to 3) are to be required for changing the PWBA ESS SFP. Those steps are not required for only removing it.

Note: There are two ROM chips that must be moved from the original PWBA ESS SFP to the replacement PWBA. Ensure both these chips are installed into the same locations on the replacement PWBA.

Note: Avoid applying excessive pressure when removing and replacing the ROM chips.

Note: Take care not to bend the terminal section of ROM when carrying out the job described below.

1) Remove the ROM, using a miniature screwdriver or the like, from the IC sockets on old PWBA ESS AIO that was removed from the printer.

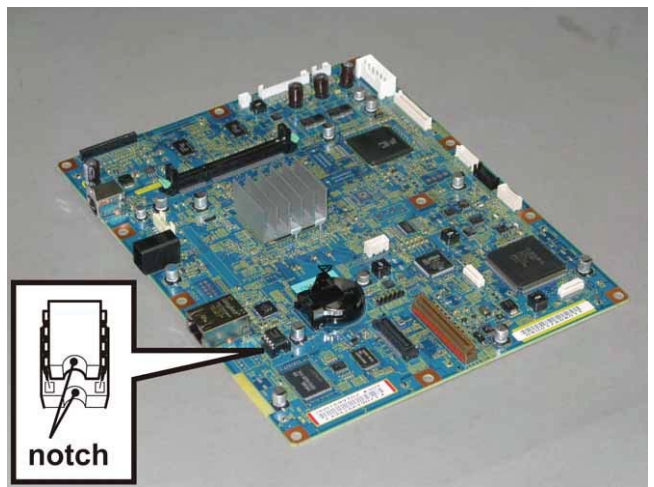


2) Remove the ROM from IC socket on new PWBA ESS AIO using a miniature screwdriver or the like.

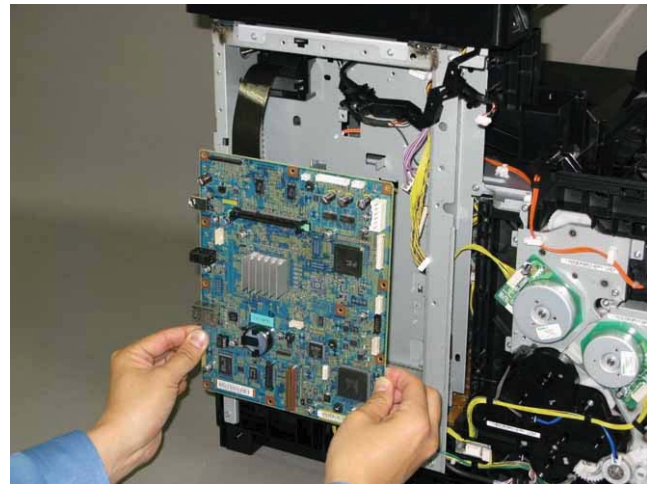


Note: Do not use ROMs removed from new PWBA ESS AIO.

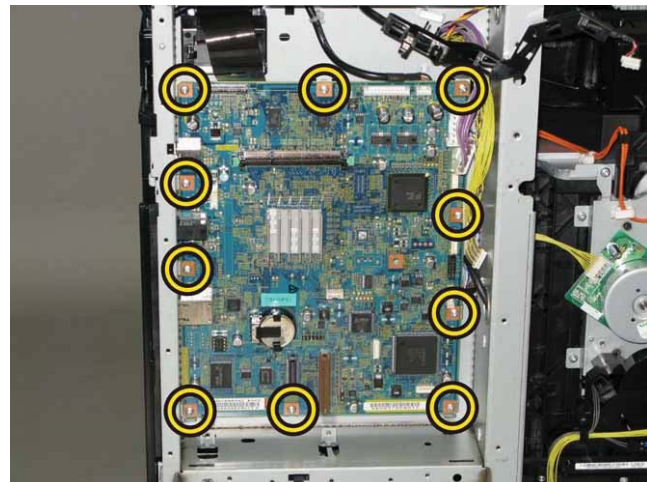
3) Attach the ROM that were removed from old PWBA ESS AIO on IC sockets of new PWBA ESS AIO with its notch aligned with the notch in IC socket.



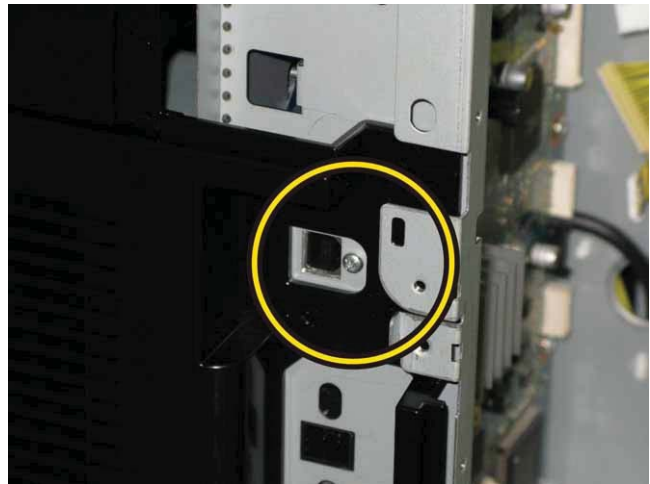
4) Attach the PWBA ESS AIO to the printer.



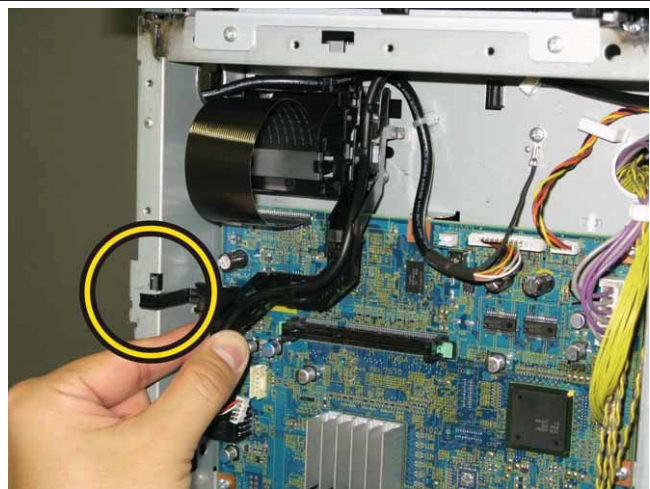
5) Secure the PWBA ESS AIO to the printer with the ten screws (silver, 6mm).



6) Secure the USB connector of the PWBA ESS AIO to the printer with the one screw (silver, 4mm).



7) Mate the boss and hook of the GUIDE HARNESS USB with the holes of the printer, attach the GUIDE HARNESS USB. Secure the GUIDE HARNESS USB to the printer with the hook.



8) Engage all the connectors of the PWBA
ESS AIO.

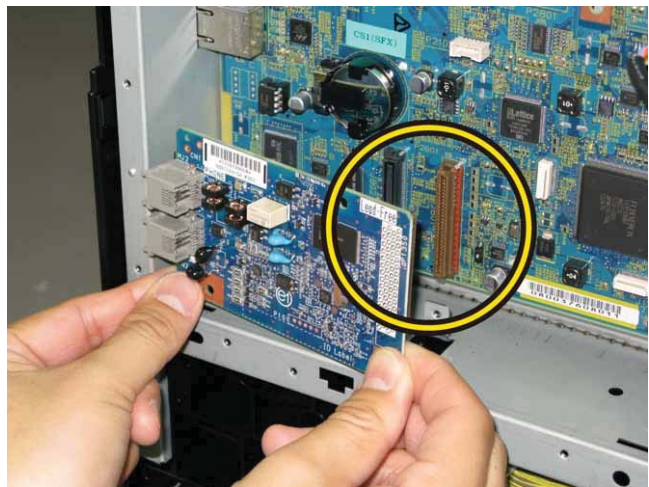


**Go to the next replacement step:
Replacement 37 PWBA FAX (PL8.1.5)**

Replacement 37 PWBA FAX (PL8.1.5)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Engage the connector (P/J801) of the PWBA FAX to the PWBA ESS AIO.



2) Secure the PWBA FAX to the printer with the two screws (silver, 6mm).



Go to the next replacement step:

Replacement 38 SHIELD ASSY ESS AIO (PL8.1.7)

Replacement 38 SHIELD ASSY ESS AIO (PL8.1.7)

1) Engage the three tabs of the SHIELD ASSY ESS AIO to the frame, and then attach the SHIELD ASSY ESS AIO to the printer.



2) Secure the SHIELD ASSY ESS AIO to the printer with the twelve screws (silver, 6mm).

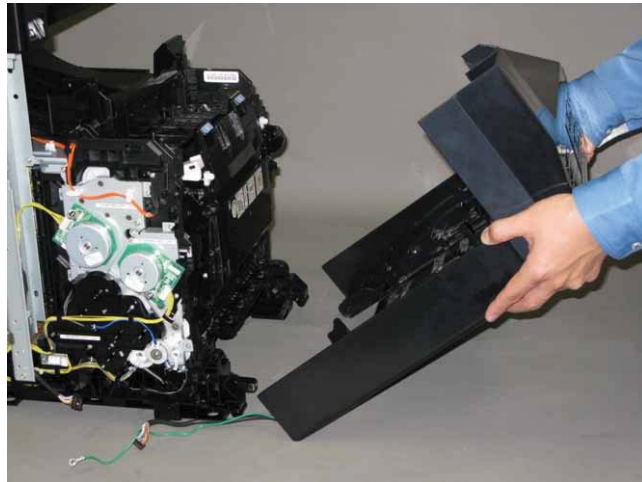


Go to the next replacement step:

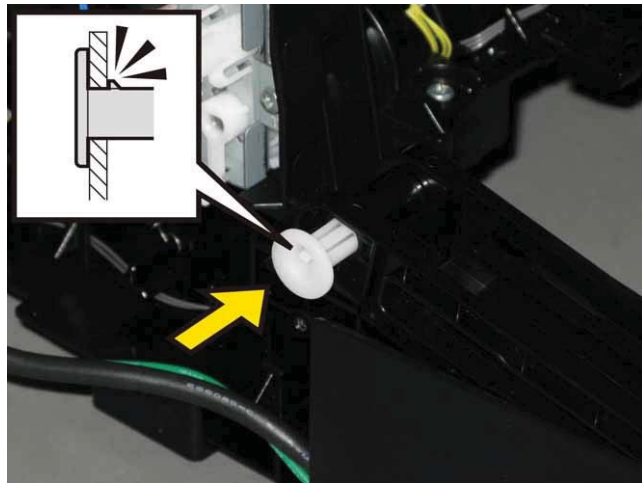
Replacement 52 COVER ASSY POLE OUT AIO (PL1.1.11)

Replacement 39 COVER ASSY FRONT (PL1.2.1)

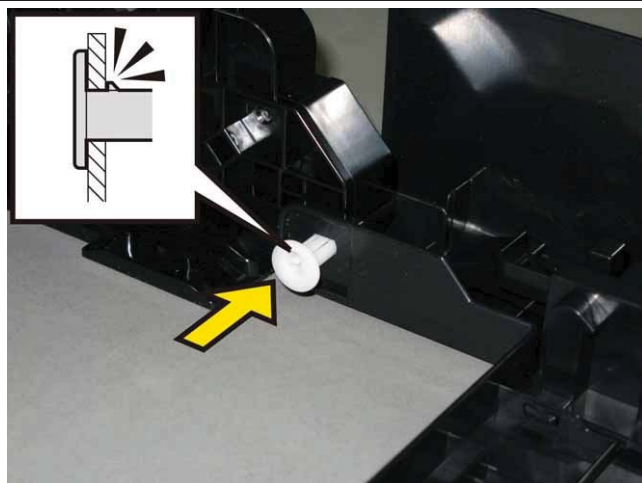
1) Lift the COVER ASSY FRONT slightly up to attach it to the printer.



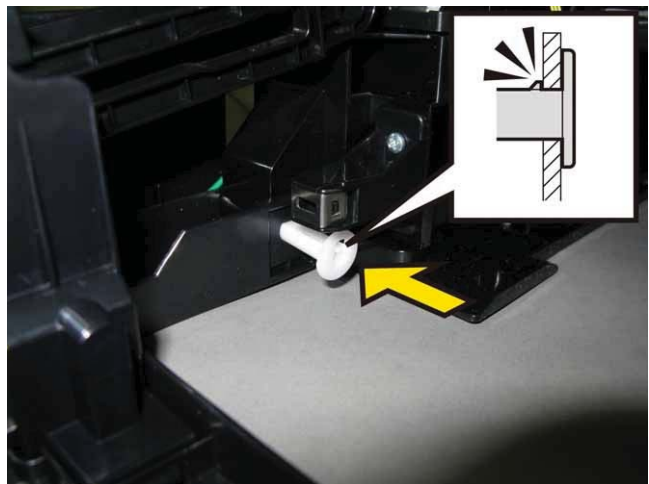
2) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the SHAFT PIVOT that is the fixation of the LINK ASSY FRONT AIO until the hook is locked.



3) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the right side SHAFT PIVOT until the hook is locked.

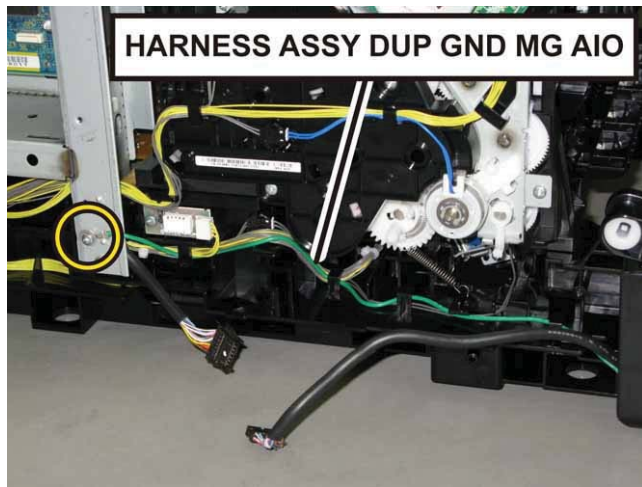


4) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the left side SHAFT PIVOT until the hook is locked.



5) Route the HARNESS ASSY DUP GND MG AIO along the hooks of the printer, secure the grounding terminal of the HARNESS ASSY DUP GND MG AIO with the one screw (silver, 6mm).

Note: This step is only 2155cdn.



6) Route the HARNESS ASSY PNL A through the hooks of the printer, engage the connector (P/J5301) of the HARNESS ASSY PNL A. Secure the relay connector with the rib of the printer.



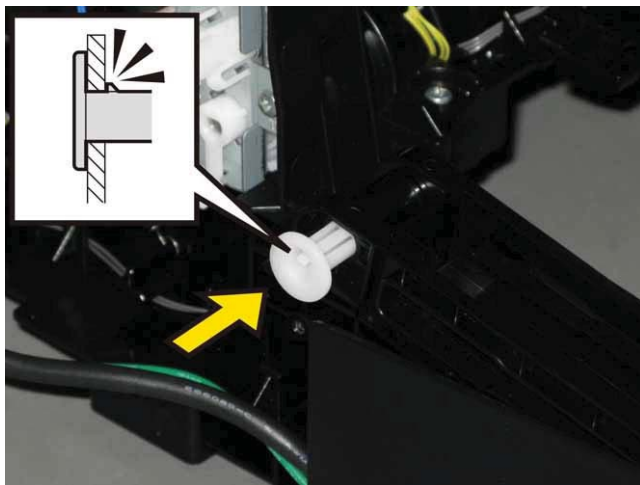
Go to the next replacement step:

Replacement 43 FEEDER ASSY DUP AIO STD (PL11.1.1) [2155cdn Only]

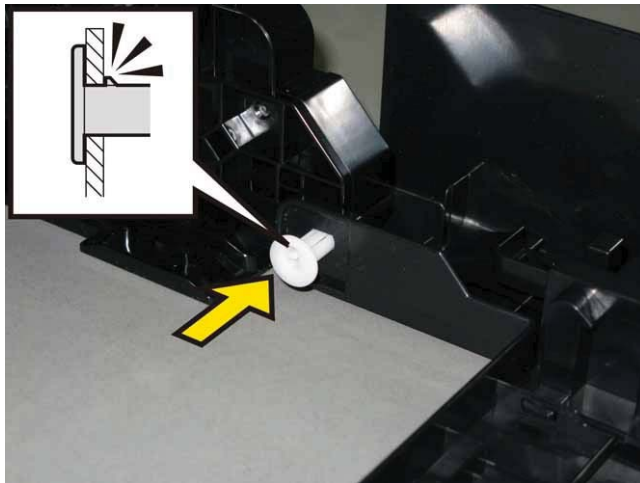
Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13) [2155cn Only]

Replacement 40 KIT SHAFT PIVOT (PL1.2.99)

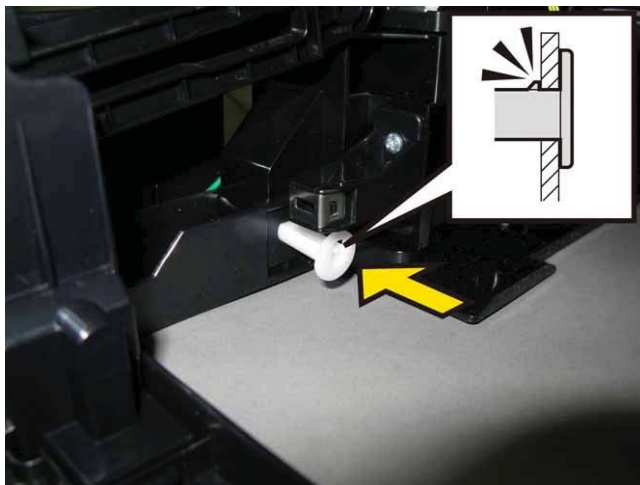
1) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the SHAFT PIVOT that is the fixation of the LINK ASSY FRONT AIO until the hook is locked.



2) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the right side SHAFT PIVOT until the hook is locked.



3) Mate the flat face of the SHAFT PIVOT with the hole of the COVER ASSY FRONT, push the left side SHAFT PIVOT until the hook is locked.

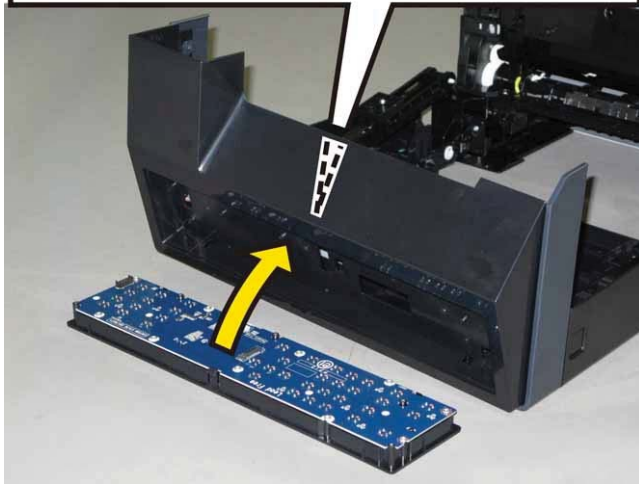
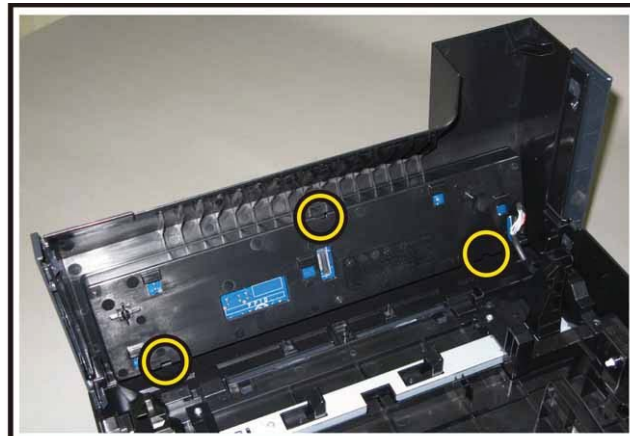


4) Close the COVER ASSY FRONT.

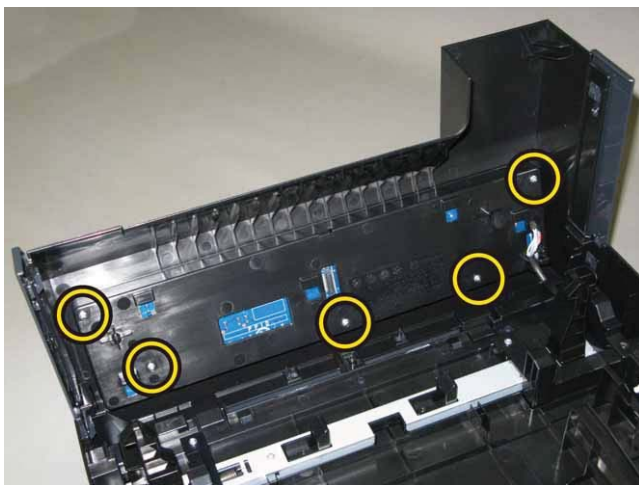
5) Insert the CASSETTE ASSY 250 MG AIO into the printer.

Replacement 41 CONSOLE ASSY PANEL AIO (PL1.2.3)

1) Attach the CONSOLE ASSY PANEL AIO to the printer., secure the three hooks of the CONSOLE ASSY PANEL AIO to the COVER ASSY FRONT.



2) Secure the CONSOLE ASSY PANEL AIO to the COVER ASSY FRONT with the five screws (silver, tap, 8mm).



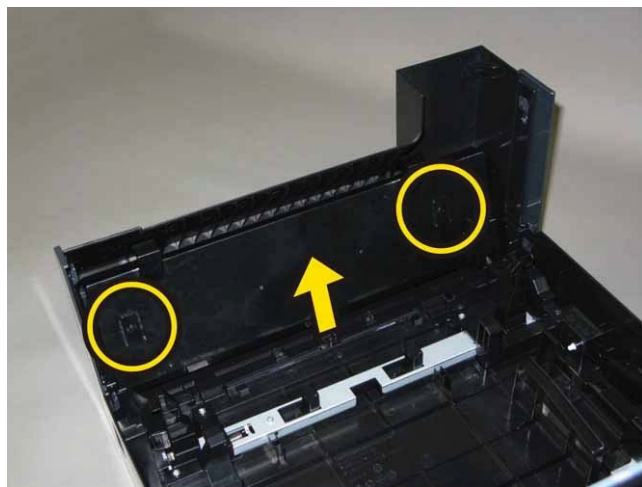
3) Engage the connector (P/J202) of the CONSOLE ASSY PANEL AIO.



4) Mate the five hooks of the COVER INNER FRONT AIO with the holes of the COVER ASSY FRONT.



5) Shift the COVER INNER FRONT AIO to the upper side, mate the two holes of the COVER INNER FRONT AIO with the two bosses of the COVER ASSY FRONT.



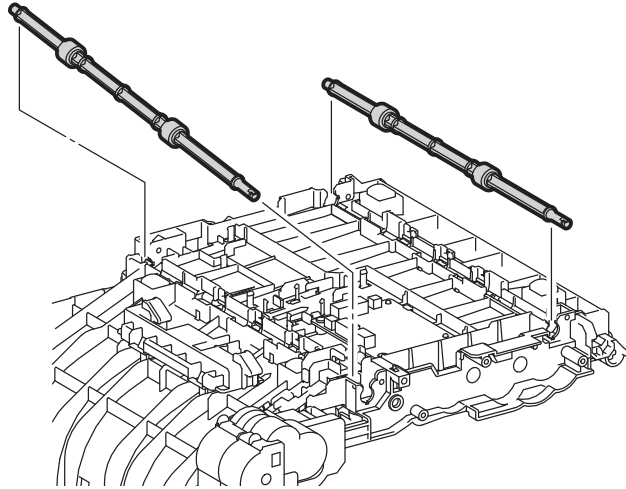
4) Close the COVER ASSY FRONT. [2155cn Only]

Go to the next replacement step:

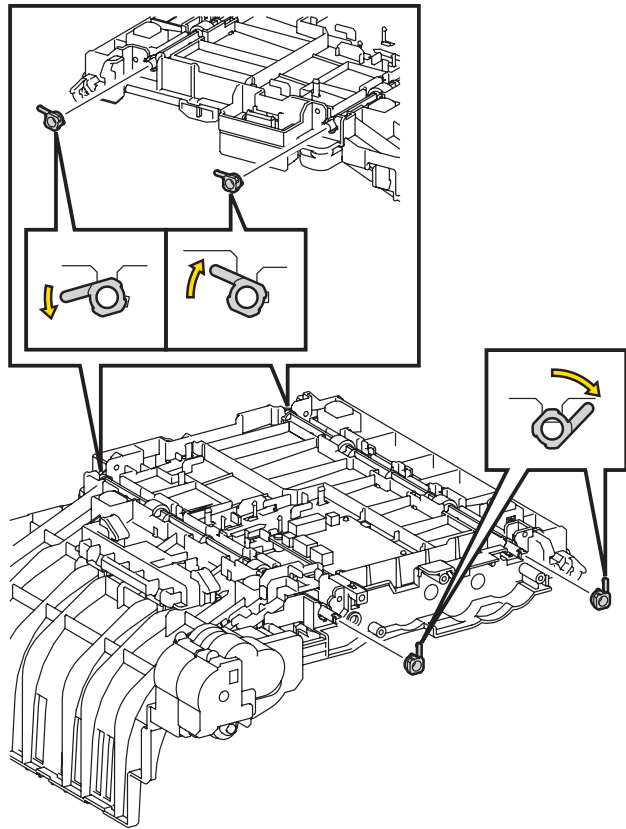
Replacement 43 FEEDER ASSY DUP AIO STD (PL11.1.1) [2155cdn Only]

Replacement 42 ROLLER ASSY DUP (PL11.2.9) [2155cdn Only]

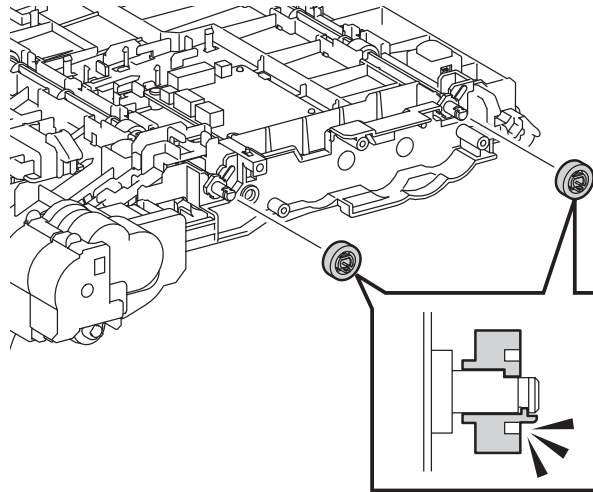
1) Attach the ROLLER ASSY DUP to the FEEDER ASSY DUP AIO STD.



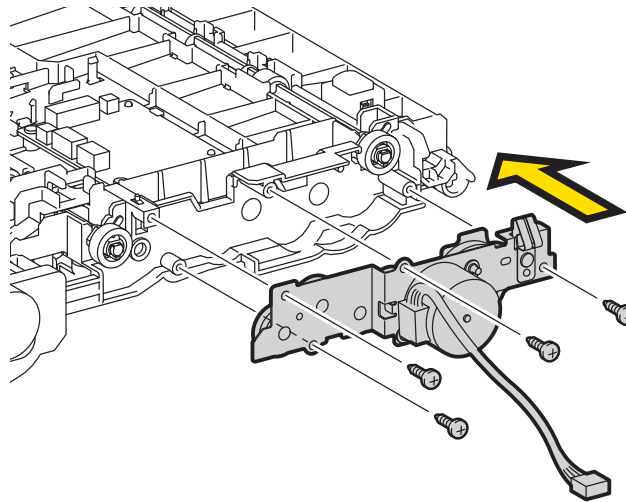
2) Replace the BEARING DUP on both the right and left sides of the ROLLER ASSY DUP by matching the tab of the BEARING DUP with the notch of the FEEDER ASSY DUP AIO STD.
Clamp the BEARING DUP firmly to the FEEDER ASSY DUP AIO STD.



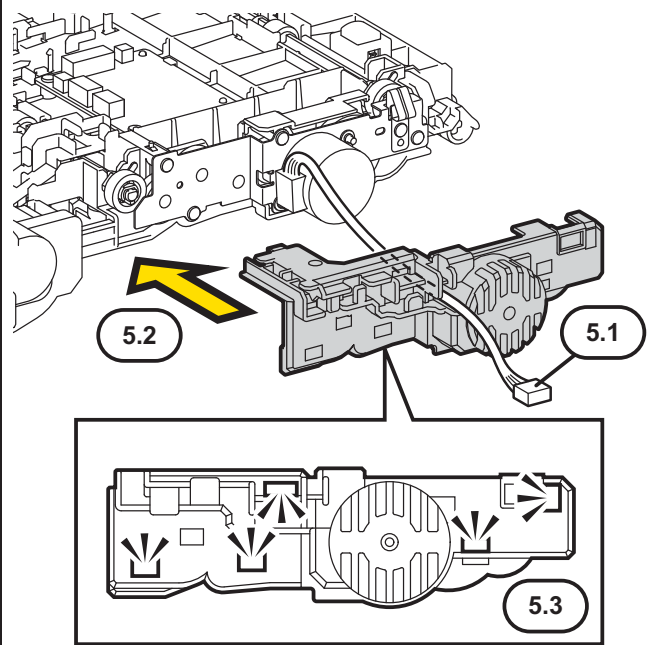
3) Attach the GEAR ROLL DUP to the ROLLER ASSY DUP, mate the hook of the GEAR ROLL DUP with the groove of the FEEDER ASSY DUP AIO STD.



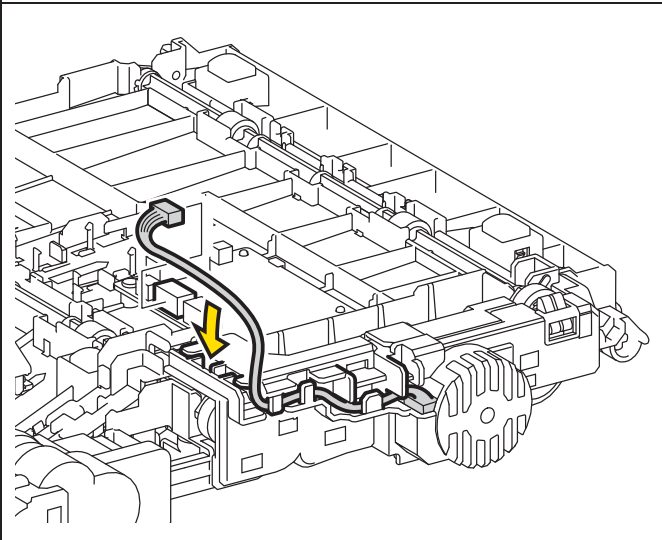
4) Attach the DRIVE ASSY DUP to the FEEDER ASSY DUP AIO STD, secure the DRIVE ASSY DUP with the four screws (silver, tap, 8mm).



5) Draw the connector of the DRIVE ASSY DUP through the hole of the COVER DRIVE DUP. Then fix the COVER DRIVE DUP to the FEEDER ASSY DUP AIO STD using the five hooks.

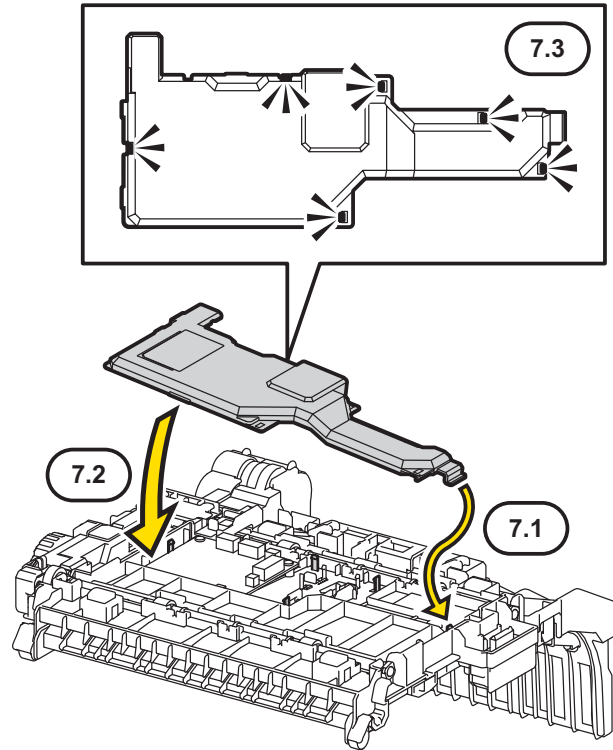


6) Route the harness of the DRIVE ASSY DUP along the hooks of the COVER DRIVE DUP, engage the connector (P/J603) of the DRIVE ASSY DUP to the PWBA DUP.



Note: When carrying out the steps described below, insert the right edge of the COVER PWBA DUP into the clearance of the CHUTE DUP FRAME.

7) Attach the COVER PWBA DUP to the FEEDER ASSY DUP AIO STD, secure the COVER PWBA DUP with the six hooks.

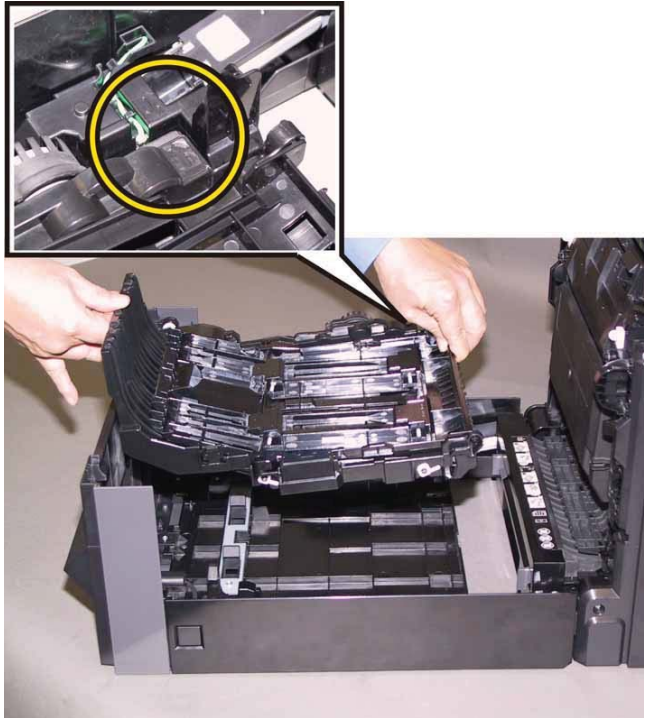


Go to the next replacement step:

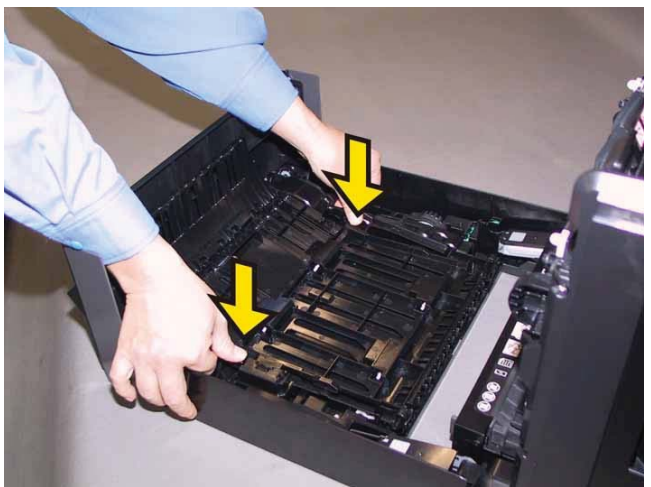
Replacement 43 FEEDER ASSY DUP AIO STD (PL11.1.1) [2155cdn Only]

Replacement 43 FEEDER ASSY DUP AIO STD (PL11.1.1) [2155cdn Only]

1) Align the arrow on the FEEDER ASSY DUP AIO STD with the one on the COVER ASSY FRONT, attach the FEEDER ASSY DUP AIO STD.



2) Push the FEEDER ASSY DUP AIO STD to secure it.



3) Route the harness of the HARNESS ASSY DUP STD MG AIO along the hooks of the HOLDER FRONT R AIO.



4) Route the HARNESS ASSY DUP STD MG AIO through the hooks of the printer, engage the connector (P/J271) of the HARNESS ASSY DUP STD MG AIO. Secure the relay connector with the rib of the printer.

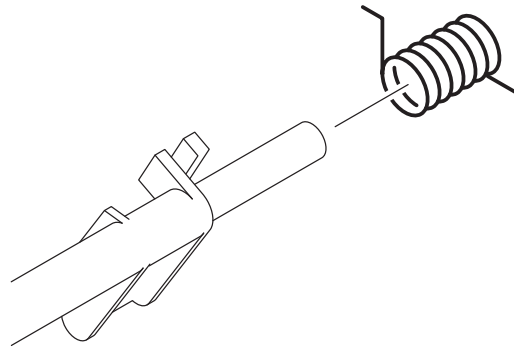


Go to the next replacement step:

Replacement 57 COVER ASSY SIDE R AIO (PL1.1.12)

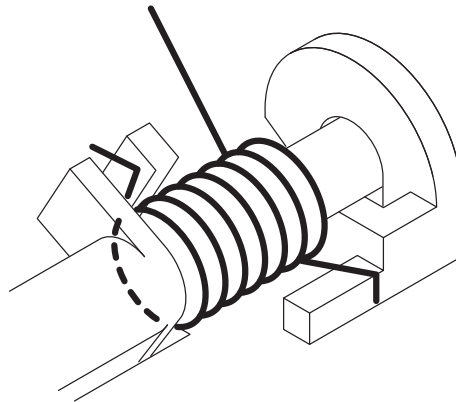
Replacement 44 ACTUATOR SSI (PL3.2.14)

1) Attach the SPRING ACT SSI to the ACTUATOR SSI.

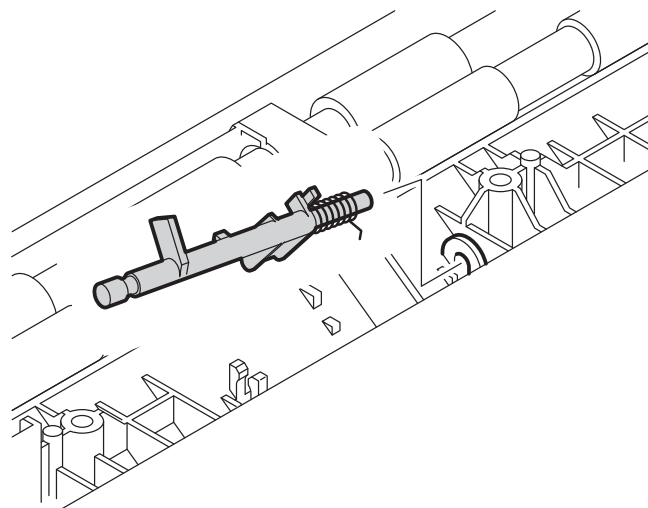


Note: When carrying out the work described next procedure, ensure that the SPRING ACT SSI is hung to ACTUATOR SSI and the CHUTE UP correctly.

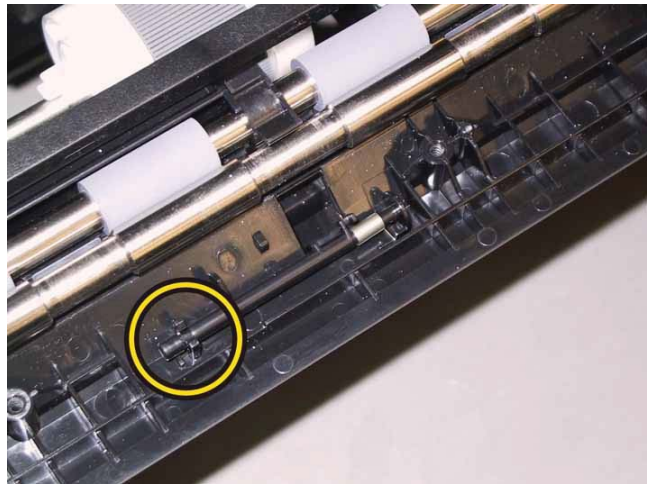
SPRING ACT SSI



2) Insert the right shaft of the ACTUATOR SSI into the hole of the CHUTE UP, hang the SPRING ACT SSI to the CUHTE UP.

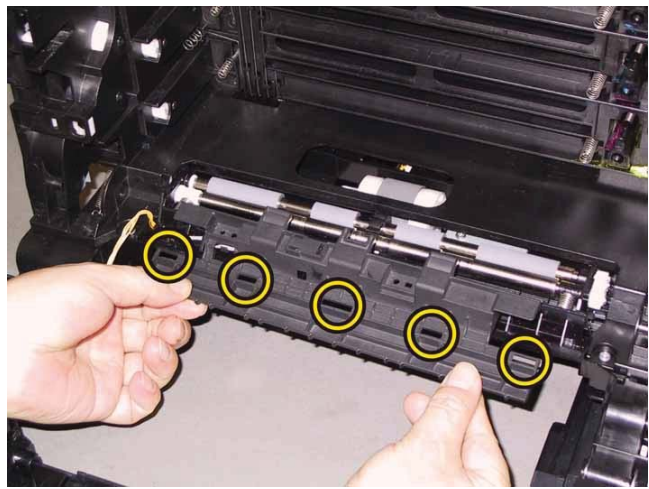


3) Secure the left shaft of the ACTUATOR SSI with the hook of the CHUTE UP, attach the ACTUATOR SSI.

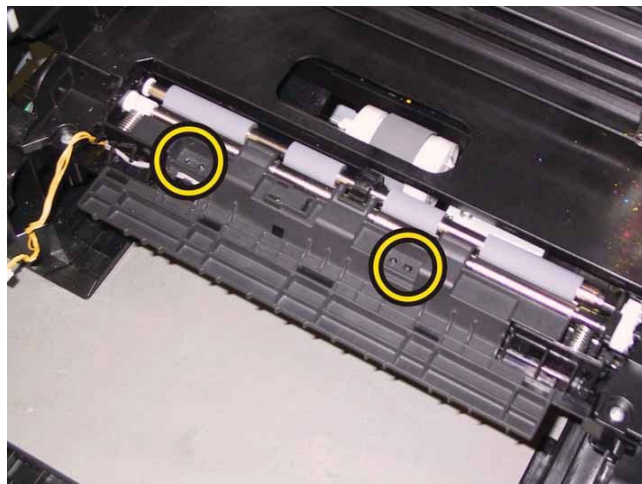


Check the ACTUATOR SSI movement, after the procedure 3 is completed.

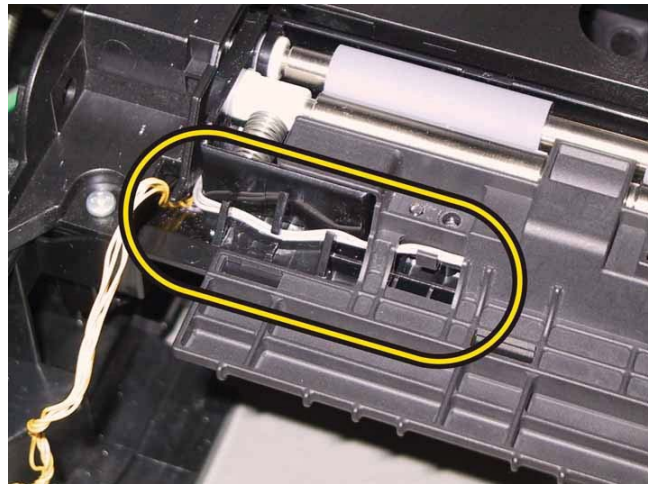
4) Mate the five tabs of the BRACKET SNS with the printer.



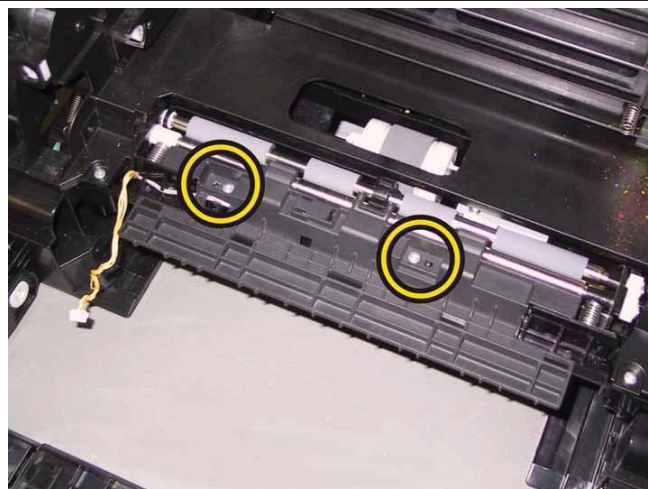
5) Mate the two holes of the BRACKET SNS with the bosses of the printer.



6) Route the harness of the BRACKET SNS through the hooks of the printer.



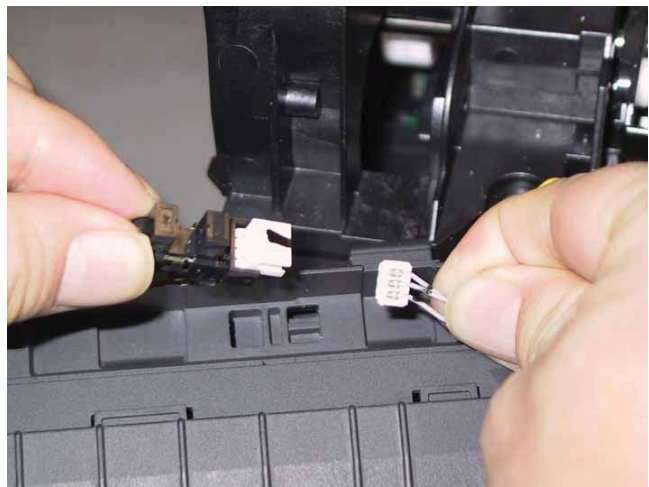
7) Secure the BRACKET SNS to the printer with the two screws (silver, tap, 8mm).



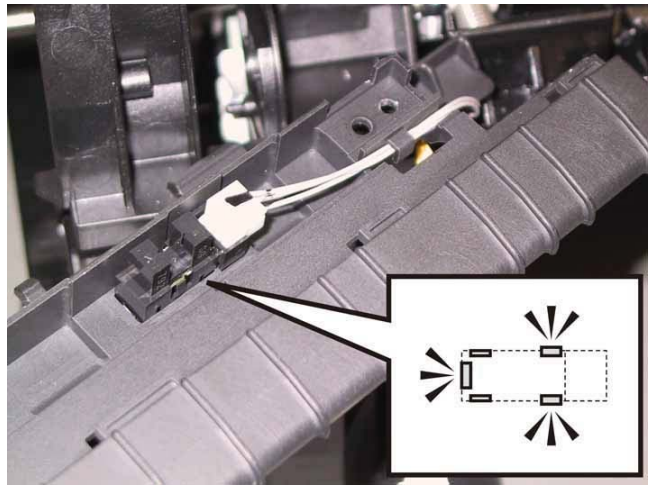
**Go to the next replacement step:
Replacement 46 KIT TRANSFER ASSY (PL6.1.98)**

Replacement 45 SENSOR PHOTO: SSI NO PAPER (PL3.2.13)

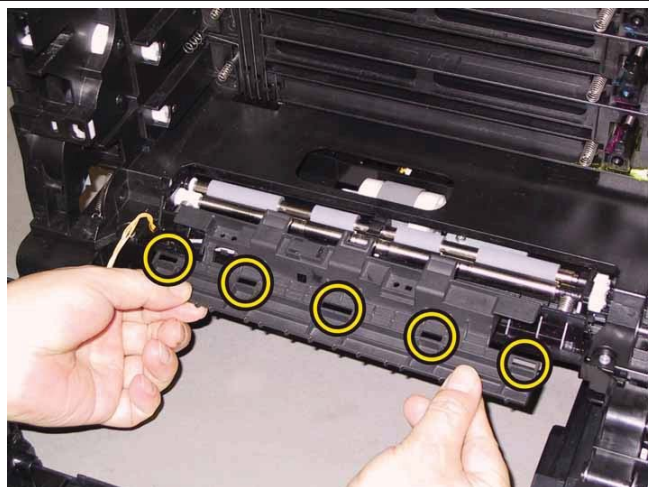
1) Engage the connector (P/J233) of the SENSOR PHOTO: SSI NO PAPER.



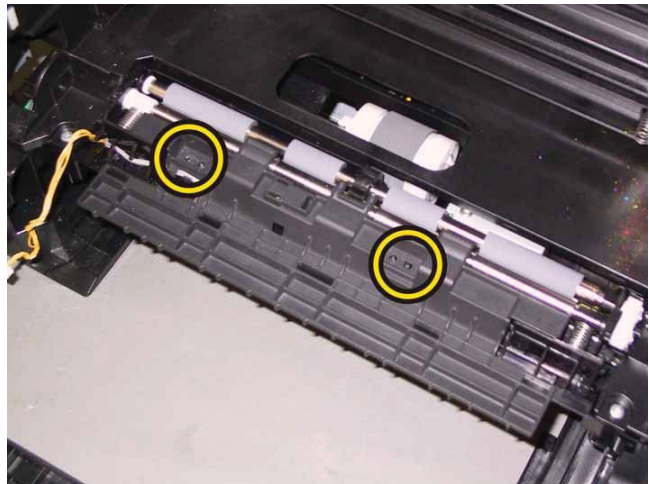
2) Replace the SENSOR PHOTO: SSI NO PAPER to the BRACKET SNS by mating the hook of the SENSOR PHOTO: SSI NO PAPER with its mounting position.



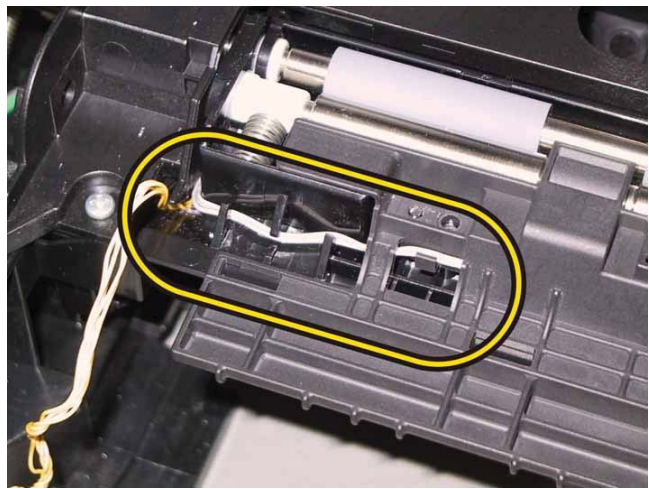
3) Mate the five tabs of the BRACKET SNS with the printer.



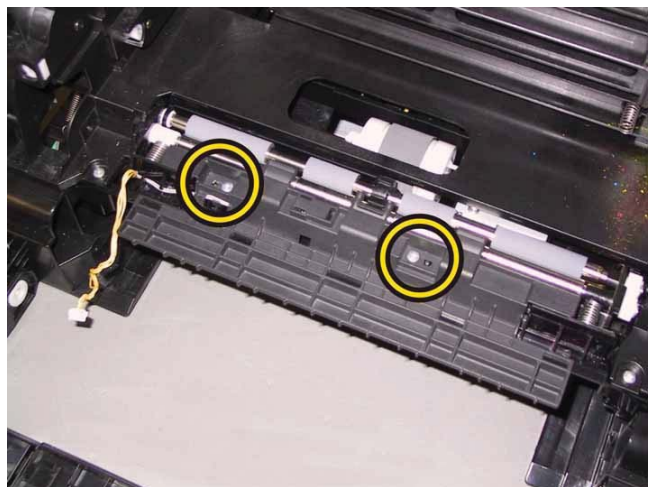
4) Mate the two holes of the BRACKET SNS with the bosses of the printer.



5) Route the harness of the BRACKET SNS through the hooks of the printer.



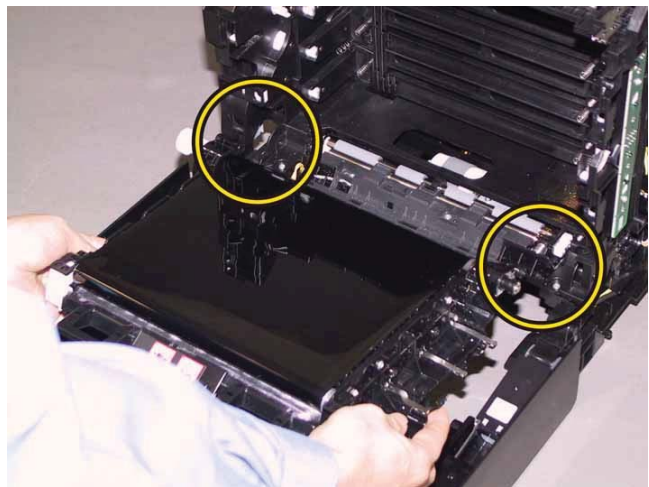
6) Secure the BRACKET SNS to the printer with the two screws (silver, tap, 8mm).



**Go to the next replacement step:
Replacement 46 KIT TRANSFER ASSY (PL6.1.98)**

Replacement 46 KIT TRANSFER ASSY (PL6.1.98)

1) Attach the TRANSFER ASSY to the printer.

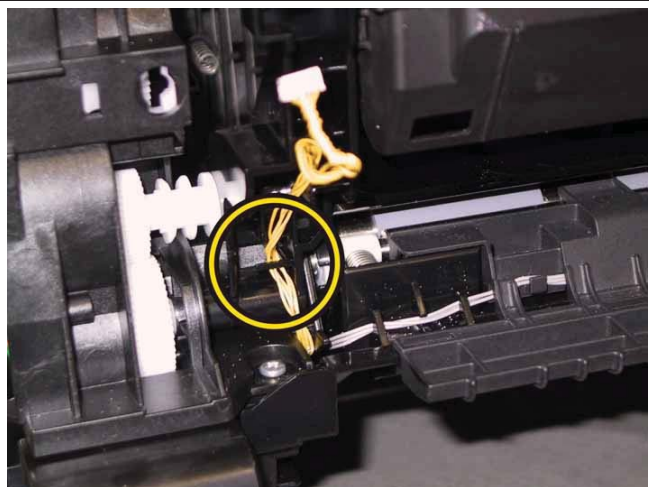


2) Replacement the KIT PIVOT. (Replacement 47)

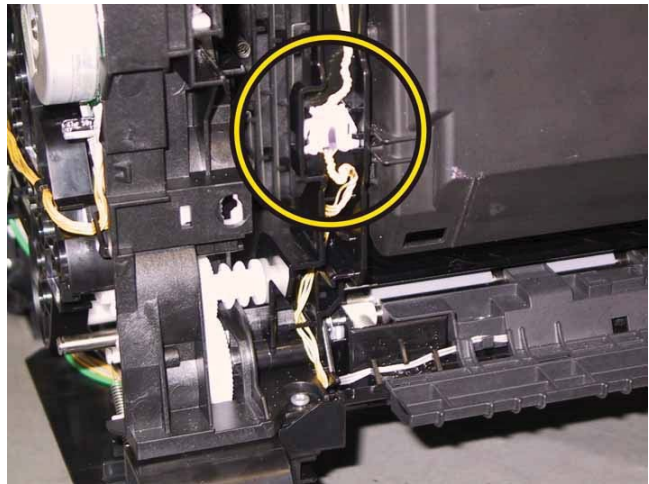
3) Close the TRANSFER ASSY.

Note: When carrying out the work described next procedure, take care not to scratch the belt surface of the TRANSFER ASSY.

4) Route the harness of the printer through the hooks of the TRANSFER ASSY.



5) Engage the connector (P/J281) of the TRANSFER ASSY, secure the relay connector with the pegs of the TRANSFER ASSY.



5) Attach the COVER HARNESS to the TRANSFER ASSY.



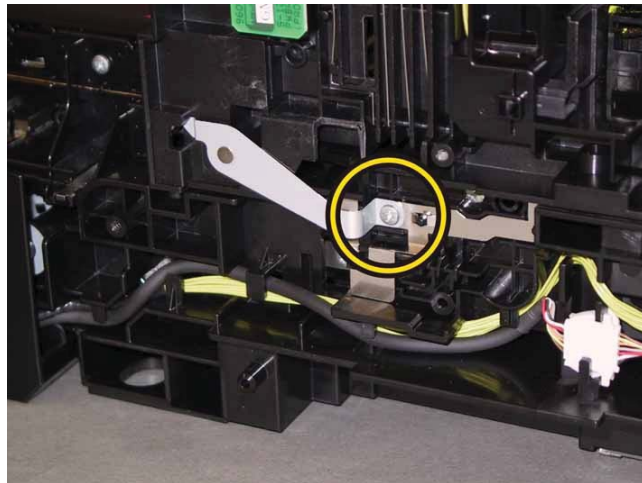
**Go to the next replacement step:
Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)**

Replacement 47 KIT PIVOT (PL6.1.99)

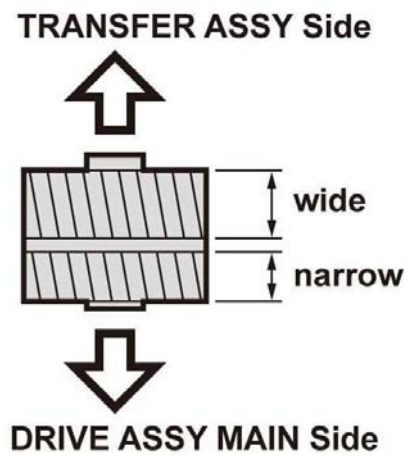
1) Mate the hole of the TRANSFER ASSY with the hole of the printer frame, attach the SHAFT ASSY PIVOT.



2) Secure the SHAFT ASSY PIVOT to the printer with the one screw (silver, tap, 8mm).

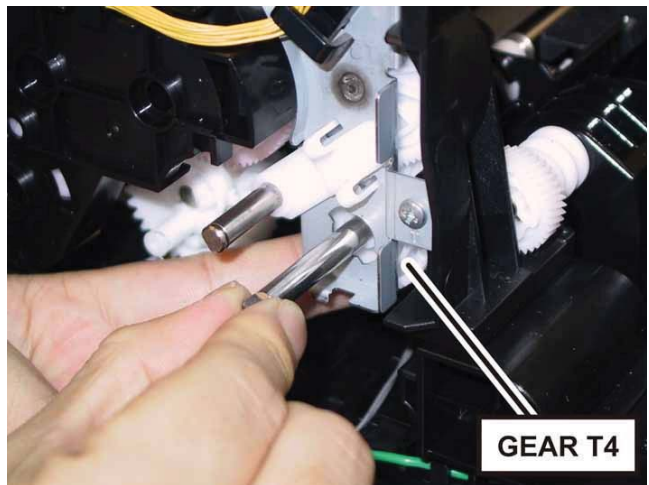


Note: When carrying out the work described next procedure, make sure that the position of the GEAR T4 is correctly.



Note: When carrying out the work described next procedure, keep the TRANSFER ASSY slightly lifted for ease of work.

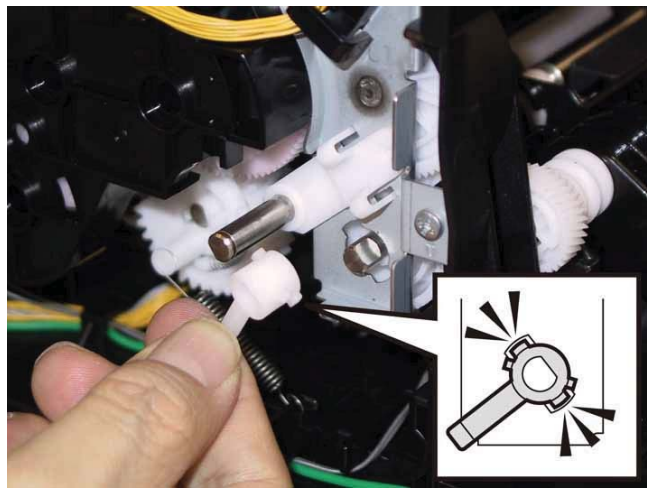
3) Attach the GEAR T4 to the printer, align the holes of the GEAR T4, the printer frame, and the TRANSFER ASSY, and then insert the PIVOT TRANS L.



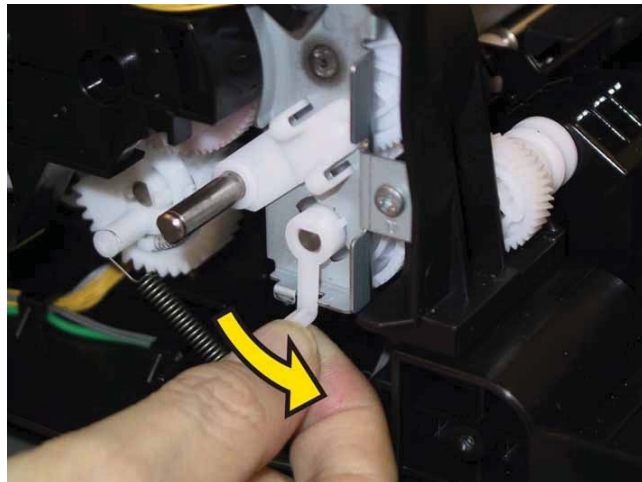
Note: When carrying out the work described next procedure, ensure that the flat face of the PIVOT TRANS L is oriented to the direction shown in the right.



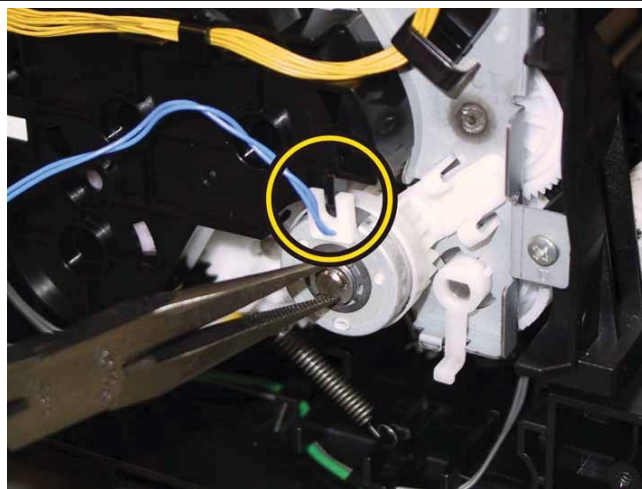
4) Mate the tab of the STOPPER PIVOT with the notch of the DRIVE ASSY MAIN, attach the STOPPER PIVOT to the PIVOT TRANS L.



5) Rotate the STOPPER PIVOT to the left, secure the STOPPER PIVOT to the DRIVE ASSY MAIN frame.



6) Mate the notch of the CLUTCH ASSY DRV with the rib of the DRIVE ASSY PH, secure the CLUTCH ASSY DRV to the ROLL ASSY REGI with the E-ring by using a pliers.



7) Route the harness of the CLUTCH ASSY DRV through the hook of the DRIVE ASSY PH.

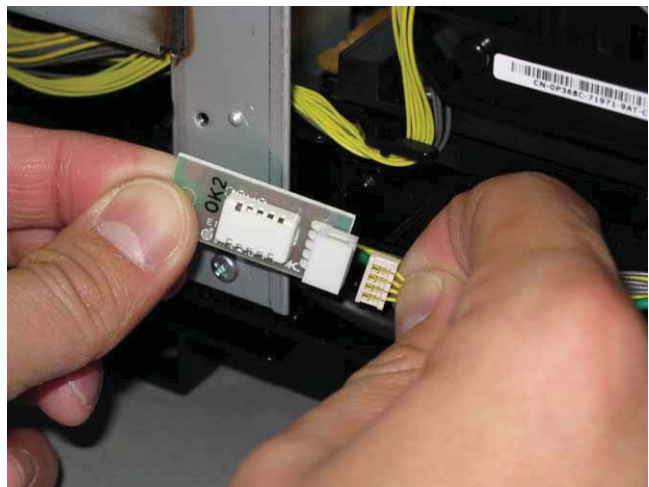


Go to the next replacement step:

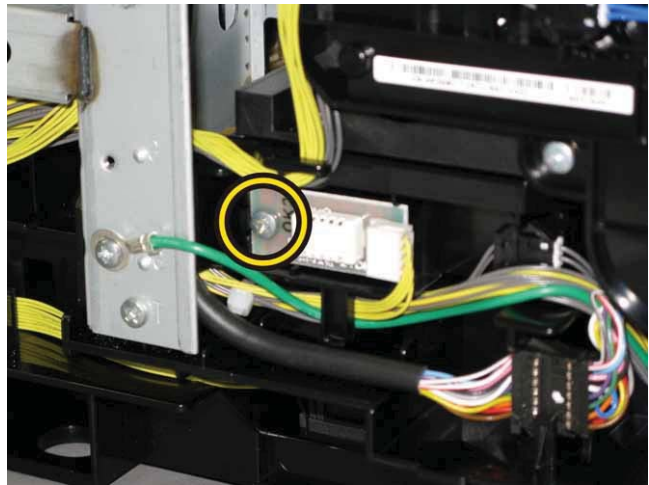
Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 48 SENSOR HUM (PL8.1.10)

1) Engage the connector (P/J201) of the SENSOR HUM.



2) Secure the SENSOR HUM to the printer with the one screw (silver, tap, 8mm).

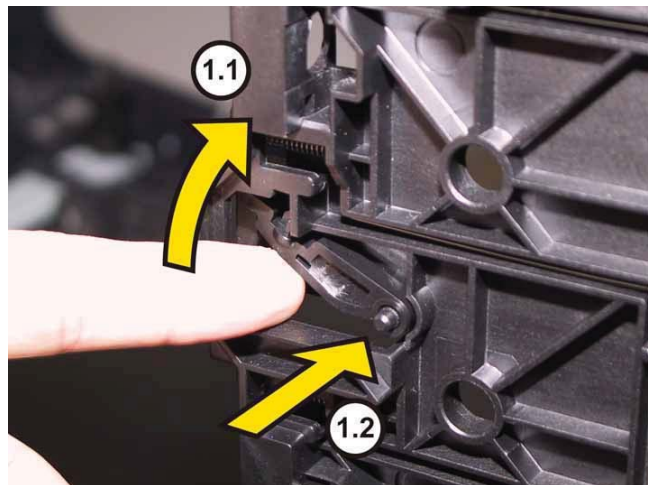


Go to the next replacement step:

Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 49 KIT BLOCK PHD RIGHT (PL4.1.97)

1) Tilt the LEVER PHD slightly, attach the LEVER PHD to the printer.

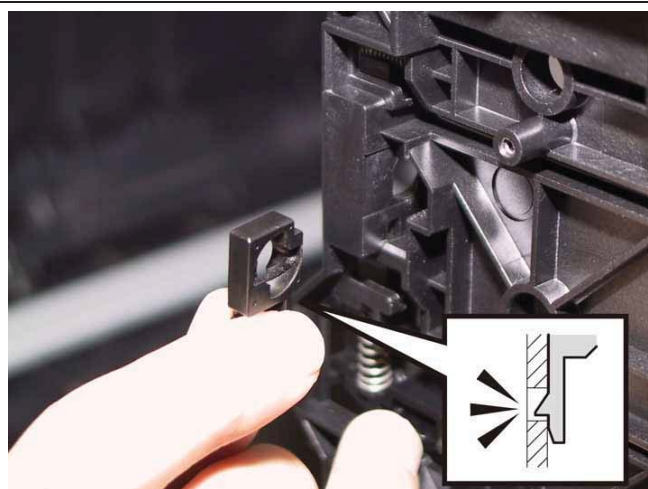


2) Attach the SPRING PHD to the printer.



Note: Described below is the replacement procedure common among the upper and lower of the **BLOCK STOPPER PHD ADs**.

3) Push the BLOCK STOPPER PHD AD to the printer until it is locked.

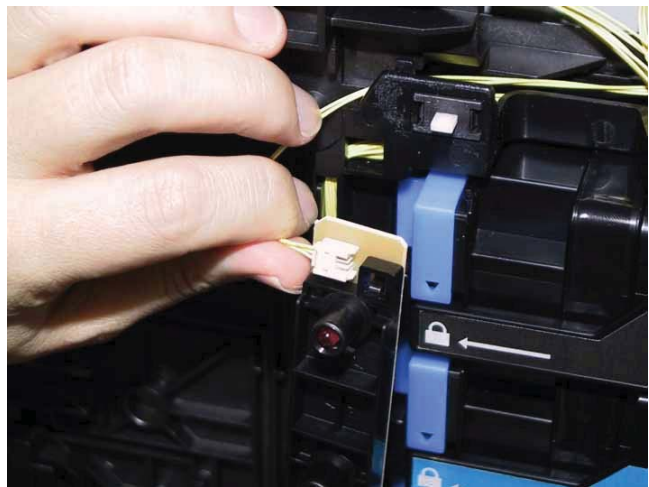


Go to the next replacement step:

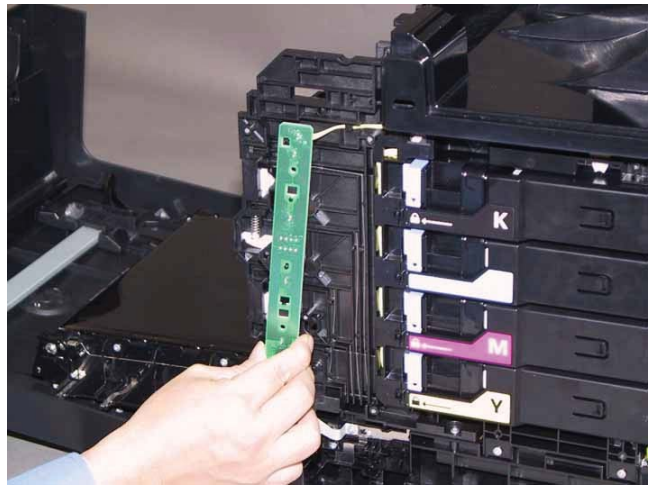
Replacement 50 LED ASSY ERASE (PL4.1.8)

Replacement 50 LED ASSY ERASE (PL4.1.8)

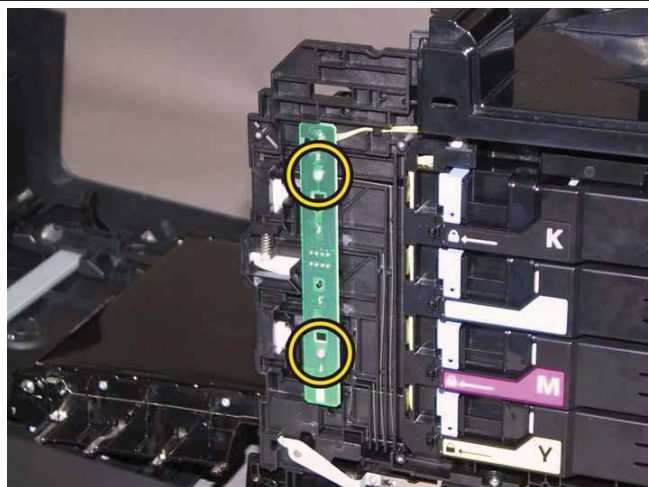
1) Engage the connector (P/J141) of the LED ASSY ERASE.



2) Attach the LED ASSY ERASE to the printer.



3) Secure the LED ASSY ERASE to the printer with two screws (silver, tap, 8mm).

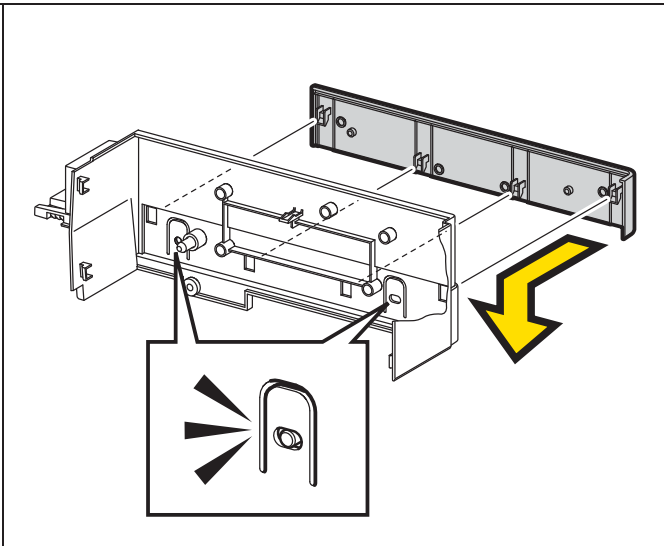


Go to the next replacement step:

Replacement 57 COVER ASSY SIDE R AIO (PL1.1.12)

Replacement 51 COVER POLE OUT AIO (PL1.1.1), COVER SIDE L BAND AIO (PL1.1.10)

1) Mate the four hooks of the COVER SIDE L BAND AIO with the holes of the COVER POLE OUT AIO.
Shift the COVER SIDE L BAND AIO to the lower side, mate the two bosses of the COVER SIDE L BAND AIO with the two holes of the COVER POLE OUT AIO.



Go to the next replacement step:

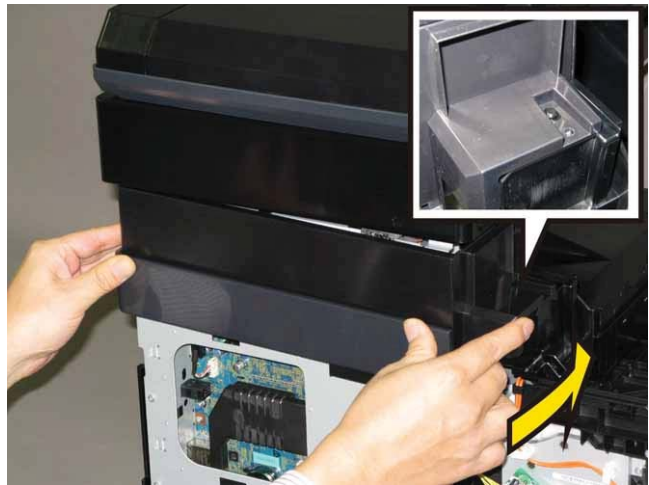
Replacement 52 COVER ASSY POLE OUT AIO (PL1.1.11)

Replacement 52 COVER ASSY POLE OUT AIO (PL1.1.11)

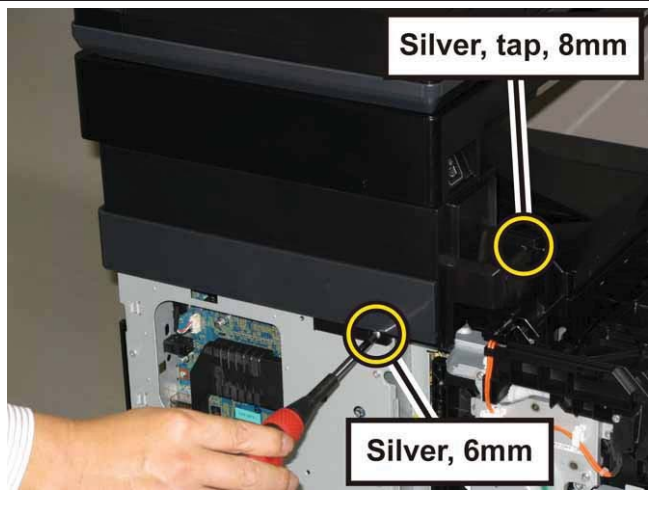
1) Mate the two hooks of the COVER ASSY POLE OUT AIO with the holes of the printer.



2) Mate the hole of the COVER ASSY POLE OUT AIO with the boss of the COVER TOP AIO.



3) Secure the COVER ASSY POLE OUT AIO to the printer with the one screw (silver, 6mm) and the one screw (silver, tap, 8mm).

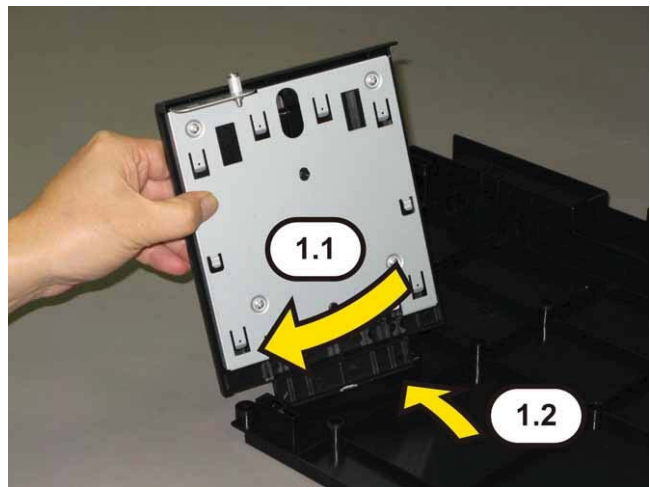


Go to the next replacement step:

Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 53 COVER SIDE L AIO (PL1.1.8), COVER ASSY ESS (PL1.1.9)

1) Insert the boss of the COVER ASSY ESS to the hole of the COVER SIDE L AIO, attach the COVER ASSY ESS to the COVER SIDE L AIO.

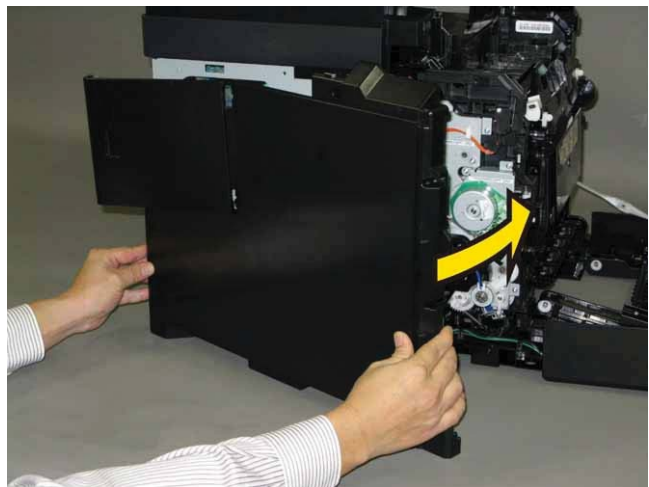


Go to the next replacement step:

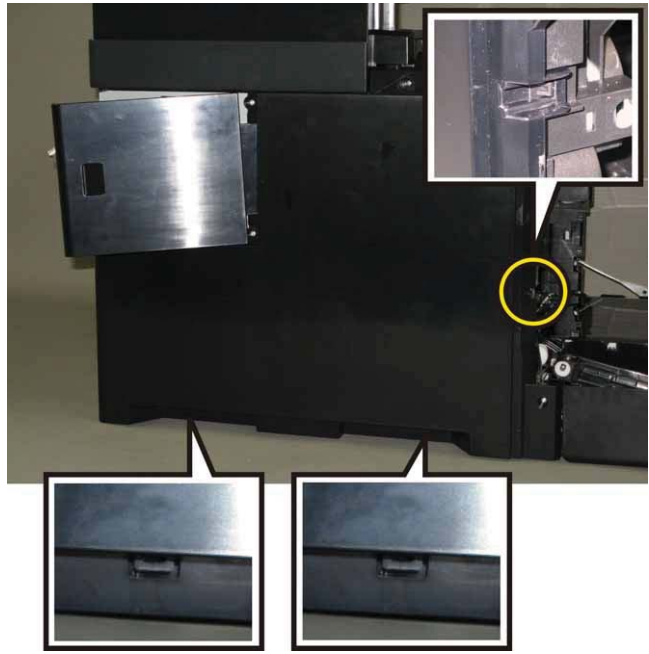
Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

Replacement 54 COVER ASSY SIDE L AIO (PL1.1.13)

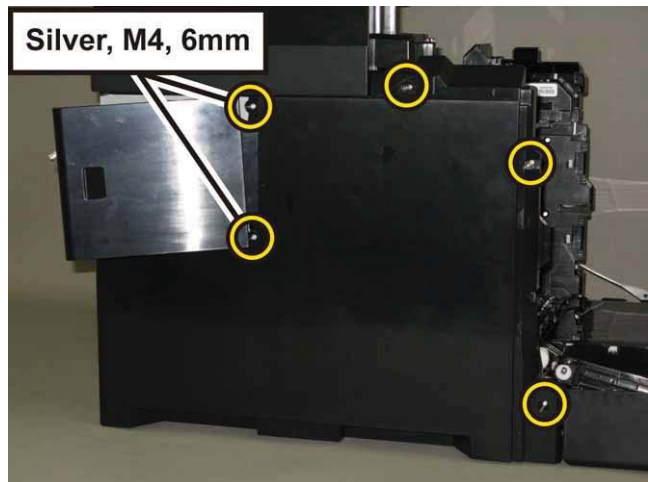
1) Mate the two hooks of the COVER ASSY SIDE L AIO with the holes of the COVER REAR AIO.



2) Secure the three hooks of the COVER ASSY SIDE L AIO to the printer.



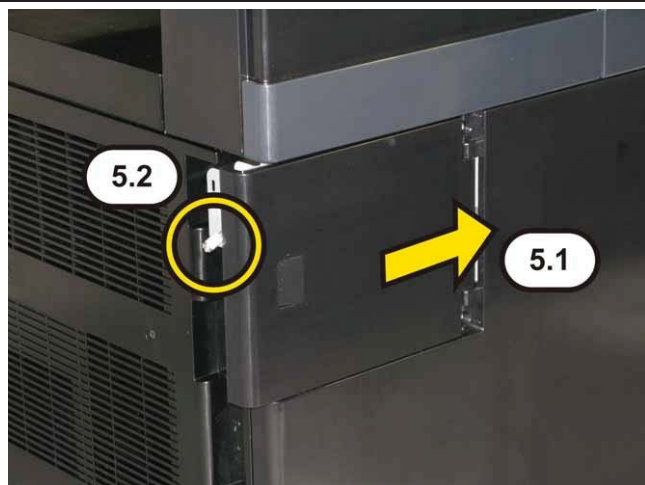
3) Secure the COVER ASSY SIDE L AIO to the printer with the two screws (silver, M4, 6mm) and the three screws (silver, tap, 8mm).



4) Close the COVER ASSY ESS.



5) Shift the COVER ASSY ESS to front side, secure the SCREW KNURLING.



**Go to the next replacement step:
Replacement 60 FUSER ASSY (PL6.1.1)**

Replacement 55 COVER SIDE R AIO (PL1.1.6), COVER WINDOW TNR AIO (PL1.1.7)

1) Insert the upper and lower hinges of the COVER WINDOW TNR AIO into the hole of the COVER SIDE R AIO.



2) Mate the boss on the lower hinge of the COVER WINDOW TNR AIO with the hole of the COVER SIDE R AIO.



3) Mate the boss on the upper hinge of the COVER WINDOW TNR AIO with the hole of the COVER SIDE R AIO to attach the COVER WINDOW TNR AIO.

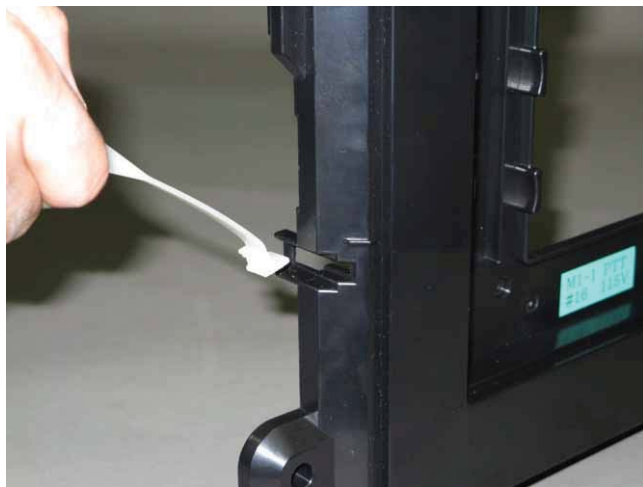


Go to the next replacement step:

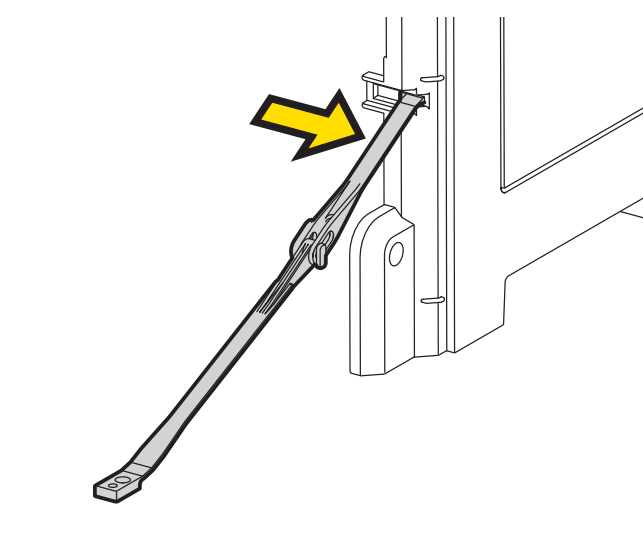
Replacement 57 COVER ASSY SIDE R AIO (PL1.1.12)

Replacement 56 STRAP ASSY AIO (PL1.2.30)

1) Insert the hook of the STRAP ASSY AIO to the hole of the COVER ASSY SIDE R AIO.



2) Shift the STRAP ASSY AIO to right side, secure the STRAP ASSY AIO.

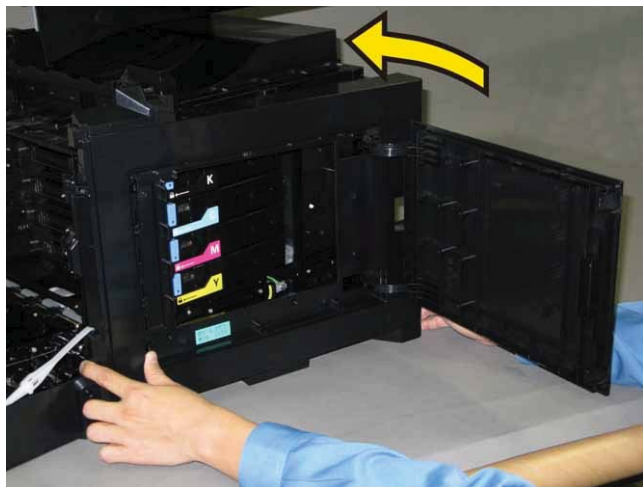


Go to the next replacement step:

Replacement 57 COVER ASSY SIDE R AIO (PL1.1.12)

Replacement 57 COVER ASSY SIDE R AIO (PL1.1.12)

1) Attach the COVER ASSY SIDE R AIO to the printer



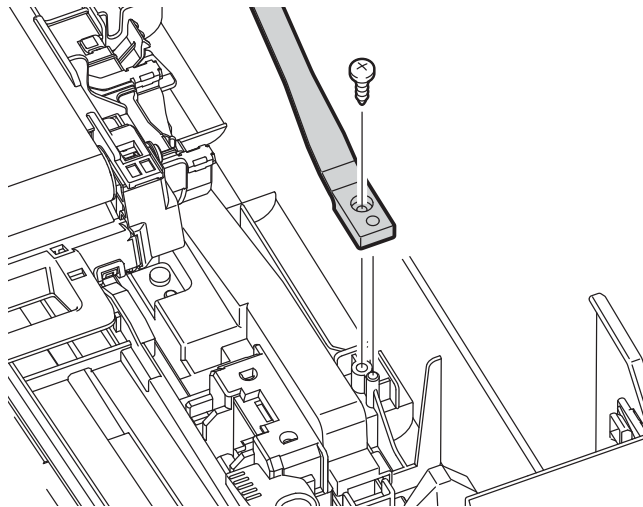
2) Secure the three hooks of the COVER ASSY SIDE R AIO to the printer.



3) Secure the COVER ASSY SIDE R AIO to the printer with the eight screws (silver, tap, 8mm).



4) Mate the hole of the STRAP ASSY AIO with the boss of the COVER ASSY FRONT, secure the STRAP ASSY AIO with the one screw (silver, tap, 8mm).

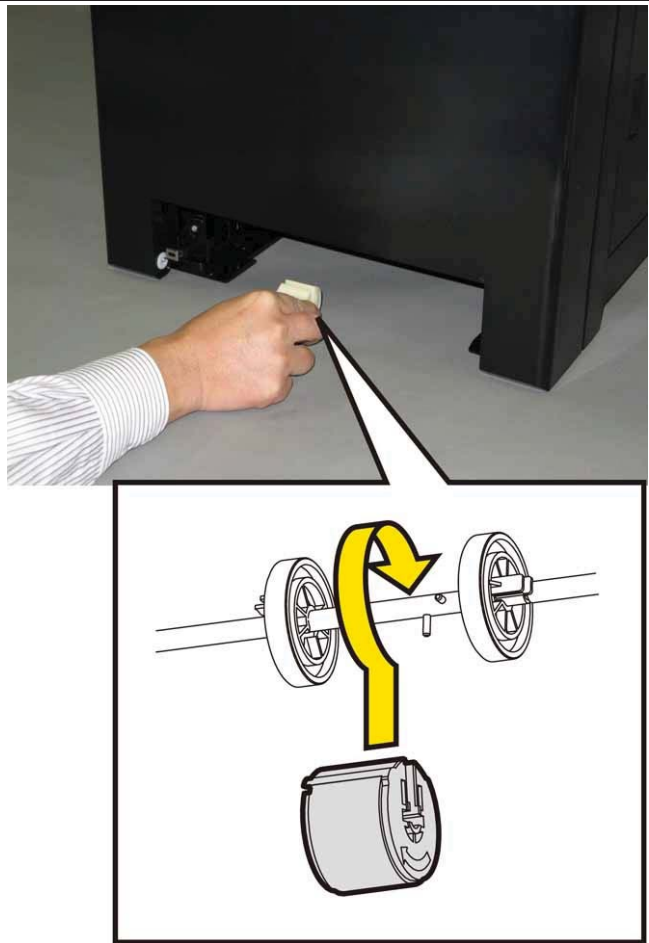


**Go to the next replacement step:
Replacement 60 FUSER ASSY (PL6.1.1)**

Replacement 58 KIT ROLL ASSY FEED (PL3.2.99)

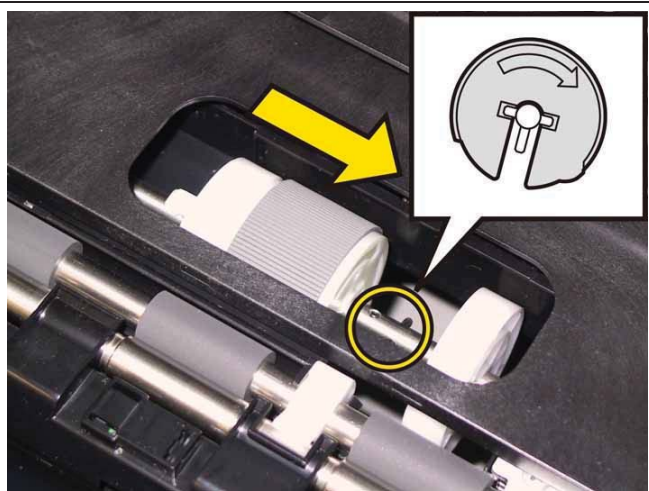
1) Close the COVER ASSY FRONT.

2) Fit the ROLL ASSY FEED to the SHAFT ASSY FEED with the groove of the ROLL ASSY FEED facing upward, rotate the ROLL ASSY FEED 180 degrees so that the pin on the SHAFT ASSY FEED is aligned with the groove on the ROLL ASSY FEED.

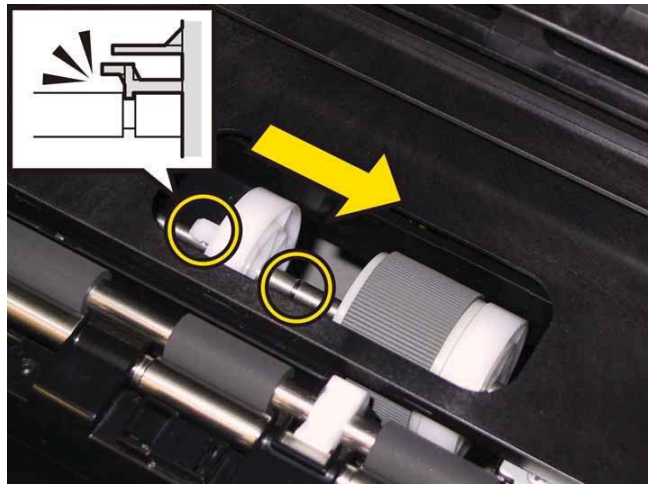


3) Open the COVER ASSY FRONT.

4) Move the ROLL ASSY FEED to the right side, put the groove of the ROLL ASSY FEED on the pin of the SHAFT ASSY FEED.



5) Move the ROLL CORE MSI to the right side, to secure the hook of the ROLL CORE MSI with the groove of the SHAFT ASSY FEED.



**Go to the next replacement step:
Replacement 61 PHD ASSY (PL4.1.21)**

Replacement 59 TONER CARTRIDGE (K), (C), (M), (Y) (PL5.1.21~24)

Note: Described below is the replacement procedure common among the four TONER CARTRIDGES.

1) Shake the TONER CARTRIDGE five or six times for the distributing toner evenly.

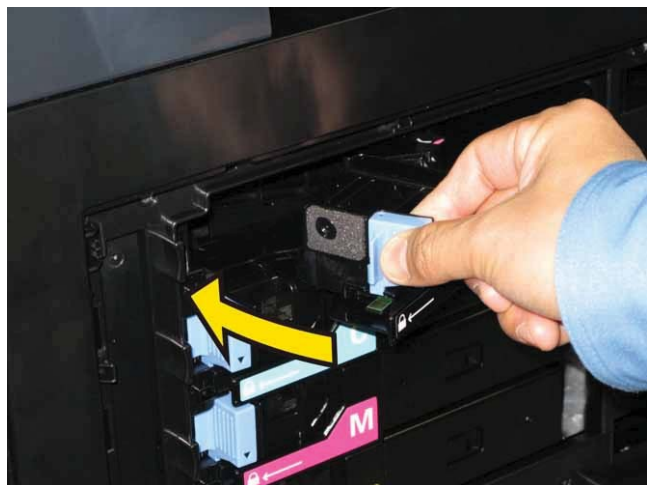


2) Insert the TONER CARTRIDGE into the HOLDER ASSY TCRU slowly, attach it.

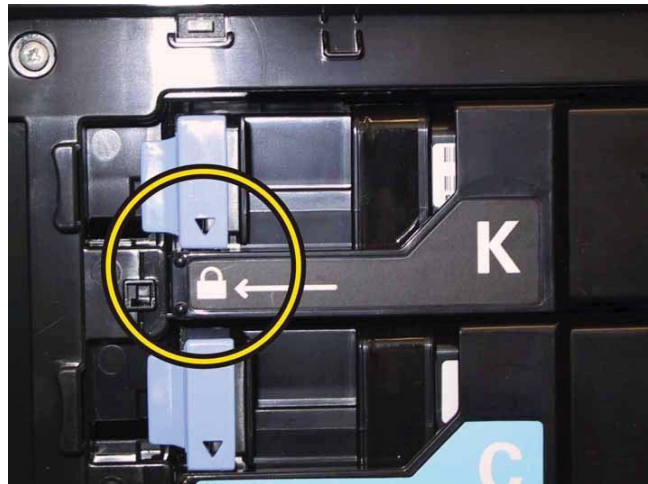


Note: Check that the TONER CARTRIDGE is secured.

3) Close the HOLDER ASSY TCRU.



Note: When performing the step described next procedure, mate the delta mark of the Handle with the lock mark on the cartridge holder.



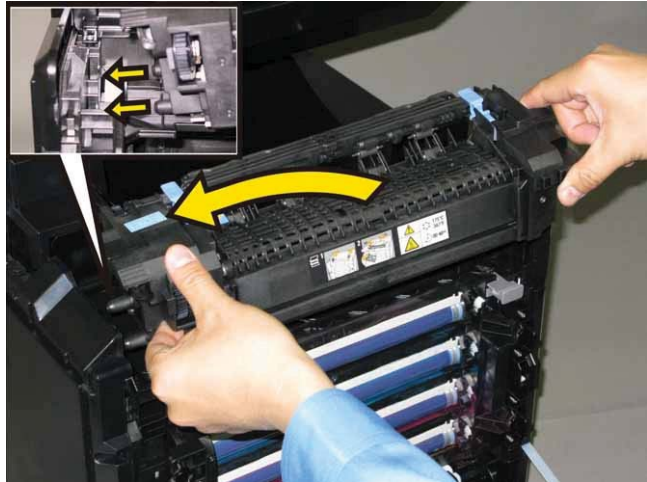
4) Move the handle to the front.



5) Close the COVER WINDOW TNR AIO.

Replacement 60 FUSER ASSY (PL6.1.1)

1) Insert the two studs of the FUSER ASSY into the holes of the printer.



2) Engage the connector (P/J171) of the FUSER ASSY by pushing the FUSER ASSY.



3) Secure the FUSER ASSY to the printer with the one screw (silver, with flange, tap, 10mm).



3) Close the TRANSFER ASSY.

4) Close the COVER ASSY FRONT.

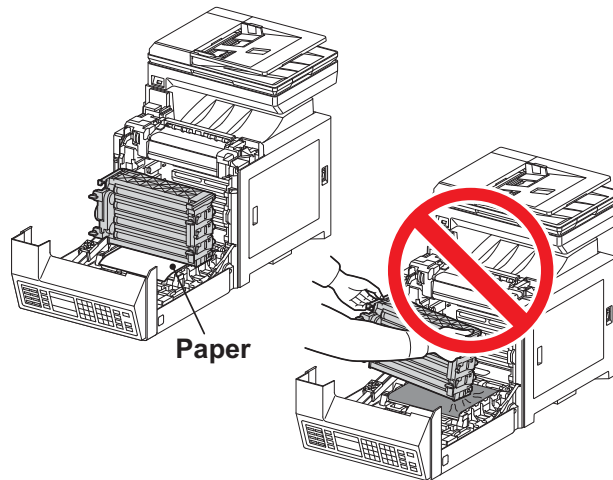
Note: When the FUSER ASSY is replaced with a new one, perform the following steps.

- 5) Plug in the power cord to the printer.
- 6) Initialize the Life Counter of the FUSER ASSY.
- 7) Turn off the power.
- 8) Turn on the power while pressing the "▲" key and "▼" key on the control panel.
- 9) Press the "▼" key several times until "Parameter" is displayed. Press the " ✓ " key once.
- 10) Press the "▼" key several times until "Life Fuser Sheet" is displayed. Press the " ✓ " key once.
- 11) Press the "▼" key several times until "Initializing" is displayed. Press the " ✓ " key once.
- 12) Press the " ✓ " key once, and Initializing the Life Counter of the FUSER ASSY is performed.
- 13) Turn off the power to exit.

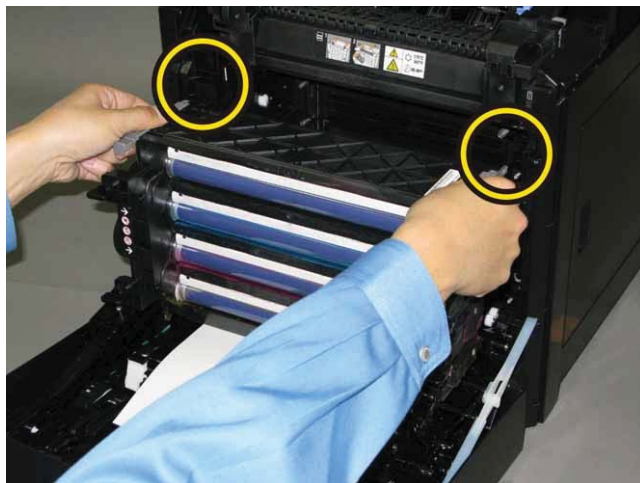
Replacement 61 PHD ASSY (PL4.1.21)

1) Put the paper on the TRANSFER ASSY (PL6.1.7) to protect the belt.

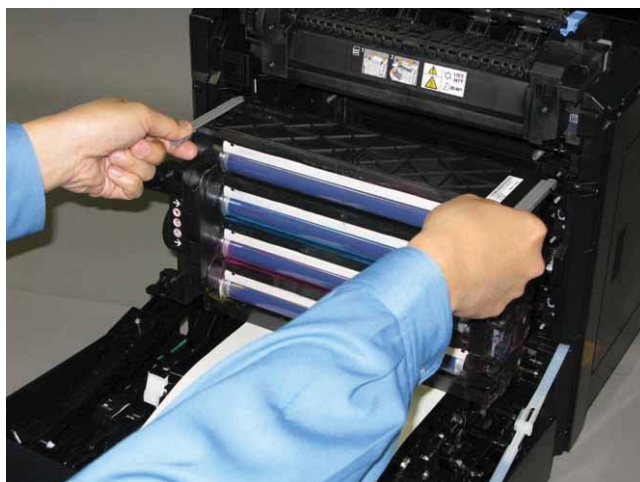
Note: When carrying out the work this procedure, take care not to cover the left and right of the belt guards with the paper.



2) Mate the left and right arrows on the Handle of the PHD ASSY with the guides of the printer.

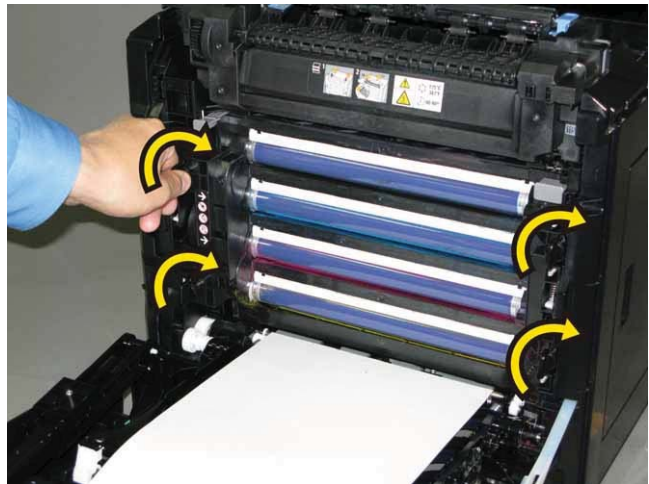


3) Push the PHD ASSY into the printer until it is stopped.

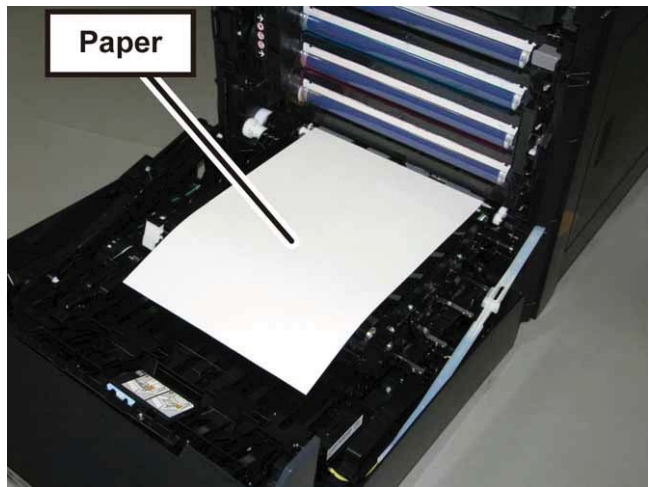


Note: Check that the PHD ASSY is secured.

4) Rotate the four Stoppers of the PHD ASSY to clockwise.



5) Remove the paper from the TRANSFER ASSY.



6) Close the TRANSFER ASSY.

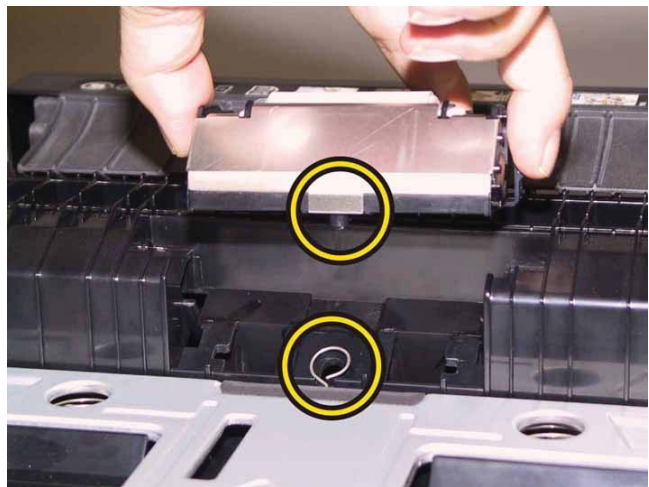


7) Close the COVER ASSY FRONT.

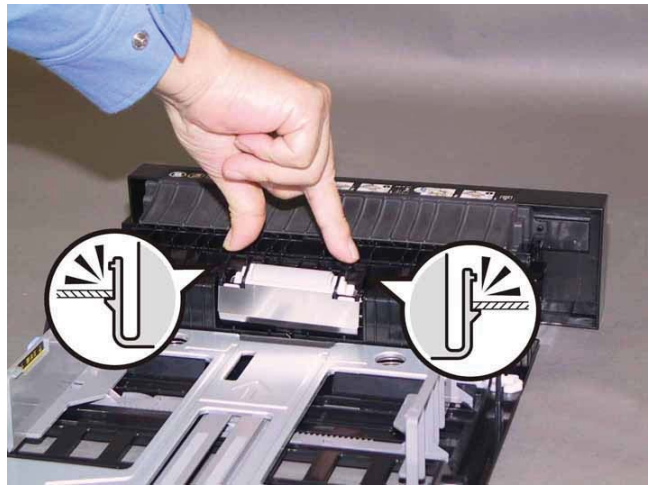
8) Insert the CASSETTE ASSY 250 MG AIO into the printer.

Replacement 62 KIT HOLDER ASSY SEPARATOR (PL2.1.99)

1) Mate the under tab of the HOLDER ASSY SEPARATOR with the hole of the CASSETTE ASSY 250 MG AIO.



2) Secure the left and right hooks of the HOLDER ASSY SEPARATOR.



Go to the next replacement step:

Replacement 63 CASSETTE ASSY 250 MG AIO (PL2.1.1)

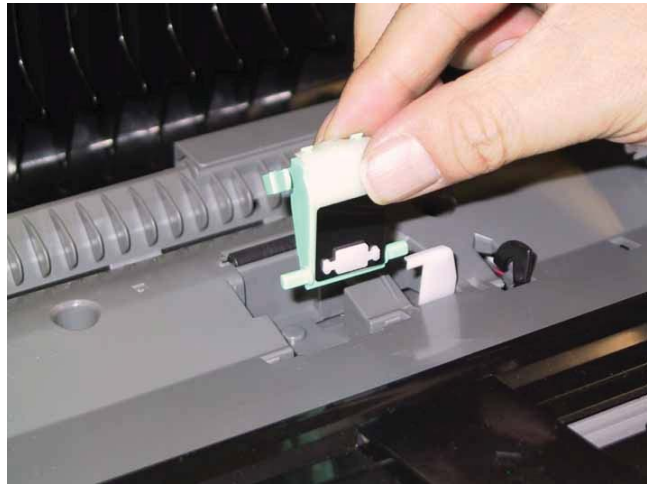
Replacement 63 CASSETTE ASSY 250 MG AIO (PL2.1.1)

1) Insert the CASSETTE ASSY 250 MG AIO into the printer.

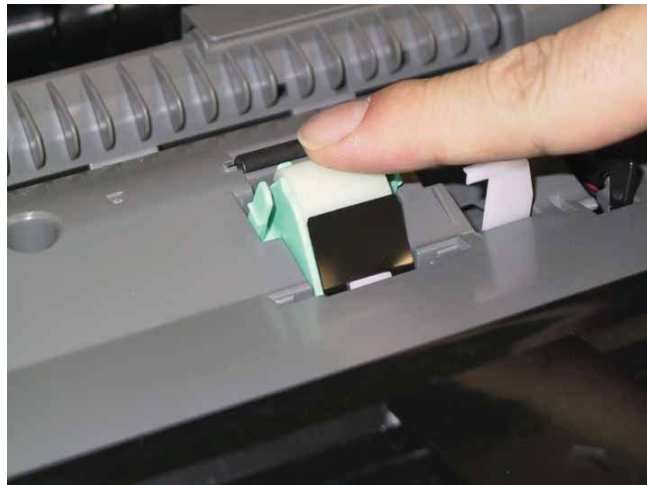


Replacement 64 KIT ADF FEED ROLL & SEPARATOR ROLL (PL10.1.98)

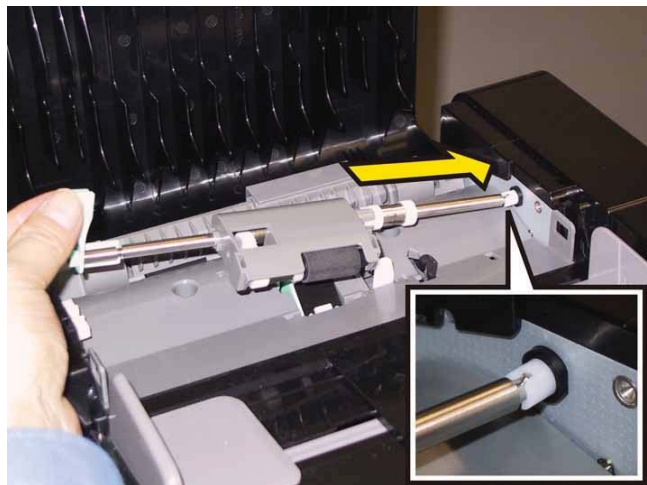
1) Mate the flat surface of the pivot on the PAD ASSY SEPARATOR with the groove of the ADF ASSY. Attach the PAD ASSY SEPARATOR.



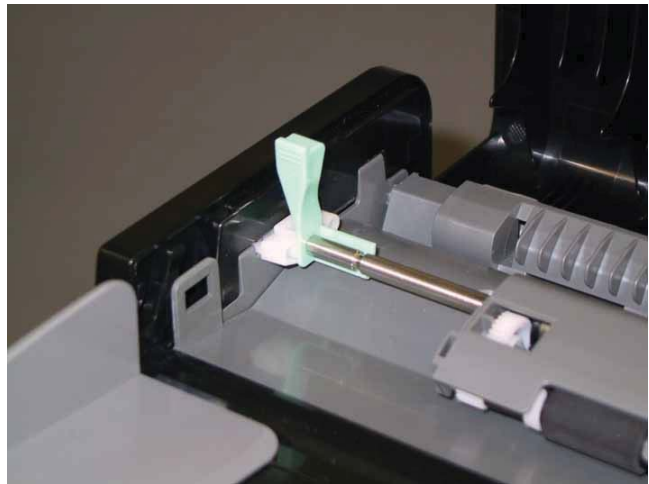
2) Tilt the PAD ASSY SEPARATOR to fix the two hooks of the PAD ASSY SEPARATOR.



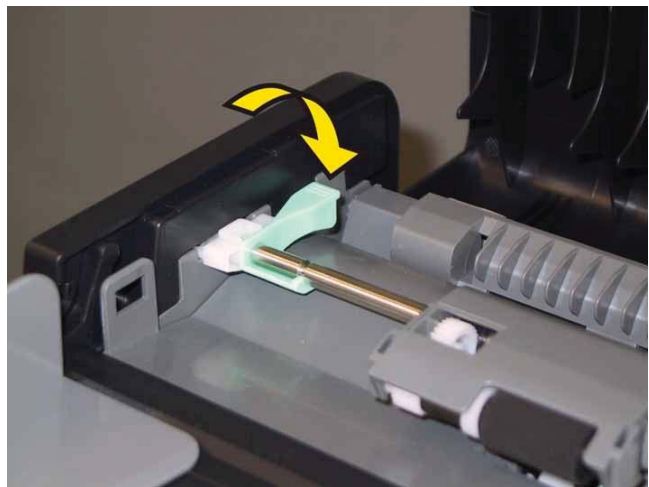
3) Mate the pin on the shaft of the ROLL ASSY FEED with the notch of the ADF ASSY.



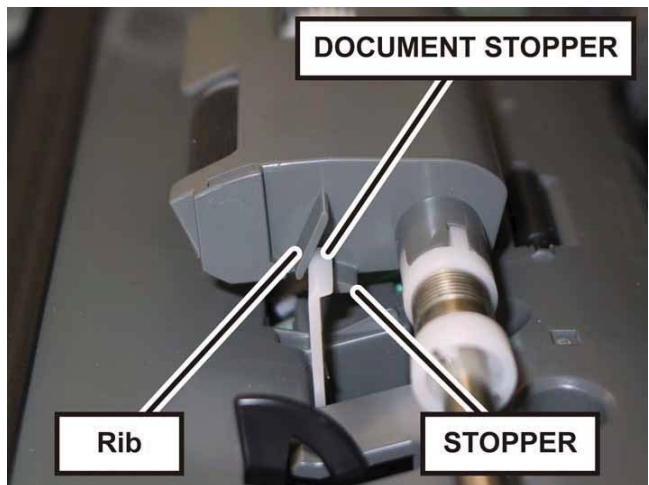
4) Mate the flat surface of the LEVER on the ROLL ASSY FEED with the guide of the ADF ASSY to attach the ROLL ASSY FEED.



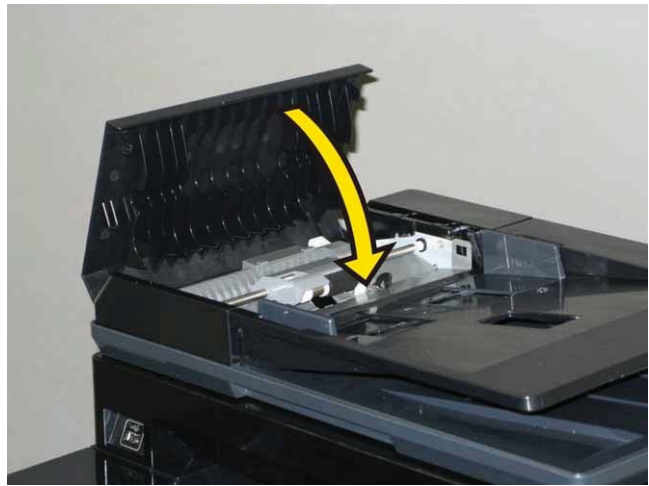
5) Tilt the LEVER of the ROLL ASSY FEED to fix the ROLL ASSY FEED.



Note: After installing the ROLL ASSY FEED, make sure that the DOCUMENT STOPPER is positioned between the Rib and the Stopper on the ROLL ASSY FEED.



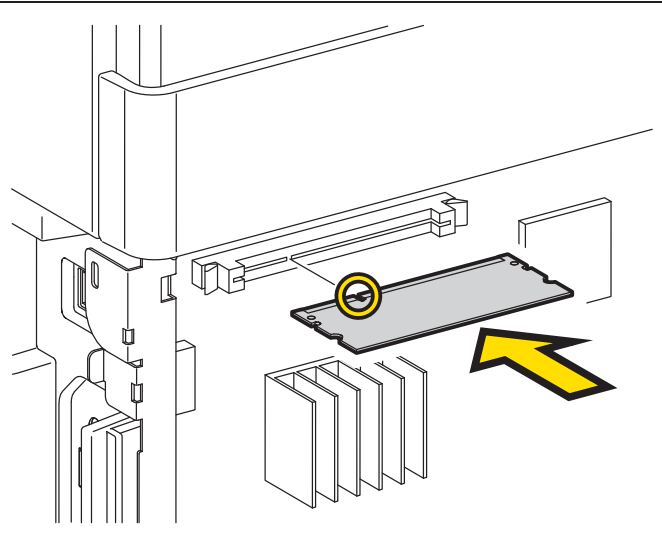
6) Close the COVER TOP ADF.



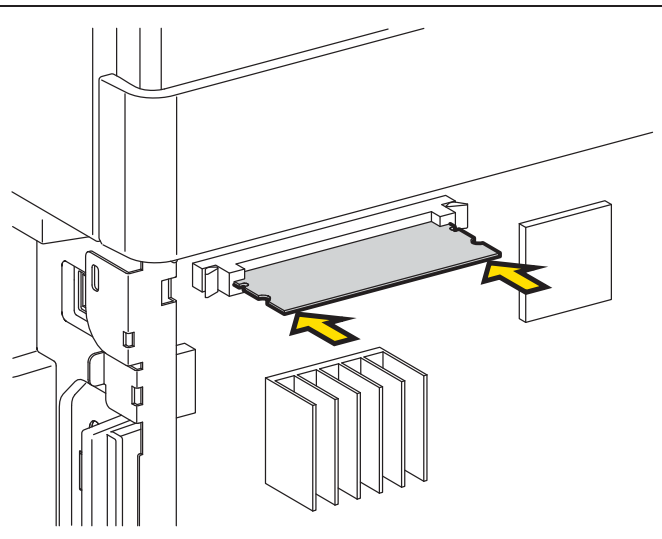
Replacement 65 MEMORY CARD (PL8.1.4)

Note: Use the wrist strap to protect the PWB from the electrostatic.

1) Fit the MEMORY CARD into the socket by mating the notch of the MEMORY CARD with the lug on the socket.



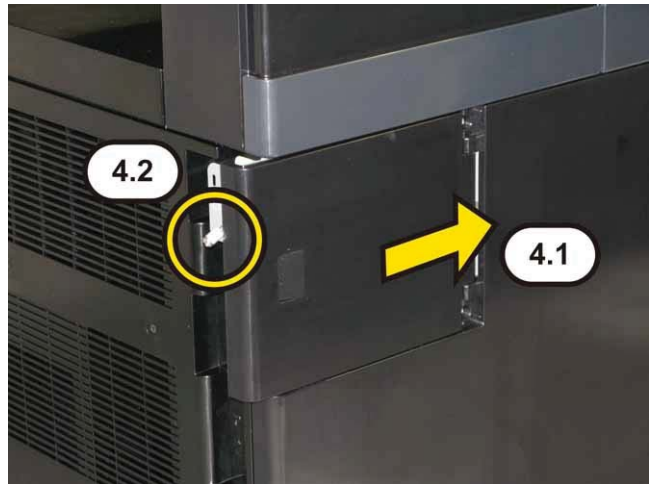
2) Insert the MEMORY CARD to the socket until it locks.



3) Close the COVER ASSY ESS.

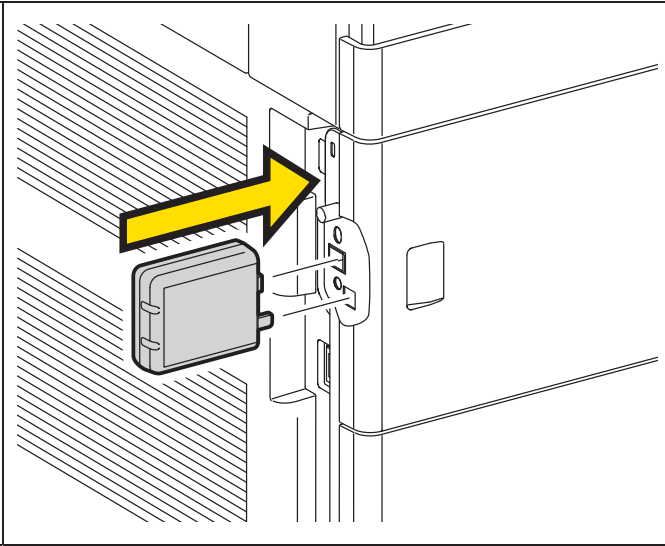


4) Shift the COVER ASSY ESS to front side, secure the SCREW KNURLING.



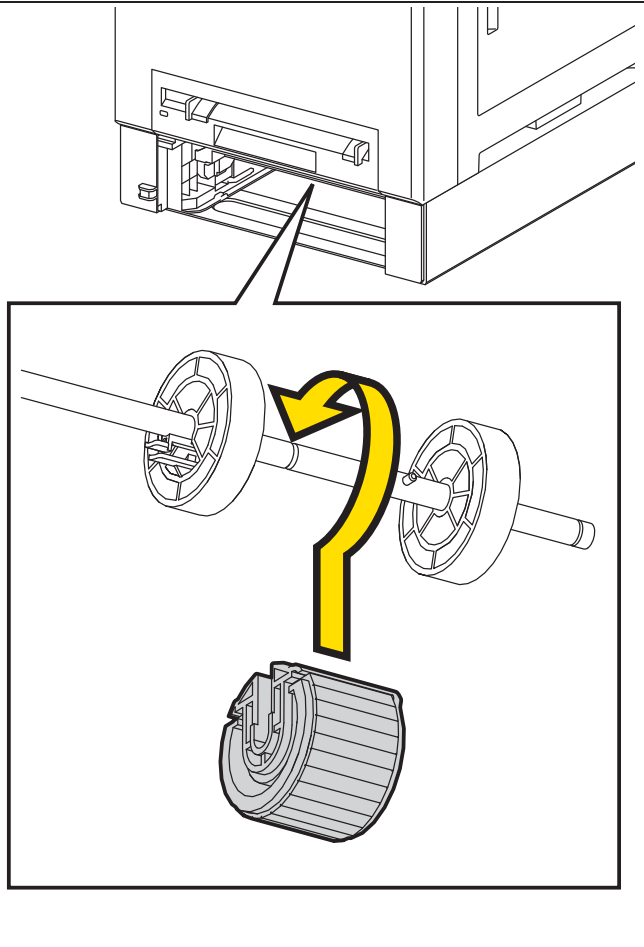
Replacement 66 WIRELESS ADAPTER (PL8.1.11)

1) Attach the WIRELESS ADAPTER to the PWBA ESS AIO and fix it.

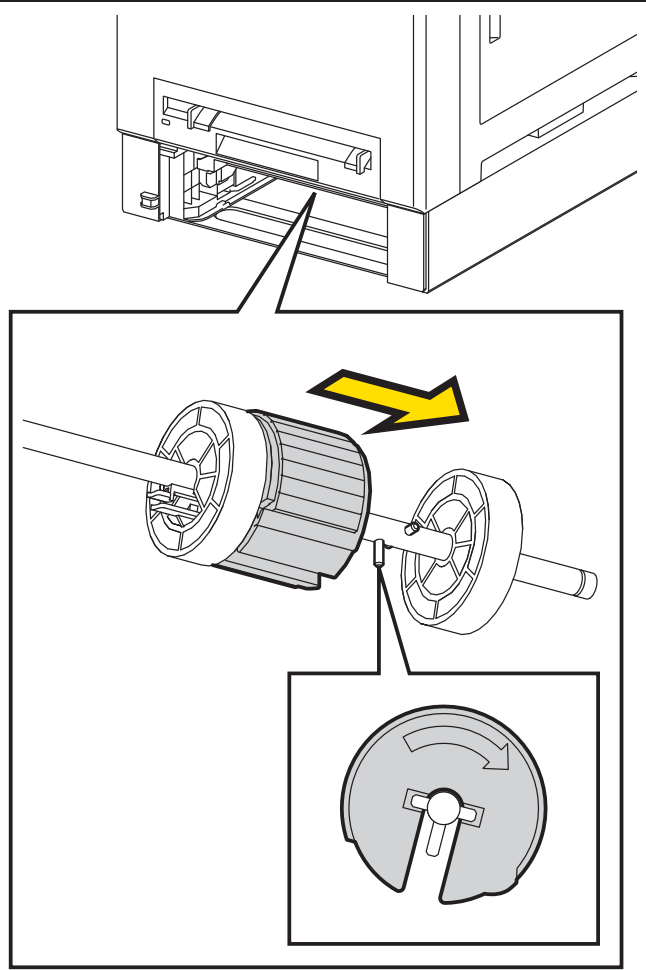


Replacement 67 ROLL ASSY FEED (Parts of the FEEDER ASSY OPT) (PL12.4.4)

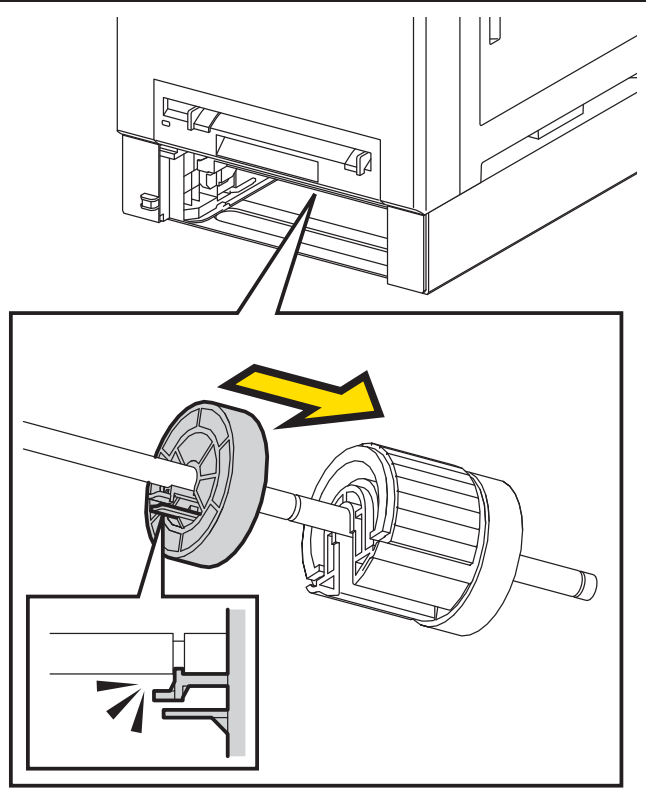
1) Fit the ROLL ASSY FEED to the SHAFT ASSY FEED with the groove of the ROLL ASSY FEED facing upward, rotate the ROLL ASSY FEED 180 degrees so that the pin on the SHAFT ASSY FEED is aligned with the groove on the ROLL ASSY FEED.



2) Move the ROLL ASSY FEED to the right side, put the groove of the ROLL ASSY FEED on the pin of the SHAFT ASSY FEED.



3) Move the ROLL CORE MSI to the right side, to secure the hook of the ROLL CORE MSI with the groove of the SHAFT ASSY FEED.

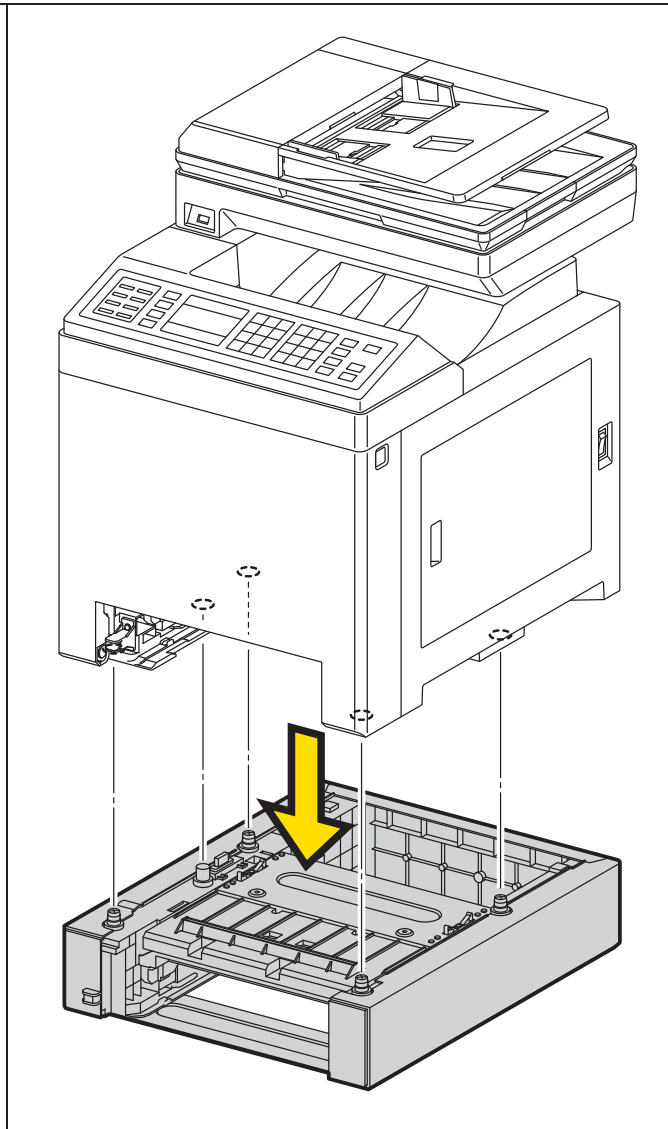


4) Insert the CASSETTE ASSY 250 OPT MG AIO into the FEEDER ASSY OPT MG AIO.

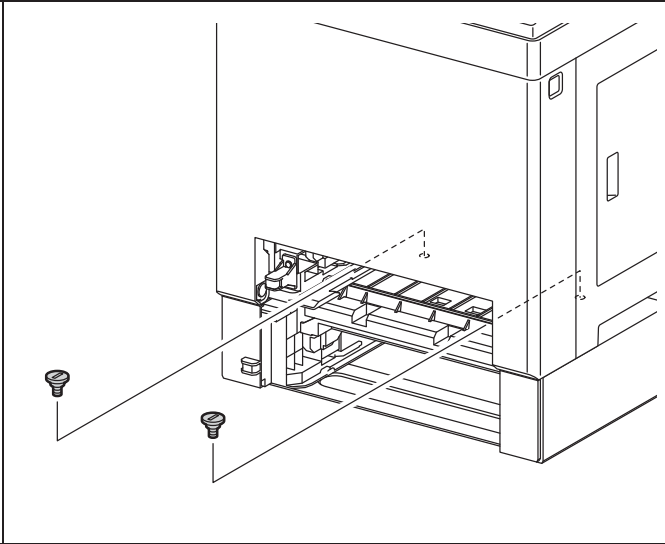
Replacement 68 KIT FEEDER ASSY OPT MG AIO (PL12.1.99)

Note: The printer must be lifted by two people.

1) Place the printer on the FEEDER ASSY OPT MG AIO with the five holes on the bottom of the printer aligned with the studs on the FEEDER ASSY OPT MG AIO.



2) Secure the printer to the FEEDER ASSY OPT MG AIO using the two SCREW JOINTs.



3) Insert the CASSETTE ASSY 250 OPT MG AIO into the FEEDER ASSY OPT MG AIO.

4) Insert the CASSETTE ASSY 250 MG AIO into the printer.

Chapter 4 Plug/Jack(P/J) Connector Locations CONTENTS

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1. Connector [P (plug) / J (jack)]

1.1 List of P/J

Printer

P/J	Coordinates	Remarks
2	D-121	Connects PWB ASSY FRONT USB and HARNESS ASSY FRONT USB
10	I-156	Connects PWBA MCU and HARNESS ASSY ESS MG AIO
11	I-156	Connects PWBA MCU and HARNESS ASSY ESS VIDEO MG AIO
14	H-157	Connects PWBA MCU and HARNESS ASSY LVPS MAIN MG AIO
15	H-156	Connects PWBA MCU and HARNESS ASSY LVPS MAIN MG AIO
16	I-158	Connects PWBA MCU and HARNESS ASSY HVPS AIO
17	H-157	Connects PWBA MCU and HARNESS ASSY FUSER MG AIO
18	H-158	Connects PWBA MCU and HARNESS ASSY TNR MOT
19	H-158	Connects PWBA MCU and HARNESS ASSY TNR MOT
20	J-158	Connects PWBA MCU and HARNESS ASSY L SIDE MG AIO
21	J-157	Connects PWBA MCU and HARNESS ASSY MAIN MOT MG AIO
22	J-157	Connects PWBA MCU and HARNESS ASSY SUB MOT MG AIO
23	J-158	Connects PWBA MCU and HARNESS ASSY L SIDE MG AIO
24	J-158	Connects PWBA MCU and HARNESS ASSY KSOL MG AIO
26	J-158	Connects PWBA MCU and HARNESS ASSY KSNR REGCL MG AIO
27	I-158	Connects PWBA MCU and HARNESS ASSY OPTION MG AIO (2155cdn Only)
27	I-158	Connects PWBA MCU and HARNESS ASSY OPTION D-LESS MG AIO (2155cn Only)
28	J-158	Connects PWBA MCU and HARNESS ASSY L SIDE MG AIO
29	I-158	Connects PWBA MCU and HARNESS ASSY SIDE SW
31	H-157	Connects PWBA MCU and HARNESS ASSY TONER CRUM
40	D-143	Connects PWBA LVPS and HARNESS ASSY ESS PER MG AIO
40	I-156	Connects PWBA MCU and HARNESS ASSY ROS RE
41	I-156	Connects PWBA MCU and HARNESS ASSY ROS VIDEO
42	J-157	Connects PWBA MCU and HARNESS ASSY PHD XPRO
44	D-143	Connects PWBA LVPS and INTERLOCK SWITCH AIO
47	B-143	Connects PWBA LVPS and HARNESS ASSY FUSER MG AIO
48	B-142	Connects PWBA LVPS and SWITCH ASSY INLET MG AIO
101	I-157	Not Connect (Debug only)
141	G-108	Connects LED ASSY ERASE and HARNESS ASSY LVPS MAIN MG AIO
144	F-152	Connects PWBA EEPROM and HARNESS ASSY PHD XPRO
161	F-153	Connects PWBA HVPS and HARNESS ASSY HVPS AIO
171	G-108	Connects FUSER ASSY and HARNESS ASSY FUSER MG AIO
181	D-152	Connects DISPENSER ASSY (Motor Assy DISP Y) and HARNESS ASSY TNR MOT
182	D-152	Connects DISPENSER ASSY (Motor Assy DISP M) and HARNESS ASSY TNR MOT
191	D-151	Connects DISPENSER ASSY (Motor Assy DISP C) and HARNESS ASSY TNR MOT
192	D-150	Connects DISPENSER ASSY (Motor Assy DISP K) and HARNESS ASSY TNR MOT
201	H-139	Connects FEEDER ASSY MG AIO (HUM Sensor) and HARNESS ASSY L SIDE MG AIO MG AIO
202	E-123	Connects CONSOLE ASSY PANEL AIO and HARNESS A-OP-OPP
211	I-137	Connects DRIVE ASSY MAIN (Main Motor) and HARNESS ASSY MAIN MOT MG AIO

P/J	Coordinates	Remarks
221	H-137	Connects DRIVE ASSY SUB (Sub Motor) and HARNESS ASSY SUB MOT MG AIO
231	D-126	Connects FEEDER ASSY MG AIO (Feed Solenoid) and HARNESS ASSY L SIDE MG AIO
232	F-126	Connects FEEDER ASSY MG AIO (REGI Sensor) and HARNESS ASSY L SIDE MG AIO
233	G-126	Connects FEEDER ASSY MG AIO (SSI No Paper Sensor) and HARNESS ASSY L SIDE MG AIO
234	G-125	Connects FEEDER ASSY MG AIO (Tray No Paper Sensor) and HARNESS ASSY L SIDE MG AIO
241	G-139	Connects DRIVE ASSY PH (Color Mode Switching solenoid) and HARNESS ASSY KSOL MG AIO
261	H-138	Connects DRIVE ASSY PH (Color Mode Switching Sensor) and HARNESS ASSY KSNR REGCL MG AIO
262	I-138	Connects CLUTCH ASSY DRV and HARNESS ASSY KSNR REGCL MG AIO
271	H-111	Connects FEEDER ASSY DUP AIO STD (HARNESS ASSY DUP STD MG AIO) and HARNESS ASSY OPTION MG AIO (2155cdn Only)
273	H-140	Connects HARNESS ASSY OPTION MG AIO and 250 OPTION FEEDER MG AIO (HARNESS ASSY TRAY) (2155cdn Only)
273	H-140	Connects HARNESS ASSY OPTION D-LESS MG AIO and 250 OPTION FEEDER MG AIO (HARNESS ASSY TRAY) (2155cn Only)
281	C-109	Connects TRANSFER ASSY (Harness Assy CTD SNR2) and HARNESS ASSY L SIDE MG AIO
291	G-108	Connects DISPENSER ASSY (Side Cover Switch) and HARNESS ASSY SIDE SW
311	G-110	Connects DISPENSER ASSY (Connector CRUM Y) and HARNESS ASSY TONER CRUM
312	G-110	Connects DISPENSER ASSY (Connector CRUM M) and HARNESS ASSY TONER CRUM
313	G-109	Connects DISPENSER ASSY (Connector CRUM C) and HARNESS ASSY TONER CRUM
314	G-109	Connects DISPENSER ASSY (Connector CRUM K) and HARNESS ASSY TONER CRUM
403	G-137	Connects PWBA ESS AIO and HARNESS ASSY A-OP-ESS
411	D-123	Connects ROS ASSY and HARNESS ASSY ROS RE
412	E-124	Connects ROS ASSY and HARNESS ASSY ROS VIDEO
422	H-150	Connects PHD ASSY (Eeprom PHD) and HARNESS ASSY PHD XPRO
501	D-143	Connects PWBA LVPS and HARNESS ASSY LVPS MAIN MG AIO
502	D-143	Connects PWBA LVPS and HARNESS ASSY LVPS MAIN MG AIO
503	D-143	Connects PWBA LVPS and FAN
504	D-143	Connects PWBA LVPS and HARNESS ASSY LVPS MAIN MG AIO
801	F-139	Connects PWBA ESS AIO and PWBA FAX
802	G-136	Connects PWBA ESS AIO and HARNESS ASSY ESS PER MG AIO
1001	F-136	Connects PWBA ESS AIO and SCANNER ASSY (PCB CCD)
1002	G-136	Connects PWBA ESS AIO and SCANNER ASSY (Scanner Motor)
1003	G-136	Connects PWBA ESS AIO and SCANNER ASSY (ADF Assy)
1301	F-137	Connects PWBA ESS AIO and HARNESS ASSY FRONT USB
2001	G-136	Connects PWBA ESS AIO and HARNESS ASSY ESS MG AIO
2002	G-137	Connects PWBA ESS AIO and HARNESS ASSY ESS VIDEO MG AIO
2103	G-138	Not Connect
2401	F-136	Not Connect
2501	G-137	Not Connect

P/J	Coordiates	Remarks
2811	D-108	Connects ADC Sensor and HARNESS ASSY CTD SNR2 (TRANSFER ASSY)
5041	H-108	Not Connect (Used in production process only)
5301	D-126	Connects HARNESS A-OP-OPP and HARNESS ASSY A-OP-ESS

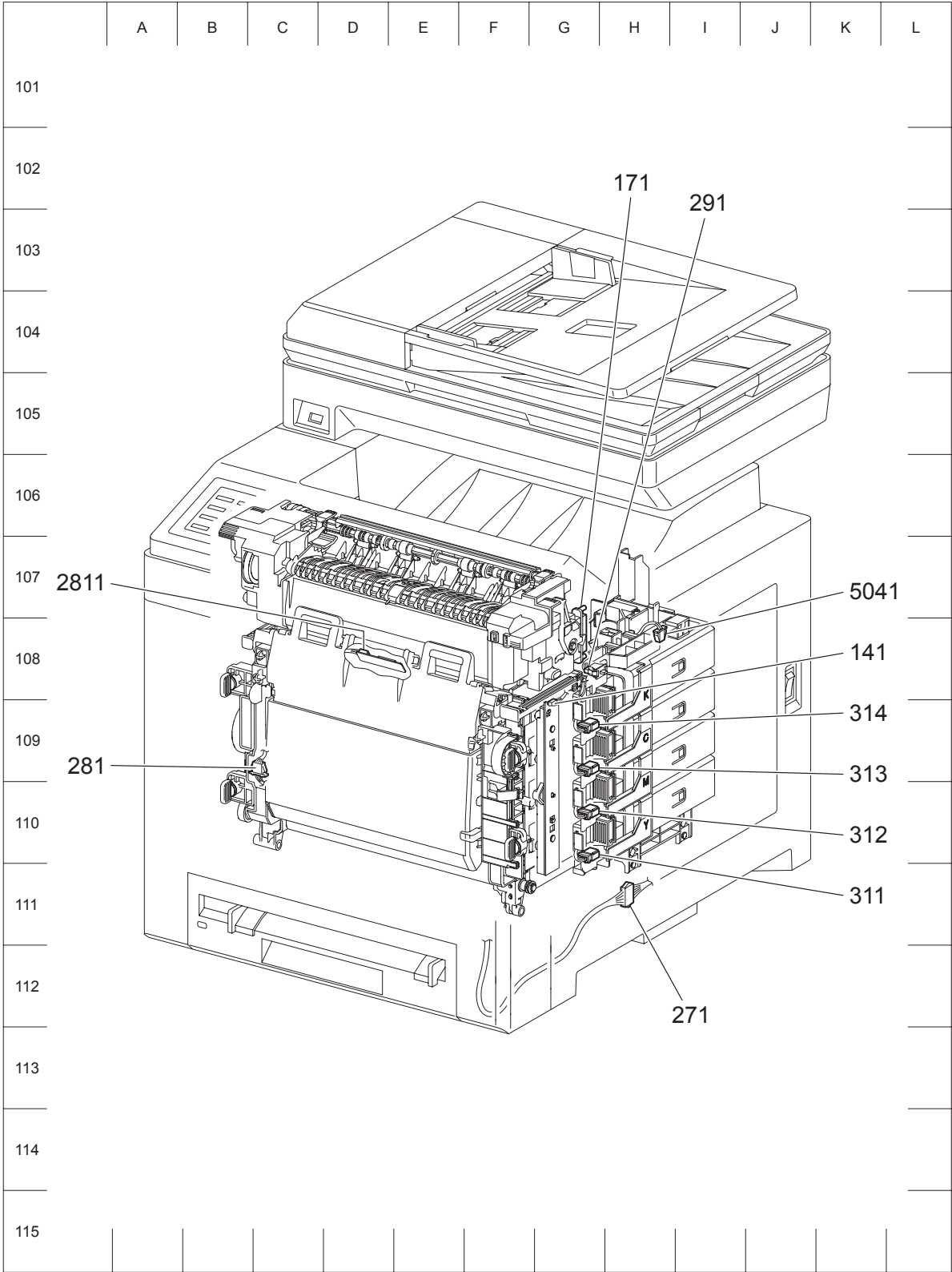
Duplex

P/J	Coordiates	Remarks
271	K-172	Connects FEEDER ASSY DUP AIO STD (HARNESS ASSY DUP STD MG AIO) and PRINTER
601	D-168	Connects PWBA DUP and HARNESS ASSY DUP STD MG AIO
602	C-168	Connects PWBA DUP and DRIVE ASSY EXIT (Exit Motor)
603	D-168	Connects PWBA DUP and DRIVE ASSY DUP (DUP Motor)
604	D-168	Connects PWBA DUP and DRIVE ASSY EXIT (DUP Clutch)
605	D-169	Not Connect

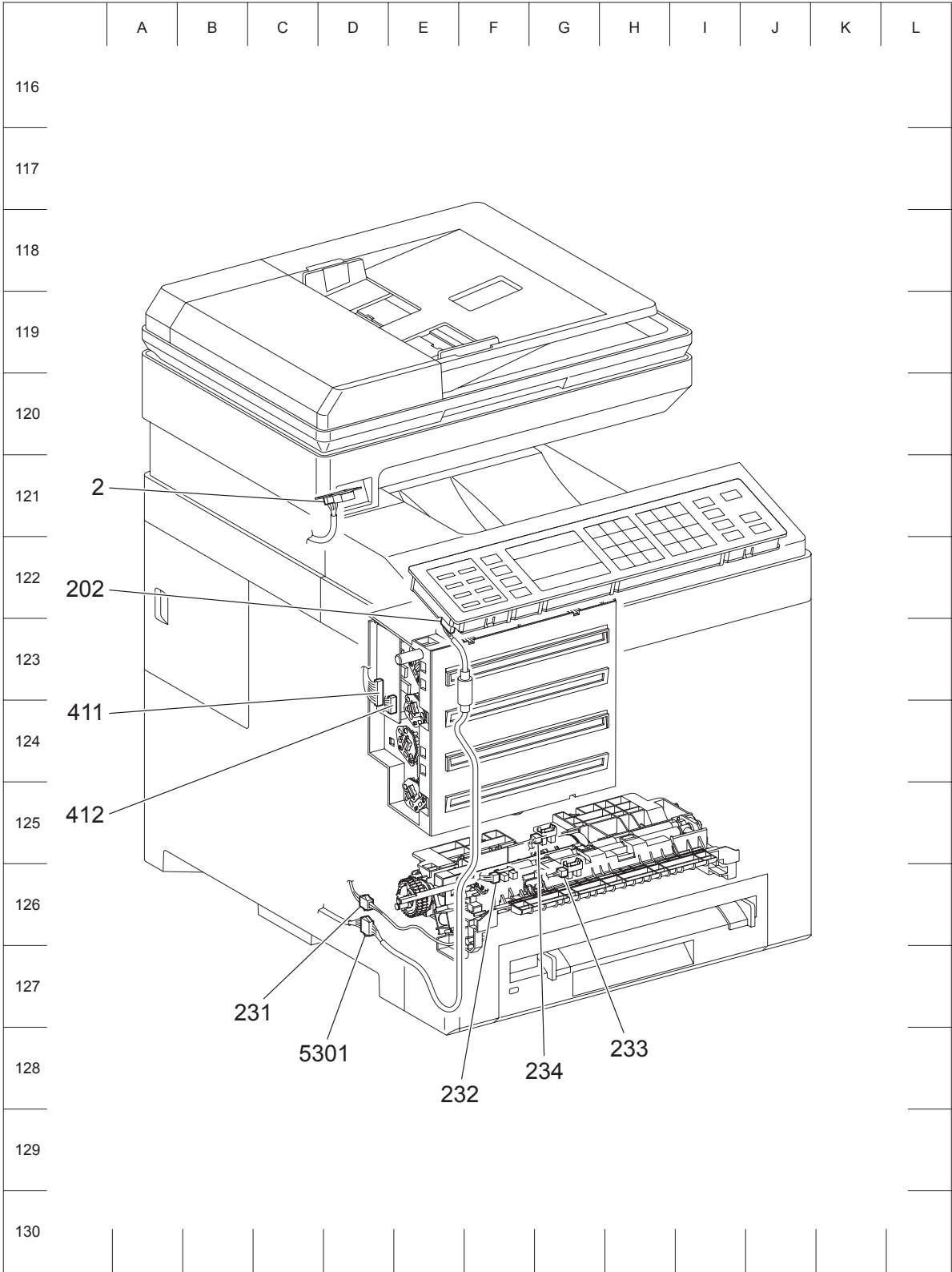
Option Feeder

P/J	Coordiates	Remarks
273	C-184	Connects 250 OPTION FEEDER MG AIO (HARNESS ASSY TRAY) and PRINTER
419	D-179	Connects PWB ASSY FEED MG AIO and HARNESS ASSY TRAY
420	D-179	Connects PWB ASSY FEED MG AIO and HARNESS ASSY TRAY COMP
421	D-180	Connects PWB ASSY FEED MG AIO and HARNESS ASSY TRAY COMP
422	D-180	Connects PWB ASSY FEED MG AIO and HARNESS ASSY TRAY MOT
4201	I-181	Connects Turn Clutch and HARNESS ASSY TRAY COMP
4202	C-1186	Connects Paper Paht Sensor and HARNESS ASSY TRAY COMP
4211	G-180	Connects Feed Solenoid and HARNESS ASSY TRAY COMP
4212	E-186	Connects Tray2 No PaperSenser and HARNESS ASSY TRAY COMP
4221	E-179	Connects MOTOR ASSY SUB (OPT FDR Motor) and HARNESS ASSY TRAY MOT

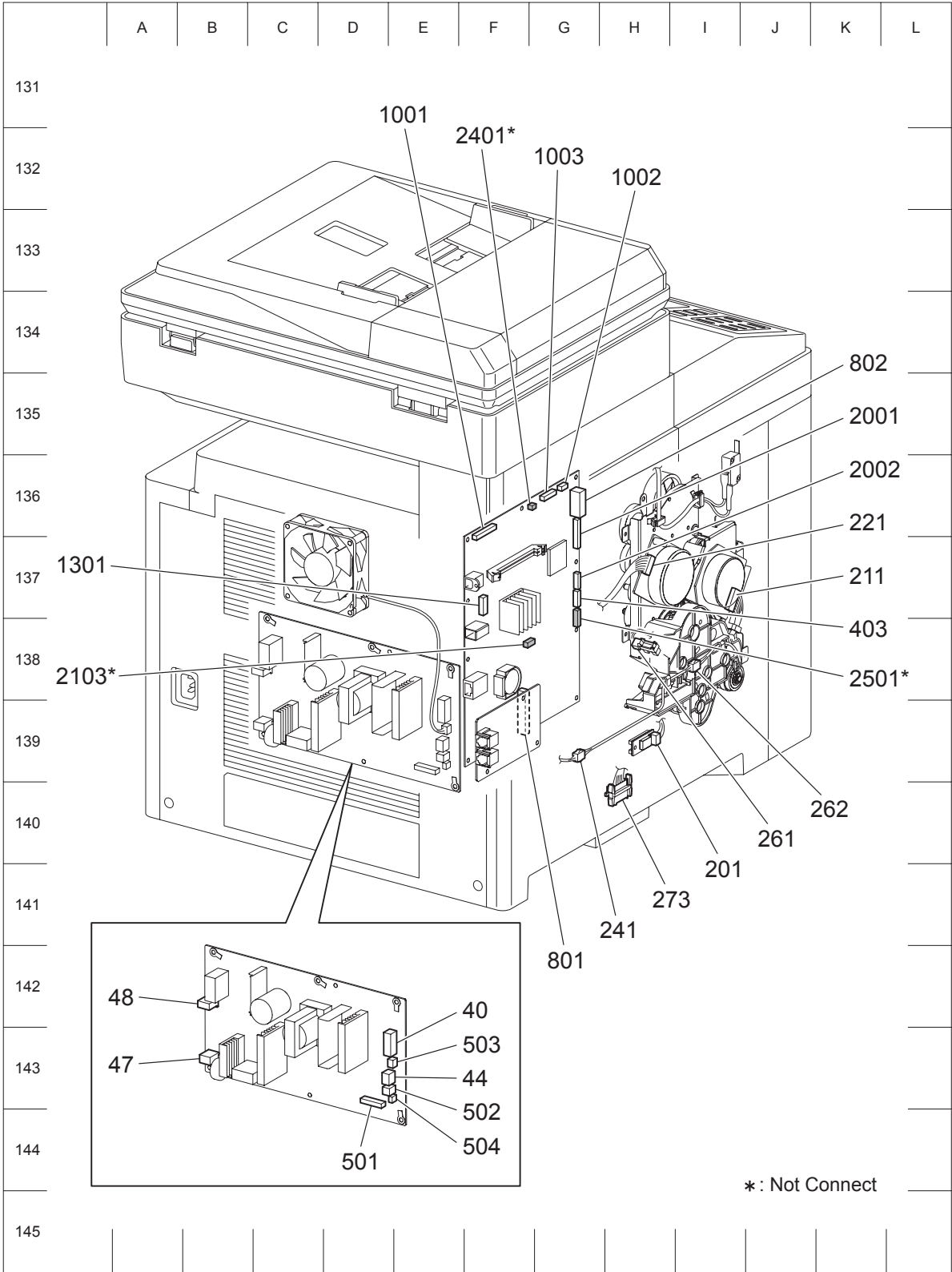
1.2 IOT P/J layout diagram



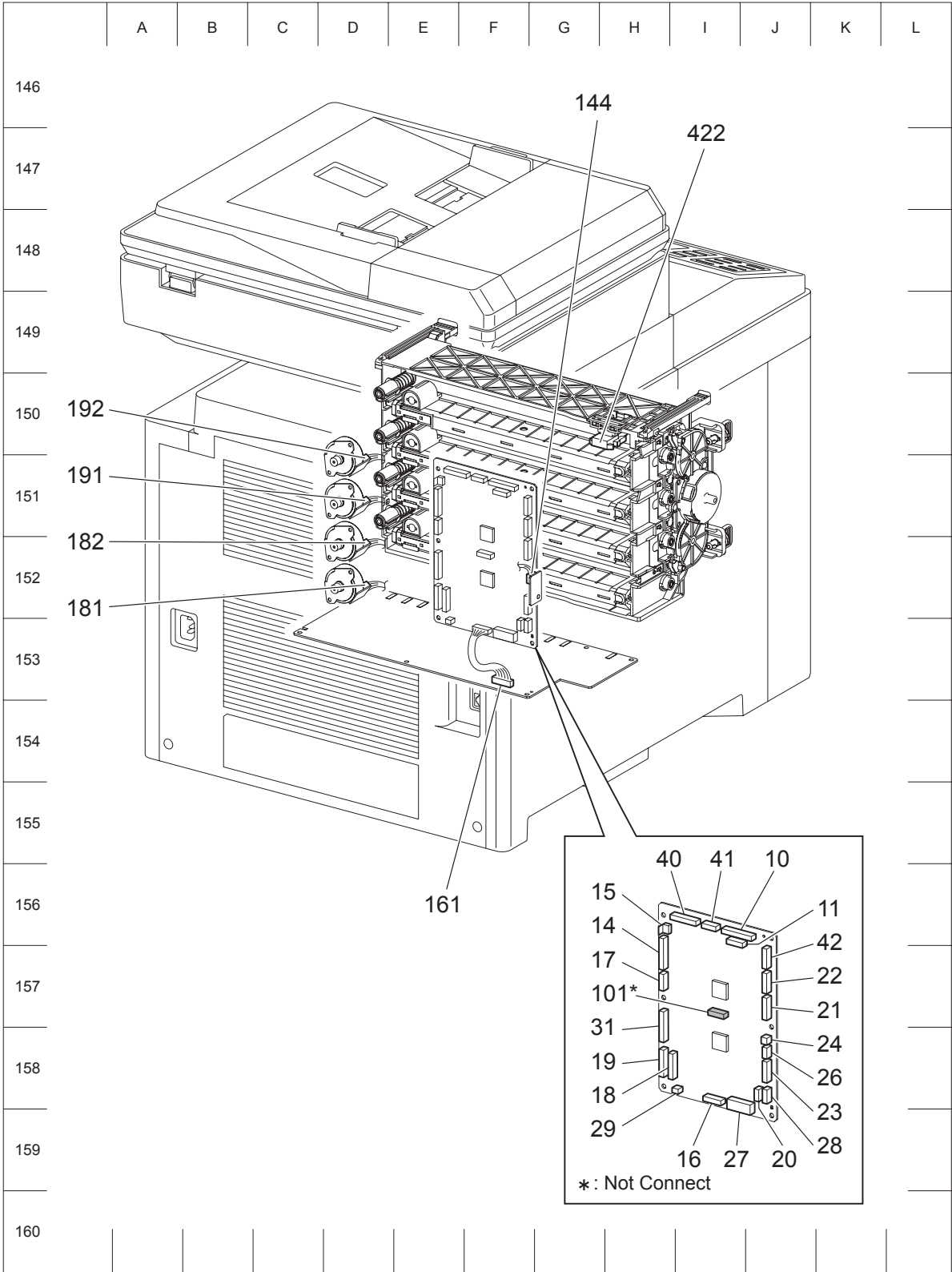
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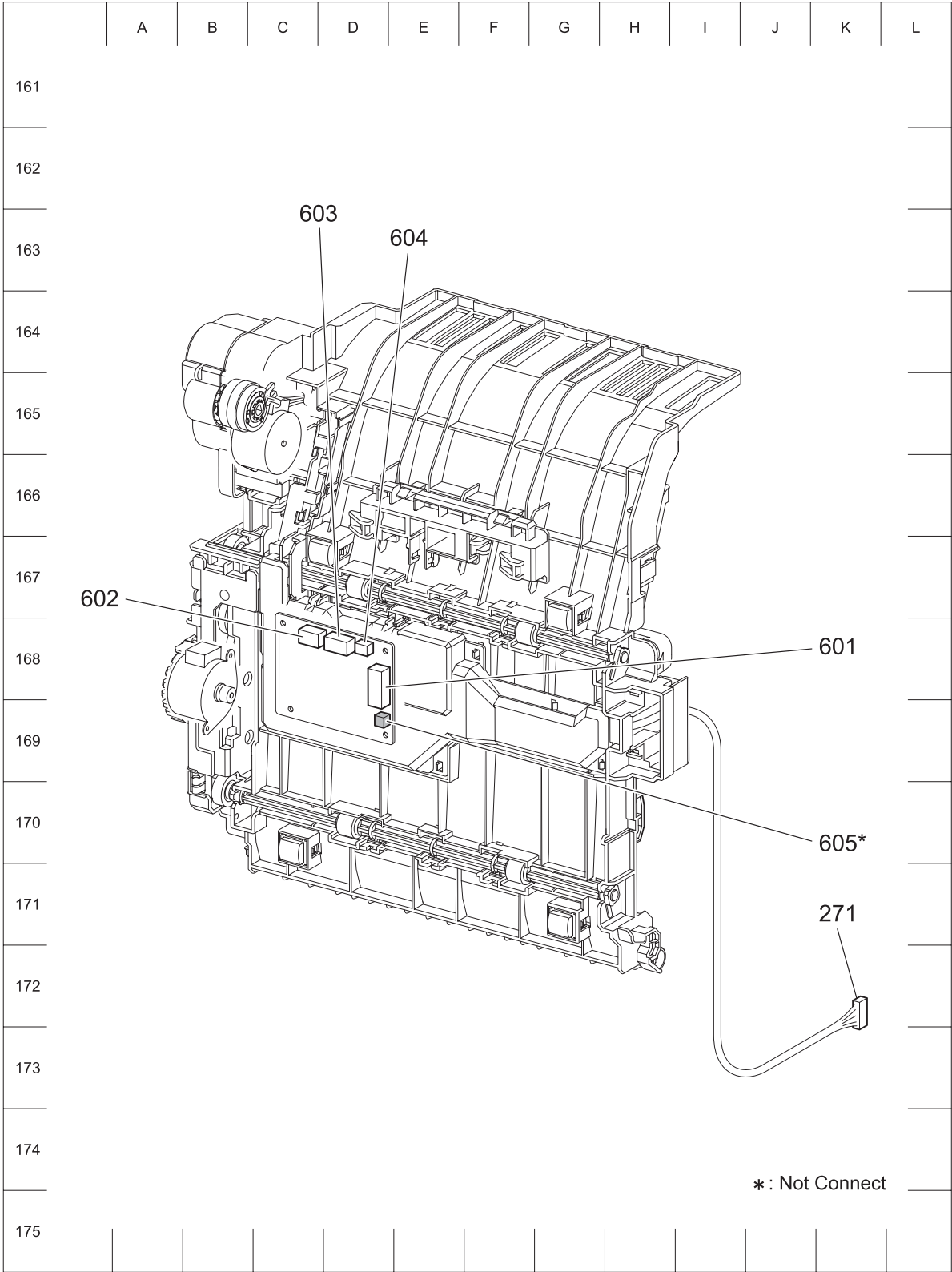


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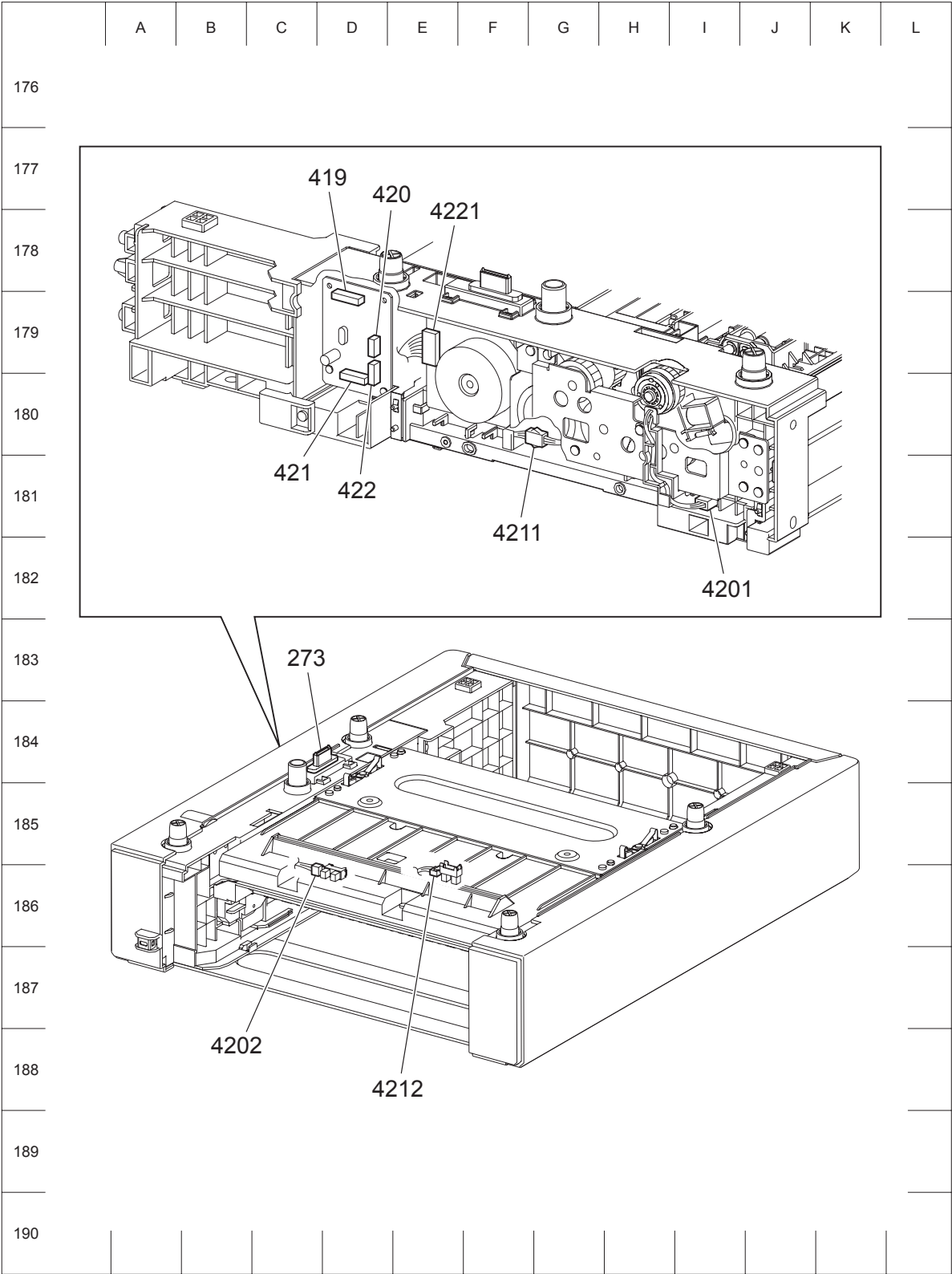
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1.3 DUPLEX P/J layout diagram



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1.4 OPTION FEEDER P/J layout diagram



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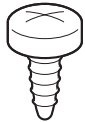
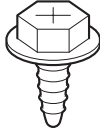
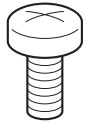
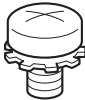
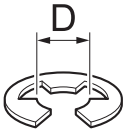
1. Parts List

1.1 Caution for use of spare parts illustration

- Available spare parts are shown in the illustration by name.
- [Ref PL X.Y.Z] shown below the part name denotes the item is "Z" in the plate "PL X.Y" of the engineering part list.
- For the detailed composition of the KIT parts, check with the engineering part list.

1.2 Caution for use of engineering parts list

- The figures indicating the illustrations are the item No. in the list and present correspondence between the illustrations and parts.
- The notation of PL "X.Y.Z" is composed of the plate (PL), item "X.Y", and parts "Z".
- The alphabet characters in the illustrations represent screws and clips as follows:

Type	Shape	PL No.	Size	PARTS No.
Screw for plastic Silver, tapping		ST1	M3X8mm	153W27878
		ST2	M3X16mm	826E17350
		ST3	M4X12mm	826E34160
Screw for plastic Silver, tapping, with flange		ST10	M3X10mm	153W18088
Screw for metal sheet Silver		SM1	M3X4mm	113W27488
		SM2	M3X6mm	826E12480
		SM3	M4X6mm	113W35688
Screw for metal sheet Silver, with an external tooth washer		SM5	M4X6mm	826E25760
Ring-E		E1	D3	354W21278
		E2	D4	354W24278

- "▼" mark in the illustrations are attached to items indicating assembly parts in the illustrations.
- Encircled alphabetical figures in the illustrations indicate interrupted leader lines. Same characters in the illustrations represent lines to be connected.
- The mark "(with 2-5)" attached to assembly parts on the illustrations and lists represents that the items "2, 3, 4, and 5" of that plate are contained and the mark "(with 2-5, PL6.1.1)" represent that the item "2, 3, 4, and 5" of that plate and the item "1" of the plate "6.1" are contained.
- The mark "[Ref PLX.Y.Z]" attached to parts in the illustrations and lists resents that the parts is the same as the parts of the item "Z" of the plate "X.Y".
- The mark "*" attached to parts in the list represents "Note" or "Reference" about that parts is contained in the same page.

NOTE

For spare parts, refer to the "Spare parts list" which is issued separately.

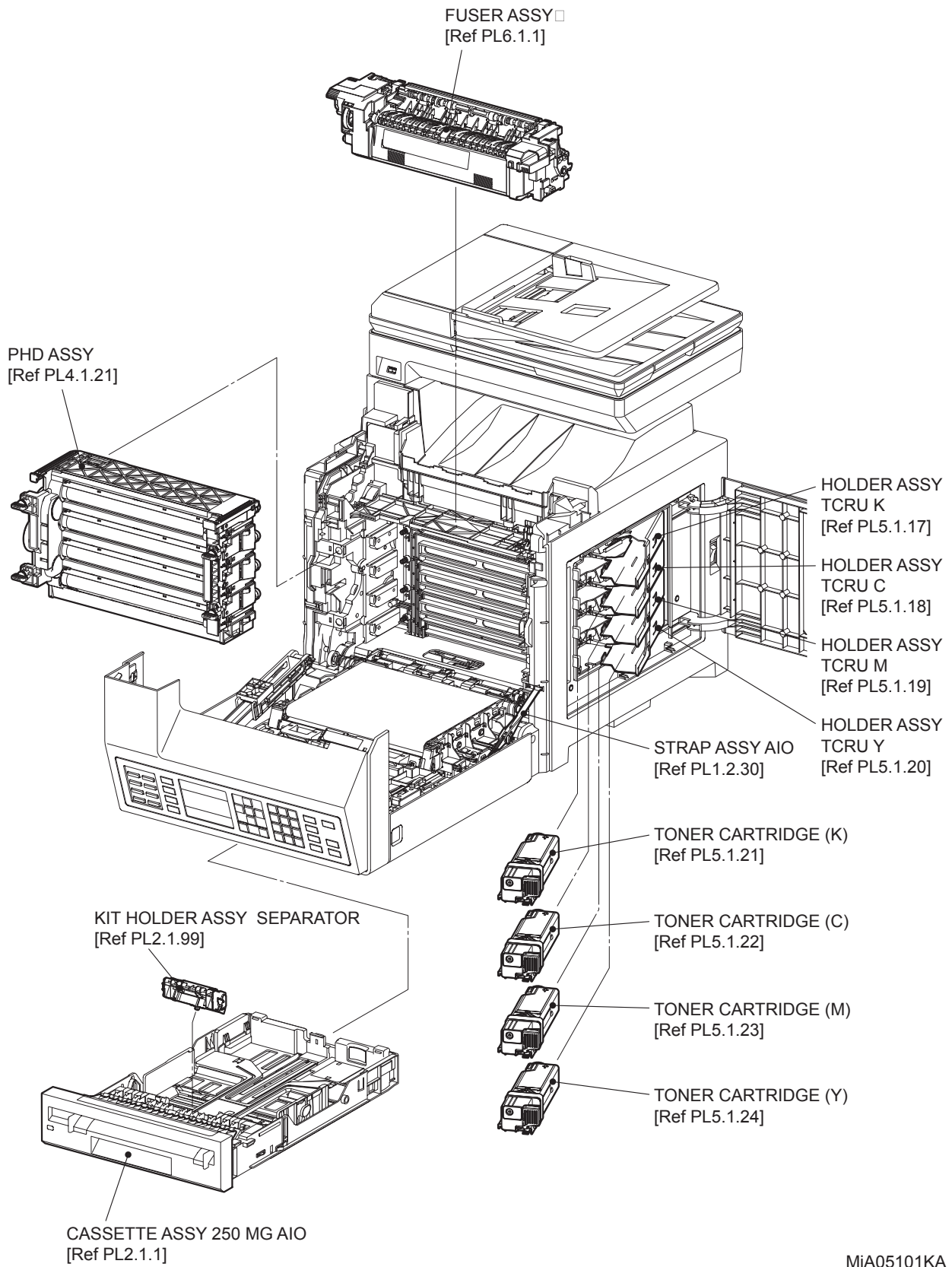
NOTE

For the connector (P/J), parts such as harness, wire, etc. in the list, refer to "Chapter 7, Electric wiring"

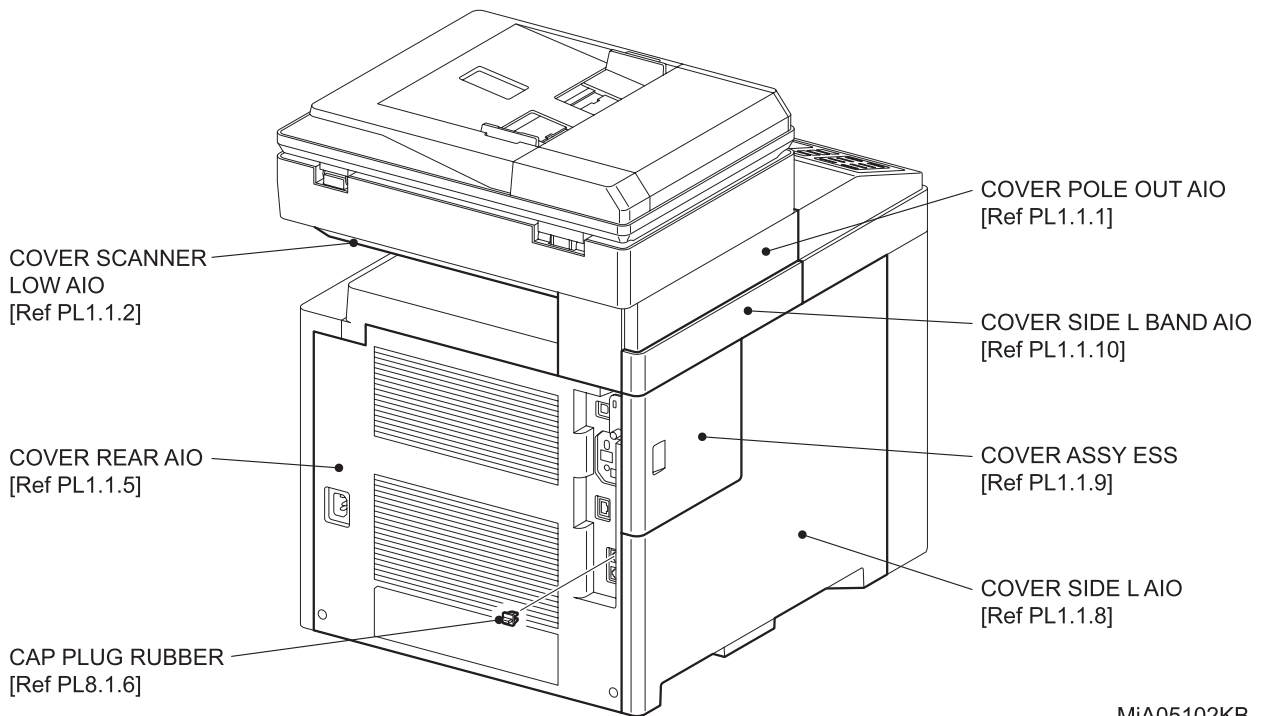
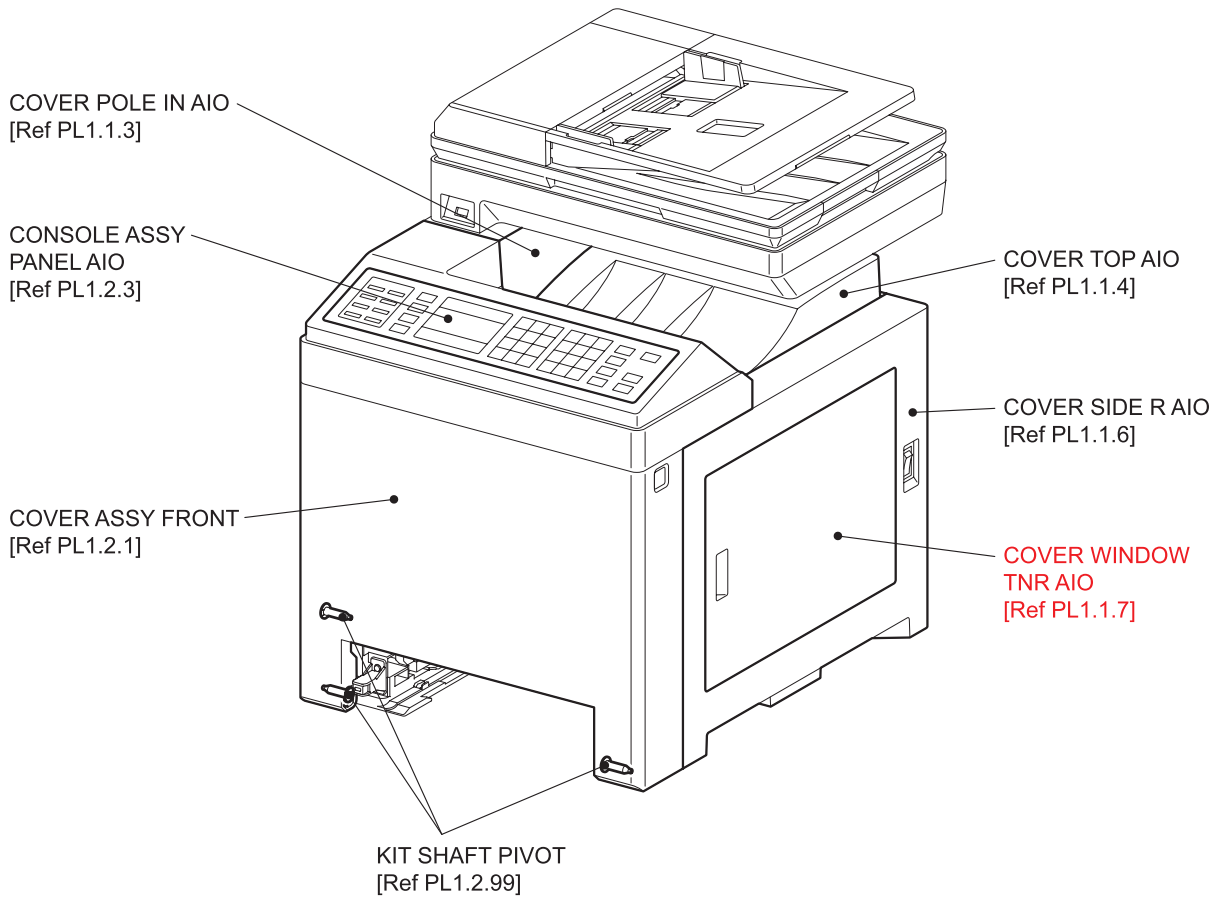
NOTE

It should be noted that configuration of parts may be different or some parts are not used depending on specifications of OEM.

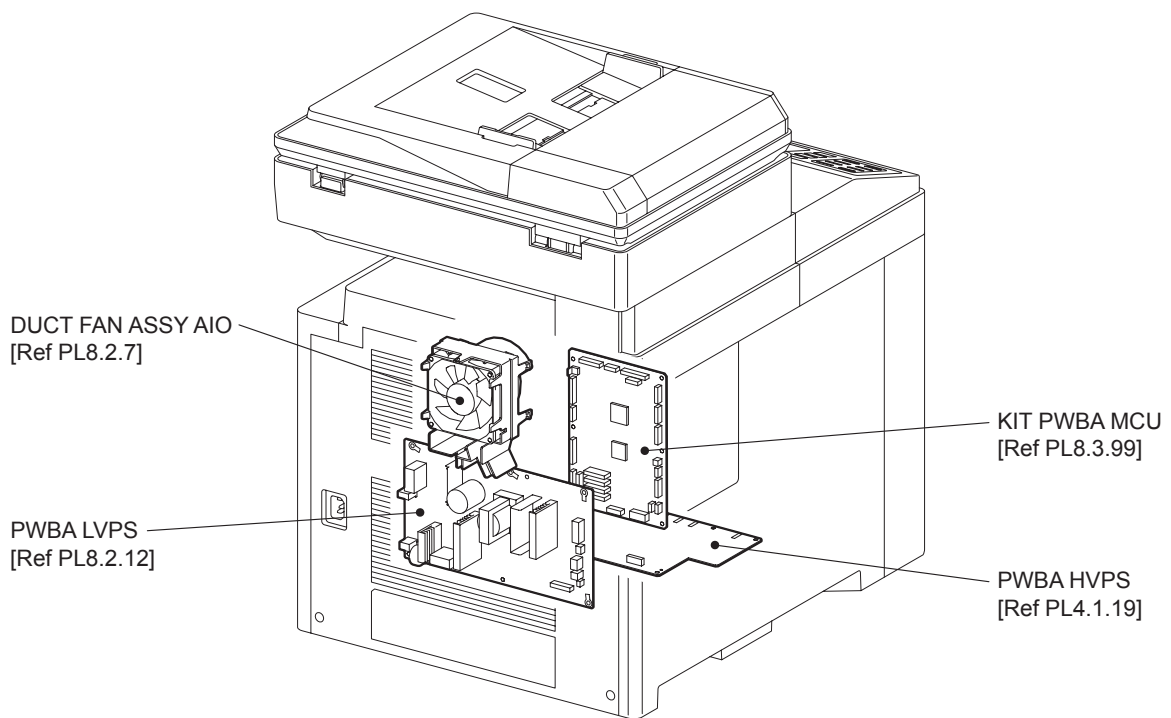
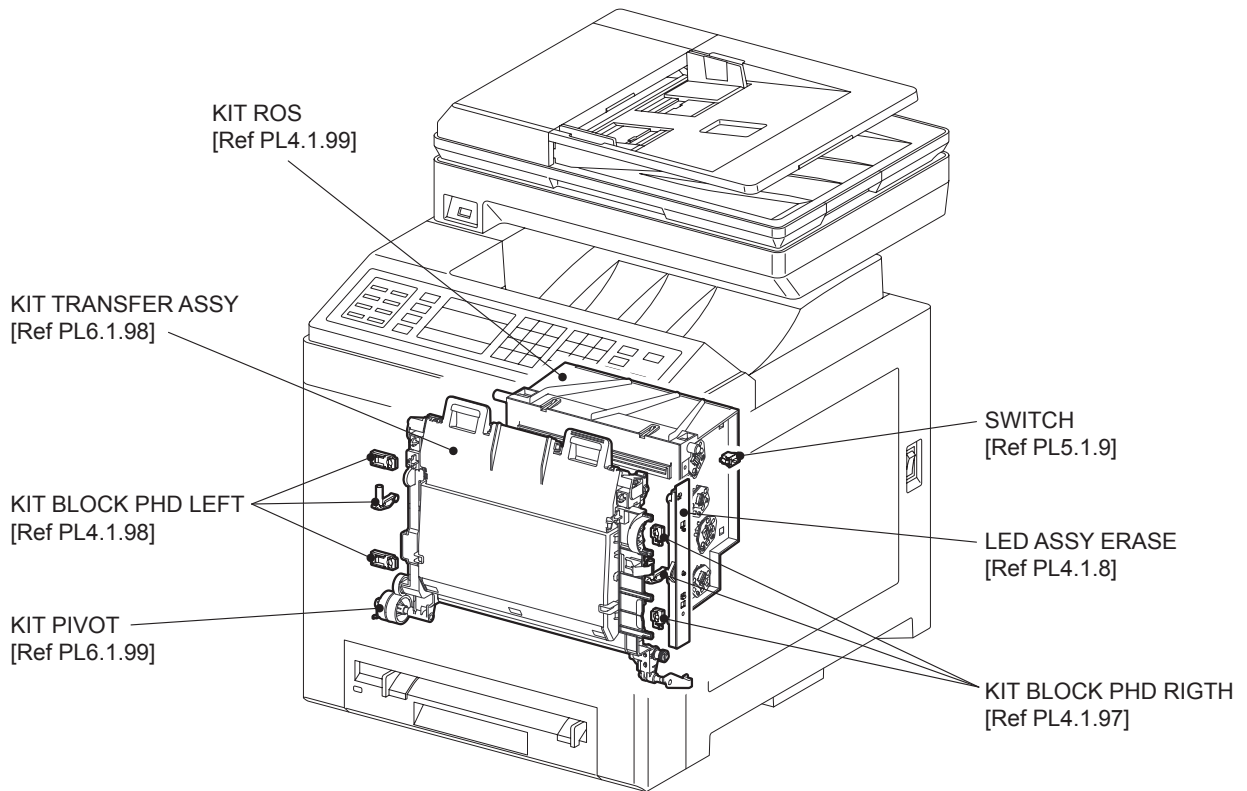
Customer Replaceable Parts Illustration



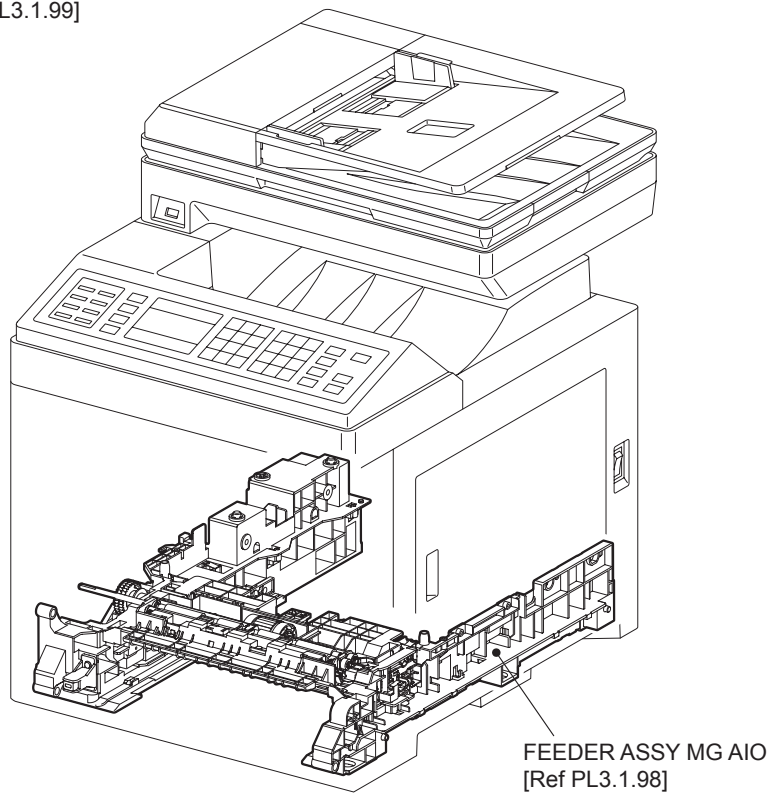
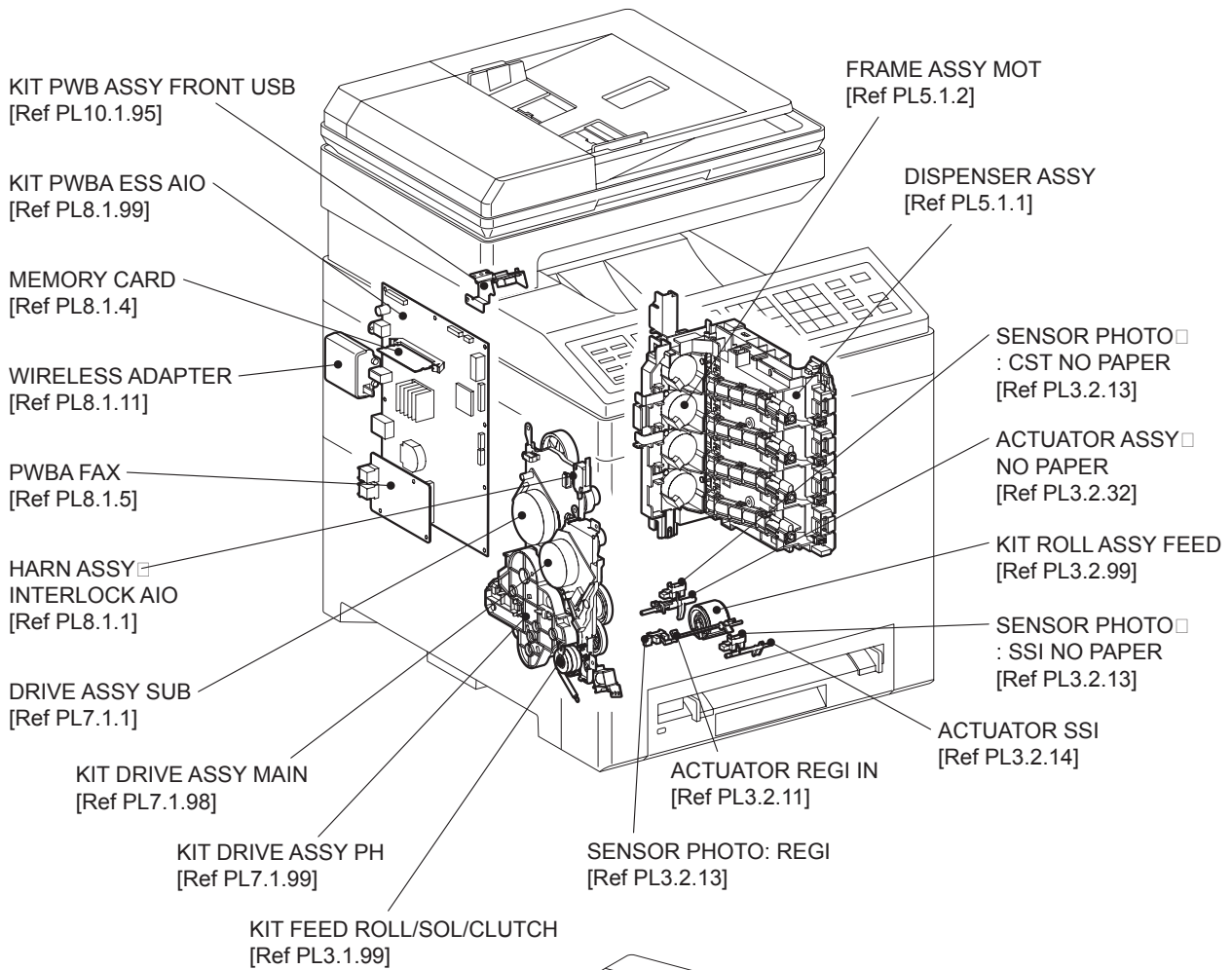
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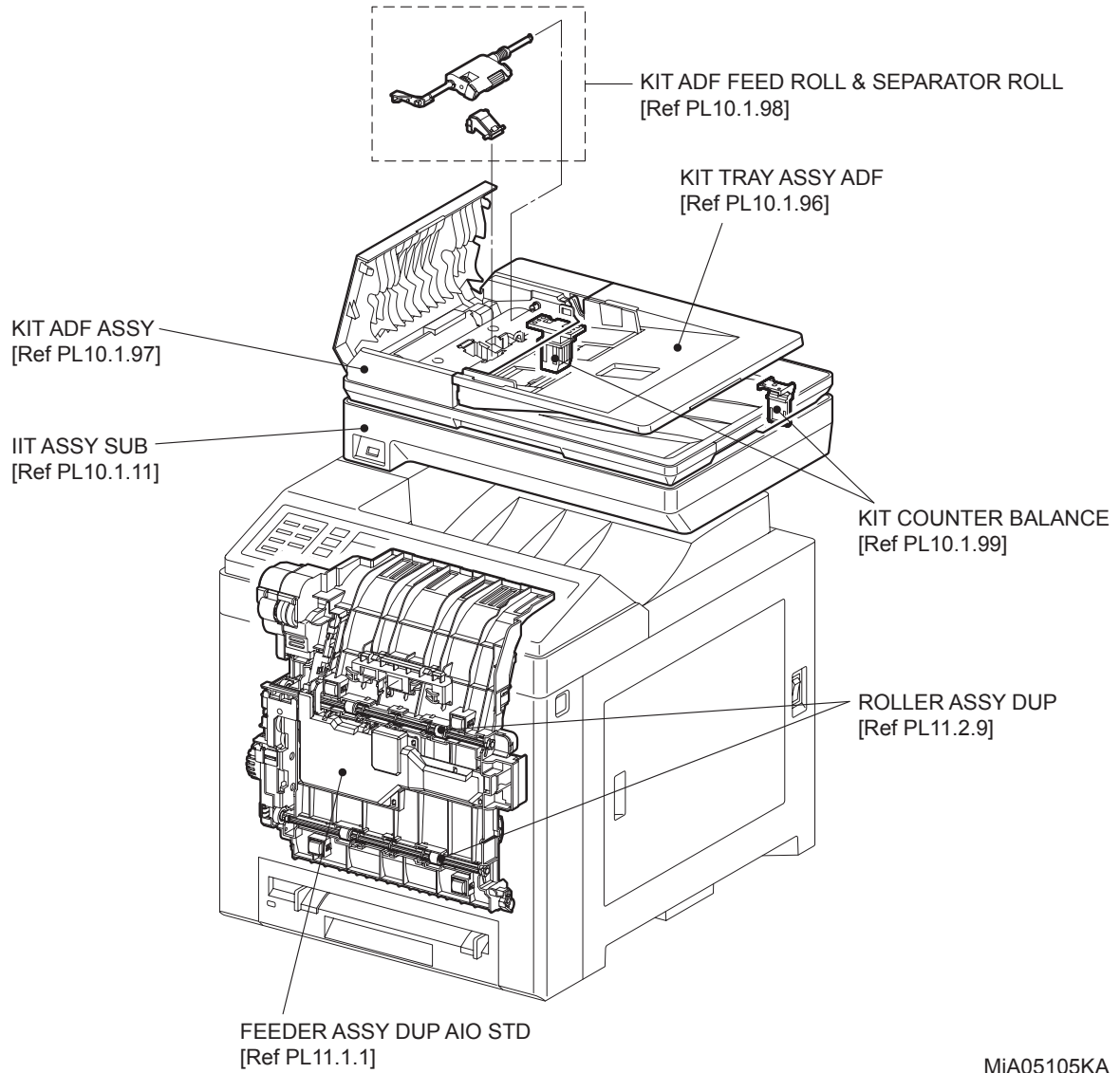
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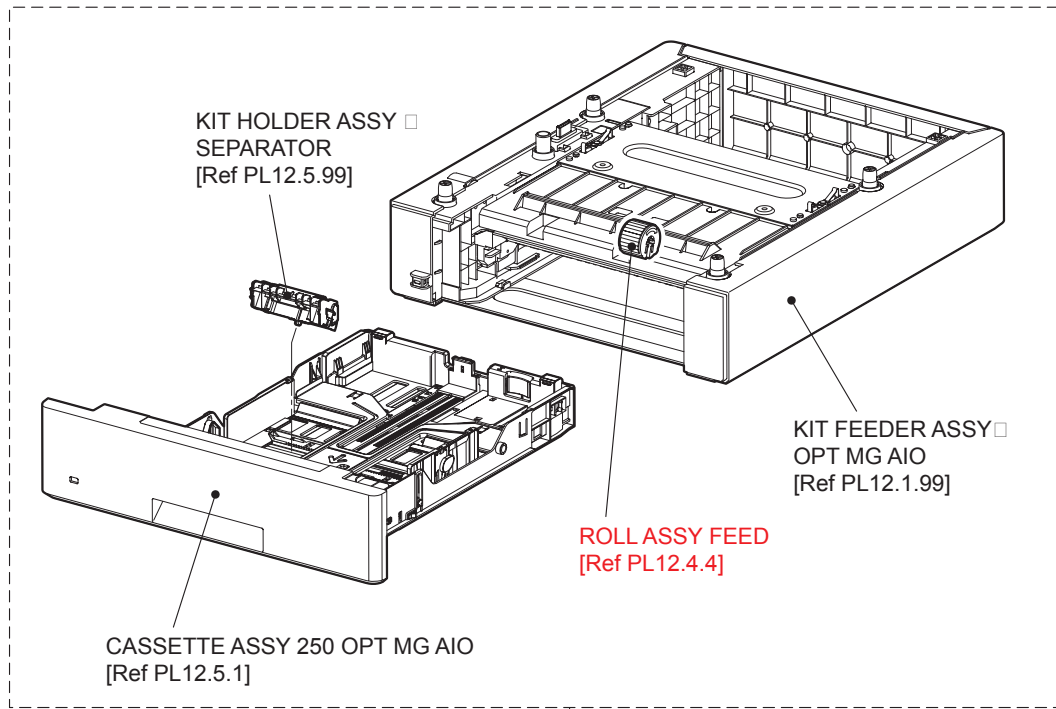
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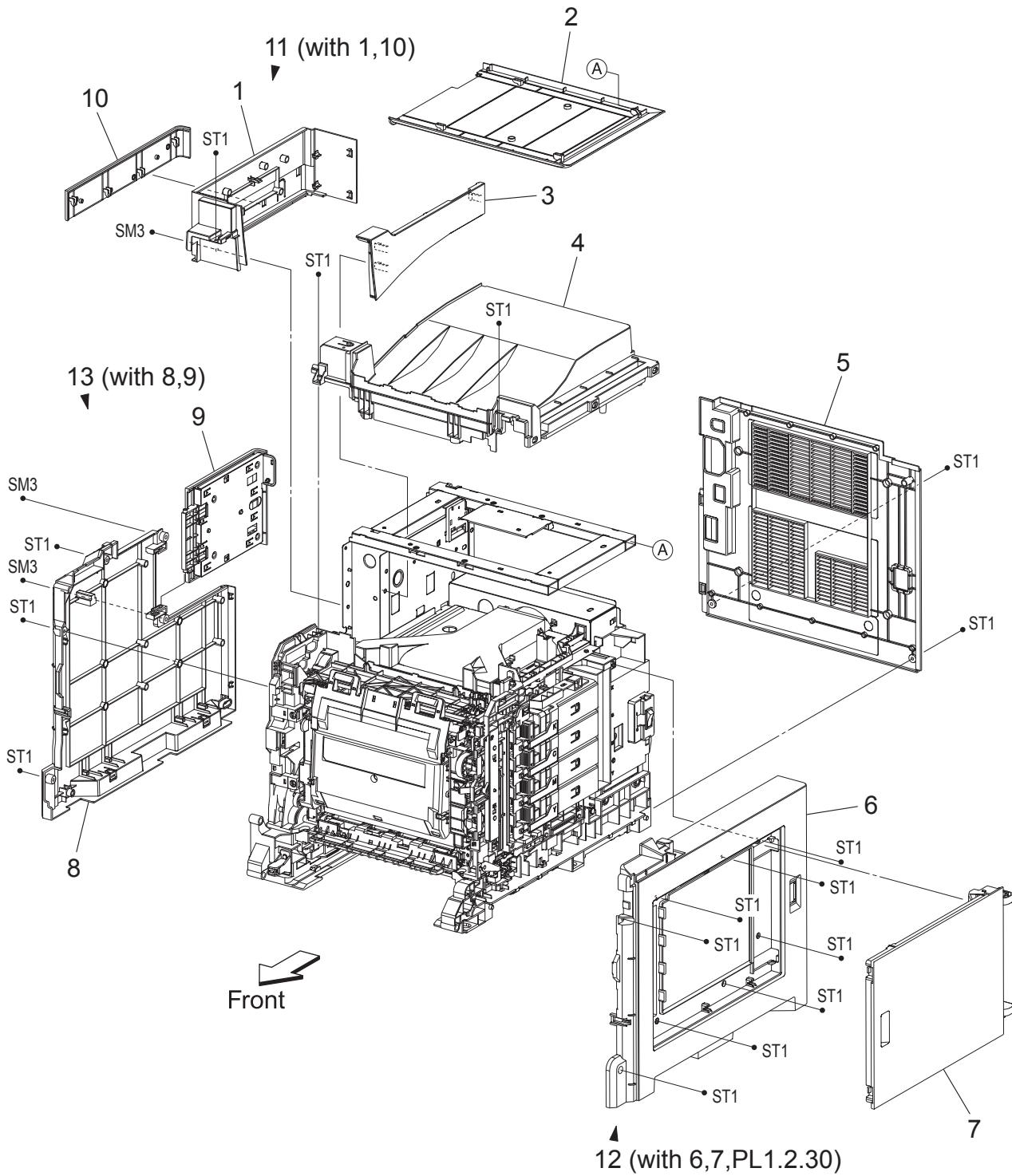
250 OPTION FEEDER MG AIO
[Ref PL12.1.1]

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Engineering parts list

PL1.1 Cover (1/2) [Illustration]

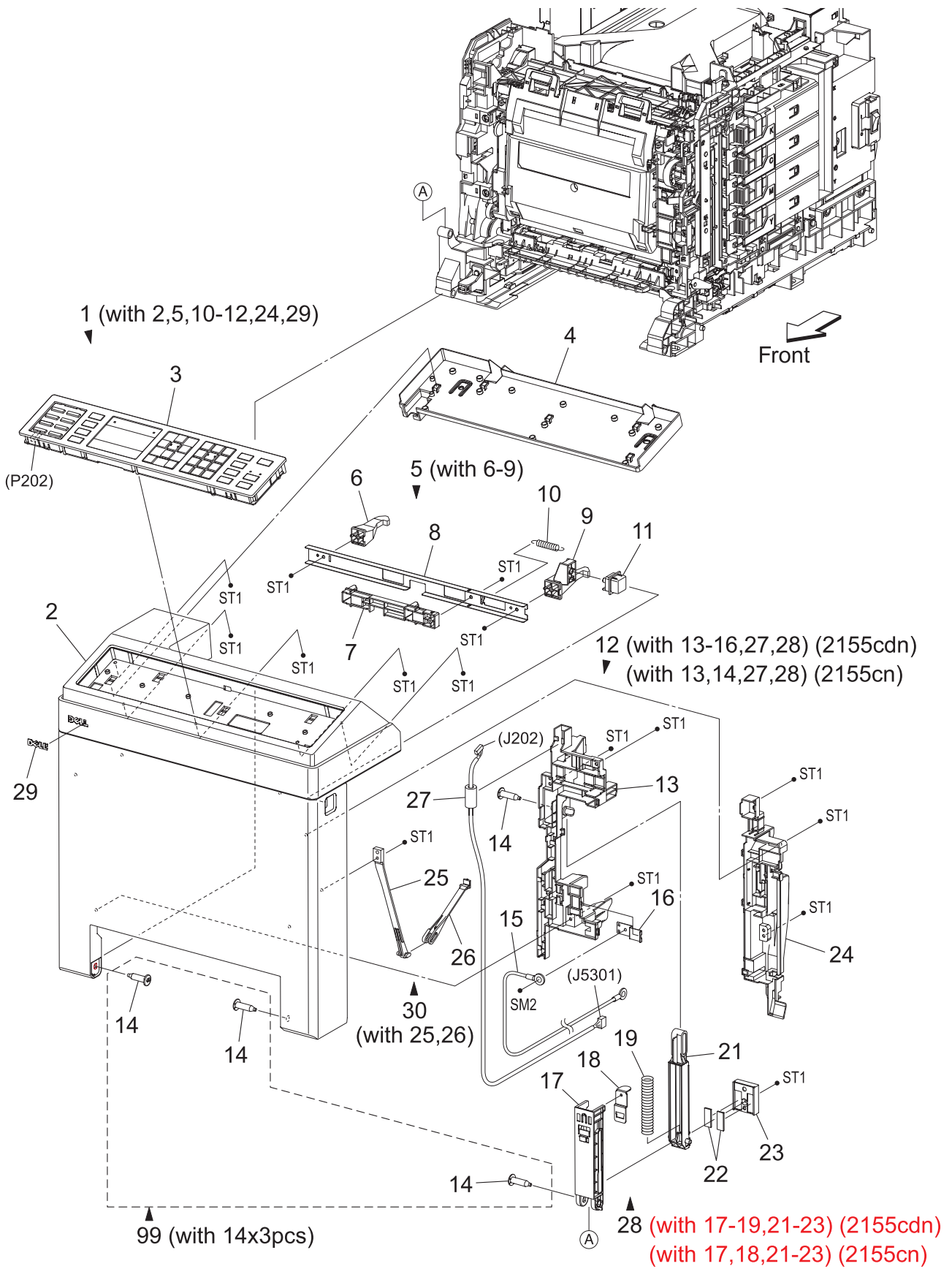


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PL1.1 Cover (1/2) [List]

Item	Parts name
1	COVER POLE OUT AIO
2	COVER SCANNER LOW AIO
3	COVER POLE IN AIO
4	COVER TOP AIO
5	COVER REAR AIO
6	COVER SIDE R AIO
7	COVER WINDOW TNR AIO
8	COVER SIDE L AIO
9	COVER ASSY ESS
10	COVER SIDE L BAND AIO
11	COVER ASSY POLE OUT AIO (with 1,10)
12	COVER ASSY SIDE R AIO (with 6,7,PL1.2.30)
13	COVER ASSY SIDE L AIO (with 8,9)

PL1.2 Cover (2/2) [Illustration]

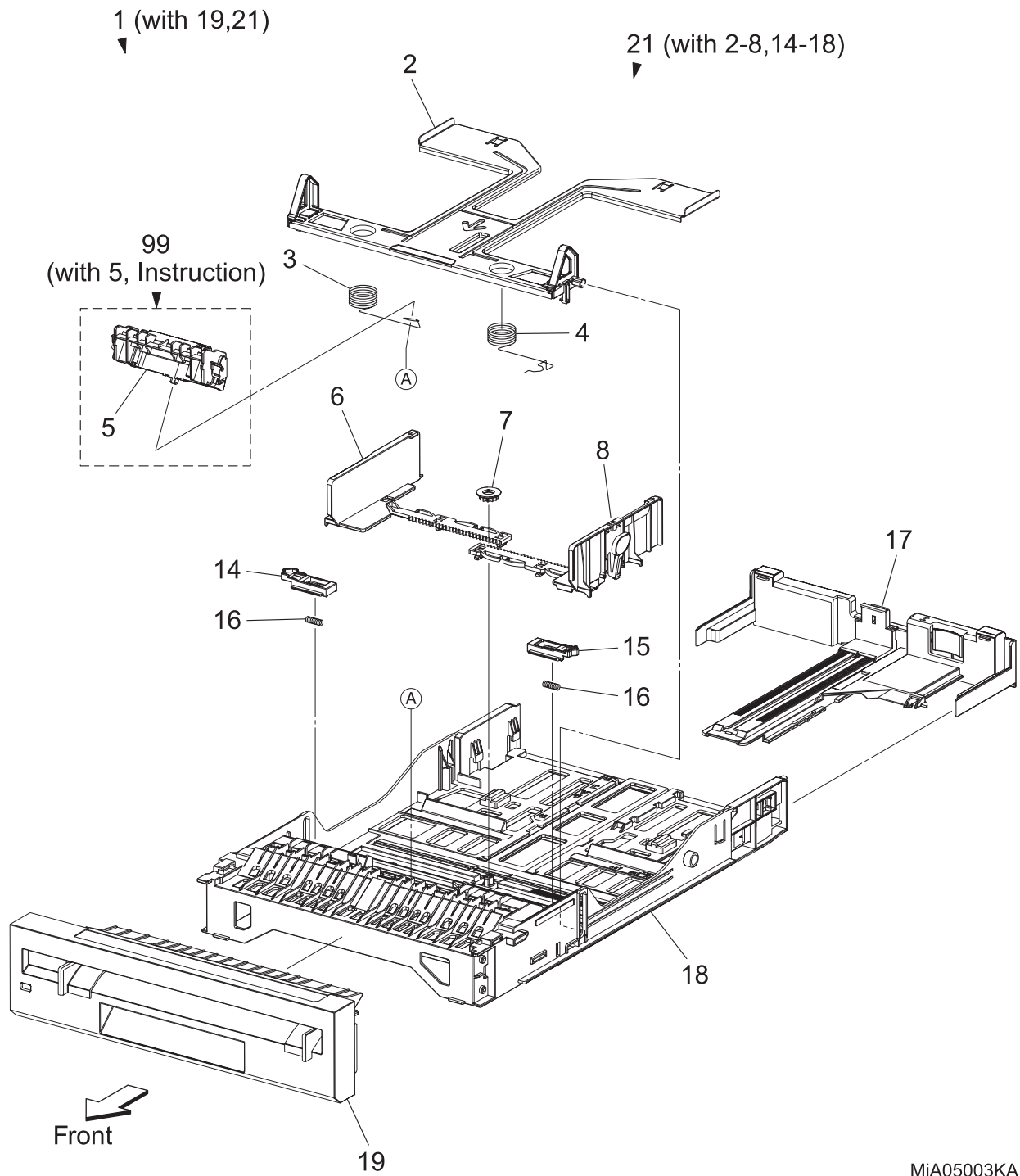


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PL1.2 Cover (2/2) [List]

Item	Parts name
1	COVER ASSY FRONT (with 2,5,10-12,24,29)
2	COVER ASSY FRONT AIO
3	CONSOLE ASSY PANEL AIO
4	COVER INNER FRONT AIO
5	LATCH ASSY FRONT (with 6-9)
6	LATCH FRONT L
7	LATCH FRONT DUP
8	PLATE LATCH
9	LATCH FRONT R
10	SPRING LATCH FRONT
11	BUTTON LATCH FRONT AIO
12	HOLDER ASSY FRONT L CDN (with 13-16,27,28) (2155cdn Only)
	HOLDER ASSY FRONT L CN (with 13,14,27,28) (2155cn Only)
13	HOLDER FRONT L AIO
14	SHAFT PIVOT
15	HARNESS ASSY DUP GND MG AIO (2155cdn Only)
16	PLATE EARTH (2155cdn Only)
17	HOLDER LINK LOWER
18	PLATE LINK
19	SPRING LINK (2155cdn Only)
20	--
21	HOLDER LINK UPPER
22	PAD L
23	HOLDER SLIDER
24	HOLDER FRONT R AIO
25	STRAP B
26	STRAP A
27	HARNESS A-OP-OPP (J202-J5301)
28	LINK ASSY FRONT AIO (with 17-19,21-23) (2155cdn Only)
	LINK ASSY FRONT AIO CN (with 17,18,21-23) (2155cn Only)
29	PLATE NAME KM
30	STRAP ASSY AIO (with 25,26)
99	KIT SHAFT PIVOT (with 14x3pcs)

PL2.1 Paper Cassette [Illustration]

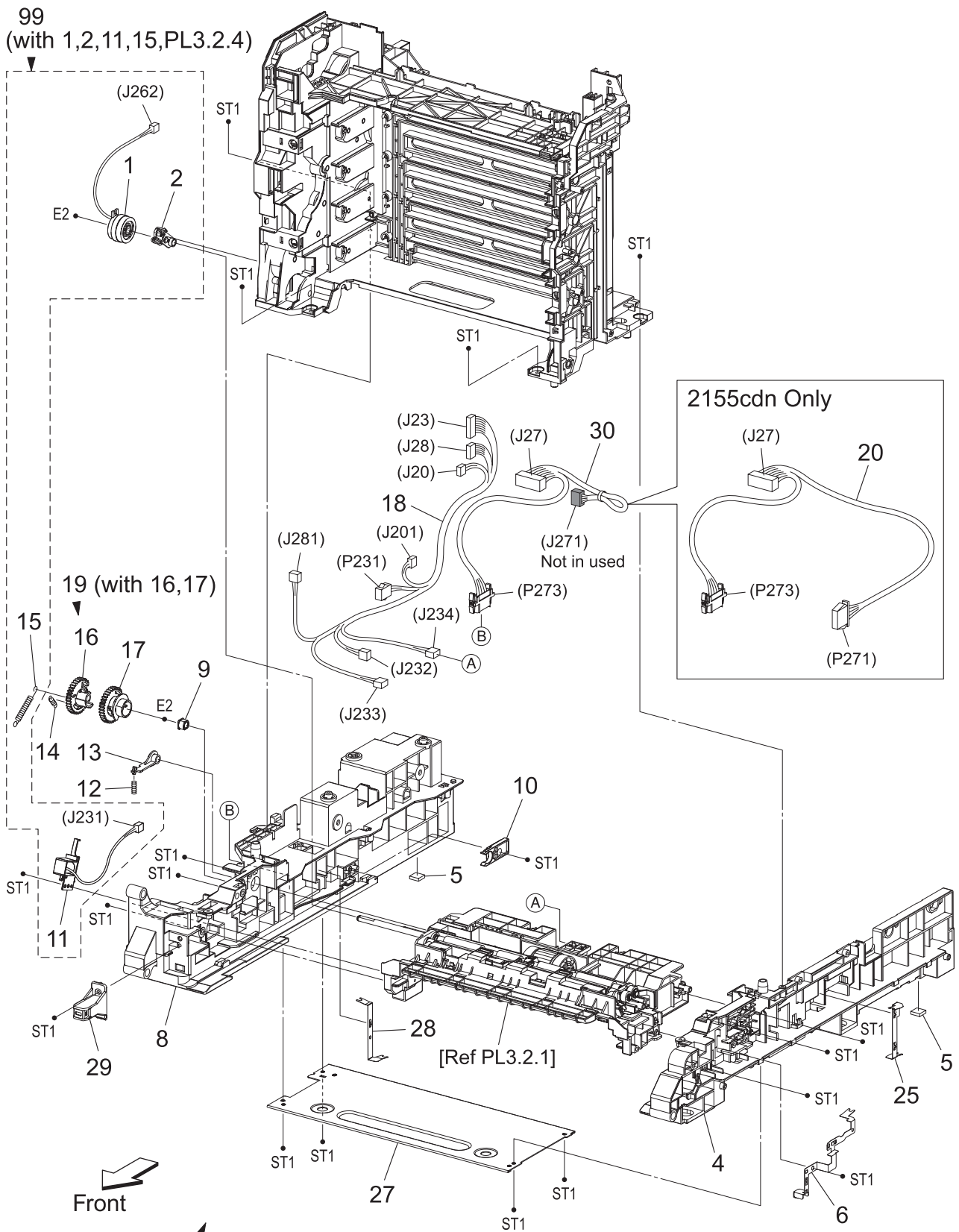


MiA05003KA

PL2.1 Paper Cassette [List]

Item	Parts name
1	CASSETTE ASSY 250 MG AIO (with 19,21)
2	PLATE ASSY BOTTOM
3	SPRING N/F L
4	SPRING N/F R
5	HOLDER ASSY SEPARATOR
6	GUIDE SIDE L
7	GEAR PINION
8	GUIDE SIDE ASSY R
9	--
10	--
11	--
12	--
13	--
14	LATCH BOTTOM L
15	LATCH BOTTOM R
16	SPRING LATCH B
17	TRAY ASSY EXTENSION
18	HOUSING CASSETTE 250
19	HANDLE ASSY CST MG AIO
20	--
21	TRAY ASSY CST 250 AIO (with 2-8,14-18)
99	KIT HOLDER ASSY SEPARATOR (with 5, Instruction)

PL3.1 Paper Feeder (1/2) [Illustration]



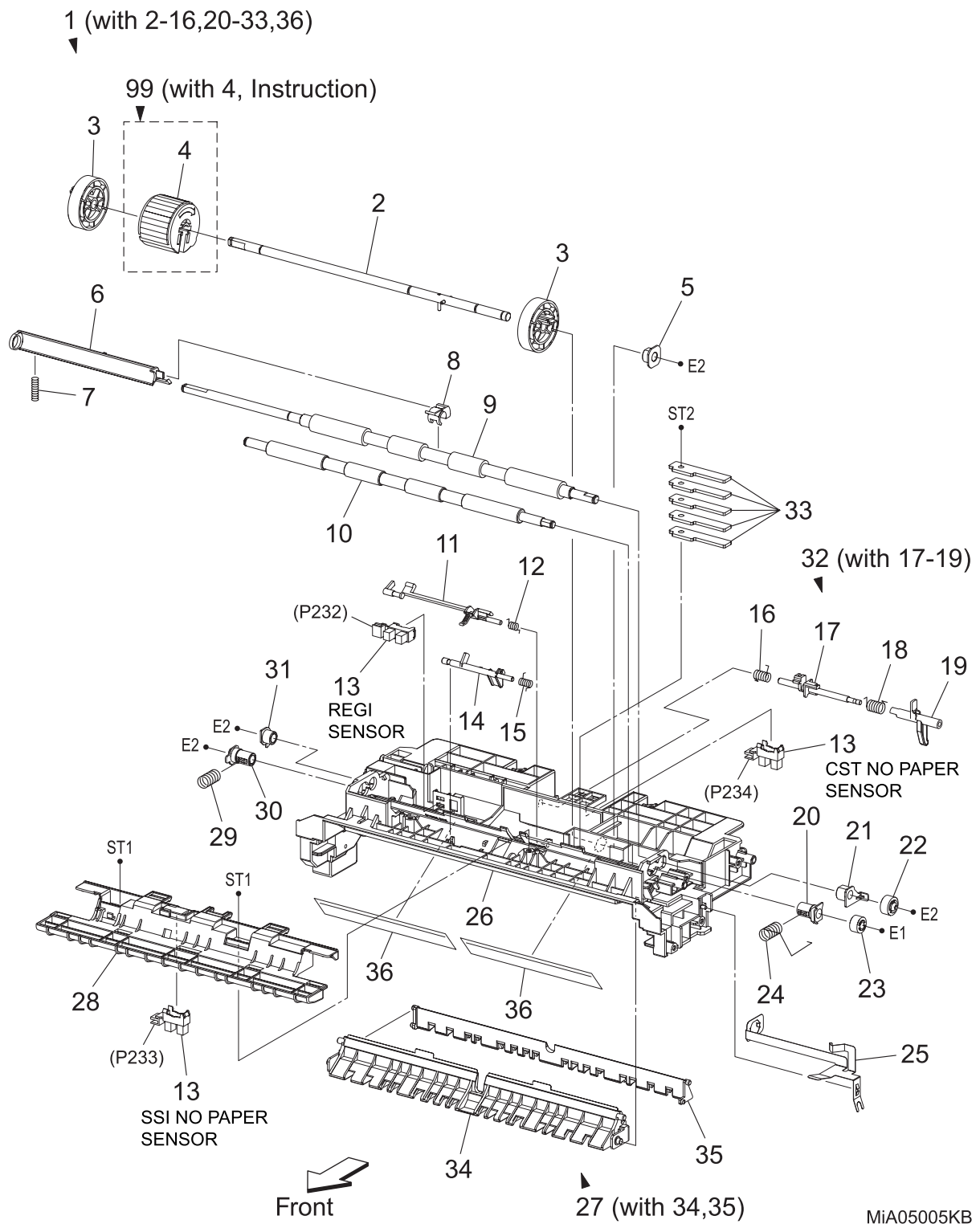
98 (with 4-6,8-15,18-20,25,27-29,PL3.2.1,PL8.1.10) (2155cdn)
 (with 4-6,8-15,18,19,25,27-30,PL3.2.1,PL8.1.10) (2155cn)

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PL3.1 Paper Feeder (1/2) [List]

Item	Parts name
1	CLUTCH ASSY DRV
2	BEARING REGI
3	--
4	CHASSIS FDR R AIO
5	FOOT ASSY
6	PLATE EARTH PH
7	--
8	CHASSIS FDR L AIO
9	BEARING
10	STOPPER CST
11	SOLENOID FEED MSI
12	SPRING LEVER
13	LEVER FEED
14	SPRING FEED IN
15	SPRING FEED OUT
16	GEAR FEED OUT
17	GEAR FEED IN
18	HARNESS ASSY L SIDE MG AIO (J20,J23,J28-J201,P231,J232,J233,J234,J281)
19	GEAR ASSY FEED (with 16,17)
20	HARNESS ASSY OPTION MG AIO (J27-P271,P273) (2155cdn Only)
21	--
22	--
23	--
24	--
25	PLATE EARTH FDR R
26	--
27	PLATE TIE
28	PLATE EARTH FDR L
29	BRACKET ASSY LOCK
30	HARNESS ASSY OPTION D-LESS MG AIO (J27-J271,P273) (2155cn Only)
98	FEEDER ASSY MG AIO DN (with 4-6,8-15,18-20,25,27-29,PL3.2.1,PL8.1.10) (2155cdn Only)
	FEEDER ASSY MG AIO N (with 4-6,8-15,18,19,25,27-30,PL3.2.1,PL8.1.10) (2155cn Only)
99	KIT FEED ROLL/SOL/CLUTCH (with 1,2,11,15,PL3.2.4)

PL3.2 Paper Feeder (2/2) [Illustration]

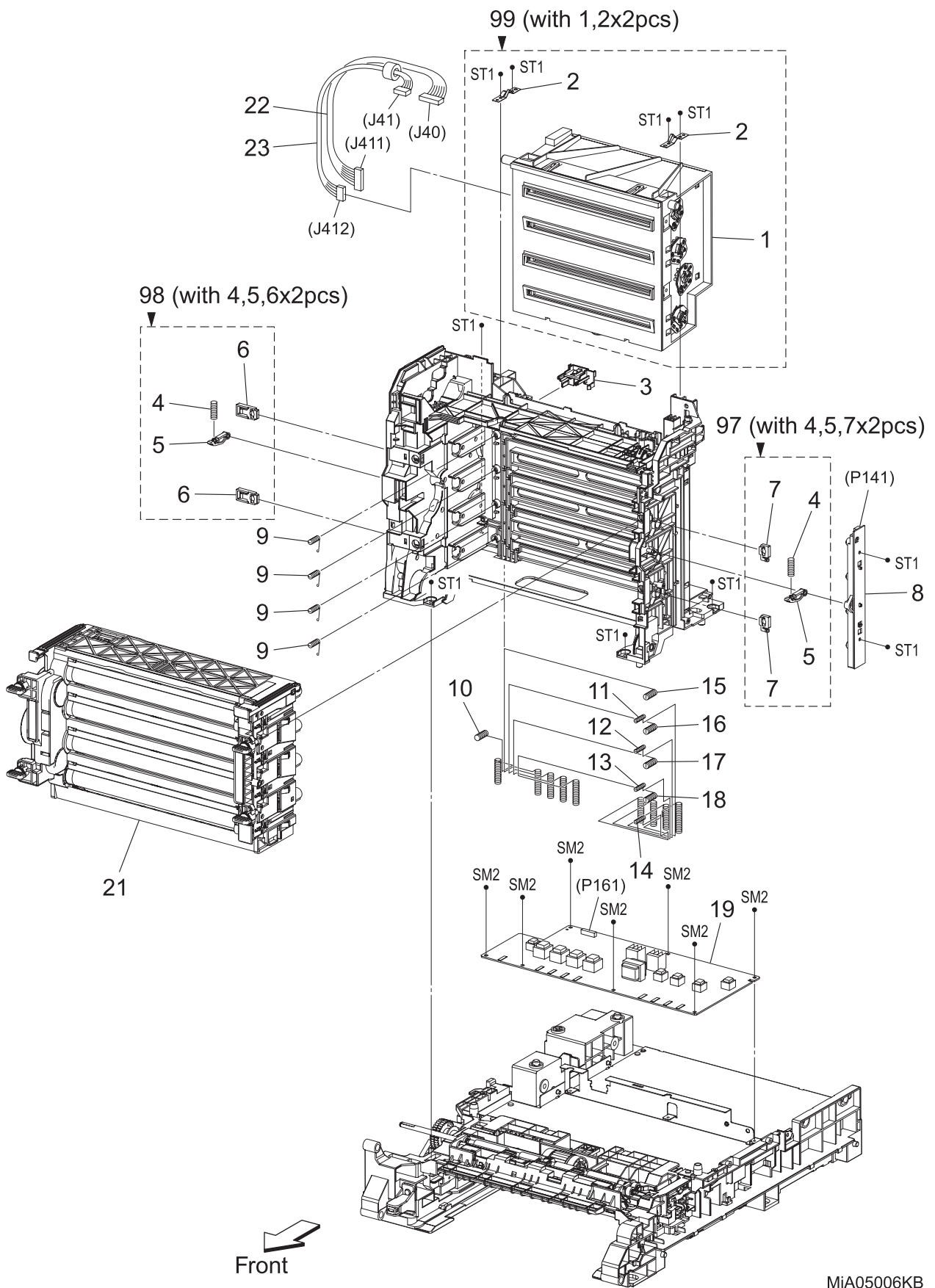


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PL3.2 Paper Feeder (2/2) [List]

Item	Parts name
1	CHUTE ASSY FDR REGI (with 2-16,20-33, 36)
2	SHAFT ASSY FEED
3	ROLL CORE MSI
4	ROLL ASSY FEED
5	BEARING EARTH
6	ACTUATOR REGI OUT
7	SPRING REGI OUT
8	ACTUATOR REGI ROLL M
9	ROLL ASSY REGI
10	ROLL REGI METAL
11	ACTUATOR REGI IN
12	SPRING ACT REGI
13	SENSOR PHOTO
14	ACTUATOR SSI
15	SPRING ACT SSI
16	SPRING STP
17	STOPPER ACT
18	SPRING ACT NP
19	ACTUATOR NO PAPER
20	BEARING M EARTH
21	BEARING EARTH REGI
22	GEAR REGI R
23	GEAR REGI M
24	SPRING REGI R MG
25	PLATE EARTH REGI
26	CHUTE UP
27	CHUTE ASSY LOW (with 34,35)
28	BRACKET SNS
29	SPRING REGI L MG
30	BEARING M
31	BEARING R
32	ACTUATOR ASSY NO PAPER (with 17-19)
33	PLATE WEIGHT
34	CHUTE ASSY LOW SSI
35	CHUTE LOW CST
36	FILM CHUTE UP
99	KIT ROLL ASSY FEED (with 4, Instruction)

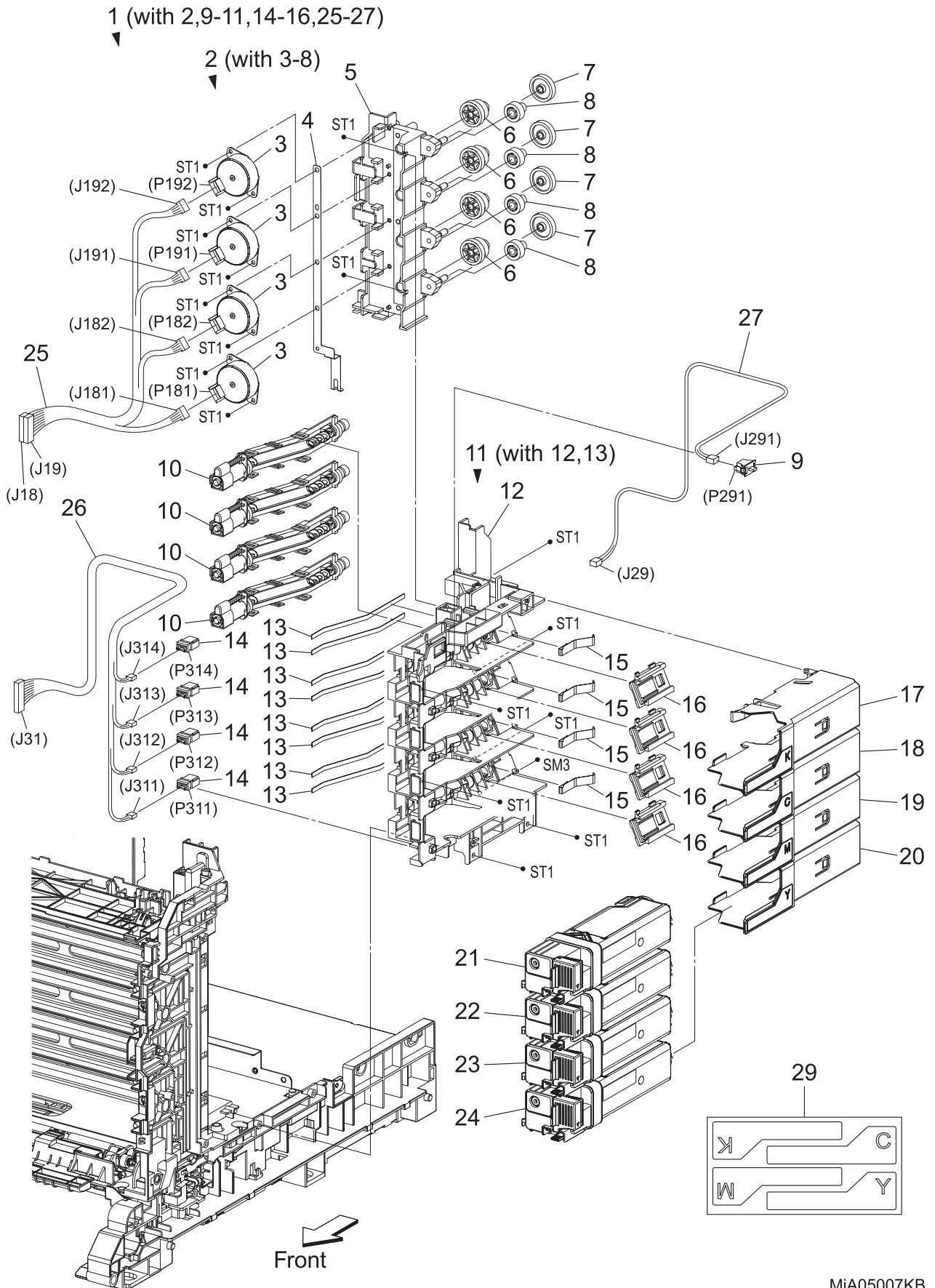
PL4.1 Xerographics [Illustration]



PL4.1 Xerographics [List]

Item	Parts name
1	ROS ASSY
2	SPRING ROS
3	HOLDER CRUM
4	SPRING PHD
5	LEVER PHD
6	BLOCK STOPPER PHD D
7	BLOCK STOPPER PHD AD
8	LED ASSY ERASE
9	SPRING TRACKING
10	SPRING CF
11	SPRING TR4
12	SPRING TR3
13	SPRING TR2
14	SPRING TR1
15	SPRING D4
16	SPRING D3
17	SPRING D2
18	SPRING D1
19	PWBA HVPS
20	--
21	PHD ASSY
22	HARN ASSY ROS RE (J40-J411)
23	HARN ASSY ROS VIDEO (J41-J412)
97	KIT BLOCK PHD RIGHT (with 4,5,7 x 2pcs)
98	KIT BLOCK PHD LEFT (with 4,5,6 x 2pcs)
99	KIT ROS (with 1,2 x 2pcs)

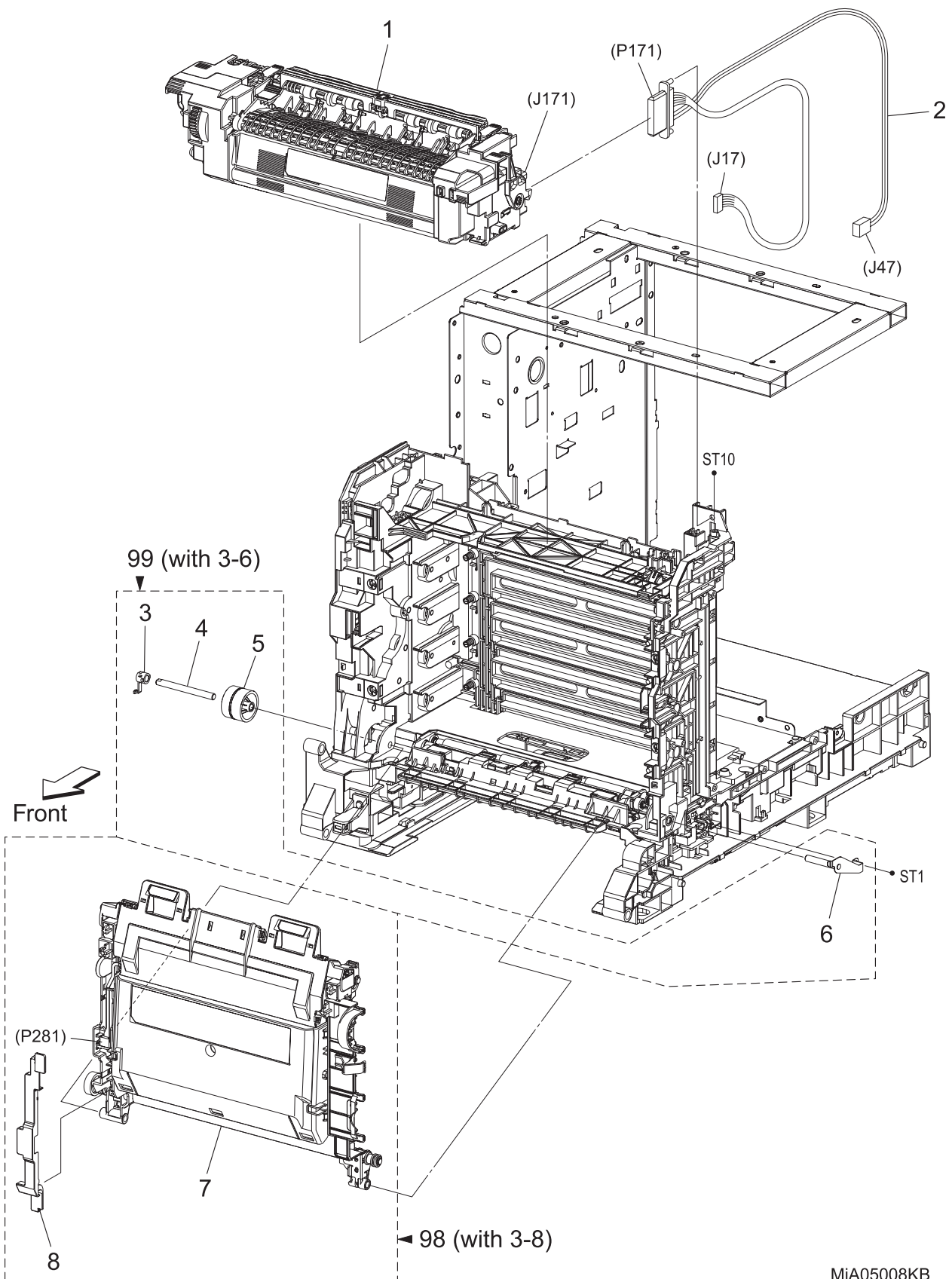
PL5.1 Dispenser [Illustration]



PL5.1 Dispenser [List]

Item	Parts name
1	DISPENSER ASSY (with 2,9-11,14-16,25-27)
2	FRAME ASSY MOT (with 3-8)
3	MOTOR ASSY DISP
4	CONDUCTOR MOTOR
5	FRAME MOTOR
6	GEAR IDLER
7	GEAR IDLER AUG
8	GEAR IDLER AGI
9	SWITCH
10	HOUSING ASSY AUGER
11	FRAME ASSY DISP (with 12,13)
12	FRAME DISP
13	SEAL DISP AUG
14	CONNECTOR CRUM
15	SPRING DISP
16	JOINT ASSY DISP
17	HOLDER ASSY TCRU K
18	HOLDER ASSY TCRU C
19	HOLDER ASSY TCRU M
20	HOLDER ASSY TCRU Y
21	TONER CARTRIDGE (K)
22	TONER CARTRIDGE (C)
23	TONER CARTRIDGE (M)
24	TONER CARTRIDGE (Y)
25	HARN ASSY TNR MOT (J18,J19-J181,J182,J191,J192)
26	HARN ASSY TONER CRUM (J31-J311,J312,J313,J314)
27	HARN ASSY SIDE SW (J29-J291)
28	--
29	LABEL HOLDER

PL6.1 Transfer & Fuser [Illustration]

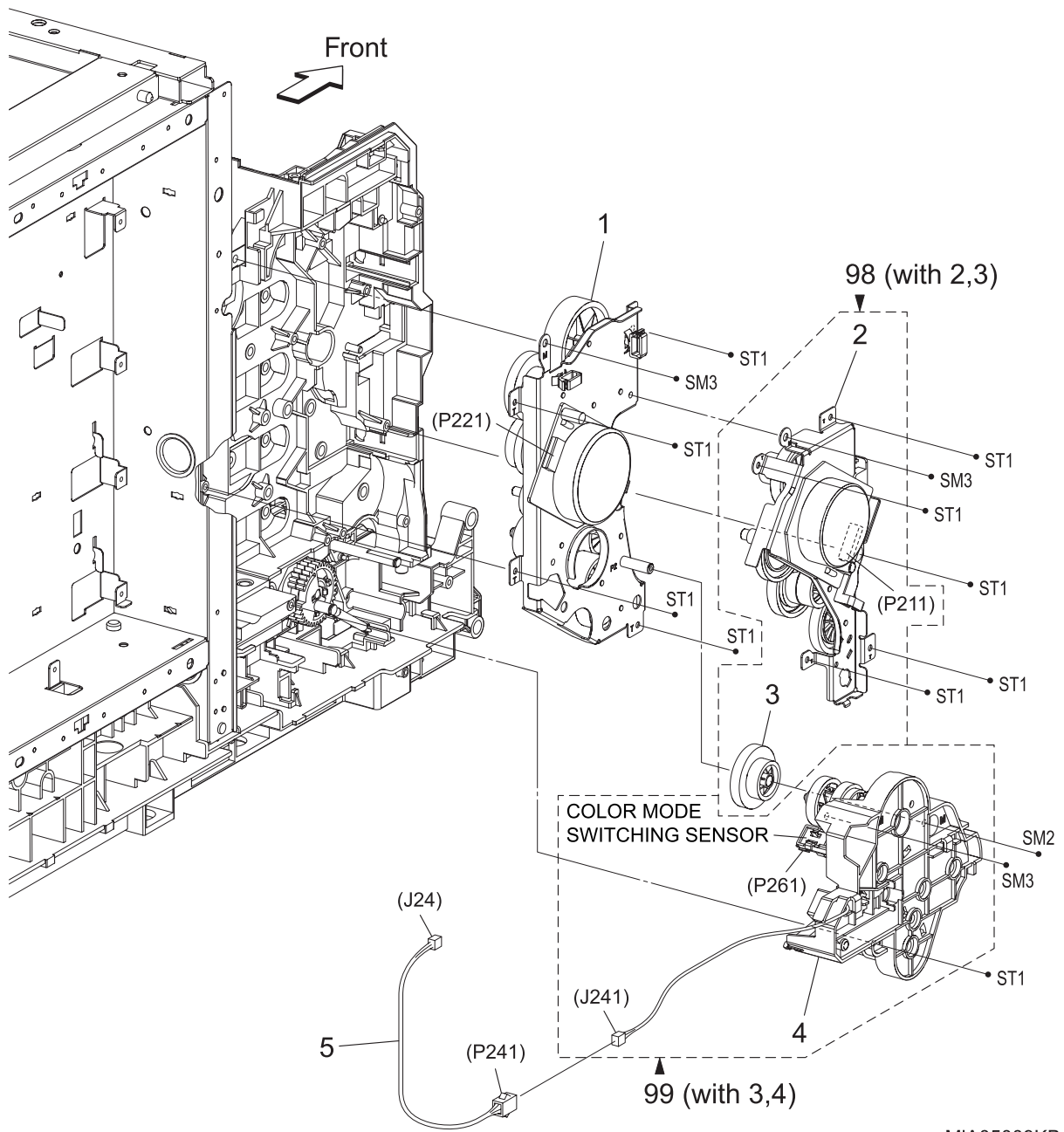


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PL6.1 Transfer & Fuser [List]

Item	Parts name
1	FUSER ASSY
2	HARNESS ASSY FUSER MG AIO (J17,47-P171)
3	STOPPER PIVOT
4	PIVOT TRANS L
5	GEAR T4
6	SHAFT ASSY PIVOT
7	TRANSFER ASSY
8	COVER HARNESS
98	KIT TRANSFER ASSY (with 3-8)
99	KIT PIVOT (with 3-6)

PL7.1 Drive [Illustration]

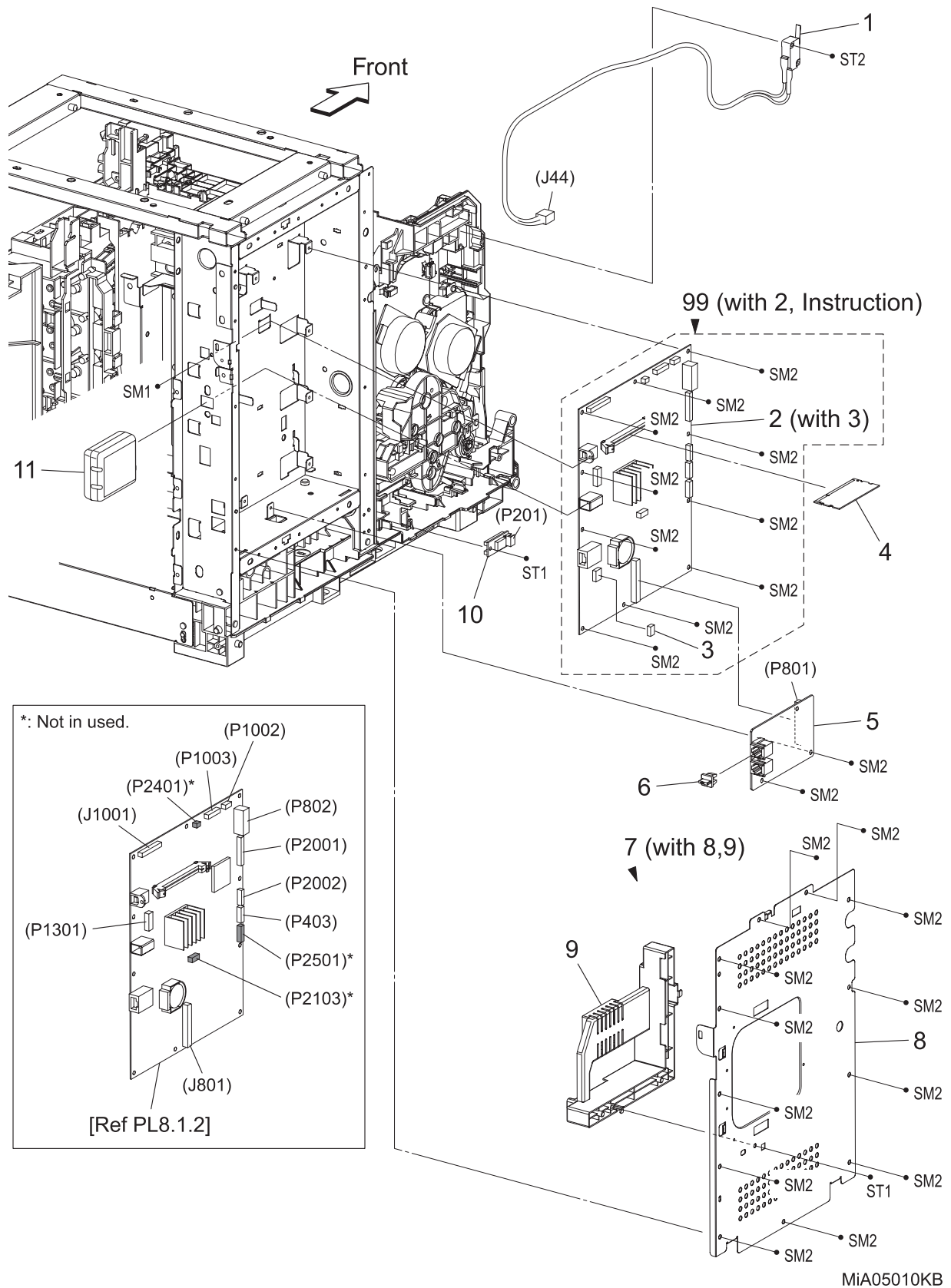


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PL7.1 Drive [List]

Item	Parts name
1	DRIVE ASSY SUB
2	DRIVE ASSY MAIN
3	GEAR P2
4	DRIVE ASSY PH
5	HARNESS ASSY KSOL MG AIO (J24-P241)
98	KIT DRIVE ASSY MAIN (with 2,3)
99	KIT DRIVE ASSY PH (with 3,4)

PL8.1 Electrical & Frame AIO (1/4) [Illustration]

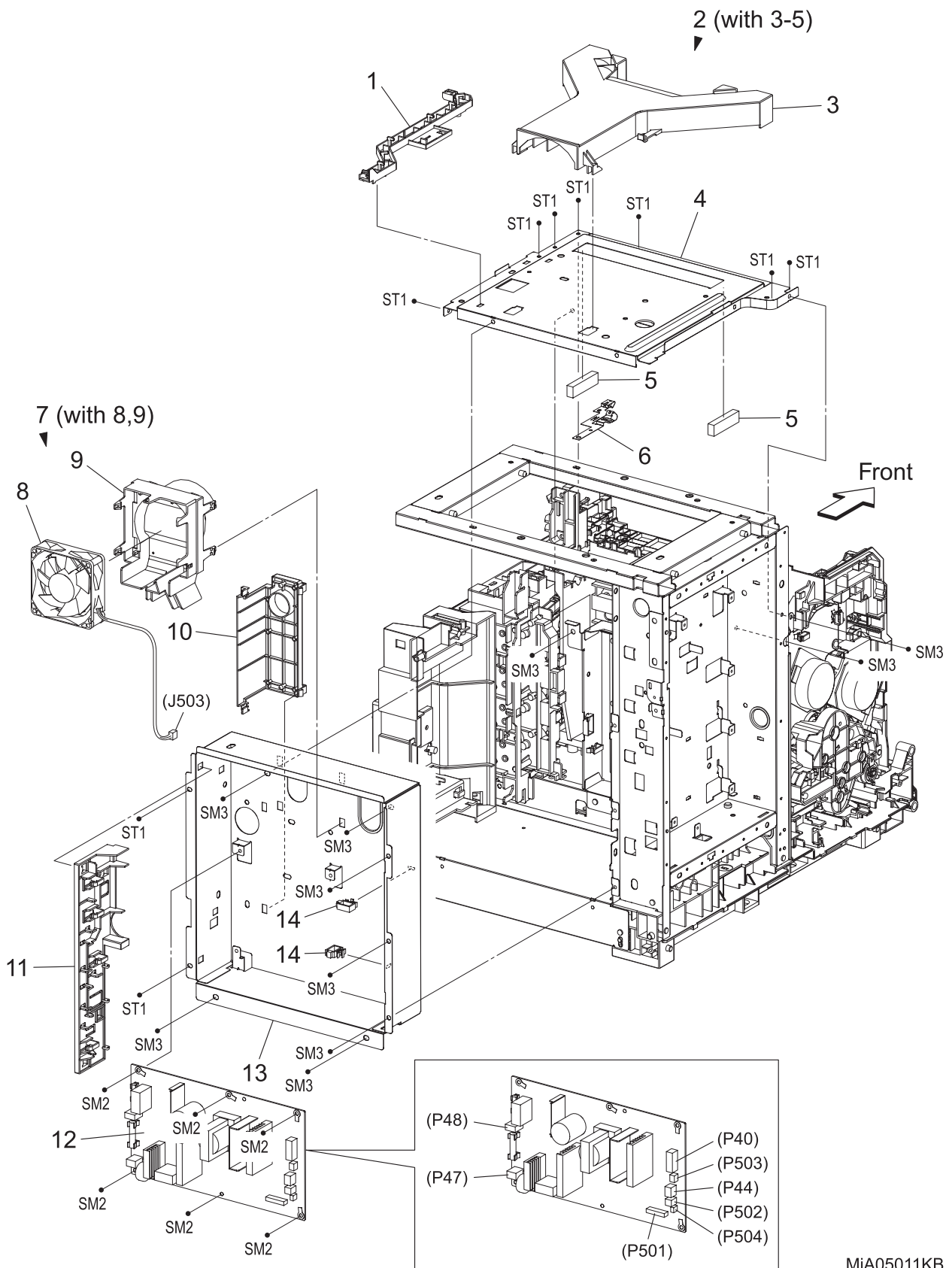


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PL8.1 Electrical & Frame AIO (1/4) [List]

Item	Parts name
1	HARN ASSY INTERLOCK AIO (SW-J44)
2	PWBA ESS AIO (with 3)
3	NVM ROM
4	MEMORY CARD (OPTION)
5	PWBA FAX
6	CAP PLUG RUBBER
7	SHIELD ASSY ESS AIO (with 8,9)
8	SHIELD ESS AIO
9	COVER INNER
10	SENSOR HUM
11	WIRELESS ADAPTER (OPTION)
12	--
99	KIT PWBA ESS AIO (with 2, Instruction)

PL8.2 Electrical & Frame AIO (2/4) [Illustration]

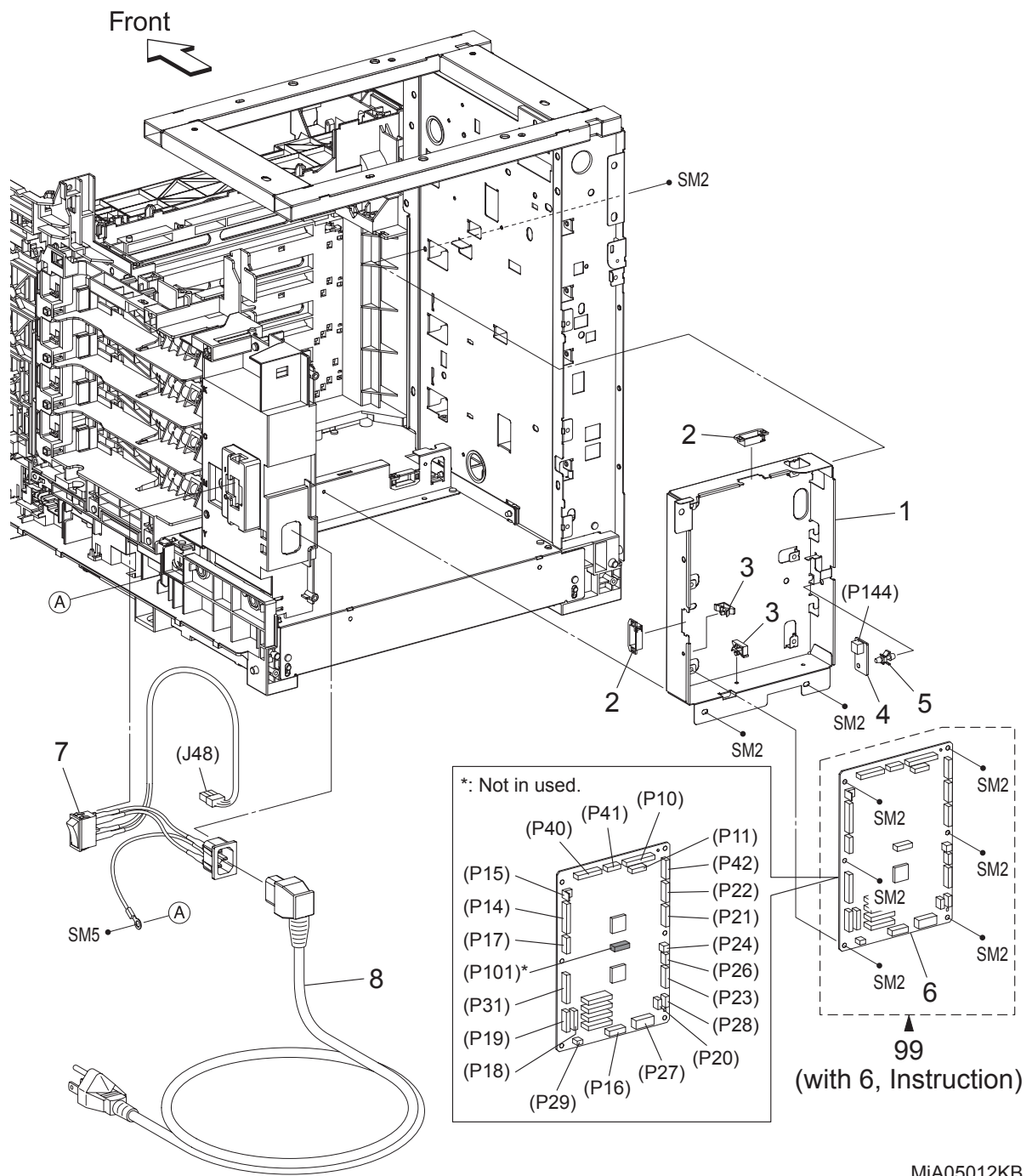


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PL8.2 Electrical & Frame AIO (2/4) [List]

Item	Parts name
1	GUIDE HARNESS FSR AIO
2	PLATE ASSY TOP (with 3-5)
3	DUCT PLATE
4	PLATE ASSY DUCT
5	SEAL PLATE
6	PLATE EARTH
7	DUCT FAN ASSY AIO (with 8,9)
8	FAN
9	DUCT FAN AIO
10	SHIELD HARNESS LVPS
11	GUIDE HARNESS LVPS
12	PWBA LVPS
13	CHASSIS LVPS
14	CLAMP RLWT-2V0

PL8.3 Electrical & Frame AIO (3/4) [Illustration]

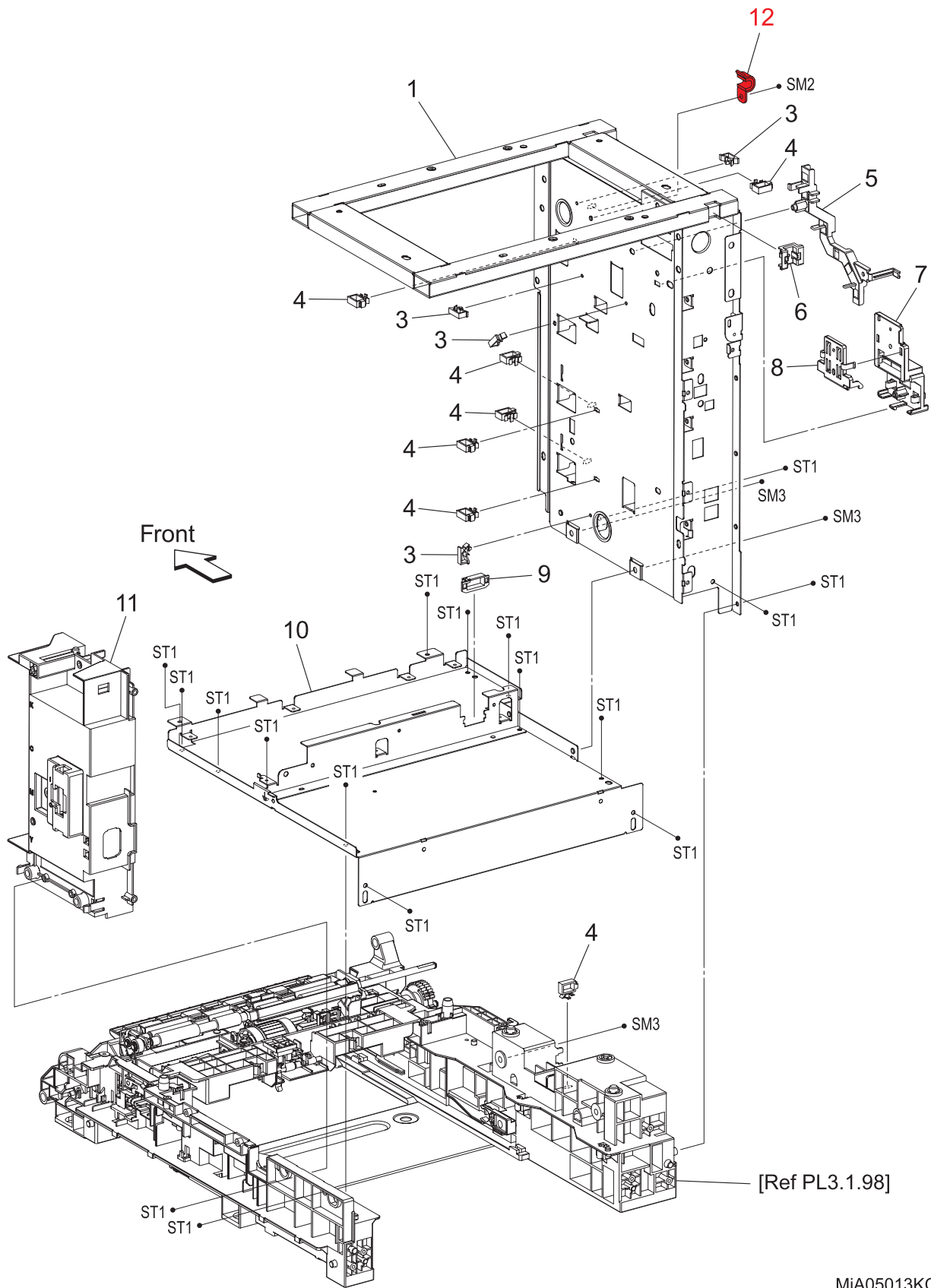


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PL8.3 Electrical & Frame AIO (3/4) [List]

Item	Parts name
1	CHASSIS MCU
2	EDGE SADDLE
3	CLAMP MST-10V0
4	PWBA EEPROM (XPRO)
5	SUPPORT PWB
6	PWBA MCU
7	SWITCH ASSY INLET MG AIO (AC INLET-MAIN SW,J48)
8	POWER CORD
99	KIT PWBA MCU (with 6, Instruction)

PL8.4 Electrical & Frame AIO (4/4) [Illustration]

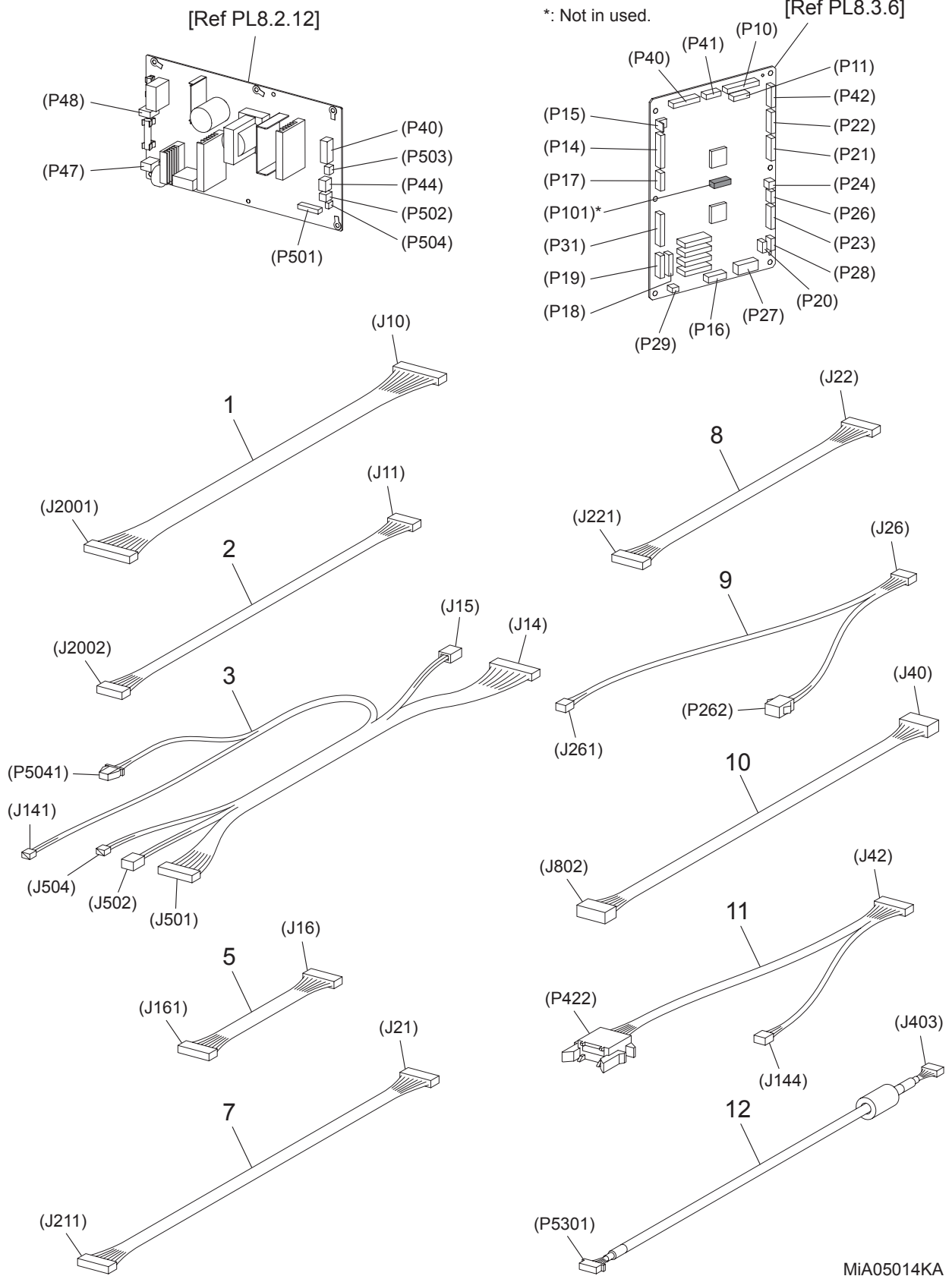


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PL8.4 Electrical & Frame AIO (4/4) [List]

Item	Parts name
1	FRAME ASSY AIO
2	--
3	CLAMP MST-10V0
4	CLAMP RLWT-2V0
5	GUIDE HARNESS USB
6	BUSHING EDGE
7	HOLDER FFC
8	COVER FFC
9	EDGE SADDLE
10	CHASSIS ASSY HVPS
11	CHASSIS INLET
12	CLAMP

PL9.1 Harness [Illustration]

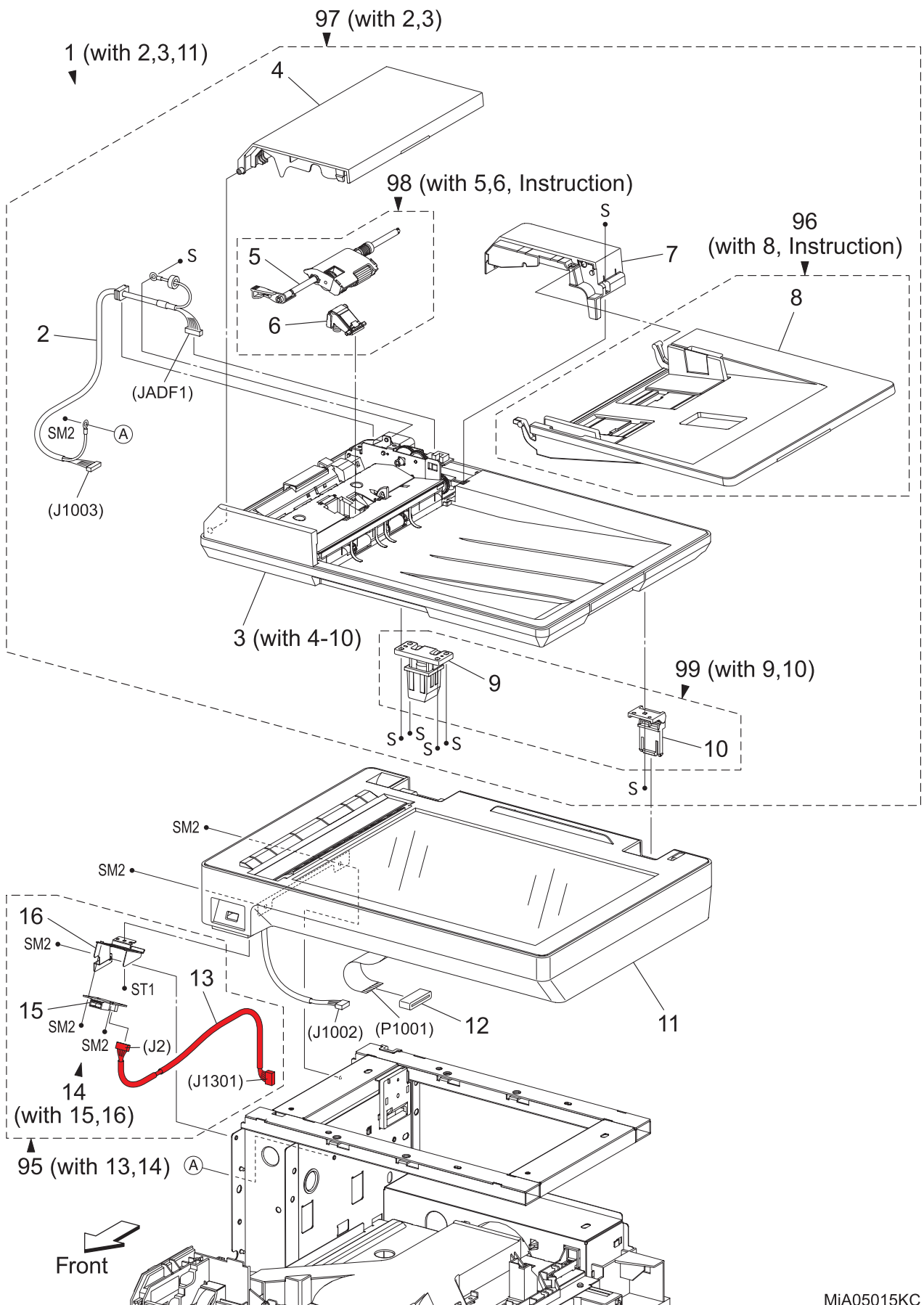


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PL9.1 Harness [List]

Item	Parts name
1	HARNESS ASSY ESS MG AIO (J10-J2001)
2	HARNESS ASSY ESS VIDEO MG AIO (J11-J2002)
3	HARNESS ASSY LVPS MAIN MG AIO (J14,J15,P5041-J141,J501,J502,J504)
4	--
5	HARN ASSY HVPS AIO (J16-J161)
6	--
7	HARNESS ASSY MAIN MOT MG AIO (J21-J211)
8	HARNESS ASSY SUB MOT MG AIO (J22-J221)
9	HARNESS ASSY KSNR REGCL MG AIO (J26-J261,P262)
10	HARNESS ASSY ESS PER MG AIO (J40-J802)
11	HARN ASSY PHD XPRO (J42-J144,P422)
12	HARNESS ASSY A-OP-ESS (J403-P5301)

PL10.1 Scanner Assy [Illustration]

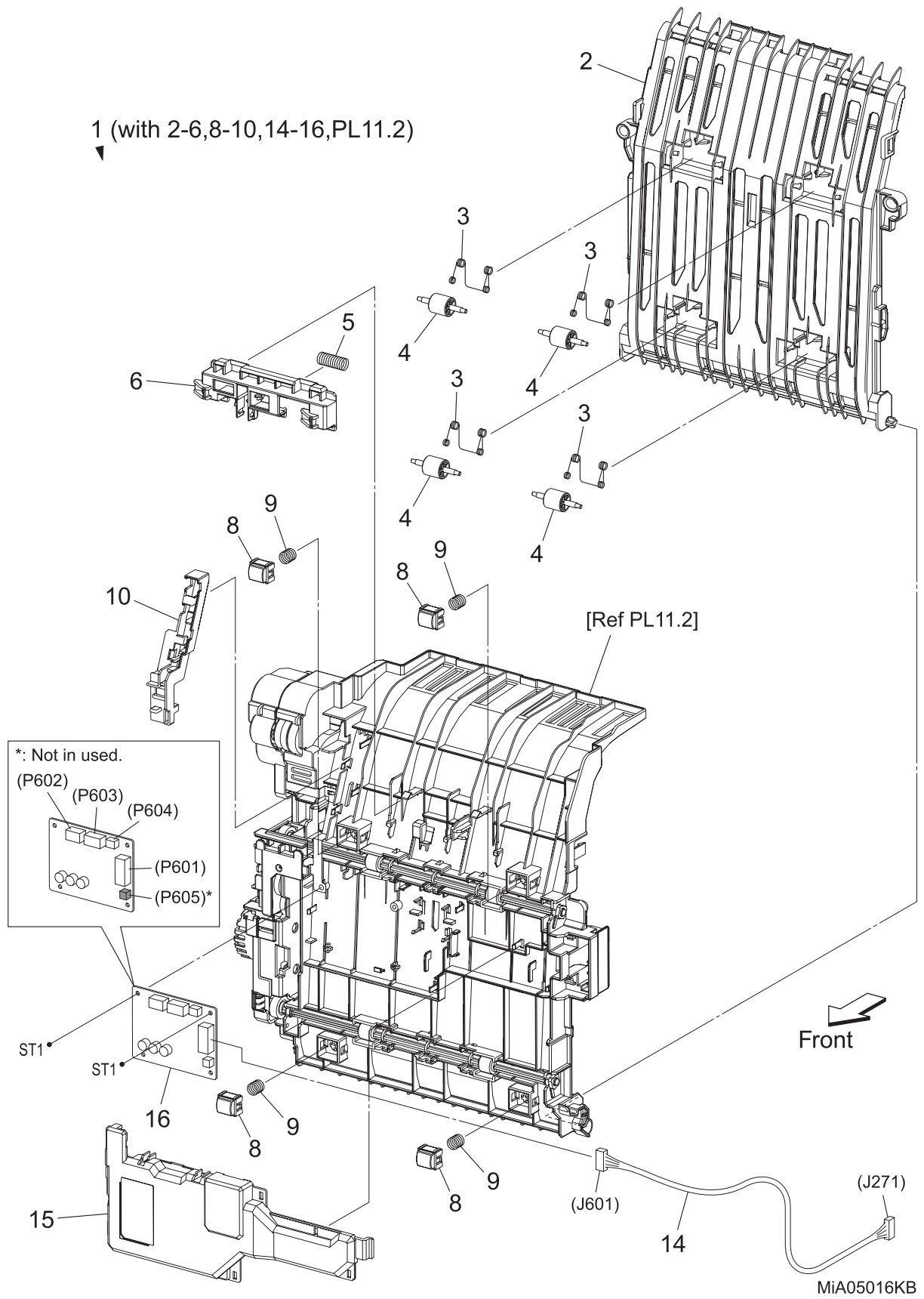


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PL10.1 Scanner Assy [List]

Item	Parts name
1	SCANNER ASSY (with 2,3,11)
2	HARN ASSY ADF (J1003-JADF1)
3	ADF ASSY (with 4-10)
4	COVER TOP ADF
5	ROLL ASSY FEED
6	PAD ASSY SEPARATOR
7	COVER ASSY REAR ADF
8	TRAY ASSY
9	COUNTER BALANCE L
10	COUNTER BALANCE R
11	IIT ASSY SUB
12	CORE FERR FFC
13	HARNESS ASSY FRONT USB (J2-J1301)
14	BRACKET ASSY USB (with 15,16)
15	PWB ASSY FRONT USB
16	BRACKET FRONT USB
95	KIT PWB ASSY FRONT USB (with 13,14)
96	KIT TRAY ASSY ADF (with 8, Instruction)
97	KIT ADF ASSY (with 2,3)
98	KIT ADF FEED ROLL & SEPARATOR ROLL (with 5,6, Instruction)
99	KIT COUNTER BALANCE (with 9,10)

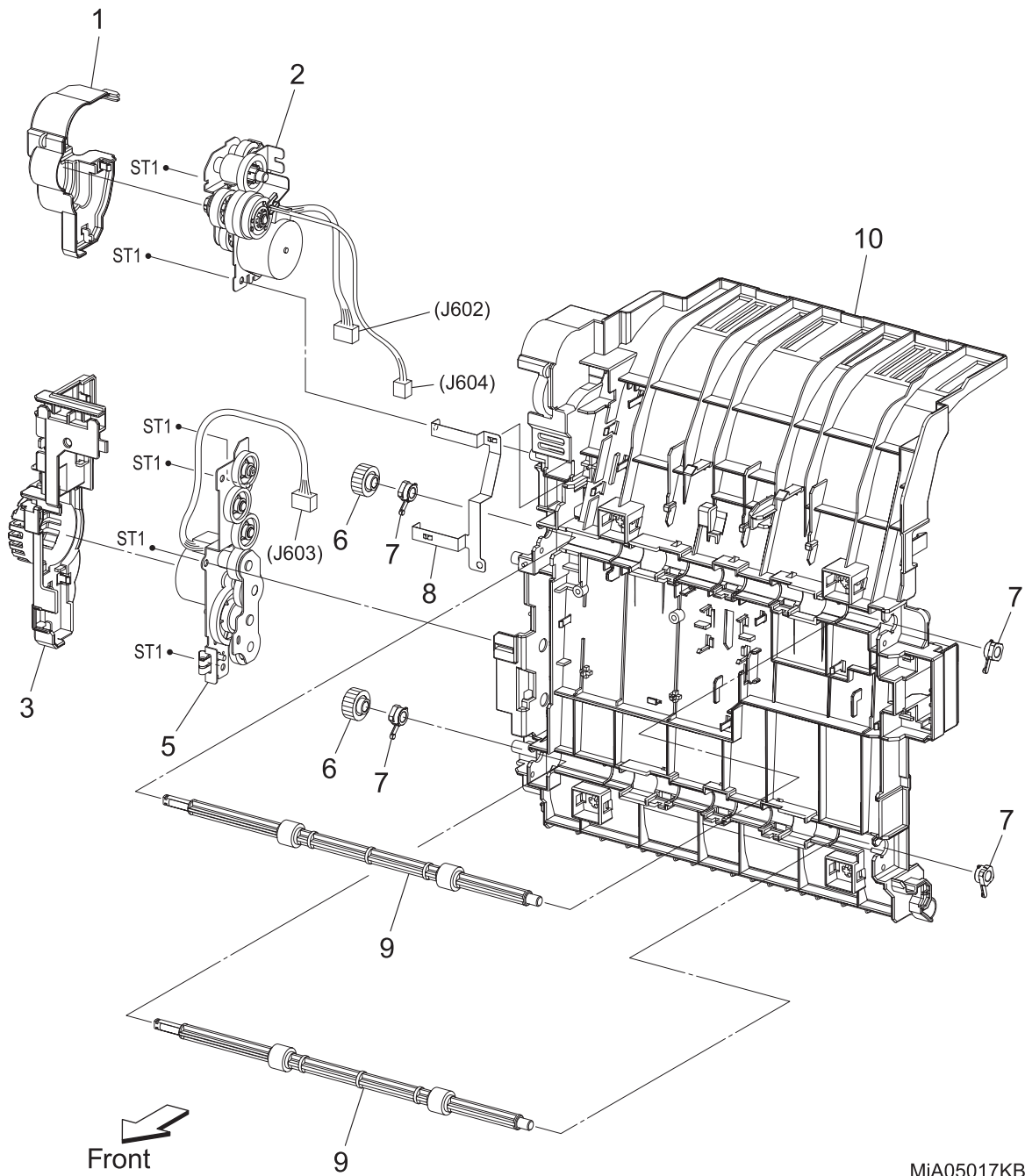
PL11.1 Duplex (2155cdn Only) (1/2) [Illustration]



PL11.1 Duplex (2155cdn Only) (1/2) [List]

Item	Parts name
1	FEEDER ASSY DUP AIO STD (with 2-6,8-10,14-16,PL11.2)
2	CHUTE DUP IN
3	SPRING PINCH DUP
4	ROLL PINCH DUP
5	SPRING LATCH DUP
6	LATCH DUP
7	--
8	HOLDER CHUTE DUP
9	SPRING CHUTE DUP
10	HOLDER HARNESS DUP
11	--
12	--
13	--
14	HARNESS ASSY DUP STD MG AIO (J271-J601)
15	COVER PWBA DUP
16	PWBA DUP

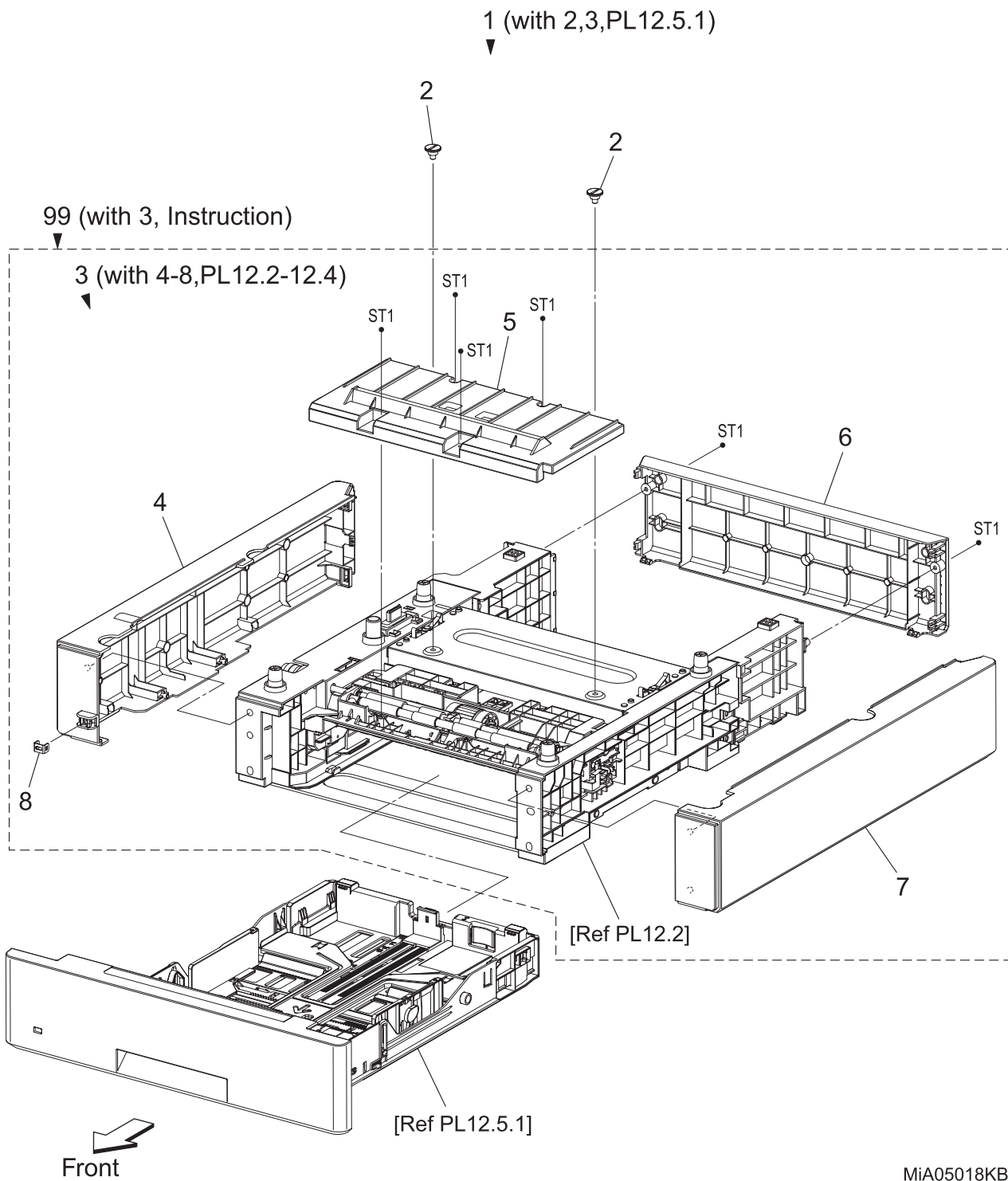
PL11.2 Duplex (2155cdn Only) (2/2) [Illustration]



PL11.2 Duplex (2155cdn Only) (2/2) [List]

Item	Parts name
1	COVER DRIVE EXIT
2	DRIVE ASSY EXIT
3	COVER DRIVE DUP
4	--
5	DRIVE ASSY DUP
6	GEAR ROLL DUP
7	BEARING DUP
8	PLATE EARTH PWBA
9	ROLLER ASSY DUP
10	CHUTE DUP FRAME

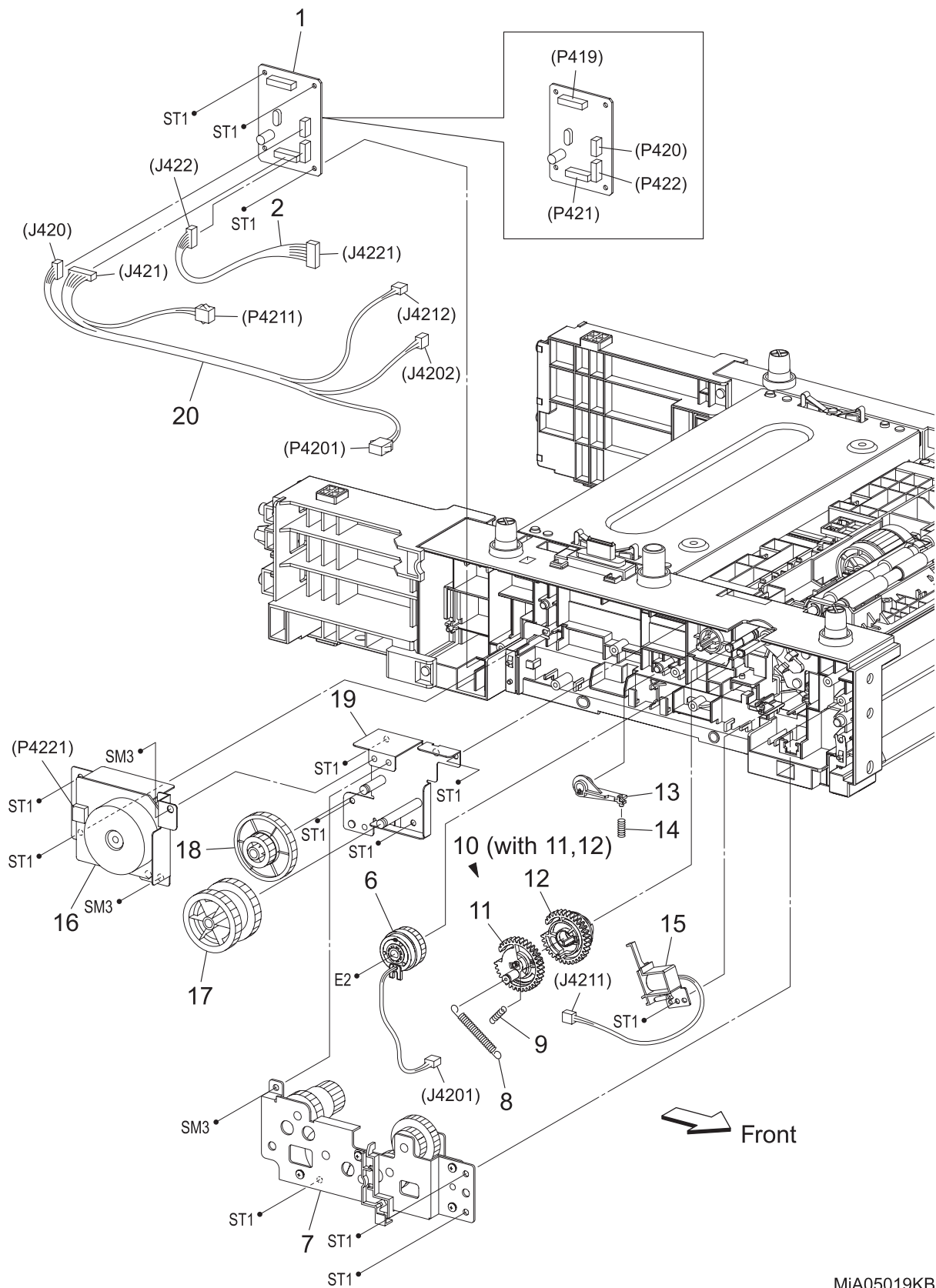
PL12.1 250 Feeder (Option) (1/5) [Illustration]



PL12.1 250 Feeder (Option) (1/5) [List]

Item	Parts name
1	250 OPTION FEEDER MG AIO (with 2,3,PL12.5.1)
2	SCREW JOINT
3	FEEDER ASSY OPT MG AIO (with 4-8,PL12.2-12.4)
4	COVER SIDE L OPT AIO
5	COVER CHUTE
6	COVER REAR OPT AIO
7	COVER SIDE R OPT AIO
8	PLATE LOCK
99	KIT FEEDER ASSY OPT MG AIO (with 3, Instruction)

PL12.2 250 Feeder (Option) (2/5) [Illustration]

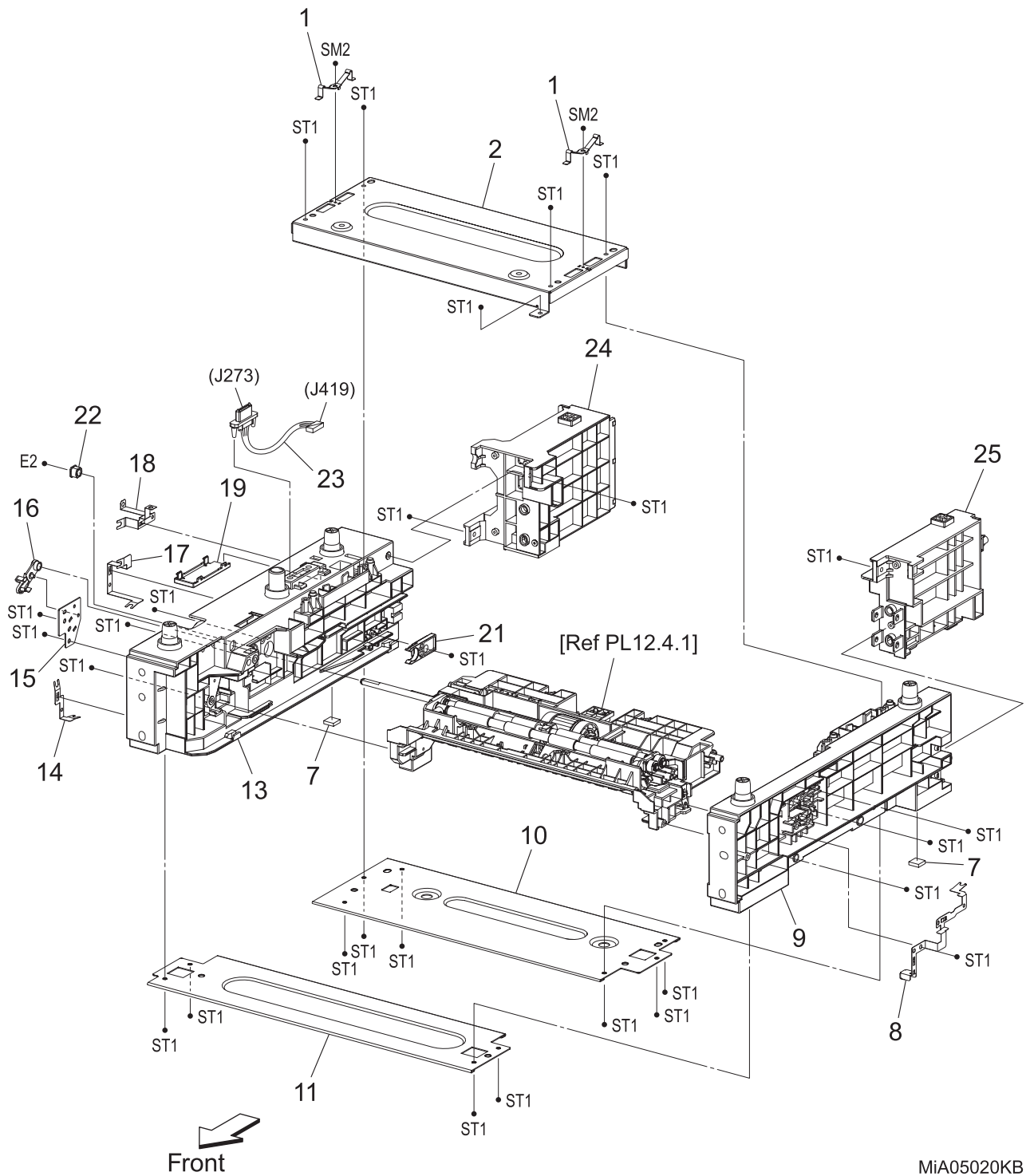


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PL12.2 250 Feeder (Option) (2/5) [List]

Item	Parts name
1	PWB ASSY FEED MG AIO
2	HARNESS ASSY TRAY MOT (J422-J4221)
3	--
4	--
5	--
6	CLUTCH ASSY DRV [Same as PL3.1.1]
7	GEAR ASSY IDLER
8	SPRING FEED OUT [Same as PL3.1.15]
9	SPRING FEED IN [Same as PL3.1.14]
10	GEAR ASSY FEED (with 11,12) [Same as PL3.1.19]
11	GEAR FEED OUT [Same as PL3.1.16]
12	GEAR FEED IN [Same as PL3.1.17]
13	LEVER FEED [Same as PL3.1.13]
14	SPRING LEVER [Same as PL3.1.12]
15	SOLENOID FEED MSI [Same as PL3.1.11]
16	MOTOR ASSY SUB
17	GEAR IDLE 40Z
18	GEAR IDLE 86-20Z
19	PLATE ASSY IDLE 1
20	HARNESS ASSY TRAY COMP (J420-J421-P4201,J4202,P4211,J4212)

PL12.3 250 Feeder (Option) (3/5) [Illustration]

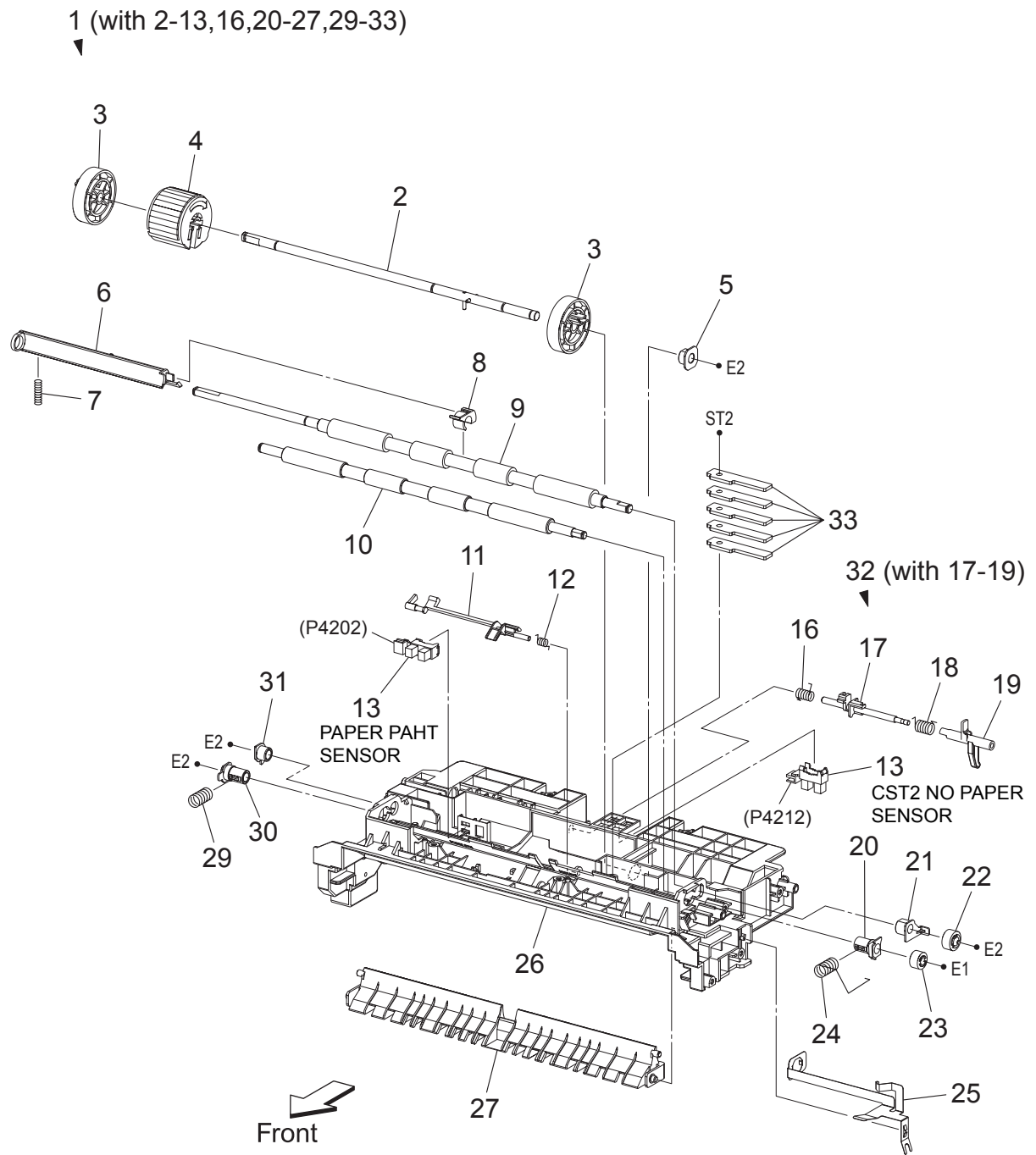


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PL12.3 250 Feeder (Option) (3/5) [List]

Item	Parts name
1	SPRING EARTH OPT
2	PLATE REAR TOP
3	--
4	--
5	--
6	--
7	FOOT ASSY [Same as PL3.1.5]
8	PLATE EARTH PH [Same as PL3.1.6]
9	CHASSIS FDR R OPT
10	PLATE REAR BOTTOM M
11	PLATE FRONT BOTTOM
12	--
13	CHASSIS FDR L OPT
14	PLATE EARTH FRONT BOTTOM
15	BRACKET SUP REGI
16	BEARING REGI [Same as PL3.1.2]
17	PLATE EARTH REAR BOTTOM
18	PLATE EARTH REAR TOP
19	COVER HARNESS DRAWER
20	--
21	STOPPER CST [Same as PL3.1.10]
22	BEARING [Same as PL3.1.9]
23	HARNESS ASSY TRAY (J273-J419)
24	BRACKET CHASSIS FDR L AIO
25	BRACKET CHASSIS FDR R AIO

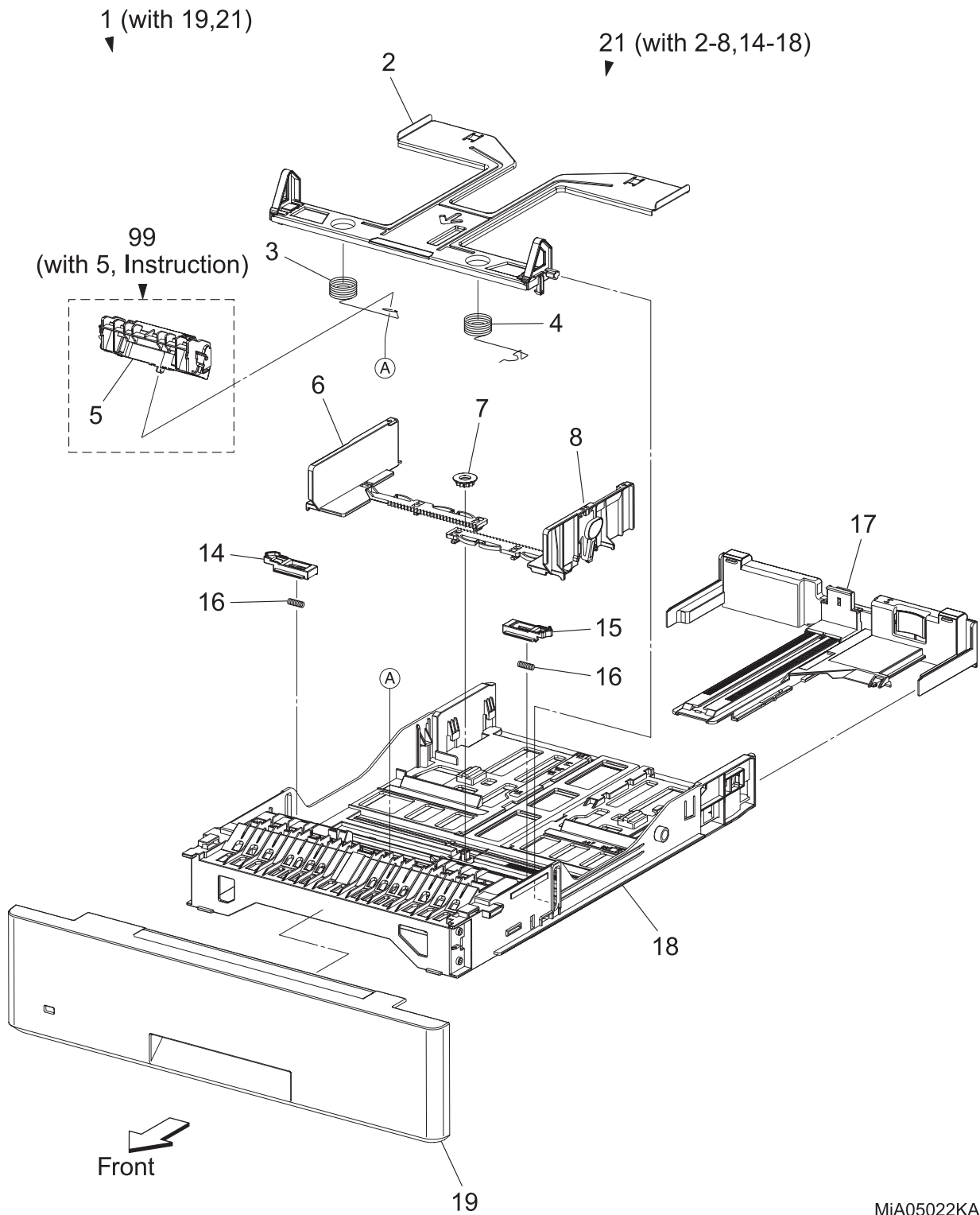
PL12.4 250 Feeder (Option) (4/5) [Illustration]



PL12.4 250 Feeder (Option) (4/5) [List]

Item	Parts name
1	CHUTE ASSY TURN (with 2-13,16,20-27,29-33)
2	SHAFT ASSY FEED [Same as PL3.2.2]
3	ROLL CORE MSI [Same as PL3.2.3]
4	ROLL ASSY FEED [Same as PL3.2.4]
5	BEARING EARTH [Same as PL3.2.5]
6	ACTUATOR REGI OUT [Same as PL3.2.6]
7	SPRING REGI OUT [Same as PL3.2.7]
8	ACTUATOR REGI ROLL
9	ROLL ASSY REGI
10	ROLL REGI METAL [Same as PL3.2.10]
11	ACTUATOR REGI IN
12	SPRING ACT REGI [Same as PL3.2.12]
13	SENSOR PHOTO [Same as PL3.2.13]
14	--
15	--
16	SPRING STP [Same as PL3.2.16]
17	STOPPER ACT [Same as PL3.2.17]
18	SPRING ACT NP [Same as PL3.2.18]
19	ACTUATOR NO PAPER [Same as PL3.2.19]
20	BEARING M EARTH [Same as PL3.2.20]
21	BEARING EARTH REGI [Same as PL3.2.21]
22	GEAR REGI R [Same as PL3.2.22]
23	GEAR REGI M [Same as PL3.2.23]
24	SPRING REGI R M
25	PLATE EARTH REGI [Same as PL3.2.25]
26	CHUTE UP [Same as PL3.2.26]
27	CHUTE LOW
28	--
29	SPRING REGI L M
30	BEARING M [Same as PL3.2.30]
31	BEARING R [Same as PL3.2.31]
32	ACTUATOR ASSY NO PAPER (with 17-19) [Same as PL3.2.32]
33	PLATE WEIGHT [Same as PL3.2.33]

PL12.5 250 Feeder (Option) (5/5) [Illustration]



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PL12.5 250 Feeder (Option) (5/5) [List]

Item	Parts name
1	CASSETTE ASSY 250 OPT MG AIO (with 19,21)
2	PLATE ASSY BOTTOM [Same as PL2.1.2]
3	SPRING N/F L [Same as PL2.1.3]
4	SPRING N/F R [Same as PL2.1.4]
5	HOLDER ASSY SEPARATOR [Same as PL2.1.5]
6	GUIDE SIDE L [Same as PL2.1.6]
7	GEAR PINION [Same as PL2.1.7]
8	GUIDE SIDE ASSY R [Same as PL2.1.8]
9	--
10	--
11	--
12	--
13	--
14	LATCH BOTTOM L [Same as PL2.1.14]
15	LATCH BOTTOM R [Same as PL2.1.15]
16	SPRING LATCH B [Same as PL2.1.16]
17	TRAY ASSY EXTENSION [Same as PL2.1.17]
18	HOUSING CASSETTE 250 [Same as PL2.1.18]
19	HANDLE ASSY CST OPT MG AIO
20	--
21	TRAY ASSY CST 250 AIO (with 2-8,14-18) [Same as PL2.1.21]
99	KIT HOLDER ASSY SEPARATOR (with 5, Instruction) [Same as PL2.1.99]

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1. Telephone System

1.1 Converting and Sending Voice in the Form of Electrical Signals

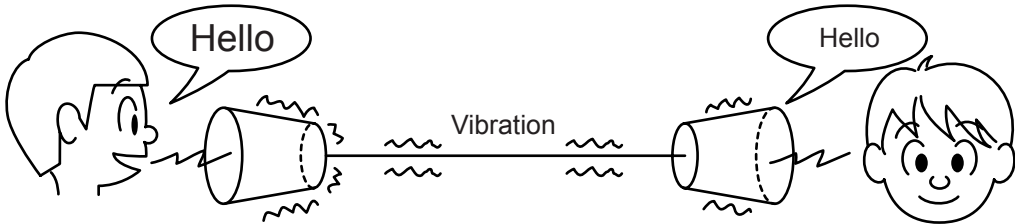
The human voice is a sound wave; in other words, air vibrations. Conversation between two people results when such vibrations travel through the air and reach each other's ears. A string telephone transmits the air vibrations generated between two people along a string stretched tight, thus allowing conversation over a distance. In this system, a paper cup at one end of the string receives the air vibrations, which are then transmitted along the string. A paper cup at the other end of the string transmits them back to the air, so that they again become again audible sound waves.

A telephone is a device that replaces the vibrations transmitted by string with electrical signals. The two paper cups correspond to microphone and speaker and the string to the telephone line. Because electrical signals travel over the telephone line at a high speed with minimal attenuation, the telephone enables conversation over great distances.

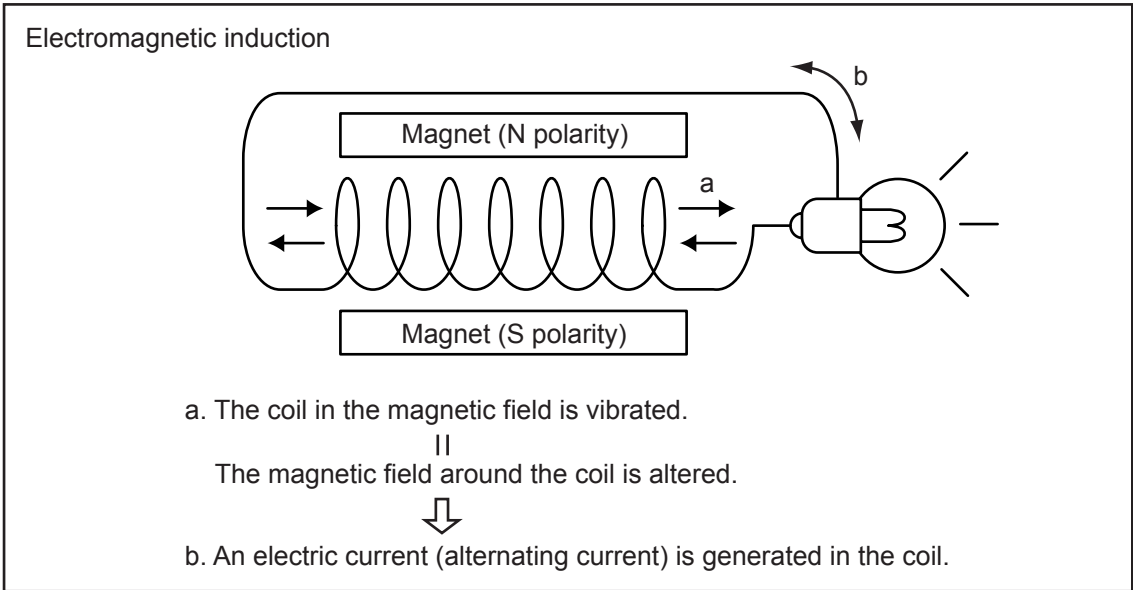
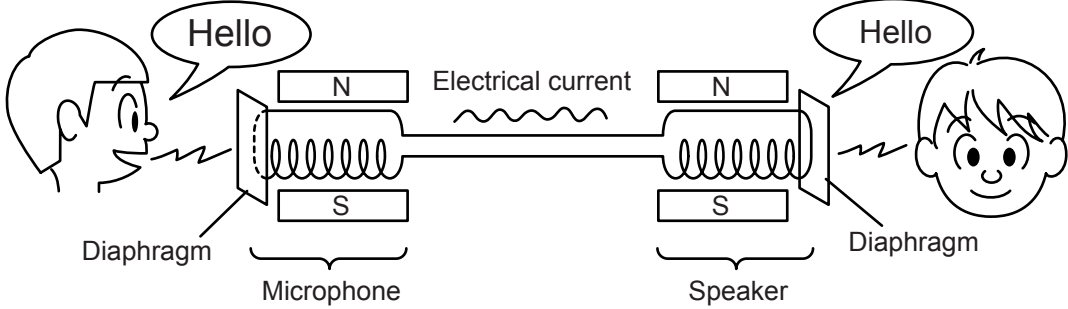
Voice is changed into electrical signals using electromagnetic induction, a process by which electrical signals are generated by vibrating a coil in a magnetic field. Both the microphone and speaker exploit this process. The microphone transduces sound into electrical signals using electromagnetic induction that occurs at a moving coil coupled to a diaphragm picking up air vibrations.

On the other hand, the speaker functions in the reverse manner, transducing electrical signals back to air vibrations. Therefore, its construction is basically the same as that of a microphone. Electrical signals passing through a coil in the magnetic field vibrate the coil, which in turn vibrates the air to reproduce the voice.

String telephone



Telephone



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These electrical signals are analog signals that fluctuate in response to the volume of the voice.

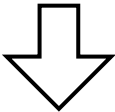
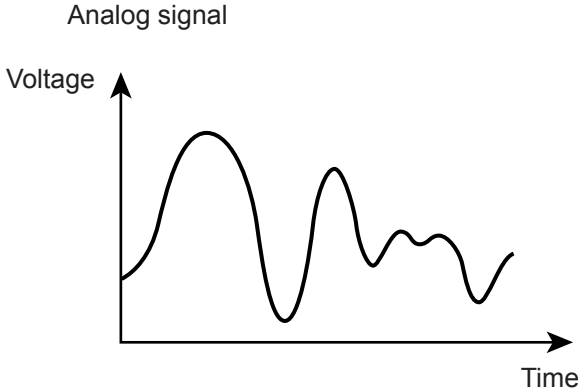
1.2 Analog and Digital Signals

An electrical signal generated by the telephone's microphone is an analog signal. The waveform of this analog signal fluctuates responsive to the voice volume. When the voice is loud, the amplitude (voltage) increases; when soft, the amplitude decreases. When the voice is high-pitched, the frequency (number of vibrations) increases; when low-pitched, the frequency decreases.

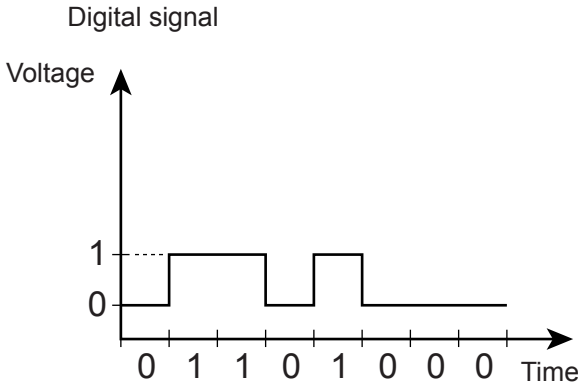
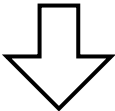
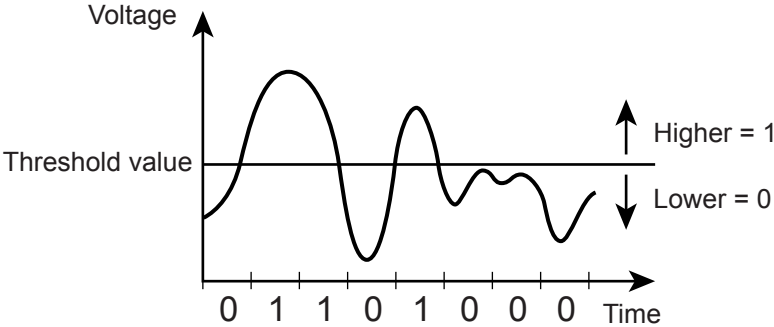
A signal whose values change in a continuous manner with time like this is called an analog signal. In contrast, a digital signal is a set of values that change with time in a discrete instead of continuous manner. In other words, an analog signal is like a hill. A digital signal is like stairs.

A digital signal is a series of values obtained by sampling a continuous analog signal at a certain required rate. For example, when sampling is by time, the rate is once a second, millisecond, etc. Because the sampling reduces the amount of data along the time axis, the converted signal is compressed and smaller in data size. Thus, once digitized, the signal information is thinned out compared to the original analog signal.

Moreover, digital signal transmission is performed by dividing a continuously changing electrical signal according to a certain rate of time, then converting each division to a value of 1 or 0, depending on whether it is greater or less than a specified threshold value. Compared to an analog signal, a digital signal offers precise data exchange because the only change that must be handled is that between 1 (high voltage) and 0 (low voltage) with respect to a standard value (the threshold value).



The signal is converted to 1 or 0 depending on whether it is higher or lower than a threshold value. In other words, the waveform is quantified.



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NOTE

The difference between analog and digital signals can be easily understood by comparing analog measuring instruments, such as clocks and scales with their needles and gradations to digital gauges that display results as a value. An analog instrument with a continuously moving needle, can, at least in theory, be read beyond the decimal point to infinitely small divisions (12.47253... g, 35.1864... g, etc.). A digital instrument, however, can only display results to the minimum necessary decimal place (12.5 g, 35.0 g, etc.).

NOTE

Conversion of an analog signal to digital signal is called AD conversion. The reverse is called DA conversion. Image data read by a FAX is a digital signal in which 0s and 1s are assigned according to whether or not there is black in the squares of a paper surface divided into a grid. FAX communications that use an analog telephone network perform DA conversion before transmitting the scanned image from the phone, and AD conversion before printing the received data.

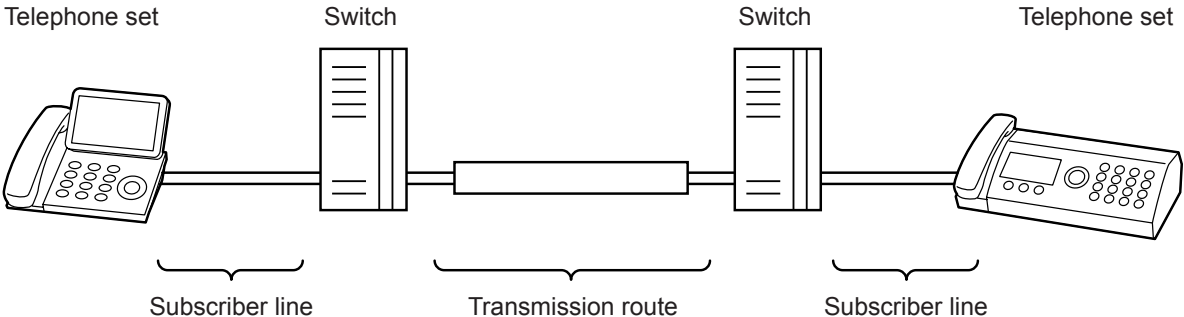
2. Telephone Call Connection Mechanism

2.1 Analog Telephone Network

To make a telephone call, the calling party and called party each must have a telephone set (telephone). These telephones must be connected by a transmission route. The transmission route includes switches located in central offices. The route itself comprises various components such as metallic cable and optical cable. The entire transmission path between the two telephones is called an analog telephone network.

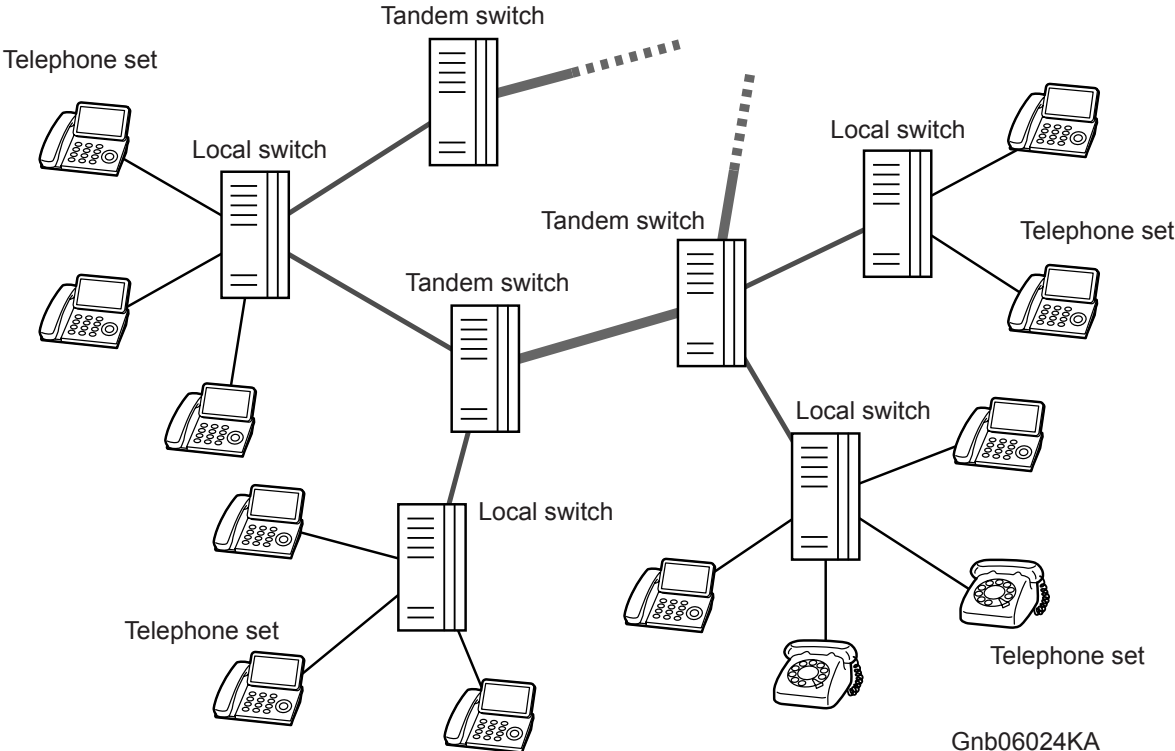
An analog telephone network comprises the following four parts:

■ Analog Telephone Network Configuration



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■ Switching Equipment Network



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2.2 Telephone Call Connection Mechanism

- 1) When the handset is lifted, the hook switch is activated and a transmission signal (400Hz/48VDC), called a dial tone (DT), is sent from the local switch. The dial tone is audible at the handset speaker, indicating that the calling party can start dialing.
- 2) Entering the telephone number by rotating the dial or pushing the buttons transmits the number to the local switch.

NOTE

There are two types of telephone line corresponding to the two ways of transmitting the phone number. They are known as dial types. Most recent telephones can automatically distinguish the dial type.

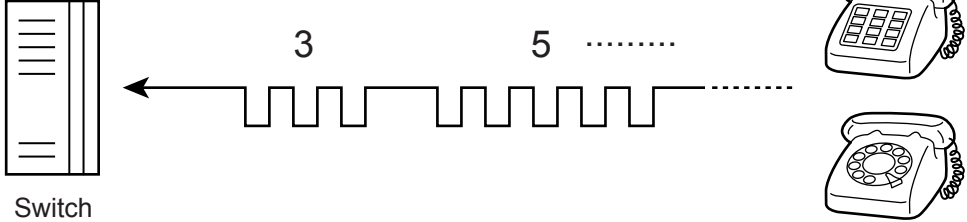
One type is "Pulse Dialing (PD)", also called "Dial Pulse (DP)". After the rotary dial on a dial phone is rotated, the dial returns to its original position. While returning, the electric current is interrupted (dividing the signal into pulses) the number of times corresponding to the number dialed. The switch derives the number from the number of pulses. When the pulse repetition rate is ten pulses per second, it is referred to as 10PPS (Pulses Per Second), when twenty, 20PPS.

The other type is a method known as "Tone Dialing (TD)", formally called "Dual-Tone Multi-Frequency (DTMF)". Each button on a push-button phone is assigned a unique pair of frequencies (the "tone"), from which the switch derives the number.

■ Pulse Dialing & Tone Dialing

Pulse dialing

"3, 5,"



Tone dialing

"3, 5, 2,"



DTMF matrix

1	2	3	697Hz	} Low frequency
4	5	6	770Hz	
7	8	9	852Hz	
*	0	#	941Hz	
1209Hz 1336Hz 1447Hz				} High frequency

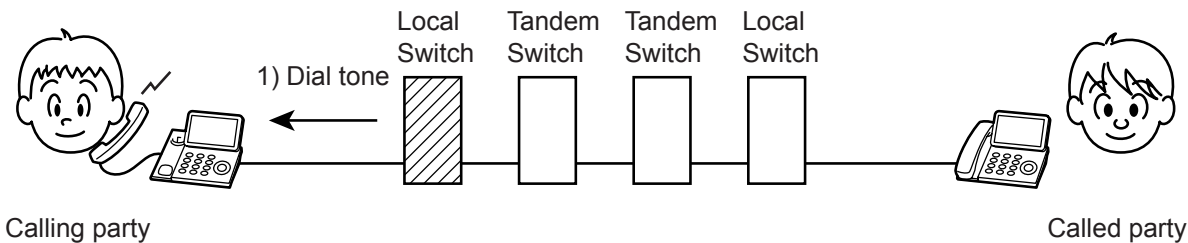
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- 3) The switch connects lines according to the transmitted number.
- 4) When a connection between local switches is established, the local switch of the called party sends a ringing signal to the telephone of the called party. The telephone that receives the ringing signal emits its ringtone. At the same time, the called party's local switch sends a ring back tone (RBT) to the calling party's telephone to indicate that a connection to the called party has been established.

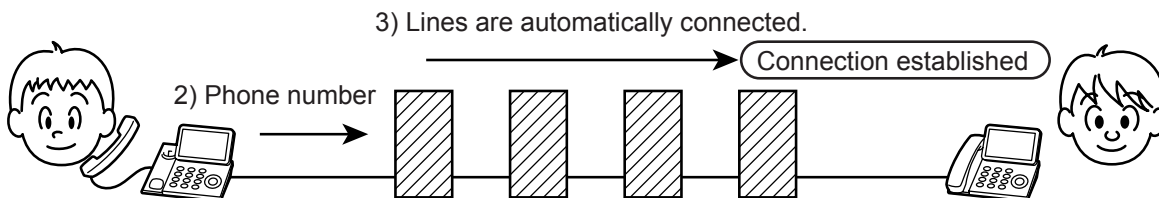
- 5) When the called party's handset is lifted, activating the hook switch, the local switch on the called party side receives a response signal and stops sending tones to the calling and called parties. This is when a communications path is established between the both parties.

■ Connecting Out-of-Town Calls

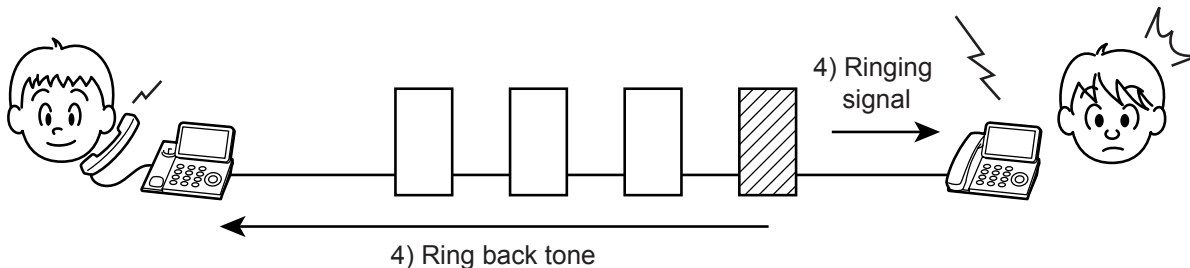
a. Lift the handset



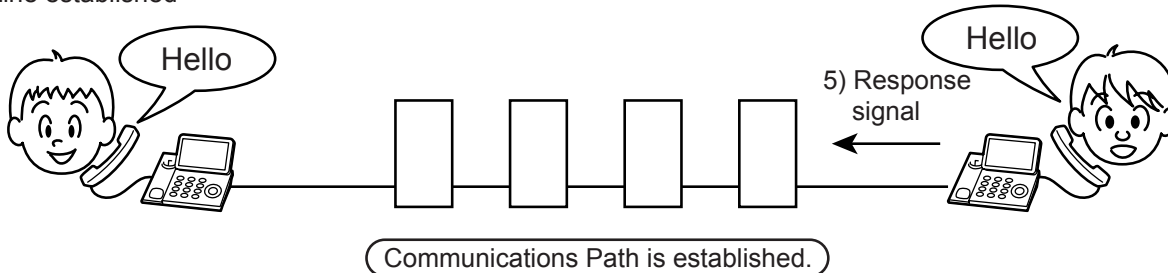
b. Dial the number



c. Calling



d. Line established



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3. Terminology

■ Line Types

- PSTN (Public Switched Telephone Network): Analog telephone network.
- If there is no switch on site, set the line type to PSTN.
- PBX (Private Branch Exchange): On-site switch that connects multiple analog telephones to a single line to establish an in-house phone system.
- If there is a switch on site, set the line type to PBX.

■ Dial Types

- Tone (Push) Dial/Pulse Dial (10PPS)/Pulse Dial (20PPS): See 2.2 Telephone Call Connection Mechanism

■ Other

- Branch Connection: To connect multiple telephones to a single line in parallel. Telephones and FAXes may not function properly in this configuration.

4. FAX System (Overview)

A FAX (abbreviation of facsimile) is a device that sends and receives image data using either an analog or a digital telephone line. The following describes the analog line system (For G3, see 6. FAX Standards).

The three basic units of a FAX are the scanner (for reading the image), the control circuit, and the printer.

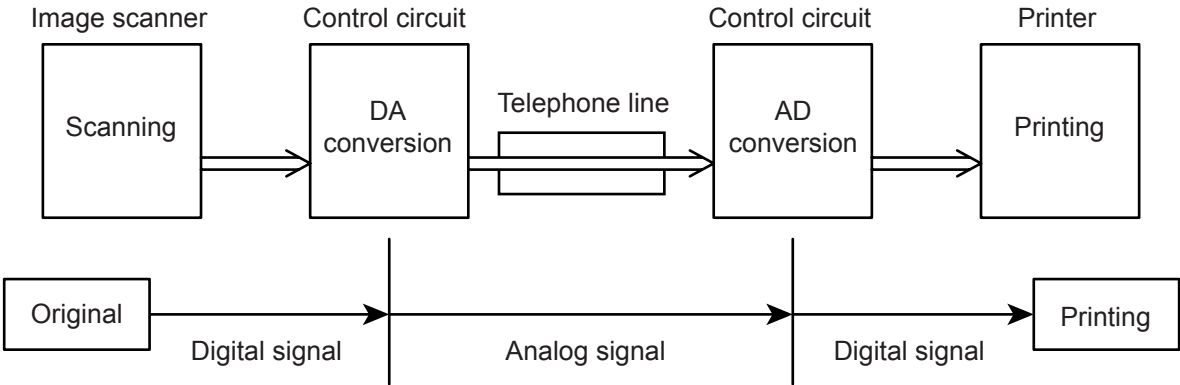
The scanner splits the image into a fine grid, then reads the brightness (white/black) of each cell. This operation is called scanning. The white/black information is converted to a digital signal: bright cells become 1, dark cells 0.

The digital signal from a scanned image is subjected to DA conversion (modulation) by the control circuit to enable transmission over an analog telephone line. After conversion, the data is sent as an analog signal. The sound audible during transmission is image data that has become an analog signal, that is, an audio signal.

The analog signal arriving over the telephone line is then subjected to AD conversion (demodulation) by the control circuit of the receiving FAX machine, and restored to a digital signal.

The black/white information obtained from the AD conversion is sent to the printer, where black cells are reproduced on the paper at the positions where they were on the original.

■ FAX System (Overview)



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Blank Page

5. Unit Mechanisms

■ Scanner

The scanner consists of a lamp (fluorescent lamp, etc.) that illuminates the original document with uniform light and charged coupled device (CCD) that reads the light reflected from the image.

A CCD is a light-receiving element that produces an electrical signal in response to light. In the case of a FAX, a number of CCDs (e.g. 2048) are arranged in a line.

The white areas of the original document reflect the light from the lamp. The black areas reflect no light. The CCDs read the light reflected from the original, outputting sequentially to the control circuit which areas are white and which black as binary data (1/0 digital data: 1 bit).

NOTE

To scan the original, the CCD device must be shifted a distance of one line after each line is scanned. When the original is scanned on the platen glass (as for a flatbed scanner), the CCD unit is moved with respect to the original. In the case of a FAX equipped with the ADF (Automatic Document Feeder), scanning via the ADF is performed by moving the original with the CCD fixed at one position. This is known as constant velocity transport (CVT).

NOTE

During scanning, the finer the grid into which the original is divided, the greater the scanning precision of the original image. For a G3 FAX (normal mode: G3 Normal), scanning is performed at the resolution of 8 divisions per millimeter (200 dpi) in the horizontal direction and 3.85 divisions per millimeter in the vertical direction. This means that the 200 dpi in-line CCD unit is shifted approximately four times per millimeter in the vertical direction. For an A4 original, the data amounts to approximately two million pixels. In the high-quality mode (G3 Fine), scanning resolution is 8 divisions per millimeter in the horizontal direction and 7.7 divisions per millimeter in the vertical direction, where the data amounts to approximately four million pixels. As resolution increases, the amount of data also increases, lengthening the transmission time.

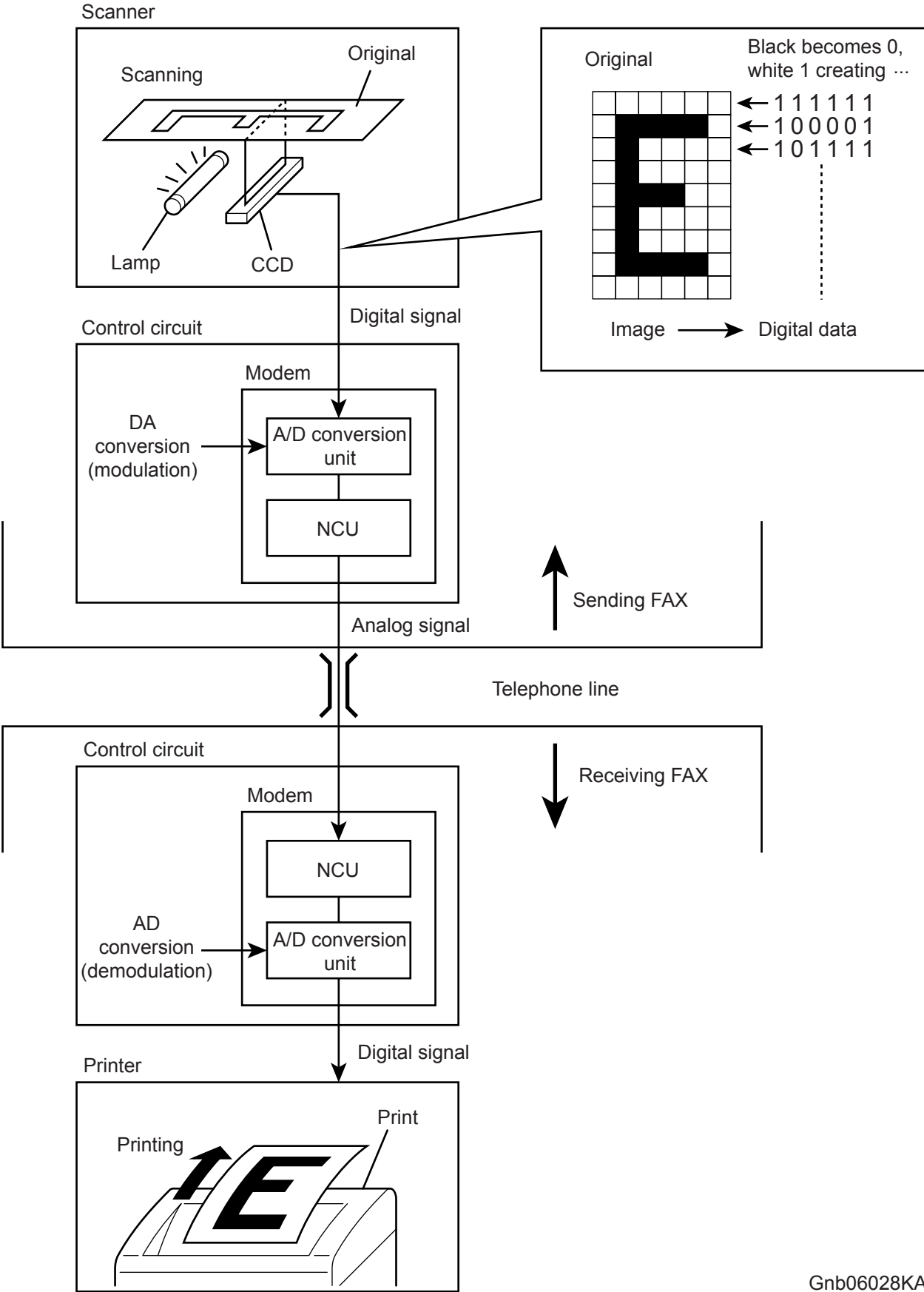
■ Control Circuit

The control circuit executes scanning of image data by controlling the image scanner. A line of CCDs scans the original image one line at a time. When scanning of one horizontal line is completed, the next line below is scanned. As this continues, the original is scanned from end to end one line at a time and converted to digital data as black-and-white information.

Because this image data is a set of digital signals, it cannot be transmitted using an analog telephone line. It must be subjected to DA conversion (modulation). On the other hand, the receiving FAX machine must perform AD conversion to restore the incoming digital data to analog data.

DA conversion, analog signal transmission, analog signal reception, and AD conversion are all performed by a modem (modulator/demodulator) in the control circuit. A modem consists of a network control unit (NCU) for connecting to the telephone line and an A/D conversion unit for performing DA and AD conversions.

■ FAX System (Detail)



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NOTE

After the telephone number is entered, the NCU automatically performs steps 1 and 2 of the line connection procedure described in 2.2 Telephone Call Connection Mechanism.

If on the receiving end, step 6 is automatically performed to answer.

The following is the line connection procedure between two FAXes based on the steps 1 to 5 of 2.2 Telephone Call Connection Mechanism. At the receiving FAX, step 6 is also automatically performed.

- 1) When an AT command (a modem control command) is sent from the control circuit to the modem, the hook switch is activated, and a state is obtained that is identical to that when the handset of a telephone is lifted. A dial tone (400Hz/48VDC) is sent from the local switch. The modem's speaker emits the dial tone as an audible sound.
- 2) After image scanning, the telephone number (a previously stored number, number entered by pressing phone buttons, etc.) is automatically dialed and transmitted to the local switch.
- 3) Steps 3, 4, and 5 for establishing a connection via the switches are identical to those for telephone.
- 6) The receiving party's FAX automatically answers when it receives the call signal, and the hook switch is activated. The local switch on the receiving party side receives a response signal and stops sending tones to the sending and receiving parties, thereby establishing a communications path between the both parties.

In the case of a telephone call, only voice conversion between the two parties follows. For FAX, preparation for delivery of image data is required that includes the following types of exchanges:

- The sending FAX indicates that the transmission is a FAX transmission.
- The receiving FAX indicates that it is ready to receive and also its communications capacity.
- The sending FAX then sends data in accordance with the receiving FAX's communications capacity.

Once mutual preparation is completed, image data sending and receiving is started. Image data is modulated into an analog signal by the A/D converter at the sending FAX, then sent from its NCU. Image data received by the NCU of the receiving FAX is demodulated into a digital signal by its A/D converter and then sent to the control circuit. When image data reception is completed, the FAX automatically disconnects the line (hook is OFF).

In summary, the NCU automatically executes a series of such operations from hook switch ON to hook switch OFF.

NOTE

The control circuit also retains other important functions such as data compression and memory. With data compression, any part of the scanned image data that consists of continuous white or black pixels is encoded into a single element, thus compressing the volume of data.

Memory temporarily stores data during transmission and reception.

■ Printer

The printer prints image data from the control circuit onto the surface of paper. The principle is the same as that of an ordinary printer in that black is applied to specified locations on the paper.

6. FAX Standards (ITU-T Recommendations)

International FAX standards (ITU-T recommendations) include G1 to G4. G1 to G3 use analog telephone networks. G4 uses a digital telephone network (ISDN). G3 is the standard currently in greatest use. FAXes conforming to Super G3, a recently added standard, are equipped with a fast 33.6kps modem and reduce transmission times to about half those of G3 FAXes.

Standard	Year Issued	Minimum Transmission Time for Single-Page A4 Document	Maximum Resolution	Maximum Transmission Speed	Features
Group 1 (G1)	1968	Approx. 6 min.	100 x 100dpi	- (Analog)	First standard. Analog transmission. No band compression technology
Group 2 (G2)	1976	Approx. 3 min.	100 x 100dpi	- (Analog)	Analog transmission. Band compression technology adopted.
Group 3 (G3)	1980	Approx. 1 min (14.4kbps) Approx. 3 sec (33.6kbps)	600 x 600dpi	14.4kbps (Super G3: 33.6kbps)	Connection to analog line using FAX modem. Image data in digital format. Data compression. Most common standard in use.
Group 4 (G4)	1988	Approx. 3 sec.	400 x 400dpi	64kbps (Using ISDN)	Digital transmission. Supported by various digital transmission services. Halftone supported.

7. Fault Isolation Procedure for FAX

Because a FAX is composed of multiple blocks, pinpointing a fault is problematic.

This section describes a simple fault isolation procedure that is based on the contents of 4. FAX System (Overview).

7.1 Fault Occurs

First, try using the copy function. If the copy function's printing results are correct, the probability of a fault in the FAX itself is low. The fault is likely in the telephone line or receiving FAX. If the fault is in the telephone line, first retry sending. If there is no improvement, contact the telephone company. If the copy function's printing results are incorrect, it can be determined if the fault is in the scanner or printer by operating each unit separately via a computer.

7.2 Send Fault

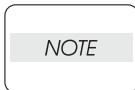
- 1) Problem with printing quality at receiving FAX, such as corrupt image, lines in image, top/bottom cut off.

- a) If copy function is normal

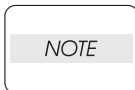
Cause: Degraded telephone line connection caused by noise, etc.; or a fault in receiving FAX's printer.

Corrective Action:

Determine whether fault is in telephone line or at receiving FAX by trying copy function at receiving FAX.



If the telephone line condition is degraded, white horizontal lines, missing rows, and/or cut-off top/bottom may occur.



Branch connections or incoming call (call waiting) may also cause image corruption.

- b) If copy function is faulty

Cause: Dirt or fault in scanner.

Corrective Action:

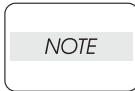
Clean platen glass or repair scanner. If the original is being sent from the ADF, try executing a copy with the original placed on the platen glass. If this solves the problem, the fault is in the ADF.

2) Cannot dial

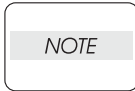
Cause: Incorrect connection. Incorrect setup of dial type and/or line type.

Corrective Action:

Correct the connection. Reset the dial type and/or line type to correct settings.



If the telephone line condition is degraded, white horizontal lines, missing rows, and/or cut-off top/bottom may occur.



Branch connections or incoming call (call waiting) may also cause image corruption.

7.3 Receive Fault

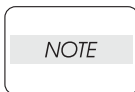
1) Problem with printing quality, such as corrupt image, lines in image, top/bottom cut off.

a) If copy function is normal

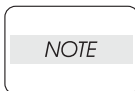
Cause: Degraded telephone line connection caused by noise, etc.; or a fault in sending FAX's scanner.

Corrective Action:

Determine whether fault is in telephone line or at sending FAX by trying copy function at receiving FAX.



If the telephone line condition is degraded, white horizontal lines, missing rows, and/or cut-off top/bottom may occur.



Branch connections or an incoming call (call waiting) may also cause image corruption.

b) If copy function is faulty

Cause: Dirt or fault in printer.

Corrective Action:

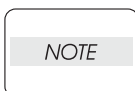
Clean all parts of printer or repair printer.

2) Does not emit response signal

Cause: Incorrect connection. Incorrect setup of dial type, line type, and/or reception mode.

Corrective Action:

Correct the connection. Reset the dial type, line type, and/or receive mode to correct settings.



If a call is made to the FAX from a telephone, and the FAX does not emit its ringing sound, a telephone line fault is highly probable.

8. Other Problems

■ Branch Connection (Parallel Connection)

During FAX reception, if the handset of another telephone on a branch connection is lifted, the received image may be corrupted or a transmission error may occur. Branch connection may also interfere with caller identification, call waiting, the receiving operation of connected telephones.

■ Call Waiting

If a call comes in during FAX sending/reception, as with branch connections the image may be corrupted.

■ DSL (Digital Subscriber Line)

DSL, a high-speed digital transmission method using existing telephone lines, has several types. These include ADSL (Asymmetric Digital Subscriber Line) with differing upstream and downstream transmission speeds, SDSL (Symmetric Digital Subscriber Line) with symmetrical upstream and downstream transmission speeds, and VDSL (Very high bit rate Digital Subscriber Line) which features higher speed. However, because the line is used for both voice and data transmission, various problems may occur, such as noise during spoken conversation, low sound volume, and mis-dialing. Replacing the splitter may improve the situation.

■ Noise

If electronic equipment (television, computer, microwave, etc.) or devices equipped with motors are located near a FAX, noise from them may degrade the line condition.

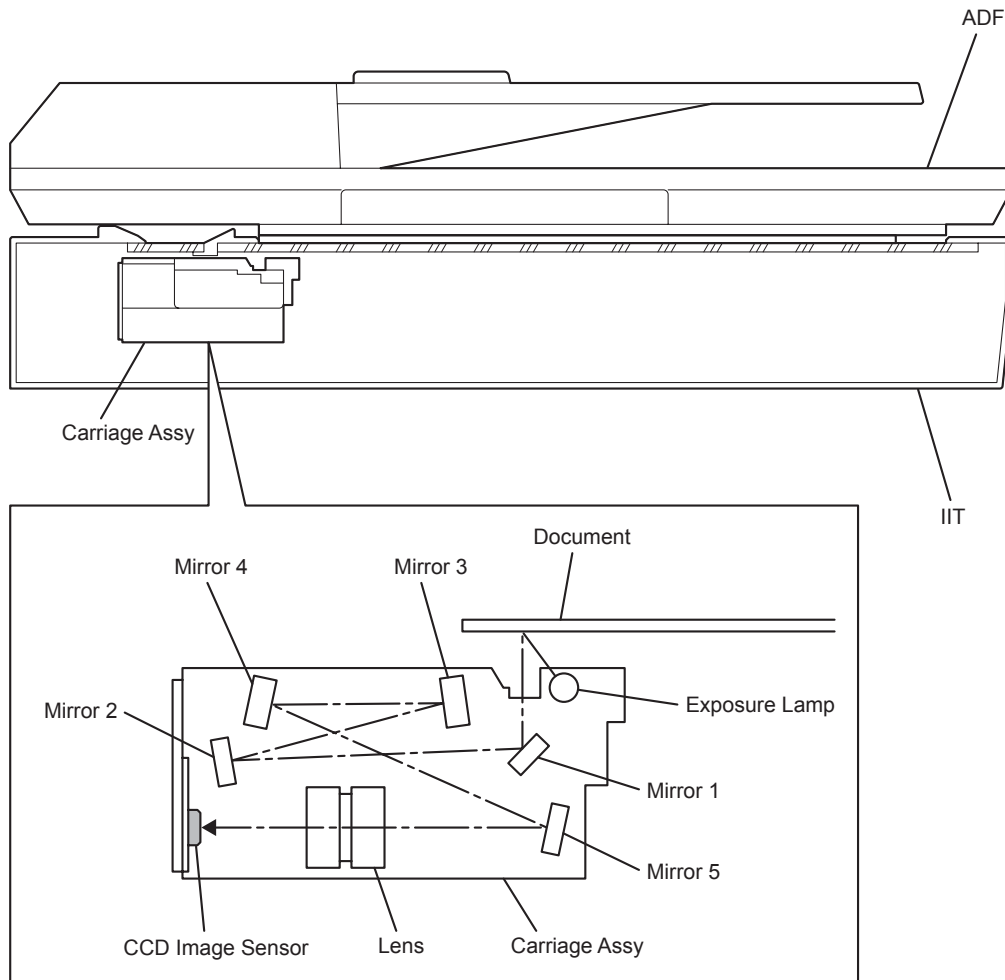
Also, a telephone line, acting as an antenna, may absorb electric waves generated from wireless or broadcasting equipment.

Because FAX data is audio data, the line quality affects the quality/stability of image data as well as that of conversation.

9. Functions of SCANNER ASSY

9.1 Document Scanning

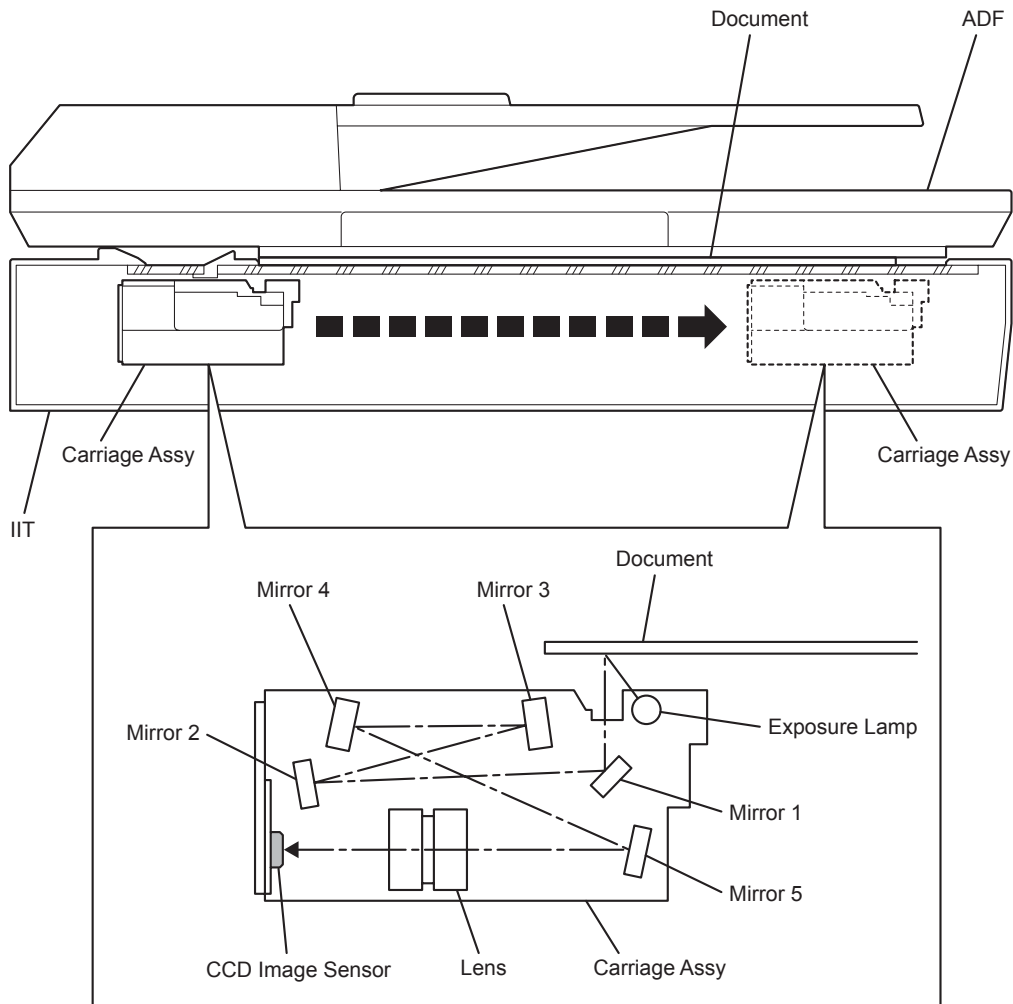
The Carriage Assy consists of components such as the CCD image sensor for inputting image, the exposure lamp for illuminating the original document, and the lens for projecting the original image to the CCD Image Sensor by reducing the image to fit the sensor size. The long light path between the document and the lens is folded by multiple mirrors so that it can be contained within a small space.



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9.2 Document Scanning at Platen (IIT)

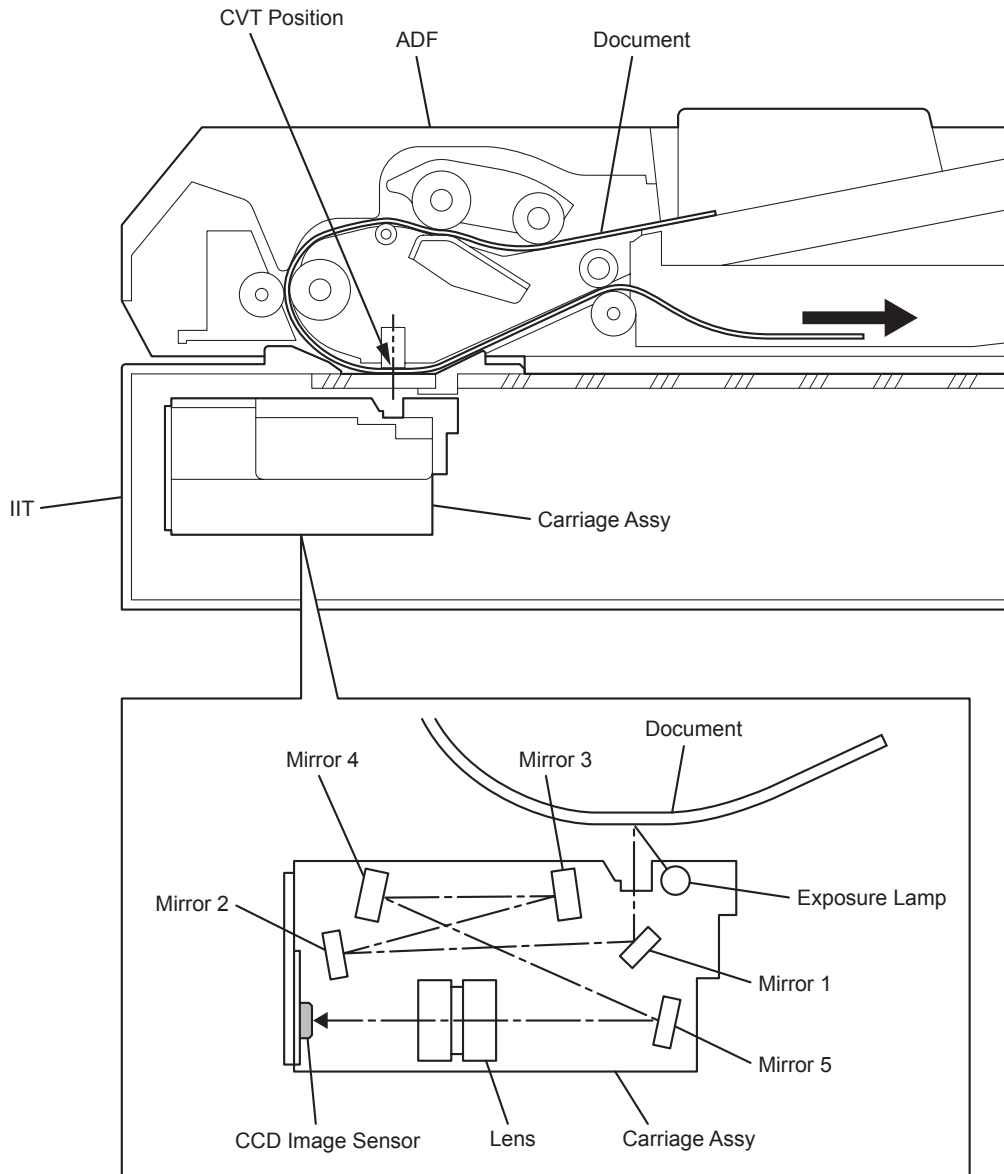
By the torque from the Carriage Motor, the Carriage Assy in the IIT moves at the shifting speed corresponding to the set magnification to illuminate the document by the exposure lamp and to capture the reflected light by the CCD Image Sensor through the multiple mirrors and the lens.



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9.3 Document Scanning at Auto Document Feeder (ADF)

By the torque from the ADF Motor, the document is fed through the Scanner Home (CVT: Constant Velocity Transport) Position at the feeding speed corresponding to the set magnification. While passing through this position, the document is illuminated by the exposure lamp in the Carriage Assy, and the reflected light is captured by the CCD Image Sensor through the multiple mirrors and the lens.



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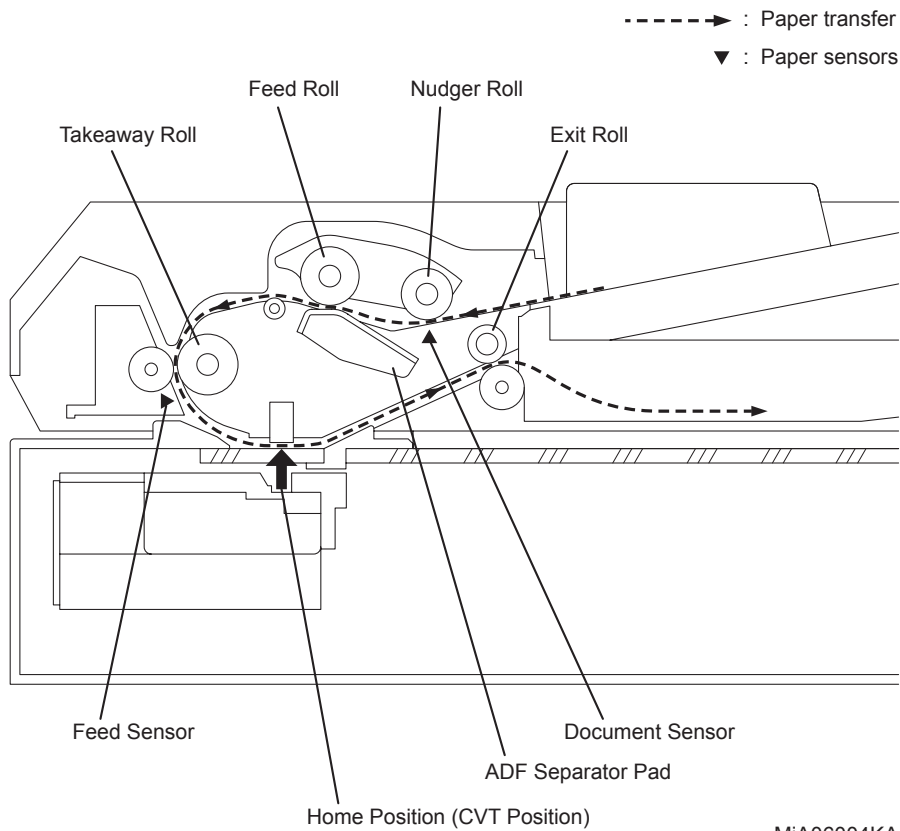
10. Paper Path

Refer to [Chapter 6](#) of the SFP Service Manual for Paper Path of Printer.

10.1 Paper Path of ADF

When the sheet feeding from the Document Feeder Tray of the ADF starts, the Nudger Roll and the Feed Roll that rotate driven by the torque from the ADF Motor. The sheet is nipped between the Feed Roll and the ADF Separator Pad while being fed into the ADF.


Inside the ADF, the sheet is fed by the Takeaway Roll that rotates by the torque from the ADF Motor to the Scanner Home (CVT: Constant Velocity Transport) Position in the Carriage Assy, and is scanned. After being scanned, the sheet is ejected to the Document Output Tray of the ADF by the Exit Roll that rotates by the torque from the ADF Motor.



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11. Functions of Major Functional Components

The sections below describe the functions of main components of the scanner.

Refer to the  for the function of Major Functional Component of Printer.

11.1 Image Input Terminal (IIT)

11.2 Auto Document Feeder (ADF)

11.1 Image Input Terminal (IIT)

- Carriage Motor (Scanner Motor)

A stepping motor that drives the Scanner ASSY.

- Scanner Home Position Sensor (CVT Position)

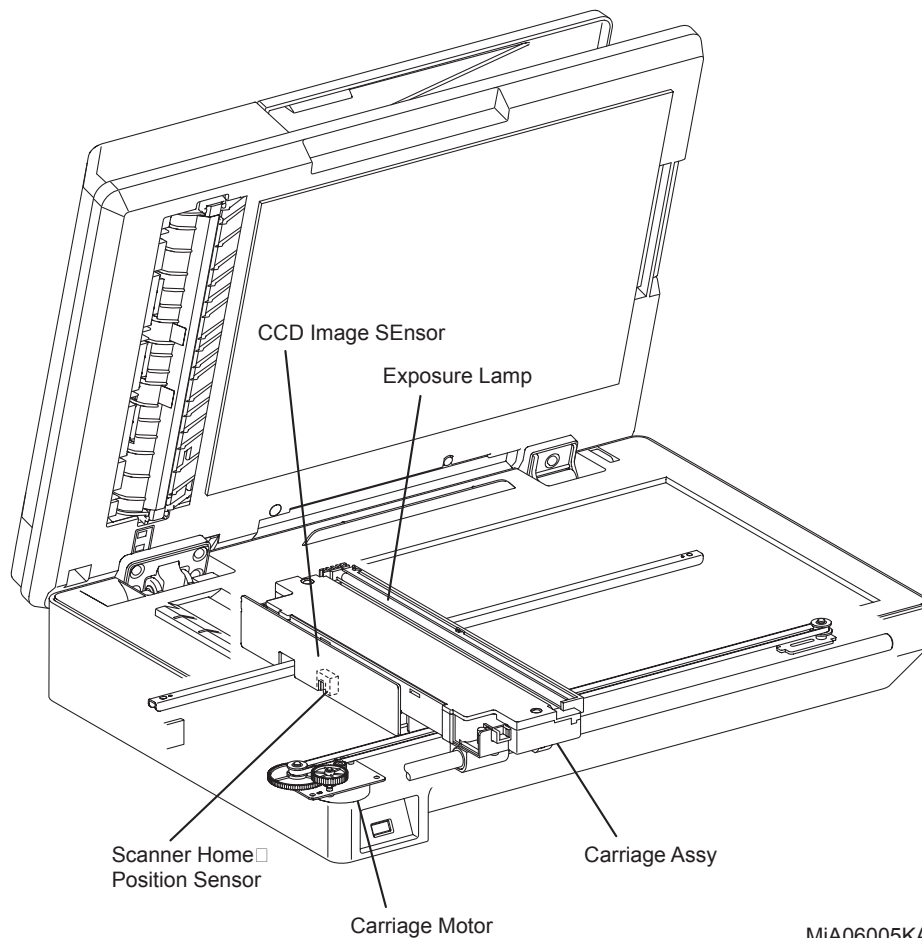
A part of the rear section of the Scanner ASSY frame functions as an actuator Scanner Home Position Sensor, thus detecting the Regi position.

- Exposure Lamp (Cold cathode fluorescent lamp)

The lamp that exposes the document.

- CCD Image Sensor (PWBA CCD)

A CCD image sensor that converts optical images into electrical signals.



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11.2 Auto Document Feeder (ADF)

- Document Sensor

A sensor that detects the presence or absence of a document on the ADF Document Tray.

- Cover Open Sensor

A switch that detects whether or not the ADF Top Cover is open.

- Feed Sensor

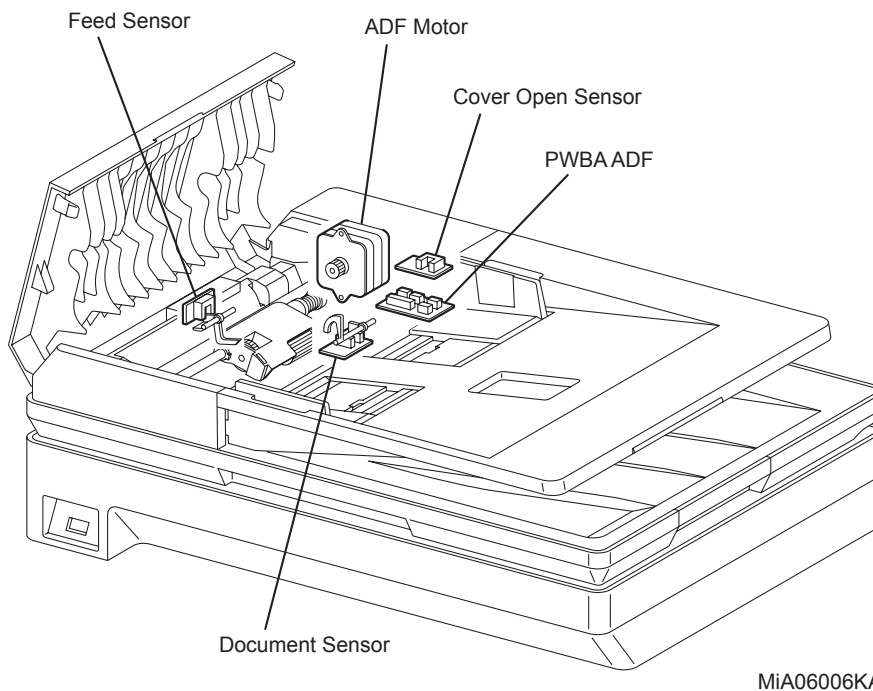
The Feed Sensor is installed immediately downstream from the Feed Roll to detect completion of document feed.

- ADF Motor

The ADF Motor rotates the Nudger Roll, Feed Roll, Takeaway Roll, Regi Roll, and Exit Roll.

-PWBA ADF (Connector PWBA)

A PWB that controls the sensors and motor in the ADF.



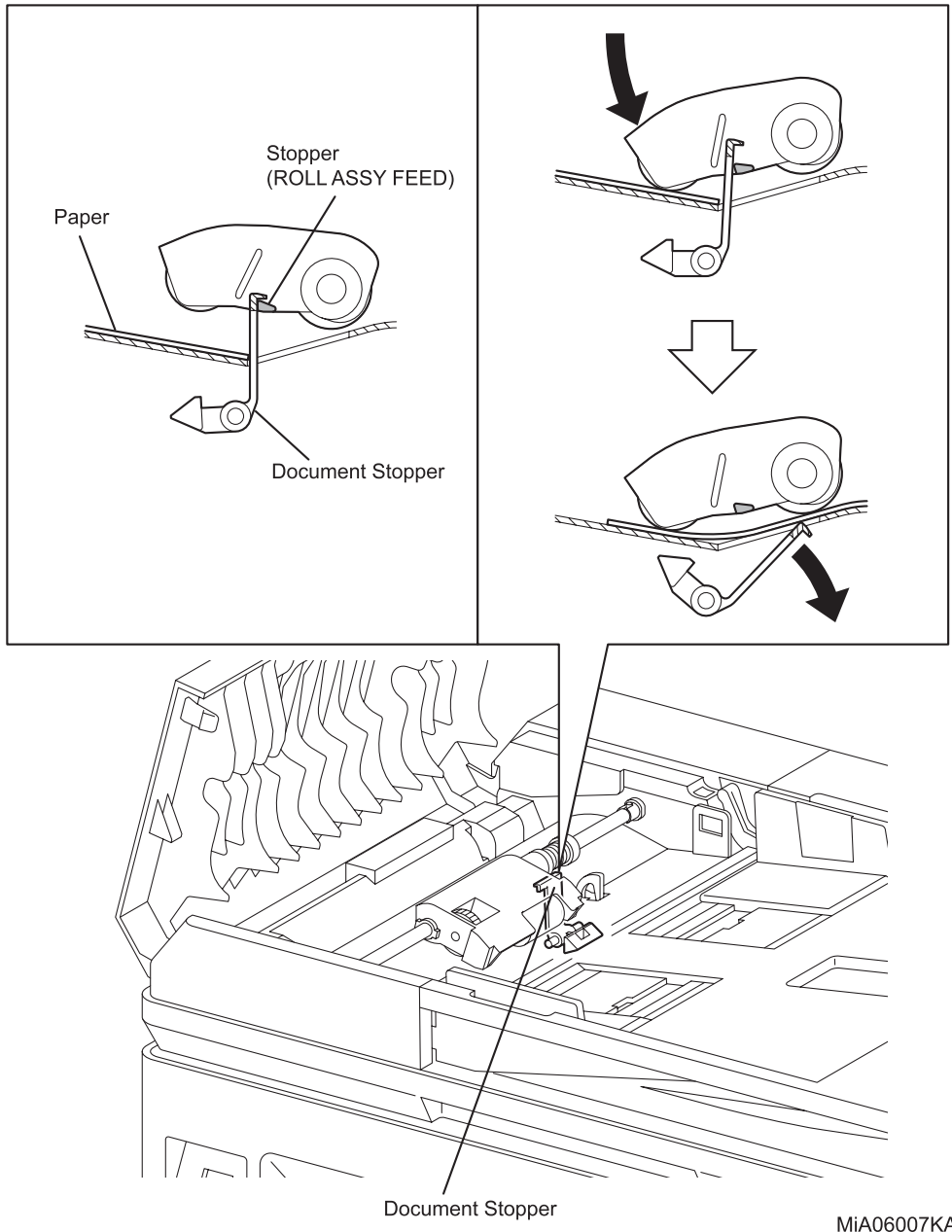
- Document Stopper

The Document Stopper is to properly adjust the lead edge of documents when they are set on the ADF. When the Roll Assy Feed is in its home position, the Document Stopper is kept from moving by a stopper located in the side of the Roll Assy Feed.

By receiving drive power, the front portion of Roll Assy Feed lowers, and then its stopper releases the Document Stopper.

The Document Stopper is pressed down by the lead edge of a paper to be fed.

After the paper is fed into the device, the Document Stopper returns to its original position by the spring force.



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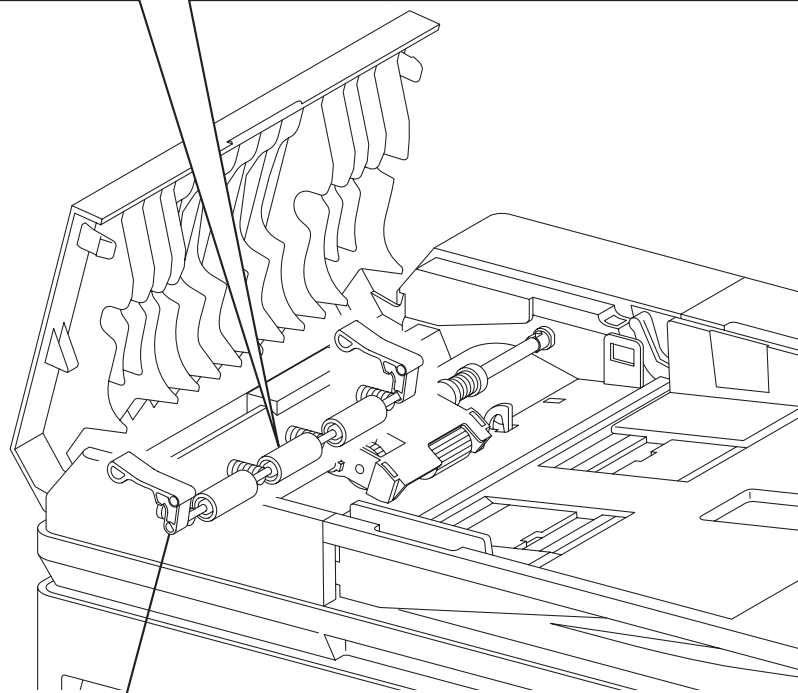
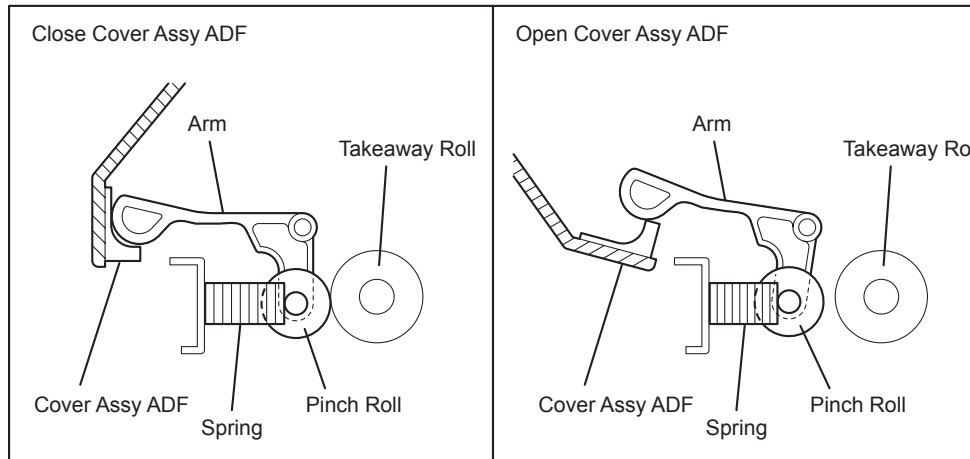
- Pinch Roll Assy

The Pinch Roll Assy is normally pressed against the direction of the Takeaway Roll by the spring pressure.

Documents are fed through between the Pinch Rolls and the Takeaway Roll to the CVT Window by the rotation of the Takeaway Roll.

If a jam occurs between the Pinch Roll Assy and the Takeaway Roll, it is hard to retrieve documents due to the high spring pressure of Pinch Roll Assy.

In order to retrieve jammed documents, open the Cover Assy ADF to release the spring pressure, and make enough clearance between the Pinch Rolls and the Takeaway Roll.



Pinch Roll Assy

MiA06008KA

11.3 Electrical

11.3.1 Electrical

- FAN (PL8.2.8)
Dissipates heat out of the printer to prevent the printer from overheating.
- SWITCH (HARN ASSY INLET AIO: PL8.3.7)
The SWITCH turns ON/OFF the AC power supply of the printer.
- Low Voltage Power Supply (PWBA LVPS: PL8.2.12)
The LVPS is provided in two types, 120V and 240V.
Supplies AC power from the power source to the FUSER heater and generates and supplies stable low voltage DC power used for the logic circuit, etc.
LVPS contains control circuit for the heater of the FUSER, in addition to the power circuit.
- Machine Control Unit (PWBA MCU: PL8.3.6)
Controls printing operation based on the communication with the print controller and information from the sensor/switch.
Major functions are as follows:
 - Communication with the ESS.
 - Receive of information from the sensors or switches.
 - Control of Motor in DRIVE ASSY MAIN and DRIVE ASSY SUB.
 - Distributing low voltage DC power output from LVPS to each component
 - Control of ROS ASSY
- High Voltage Power Supply (PWBA HVPS: PL4.1.19)
Supplies high voltage to the following parts in the TRANSFER ASSY and Developer to perform charging, development, and primary transfer.
 - BCR
 - BTR
 - Developer
- PWBA EEPROM (PL8.3.4)
Information unique to the printer is stored.
- Electronic Sub System (PWBA ESS AIO: PL8.1.2)
The ESS connected to the MCU controls the entire system (Diagnostic, Interface and Image processing).
- HUMIDITY SENSOR (SENSOR HUM: PL8.1.10)
HUMIDITY SENSOR reads the temperature/humidity within the printer and converts the values to voltage values.
- OPERATOR PANEL (CONSOLE ASSY PANEL AIO: PL1.2.3)
OPERATOR PANEL displays the state of the printer using LED.

- INTERLOCK SWITCH (HARN ASSY INTERLOCK AIO: PL8.1.1)

INTERLOCK SWITCH is a switch that cuts the +24VDC power supply to the HVPS or Motor, etc. upon the opening of the Front Cover.

- WIRELESS PRINTER ADAPTER (WIRELESS ADAPTER: PL8.1.11)

An adapter for enabling the network connectivity of the printer by wireless.

- SIDE COVER SWITCH (SWITCH: PL5.1.9)

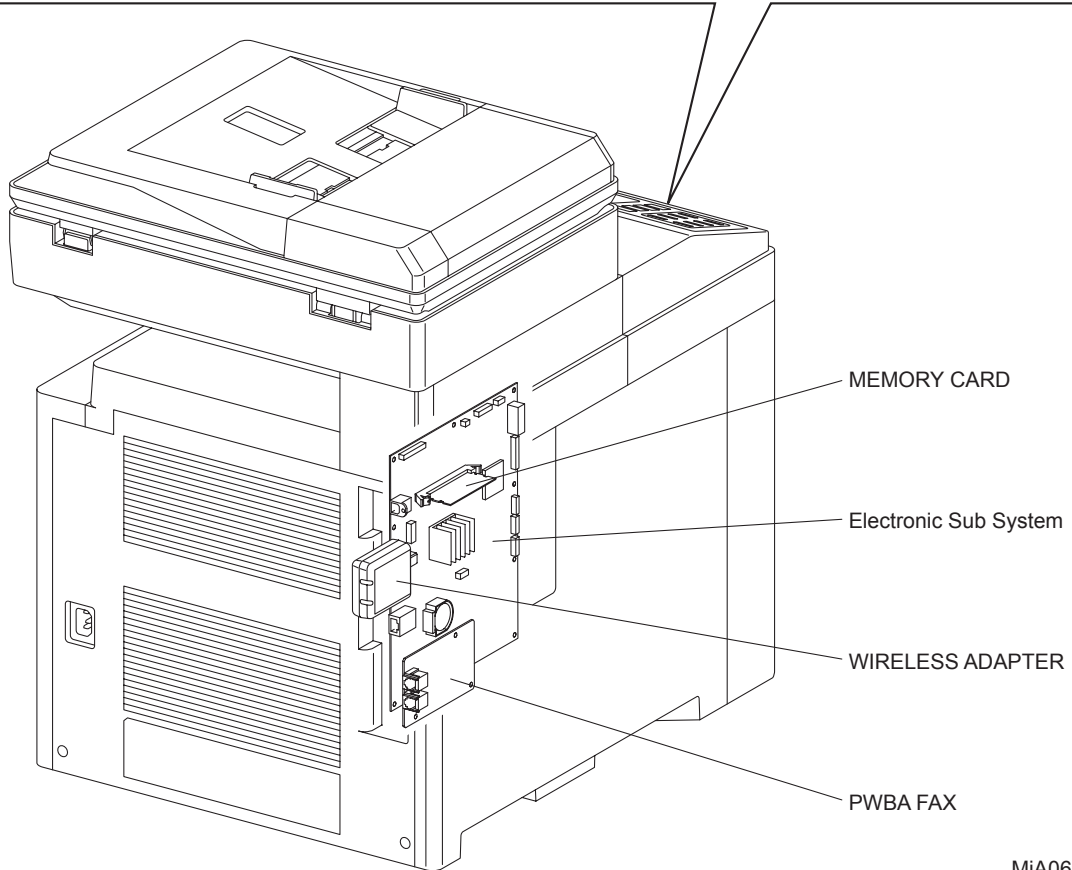
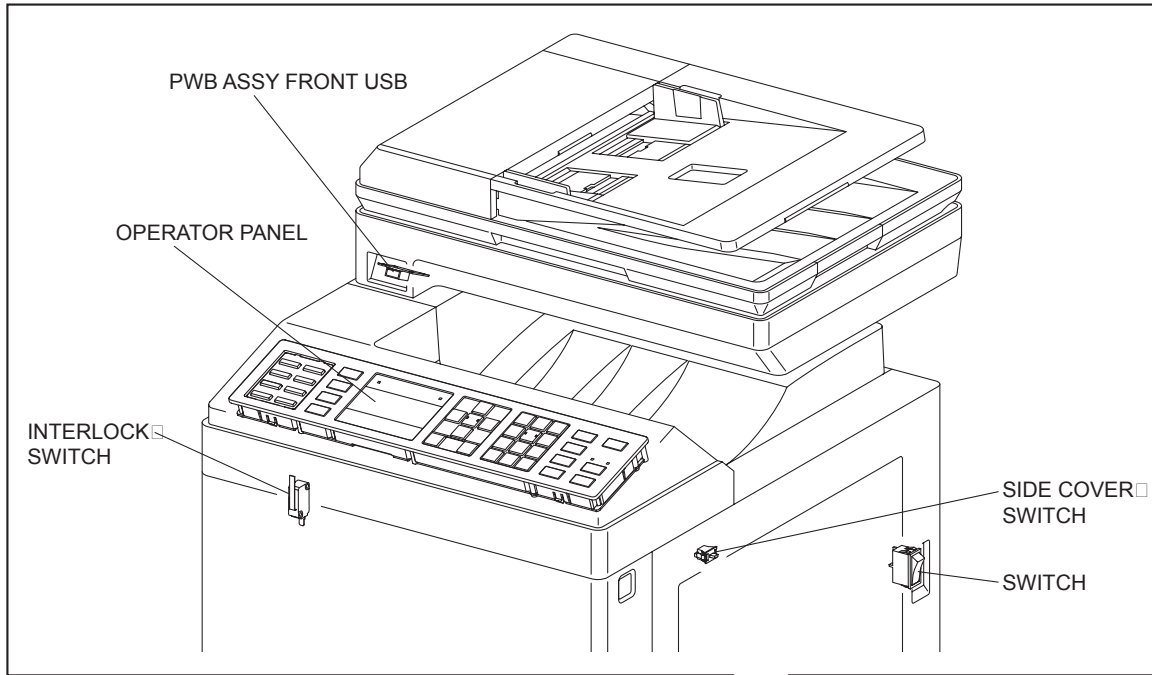
SIDE COVER SW is a switch that detects the right side cover open.

- PWB ASSY FRONT USB (PL10.1.15)

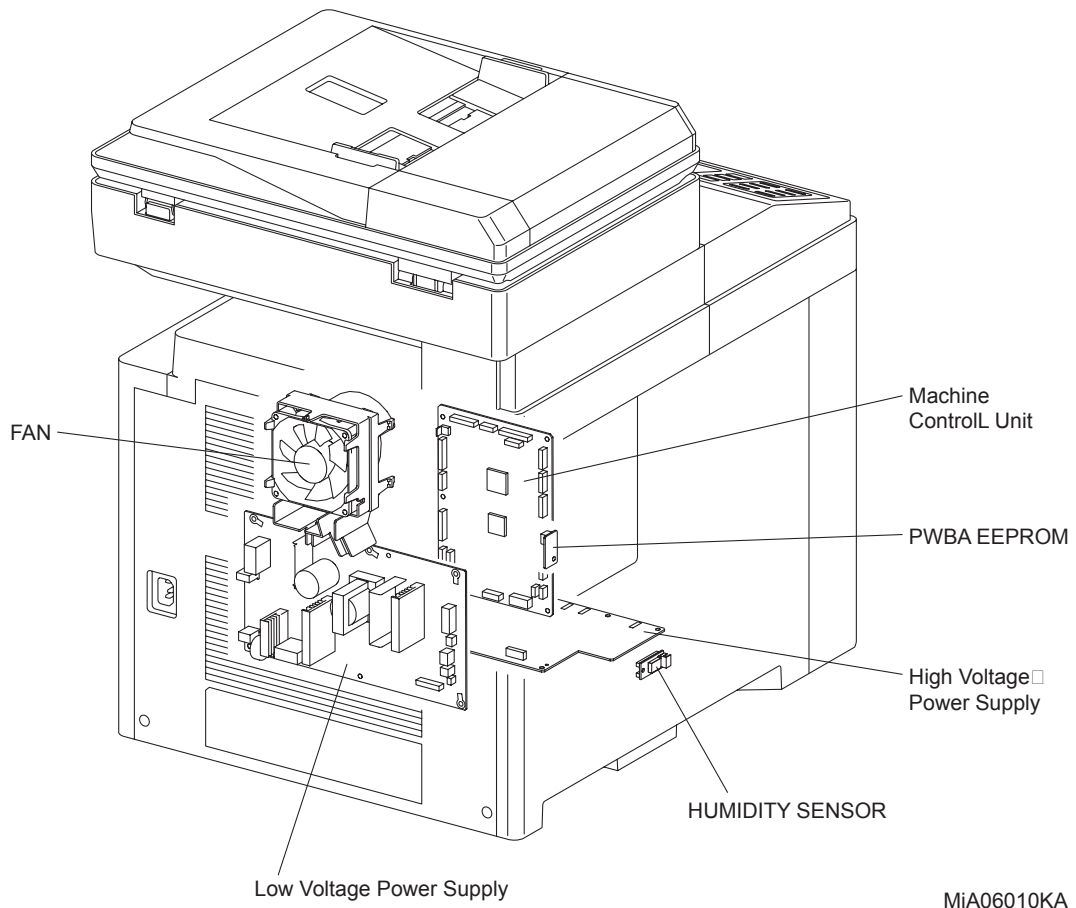
A PWB for controlling the USB interface.

- PWBA FAX (PL8.1.5)

A PWB for controlling the FAX interface.



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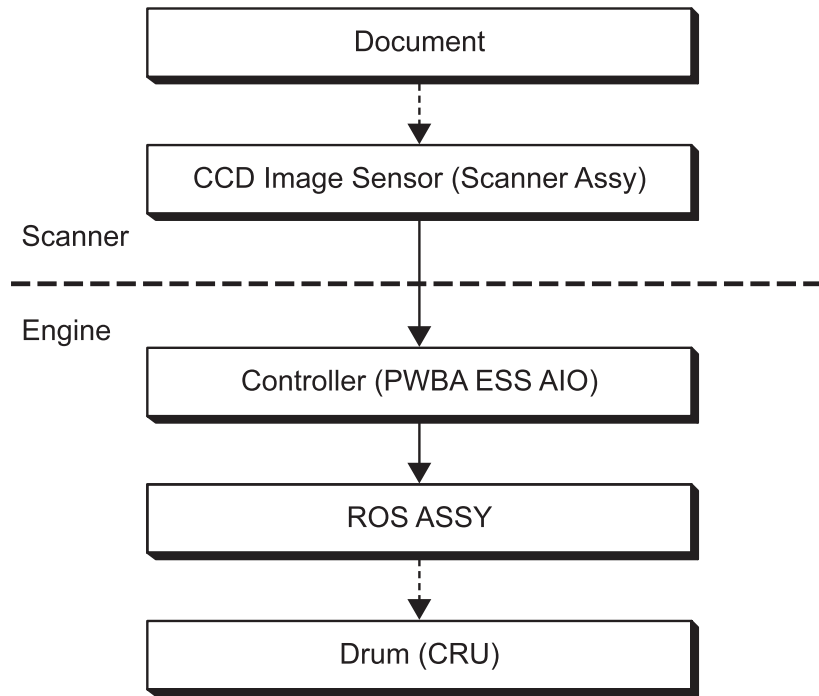


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11.3.2 Data Flow

The image data from the document set on the IIT or ADF goes through the following components before it is printed at the Engine section.

Refer to the [Data Flow of Printer](#) for Data Flow of Printer.



MiA06011KA

12. Control

Refer to [the **Scanner Reference Manual** for Control of Printer.](#)

12.1 Document Scanning Steps

A CCD Image Sensor is used to read image data from the document. To ensure stabilized image reading, the CCD Image Sensor output is adjusted. Adjustment includes Automatic Gain Control (AGC) and Automatic Offset Control (AOC).

Reference data for adjustment is collected and used to perform compensation on the read image data. Compensation includes shading compensation, white variation compensation, and black variation compensation. These adjustment and compensation steps are described below.

Reference data is obtained by reading image data from a white reference plate via the CCD image sensor.

12.1.1 AOC (Auto Offset Control)

AOC is performed by turning off the Exposure Lamp after AGC. This state is read by the CCD Image Sensor as the black reference value, which is used to adjust CCD Image Sensor output. (The order of AGC and AOC adjustment depends on the model.)

12.1.2 AGC (Auto Gain Control): White Level Variation Adjustment

During AGC, the Scanner ASSY is moved to the position of the white reference plate, and the Exposure Lamp is illuminated. The light reflected from the white reference plate is read by the CCD Image Sensor as the white reference value, which is used to adjust CCD Image Sensor output.

12.1.3 Shading Compensation

Shading compensation compensates for pixel-by-pixel sensitivity variations and the nonuniformity of lamp light in the fast scanning direction. The AGC and AOC adjustment values are used to compensate for the image data read by the CCD Image Sensor.

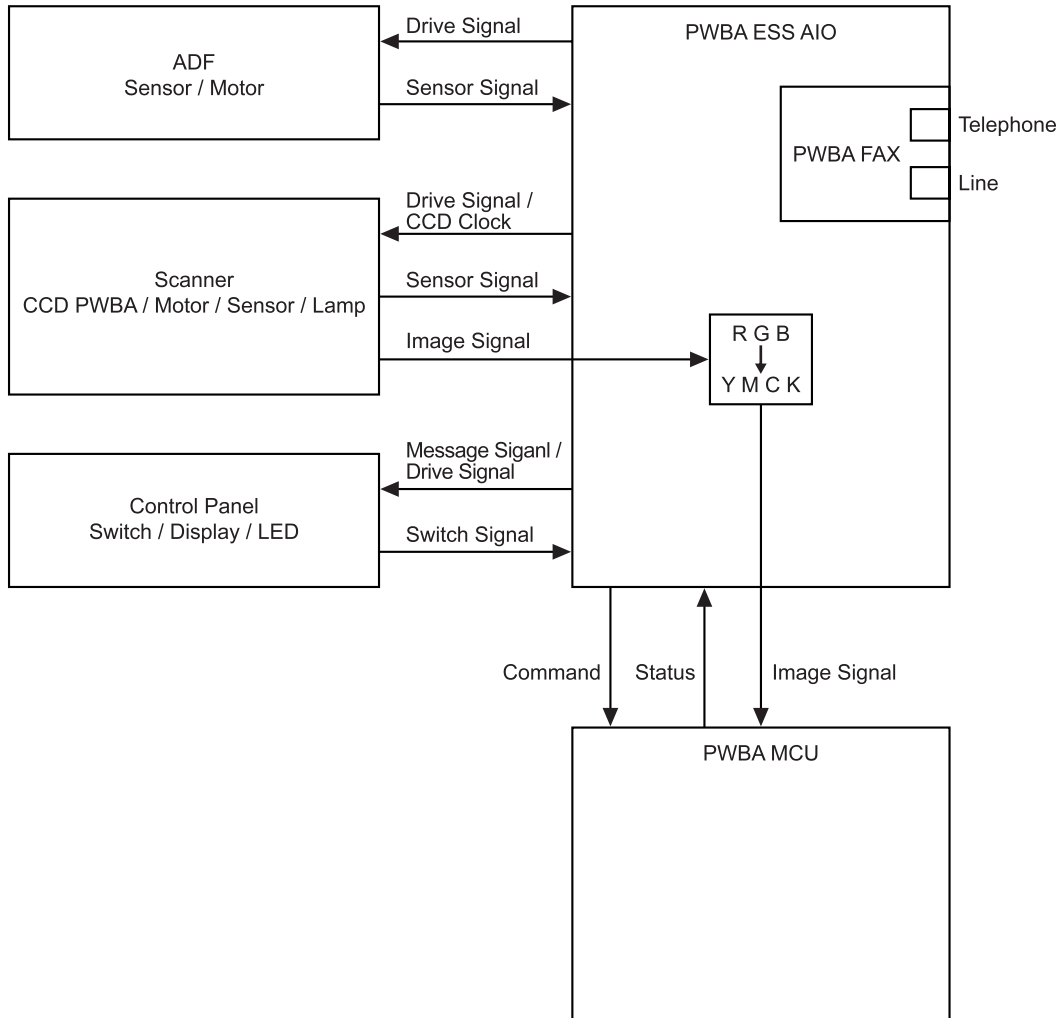
12.2 CCD Image Sensor Overview

The CCD Image Sensor is a four-color image sensor with three lines for the respective colors R (red), G (green), B (blue), and one line for B/W (black and white).

12.3 System Configuration

The PWBA ESS AIO controls the FAX, Scanner, and ADF. FAX and copy operations are performed according to data entered at the operation panel.

The following figure shows the system configuration.



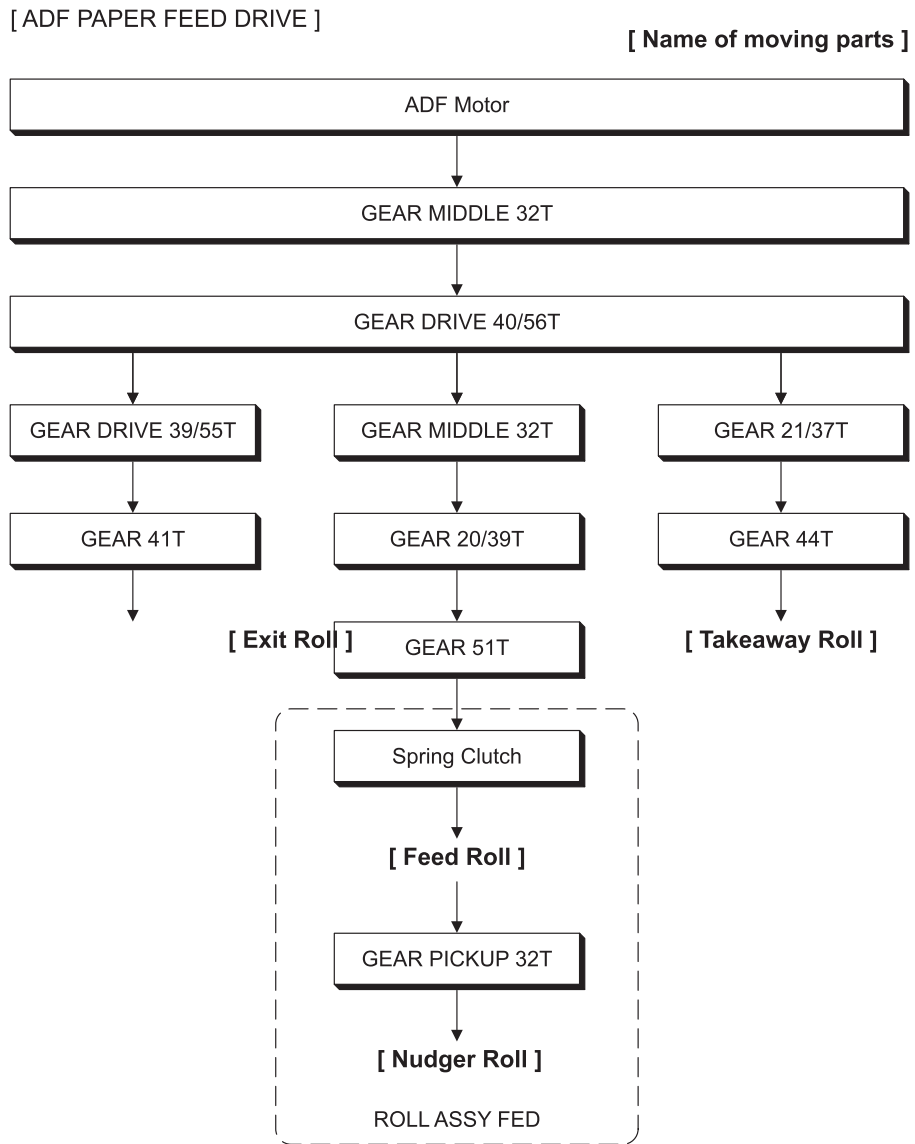
MiA06012KA

13. Drive Transmission Route of ADF Motor

Refer to the [Diagram Reference] for Drive Transmission Route of Printer.

13.1 ADF Motor

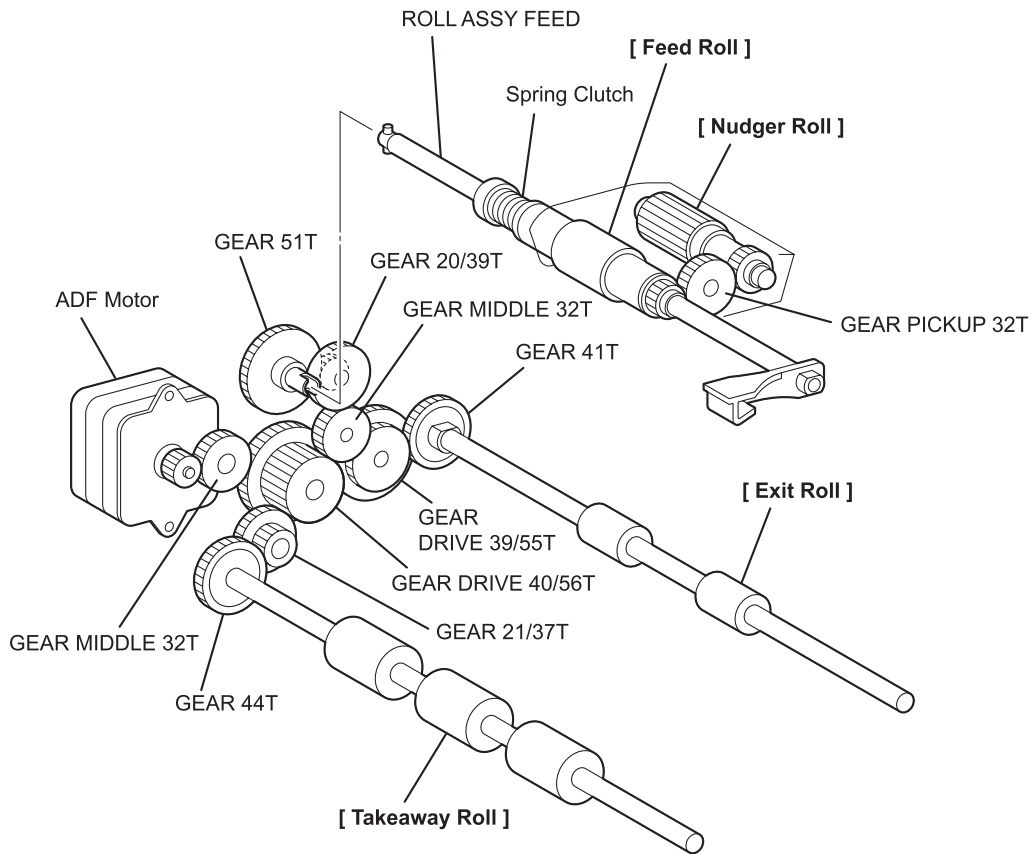
Rotation power of the ADF Motor is transmitted through the route below.



MiA06013KA

[ADF PAPER FEED DRIVE]

[Name of moving parts]



MiA06014KA






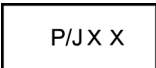
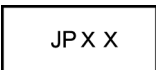
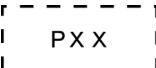
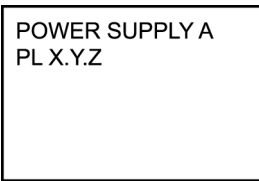
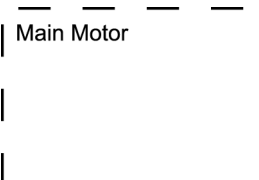
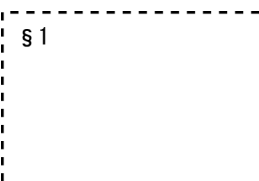


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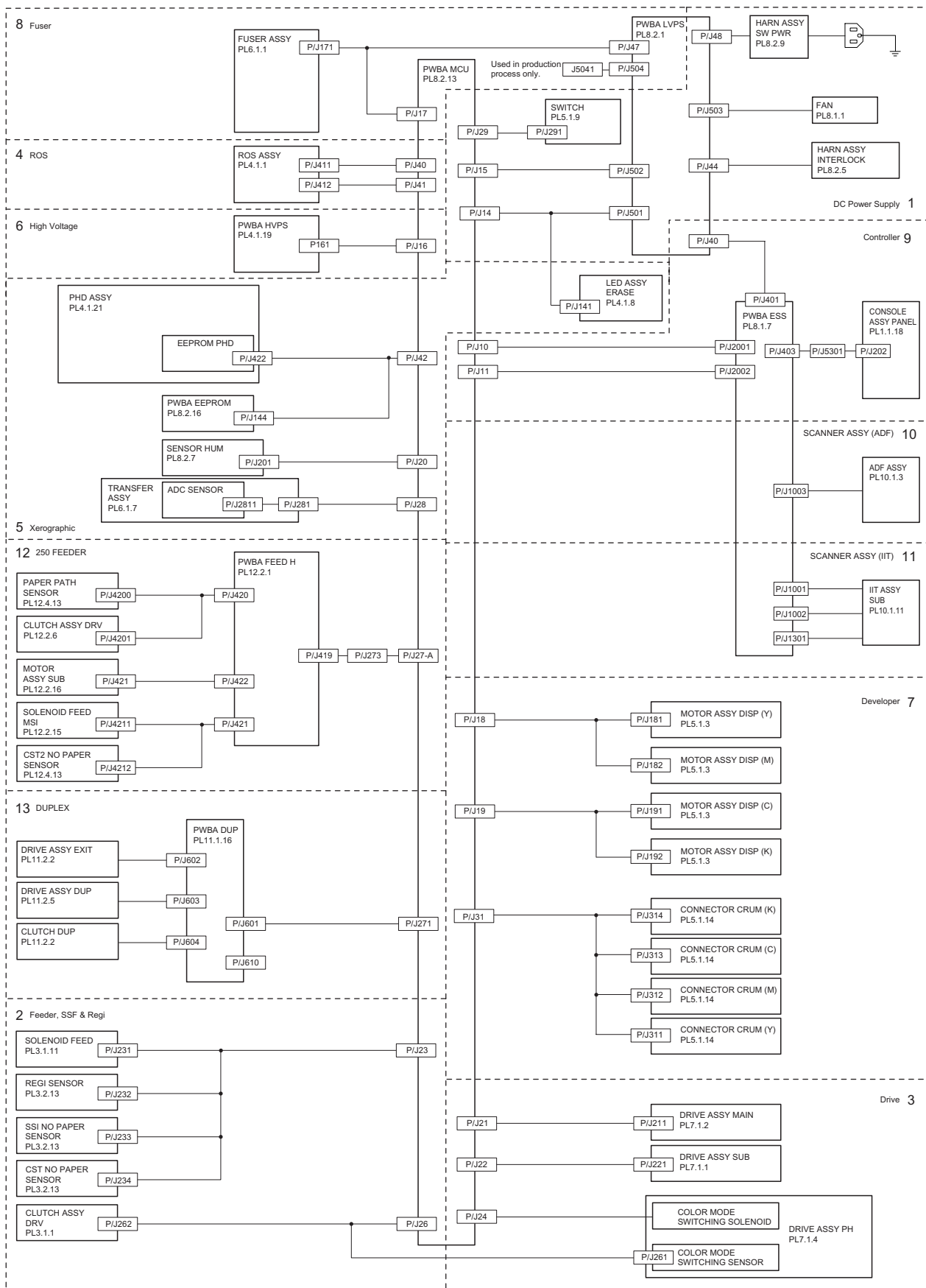
1. Connection Wiring Diagram

1.1 Symbols in the General Connection Wiring Diagram

The symbols in the general connection wiring diagram are described below.

Symbol	Description
	Represents an interconnection between parts using wiring harness or wire.
	Represents an interconnection which differs according to the specifications.
	Represents an interconnection between parts using a conductive member such as a plate spring.
	Represents a connection between parts by tightening of a screw.
	Indicates a frame ground.
	Represents a connector. The connector No. is indicated inside the box.
	Represents a connection terminal with a plate spring on the printed circuit board. The connector (terminal) No. is indicated inside the box.
	Represents a connector directly connected to the printed circuit board. The connector No. is indicated inside the box.
	The box containing a part name represents a part. "PL X.Y.Z" indicates the item "Z" of the plate (PL) "X.Y" described in Chapter 5 "Parts List."
	Represents a functional part within a part, and indicates the name of the functional part.
	Represents a section in "2. Interconnection Wiring Diagram of Parts," and indicates its section No.
	Represents a screw for fixing wiring harness and a conductive member such as a plate spring.
	Represents a conductive member such as a plate spring.

1.2 General Wiring Diagram

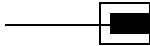
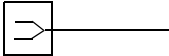
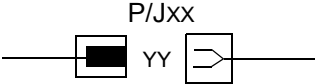
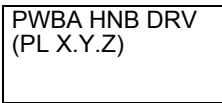
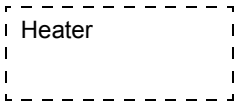

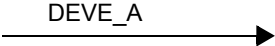
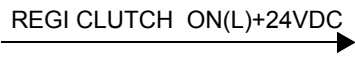
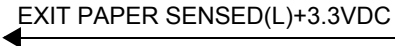


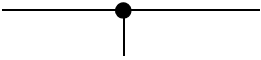
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2. Interconnection Wiring Diagram of Parts

2.1 Notes on Using the Wiring Diagram between Parts

The following describes the legend of the wiring diagrams between parts shown on the following pages.

Symbols	Description
	Denotes a plug.
	Denotes a jack.
	Denotes Pin yy and Jack yy of the connector Pxx and Jxx.
	Denotes the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Chapter 5. Parts List.
	Denotes functional parts attached with functional parts name.
	Denotes the control and its outline in PWB.
	Denotes a connection between parts with harnesses or wires, attached with signal name/contents.
	Denotes the function, and logic value of the signal to operate the function (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.
	Denotes the function, and logic value of the signal when the function operated (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.

Symbols	Description
	Denotes a connection between wires.
I/L +24VDC	Denotes DC voltage when the interlock switch in HNB MCU WITH CPU turns on.
+5VDC +3.3VDC	Denotes DC voltage.
SG	Denotes signal ground.
AG	Denotes analog ground.
RTN	Denotes the return.

2.2 Configuration of the Interconnection Wiring Diagram of Parts

The interconnection wiring diagram is divided into 11 sections.
§ 1 to § 11 indicate details of the interconnections of parts.

§ 1 DC POWER SUPPLY

Connections of PWBA LVPS with PWBA MCU.
Connections of HARN ASSY SW PWR with PWBA LVPS.
Connections of HARN ASSY INTERLOCK with PWBA LVPS.
Connections of SWITCH with PWBA MCU.

§ 2 FEEDER, SSF & REGI

Connections of SOLENOID FEED with PWBA MCU.
Connections of REGI SENSOR with PWBA MCU.
Connections of SSI NO PAPER SENSOR with PWBA MCU.
Connections of CST NO PAPER SENSOR with PWBA MCU.
Connections of CLUTCH ASSY DRV with PWBA MCU.

§ 3 DRIVE

Connections of DRIVE ASSY PH with PWBA MCU.
Connections of DRIVE ASSY MAIN with PWBA MCU.
Connections of DRIVE ASSY SUB with PWBA MCU.

§ 4 ROS

Connections of ROS ASSY with PWBA MCU.

§ 5 XEROGRAPHIC

Connections of PWBA EEPROM with PWBA MCU.
Connections of PHD ASSY with PWBA MCU.
Connections of SENSOR HUM with PWBA MCU.
Connections of LED ASSY ERASE with PWBA MCU.
Connections of TRANSFER ASSY with PWBA MCU.

§ 6 HIGH VOLTAGE

Connections of PWBA HVPS with PWBA MCU.

§ 7 DEVELOPER

Connections of DISPENSE MOTOR (Y) with PWBA MCU.
Connections of DISPENSE MOTOR (M) with PWBA MCU.
Connections of DISPENSE MOTOR (C) with PWBA MCU.
Connections of DISPENSE MOTOR (K) with PWBA MCU.
Connections of CONNECTOR CRUM (Y) with PWBA MCU.
Connections of CONNECTOR CRUM (M) with PWBA MCU.
Connections of CONNECTOR CRUM (C) with PWBA MCU.
Connections of CONNECTOR CRUM (K) with PWBA MCU.

§ 8 FUSER

Connections of FUSER ASSY with PWBA MCU.
Connections of FUSER ASSY with PWBA LVPS.
Connections of PWBA MCU with PWBA LVPS.

§ 9 CONTROLLER

Connections of PWBA ESS with PWBA MCU.
Connections of CONSOLE ASSY PANEL with PWBA ESS.
Connections of PWBA LVPS with PWBA ESS.

§ 10 SCANNER ASSY (ADF)

Connections of PWBA ESS AIO with ADF ASSY.

§ 11 SCANNER ASSY(IIT)

Connections of PWBA ESS AIO with IIT ASSY SUB.

Connections of PWBA ESS AIO with PWB ASSY FRONT USB.

§ 12 250 FEEDER

Connections of PWBA FEEDER H with PWBA MCU.

Connections of PWBA FEEDER H with CLUTCH ASSY PH TURN.

Connections of PWBA FEEDER H with PATH SENSOR.

Connections of PWBA FEEDER H with SOLENOID FEED.

Connections of PWBA FEEDER H with CST NO PAPER SENSOR.

Connections of PWBA FEEDER H with DRIVE ASSY OPTION.

§ 13 DUPLEX

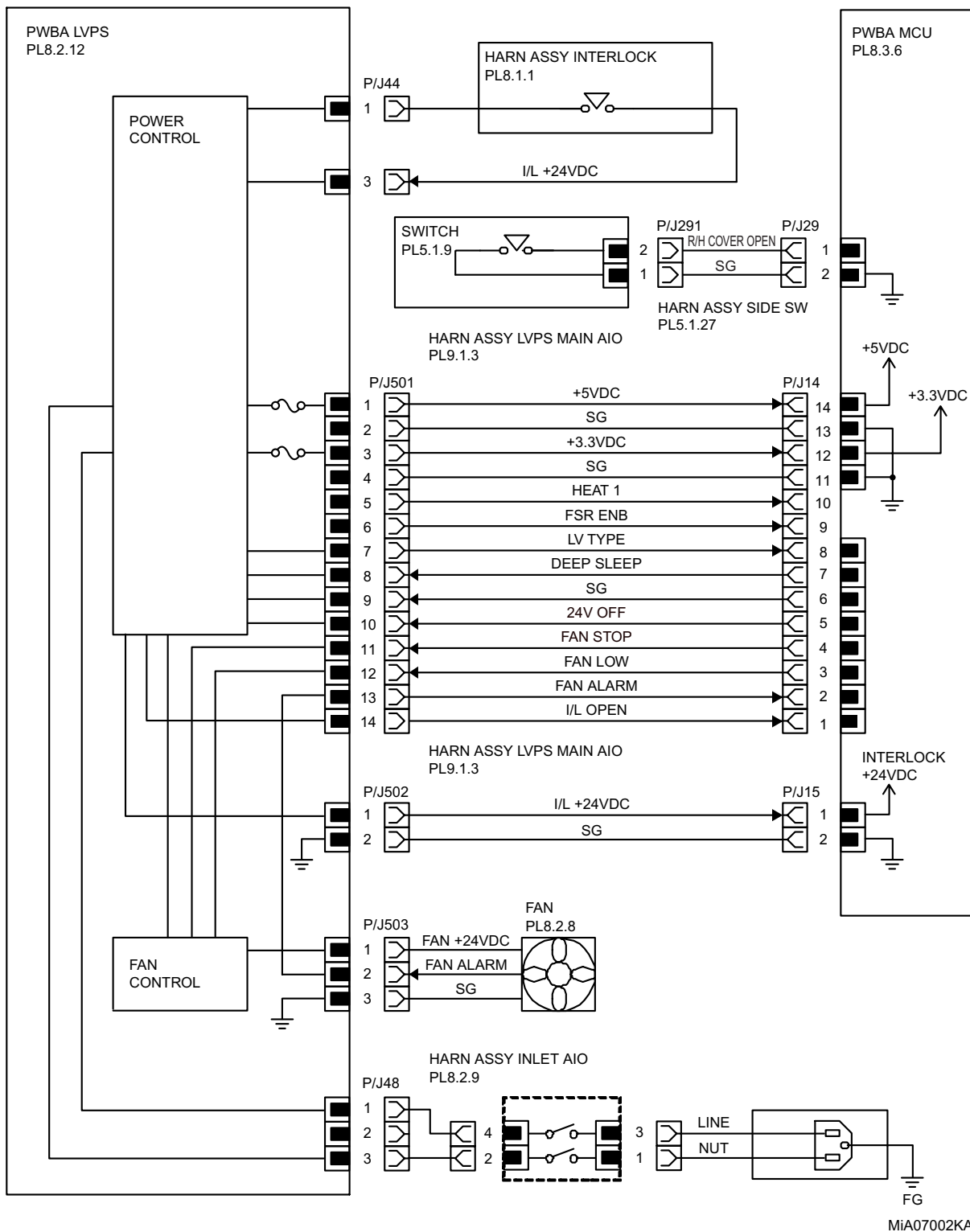
Connections of PWBA DUP with PWBA MCU.

Connections of PWBA DUP with MOTOR ASSY DUP-UP.

Connections of PWBA DUP with MOTOR ASSY DUP-DN.

Connections of PWBA DUP with CLUTCH DUP.

§ 1 DC POWER SUPPLY



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Signal line name	Description
LV TYPE 24V ON	Control signal of the LVPS
FAN LOW FAN STOP ALARM FAN	Drive control signal of the SIDE FAN

- LVPS overcurrent protection circuit

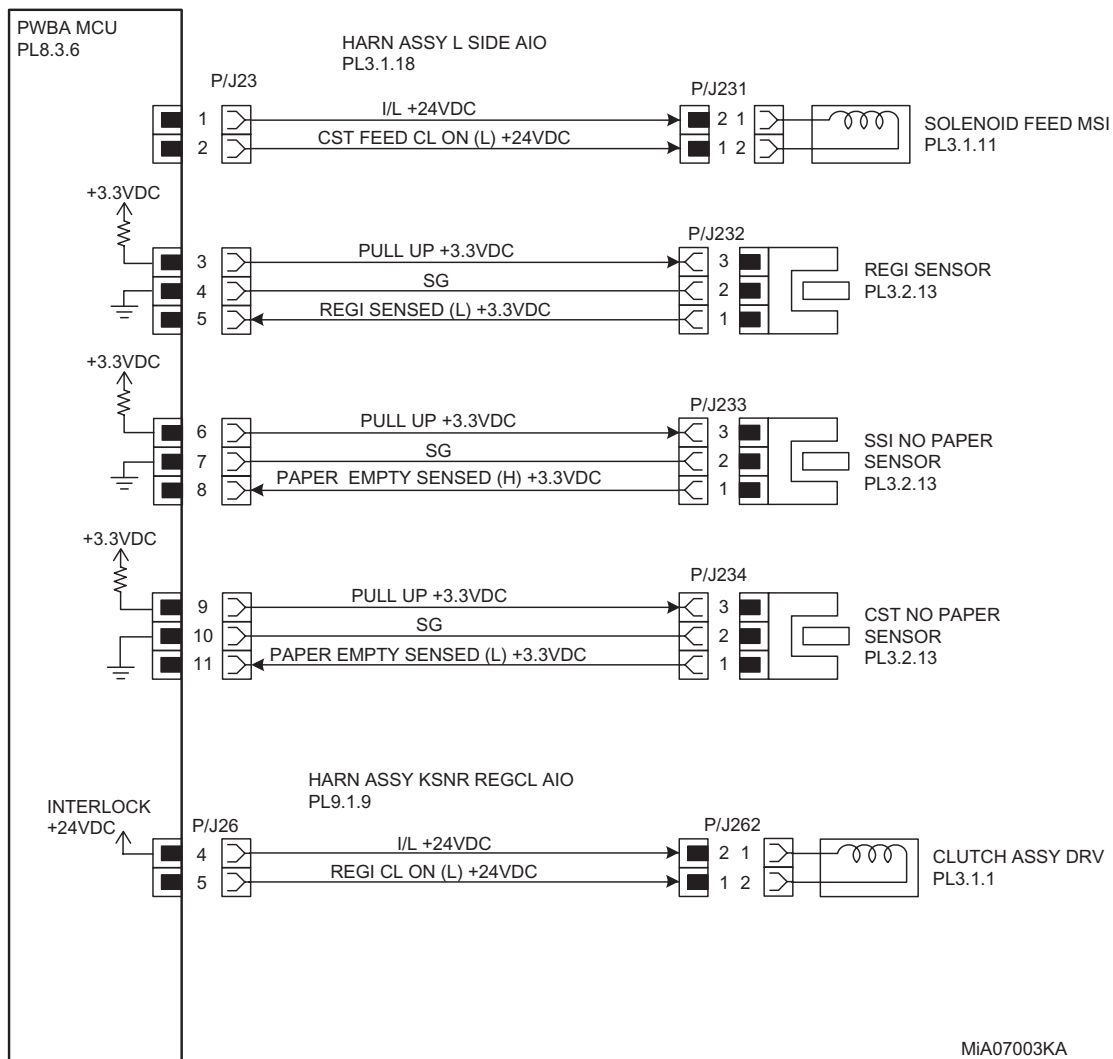
This circuit stops all outputs, if the power supply voltage 24VDC, 5VDC, or 3.3VDC is shorted.

- LVPS overvoltage protection circuit

This circuit stops all outputs, if the power supply voltage 24VDC, 5VDC, or 3.3VDC exceeds the specified voltage respectively.

At this time, the operating point is 36VDC or less for 24VDC, 7VDC or less for 5VDC and 3.3VDC.

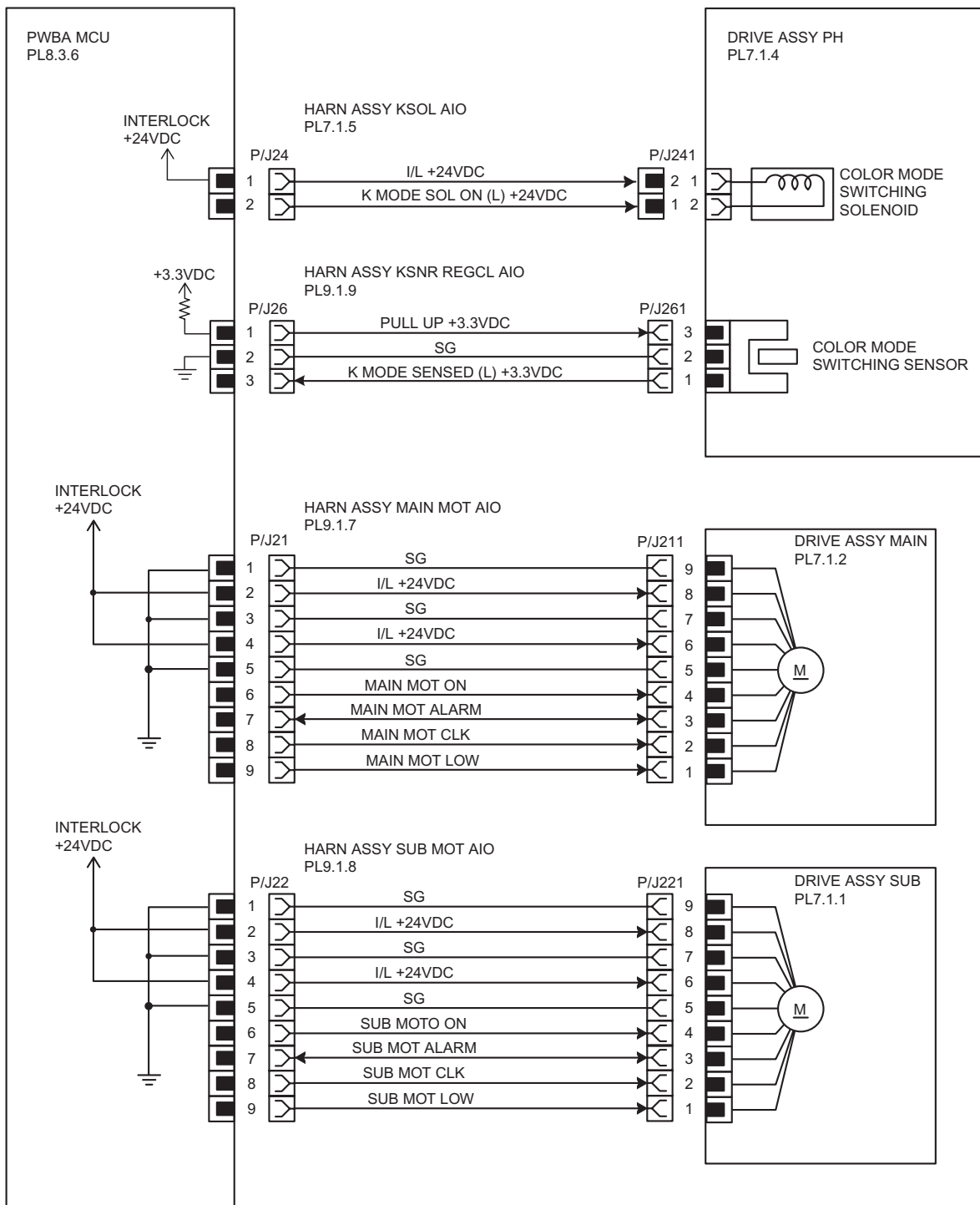
§ 2 FEEDER, SSF & REGI



MiA07003KA

Signal line name	Description
CST FEED CL ON (L) +24VDC	ON/OFF signal of the SOLENOID FEED
REGI SENSED (L) +3.3VDC	Paper detect signal of the Regi part by the Sensor Photo (REGI SENSOR)
PAPER EMPTY SENSED (H) +3.3VDC	Paper detect signal of the SSI by the Sensor Photo (SSI NO PAPER SENSOR)
PAPER EMPTY SENSED (L) +3.3VDC	Paper detect signal of the Paper Cassette by the Sensor Photo (CST NO PAPER SENSOR)
REGI CL ON (L) +24VDC	ON/OFF signal of the CLUTCH ASSY DRV

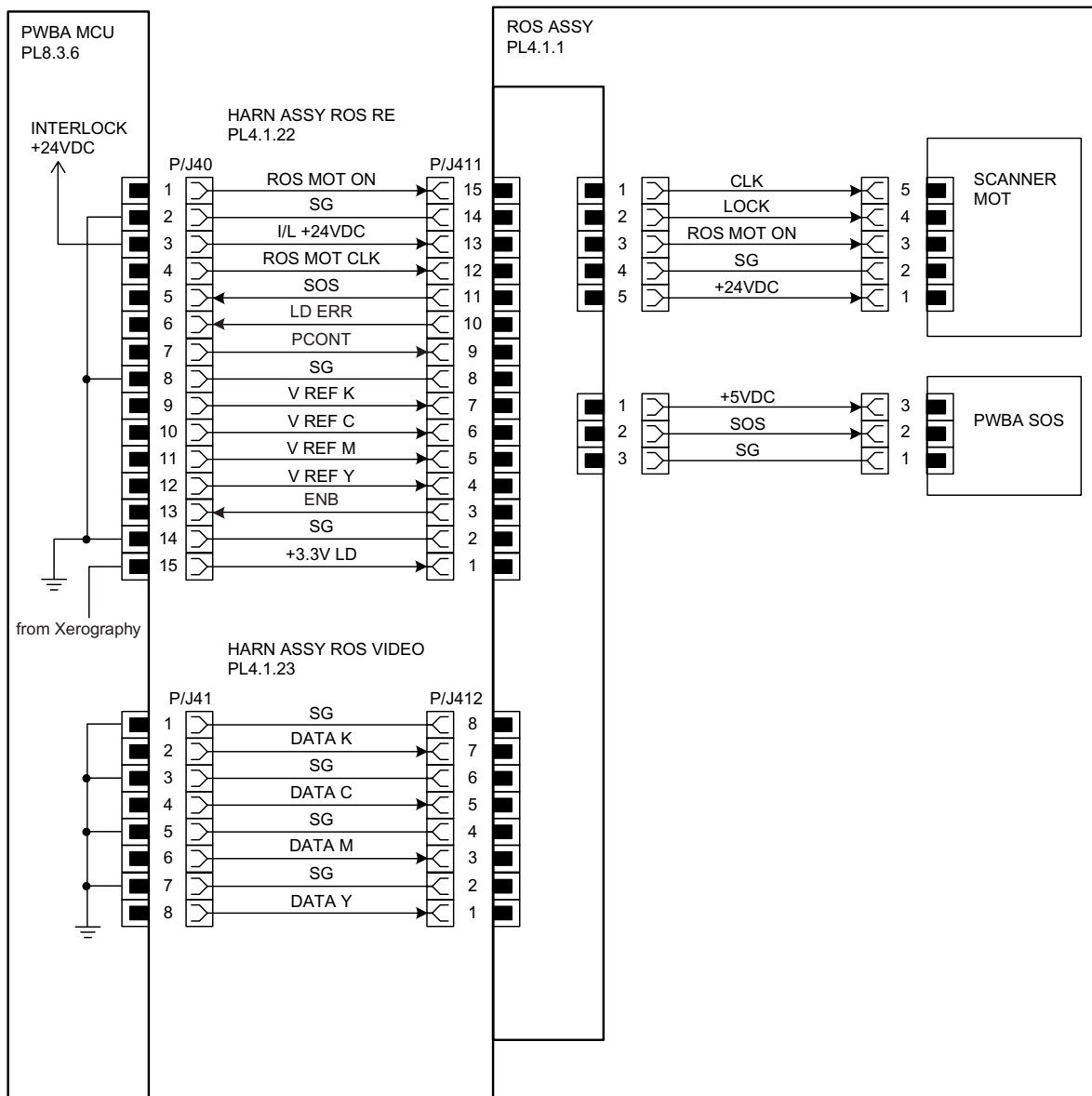
§ 3 DRIVE



MiA07004KA

Signal line name	Description
K MODE SOL ON (L) +24VDC	ON/OFF signal of the COLOR MODE SWITCHING SOLENOID
K MODE SENSED (L) +3.3VDC	Color mode detect signal of the DRIVE ASSY PH by the Sensor Photo (COLOR MODE SWITCHING SENSOR)
MAIN MOT ON MAIN MOT ALARM MAIN MOT CLK MAIN MOT LOW	Drive control signal of the DRIVE ASSY MAIN
SUB MOT ON SUB MOT ALARM SUB MOT CLK SUB MOT LOW	Drive control signal of the DRIVE ASSY SUB

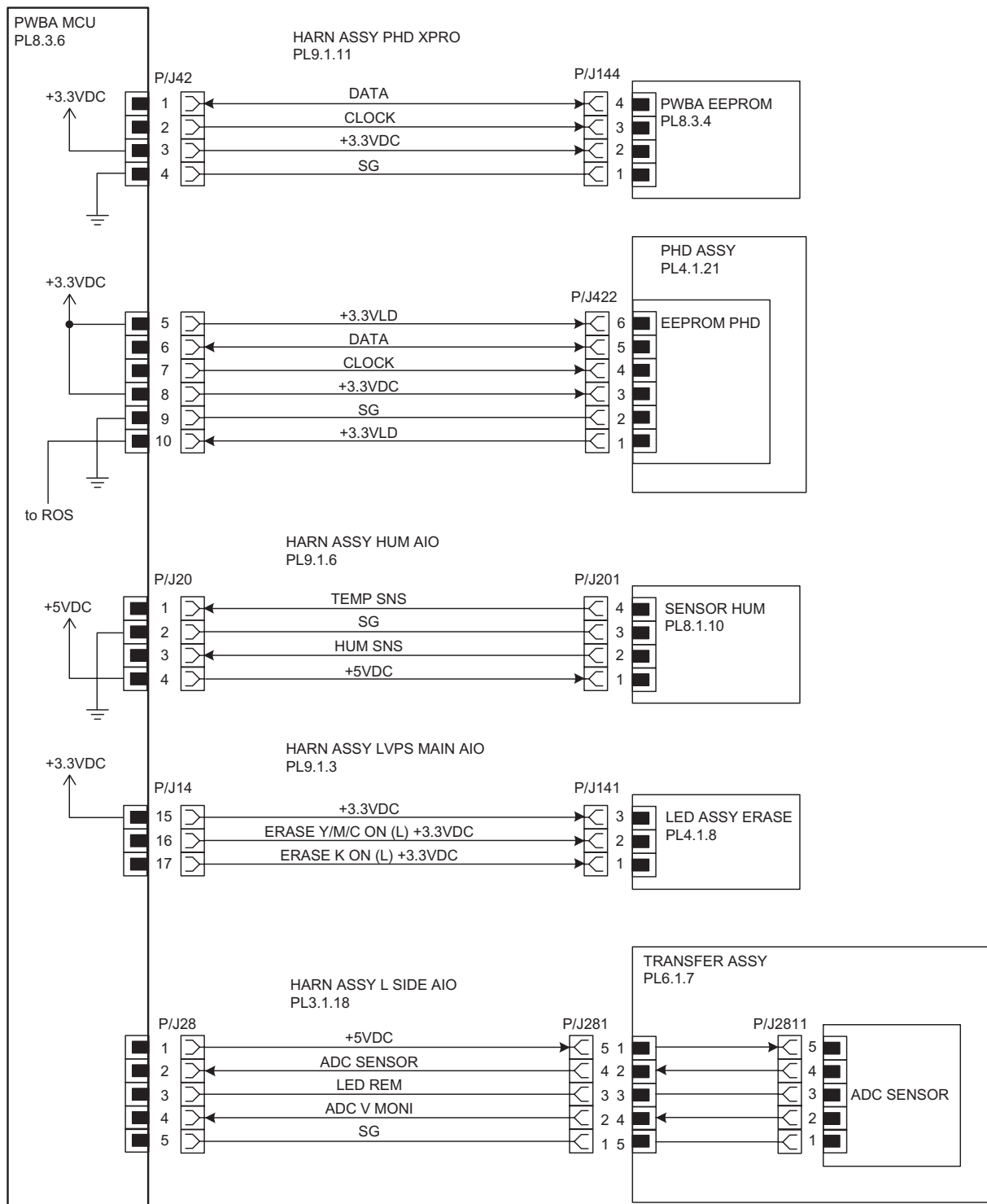
§ 4 ROS



MiA07006KA

Signal line name	Description
ROS MOT ON ROS MOT CLK	Drive control signal of the ROS MOTOR
SOS	Reference signal for scan start of LASER
V REF K V REF C V REF M V REF Y	Emission control signal of the laser diode
LD ERR	Error signal of the laser diode
PCONT	Power control signal of the laser diode
DATA K DATA C DATA M DATA Y	Video signal of the laser diode

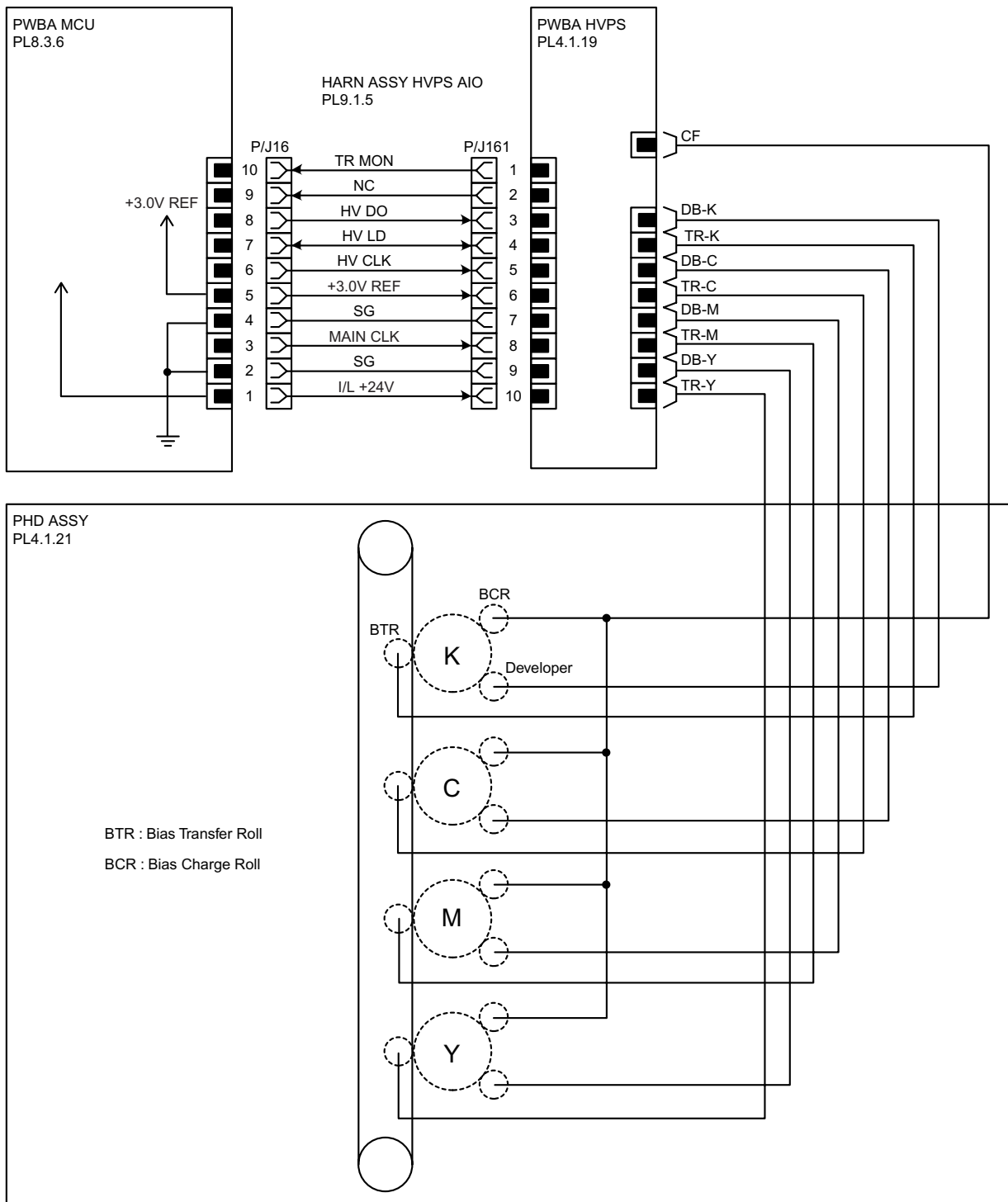
§ 5 XEROGRAPHIC



MiA07007KA

Signal line name	Description
CLOCK DATA	Control signal of the PWBA EEPROM
CLOCK DATA	Control signal of the EEPROM PHD
TEMP SNS	Temperature data in the printer by the SENSOR HUM (Analog value)
HUM SNS	Humidity data in the printer by the SENSOR HUM (Analog value)
ERASE K ON (L) +3.3VDC ERASE Y/M/C ON (L) +3.3VDC	ON/OFF signal of the LED ASSY ERASE
ADC SENSOR	Toner patch density data measured by the ADC SENSOR (Analog value)
LED REM	Remote signal of the LED of ADC SENSOR
ADC V MONI	Control signal of the ADC SENSOR

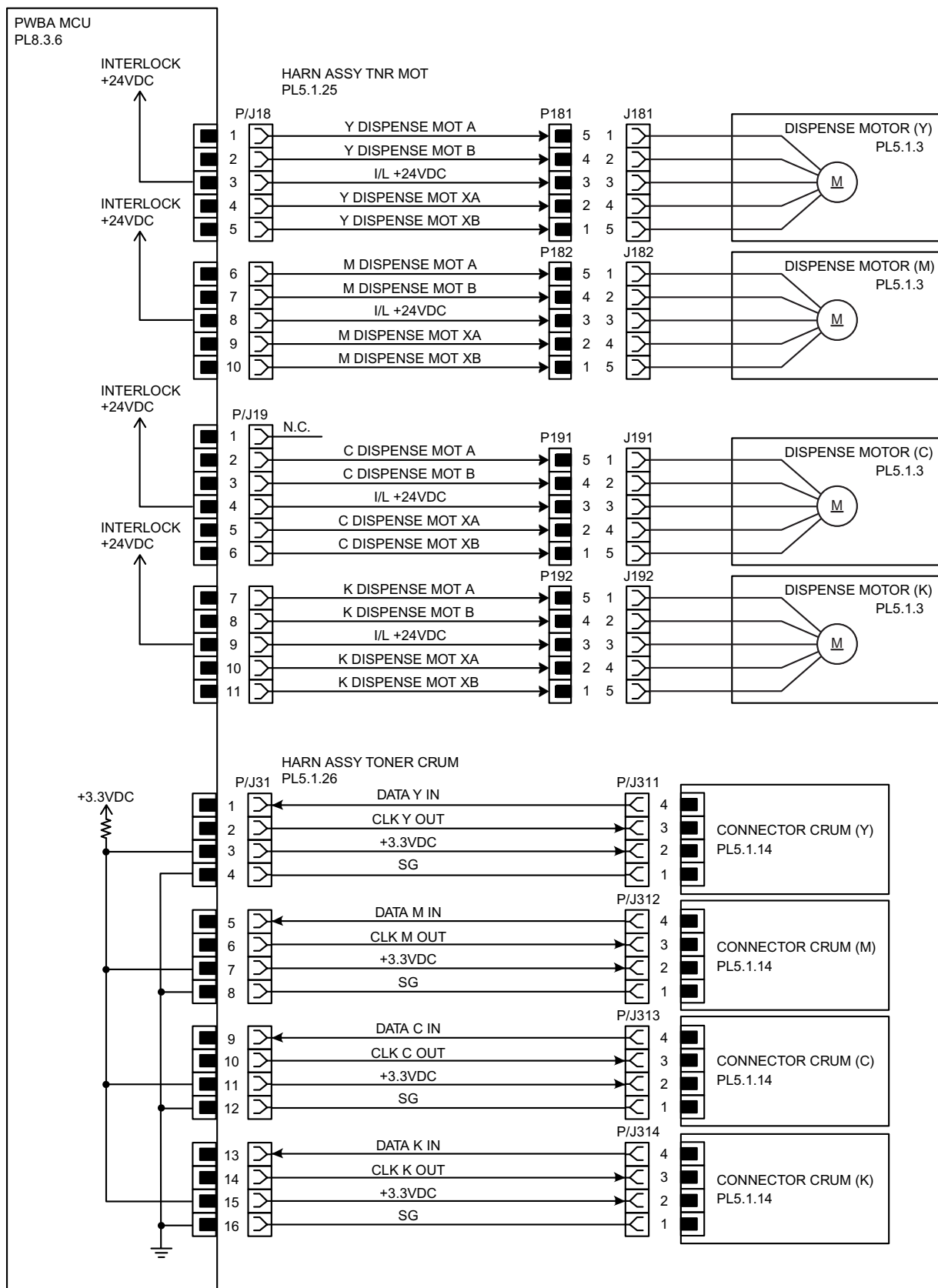
§ 6 HIGH VOLTAGE



MiA07008KA

Signal line name	Description
TR MON HV DO HV LD HV CLK MAIN CLK	Control signal of the HVPS

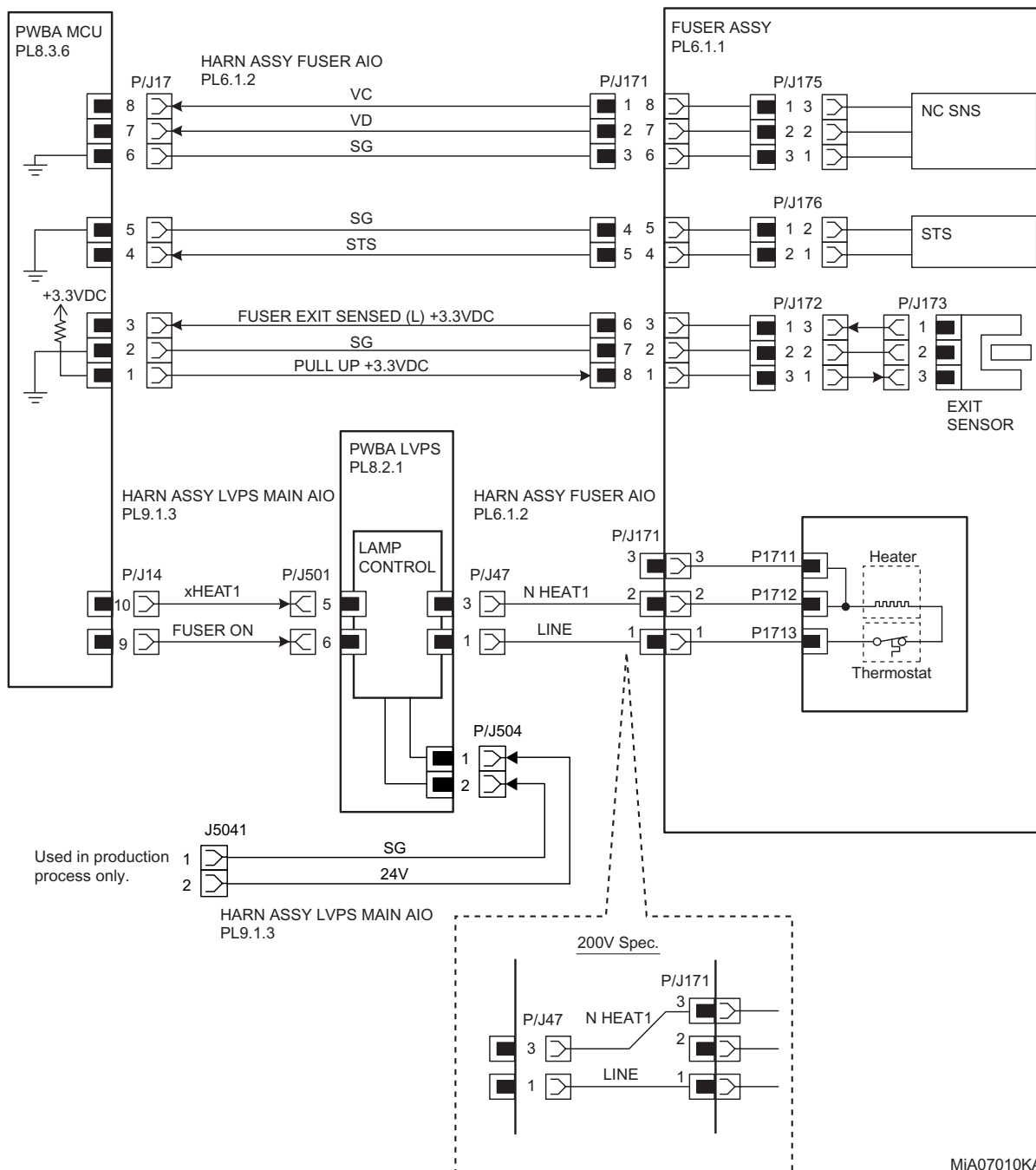
§ 7 DEVELOPER



MiA07009KA

Signal line name	Description
Y DISPENSE MOT A Y DISPENSE MOT B Y DISPENSE MOT XA Y DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (Y)
M DISPENSE MOT A M DISPENSE MOT B M DISPENSE MOT XA M DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (M)
C DISPENSE MOT A C DISPENSE MOT B C DISPENSE MOT XA C DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (C)
K DISPENSE MOT A K DISPENSE MOT B K DISPENSE MOT XA K DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (K)
DATA Y IN CLK Y OUT	Control signal of the CONNECTOR CRUM (Y)
DATA M IN CLK M OUT	Control signal of the CONNECTOR CRUM (M)
DATA C IN CLK C OUT	Control signal of the CONNECTOR CRUM (C)
DATA K IN CLK K OUT	Control signal of the CONNECTOR CRUM (K)

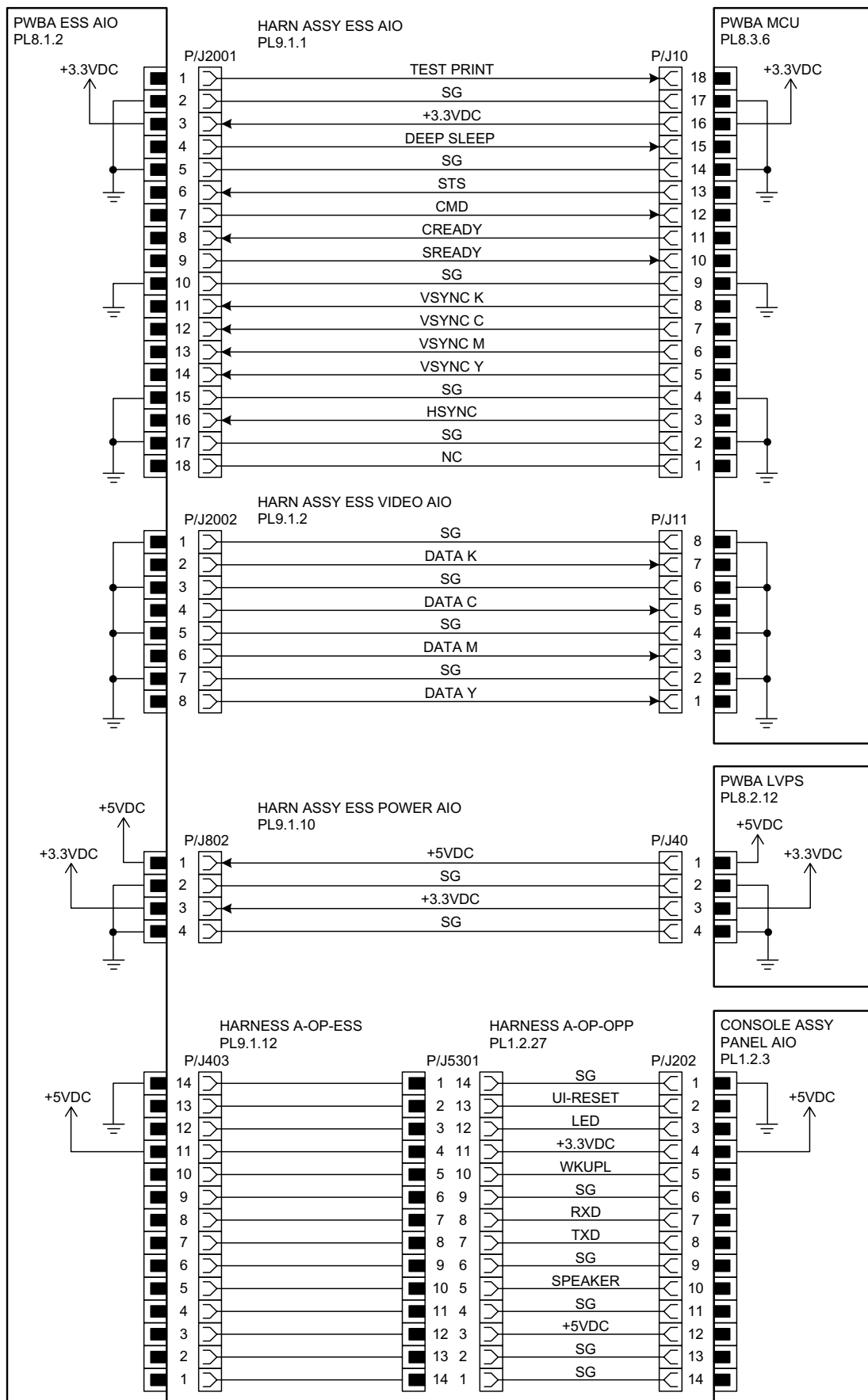
§ 8 FUSER



MIA07010KA

Signal line name	Description
VC VD	Temperature data measured by Temp. Sensor for controlling temperature (analog value)
STS	Heat Roll surface temperature data measured by Temp. Sensor for detecting high temperature (analog value)
FUSER EXIT SENSED (L) +3.3VDC	Paper detect signal of the Fuser Exit by the Sensor Photo (EXIT SENSOR)
FUSER ON	Lighting signal of Fuser Lamp
RELAY TEST LOW RELAY TEST HIGH	Test signal of the LVPS (Used in production process only)

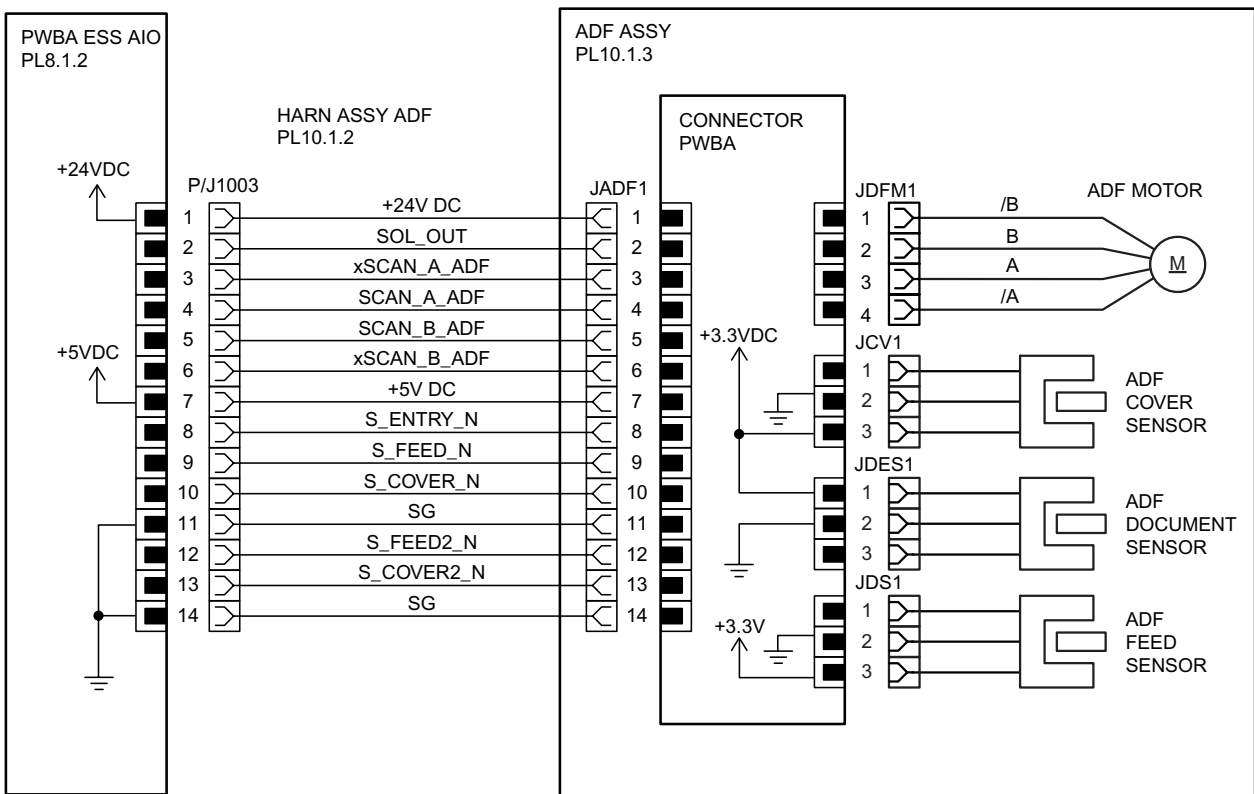
§ 9 CONTROLLER



MIA07011KA

Signal line name	Description
TEST PRINT	Control signal for the TEST PRINT mode
STS	Status signal transmitted fro the PWBA MCU to the PWBA ESS
CMD	Command signal transmitted from the PWBA ESS to the PWBA MCU
CREADY SREADY	Signal for indicating whether or not the printer is ready for receiving command signal
VSYNC K VSYNC C VSYNC M VSYNC Y	Signal for indicating registration position of each of images Y, M, C and K
HSYNC	Signal for data
DATA K DATA C DATA M DATA Y	Video data of four colors
UI-RESET LED WKUPL RXD TXD SPEAKER	Control signal of the CONSOLE ASSY

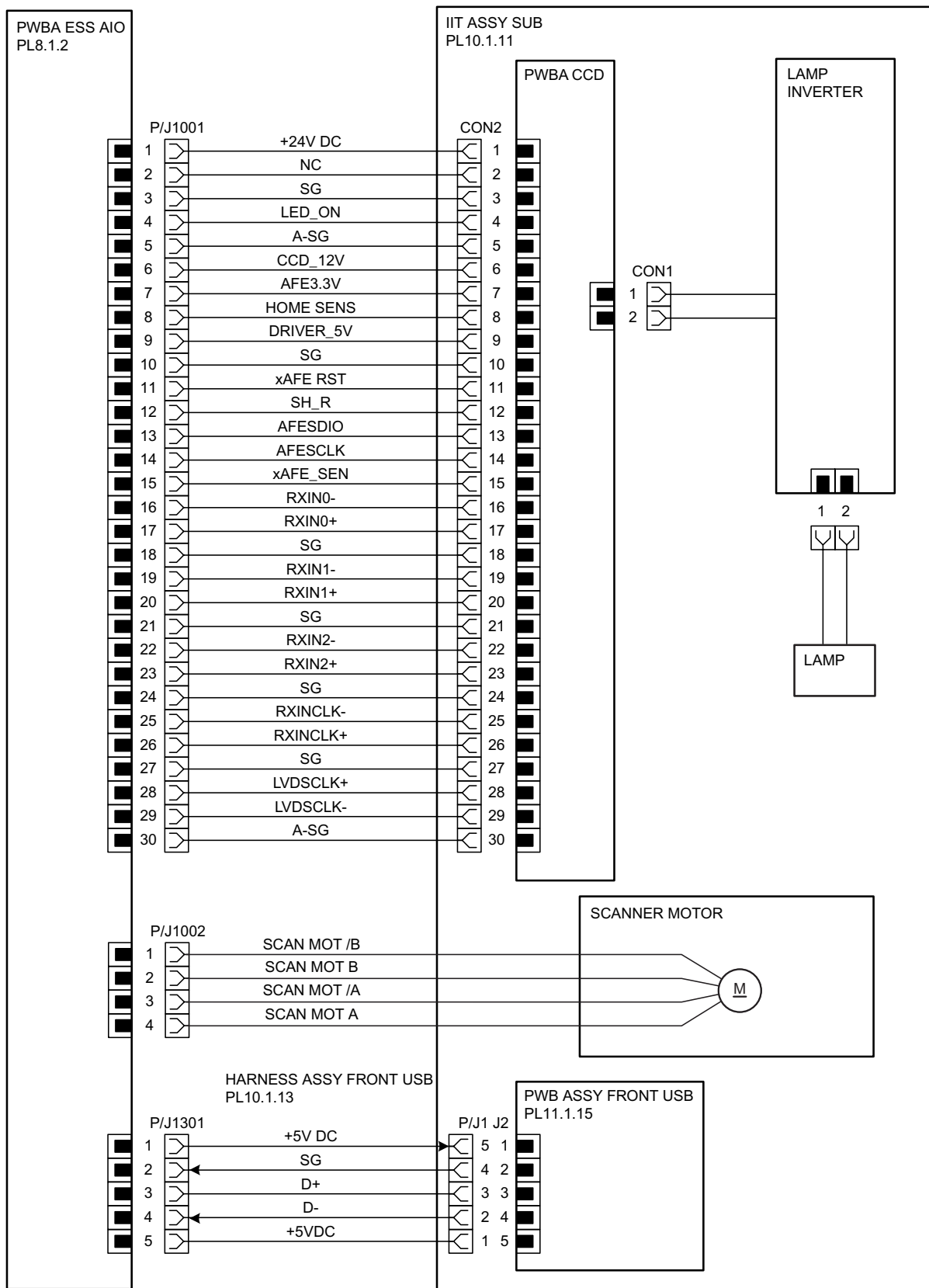
§ 10 SCANNER ASSY (ADF)



MiA07014KA

Signal line name	Description
xSCAN_A_ADF SCAN_A_ADF SCAN_B_ADF xSCAN_B_ADF	Drive control signal of the ADF MOTOR
S_ENTRY_N	Document detect signal of the ADF by the Sensor Photo
S_FEED_N	Document detect signal of the ADF by the Sensor Photo
S_COVER_N	Cover open or close signal of the ADF by the Sensor Photo

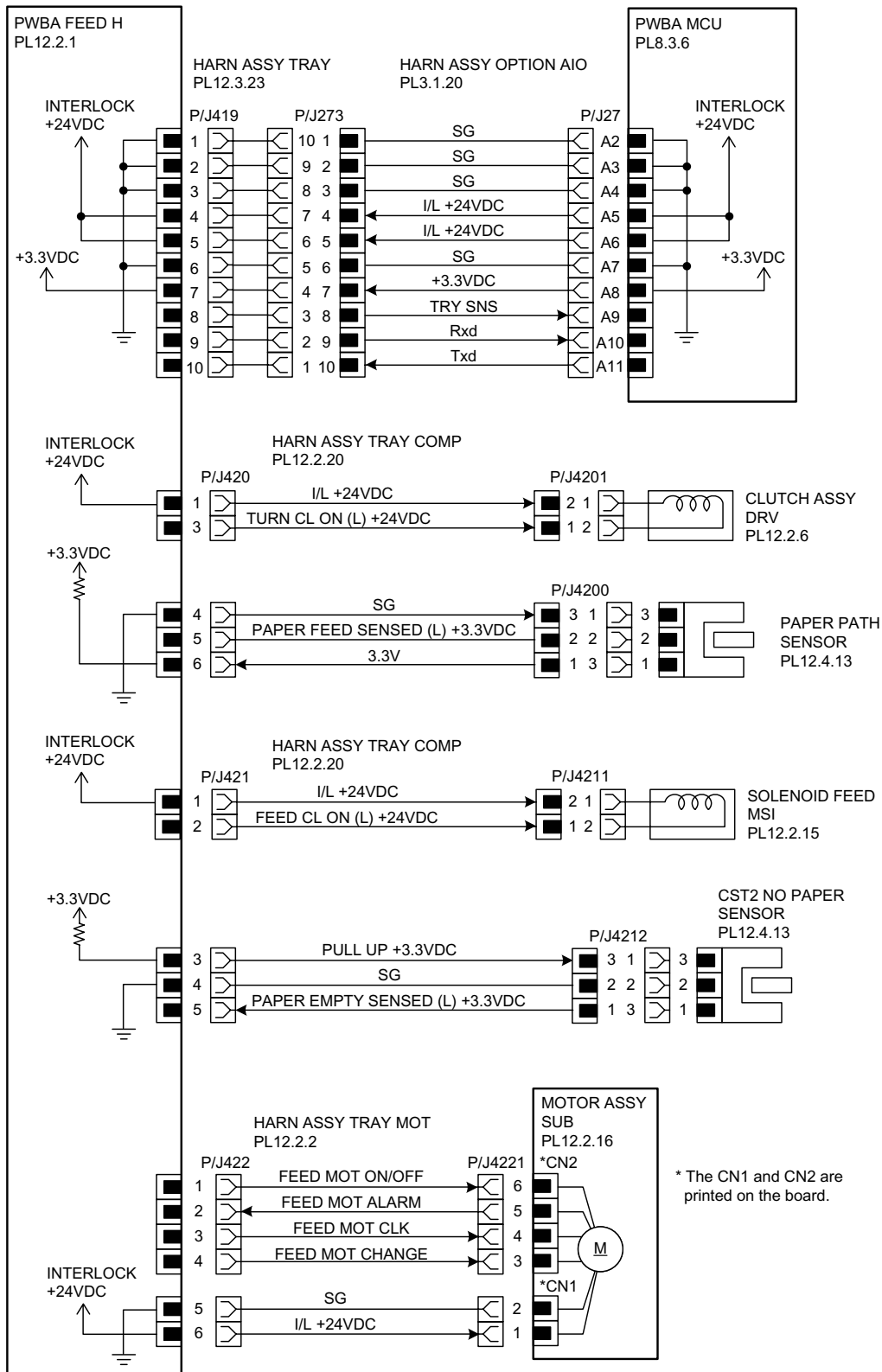
§ 11 SCANNER ASSY (IIT)



MiA07015KA

Signal line name	Description
HOME SENS	Home Sensor Signal
xAFE_RST SH_R AFESDIO AFESCLK xAFE_SEN	Control signal of the PWBA CCD
RXIN0- RXIN0+	Image data of the document by the CCD
RXIN1- RXIN1+	Image data of the document by the CCD
RXIN2- RXIN2+	Image data of the document by the CCD
RXINCLK- RXINCLK+	Video Clock of image data by the PWBA CCD
LVDSCLK+ LVDSCLK-	Control signal of the PWBA CCD
SCAN MOT /B SCAN MOT B SCAN MOT /A SCAN MOT A	Drive control signal of the Scanner Motor

§ 12 250 FEEDER

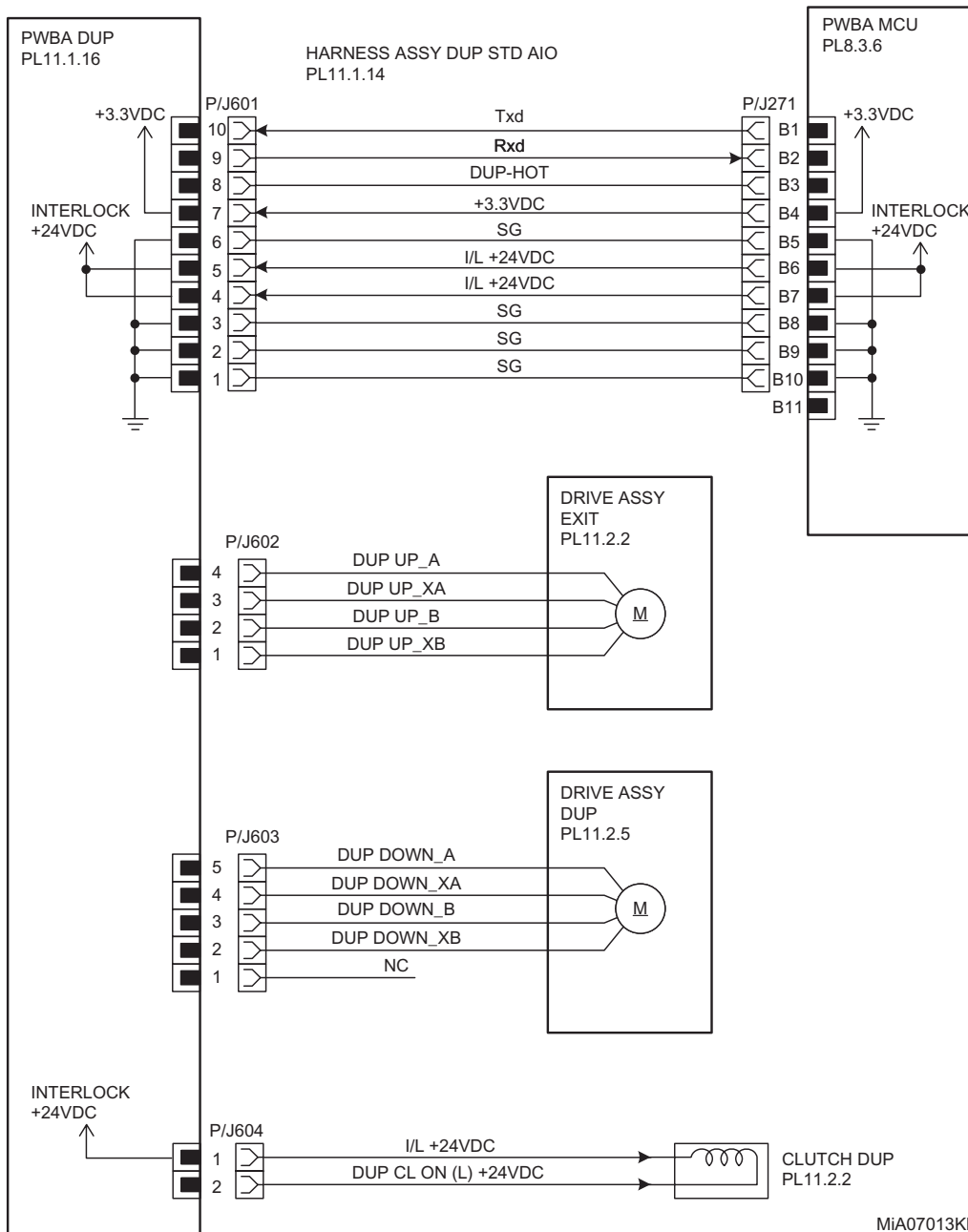


* The CN1 and CN2 are printed on the board.

MiA07012KA

Signal line name	Description
TRY SNS Rxd Txd	Control signal of the PWBA FEEDER
TURN CL ON (L) +24VDC	ON/OFF signal of the TURN CLUTCH
FEED CL ON (L) +24VDC	ON/OFF signal of the FEED CLUTCH
PAPER EMPTY SENSED (L) +3.3VDC	Paper detect signal of the Feeder by the Sensor Photo (NO PAPER SENSOR)
FEED MOT ON/OFF FEED MOT ALARM FEED MOT CLK FEED MOT CHANGE	Drive control signal of the FEED MOTOR

§ 13 DUPLEX



MiA07013KB

Signal line name	Description
DUP-HOT Txd Rxd	Control signal of the PWBA DUP
DUP UP_A DUP UP_XA DUP UP_B DUP UP_XB	Drive control signal of the DUP MOTOR UP
DUP DOWN_A DUP DOWN_XA DUP DOWN_B DUP DOWN_XB	Drive control signal of the DUP MOTOR DOWN
DUP CL ON (L) +24VDC	ON/OFF signal of the DUP CLUTCH
FAN +24VDC FAN ALARM	Drive control signal of the DUP FAN

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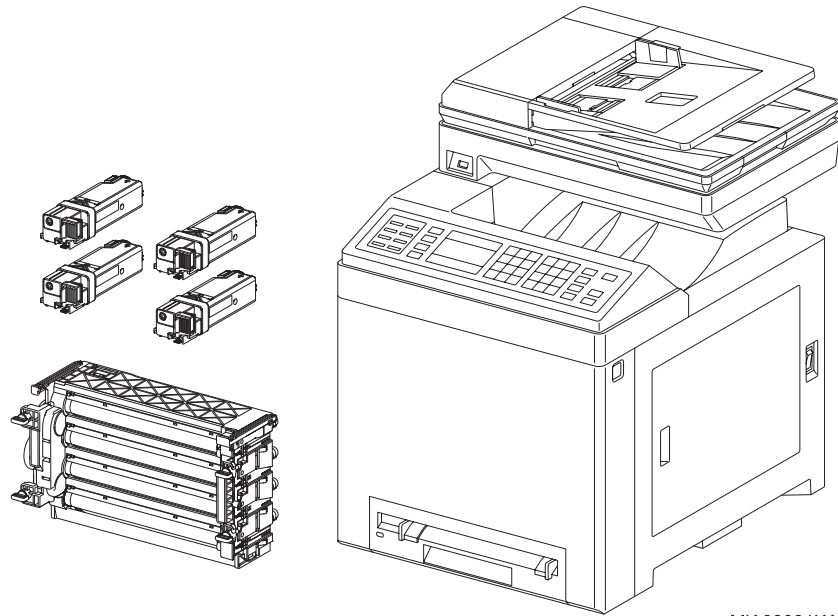
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1. Configuration of Printer

1.1 Basic Configuration

The printer has the following basic configurations depending on the destination.

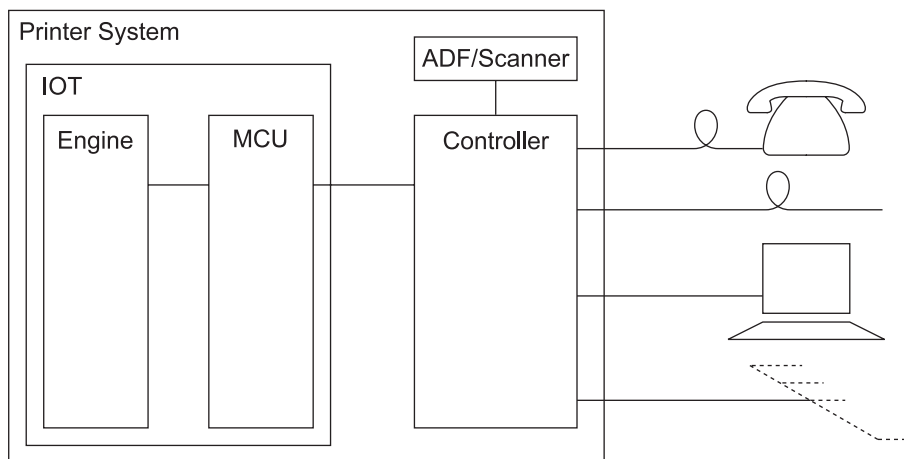
- print engine main unit (SSF and 250 feeder unit as the standard paper feeding)
- consumables (CRU)



MiA08001KA

1.2 Functional Configuration

Functional configuration of this printer is shown below.



Mnt08002KA

2. Electrical Properties

2.1 Power Source

Two types of power source as follows are available for this printer, which are selected according to the specifications.

- 110V printer: voltage: 100-127VAC $\pm 10\%$ (90 ~ 140V), frequency: 50/60Hz ± 3 Hz, current capacity: 9A or less
- 220V printer: voltage: 220-240VAC $\pm 10\%$ (198 ~ 264V), frequency: 50/60Hz ± 3 Hz ,current capacity: 5A or less

2.2 Power Consumption

Power consumption in each operation mode at rated voltage input

Operation mode	Average (Wh/h)
Running mode (Ave.)	520 or less
Running mode (MAX.)	1100 or less
Standby mode	52 or less
Sleep mode	20 or less
Deep sleep mode	18.4 or less

2.3 Rush Current

When the power switch is turned on, the inrush current shall be maximum 120A,10msec (half cycle) or less.

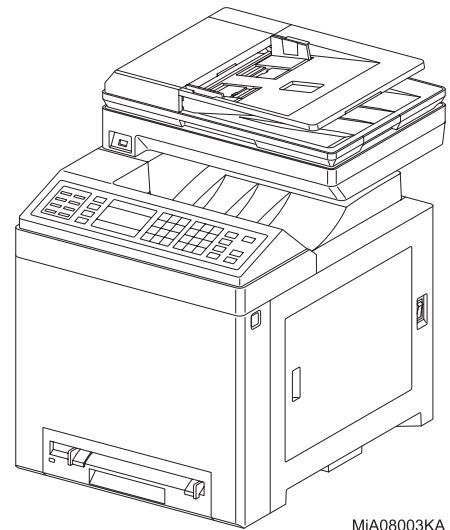
3. Mechanical Properties

3.1 Dimensions/Mass of Printer

Model	Width(mm)	Depth(mm)	Height(mm)	Mass(kg)
2155cn	436	541.8 ^{*1}	584.5	35.8 ^{*1}
2155cdn				30.0 ^{*1}

*1: Depth of M/C is with paper tray.

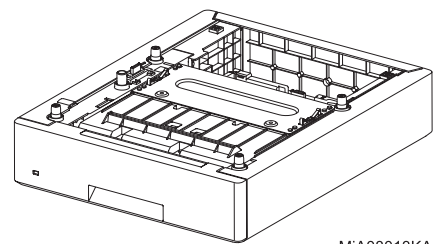
*2: Mass of M/C is with CRU.



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3.2 Dimensions/Mass of 250 Feeder (Option)

Width(mm)	Depth(mm)	Height(mm)	Mass(kg)
419.2	518	106	4.5



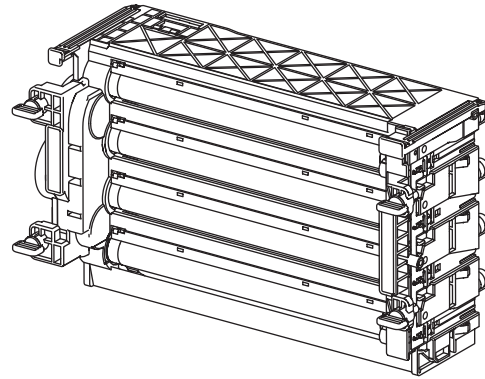
MiA08013KA

3.3 Dimensions/Mass of Consumables and CRUs

3.3.1 PHD Unit

Width: 332mm
 Depth: 138mm
 Height: 196mm
 Mass: 3.37K kg

Reference: *The PHD Unit has CRUM (CRU memory) to record information.*

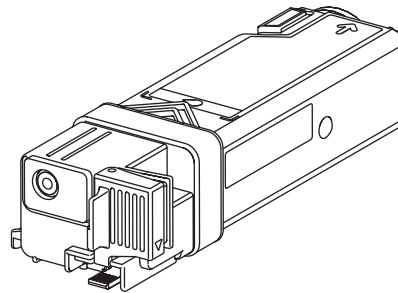


Wsb08006KA

3.3.2 Black toner cartridge

Width: 185.8mm
 Depth: 63mm
 Height: 40.5mm
 Mass: 1K kg

Reference: *The Black toner cartridge has CRUM (CRU memory) to record information.*

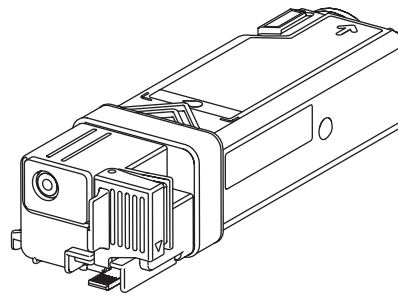


Wsb08005KA

3.3.3 Yellow toner cartridge

Width: 185.8mm
 Depth: 63mm
 Height: 40.5mm
 Mass: 0.5K kg

Reference: *The Yellow toner cartridge has CRUM (CRU memory) to record information.*

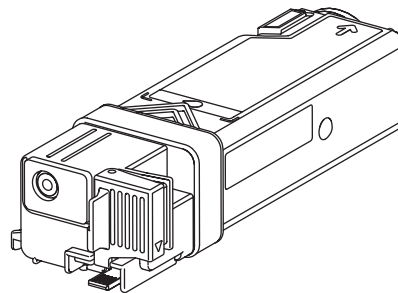


Wsb08005KA

3.3.4 Magenta toner cartridge

Width: 185.8mm
 Depth: 63mm
 Height: 40.5mm
 Mass: 0.5K kg

Reference: *The Magenta toner cartridge has CRUM (CRU memory) to record information.*



Wsb08005KA

3.3.5 Cyan toner cartridge

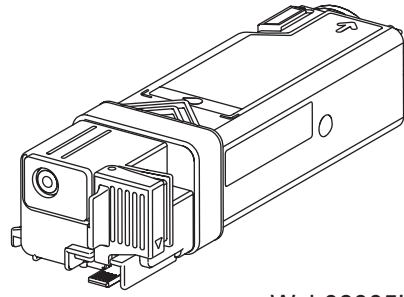
Width: 185.8mm

Depth: 63mm

Height: 40.5mm

Mass: 0.5K kg

Reference: The Cyan toner cartridge has CRUM (CRU memory) to record information.

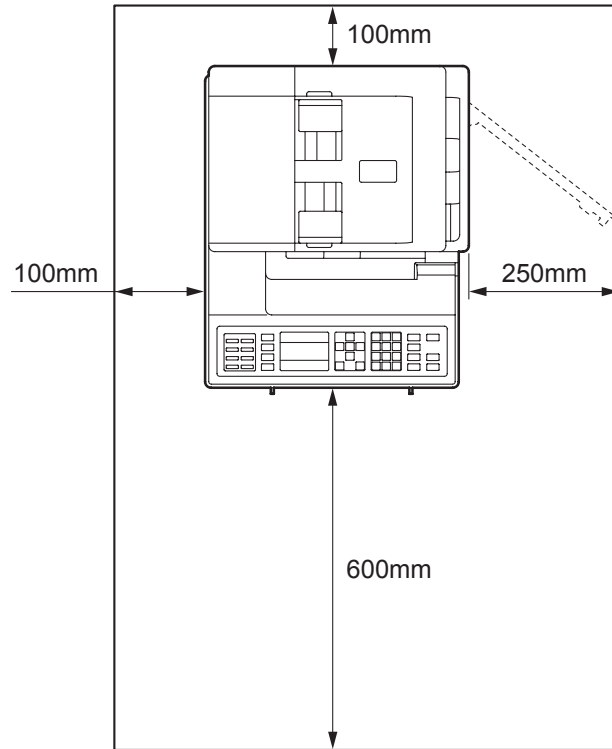


Wsb08005KA

3.4 Installation Space (min. installation space)

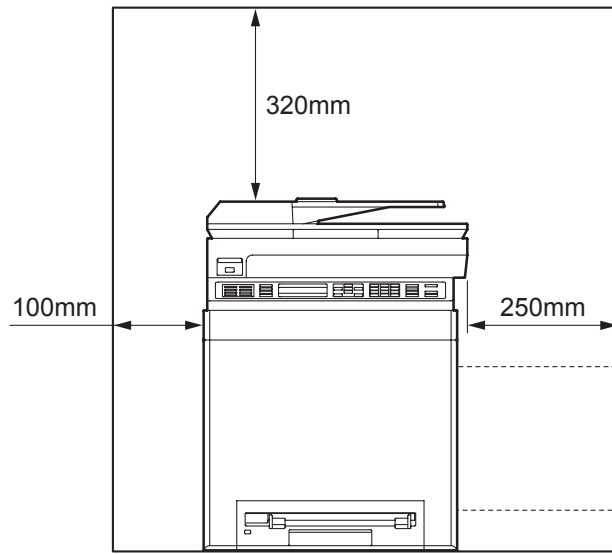
Minimum space as shown below is required to install the printer when it is used for normal objects.
(Space occupied by the operator is not included.)

Top view



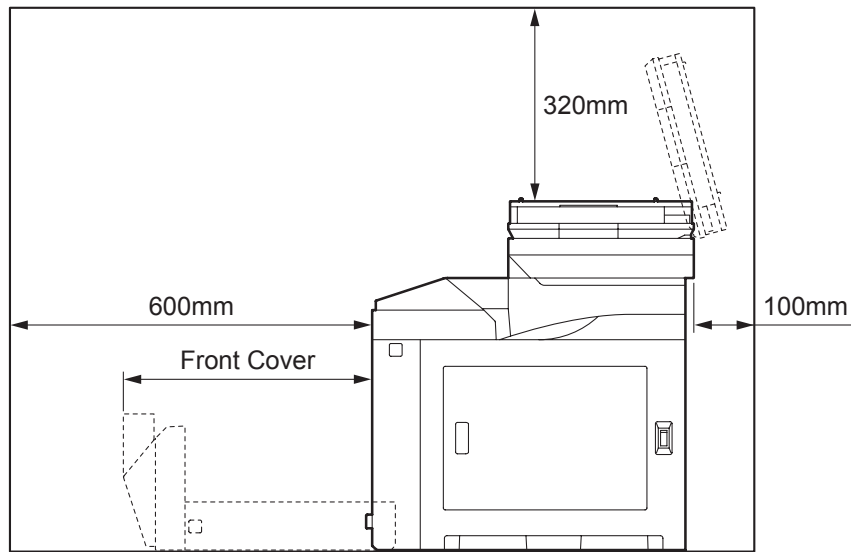
MiA08007KA

Front view



MiA08008KA

Side view



MiA08009KA

4. Functions

4.1 Recording System

Electro-photographic system employing OPC drum and direct transfer by the transport belt

4.2 Exposure System

Semiconductor four laser beams scanning system

4.3 Development System

Development with dry type 2-component developer

4.4 Fixing System

Thermal fixing system by Free Belt Nip Fusing (FBNF)

4.5 Resolution

Max 1200 dots/25.4mm

4.6 Operation Mode

The printer can be operated in either of 5 operation modes. The modes are switched over by command from the printer controller or change of printer operation, etc.

Proceeding from power ON, low power mode or sleep mode to standby mode will take place after going through a warm up stage.

- Running mode (Printing)

State in running or recording operation

Fixing system: Held at operating temperature.

Exposure system: Operating status

Recording system: Operating status

- Running mode (Scanning)

Exposure system: Operating status

- Ready mode

Ready state

Fixing system: Held at ready temperature.

Exposure system: Stop status

Recording system: Stop status

- Sleep mode

Complete resting state. Compatible to E-Star requirement.

Fixing system: Stop status

Exposure system: Stop status

Recording system: Stop status

- Deep sleep mode

Resting state from the sleep state.

Fixing system: Stop status

Exposure system: Stop status

Recording system: Stop status

4.7 Warm-up Time

When nominal voltage (110V, 220V) is applied, the printer will proceed to standby mode from POWER-ON within 16.5 seconds.

Reference: Measured at 22°C, 55% RH, nominal voltage.

4.8 FCOT (First Copy Output Time)

FCOT time of the printer is shown in the table below.

The time required for the first sheet of paper to be delivered after the Copy indication is given is calculated on the following conditions (rounded to one decimal place).

- IOT performance that the controller does not have IOT wait.
- The printer is in the standby mode. (ROS MOTOR OFF, FUSER READY)
- Paper is A4 SEF
- Document on the platen glass or the ADF.
- Except when process control is operating*1

*1: Process controller operation is process controls such as TC control, electric potential control, cleaning cycle, registration control, and so on. Sometimes, the printer stops feeding papers for a certain period of time while continuous printing for these operations.

- Color mode

B/W: 15 sec. or less

Color: 25 sec. or less

4.9 Input Properties

4.9.1 Paper pick-up system

- Paper pick-up with paper tray
Feeding method of this printer is ARRF method.

4.9.2 Paper pick-up capacity

- Paper pick-up with paper tray
 - 250 sheet Paper Tray : 250 sheets or below 27.6mm of standard paper (Standard)
- SSF paper pick-up
1 sheet

4.10 Output Properties

4.10.1 Paper delivery system

Paper can be delivered by the following method.

- FACE DOWN delivery

4.10.2 Paper delivery capacity

- FACE DOWN delivery
150 sheets (Letter/A4 standard paper)

4.10.3 Delivery paper size/mass

- FACE DOWN delivery
All paper sizes applicable to this printer

4.10.4 Full stack detection

non

4.11 Paper

4.11.1 Paper type

Paper which can be used with this printer is classified into standard paper, general paper and special paper.

- Standard paper

Using this type of paper is recommended. Reliability, operability and print image quality are the application range of the specifications.

Following paper is the standard paper.

	B/W	F/C
For overseas market	4200MP	X-pressions

- General paper

General paper is plain paper except standard paper and special paper, and its reliability and running performance are within the specification, but the print image quality is out of the specification.

- Special paper

Special paper except for plain paper. Reliability and operability are the applicable range of specifications but the print image quality is out of the applicable range of specifications.

4.11.2 Paper mass

- Paper feed from paper tray

"60 to 216 gsm" (16 lb to 80 lb)

4.11.3 Paper size

Paper size which can be set to each paper pick-up unit is shown in the table below.

Cassette	Paper size
250 Sheet Paper Tray / SSF	A5, B5, A4, Letter, Executive, Legal, Folio, Monarch, DL, C5, Com-10 Minimum size Width 76.2mm (3 in) x Length 127mm (5 in) Maximum size Width 215.9mm (8.5 in) x Length 355.6mm (14 in)

5. Consumables

Consumables are usually replaced by costumers. In the event of recovery of failure attributable to consumables or isolation of failure, you may replace them.

5.1 Items of Consumables

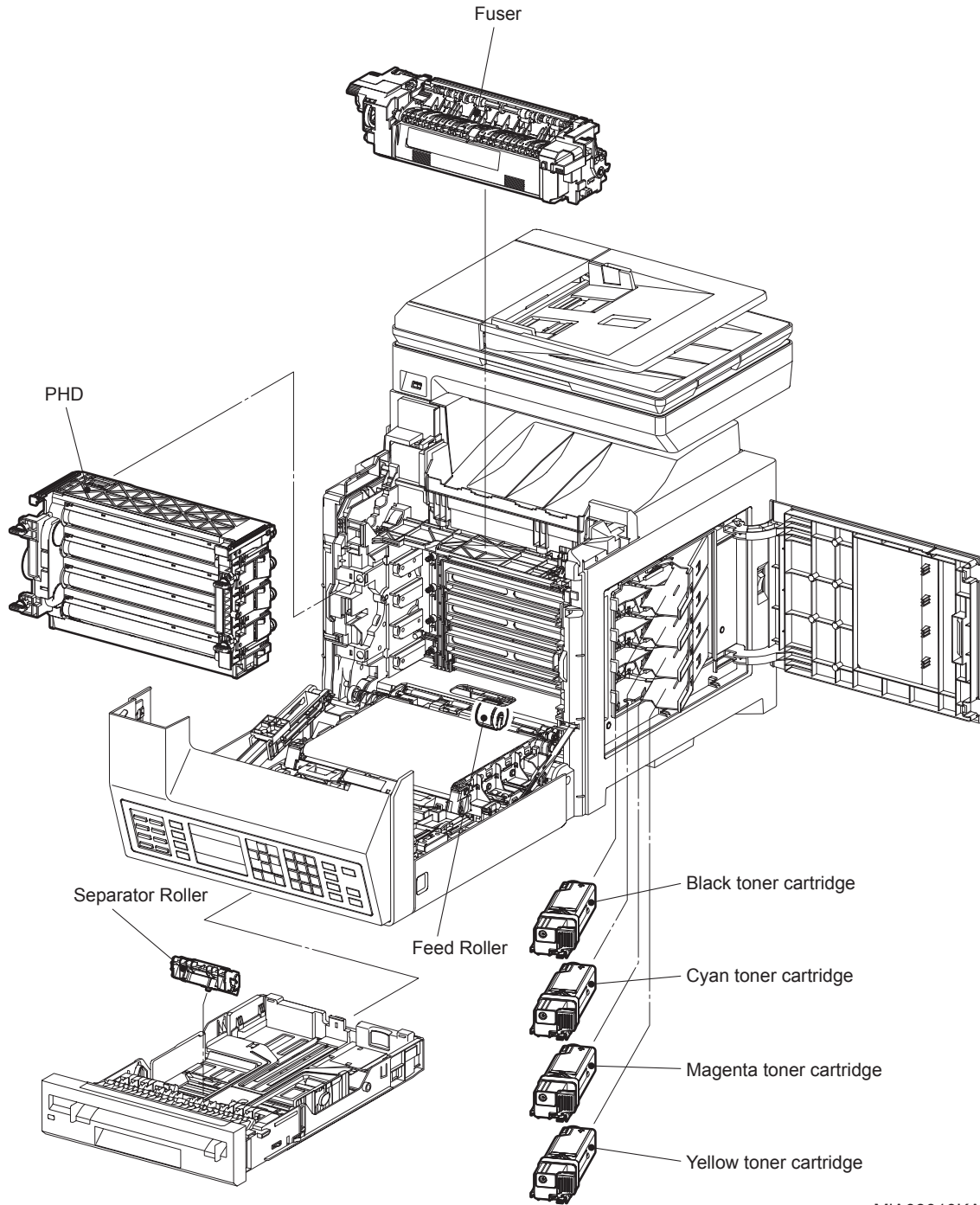
- Black toner cartridge
Cartridge to supply black toner to the development unit.
Black toner cartridge has CRUM (CRU memory) to record information.
- Yellow toner cartridge
Cartridge to supply yellow toner to the development unit.
Yellow toner cartridge has CRUM (CRU memory) to record information.
- Magenta toner cartridge
Cartridge to supply magenta toner to the development unit.
Magenta toner cartridge has CRUM (CRU memory) to record information.
- Cyan toner cartridge
Cartridge to supply cyan toner to the development unit.
Cyan toner cartridge has CRUM (CRU memory) to record information.

5.2 Consumable Life

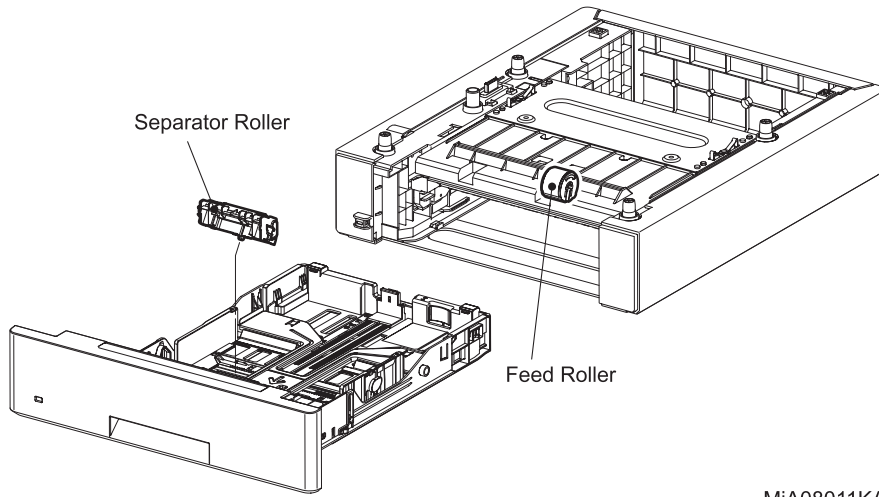
- | | |
|----------------------------|---------------|
| - Black toner cartridge: | 1.2k / 3kPV |
| - Yellow toner cartridge: | 1.2k / 2.5kPV |
| - Magenta toner cartridge: | 1.2k / 2.5kPV |
| - Cyan toner cartridge: | 1.2k / 2.5kPV |

5.3 Periodic Replacing Parts (Reference)

- | | |
|--------------------|------------------|
| - Separator Roller | 50kPV or 5 years |
| - FUSER | 50kPV or 5 years |
| - PHD | 24kPV |



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6. Operating Environment

6.1 Installation Temperature / Humidity

Installation temperature and humidity on the condition without condensation is as follows.

At operating: 10-32 °C, 10-85%RH (No condensation)

6.2 Installation Altitude

0 to 3,100m

6.3 Installation Horizontality

This machine functions normally in a horizontal position or any position with the maximum allowable level difference of 5 mm or less in longitudinal direction, and 10 mm or less in lateral direction.

6.4 Ambient Lighting

3000 Lux or less (without no direct sun beams)

6.5 Storage Temperature of a Toner Cartridge

The guaranteed period of the print cartridge before unpacked is as follows:

Normal conditions: 12 months under 0 to 35°C, 15 to 80% RH.

Harsh conditions: Up to 48 hours (Max) under -20 to 0°C and 35 to 40°C, 5 to 15% RH and 80 to 95% RH.

The storage altitude shall be 0 to 3100m. Can be extended to 0 to 15000m when shipped by air.
(Provided that the cargo bay is pressurized to 70.9275Kpa or higher.)

7. Safety / Environment Conditions

7.1 Safety Standard

- 110V system
UL60950-1, CSA 22.2 60950
- 220V system
IEC60950-1 / EN60950-1,

7.2 Laser Safety Standard

- 110V system
FDA21CFR Chapter 1, Subchapter J, Section 1010, 1040
- 220V system
IEC60825-1 Amendment 1 + Amendment 2,
EN60825-1 Amendment 1 + Amendment 2 Class 1 Laser Product

7.3 EMI

- 110V system (US)
FCC Part 15, Subpart B, Class B
- 220V system (EC)
EN55022:2006, Class B

7.4 Noise

Noise of printing is as follows.

Mode		Sound Power Level (B)	
		LWA	LWAD
Running	Color	6.49	6.79
	B&W	6.41	6.71
Standby	Color	4.0	4.3
	B&W	4.0	4.3

8. Print image Quality

8.1 Image Quality Guarantee Conditions

The image quality is specified and guaranteed under the following conditions.

8.1.1 Environmental conditions

Environment condition for evaluating image quality

Temperature: 15-28 °C

Humidity: 20-70%RH

8.1.2 Guaranteed paper

The print image quality specified here is guaranteed with standard paper fed from the paper tray.

Evaluation is performed with the maximum size of each standard paper.

- Fuji Xerox C2 paper (Color print)

- Fuji Xerox P paper (B&W print)

8.1.3 Paper condition

The paper is used fresh paper immediately after unpacked, which has been left in the operating environment for 12 hours before unpacking.

8.1.4 Printer condition

The print image quality specified in this section is guaranteed with the printer in normal condition.

8.1.5 Image quality guaranteed area

The print image quality specified in this section is guaranteed in the guaranteed image quality area specified in this manual. (Refer to Chapter 1□)

8.1.6 Criterion

The print image quality is guaranteed with the Spec. In rate = 90% ($\gamma = 90\%$).

9. Option

9.1 Options to be Installed by Users

Users can install the following unit.

- 250 Sheet Feeder
- Expansion memory (512MB)
- Wireless Printer Adapter

10. ESS Specification

10.1 External Interface

10.1.1 USB

Item	Specification
Connector	Type-A x 1, Type-B x 1
Protocol	USB2.0, HighSpeed
Supported Class	Type-A :USB Mass Storage Class

10.1.2 Ethernet

Item	Specification
Connection	One RJ-45 connector
Protocol	10Base-T / 100Base-TX / 1000BASE-TX

10.1.3 Wireless

Item	Specification
Connection	IEEE802.11b / 802.11g / 802.11n
Protocol	See "10.2 Network Protocol" for details

10.2 Network Protocol

10.2.1 Printing Protocol

Protocol	Transport	Maximum Session	Supported Client
Port9100	TCP/IP	1	Windows XP / Vista / 7 / Server2003 / Server2008 / Server2008 R2
LPD	TCP/IP	1	Windows XP / Vista / 7 / Server2003 / Server2008 / Server2008 R2 Mac OS X Linux
IPP	TCP/IP	5	Windows XP / Server2003 Mac OS X 10.3
SMB	TCP/IP	5	Windows XP / Vista / 7 / Server2003 / Server2008
WSD	TCP/IP	2	Windows Vista / 7 / Server2008 / Server2008 R2

10.2.2 Other Protocols

Protocol	Transport	Support
HTTP / HTTPS	TCP/IP	EWS
SMTP	TCP/IP	E-Mail Alert
SNMP	UDP/IP	Driver, Installer
DHCP	UDP/IP	IP setup
BOOTP	UDP/IP	IP setup
RARP	TCP/IP	IP management
AutoIP	TCP/IP	Installer (device discovery)
WINS	TCP/IP	IP setup
Telnet	TCP/IP	IP management
Bonjour(mDNS)	UDP/IP	IP setup for Mac
LDAP	TCP/IP	Address Book
DDNS	TCP/IP	IP management

10.2.3 MIB

The printer supports following MIB.

- RFC1213 MIB-II
- RFC1514 HostResources
- RFC1759 Printer MIB
- Printer port monitor MIB
- Dell Private MIB

10.3 Decomposer

10.3.1 PDL

PDL	Interface port	Operating system
PCL 5c	USB, TCP/IP	
PCL 6	USB, TCP/IP	Windows XP / Vista / 7 / Server2003 / Server2008 / Server2008 R2
HBPL	USB, TCP/IP	Mac OS X (10.3/10.4/10.5/10.6), Linux, Windows Vista / 7 / Server2008 / Server2008 R2

10.3.2 Font

- PCL Font
 - 81 Fonts
- PDF Font

Type	Font Name
TrueType	ITC Zapf Dingbats
	Arial
	Arial Bold
	Arial Italic
	Arial Bold Italic
	Courier
	Courier Bold
	Courier Italic
	Courier Bold Italic
	Times New Roman
	Times New Roman Bold
	Times New Roman Italic
	Times New Roman Bold Italic
Symbol	
Multiple master	GoldSEMM
	GoldSAMM

10.3.3 Image Area

Usable Area Size	Maximum : 215.9mm (8.5 in.) x 355.6mm (14 in.)
Unprintable Area	4.1 mm each from four edges (left, right, top and bottom) of paper
Printable Area	Maximum : 207.9mm (8.18 in.) x 347.6mm (13.68 in.)
Print Image Quality Guaranteed Area	Same as Printable Area

10.4 Job Control

10.4.1 Cancel Print

A print job in process can be cancelled at the operation panel.

10.4.2 Job Recovery

When a job fails due to a paper jam, the printer automatically restarts the job after the jammed paper is removed.

10.4.3 Job Time Out

When job transmission is interrupted for a certain period of time (Time can be changed at the operation panel and unlimited time can be selected), the print data is deleted as an error.

10.4.4 Dell Color Track

Auditron is a function to specify the availability of color print and to limit print volume per user. Only administrators are allowed to make limitation settings from the EWS.

User name and password is embedded in the print job in order to identify who the job is sent from.

User name and password are entered by user from the printer driver.

The printer can support maximum 50 accounts.

10.4.5 Secure Print (/Store Print)

When memory is expanded (512MB), the printer holds print data, including a user password (12 digits) specified in the printer driver, user name and document name, in memory. The data is not printed until the same password, user name and document name are specified at the printer UI. The user can select whether the data is cleared or not after being printed. The data remains in the printer as long as it is not cleared. The data on the memory is cleared when the printer is turned off. The user can omit entering a password (This is called Store Print).

10.4.6 Proof Print

When memory is expanded (512MB), proof print can be selected only when multiple sets of prints are specified in the printer driver. The printer prints only the first set of the print data. Then the user can select whether the remaining sets are printed or not (the remaining data is cleared) when the same user name and document name are entered at the Panel UI. The data remains in the printer as long as it is not cleared. The data on the memory is cleared when the printer is turned off.

10.4.7 IP Filter

The user can select to accept or reject jobs for the specified IP address. Up to 5 IP addresses can be specified.

IP filter is available only to LPD and Port9100.

10.4.8 Virtual Mail Box

There are two type of Virtual Mail Box.

[Public Virtual Mail Box] When print job is selected Public (password not needed) in the Stored Print menu on the driver, everyone can print job from operator panel if know user name or file name. And this print job remains till deleted intentionally.

[Private Virtual Mail Box] When print job is selected Private (password needed) in the Stored Print menu on the driver, everyone cannot print job from operator panel if unknown password.

And this print job remains till deleted intentionally.

10.5 Logging

10.5.1 Job Logging

The printer can retain up to 20 job logs. Job log can be printed instantly according to the user's request or automatically printed when the number of the retained job logs has reached 20. Job log includes the following information:

- Job finish date and time
- Job type (Print/File/FaxSend/FaxReceived/Copy/Scan)
- Input interface (USB, Lpd etc.)
- Document name (File name)
- Output color
- User name/Host name
- Number of printed pages (Color/B/W)
- Number of printed impressions (Color/B/W)
- Paper size
- Result (Successful, Error, etc.)

10.5.2 Error Logging

The printer can retain up to 42 jam errors and up to 42 fatal errors.

The user can print error log by the panel operation.

Jam error log includes the following information:

- PV when jam has occurred
- Name of Jam

Fatal error log includes the following information:

- PV when error has occurred
- Error code

10.5.3 Billing Count

NOTE

- The same data is stored in two or more addresses in one IC. Datacheck (checksum etc.) is conducted.

NOTE

- When ESS is replaced, IC can be transferred. (IC is mounted on socket)

Counter	Description
Color Print Counter	Count the number of paper printed in color (7 digits)
B/W Print Counter	Count the number of paper printed in B/W (7 digits)
Total Print Counter	Count the total number of paper printed in color and B/W (7 digits)

10.6 ID Print

User name can be printed. The printing position can be selected from upper right, upper left, lower right and lower left (Only for PCL6).

The user selects using the operation panel whether user name is printed or not and where it is printed.

10.7 Non Dell Toner Mode

When life of toner cartridge has ended, the printer stops accepting print request (life of toner cartridge is counted by the counter in CRUM). Taking into consideration that some users use refilled toner cartridges, the printer can accept print request by the user's panel operation even if life of toner cartridge has ended. When the mode has changed so that the printer does not stop even after life of toner cartridge ends, the printer displays a message on the operation panel to inform the user of the mode change. When the printer operates in this mode, print image quality is not guaranteed. Also, remaining toner level is not displayed (as CRUM data can not be guaranteed).

10.8 Report Function

10.8.1 Panel Settings

This list shows function details set from the control panel.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.2 PCL Fonts List

This list shows PCL Fonts.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.3 PCL Macros List

This list shows PCL Macros.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.4 Job History Report

This report shows Job History.

Manual print: Report is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.5 Error History Report

This report shows Error History.

Manual print: Report is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.6 Printer Meter

This report shows Print Volume.

Manual print: Report is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.7 Color Test Page

This Page shows Demo Print Page.

Manual print: Demo Page is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.8 Stored Document List

This report shows FAX sender/receiver, time, result, etc. for 50 communications.

10.8.9 FAX Activity Report

This report shows FAX sender/receiver, time, result, etc. for 50 communications.

Manual print: Report is printed by panel operation.

Auto print: Report is printed out automatically when the total of FAX send/receive has exceeded 50.

User can specify whether to enable or disable auto print.

10.8.10 FAX Pending Report

This report shows FAX sender/receiver, time, result, etc. for 50 communications.

Manual print: Report is printed by panel operation.

Auto print: Report is printed out automatically when the total of FAX send/receive has exceeded 50.

User can specify whether to enable or disable auto print.

10.8.11 System Setting List

This list shows AIO controller, hardware configuration, and host interface.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.12 Speed Dial List

This list shows contents registered for Speed Dial and Group Dial.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.13 Address Book

Address information of E-mail addresses and group details are reported.

Manual print: Address Book is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.14 Server Address Book

Address information of server addresses is reported.

Manual print: Address Book is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.15 Broadcast Report

This report shows a result of broadcasting (Multi-polling is not supported).

Manual print: Not supported.

Auto print: Report is printed out automatically when broadcasting has completed.

User can specify whether to enable or disable auto print.

10.8.16 Monitor/Unsent Report

This report shows a communication result (normal/abnormal) of FAX sending with a reduced copy of the first page of the sending document. Only a part of the first page may be printed as reduced copy depending on documents.

User can select from the following three options on the menu in advance.

Print always (Always print out Monitor/Unsent Report)

Print only at error (Only unsent report is printed)

Not print (Not print out Monitor/Unsent Report)

10.8.17 Power-off Report

This report shows stored FAX documents erased due to sudden power-off such as blackout.

Manual print: This function is not supported.

Auto print: Report is printed automatically after power has been restored to the machine if there are any document files erased.

10.8.18 Protocol Monitor Report

This report shows a protocol status of the latest communication.

Manual print: Report is printed by panel operation.

Print at error: Report is printed when an error has occurred.

Auto print: Report is printed automatically after communication is complete.

User can select Auto print/Print at error/Manual print.

10.8.19 PDF Font Report

This list shows PDF Fonts.

Manual print: List is printed by instructing from the operator panel, EWS, or ToolBox.

Auto print: Not supported.

10.8.20 Menu map

This list shows panel-UI Menu tree.

10.8.21 FAX Pending Report

This list shows Pending FAX Job(s).

10.9 Utility Print

10.9.1 Printer Settings List

Printer Settings List can be printed according to the user's request.

Printer Settings List is printed in B/W in the automatically selected paper tray.

Printer Settings List includes the following information:

Items on the list are slightly different from below when wireless LAN option is installed.

[Title]

Product name (Logo)

[General]

Printer Name, Service tag, Asset Number, Total Impressions, Color Impressions, Black Impressions, Serial Number, Memory capacity, Printer language, Number of fonts available, Firmware Version, Boot version, Engine Version, IIT Version, IPS Version, Default paper size, Default paper type for plain paper, Default paper type for label, Default panel display language

[Network]

Firmware version, MAC address, Ethernet Setting TCP/IP: LPD, Port9100, SNMP, E-Mail Alert, EWS, IP Filter

[Print Volume]

Print volume for each paper size

10.9.2 Panel Settings List Print

Panel Settings List can be printed by the user's operation.

Panel Settings List is printed in B/W on A4 size paper (Letter size paper for the US) in the automatically selected paper tray.

10.9.3 Font List Print

PCL or PS Font List and Color Bar (for color check) can be printed by the user's operation.

Font List is printed in color on A4 size paper (Letter size paper for the US) in the automatically selected paper tray.

10.9.4 Job History Report

The user can print Job History Report by requesting instant print or by setting auto print.

Job History Report in B/W on A4 size (Letter size for the US) in the automatically selected paper tray.

- Date
- Time
- Input Port
- Host/User Name
- Document Name
- Output Color
- Page Size
- Pages
- Sheets
- Result

| 10.9.5 Error History Report

Error History Report can be printed according to the user's request.

Error History Report in B/W on A4 size (Letter size for the US) in the automatically selected paper tray.

- System Fail History:

 Date/Time/Chain Link

- Paper Jam History:

 Date/Time/Paper Jam Type

11. IIT (Image Input Terminal) Specifications

11.1 Scanner

11.1.1 Scanning Method

- Platen: Document-fixed flatbed scanning method.
- ADF: Carriage-fixed, document-feeding scanning method (one side scanning).

11.1.2 Optical Resolution

1200 x 1200 dots / 25.4mm (max)

11.1.3 Light Source

LED

11.1.4 Maximum Scanning Guarantee Area

Platen: 215.9 mm x 297 mm

ADF: 215.9 mm x 355.6 mm

11.1.5 Scanning Halftone Level

Output from the CCD has the following halftone level.

B/W: 16bit

Color: 16bit x 3ch (R/G/B)

11.2 Platen

11.2.1 Platen Glass

Size: 221mm x 300mm (Flat glass area)

11.2.2 Document Image Area

Scanning area is as follows (Platen mode).

Max: 215.9mm (8.5") x 297mm

11.3 ADF

11.3.1 Document Condition

Sheets without breakage, wrinkles, or folds.

11.3.2 Document Thickness

50 g/m² to 125g/m²

11.3.3 Auto Document Size Detection

None

11.3.4 Document Feed System

FRPF: Friction Retard Pad Feeder (Top sheet feeding)

11.3.5 ADF Half-Open, Full-Open Angles

- Full-open: 70 +/- 5 degrees
- Half-open: 12 +/- 5 degrees to 65 +/- 5 degrees
- Self-closing: 12 +/- 5 degrees or less

11.3.6 Document Registration

- ADF Mode: Center Registration

11.3.7 Capacity

- 35 sheets. (Plain Paper)

12. FAX Specifications

12.1 Communication

12.1.1 Communication Mode

- Priority 1: ITU-T Super G3
- Priority 2: ITU-T G3 ECM
- Priority 3: ITU-T G3

ITU: International Telecommunication Union

ITU-T: ITU Telecommunication Standardization Sector

ECM: Error Correction Mode

12.1.2 Density of Transmitting Pixels

- B/W;
R16x15.4 line/mm, R8x15.4 line/mm, R8x7.7 line/mm, R8x3.85 line/mm, 400x400 pixel/25.4mm,
300x300 pixel/25.4mm, 200x200 pixel/25.4mm, 200x100 pixel/25.4mm
- Color;
Not supported.

12.1.3 Modem Signal Processing

The following protocols are supported:

- V.34 (33.6 /31.2 /28.8 /26.4 /24 /21.6 /19.2 /16.8 /14.4 /12 /9.6 /7.2 /4.8 /2.4kbps)
- V.17 (14.4 /12 /9.6 /7.2kbps)
- V.29 (9.6 /7.2kbps)
- V.27ter (4.8 /2.4kbps)

12.1.4 Data Compression, Output Bit Depth

- B/W: 1bit, JBIG, MMR, MR, MH encoding
- Color: Not supported.

12.1.5 Communication Control Procedure

The procedure complies with ITU-T Recommendation T.30

12.1.6 Transmission Time

The time (T_p) to transmit image data in G3 communication is defined in the table below. Resolution is not converted during transmission and density is normal.

Chart		14.4Kbps (MMR)	28.8Kbps (MMR)	33.6Kbps (JBIG) ^{*1}
IIEEJ No.4	Super Fine	56 sec. or less	29 sec. or less	22 sec. or less
	Fine	26 sec. or less	13 sec. or less	11 sec. or less
	Standard	19 sec. or less	10 sec. or less	7 sec. or less
ITU-T No.1	Super Fine	30 sec. or less	15 sec. or less	12 sec. or less
	Fine	15 sec. or less	8 sec. or less	6 sec. or less
	Standard	11 sec. or less	6 sec. or less	4 sec. or less
FX English Sales Text	Standard	7 sec. or less	4 sec. or less	2 sec. or less
FX Japanese Sales Text	Standard	9 sec. or less	5 sec. or less	4 sec. or less
IIEEJ No.1	Standard	75 sec. or less	38 sec. or less	20 sec. or less

*1: Reference

12.1.7 Protocol Control Time

When data error is not identified, protocol control time (T_m , T_n , T_u) is as follows:

- V.17, V.29, V.27ter

Mode	Before messages: T_m	Between messages: T_n	After messages: T_u	Total
Standard protocol	16.4 sec. or less	3.2 sec. or less	4.4 sec. or less	24.0 sec. or less

-V.34

Mode	Before messages: T_m	Between messages: T_n	After messages: T_u	Total
Standard protocol	9.9 sec. or less	1.0 sec. or less	0.9 sec. or less	11.8 sec. or less

12.1.8 Throughput

Sending time is calculated in the following formula:

Sending time = Setup time + T_m + $(N \times T_p)$ + $\{(N-1) \times T_n\}$ + T_u (sec.)

(N: Send quantity, T_p : Image transmission time)

12.2 Cable Characteristics

With pseudo cable of 0 through 15Km, the highest speed is guaranteed for communication with V.17, V.29, and V.27ter respectively. As for V.34, 33600bps communication speed is guaranteed with 0 through 2Km cable, 31200bps communication speed with 2 through 9Km cable, 19200bps or higher communication speed with 9 through 15km cable.

12.3 Communication Load Characteristics

Data error characteristics for noise and cable loss during communication are as follows:

Error rate (Error frequency/Total communication quantity) $\leq 1/500$

12.4 Incoming Call Level

Under ideal conditions (flat line, no noise, and no other line stress), the normal communication in the range of -3 dBm to 43 dBm shall be guaranteed.

As for V.17, V.29, and V.27 ter, the highest speed shall be guaranteed in the range of -6 dBm to -43 dBm. For V.34, the communication of 33600 bps or more shall be guaranteed in the range of -9 dBm to -19 dBm, as well as that of 16800 bps or more in the range of -19 dBm to -43 dBm.

However, the normal communication in conformance to V.34 shall be guaranteed in the range of -9 dBm to -43 dBm.

MFG P/N	Part Description	Dell P/N	CRU or FRU
TONER / INK			
675K 92610	KIT PKG TN KM 3K-K	N51XP	CRU
675K 92620	KIT PKG TN KM 2.5K-C	769T5	CRU
675K 92630	KIT PKG TN KM 2.5K-M	8WNV5	CRU
675K 92640	KIT PKG TN KM 2.5K-Y	NPDXG	CRU
675K 92570	KIT PKG TN KM 1.2K-K	2FV35	CRU
675K 92580	KIT PKG TN KM 1.2K-C	WHPFG	CRU
675K 92590	KIT PKG TN KM 1.2K-M	9M2WC	CRU
675K 92600	KIT PKG TN KM 1.2K-Y	NT6X2	CRU
675K 96490	KIT PKG TN DUAL KM 3K-K	899WG	CRU

DEVELOPERS			
675K 92520	PHD ASSY REORDER	KGR81	CRU

FUSER AND ACESSORIES			
126K 27840	FUSER ASSY 115V	YPKFP	FRU
126K 27850	FUSER ASSY 220V	PC5HW	FRU
675K 84661	WIRELESS ADAPTER	P624N	CRU

DUPLEXER			
059K 68870	FEEDER ASSY DUP AIO (with 2-16,PL11.2)	V77N2	FRU

TRANSFER BELT			
604K 59850	KIT TRANSFER ASSY (with 3-8)	RKN5T	FRU

ROLLER			
604K 49601	ROLL ASSY FEED (with 4 + Instruction)	G866F	CRU
604K 50081	KIT HOLDER ASSY SEPARATOR	M312F	CRU

FEEDER, TRAY AND TRAY HOUSING			
050K 65890	CASSETTE ASSY 250 MG AIO (with 2-19)	2XDPY	CRU
604K 59981	FDR,ASSY,OPT,2155CN/CDN	JGHFM	CRU
050K 65900	CASSETTE ASSY 250 OPT MG AIO	K63TW	CRU
675K 92420	TRAY,PAPER,OPT,250-SHEET,2155	PPR51	CRU

PLASTICS			
604K 60031	KIT COVER-WINDOW TNR AIO	MX82D	FRU
848K 45591	COVER ASSY FRONT CDN (with 2,5-13)	JGM6J	FRU
848K 45581	COVER ASSY FRONT CN (with 2,5-13)	YT3CY	FRU
801K 45121	STRAP ASSY (with 24,25)	551G9	FRU

ELECTRICAL / ELECTRONICS BOARDS AND CARDS			
960K 53610	PWBA FAX	GJVTN	FRU
604K 59940	KIT ESS PWBA AIO (with 02, instruction)	WJ5T5	FRU
105K 24450	PWBA LVPS 100V	VJ1N9	FRU
105K 24460	PWBA LVPS 220V	Y5DMC	FRU
604K 59951	KIT PWBA MCU (with 6, Instruction)	7KV9X	FRU

FAN AND ACESSORIES			
054K 45130	DUCT FAN ASSY AIO (with 8.9)	RVXW1	FRU

MEMORY			
675K 92450	KIT PACKAGE DDR2 512MB	T4NTT	CRU

MISCELLANEOUS HARDWARE			
604K 49490	KIT FEED ROLL/SOL/CLUTCH (with 1,2,11,15,PL3.2.4)	P376C	FRU
604K 50081	KIT HOLDER ASSY SEPARATOR (with 5, Instruction)	M312F	CRU
604K 49601	ROLL ASSY FEED (with 4 + Instruction)	G866F	CRU
007K 17800	DRIVE ASSY SUB	THMDN	FRU
604K 59921	KIT DRIVE ASSY MAIN (with 2,3)	4CK8W	FRU
604K 49480	KIT DRIVE ASSY PH (with 3,4)	P391C	FRU
962K 65360	HARN ASSY INTERLOCK AIO (SW-J44)	P359C	FRU
604K 60000	IIT ASSY SUB	XMFKH	FRU
604K 60050	KIT PWB ASSY FRONT USB (with 13,14)	NRHVK	FRU
604K 59960	TRAY ASSY (with instruction)	17YWR	CRU
604K 59971	KIT ADF ASSY (with 2,3)	NG4J0	FRU
604K 49531	ADF FEED ROLL & SEPARATER ROLL KIT (with 3-4, Instruction)	P377C	CRU
604K 49540	KIT COUNTER BALANCE (with 22,23)	P378C	FRU
059K 68870	FEEDER ASSY DUP AIO (with 2-16,PL11.2)	V77N2	FRU
101E 23710	CAP TERMINATOR	GF121	CRU
848K 40660	CONSOLE ASSY PANEL DAO	WTYXR	FRU
848K 40670	CONSOLE ASSY PANEL EMEA/AUS	GYV1H	FRU

BASE UNIT			
998S 65264	SVC PRINTER N 110V (Spare)	RKWX1	CRU
998S 65265	SVC PRINTER DN 110V (Spare)	CCHRM	CRU
998S 65266	SVC PRINTER N 220V EMEA (Spare)	7WC81	CRU
998S 65267	SVC PRINTER DN 220V EMEA (Spare)	51ND3	CRU
998S 65268	SVC PRINTER N 220V AUS (Spare)	96P5W	CRU
998S 65269	SVC PRINTER DN 220V AUS (Spare)	7KKYX	CRU
998S 65369	ASSY,BASE,SVC,LV,TAA,2155CDN	90DHP	CRU

Notes

CRU : Customer Replaceable Units - refers to parts that can easily be replaced by the customer without sending an onsite technician.
FRU : Field Replaceable Unit - a part that can be replaced or added by onsite technician.